BAYOU DESIARD (INCLUDING LAKE BARTHOLEMEW) WATERSHED TMDL FOR BIOCHEMICAL OXYGEN-DEMANDING SUBSTANCES AND NUTRIENTS

Subsegment 080701

SURVEYED 06/19-21/2001

TMDL REPORT

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EXECUTIVE SUMMARY

This report presents the results of a watershed based, calibrated modeling analysis of Bayou Desiard. The modeling was conducted to establish a TMDL for biochemical oxygen-demanding pollutants and nutrients for the Bayou Desiard watershed (Subsegment 080701).

Bayou Desiard is located in the Ouachita River Basin in subsegment 080701. Subsegment 080701 also includes Lake Bartholemew. The subsegment lies in Ouachita and Morehouse parishes. The headwater flows start at the Lake Bartholemew pumping station east of Sterlington, Louisiana. Little Bayou Bouef brings a negligible amount of flow into Lake Bartholemew from the northern areas of Calhoun Brake. Most of the flow in Little Bayou Bouef is retained by several small dams or weirs. Bayou Desiard connects to Lake Bartholemew at the U.S. 165 control gates. Near Fairbanks, Louisiana, Mill Bayou drains the southern areas of Calhoun Brake into Bayou Desiard. Water from Black Bayou Lake drains into Bayou Desiard via Hannah's Run near Lamkin, Louisiana. Other control structures are also located on Bayou Desiard at L-11 Canal (Bayou Chauvin), Inabnet Road (Midway Dam), Stadium Drive, the Hogg Bayou Control Structure, and the City of Monroe Water Treatment Plant. Bayou Desiard has been physically disconnected from the Oauchita River by a levee. The flow is conveyed to the Ouachita River by the City of Monroe's Water Treatment Plant Pumping System.

Most of the watershed is sparsely populated. The higher population and urban land use concentrations are located near Monroe, Louisiana. The primary land uses are forests and agriculture.

No facilities discharge wastewater into Bayou Desiard. Bayou Desiard serves as the drinking water source for Monroe, Louisiana. The bayou does receive stormwater runoff from nearby homes and businesses.

Input data for the calibration model was developed from data collected during the survey conducted June 19-21, 2001. Flow data was obtained for the City of Monroe Water Treatment Plant for the survey period. Climatological data (wind, pan evaporation) was obtained from the Louisiana Office of State Climatology. A satisfactory calibration was achieved for the main stem. In those cases where the calibration was not as accurate, the difference was in the conservative direction. For the projection models, data was taken from the LDEQ Ambient Stream Network. Personnel at the City of Monroe Water Treatment Plant provided some historical flow records for the water treatment plant and the pumping station at Lake Bartholemew.

The Louisiana Total Maximum Daily Load Technical Procedures, 06/15/2001, have been utilized in this study.

Modeling was limited to low flow scenarios for both the calibration and the projections since the constituent of concern was dissolved oxygen and the available data was limited to low flow conditions. The model used to simulate Bayou Desiard was LAQUAL, a modified version of QUAL-TX, which has been adapted to address specific needs of Louisiana waters.

Bayou Desiard, Subsegment 080701, was not listed on either the year 1998 Section 303(d) list or the year 2000 Modified Court Ordered Section 303(d) list for organic enrichment/low dissolved oxygen and nutrients. However, it was part of the 1999 ambient network monitoring program and was listed in the 2000 305(b) report based on new assessment methodology. The subsegment was found to be "not supporting" its designated use of Fish and Wildlife Propagation. The listed cause was organic enrichment/low dissolved oxygen and nutrients. The listed source was hydromodification. Other suspected sources include natural sources and man-made nonpoint sources. It was "fully supporting" all other designated uses. Bayou Desiard was subsequently scheduled for TMDL development with other listed waters in the Ouachita River Basin. This TMDL addresses the organic enrichment/low dissolved oxygen impairment and nutrients.

This TMDL establishes load limitations for oxygen-demanding substances and goals for reduction of those pollutants. LDEQ's position, as stated in the declaratory ruling issued by Dale Givens regarding water quality criteria for nutrients (Sierra Club v. Givens, 710 So.2d 249 (La. App. 1st Cir. 1997), writ denied, 705 So.2d 1106 (La. 1998), is that when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. The implementation of this TMDL through future wastewater discharge permits (if required) and the implementation of best management practices to control and reduce runoff of soil and oxygen-demanding pollutants from nonpoint sources in the watershed will also control and reduce the nutrient loading from those sources.

The results of the projection modeling show that the water quality standard for dissolved oxygen of 5.0 mg/l can be maintained during the summer critical season with a 50% reduction of the total nonpoint pollution. The projected minimum DO is 4.92 mg/l at RK 27.10. This is within the tolerance range accepted by EPA as technically acceptable.

Table 1. Total Maximum Daily Load (Sum of CBOD, NH_3-N, and SOD)

ALLOCATION	SUMMER		WINTER	
	% Reduction Required	(MAR-NOV) (lbs BOD/day)	% Reduction Required	(DEC-FEB) (lbs BOD/day)
Point Source WLA		0		0
Point Source Reserve MOS		0		0
Total Nonpoint Source LA	50	68,891	50	68,770
Total Nonpoint Source Reserve MOS		17,223		13,752
TMDL		86,114		82,522

The results of the winter projection model show that the water quality criterion for dissolved oxygen of 5.0 mg/l can also be maintained during the winter critical season with a 50 % reduction in the total nonpoint source pollution. Based on the winter model projection, the minimum dissolved oxygen is 6.52 mg/l at RK 34.26.

Table 1 shows that nonpoint source loading occurs during both the summer and the winter. The greatest deoxygenating impact of the nonpoint loading is manifested in the summer due to resuspension of the load and higher water temperatures.

The sensitivity runs demonstrate that the calibrated models are sensitive to parameters related to depth, temperature, and chlorophyll a.

LDEQ has developed this TMDL to be consistent with the State antidegradation policy (LAC 33:IX.1109.A).

LDEQ will work with other agencies such as local Soil Conservation Districts to implement agricultural best management practices in the watershed through the 319 programs. LDEQ will also continue to monitor the waters to determine whether standards are being attained.

In accordance with Section 106 of the federal Clean Water Act and under the authority of the Louisiana Environmental Quality Act, the LDEQ has established a comprehensive program for monitoring the quality of the state's surface waters. The LDEQ Surveillance Section collects surface water samples at various locations, utilizing appropriate sampling methods and procedures for ensuring the quality of the data collected. The objectives of the surface water monitoring program are to determine the quality of the state's surface waters, to develop a long-term data base for water quality trend analysis, and to monitor the effectiveness of pollution controls. The data obtained through the surface water monitoring program is used to develop the state's biennial 305(b) report (*Water Quality Inventory*) and the 303(d) list of impaired waters. This information is also utilized in establishing priorities for the LDEQ nonpoint source program.

The LDEQ has implemented a watershed approach to surface water quality monitoring. Through this approach, the entire state is sampled over a five-year cycle with two targeted basins sampled each year. Long-term trend monitoring sites at various locations on the larger rivers and Lake Pontchartrain are sampled throughout the five-year cycle. Sampling is conducted on a monthly basis or more frequently if necessary to yield at least 12 samples per site each year. Sampling sites are located where they are considered to be representative of the waterbody. Under the current monitoring schedule, targeted basins follow the TMDL priorities. In this manner, the first TMDLs will have been implemented by the time the first priority basins will be monitored again in the second five-year cycle. This will allow the LDEQ to determine whether there has been any improvement in water quality following implementation of the TMDLs. As the monitoring results are evaluated at the end of each year, waterbodies may be added to or removed from the 303(d) list. The sampling schedule for the next five years is shown below.

2002 - Red and Sabine River Basins
2003 - Mermentau and Vermilion-Teche River Basins
2004 - Calcasieu and Ouachita River Basins
2005 - Barataria and Terrebonne Basins

2006 - Lake Pontchartrain Basin and Pearl River Basin
(Atchafalaya and Mississippi Rivers will be sampled continuously.)

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1.0 Introduction

Bayou Desiard, Subsegment 080701, was not listed on either the 1998 Section 303(d) list or year 2000 Modified Court Ordered Section 303(d) list for organic enrichment/low dissolved oxygen and nutrients. However, it was part of the 1999 ambient network monitoring program and was listed in the 2000 305(b) report based on new assessment methodology. The subsegment was found to be "not supporting" its designated use of Fish and Wildlife Propagation. It was "fully supporting" all other uses. The listed cause was organic enrichment/low dissolved oxygen and nutrients. The listed source was hydromodification. Other suspected sources include natural and man-made nonpoint sources. It was "fully supporting" all other designated uses. Bayou Desiard was subsequently scheduled for TMDL development with other listed waters in the Ouachita River Basin. This TMDL addresses the organic enrichment/low dissolved oxygen impairment and nutrients.

2.0 Study Area Description

2.1 General Information

The Bayou Desiard watershed is located in Ouachita and Morehouse parishes in north Louisiana. It includes Lake Bartholemew (Dead Bayou) near Sterlington, Louisiana. Lake Bartholemew is an oxbow lake. It was created when a new section of streambed was created for Bayou Bartholemew and the original section was cut off from the bayou with levees. A pumping station is located at the east end of Lake Bartholemew. The pumps are normally set to pump either 36 MGD or 72 MGD, when activated. A sod (grass) farm on Lake Bartholemew intermittently withdraws water from the waterbody. An overflow control structure is located at the west end of Lake Bartholemew. The structure allows water to flow back into Bayou Bartholemew if the water surface elevation in Bayou Bartholemew gets to high. Normally, Little Bayou Bouef would carry flow from the northern areas of Calhoun Brake into Lake Bartholemew. Local people have built several dam structures on Little Bayou Bouef. As a result, a negligible amount of flow is contributed by Little Bayou Bouef. A 72-inch control gate allows water to flow from Lake Bartholemew into Bayou Desiard. Therefore, Lake Bartholemew becomes the headwaters for Bayou Desiard.

Bayou Desiard flows southward. Near Fairbanks, Louisiana, a golf course intermittently withdraws water from Bayou Desiard. The golf course exists in Frenchmen's Bend Subdivision. Mill Bayou joins Bayou Desiard slightly downstream of the subdivision and golf course. Mill Bayou conveys water from the southern areas of Calhoun Brake during and after rainfall events. The confluence of Bayou Desiard and Hannah's Run is located near Lamkin, Louisiana. Hannah's Run conveys water from Black Bayou Lake to Bayou Desiard through a stop-log weir and two sets of control gates. Each gate includes two 56-inch pipes. At Fink's Hideaway Road, a stop-log weir allows the flow from Bayou Desiard into L-11 Canal (Bayou Chauvin) to be controlled, while a 72 inch pipe allows Bayou Desiard to flow underneath L-11 Canal. As Bayou Desiard continues southward, it is controlled by another 72-inch gate at Inabnet Road (Midway Dam Control Structure). Streamflow is conveyed under Stadium Drive through a 72-inch pipe. Bayou Desiard ends in Monroe, Louisiana, where it was separated from the Ouachita River by a control levee. The streamflow exits Bayou Desiard through the City of Monroe's Water Treatment Plant pumping system. The treatment plant can pump up to 21 MGD, but only treats a maximum of 11 MGD. The remaining flow is discharged to the Ouachita River.

The watershed consists of a natural region of Louisiana known as lowlands. The lowlands consist of abandoned Mississippi River floodplains. Before man-made control structures existed along the Mississippi River, it meandered and altered its path as it sought its way to the Gulf of Mexico. It modified the land as it cut new paths and deposited soils along its banks. The watershed consists of mostly lowlands with little relief or slope. Soils in the watershed include Ouachita River alluvial soil, flatwoods soil, and loess covered hill and terrace soils. The Ouachita River alluvial soils are comprised mostly of older deposits left by the Arkansas River as it flowed through the area until about 3,000 years ago. These soils are less productive than the Mississippi River and Red River alluvial soils. The loess covered hill and terrace soils are silty in texture and older than the alluvial soils. Flatwoods soils are usually poorly drained due to the lack of local relief. The flatwoods soils usually have low natural productivity. The vegetation consists of mixed forests, longleaf pine forests, bottomland hardwoods, and cypress forests. Mixed forests include shortleaf pine, oak, and hickory. Longleaf pine forests include longleaf and slash pine and some hardwoods. The bottomland hardwoods include oak, gum, maple, and some loblolly pine. Cypress forests include cypress and tupelo gum. (Kniffen, 1988)

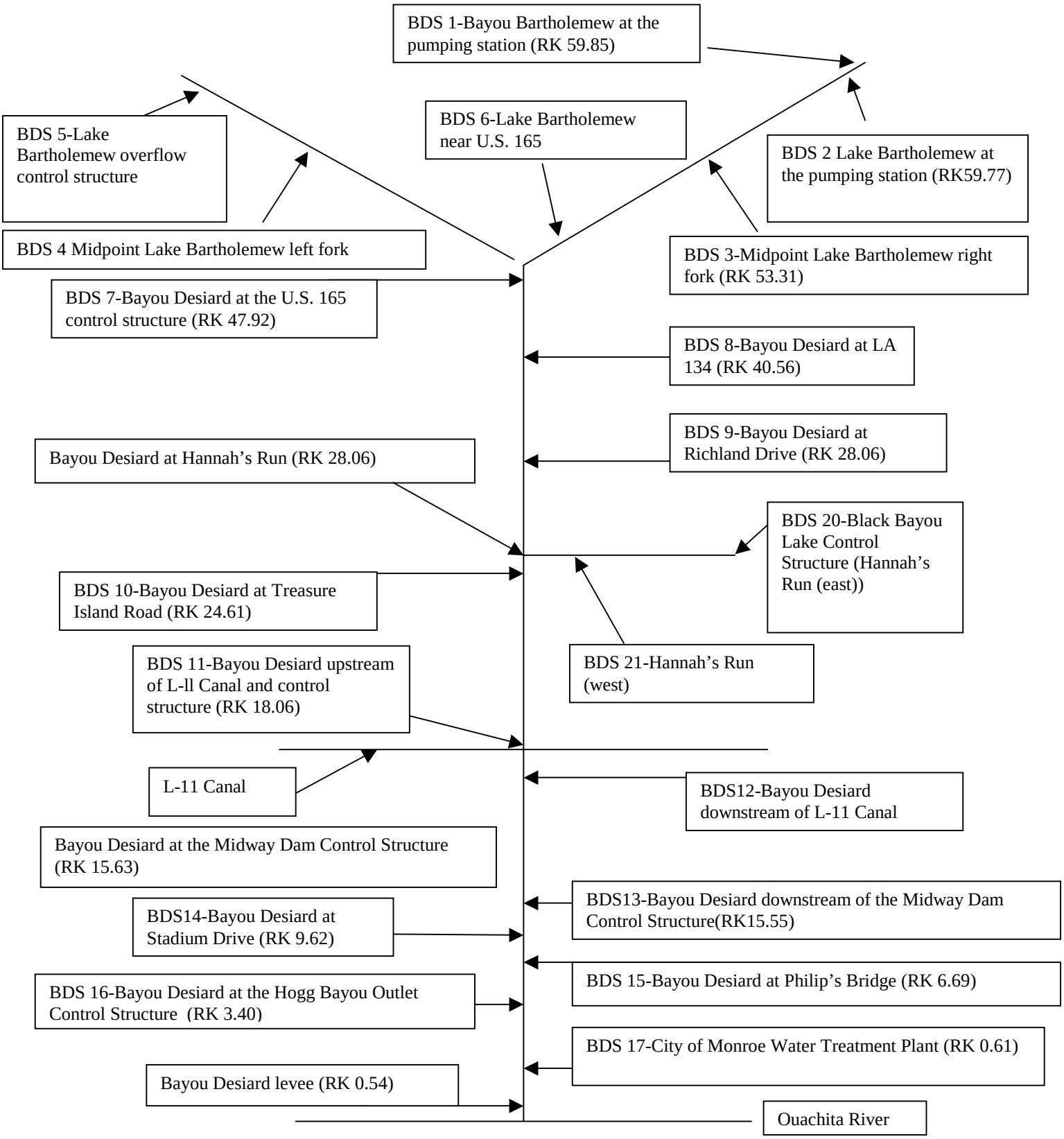
The land uses for subsegment 080701 are shown in Table 2. The subsegment consists primarily of various forms of forestland with a significant amount of agriculture or cropland. Urban areas are also concentrated near Monroe, LA. The land use map is presented in Appendix H.

The vector diagram in Figure 1 shows the main stem sites and tributary sites used in the calibrated model. It shows the direct tributaries of Bayou Desiard. None of these tributaries are perennial in terms of flow. Little Bayou Bouef does not flow due to local dams and weirs. Mill Bayou flows only after rainfall events, providing drainage for Calhoun Brake. Hanna's Run is controlled by man-made structures. The only time water flows through Hannah's Run is when water from Black Bayou Lake is needed to keep the water surface elevation in Bayou Desiard within an acceptable range. A stop-log weir and a control gate control this flow. Another control gate exists in Hannah's Run to control the flow to

Table 2. Land Uses in Segment 080701

LAND USE	ACRES	PERCENT
Fresh Marsh	2.45	0.001
Wetland Forest Deciduous	6470.10	24.04
Upland Forest Deciduous	2526.65	9.39
Upland Forest Evergreen	3049.78	11.33
Upland Forest Mixed	3279.09	12.19
Dense Pine Thicket	552.71	2.05
Wetland Scrub/Shrub Deciduous	36.70	0.14
Upland Scrub/Shrub Deciduous	19.35	0.07
Upland Scrub/Shrub Evergreen	5.12	0.02
Upland Scrub/Shrub Mixed	47.37	0.18
Agriculture/Cropland/Grassland	8506.54	31.61
Vegetated Urban	631.22	2.35
Water	1781.56	6.62
Total	26908.62	

Figure 1. Vector Diagram for the Bayou Desiard Watershed (Subsegment 080701)



Bayou Desiard. Flow from Bayou Desiard to L-11 Canal is also controlled by stop-log weirs on the upstream and downstream sides of L-11 Canal. The stop-log weirs at Black Bayou Lake and L-11 Canal allow continual flow due to leakage. The amount of flow is unknown. Based upon visual observations, the seepage flow can be significant. The flow and water surface elevation in Bayou Desiard is also controlled by three more structures. The structures include Midway Dam at Inabnet Road, Hogg Bayou Outlet Control Structure (stop-log weir), the City of Monroe Water Treatment Plant Pumping Station, and the levee between Bayou Desiard and the Ouachita River.

The purposes of the control structures are to provide drinking water and prevent flooding. Due to the water's extended residence time, Bayou Desiard is essentially a long and narrow lake with a small, often immeasurable amount of flow passing through it. The system is constantly in transition due to the opening and closing of the control structures. The streamflow may also be affected by evapotranspiration, evaporation, and/or shallow groundwater interflow.

Vicinity maps of the watershed are presented in Appendix H.

2.2 Water Quality Standards

The Water Quality criteria and designated uses for the Bayou Desiard and Lake Bartholemew are shown in Table 3.

Table 3. Water Quality Numerical Criteria and Designated Uses

Subsegment	080701
Stream Description	Bayou Desiard (Oxbow Lake) and Lake Bartholemew (Dead Bayou)
Designated Uses	A, B, C, D
Criteria:	
Cl	25
SO_4	25
DO	5.0
PH	6.0 - 8.5
$BAC_{Note\ 1}$	200/400 (Summer) 1,000/2,000 (Winter)
Temperature °C	32
TDS	100

USES: A – primary contact recreation; B – secondary contact recreation; C – propagation of fish and wildlife; D – drinking water supply; E – oyster propagation; F – agriculture; G – outstanding natural resource water; L – limited aquatic life and wildlife use.

Note 1 – 200 colonies/100 mL maximum log mean and no more than 25% of samples exceeding 400 colonies/100 mL for the period May through October; 1,000 colonies/100mL maximum log mean and no more than 25% of samples exceeding 2,000 colonies/100mL for the period November through April.

The summer and winter dissolved oxygen criterion for the Subsegment 080701 is 5.0 mg/L. LDEQ defines the summer months as May through October. The winter months are defined as November through April.

The chlorides, sulfate, and TDS values are 25 mg/L, 25 mg/l, and 500 mg/L, respectively. The temperature criterion is 32 °C. The pH criterion is 6.0–8.5. The designated uses include primary and secondary contact recreation, the propagation of fish and wildlife, and drinking water supply.

Previous studies of Bayou Desiard are not known to exist by this agency. However, the University of Louisiana at Monroe collects monthly water quality data at 12 sites throughout the system. This data is collected for the City of Monroe and yearly reports are developed for the city.

2.3 Wastewater Discharges

Lake Bartholemew and Bayou Desiard do not accept any large point source discharges. The many homes and lawns along the waterbodies provide nonpoint source loading, primarily due to stormwater runoff and the use of pesticides, herbicides and fertilizers. A sod (grass) farm on Lake Bartholemew and a golf course in Frenchmen's Bend Subdivision also provide nonpoint source loading.

The urban areas in Monroe also provide nonpoint loading due to runoff from city pavement and streets. This loading may include metals, oil, and grease.

2.4 Water Quality Conditions/Assessment

The designated uses of Bayou Desiard and Lake Bartholemew, Subsegment 080701, are primary and secondary contact recreation, the propagation of fish and wildlife, and drinking water supply. In 1999, water quality data was collected through the ambient monitoring program. As a result, the waterbody was assessed as "not supporting" its designated use of fish and wildlife propagation. It was fully supporting all other uses. Bayou Desiard was subsequently scheduled for TMDL development with other listed waters in the Ouachita River Basin. According to the 305(b) listing, the suspected cause of impairment was organic enrichment/low DO and nutrients. The listed source was hydromodification. Other suspected sources include natural and man-made nonpoint sources.

Figures 2 through 5 show graphs of the dissolved oxygen, field pH, TDS, field conductivity, TKN, NO2+NO3, total phosphorus, chloride, and sulfate values for LDEQ's Ambient Water Quality Network Station (0786) on Bayou Desiard at the control structure in Monroe, LA. The site was sampled 12 times from January 19, 1999 to December 14, 1999.

The data indicates that the dissolved oxygen concentrations rarely fell below 5.0 mg/L during the sampling period.

This was the assessment data that was used to place the waterbody on the 305(b) list. The waterbody failed the assessment because of the two samples with dissolved oxygen values of 2.8 mg/L.

Figure 2. DO and pH Data for Bayou Desiard at the Control Structure in Monroe, LA. LDEQ Ambient Network Sta. No. 0786 (1/19/99-12/14/99)

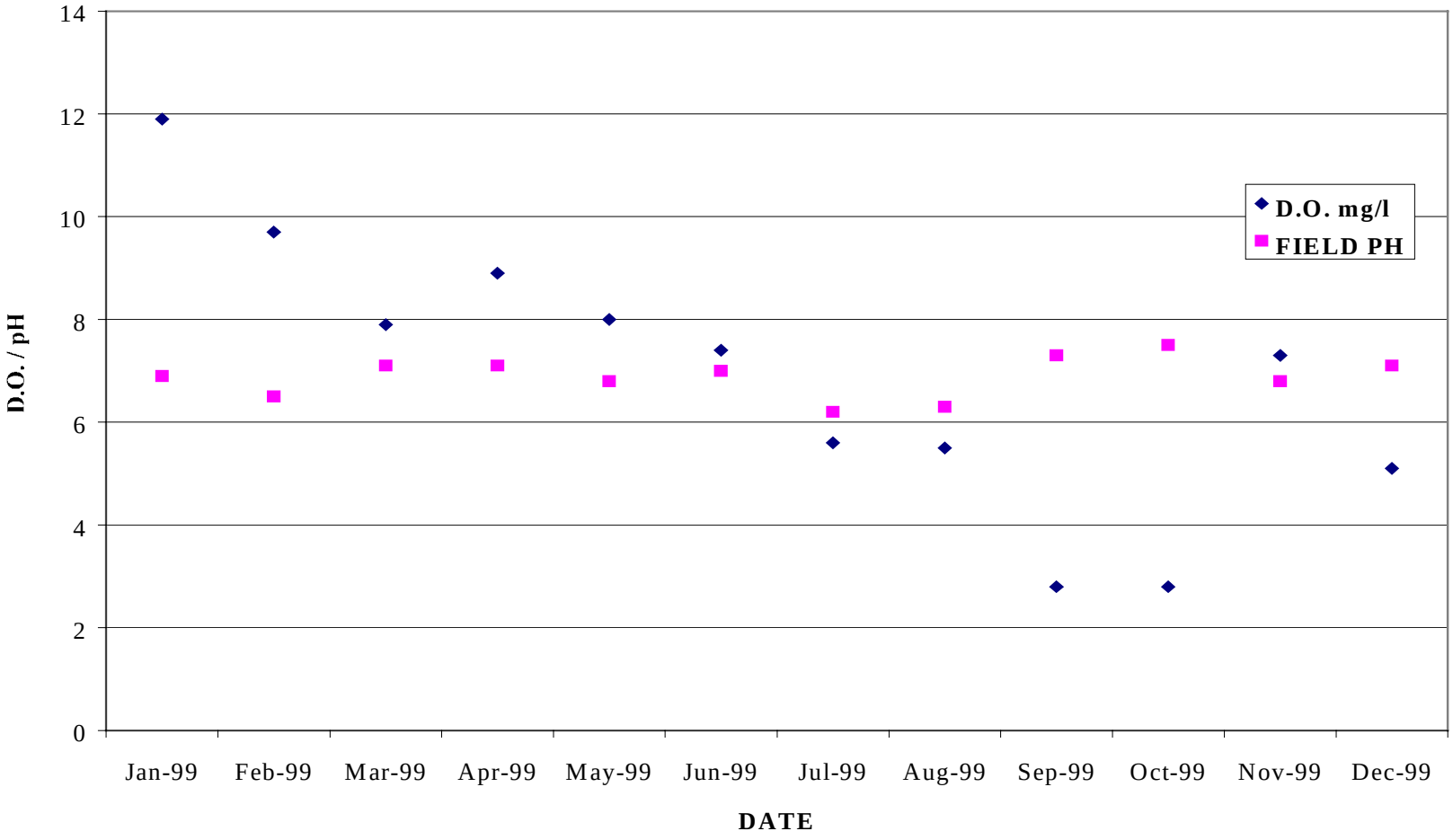


Figure 3. Field Conductivity and T.D.S. Data for Bayou Desiard at the Control Structure in Monroe, LA. LDEQ Ambient Network Sta. No. 0786 (1/19/99-12/14/99)

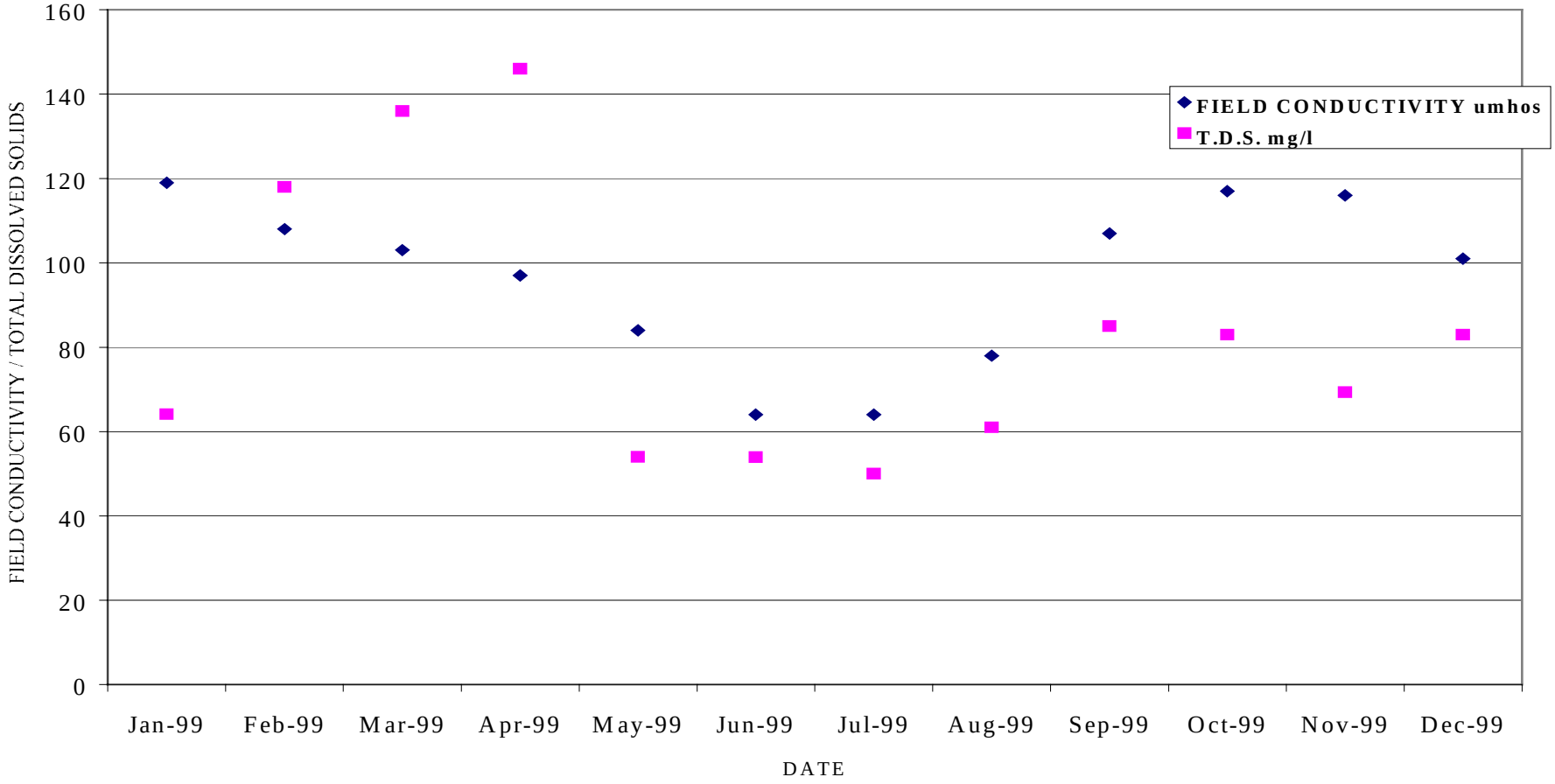


Figure 4. TKN, NO2+NO3, and Total Phosphorus for Bayou Desiard at the Control Structure in Monroe, LA. LDEQ Ambient Network Sta. No. 0786 (1/19/99-12/14/99)

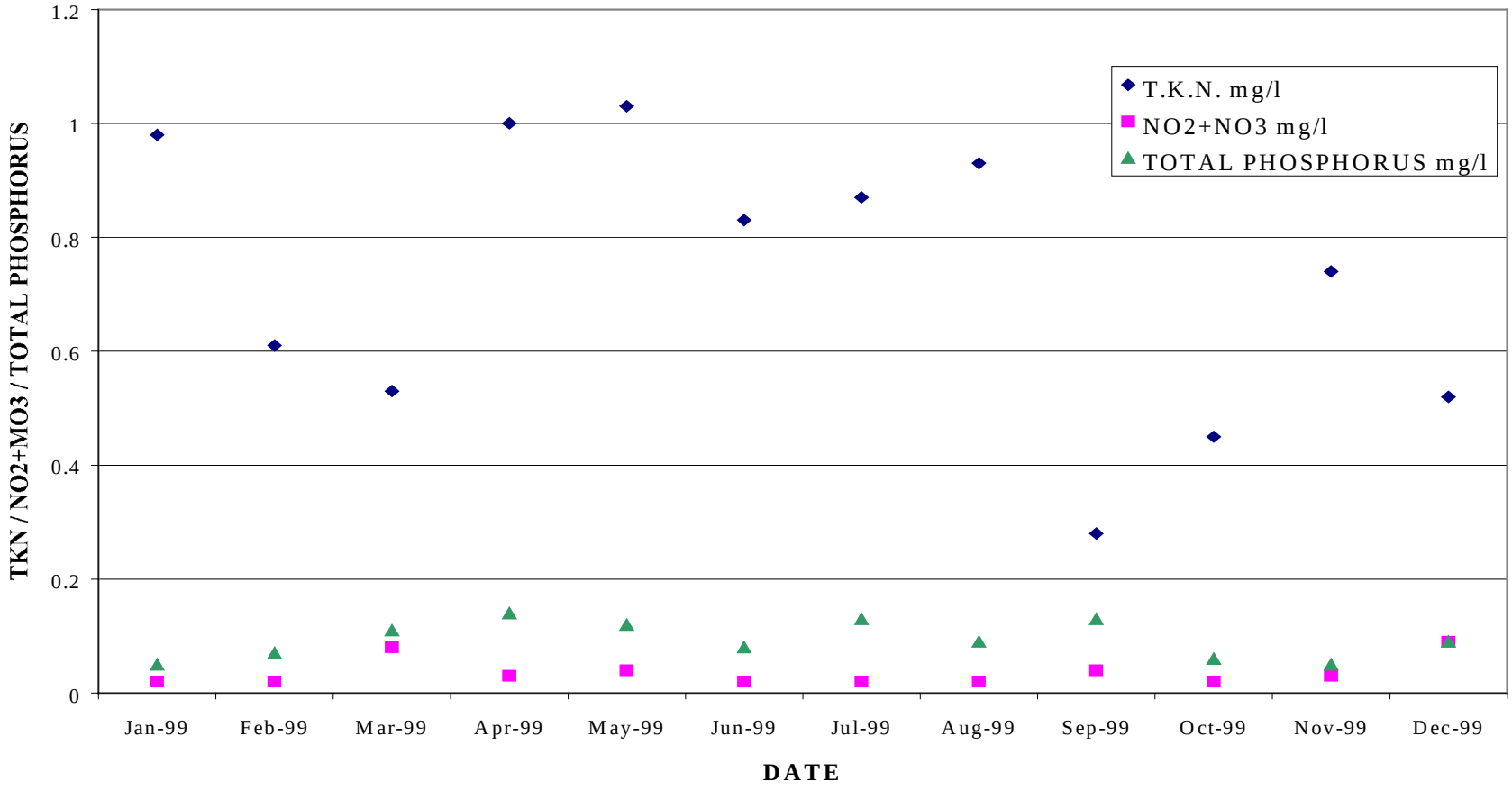
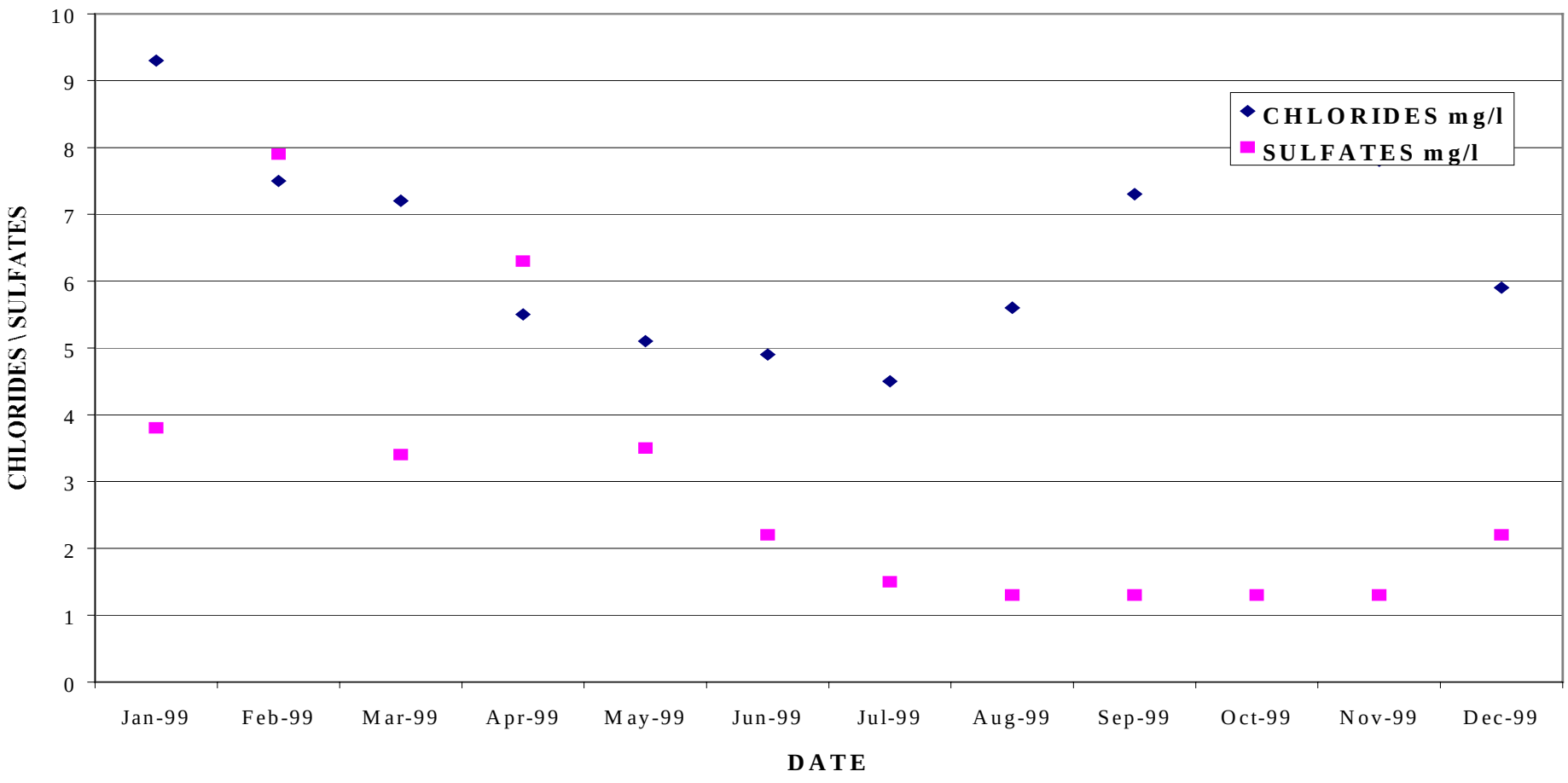


Figure 5. Chloride and Sulfate Data for Bayou Desiard at the Control Structure in Monroe, LA. LDEQ Ambient Network Sta. No. 0786 (1/19/99-12/14/99)



2.5 Prior Studies

Previous studies of Bayou Desiard are not known to exist by this agency. However, the University of Louisiana at Monroe collects monthly water quality data at 12 sites throughout the system. This data is collected for the City of Monroe and yearly reports are developed for the city.

3.0 Documentation of Calibration Models

3.1 Program Description

"Simulation models are used extensively in water quality planning and pollution control. Models are applied to answer a variety of questions, support watershed planning and analysis and develop total maximum daily loads (TMDLs). Receiving water models simulate the movement and transformation of pollutants through lakes, streams, rivers, estuaries, or near shore ocean areas. Receiving water models are used to examine the interactions between loadings and response, evaluate loading capacities (LCs), and test various loading scenarios. A fundamental concept for the analysis of receiving waterbody response to point and nonpoint source inputs is the principle of mass balance (or continuity). Receiving water models typically develop a mass balance for one or more constituents, taking into account three factors: transport through the system, reactions within the system, and inputs into the system." (EPA841-B-97-006, pp. 1-30)

The model used to simulate Bayou Desiard, Lake Bartholemew, and Hannah's Run was LA-QUAL, a steady-state one-dimensional water quality model. LA-QUAL has the mechanisms for incorporating the effects of algae and wind reaeration. LA-QUAL history dates back to the QUAL-I model developed by the Texas Water Development Board with Frank D. Masch & Associates in 1970 and 1971. William A. White wrote the original code.

In June 1972, the United States Environmental Protection Agency awarded Water Resources Engineers, Inc. (now Camp Dresser & McKee) a contract to modify QUAL-I for application to the Chattahoochee-Flint River, the Upper Mississippi River, the Iowa-Cedar River, and the Santee River. The modified version of QUAL-I was known as QUAL-II. Over the next three years, several versions of the model evolved in response to specific client needs. In March 1976, the Southeast Michigan Council of Governments (SEMCOG) contracted with Water Resources Engineers, Inc. to make further modifications and to combine the best features of the existing versions of QUAL-II into a single model. That became known as the QUAL-II/SEMCOG version.

Between 1978 and 1984, Bruce L. Wiland with the Texas Department of Water Resources modified QUAL-II for application to the Houston Ship Channel estuarine system. Numerous modifications were made to enable modeling this very large and complex system including the addition of tidal dispersion, lower boundary conditions, nitrification inhibition, sensitivity analysis capability, branching tributaries, and various input/output changes. This model became known as QUAL-TX and was subsequently applied to streams throughout the State of Texas.

In 1999, the Louisiana Department of Environmental Quality (LA DEQ) and Wiland Consulting, Inc. developed LA-QUAL based on QUAL-TX Version 3.4. The program was converted from a DOS-based program to a Windows-based program with a graphical interface and enhanced graphic output.

Other program modifications specific to the needs of Louisiana and the Louisiana DEQ were also made. LA-QUAL is a user-oriented model and is intended to provide the basis for evaluating total maximum daily loads in the State of Louisiana.

3.2 TMDL Theoretical Development

3.2.1 Stage 1 - Data Collection

The development of a TMDL for biochemical oxygen demand generally occurs in 3 stages. Stage 1 encompasses the data collection activities. These activities may include gathering such information as stream cross-sections, stream flow, stream water chemistry, stream temperature and dissolved oxygen and various locations on the stream, location of the stream centerline and the boundaries of the watershed which drains into the stream, and other physical and chemical factors which are associated with the stream. Additional data gathering activities include gathering all available information on each facility which discharges pollutants in to the stream, gathering all available stream water quality chemistry and flow data from other agencies and groups, gathering population statistics for the watershed to assist in developing projections of future loadings to the water body, land use and crop rotation data where available, and any other information which may have some bearing on the quality of the waters within the watershed. Any data available from reference or least impacted streams that can be used to gauge the relative health of the watershed is also collected during Stage 1.

3.2.2 Stage 2 - Data Preparation and Calibration Model Development

Stage 2 involves organizing all of this data into one or more useable forms from which the input data required by the model can be obtained or derived. Water quality samples, field measurements, and historical data must be analyzed and statistically evaluated in order to determine a set of conditions that have actually been measured in the watershed. The findings are then input to the model. Best professional judgment is used to determine initial estimates for parameters that were not or could not be measured in the field. These estimated variables are adjusted in sequential runs of the model until the model reproduces the field conditions that were measured. In other words, the model produces a value of the dissolved oxygen, temperature, or other parameter that matches the measured value within an acceptable margin of error at the locations along the stream where the measurements were actually made. When this happens, the model is considered to be calibrated to the actual stream conditions. At this point, the model should confirm if there is an impairment and give some indications of the causes of the impairment. If a second set of measurements is available for slightly different conditions, the calibrated model is run with these conditions to see if the calibration holds for both sets of data. When this happens, the model is considered to be verified.

3.2.3 Stage 3 - Projection Model Development

Stage 3 covers the projection modeling which results in the TMDL. The critical conditions of flow and temperature are determined for the waterbody and the maximum pollutant discharge conditions from the point sources are determined. These conditions are then substituted into the model along with any related condition changes, which are required to perform worst-case scenario predictions. At this point, the loadings from the point and nonpoint sources (increased by an acceptable margin of safety) are run at various levels and distributions until the model output shows that dissolved oxygen criteria are achieved. It is critical that a balanced distribution of the point and nonpoint source loads be made

in order to predict any success in future achievement of water quality standards. At the end of Stage 3, a TMDL is produced which shows the point source permit limits and the amount of reduction in man-made nonpoint source pollution which must be achieved to attain water quality standards. The man-made portion of the nonpoint source pollution is estimated from the difference between the calibration loads and the loads observed on reference or least impacted streams.

3.3 Input Data Documentation for the LA-QUAL Model

Data collected during an intensive survey conducted from June 19-21, 2001, was used to establish the input for the calibration model of Bayou Desiard, Lake Bartholemew, and Black Bayou Lake. The survey data is presented in Appendix F.

Reliable flow measurements could not be obtained during the survey. Most reaches of Lake Bartholemew and Bayou Desiard are wide and deep. This makes it physically difficult to obtain a velocity measurement. It also causes the velocity to be lower than the minimum detectable levels of the field equipment.

Daily stage readings were taken at various points throughout the system. The intention was to calculate the rate at which the stage was falling at each point. This rate was calculated in units of feet per day. The surface area of the waterbody was estimated between each site where the stage readings were taken. The surface area was calculated using the reach length and average width of each reach. The average width was calculated using the cross-section data obtained during the survey. The surface area was multiplied by the rate at which the stage was rising or falling to determine a gain or loss of volume in units of cubic feet per day. This method did not work. The results did not agree from reach to reach. The results did not agree with the chloride data.

The only reliable flow measurement available for the system was obtained from the City of Monroe Water Treatment Plant. The water quality data was obtained on June 20, 2001. The flow being withdrawn by the treatment plant on June 20, 2001 was 13.8 MGD (21.35 cfs, 0.6045 cms). This flow was used at site BDS17. Starting at the downstream end and working upstream, this flow and the corresponding chloride concentration were used with the chloride values at sites BDS15, BDS14, and BDS13, to calculate flow values at these sites.

The pumping station on Lake Bartholemew was closed and the gates at U.S. 165 were closed. However, the reconnaissance survey revealed that water leaked through the gates at U.S. 165 and the stage reading indicated that the water surface elevation of Lake Bartholemew was falling during the survey. The gates at Black Bayou Lake were also closed. The reconnaissance survey revealed that water leaked through the stop-log weir and the stage readings indicated that the water surface elevation was falling during the survey. Water was also seen leaking from Bayou Desiard to L-11 Canal through the stop-log weirs.

Due to these observations, flows from Lake Bartholemew and Black Bayou Lake were estimated using the stage readings and water surface area as described above. The flow contributed by Lake Bartholemew was split equally between the east and west ends. The resulting split flow was used to calibrate the model at sites BDS2 through BDS6. The combined flow was used at site BDS7

Starting at site BDS7 and working downstream, the flow and chloride concentration at site BDS7 and the chloride values at sites BDS8 and BDS9 were used to calculate flow values at these sites. The calculated flow for Black Bayou Lake was brought in at site BDS20 on Hannah's Run. Summing the flows at site BDS7 and site BDS20 provided the flow at site BDS10. It should be noted that the reconaissance survey revealed that water leaked through various holes in the stop-log weir at Black Bayou Lake (Hannah's Run East). In order to reduce the flow to match the calculated flows at the downstream sites, flow was withdrawn at L-11 Canal. This scenario was confirmed by reconnaissance survey and watershed survey observations. The reconaisance survey showed that water also flowed through various holes in the stop-log weir at L-11 Canal.

Streamflow estimations are presented in Appendix F.

Field and laboratory water quality data were entered in a spreadsheet for ease of analysis. The BOD data was analyzed in a separate spreadsheet. The output graphs for the spreadsheet indicated that most of the sites had two components of CBOD. This caused a CBOD curve with two distinguishable "humps". As a result, values of ultimate CBOD1, CBOD1 decay rate, CBOD1 Lag, ultimate CBOD2, CBOD2 decay rate, CBOD lag and NBOD decay were computed for each sample taken. This data was the primary source for the model input data for initial conditions; decay rates; incremental temperature, DO, $CBOD_U$, organic nitrogen, ammonia nitrogen, nitrite + nitrate nitrogen, and headwater data.

3.3.1 Model Schematics and Maps

A vector diagram of the modeled area is presented in Figure 1 and Appendix H. The vector diagram shows the locations of survey stations, the locations of modeled tributaries and the locations of intermittent tributaries that were not modeled. Maps of the stream and subsegment are also included in Appendix H.

3.3.2 Model Options, Data Type 2

Nine constituents were modeled during the calibration process. These constituents included flow, chlorides, sulfates, dissolved oxygen, two ultimate carbonaceous biochemical oxygen demand components, organic nitrogen, ammonia nitrogen, and nitrite + nitrate nitrogen.

Due to the two CBOD components, CBOD1 was simulated using the effective BOD parameter. Effective BOD is used to simulate the effects of algae on BOD. CBOD2 was simulated using the nonconservative material parameter (NCM). Initially, the organic nitrogen parameter was going to be used to simulate NBOD. However, organic nitrogen is not inhibited when dissolved oxygen concentrations decline. Therefore, organic nitrogen, ammonia nitrogen, and nitrite + nitrate nitrogen were simulated. The input CBOD1 and CBOD2 values were combined and the input organic nitrogen concentration was multiplied by 4.57 to determine the final TMDL.

Chlorophyll a was not modeled. The effects of algae on dissolved oxygen and the nitrogen cycle were simulated by including chlorophyll a in the Initial Conditions section of the LAQUAL model. The sampling results showed elevated quantities of chlorophyll a, especially at site BDS8. The continuous monitors showed diurnal swings in dissolved oxygen that are typical of waterbodies containing algae. The water quality values for TDS and color were low for waterbodies containing algae. There was a significant riparian zone along most of the waterbody. This zone provided a vegetative canopy along

the banks. However, the waterbody was wide with a low velocity. These characteristics allowed most of the water surface to receive full sunlight. This provided the optimum environment for aggressive algae production. Therefore, algal production was strongly evident in the waterbody. This simulation was accomplished by using a chlorophyll a value in the initial conditions data.

3.3.3 Temperature Correction of Kinetics, Data Type 4

The temperature values computed are used to correct the rate coefficients in the source/sink terms for the other water quality variables. These coefficients are input at 20 ^{o}C and are then corrected in the model to stream temperature using the following equation:

$$X_T = X_{20} * \text{Theta}^{(T-20)}$$

Where:

X_T = the value of the coefficient at the local temperature T in degrees Celsius
X_{20} = the value of the coefficient at the standard temperature at 20 degrees Celsius
Theta = an empirical constant for each reaction coefficient

In the absence of specified values for data type 4, the model uses default values. A complete listing of these values can be found in the LA-QUAL for Windows User's Manual (LDEQ, 2001).

3.3.4 Reach Identification Data, Data Type 8

Thirty-one reaches and 179 elements were used in the model of Subsegment 080701. Generally, a new reach was started at every sampling site, control structure, or confluence with a tributary. The control structures were represented with individual reaches. New reaches are often started wherever the water quality or hydrology changes significantly. The east end of Lake Bartholemew was represented as the extended main-stem of Bayou Desiard. The west end of Bayou Desiard and Hannah's Run were represented as individual branches to the main-stem. The water quality at sites 2 and 5 were used to represent the headwater values for the east and west ends of Lake Bartholemew. Black Bayou Lake was represented as a headwater. The reach and element information has been provided in Appendix C.

3.3.5 Advective Hydraulic Coefficients, Data Type 9

Rather than directly inputting the widths and depths of the stream, the model requires entry of the advective hydraulic characteristics. Cross-section measurements had been obtained during the watershed survey. The flow and water surface elevations are completely controlled by man-made structures. Subsequently, the assumption was made that the widths and depths at the individual sites do not have a wide range of variance. The measured widths and depths were assumed to be representative of the minimal values. These values were used to estimate the width and depth constant values for the reaches in which the sites existed. Values for the intervening reaches were selected based upon the measured values.

Values for the width and depth exponents were selected based on the assumption of whether or not the width or depth varied greatly with flow. If the width or depth varied greatly with flow, the exponent value was set to 0.4. If the width or depth did not vary greatly with flow, the exponent value was set to

0.1. The individual widths and depths were assumed to remain fairly constant for streamflows at or near low flow conditions. Therefore, the width and depth exponents were set to 0.1
The values for the width and depth coefficients were determined during the calibration process.

3.3.6 Initial Conditions, Data Type 11

The initial conditions are used to reduce the number of iterations required by the model. The values required for this model were temperature and DO by reach. The input values came from the survey station located closest to the reach. Chlorophyll a values were also used since the effects of algae on the dissolved oxygen concentrations were also simulated with this model. The chlorophyll a data had been obtained at each site. During calibration, it became evident that macrophytes were needed to take up the nitrite + nitrate produced by the simulated oxidation of ammonia. This was expected since macrophytes were visible at various locations in Bayou Desiard. The input data and sources are shown in Appendix C.

3.3.7 Reaeration Rates, Data Type 12

Three reaeration equations were used in the model. The stream velocity was extremely low and many of the reaches were wide and open to wind reaeration. Except for the effects of algae and macrophytes, wind reaeration was assumed to be the primary source of dissolved oxygen. Two wind reaeration equations were used for the model. The first wind reaeration equations are stated as follows:

Equation (1) $K2 = (0.362 \times W^{0.5}) / D$

Equation (2) $K2 = (0.479 + 0.081 \times W^{2})/D$

Equation (3) $K2 = a/D$

Where:

a = 0.7 (converted for metric units)
W = wind velocity (m/sec)
D = modeled stream reach depth (feet)

Equation (1) was developed by Banks in 1975). This equation appeared to be most effective in reaches 1 – 6, 10 – 13, and 19. The remaining reaches upstream of Hannah's Run (including Hannah's Run) had an extensive vegetative canopy or were used to represent a control pipe.

Equation (2) was developed by Johanson in 1977. This equation was effective in reaches 20, 22, 24 – 26, and 28 – 31. The remaining reaches were used to represent control pipes

Equation (3) was used to simulate the reaeration characteristics of reaches that were not impacted by wind (due to vegetative canopy) and reaches that were used to represent control pipes. These reaches included 7 - 9, 14 – 18, 21, 23, and 27.

3.3.8 Sediment Oxygen Demand, Data Type 12

The SOD values were achieved through calibration. Generally, the stream is too deep to be impacted by SOD at the sampling depth of 1.0 meters. However, reaches 7 - 10 were used to represent the short distance of shallower reaches that conveyed water from Lake Bartholemew to Bayou Desiard. Cross-section data was not obtained in these reaches. The reaches were observed as being relatively shallow and narrow during the reconnaissance survey. Reaches 12 and 13 were also observed to be relatively shallow. Therefore, SOD was more likely to be have an impact in these reaches.

3.3.9 Carbonaceous BOD Decay and Settling Rates, Data Type 12

The CBOD1 and CBOD2 decay rates used were based on the bottle rates from the survey. The decay rates ranged from 0.08 per day to 0.23 per day. The settling rates were set to 0.05 per day.

3.3.10 Nitrogenous BOD Decay and Settling Rates, Data Type 15

The NBOD bottle decay rates were used as the organic nitrogen decay rates. They ranged from 0.05 per day to 0.25 per day This seemed to be applicable since the organic nitrogen was being converted to ammonia and then nitrite + nitrate. Most of the sites had ammonia and nitrite + nitrate levels that were not detectable. This indicated that the ammonia was quickly being oxidized to nitrite + nitrate and the nitrite + nitrate was being immediately consumed by algae and macrophytes. The settling rates were set to 0.15 per day.

3.3.11 Incremental Conditions, Data Types 16, 17, and 18

The incremental conditions were not used in the calibration or the projection models.

3.3.12 Nonpoint Sources, Data Type 19

Nonpoint source loads that are not associated with a flow are input into this part of the model. These can be most easily understood as resuspended load from the bottom sediments and were modeled as sediment oxygen demand (SOD), CBOD1 (in BOD), CBOD2 (in NCM), and organic nitrogen loads. These values were determined by calibration.

Dissolved oxygen was also input as a nonpoint load in reach 14. This was done to simulate the reaeration characteristics of the stop-log weir between Black Bayou Lake and Hannah's Run. The water pours through the various cracks in the weir and free-falls three or four feet. It then passes underneath railroad tracks through two 56-inch diameter control gates.

Although SOD is actually a nonpoint load, it is entered into Data Type 12.

3.3.13 Headwaters, Data Types 20, 21, and 22

Site BDS2 was located on Lake Bartholemew at the pumping station. This site was considered to be the headwater of the east end of Lake Bartholemew. Site BDS5 was located on Lake Bartholemew

near the overflow control structure. This site was considered to be the headwaters of the west end of Lake Bartholemew. The estimated flow from Lake Bartholemew was split between the two headwaters. Site BDS20 was located in Black Bayou Lake at the control structure (Hannah's Run (east)). This site was considered to be the headwaters of Hannah's Run.

3.3.14 Wasteloads, Data Types 24, 25, and 26

There were no tributaries or facilities discharging into Bayou Desiard. The west end of Lake Bartholemew and Hannah's Run were included as individual branches. However, the flow exiting Bayou Desiard at the L-11 Canal and the City of Monroe Water Treatment Plant's intake pipes were simulated as wasteloads with a negative (outgoing) flow. The water was withdrawn with the water quality concentrations that were simulated by the model.

3.3.15 Lower Boundary Conditions, Data Type 27

The lower boundary conditions were not utilized in this model so that the model could be calibrated to survey data and not be forced through the survey data. Therefore, a better simulation of the actual loading could be obtained during calibration.

3.4 Model Results and Discussions

The calibration model input and output is presented in Appendix B. The overlay plotting option was used to determine if calibration had been achieved. A plot of the dissolved oxygen concentration versus river kilometer is presented in Figure 6.

The hydrologic calibration for depth and width was very good throughout the subsegment. The flow, chloride, and sulfate calibrations were adequate at best. This was true because the only reliable flow measurement available for the time of the survey was the flow withdrawn by the City of Monroe Water Treatment Plant.

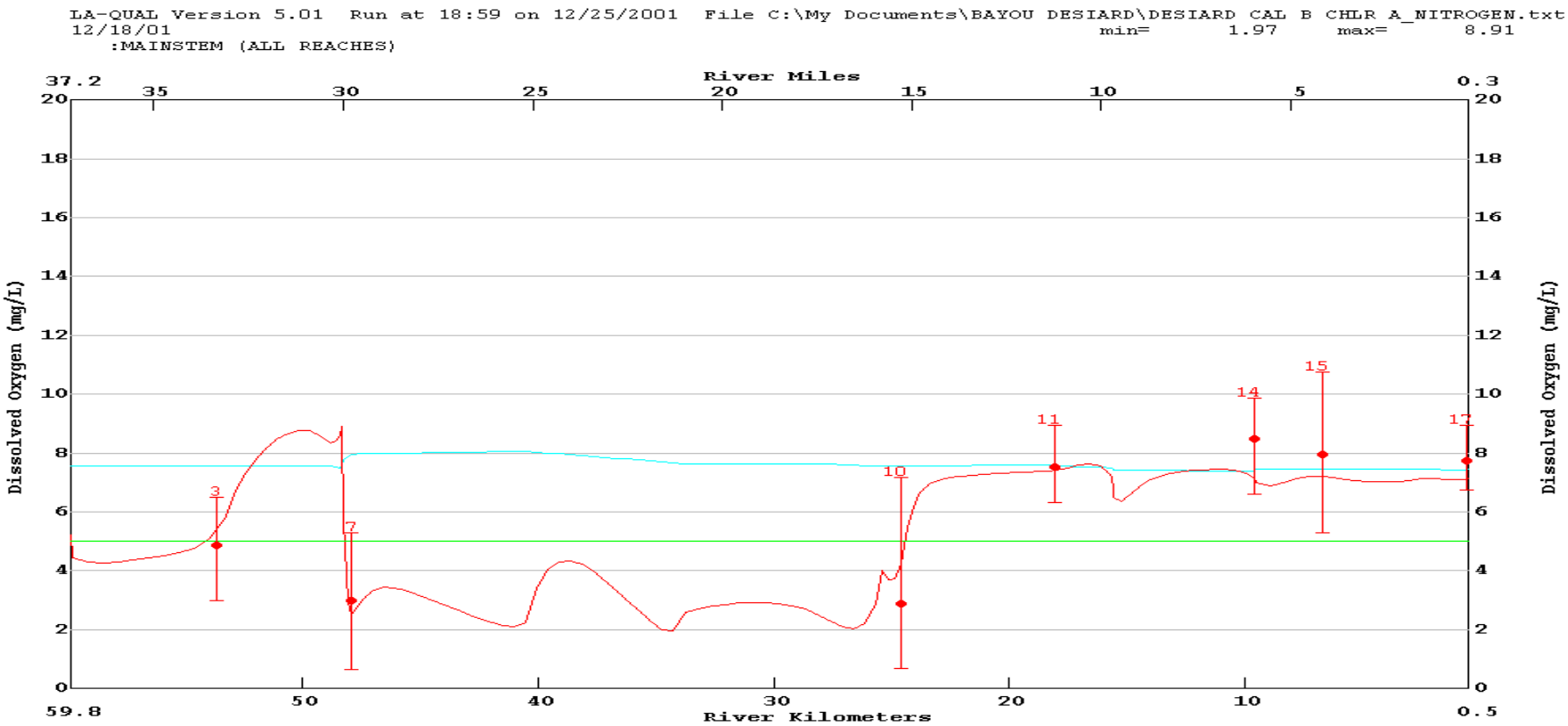
As shown in Figure 6, Bayou Desiard was not meeting the dissolved oxygen criteria for the summer season. Apparently, this is primarily due to nonpoint loading and the affects of algal and macrophyte activity.

4.0 Water Quality Projections

Since the calibrated model indicated that the DO criterion was not being met in approximately 30 km of Bayou Desiard, summer and winter projections were developed. Nonpoint load reduction percentages were estimated during this process. The projection models are presented in Appendix D.

Typically, LA DEQ's reference stream data or other applicable data is used to represent the "natural background" loading in a waterbody when estimating the percent reduction of nonpoint loading. This allows "man-made" and "natural background" nonpoint loading to be estimated. The reduction percentages are then applied to the man-made portion of the nonpoint loads. None of the reference stream data was representative of the Bayou Desiard system. Therefore, the "man-made" and "natural

Figure 6. Calibration Model Dissolved Oxygen versus River Kilometer



- numbered points indicate survey stations
- vertical lines indicate various tributaries and outfalls
- the horizontal line (green) indicates the DO criterion
- upper plotted line (blue) indicates DO saturation
- lower plotted line (red) indicates calibration model output

background" nonpoint loads were not differentiated. Instead, the reduction percentages were applied to the total nonpoint loads. This was accomplished by using a natural background benthic load of 0.0 gm O_2/m^2/day in the projection loading calculation spreadsheets in Appendix E.

4.1 Critical Conditions, Seasonality and Margin of Safety

The Clean Water Act requires the consideration of seasonal variation of conditions affecting the constituent of concern, and the inclusion of a margin of safety (MOS) in the development of a TMDL. For the Bayou Desiard TMDL, an analysis of LDEQ ambient data has been employed to determine critical seasonal conditions and an appropriate margin of safety.

Critical conditions for dissolved oxygen were determined for Bayou Desiard water quality assessment data from Bayou Desiard at the control structure in Monroe, LA. This is station number 0786 in the LDEQ Ambient Monitoring Network data. The 90th percentile temperature for each season and the corresponding 90% value of saturation DO were determined. Ambient temperature data is presented in Appendix G. Critical temperature and DO saturation determinations are shown in Appendix E.

Graphical and regression analysis techniques have been used by LDEQ historically to evaluate the temperature and dissolved oxygen data from the Ambient Monitoring Network and run-off determinations from the Louisiana Office of Climatology water budget. Since nonpoint loading is conveyed by run-off, this was a reasonable correlation to use. Temperature is strongly inversely proportional to dissolved oxygen and moderately inversely proportional to run-off. Dissolved oxygen and run-off are also moderately directly proportional. The analysis concluded that the critical conditions for stream dissolved oxygen concentrations were those of negligible nonpoint run-off and low stream flow combined with high stream temperature.

When the rainfall run-off (and non-point loading) and stream flow are high, turbulence is higher due to the higher flow and the temperature is lowered by the run-off. In addition, run-off coefficients are higher in cooler weather due to reduced evaporation and evapotranspiration, so that the high flow periods of the year tend to be the cooler periods. Reaeration rates and DO saturation are, of course, much higher when water temperatures are cooler, but BOD decay rates are much lower. For these reasons, periods of high loading are periods of higher reaeration and dissolved oxygen but not necessarily periods of high BOD decay.

This phenomenon is interpreted in TMDL modeling by assuming that nonpoint loading associated with flows into the stream are responsible for the benthic blanket which accumulates on the stream bottom and that the accumulated benthic blanket of the stream, expressed as SOD and/or resuspended BOD in the calibration model, has reached steady state or normal conditions over the long term and that short term additions to the blanket are off set by short term losses. This accumulated loading has its greatest impact on the stream during periods of higher temperature and lower flow. The man-made portion of the NPS loading is the difference between the calibration load and the reference stream load where the calibration load is higher. The only mechanism for changing this normal benthic blanket condition is to implement best management practices and reduce the amount of nonpoint source loading entering the stream and feeding the benthic blanket.

Critical season conditions were simulated in the Bayou Desiard dissolved oxygen TMDL projection modeling by using the seasonal average flows from data provided by the City of Monroe Water

Treatment Plant (Monroe WTP) and temperature guidelines from the Louisiana Total Maximum Daily Load Technical Procedures Manual (LTP). Due to the man-controlled flow regime, seasonal 7Q10 values were not applicable as recommended in the LTP. Therefore the outgoing flow was based upon seasonal data provided by the Monroe WTP. Incremental flow was assumed to be consistent with the levels used in the calibration model; nonpoint model loading was from tributaries, sediment oxygen demand, resuspension of sediments.

In reality, the highest temperatures occur in July-August, the lowest stream flows occur in October-November, and the maximum point source discharge occurs following a significant rainfall, i.e., high-flow conditions. The summer projection model is established as if all these conditions happened at the same time. The winter projection model accounts for the seasonal differences in flows and BMP efficiencies. Other conservative assumptions regarding rates and loadings are also made during the modeling process. In addition to the conservative measures, an explicit MOS of 20% was used for all loads to account for future growth, safety, model uncertainty and data inadequacies.

4.2 Input Data Documentation for the LA-QUAL Model

Due to the lack of historical flow data, seasonal 7Q10 values could not be calculated for Bayou Desiard. The calibration headwater flows were greater than the 0.1 cfs and 1.0 cfs recommended in the LTP for the summer and winter projections, respectively. Therefore, they were retained in the summer and winter projection models.

There were no perennial tributaries to be included in the model as boundary loads.

The projection temperatures were set to the 90th percentile temperatures for the LA DEQ Ambient Network Site on Bayou Desiard at the Control structure in Monroe, LA (Station 0786).

The seasonal headwater and initial condition values for dissolved oxygen were set to 90 percent of the saturation dissolved oxygen concentration for the corresponding 90th percentile temperatures.

The calibration nonpoint and headwater loads were reduced by a percentage and applied in the projection models. The UCBOD1 and UCBOD2 nonpoint loads were combined before being reduced in the loading spreadsheets as nonpoint UCBOD. The value produced by the spreadsheets was then manually redistributed based upon the ratios present in the calibration model. The nonpoint organic nitrogen was multiplied by 4.57 to obtain a value for nonpoint UNBOD. This value was then reduced by the spreadsheet. The resulting value was then manually converted back to nonpoint organic nitrogen by dividing by 4.57. The resulting value was used in the projections. The spreadsheets are presented in Appendix E.

The calibration input values for the remaining parameters were retained and used as input values in the summer and winter projections. The model adjusts the input values for SOD, $CBOD_U$ decay, NCM decay, and organic nitrogen decay based upon the input temperature. The model projects the width and depth values based upon the streamflow.

4.2.1 Model Options, Data Type 2

Six constituents were simulated during the projection process. These were dissolved oxygen, carbonaceous biochemical oxygen demand (CBOD1 and CBOD2), organic nitrogen, ammonia nitrogen, and nitrite + nitrate nitrogen.

4.2.2 Temperature Correction of Kinetics, Data Type 4

The temperature correction factors specified in the LTP were entered in the model.

4.2.3 Reach Identification Data, Data Type 8

The reach-element design from the calibration was used in the projection modeling.

4.2.4 Advective Hydraulic Coefficients, Data Type 9

The stream cross-section was automatically adjusted for the projection flows by the model through the use of the coefficients and exponents established during the calibration.

4.2.5 Initial Conditions, Data Type 11

The initial conditions were set to the 90th percentile critical season temperature in accordance with the LTP. The dissolved oxygen values for the initial conditions were set at 90 percent of the saturation dissolved oxygen concentration for the corresponding temperature.

4.2.6 Reaeration Rates, Carbonaceous BOD Decay and Settling Rates, Nitrogenous BOD Decay and Settling Rates, Data Types 12 and 15

The reaeration rate equations, CBOD decay and settling rates, and NBOD decay and settling rates were not changed from the calibration equations and rates.

4.2.7 Incremental Conditions, Data Types 16, 17, and 18

The incremental conditions were not used in the calibration or the projection models.

4.2.8 Sediment Oxygen Demand, Nonpoint Sources, Headwaters, Wasteloads, Data Type 12, 19, 20, 21, 22, 24, 25, and 26

The NPS values were calculated for each projection scenario using a set of load equivalent spreadsheets (workbook). Typically, an analysis was made of the calibration NPS and SOD loads in terms of total loading in units of gm-O_2/m^2/day and compared to the reference stream loads in the same terms (which accounted for the width differences between the reference and the modeled streams). Reference stream values for total loading are typically used to represent “natural background” total benthic loading. Calibration values are used where they were smaller than reference stream values.

The same set of spreadsheets are also used to calculate load reductions for the headwaters, tributaries, and wasteloads. Reduced concentrations for the incoming nonpoint flows were also calculated with this set of spreadsheets. Applicable data is used to represent the "natural background" values.

However, none of the reference streams were similar to Bayou Desiard. Therefore, data representative of natural background values was not available. It is assumed that the loading in Bayou Desiard is primarily "natural background". If this is true, then there is no reference stream data available to represent the Bayou Desiard watershed. The benthic loads (in gm O_2/m^2/day) were far greater in Bayou Desiard than in any of the reference streams. As a result, the man-made and natural background nonpoint loads were not quantified. The reduction percentages were applied to the total nonpoint load.

4.2.9 Boundary Conditions, Data Type 27

The lower boundary conditions were not used for this waterbody due to several reasons. The reasons include:

1) The waterbody is not tidally influenced
2) The lower boundary condition was not allowed to influence the model results so that the model could simulate the survey values.

4.3 Model Results and Discussion

The projection model input and output data sets and output graphs are presented in Appendix D.

4.3.1 Summer Projection

Summer projection runs were made to estimate the impact of a partial removal of total NPS loads. The final model results showed that the instream dissolved oxygen criterion of 5.0 mg/L could be met in the summer with a 50% reduction in the total nonpoint loads. The model showed that a minimum DO concentration of 4.92 mg/L would occur at RK 27.10. This is within the tolerance range accepted by EPA as technically acceptable. A graph of the dissolved oxygen concentration versus river kilometer for the summer projection is presented in Figure 7. An additional summer projection with a 40% reduction in the total nonpoint loading was developed. The dissolved oxygen simulation is presented in Figure 8.

4.3.2 Winter Projection

The results of the model show that the water quality criterion for dissolved oxygen for Bayou Desiard of 5.0 mg/l can be maintained during the winter critical season. The criterion was achieved by using a 50% reduction in the total nonpoint loads. A 50% reduction in the estimated man made nonpoint loading was utilized to be consistent with the projection for the summer critical conditions and the use of an annual percentage reduction. The minimum simulated dissolved oxygen concentration is 6.52 mg/l at RK 34.26. A graph of the dissolved oxygen concentration versus river kilometer for the winter projection is presented in Figure 9.

Figure 7. Summer Projection with 50 % Removal of the Total NPS Loads

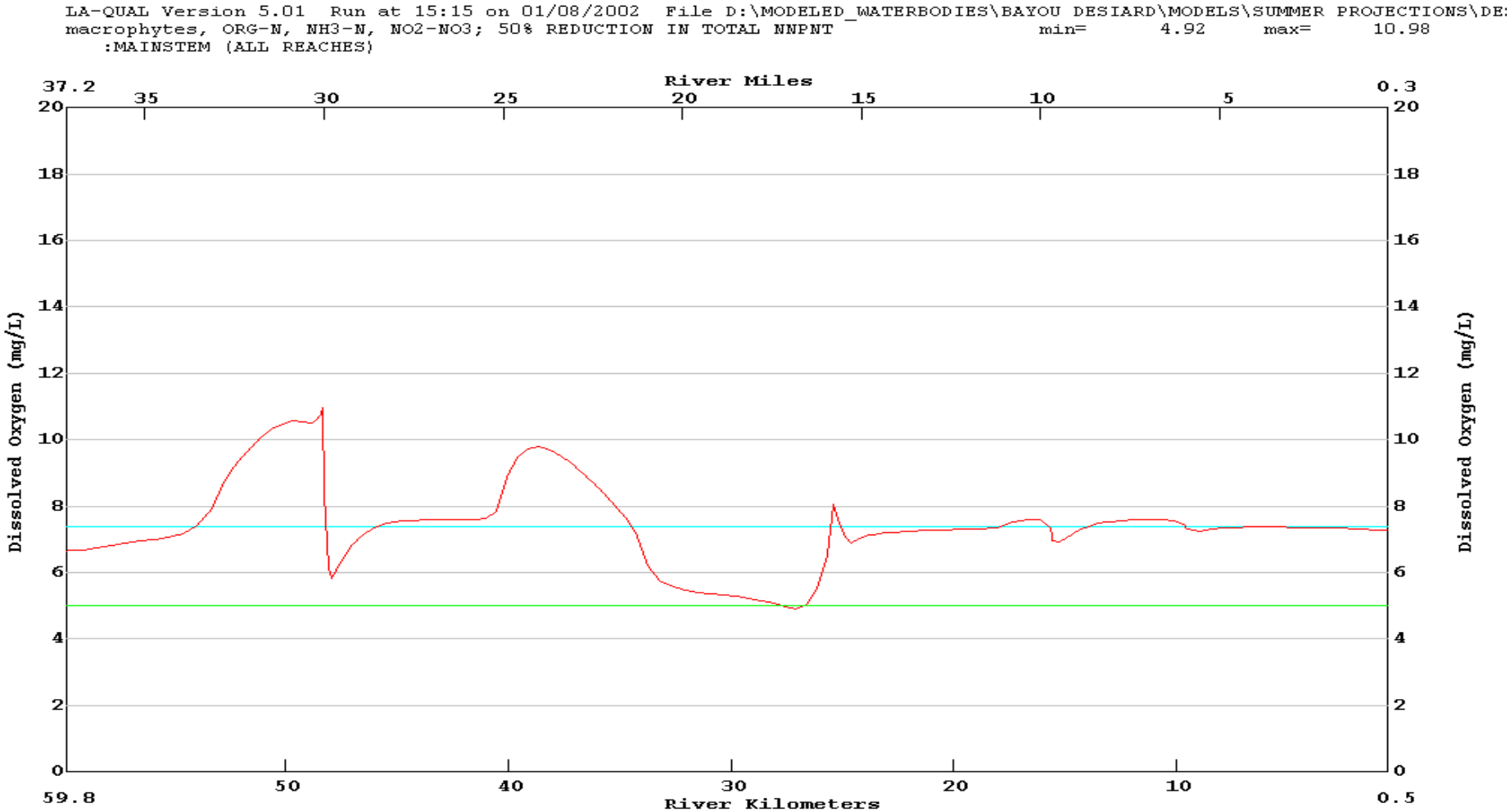


Figure 8. Summer Projection with 40 % Removal of the Total NPS Loads

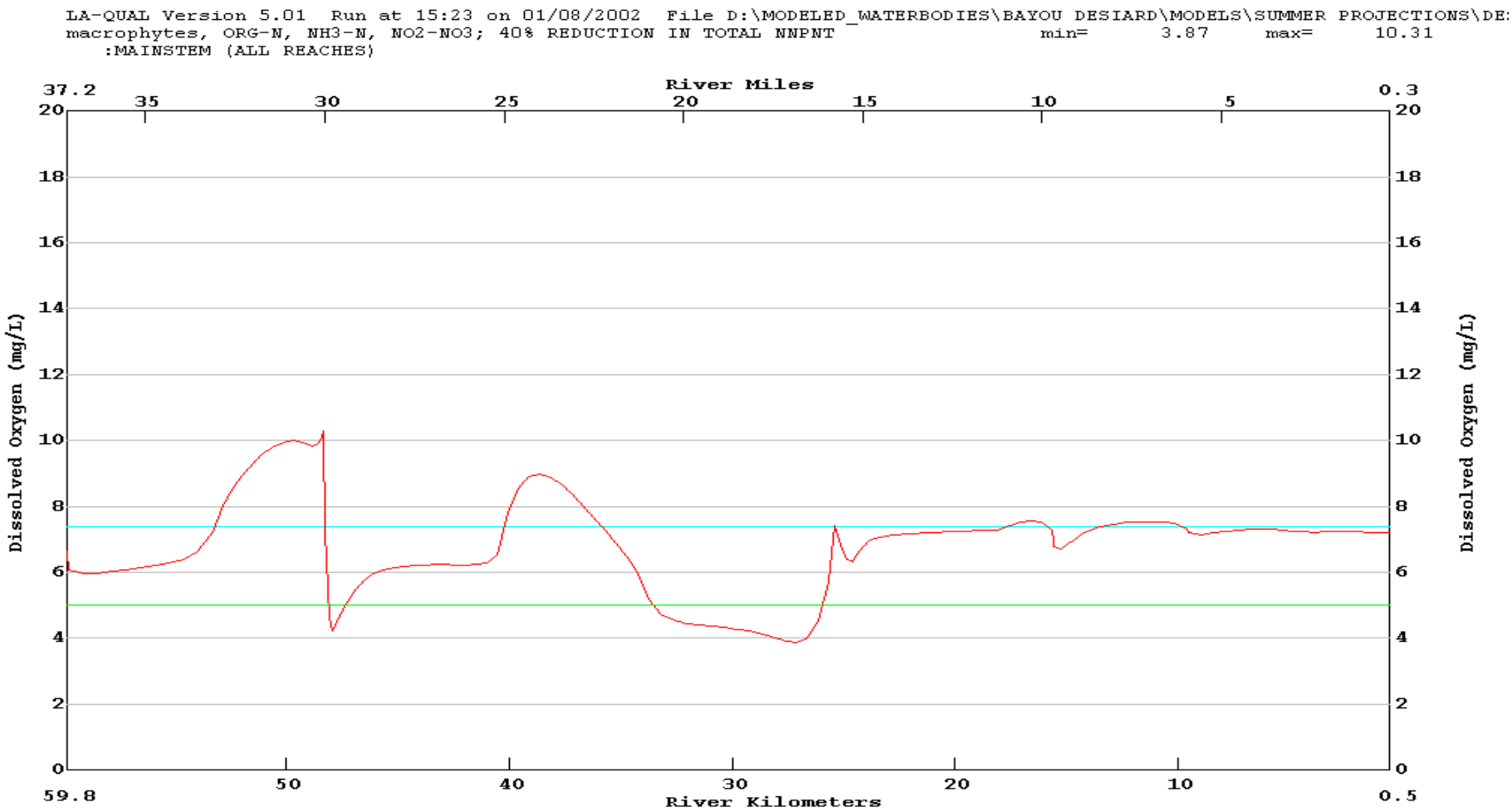
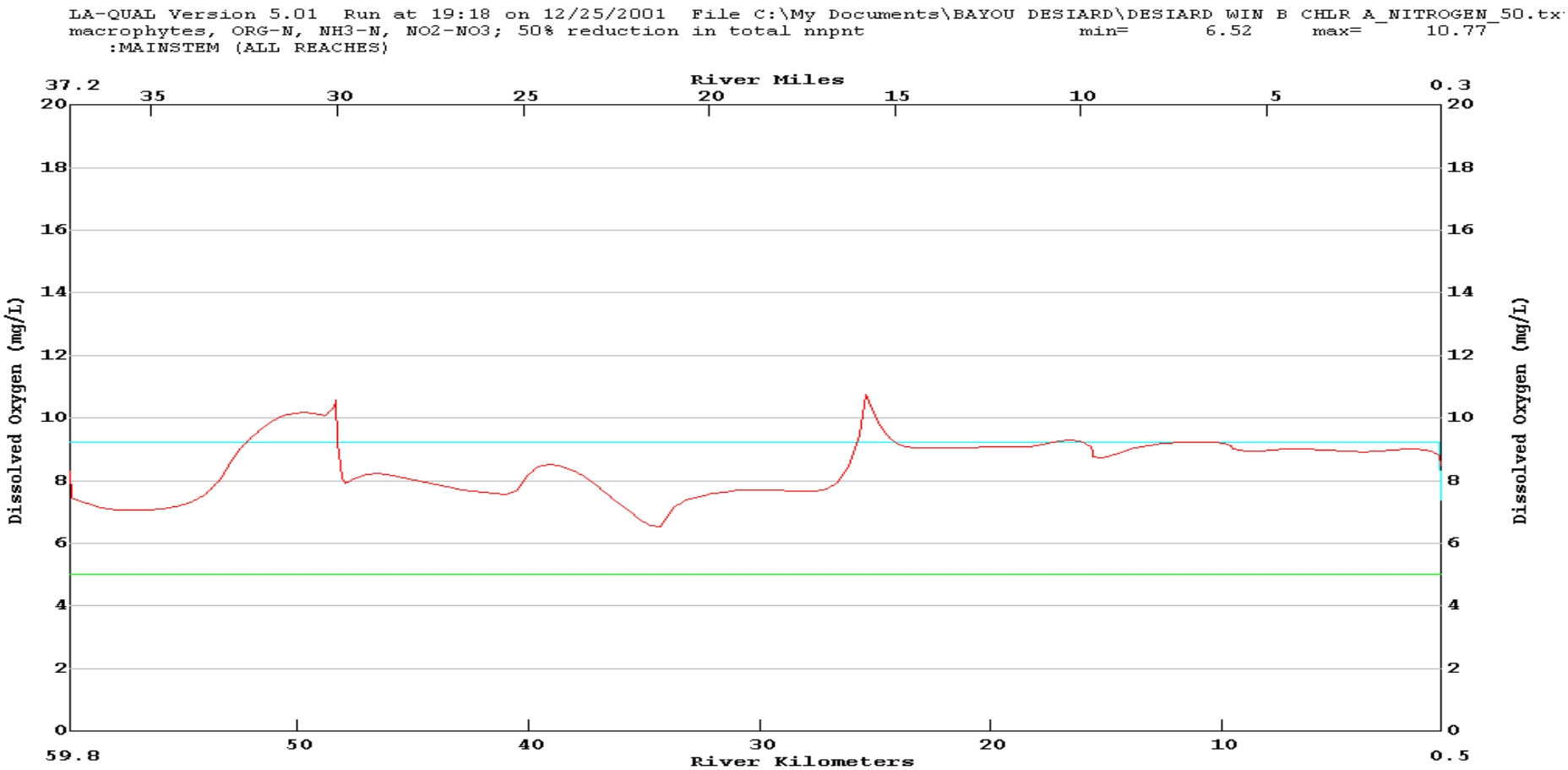


Figure 9. Winter Projection with 50 % Removal of the Total NPS Loads



4.4 Calculated TMDL, WLAs and LAs

The TMDLs, WLAs, and LAs are summarized in Table 5.0.

4.4.1 Outline of TMDL Calculations

An outline of the TMDL calculations is provided to assist in understanding the calculations in the Appendices.

4.4.1.1 The Calibration Benthic Loading was Determined as Follows:

- The CBOD1 and CBOD2 components of the nonpoint loads were combined before being used in the loading spreadsheet as nonpoint UCBOD.

- The nonpoint organic nitrogen was multiplied by 4.57 to estimate a value to use in the loading spreadsheet for nonpoint UNBOD.

- The nonpoint UCBOD, nonpoint UNBOD, and SOD loads were summed for each reach in terms of gm O_2/m^2-day to get the total calibration benthic loading. Man-made and natural background loads were not estimated. The total nonpoint loads were reduced. This was accomplished by setting the "natural background" benthic loading to 0.0 gm O_2/m^2-day.

4.4.1.3 Projection Benthic Loading Was Determined as Follows:

- Projection benthic loads are determined by trial and error during the modeling process using a uniform percent reduction for resuspension and SOD loads. Headwater and tributaries loads were reduced by the same uniform percent reduction as the benthic loads. Headwater and tributary concentrations of DO range from stream criteria levels to 90 percent of the DO saturation concentration at the 90th percentile temperature for the nearest LA DEQ Ambient Network site.

- The projection benthic loading at $20^{o}C$ is calculated as the sum of the projection resuspension and SOD components expressed as gm O_2/m^2-day.

- Normally, the natural background benthic load is subtracted from the projection benthic load to obtain the man-made projection benthic load for each reach. In this case the "natural background" benthic load was negated and the total benthic load for each reach was used.

- The percent reduction of total nonpoint loads for each reach is determined from the difference between the projected total non-point load and the total non-point load found during calibration.

- The resulting nonpoint CBOD loads are then redistributed as nonpoint CBOD1 and nonpoint CBOD2 using the same ratio that was observed in the calibration model. The resulting nonpoint UNBOD loads are divided by 4.57 to obtain values for nonpoint organic nitrogen. The nonpoint UCBOD1, UCBOD2, and organic nitrogen values are used in the projection models.

- The projection loads are also computed in units of lb/d and kg/d for each reach.

4.4.1.4 The total stream loading capacity at critical water temperature is calculated as the sum of:

- Headwater and tributary CBOD and NBOD loading in lb/d and kg/d.

- The total (natural and man-made) projection benthic loading for all reaches of the stream is converted to the loading at critical temperature and summed in lb/d and kg/d.

- The margin of safety in lb/d and kg/d.

4.4.2 Bayou Desiard TMDL

The TMDLs for the biochemical oxygen demanding constituents have been calculated for the summer and winter critical seasons. The TMDLs for Bayou Desiard watershed were set equal to the total stream loading capacity. A summary of the loads is presented in Table 5. Additional documentation is presented in Appendix A.

Table 5. Total Maximum Daily Load (Sum of CBOD, NH_3-N, and SOD)

ALLOCATION	SUMMER		WINTER	
	% Reduction Required	(MAR-NOV) (lbs BOD/day)	% Reduction Required	(DEC-FEB) (lbs BOD/day)
Point Source WLA		0		0
Point Source Reserve MOS		0		0
Total Nonpoint Source LA	50	68,891	50	68,770
Total Nonpoint Source Reserve MOS		17,223		13,752
TMDL		86,114		82,522

5.0 Sensitivity Analyses for the Main Stem of the Bayou Desiard Calibration Model

All modeling studies necessarily involve uncertainty and some degree of approximation. It is therefore of value to consider the sensitivity of the model output to changes in model coefficients, and in the hypothesized relationships among the parameters of the model. The LAQUAL model allows multiple parameters to be varied with a single run. The model adjusts each parameter up or down by the percentage given in the input set. The rest of the parameters listed in the sensitivity section are held at their original calibration

value. Thus the sensitivity of each parameter is reviewed separately. A sensitivity analysis was performed on the calibration model for the main stem. The sensitivity of the model's minimum DO projections to these parameters is presented in Table 6 and Appendix I. Parameters were varied by +/- 30%, except temperature, which was adjusted +/- 2 degrees Centigrade.

Values reported in Table 6 and Appendix I are sorted by percentage variation of minimum DO in the main stem of the Bayou Desiard from largest percentage variation to the smallest. Table 6 indicates that the simulated dissolved oxygen concentration is most sensitive to parameters related to temperature, depth, and chlorophyll a. These parameters include stream reaeration, chlorophyll a, velocity, depth, temperature and baseflow. The model varied from slightly sensitive to not sensitive to the remaining parameters.

6.0 Conclusions

The TMDL required a 50% decrease in the total nonpoint source loads to the Bayou Desiard watershed in order to meet the DO criteria during the summer season. The 50 percent reduction should also be applied to all tributaries in the watershed due to the impact they will have on the main stem.

The summer season is the critical season. However, the nonpoint loading occurs throughout the year. Therefore, a 50% reduction in the total nonpoint loading was also used in the winter projections. There are no facilities known to be discharging directly into Bayou Desiard, Lake Bartholemew, Mill Bayou, Hannah's Run, or Black Bayou Lake.

The modeling that was conducted for this TMDL is conservative and based on limited information. Future studies may show that this TMDL is smaller than that which can actually be accommodated by the watershed.

This waterbody was also listed as impaired due to nutrients. The sampling results showed elevated concentrations of chlorophyll a. The continuous monitors showed diurnal swings in dissolved oxygen. The waterbody had a significant riparian zone, but the bayou was wide with a low velocity. This was characteristic of an environment that was good for aggressive algal production. Therefore, algal production was considered to be a problem in this watershed. Therefore, the effects of algae on the dissolved oxygen concentrations were simulated throughout the model.

This TMDL establishes load limitations for oxygen-demanding substances and goals for reduction of those pollutants. LDEQ's position, as supported by the ruling in the lawsuit regarding water quality criteria for nutrients (Sierra Club v. Givens, 710 So.2d 249 (La. App. 1st Cir. 1997), writ denied, 705 So.2d 1106 (La. 1998), is that when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. The

Table 6. Summary of Calibration Model Sensitivity Analysis

BAYOU DESIARD SENSITIVITY ANALYSIS RESULTS

Developed from the Bayou Desiard watershed calibration model.

Input data into shaded cells.

Minimum D. O. values are based upon the entire watershed model.

A = Calibration Model Minimum D.O. = 1.97 mg/L at RKM 34.25

Parameter	+ 30 % Parameter Change			- 30 % Parameter Change		
	min D.O. (mg/L)	RKM Location (km)	% Min D.O. Change	min D.O. (mg/L)	RKM Location (km)	% Min D.O. Change
	B	C	D=(B-A)/Ax100	E	F	G=(E-A)/A x 100
Reaeration	2.89	47.92	46.70	0.95	34.25	-51.78
Velocity	0.66	34.7	-66.50	2.46	26.6	24.87
Depth	2.48	26.63	25.89	0.50	47.9	-74.62
Initial Chlorophyll a	2.57	26.63	30.46	0.88	47.92	-55.33
Benthal	1.16	27.10-26.63	-41.12	2.06	34.74	4.57
Initial Temperature	1.61	26.63	-18.27	1.76	34.74	-10.66
Baseflow	1.96	26.63	-0.51	1.64	47.92	-16.75
Headwater Flow	1.96	26.63	-0.51	1.64	47.92	-16.75
Aerobic BOD Decay	1.80	26.63	-8.63	2.03	34.25	3.05
BOD Settling	1.94	34.74-34.25	-1.52	1.88	26.63	-4.57
Macrophytes	2.01	26.63	2.03	1.63	34.74	-17.26
Headwater BOD	1.83	26.63	-7.11	1.97	34.25	0.00
NCM Decay	1.93	26.63	-2.03	2.03	34.25	3.05
Nonconservative Material (NCM) Settling	1.99	34.25	1.02	1.95	26.63	-1.02
Wasteload Flow	1.97	34.25	0.00	1.97	34.25	0.00
Wasteload D.O.	1.97	34.25	0.00	1.97	34.25	0.00
Wasteload BOD	1.97	34.25	0.00	1.97	34.25	0.00
Wasteload NCM	1.97	34.25	0.00	1.97	34.25	0.00
Wasteload Organic Nitrogen	1.97	34.25	0.00	1.97	34.25	0.00
Wasteload Ammonia Nitrogen	1.97	34.25	0.00	1.97	34.25	0.00
Wasteload Nitrate Nitrogen	1.97	34.25	0.00	1.97	34.25	0.00
Wasteload Temperature	1.97	34.25	0.00	1.97	34.25	0.00
Headwater D.O.	1.97	34.25	0.00	1.97	34.25	0.00
Headwater NCM	1.97	34.25	0.00	1.97	34.25	0.00
Headwater Organic Nitrogen	1.97	34.25	0.00	1.97	34.25	0.00
Headwater Ammonia	1.97	34.25	0.00	1.97	34.25	0.00
Headwater Nitrate Nitrogen	1.97	34.25	0.00	1.97	34.25	0.00
Headwater Temperature	1.97	34.25	0.00	1.97	34.25	0.00
Headwater Chlorophyll a	1.97	34.25	0.00	1.97	34.25	0.00

implementation of this TMDL through wastewater discharge permits and implementation of best management practices to control and reduce runoff of soil and oxygen-demanding pollutants from nonpoint sources in the watershed will also control and reduce the nutrient loading from those sources.

LDEQ has developed this TMDL to be consistent with the State antidegradation policy (LAC 33:IX.1109.A).

LDEQ will work with other agencies such as local Soil Conservation Districts to implement agricultural best management practices in the watershed through the 319 program. LDEQ will also continue to monitor the waters to determine whether standards are being attained.

In accordance with Section 106 of the federal Clean Water Act and under the authority of the Louisiana Environmental Quality Act, the LDEQ has established a comprehensive program for monitoring the quality of the state's surface waters. The LDEQ Surveillance Section collects surface water samples at various locations, utilizing appropriate sampling methods and procedures for ensuring the quality of the data collected. The objectives of the surface water monitoring program are to determine the quality of the state's surface waters, to develop a long-term database for water quality trend analysis, and to monitor the effectiveness of pollution controls. The data obtained through the surface water monitoring program is used to develop the state's biennial 305(b) report (*Water Quality Inventory*) and the 303(d) list of impaired waters. This information is also utilized in establishing priorities for the LDEQ nonpoint source program.

The LDEQ has implemented a watershed approach to surface water quality monitoring. Through this approach, the entire state is sampled over a five-year cycle with two targeted basins sampled each year. Long-term trend monitoring sites at various locations on the larger rivers and Lake Pontchartrain are sampled throughout the five-year cycle. Sampling is conducted on a monthly basis or more frequently if necessary to yield at least 12 samples per site each year. Sampling sites are located where they are considered to be representative of the waterbody. Under the current monitoring schedule, targeted basins follow the TMDL priorities. In this manner, the first TMDLs will have been implemented by the time the first priority basins will be monitored again in the second five-year cycle. This will allow the LDEQ to determine whether there has been any improvement in water quality following implementation of the TMDLs. As the monitoring results are evaluated at the end of each year, waterbodies may be added to or removed from the 303(d) list. The sampling schedule for the next five years is shown below.

2002 - Red and Sabine River Basins
2003 - Mermentau and Vermilion-Teche River Basins
2004 - Calcasieu and Ouachita River Basins
2005 - Barataria and Terrebonne Basins
2006 - Lake Pontchartrain Basin and Pearl River Basin
(Atchafalaya and Mississippi Rivers will be sampled continuously.)

Compliance inspections have also been done throughout the Calcasieu River and Ouachita River basins during the ambient sampling as part of the watershed approach to monitoring and to identify enforcement needs. The compliance inspections conducted during 1999 included:

Calcasieu Basin - 33 major NPDES facilities, 260 minor facilities

Ouachita Basin - 348 facilities (total) inspected

7.0 References

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LA DEQ ALPS Database

LA DEQ Ambient Network Database

LA DEQ Assessment Network Database

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8.0 Appendices

APPENDIX A - DETAILED TMDL ANALYSIS

Bayou Desiard (including Lake Bartholemew) Watershed TMDL
For Biochemical Oxygen Demanding Substances and Nutrients
Subsegment 080701
Originated: January 14, 2002

Summer TMDL Summary:

BAYOU DESIARD (SUBSEGMENT 080701)

Calculation of the TMDL - Kilograms per day			
Load description	WLA (kg/day)	LA (kg/day)	MOS Load (kg/day)
Point Source loads	0		0
Headwater / Tributatary loads		1,940	485
Benthic loads		29,303	7,326
Incremental Loads		0	0
SUB-TOTAL	**0**	**31,243**	**7,811**
TMDL = WLA + LA + MOS		***39,054 kg/day***	

Calculation of the TMDL - Pounds per day			
Load description	WLA (lbs/day) (1)	LA (lbs/day) (1)	MOS Load (lbs/day) (1)
Point Source loads	0		0
Headwater / Tributatary loads		4,278	1069
Benthic loads		64,613	16,154
Incremental Loads		0	0
SUB-TOTAL	**0**	**68,891**	**17,223**
TMDL = WLA + LA + MOS		***86,114 lbs/day***	

Notes:

(1) - Load(lbs/day) = Load(kg/day) x 2.205

Calculation of the TMDL - Kilograms per day			
Load description	WLA (kg/day)	LA (kg/day)	MOS Load (kg/day)
Point Source loads	0		0
Natural Nonpoint Loads		0	
Manmade Nonpoint Loads		31,243	7,811
SUB-TOTAL	**0**	**31,243**	**7,811**
TMDL = WLA + LA + MOS		***39,054 kg/day***	

Calculation of the TMDL - Pounds per day			
Load description	WLA (lbs/day)	LA (lbs/day)	MOS Load (lbs/day)
Point Source loads	0		0
Natural Nonpoint Loads		0	
Manmade Nonpoint Loads		68,891	17,223
SUB-TOTAL	**0**	**68,891**	**17,223**
TMDL = WLA + LA + MOS		***86,114 lbs/day***	

Bayou Desiard (including Lake Bartholemew) Watershed TMDL
For Biochemical Oxygen Demanding Substances and Nutrients
Subsegment 080701
Originated: January 14, 2002

Winter TMDL Summary:

BAYOU DESIARD (SUBSEGMENT 080701)

Calculation of the TMDL - Kilograms per day			
Load description	WLA (kg/day)	LA (kg/day)	MOS Load (kg/day)
Point Source loads	0		0
Headwater / Tributatary loads		1,940	485
Benthic loads		29,248	5,752
Incremental Loads		0	0
SUB-TOTAL	0	31,188	6,237
TMDL = WLA + LA + MOS		*37,425 kg/day*	

Calculation of the TMDL - Pounds per day			
Load description	WLA (lbs/day) (1)	LA (lbs/day) (1)	MOS Load (lbs/day) (1)
Point Source loads	0		0
Headwater / Tributatary loads		4,278	1069
Benthic loads		64,492	12,683
Incremental Loads		0	0
SUB-TOTAL	0	68,770	13,752
TMDL = WLA + LA + MOS		*82,522 lbs/day*	

Notes:

(1) - Load(lbs/day) = Load(kg/day) x 2.205

Calculation of the TMDL - Kilograms per day			
Load description	WLA (kg/day)	LA (kg/day)	MOS Load (kg/day)
Point Source loads	0		0
Natural Nonpoint Loads		0	
Manmade Nonpoint Loads		31,187	6,237
SUB-TOTAL	0	31,187	6,237
TMDL = WLA + LA + MOS		*37,424 lbs/day*	

Calculation of the TMDL - Pounds per day			
Load description	WLA (lbs/day)	LA (lbs/day)	MOS Load (lbs/day)
Point Source loads	0		0
Natural Nonpoint Loads		0	
Manmade Nonpoint Loads		68,768	13,753
SUB-TOTAL	0	68,768	13,753
TMDL = WLA + LA + MOS		*82,521 lbs/day*	

APPENDIX B - Bayou Desiard Calibration Model Input and Output Data Sets and Plots

Bayou Desiard (including Lake Bartholemew) Watershed TMDL
For Biochemical Oxygen Demanding Substances and Nutrients
Subsegment 080701
Originated: January 14, 2002

```
LA-QUAL Version 5.01
Louisiana Department of Environmental Quality

Input file is C:\My Documents\BAYOU DESIARD\DESIARD CAL B CHLR A_NITROGEN.txt
Output produced at 18:59 on 12/25/2001

$$$ DATA TYPE 1 (TITLES AND CONTROL CARDS) $$$

CARD TYPE       CONTROL TITLES

TITLE01         BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
TITLE02         12/18/01
CNTROL11   NO   SEQUENCING OUTPUT
CNTROL12  YES   METRIC UNITS
CNTROL13  YES   OXYGEN DEPENDENT RATES
ENDATA01

$$$ DATA TYPE 2 (MODEL OPTIONS) $$$

CARD TYPE       MODEL OPTION

MODOPT01   NO   TEMPERATURE
MODOPT02   NO   SALINITY
MODOPT03  YES   CONSERVATIVE MATERIAL  I = CHLORIDES                  IN MG/L
MODOPT04  YES   CONSERVATIVE MATERIAL II = SULFATES                   IN MG/L
MODOPT05  YES   DISSOLVED OXYGEN
MODOPT06  YES   BIOCHEMICAL OXYGEN DEMAND
MODOPT07  YES   NITROGEN
MODOPT08   NO   PHOSPHORUS
MODOPT09   NO   CHLOROPHYLL A
MODOPT10   NO   MACROPHYTES
MODOPT11   NO   COLIFORM
MODOPT12  YES   NONCONSERVATIVE MATERIAL = CBOD2                      IN MG/L
ENDATA02

$$$ DATA TYPE 3 (PROGRAM CONSTANTS) $$$

CARD TYPE       DESCRIPTION OF CONSTANT                        VALUE

PROGRAM         MAXIMUM ITERATION LIMIT            =       200.00000
PROGRAM         PLOT TYPE                          =         3.00000
PROGRAM         FINAL REPORT TYPE                  =         1.00000
PROGRAM         SPECIAL REPORT TYPE                =         3.00000
PROGRAM         BOD OXYGEN UPTAKE RATE             =         1.00000 mg O/mg BOD
PROGRAM         KL MINIMUM                         =         0.70000 meters/day
PROGRAM         NCM OXYGEN UPTAKE RATE             =         1.00000 mg O/mg NCM
PROGRAM         INHIBITION CONTROL VALUE           =         3.00000
PROGRAM         DISPERSION EQUATION                =         1.00000
PROGRAM         OCEAN EXCHANGE RATIO               =         0.00000
PROGRAM         HYDRAULIC CALCULATION METHOD       =         2.00000 (widths and depths)
```

```
PROGRAM         SETTLED RATE UNITS                =         2.00000 (per day)
PROGRAM         WIND                              =         2.56000 meters/sec
PROGRAM         EFFECTIVE BOD DUE TO ALGAE        =         0.10000 mg/L BOD per ug/L chl a
PROGRAM         ALGAE OXYGEN PRODUCTION           =         0.02500 mg O/ug chl a/day
PROGRAM         MACROPHYTE OXYGEN PRODUCTION      =         0.00000 mg O/mg macrophyte/day
PROGRAM         ORGN OXYGEN UPTAKE RATE           =         0.00000 mg O/mg N
PROGRAM         NH3 OXYGEN UPTAKE RATE            =         4.33000 mg O/mg N
PROGRAM         N PREFERENCE                      =         0.50000 (0.0=NH3 1.0=NO3)
PROGRAM         N INHIBITION EQUATION             =         1.00000
ENDATA03

$$$ DATA TYPE 4 (TEMPERATURE CORRECTION CONSTANTS FOR RATE COEFFICIENTS) $$$

 CARD TYPE     RATE CODE     THETA VALUE

THETA        NCM DECA       1.04700
THETA        ORGN DEC       1.07000
ENDATA04

$$$ CONSTANTS TYPE 5 (TEMPERATURE DATA) $$$

CARD TYPE       DESCRIPTION OF CONSTANT                        VALUE

ENDATA05

$$$ DATA TYPE 6 (ALGAE CONSTANTS) $$$

CARD TYPE       DESCRIPTION OF CONSTANT                        VALUE

ENDATA06

$$$ DATA TYPE 7 (MACROPHYTE CONSTANTS) $$$

CARD TYPE       DESCRIPTION OF CONSTANT                        VALUE

ENDATA07

$$$ DATA TYPE 8 (REACH IDENTIFICATION DATA) $$$
                                                      BEGIN         END     ELEM    REACH     ELEMS   BEGIN    END
CARD TYPE  REACH  ID  NAME                            REACH        REACH   LENGTH   LENGTH    PER RCH   ELEM   ELEM
                                                         km           km       km       km               NUM    NUM

REACH ID      1   LB    BDS 1-BDS 2                   59.85  TO   59.77   0.0800     0.08       1        1      1
REACH ID      2   LB    BDS 2-BDS 3                   59.77  TO   53.31   0.6460     6.46      10        2     11
REACH ID      3   LB    BDS 3-BDS 6                   53.31  TO   48.81   0.4500     4.50      10       12     21
REACH ID      4   LB    BDS 6-US 165 GATE INLET CANAL 48.81  TO   48.41   0.2000     0.40       2       22     23
REACH ID      5   LB    BDS 5-BDS 4                    8.53  TO    4.33   0.4200     4.20      10       24     33
REACH ID      6   LB    BDS 4-US 165 GATE INLET CANAL  4.33  TO    0.00   0.4330     4.33      10       34     43
REACH ID      7   LB    US165 GATE IN CANAL-US165 GATE 48.41  TO   48.33   0.0800     0.08       1       44     44
REACH ID      8   CP    US 165 GATE/CONTROL STRUCTURE  48.33  TO   48.25   0.0800     0.08       1       45     45
```

REACH ID	9	BD	US165 GATE OUTLET-BDS 7	48.25	TO	47.92	0.1100	0.33	3	46	48
REACH ID	10	BD	BDS 7-BDS 8	47.92	TO	40.56	0.4600	7.36	16	49	64
REACH ID	11	BD	BDS 8-MILL BAYOU	40.56	TO	33.77	0.4850	6.79	14	65	78
REACH ID	12	BD	MILL BAYOU-BDS 9	33.77	TO	28.06	0.5710	5.71	10	79	88
REACH ID	13	BD	BDS 9-HANNAH'S RUN	28.06	TO	25.67	0.4780	2.39	5	89	93
REACH ID	14	HE	HANNAH'S RUN(E)CONTROL GATES	0.45	TO	0.44	0.0120	0.01	1	94	94
REACH ID	15	HR	HANNAHS RUN(E)-HANNAHS RUN(W)	0.44	TO	0.15	0.2880	0.29	1	95	95
REACH ID	16	HW	HANNAH'S RUN(W) CONTROL GATES	0.15	TO	0.14	0.0120	0.01	1	96	96
REACH ID	17	HR	HANNAH'S RUN(W)-BDS21	0.14	TO	0.10	0.0400	0.04	1	97	97
REACH ID	18	HR	BDS 21-BAYOU DESIARD	0.10	TO	0.00	0.1000	0.10	1	98	98
REACH ID	19	BD	HANNAH'S RUN-BDS10	25.67	TO	24.61	0.2650	1.06	4	99	102
REACH ID	20	BD	BDS 10- L-11 CANAL PIPE INTAKE	24.61	TO	18.06	0.2620	6.55	25	103	127
REACH ID	21	CP	L-11 CANAL CONTROL PIPE	18.06	TO	17.98	0.0800	0.08	1	128	128
REACH ID	22	BD	L-11 PIPEOUTFALL-MIDWAY INTAKE	17.98	TO	15.63	0.4700	2.35	5	129	133
REACH ID	23	MD	MIDWAY DAM CONTROL PIPE	15.63	TO	15.59	0.0400	0.04	1	134	134
REACH ID	24	BD	MIDWAY OUTFALL-BDS13	15.59	TO	15.55	0.0400	0.04	1	135	135
REACH ID	25	BD	BDS13-BDS14	15.55	TO	9.62	0.2965	5.93	20	136	155
REACH ID	26	BD	BDS14-STADIUM DR. PIPE INTAKE	9.62	TO	9.57	0.0500	0.05	1	156	156
REACH ID	27	SD	STADIUM DRIVE PIPES	9.57	TO	9.52	0.0500	0.05	1	157	157
REACH ID	28	BD	STADIUM DR. PIPE OUTFALL-BDS15	9.52	TO	6.69	0.5660	2.83	5	158	162
REACH ID	29	BD	BDS15-BDS16	6.69	TO	3.40	0.4700	3.29	7	163	169
REACH ID	30	BD	BDS16-BDS17	3.40	TO	0.61	0.3100	2.79	9	170	178
REACH ID	31	BD	BDS17-MONROE WTP INTAKE	0.61	TO	0.54	0.0700	0.07	1	179	179

ENDATA08

$$$ DATA TYPE 9 (ADVECTIVE HYDRAULIC COEFFICIENTS) $$$

CARD TYPE	REACH	ID	WIDTH "A"	WIDTH "B"	WIDTH "C"	DEPTH "D"	DEPTH "E"	DEPTH "F"	SLOPE	MANNINGS "N"
HYDR-1	1	LB	1.000	0.100	1.720	0.050	0.100	1.720	0.00010	0.035
HYDR-1	2	LB	1.000	0.100	61.720	0.050	0.100	3.410	0.00010	0.035
HYDR-1	3	LB	1.000	0.100	89.150	0.050	0.100	3.620	0.00010	0.035
HYDR-1	4	LB	1.000	0.100	114.290	0.050	0.100	3.340	0.00010	0.035
HYDR-1	5	LB	1.000	0.100	123.140	0.050	0.100	3.900	0.00010	0.035
HYDR-1	6	LB	1.000	0.100	114.290	0.050	0.100	3.340	0.00010	0.035
HYDR-1	7	LB	1.000	0.100	6.000	0.050	0.100	1.000	0.00010	0.035
HYDR-1	8	CP	1.000	0.100	1.620	0.050	0.100	1.620	0.00010	0.035
HYDR-1	9	BD	1.000	0.100	42.060	0.050	0.100	1.660	0.00010	0.035
HYDR-1	10	BD	1.000	0.100	21.330	0.050	0.100	1.830	0.00010	0.035
HYDR-1	11	BD	1.000	0.100	21.330	0.050	0.100	1.830	0.00010	0.035
HYDR-1	12	BD	1.000	0.100	76.200	0.050	0.100	2.310	0.00010	0.035
HYDR-1	13	BD	1.000	0.100	76.200	0.050	0.100	2.310	0.00010	0.035
HYDR-1	14	HE	1.000	0.100	1.720	0.050	0.100	1.720	0.00010	0.035
HYDR-1	15	HR	1.000	0.100	17.680	0.050	0.100	2.420	0.00010	0.035
HYDR-1	16	HW	1.000	0.100	1.720	0.050	0.100	1.720	0.00010	0.035
HYDR-1	17	HR	1.000	0.100	17.680	0.050	0.100	2.420	0.00010	0.035
HYDR-1	18	HR	1.000	0.100	17.680	0.050	0.100	2.420	0.00010	0.035
HYDR-1	19	BD	1.000	0.100	90.060	0.050	0.100	2.430	0.00010	0.035
HYDR-1	20	BD	1.000	0.100	90.060	0.050	0.100	2.430	0.00010	0.035

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HYDR-1       21   CP       1.000       0.100       1.620       0.050       0.100       1.620     0.00010   0.035
HYDR-1       22   BD       1.003       0.100      94.550       0.050       0.100       2.345     0.00010   0.035
HYDR-1       23   MD       1.000       0.100       1.620       0.050       0.100       1.620     0.00010   0.035
HYDR-1       24   BD       1.000       0.100      99.040       0.050       0.100       2.260     0.00010   0.035
HYDR-1       25   BD       1.000       0.100      99.040       0.050       0.100       2.260     0.00010   0.035
HYDR-1       26   BD       1.000       0.100      11.580       0.050       0.100       2.470     0.00010   0.035
HYDR-1       27   SD       1.000       0.100       1.620       0.050       0.100       1.620     0.00010   0.035
HYDR-1       28   BD       1.000       0.100     117.340       0.050       0.100       2.660     0.00010   0.035
HYDR-1       29   BD       1.000       0.100     117.340       0.050       0.100       2.660     0.00010   0.035
HYDR-1       30   BD       1.000       0.100     124.960       0.050       0.100       4.850     0.00010   0.035
HYDR-1       31   BD       1.000       0.100     124.960       0.050       0.100       4.850     0.00010   0.035
ENDATA09

$$$ DATA TYPE 10 (DISPERSIVE HYDRAULIC COEFFICIENTS) $$$

CARD TYPE  REACH  ID     TIDAL     DISPERSION     DISPERSION     DISPERSION     DISPERSION
                        RANGE        "A"            "B"            "C"            "D"

HYDR          1   LB      0.00        0.000          0.000          0.000          0.000
HYDR          2   LB      0.00        1.000          0.000          0.000          0.000
HYDR          3   LB      0.00        1.000          0.000          0.000          0.000
HYDR          4   LB      0.00        1.000          0.000          0.000          0.000
HYDR          5   LB      0.00        1.000          0.000          0.000          0.000
HYDR          6   LB      0.00        1.000          0.000          0.000          0.000
HYDR          7   LB      0.00        1.000          0.000          0.000          0.000
HYDR          8   CP      0.00        1.000          0.000          0.000          0.000
HYDR          9   BD      0.00        1.000          0.000          0.000          0.000
HYDR         10   BD      0.00        1.000          0.000          0.000          0.000
HYDR         11   BD      0.00        1.000          0.000          0.000          0.000
HYDR         12   BD      0.00        4.000          0.000          0.000          0.000
HYDR         13   BD      0.00        4.000          0.000          0.000          0.000
HYDR         14   HE      0.00        1.000          0.000          0.000          0.000
HYDR         15   HR      0.00        4.000          0.000          0.000          0.000
HYDR         16   HW      0.00        1.000          0.000          0.000          0.000
HYDR         17   HR      0.00        4.000          0.000          0.000          0.000
HYDR         18   HR      0.00        4.000          0.000          0.000          0.000
HYDR         19   BD      0.00        4.000          0.000          0.000          0.000
HYDR         20   BD      0.00        4.000          0.000          0.000          0.000
HYDR         21   CP      0.00        1.000          0.000          0.000          0.000
HYDR         22   BD      0.00        1.000          0.000          0.000          0.000
HYDR         23   MD      0.00        1.000          0.000          0.000          0.000
HYDR         24   BD      0.00        1.000          0.000          0.000          0.000
HYDR         25   BD      0.00        1.000          0.000          0.000          0.000
HYDR         26   BD      0.00        1.000          0.000          0.000          0.000
HYDR         27   SD      0.00        1.000          0.000          0.000          0.000
HYDR         28   BD      0.00        1.000          0.000          0.000          0.000
HYDR         29   BD      0.00        1.000          0.000          0.000          0.000
HYDR         30   BD      0.00        1.000          0.000          0.000          0.000
HYDR         31   BD      0.00        1.000          0.000          0.000          0.000
ENDATA10
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Bayou Desiard (including Lake Bartholemew) Watershed TMDL
For Biochemical Oxygen Demanding Substances and Nutrients
Subsegment 080701
Originated: January 14, 2002

$$$ DATA TYPE 11 (INITIAL CONDITIONS) $$$

CARD TYPE	REACH	ID	TEMP	SALIN	DO	NH3	NO3+2	PHOS	CHL A	MACRO
INITIAL	1	LB	28.03	0.00	2.93	0.00	0.00	0.00	1.30	115.00
INITIAL	2	LB	29.96	0.00	4.87	0.00	0.00	0.00	20.50	115.00
INITIAL	3	LB	29.96	0.00	4.87	0.00	0.00	0.00	22.40	115.00
INITIAL	4	LB	29.96	0.00	4.87	0.00	0.00	0.00	36.40	115.00
INITIAL	5	LB	31.23	0.00	8.43	0.00	0.00	0.00	42.40	115.00
INITIAL	6	LB	31.23	0.00	8.43	0.00	0.00	0.00	42.40	115.00
INITIAL	7	LB	30.60	0.00	7.00	0.00	0.00	0.00	44.00	115.00
INITIAL	8	CP	29.40	0.00	5.00	0.00	0.00	0.00	46.00	115.00
INITIAL	9	BD	28.49	0.00	3.00	0.00	0.00	0.00	48.00	115.00
INITIAL	10	BD	27.00	0.00	1.70	0.00	0.00	0.00	75.00	115.00
INITIAL	11	BD	26.35	0.00	0.39	0.00	0.00	0.00	75.00	115.00
INITIAL	12	BD	29.32	0.00	0.60	0.00	0.00	0.00	24.60	115.00
INITIAL	13	BD	29.32	0.00	1.00	0.00	0.00	0.00	24.60	115.00
INITIAL	14	HE	28.89	0.00	1.34	0.00	0.00	0.00	17.90	115.00
INITIAL	15	HR	29.40	0.00	4.20	0.00	0.00	0.00	17.90	115.00
INITIAL	16	HW	30.54	0.00	4.20	0.00	0.00	0.00	17.90	115.00
INITIAL	17	HR	30.54	0.00	5.50	0.00	0.00	0.00	17.90	115.00
INITIAL	18	HR	30.00	0.00	6.95	0.00	0.00	0.00	13.60	115.00
INITIAL	19	BD	30.00	0.00	3.00	0.00	0.00	0.00	13.60	115.00
INITIAL	20	BD	30.00	0.00	2.87	0.00	0.00	0.00	16.00	115.00
INITIAL	21	CP	29.66	0.00	5.20	0.00	0.00	0.00	19.20	115.00
INITIAL	22	BD	30.00	0.00	7.54	0.00	0.00	0.00	31.00	115.00
INITIAL	23	MD	30.40	0.00	7.75	0.00	0.00	0.00	43.00	115.00
INITIAL	24	BD	30.80	0.00	8.25	0.00	0.00	0.00	57.20	115.00
INITIAL	25	BD	31.10	0.00	8.50	0.00	0.00	0.00	52.00	115.00
INITIAL	26	BD	31.34	0.00	8.50	0.00	0.00	0.00	48.60	115.00
INITIAL	27	SD	31.00	0.00	8.25	0.00	0.00	0.00	40.00	115.00
INITIAL	28	BD	30.75	0.00	7.94	0.00	0.00	0.00	32.60	115.00
INITIAL	29	BD	30.75	0.00	7.94	0.00	0.00	0.00	30.00	115.00
INITIAL	30	BD	30.90	0.00	7.75	0.00	0.00	0.00	20.00	115.00
INITIAL	31	BD	30.98	0.00	7.75	0.00	0.00	0.00	13.00	115.00

ENDATA11

$$$ DATA TYPE 12 (REAERATION, SEDIMENT OXYGEN DEMAND, BOD COEFFICIENTS) $$$

CARD TYPE	REACH	ID	K2 OPT	K2 "A"	K2 "B"	K2 "C"	BKGRND SOD g/m²/d	AEROB BOD DECAY per day	BOD SETT m/d	BOD CONV TO SOD	ANAER BOD DECAY
COEF-1	1	LB	12 BANKS	1.000	0.000	0.000	0.000	0.140	0.050	0.000	0.000
COEF-1	2	LB	12 BANKS	1.000	0.000	0.000	0.000	0.200	0.050	0.000	0.000
COEF-1	3	LB	12 BANKS	1.000	0.000	0.000	0.000	0.190	0.050	0.000	0.000
COEF-1	4	LB	12 BANKS	1.000	0.000	0.000	0.000	0.190	0.050	0.000	0.000
COEF-1	5	LB	12 BANKS	1.000	0.000	0.000	0.000	0.150	0.050	0.000	0.000
COEF-1	6	LB	12 BANKS	1.000	0.000	0.000	0.000	0.150	0.050	0.000	0.000

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COEF-1       7   LB  20 K2=a/D          0.700     0.000     0.000     9.000     0.190     0.050     1.000     0.000
COEF-1       8   CP  20 K2=a/D          0.700     0.000     0.000     9.000     0.190     0.050     1.000     0.000
COEF-1       9   BD  20 K2=a/D          0.700     0.000     0.000     9.000     0.200     0.050     1.000     0.000
COEF-1      10   BD  12 BANKS           0.010     0.000     0.000     2.500     0.170     0.050     1.000     0.000
COEF-1      11   BD  12 BANKS           0.010     0.000     0.000     0.000     0.120     0.050     1.000     0.000
COEF-1      12   BD  12 BANKS           1.000     0.000     0.000     2.500     0.080     0.050     0.000     0.000
COEF-1      13   BD  12 BANKS           1.000     0.000     0.000     2.500     0.080     0.050     0.000     0.000
COEF-1      14   HE  20 K2=a/D          0.700     0.000     0.000     0.000     0.080     0.050     0.000     0.000
COEF-1      15   HR  20 K2=a/D          0.700     0.000     0.000     0.000     0.080     0.050     0.000     0.000
COEF-1      16   HW  20 K2=a/D          0.700     0.000     0.000     0.000     0.100     0.050     0.000     0.000
COEF-1      17   HR  20 K2=a/D          0.700     0.000     0.000     0.000     0.110     0.050     0.000     0.000
COEF-1      18   HR  20 K2=a/D          0.700     0.000     0.000     0.000     0.110     0.050     0.000     0.000
COEF-1      19   BD  12 BANKS           1.000     0.000     0.000     2.500     0.120     0.050     0.000     0.000
COEF-1      20   BD  13 JOHANSON        1.000     0.000     0.000     0.000     0.130     0.050     0.000     0.000
COEF-1      21   CP  20 K2=a/D          0.700     0.000     0.000     0.000     0.140     0.050     0.000     0.000
COEF-1      22   BD  13 JOHANSON        1.000     0.000     0.000     0.000     0.160     0.050     0.000     0.000
COEF-1      23   MD  20 K2=a/D          0.700     0.000     0.000     0.000     0.180     0.050     0.000     0.000
COEF-1      24   BD  13 JOHANSON        1.000     0.000     0.000     0.000     0.230     0.050     0.000     0.000
COEF-1      25   BD  13 JOHANSON        1.000     0.000     0.000     0.000     0.160     0.050     0.000     0.000
COEF-1      26   BD  13 JOHANSON        1.000     0.000     0.000     0.000     0.080     0.050     0.000     0.000
COEF-1      27   SD  20 K2=a/D          0.700     0.000     0.000     0.000     0.100     0.050     0.000     0.000
COEF-1      28   BD  13 JOHANSON        1.000     0.000     0.000     0.000     0.120     0.050     0.000     0.000
COEF-1      29   BD  13 JOHANSON        1.000     0.000     0.000     0.000     0.120     0.050     0.000     0.000
COEF-1      30   BD  13 JOHANSON        1.000     0.000     0.000     0.000     0.120     0.050     0.000     0.000
COEF-1      31   BD  13 JOHANSON        1.000     0.000     0.000     0.000     0.100     0.050     0.000     0.000
ENDATA12

$$$ DATA TYPE 13 (NITROGEN AND PHOSPHORUS COEFFICIENTS) $$$

CARD TYPE      REACH  ID       ORG-N     ORG-N   ORGN CONV       NH3       NH3      PHOS     DENIT
                                DECA      SETT  TO NH3 SRCE     DECA      SRCE      SRCE      RATE

COEF-2           1   LB       0.200     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2           2   LB       0.090     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2           3   LB       0.050     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2           4   LB       0.090     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2           5   LB       0.120     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2           6   LB       0.120     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2           7   LB       0.100     0.015     1.000       0.600     0.000     0.000     0.000
COEF-2           8   CP       0.100     0.015     1.000       0.600     0.000     0.000     0.000
COEF-2           9   BD       0.200     0.015     1.000       0.600     0.000     0.000     0.000
COEF-2          10   BD       0.200     0.015     1.000       1.000     0.000     0.000     0.000
COEF-2          11   BD       0.200     0.015     1.000       1.000     0.000     0.000     0.000
COEF-2          12   BD       0.060     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          13   BD       0.060     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          14   HE       0.110     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          15   HR       0.110     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          16   HW       0.150     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          17   HR       0.180     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          18   HR       0.180     0.015     0.000       0.600     0.000     0.000     0.000
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COEF-2          19   BD       0.070     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          20   BD       0.090     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          21   CP       0.080     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          22   BD       0.070     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          23   MD       0.060     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          24   BD       0.050     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          25   BD       0.070     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          26   BD       0.150     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          27   SD       0.150     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          28   BD       0.250     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          29   BD       0.250     0.015     0.000       0.800     0.000     0.000     0.000
COEF-2          30   BD       0.150     0.015     0.000       0.800     0.000     0.000     0.000
COEF-2          31   BD       0.070     0.015     0.000       0.600     0.000     0.000     0.000
ENDATA13

$$$ DATA TYPE 14 (ALGAE AND MACROPHYTE COEFFICIENTS) $$$

CARD TYPE      REACH  ID       SECCHI    ALGAE:     ALGAE    ALG CONV     ALGAE     ALGAE     MACRO     MACRO
                                DEPTH     CHL A      SETT     TO SOD       GROW      RESP      GROW      RESP

ENDATA14

$$$ DATA TYPE 15 (COLIFORM AND NONCONSERVATIVE COEFFICIENTS) $$$

CARD TYPE      REACH  ID    COLIFORM       NCM       NCM    NCM CONV
                             DIE-OFF     DECAY      SETT     TO SOD

COEF-4           1   LB        0.00      0.01      0.05      0.00
COEF-4           2   LB        0.00      0.03      0.05      0.00
COEF-4           3   LB        0.00      0.04      0.05      0.00
COEF-4           4   LB        0.00      0.01      0.05      0.00
COEF-4           5   LB        0.00      0.01      0.05      0.00
COEF-4           6   LB        0.00      0.01      0.05      0.00
COEF-4           7   LB        0.00      0.01      0.05      1.00
COEF-4           8   CP        0.00      0.01      0.05      1.00
COEF-4           9   BD        0.00      0.02      0.05      1.00
COEF-4          10   BD        0.00      0.02      0.05      1.00
COEF-4          11   BD        0.00      0.02      0.05      1.00
COEF-4          12   BD        0.00      0.01      0.05      0.00
COEF-4          13   BD        0.00      0.01      0.05      0.00
COEF-4          14   HE        0.00      0.01      0.05      0.00
COEF-4          15   HR        0.00      0.01      0.05      0.00
COEF-4          16   HW        0.00      0.02      0.05      0.00
COEF-4          17   HR        0.00      0.02      0.05      0.00
COEF-4          18   HR        0.00      0.02      0.05      0.00
COEF-4          19   BD        0.00      0.01      0.05      0.00
COEF-4          20   BD        0.00      0.01      0.05      0.00
COEF-4          21   CP        0.00      0.02      0.05      0.00
COEF-4          22   BD        0.00      0.03      0.05      0.00
COEF-4          23   MD        0.00      0.04      0.05      0.00
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COEF-4          24   BD        0.00      0.05      0.05      0.00
COEF-4          25   BD        0.00      0.02      0.05      0.00
COEF-4          26   BD        0.00      0.01      0.05      0.00
COEF-4          27   SD        0.00      0.01      0.05      0.00
COEF-4          28   BD        0.00      0.03      0.05      0.00
COEF-4          29   BD        0.00      0.03      0.05      0.00
COEF-4          30   BD        0.00      0.03      0.05      0.00
COEF-4          31   BD        0.00      0.04      0.05      0.00
ENDATA15

$$$ DATA TYPE 16 (INCREMENTAL DATA FOR FLOW, TEMPERATURE, SALINITY, AND CONSERVATIVES) $$$

CARD TYPE      REACH  ID       OUTFLOW      INFLOW      TEMP     SALIN      CM-I     CM-II   IN/DIST  OUT/DIST

ENDATA16

$$$ DATA TYPE 17 (INCREMENTAL DATA FOR DO, BOD, AND NITROGEN) $$$

CARD TYPE      REACH  ID          DO       BOD     ORG-N       NH3     NO3+2

ENDATA17

$$$ DATA TYPE 18 (INCREMENTAL DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NONCONSERVATIVES) $$$

 CARD TYPE      REACH  ID        PHOS     CHL A      COLI       NCM

ENDATA18

$$$ DATA TYPE 19 (NONPOINT SOURCE DATA) $$$

CARD TYPE      REACH  ID         BOD     ORG-N      COLI       NCM        DO

NONPOINT          1   LB        5.00      0.00      0.00     50.00      0.00
NONPOINT          2   LB     2500.00    350.00      0.00    350.00      0.00
NONPOINT          3   LB     1400.00    150.00      0.00    300.00      0.00
NONPOINT          4   LB      500.00     35.00      0.00    325.00      0.00
NONPOINT          5   LB     1800.00   1000.00      0.00   1150.00      0.00
NONPOINT          6   LB     1600.00    250.00      0.00   1150.00      0.00
NONPOINT          7   LB        0.00     75.00      0.00      0.00      0.00
NONPOINT          8   CP        0.00      0.00      0.00      0.00      0.00
NONPOINT          9   BD        0.00      0.00      0.00      0.00      0.00
NONPOINT         10   BD      470.00    150.00      0.00    200.00      0.00
NONPOINT         11   BD      470.00    150.00      0.00    200.00      0.00
NONPOINT         12   BD      800.00    150.00      0.00    400.00      0.00
NONPOINT         13   BD      500.00     50.00      0.00    450.00      0.00
NONPOINT         14   HE        0.00      0.00      0.00      0.00    850.00
NONPOINT         15   HR        0.00      5.00      0.00      0.00      0.00
NONPOINT         16   HW        0.00      0.00      0.00      0.00      0.00
NONPOINT         17   HR        0.00      5.00      0.00      0.00      0.00
NONPOINT         18   HR        0.00      5.00      0.00      0.00      0.00
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NONPOINT         19   BD      800.00     15.00      0.00    700.00      0.00
NONPOINT         20   BD     2400.00    250.00      0.00    700.00      0.00
NONPOINT         21   CP        0.00      0.00      0.00      0.00      0.00
NONPOINT         22   BD      100.00     25.00      0.00    150.00      0.00
NONPOINT         23   MD        0.00      0.00      0.00      0.00      0.00
NONPOINT         24   BD     2400.00    100.00      0.00    550.00      0.00
NONPOINT         25   BD     2650.00    100.00      0.00    550.00      0.00
NONPOINT         26   BD      750.00    100.00      0.00    500.00      0.00
NONPOINT         27   SD        0.00      0.00      0.00      0.00      0.00
NONPOINT         28   BD     1900.00    250.00      0.00    400.00      0.00
NONPOINT         29   BD     1900.00    500.00      0.00    600.00      0.00
NONPOINT         30   BD     2400.00    450.00      0.00    600.00      0.00
NONPOINT         31   BD       10.00     10.00      0.00     10.00      0.00
ENDATA19

$$$ DATA TYPE 20 (HEADWATER FOR FLOW, TEMPERATURE, SALINITY AND CONSERVATIVES) $$$

CARD TYPE     ELEMENT   NAME                  UNIT          FLOW      TEMP     SALIN      CM-I     CM-II

HDWTR-1           1     LAKE BARTHOLEMEW EAS    0        0.10278    29.960     0.000     9.900     3.000
HDWTR-1          24     LAKE BARTHOLEMEW WES    0        0.10278    31.230     0.000     8.900     3.200
HDWTR-1          94     HANNAH'S RUN (EAST)     0        1.45612    28.890     0.000     3.500     0.000
ENDATA20

$$$ DATA TYPE 21 (HEADWATER DATA FOR DO, BOD, AND NITROGEN) $$$

CARD TYPE     ELEMENT   NAME                          DO       BOD     ORG-N       NH3     NO3+2

HDWTR-2           1     LAKE BARTHOLEMEW EAS        5.21      3.32      1.49      0.00      0.00
HDWTR-2          24     LAKE BARTHOLEMEW WES        8.43      7.08      1.68      0.00      0.00
HDWTR-2          94     HANNAH'S RUN (EAST)         1.34     16.54      0.92      0.17      0.00
ENDATA21

$$$ DATA TYPE 22 (HEADWATER DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NONCONSERVATIVES) $$$

CARD TYPE     ELEMENT   NAME                         PHOS     CHL A      COLI       NCM

HDWTR-3           1     LAKE BARTHOLEMEW EAS         0.00      1.30      0.00      8.23
HDWTR-3          24     LAKE BARTHOLEMEW WES         0.00     42.40      0.00      6.66
HDWTR-3          94     HANNAH'S RUN (EAST)          0.00     17.90      0.00      7.29
ENDATA22

$$$ DATA TYPE 23 (JUNCTION DATA) $$$

CARD TYPE   JUNCTION   UPSTRM     RIVER     NAME
             ELEMENT  ELEMENT     KILOM

JUNCTION          44      23      48.41  INLET CANAL TO B. DESIARD @ US 165 CONTROL STRUCTURE
JUNCTION          99      93      25.67  HANNAH'S RUN JUNCTION WITH BAYOU DESIARD
ENDATA23
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$$$ DATA TYPE 24 (WASTELOAD DATA FOR FLOW, TEMPERATURE, SALINITY, AND CONSERVATIVES) $$$

CARD TYPE  ELEMENT    RKILO  NAME                          FLOW      TEMP       SAL      CM-I     CM-II

WSTLD-1      128      18.06  BAYOU CHAUVIN OUTLET       -1.05717     0.000     0.000     0.000     0.000
WSTLD-1      179       0.61  MONROE WTP INTAKE          -0.60450     0.000     0.000     0.000     0.000
ENDATA24

$$$ DATA TYPE 25 (WASTELOAD DATA FOR DO, BOD, AND NITROGEN) $$$
                                                                          % BOD                          %
CARD TYPE     ELEMENT   NAME                          DO       BOD      RMVL     ORG-N       NH3    NITRIF     NO3+2

WSTLD-2         128     BAYOU CHAUVIN OUTLET        0.00      0.00      0.00      0.00      0.00      0.00      0.00
WSTLD-2         179     MONROE WTP INTAKE           0.00      0.00      0.00      0.00      0.00      0.00      0.00
ENDATA25

$$$ DATA TYPE 26 (WASTELOAD DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NONCONSERVATIVES) $$$

CARD TYPE     ELEMENT   NAME                        PHOS     CHL A      COLI       NCM

WSTLD-3         128     BAYOU CHAUVIN OUTLET        0.00      0.00      0.00      0.00
WSTLD-3         179     MONROE WTP INTAKE           0.00      0.00      0.00      0.00
ENDATA26

$$$ DATA TYPE 27 (LOWER BOUNDARY CONDITIONS) $$$

CARD TYPE    CONSTITUENT                    CONCENTRATION

LOWER BC     TEMPERATURE                       =     30.850 deg C
LOWER BC     SALINITY                          =      0.000 ppt
LOWER BC     CONSERVATIVE MATERIAL I           =      0.000 MG/L
LOWER BC     CONSERVATIVE MATERIAL II          =      0.000 MG/L
LOWER BC     DISSOLVED OXYGEN                  =      0.000 mg/L
LOWER BC     BIOCHEMICAL OXYGEN DEMAND         =      0.000 mg/L
LOWER BC     ORGANIC NITROGEN                  =      0.000 mg/L
LOWER BC     AMMONIA NITROGEN                  =      0.000 mg/L
LOWER BC     NITRATE + NITRITE                 =      0.000 mg/L
LOWER BC     PHOSPHORUS                        =      0.000 mg/L
LOWER BC     CHLOROPHYLL A                     =     16.700 µg/L
LOWER BC     COLIFORM                          =      0.000 #/100 mL
LOWER BC     NONCONSERVATIVE MATERIAL          =      0.000 MG/L
ENDATA27

$$$ DATA TYPE 28 (DAM DATA) $$$

CARD TYPE     ELEMENT   NAME                 EQN      "A"       "B"       "H"

ENDATA28
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Bayou Desiard (including Lake Bartholemew) Watershed TMDL
For Biochemical Oxygen Demanding Substances and Nutrients
Subsegment 080701
Originated: January 14, 2002

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$$$ DATA TYPE 29 (SENSITIVITY ANALYSIS DATA) $$$

CARD TYPE       PARAMETER     COL 1     COL 2     COL 3     COL 4     COL 5     COL 6     COL 7     COL 8

ENDATA29

$$$ DATA TYPE 30 (PLOT CONTROL CARDS) $$$


NUMBER OF PLOTS =  5
NUMBER OF REACHES IN PLOT 1 =   2
PLOT RCH  5  6
NUMBER OF REACHES IN PLOT 2 =   5
PLOT RCH 14 15 16 17 18
NUMBER OF REACHES IN PLOT 3 =  11
PLOT RCH  1  2  3  4  7  8  9 10 11 12 13
NUMBER OF REACHES IN PLOT 4 =  13
PLOT RCH 19 20 21 22 23 24 25 26 27 28 29 30 31
NUMBER OF REACHES IN PLOT 4 =  24
PLOT RCH  1  2  3  4  7  8  9 10 11 12 13 19 20 21 22 23 24 25 26 27 28 29 30 31
ENDATA30

$$$ DATA TYPE 31 (OVERLAY PLOT DATA) $$$


OVERLAY 1 DESIARDCAL_LBARTHWEST_NIT.TXT       :LAKE BARTHOLEMEW (WEST)
OVERLAY 2 DESIARDCAL_HANNAHSRUN_NIT.TXT       :HANNAH'S RUN
OVERLAY 3 DESIARDCAL_MAIN_NIT.TXT             :MAINSTEM (REACHES 1-4 & 7-13)
OVERLAY 4 DESIARDCAL_MAIN_NIT.TXT             :MAINSTEM (REACHES 19-31)
OVERLAY 5 DESIARDCAL_MAIN_NIT.TXT             :MAINSTEM (ALL REACHES)
ENDATA31



     .....NO ERRORS DETECTED IN INPUT DATA
     .....HYDRAULIC CALCULATIONS COMPLETED
     .....TRIDIAGONAL MATRIX TERMS INITIALIZED
     .....OXYGEN DEPENDENT RATES CONVERGENT IN  52 ITERATIONS
     .....CONSTITUENT CALCULATIONS COMPLETED
 ***** WARNING:  NEGATIVE CONCENTRATIONS SET TO ZERO FOR Ammonia Nitrogen
 ***** WARNING:  NEGATIVE CONCENTRATIONS SET TO ZERO FOR Nitrate+Nitrite Nitrogen
     .....GRAPHICS DATA FOR PLOT 1 WRITTEN TO UNIT 11
     .....GRAPHICS DATA FOR PLOT 2 WRITTEN TO UNIT 12
     .....GRAPHICS DATA FOR PLOT 3 WRITTEN TO UNIT 13
     .....GRAPHICS DATA FOR PLOT 4 WRITTEN TO UNIT 14
     .....GRAPHICS DATA FOR PLOT 5 WRITTEN TO UNIT 15


FINAL REPORT    LAKE BARTHOLEMEW EAS                            BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO.  1      BDS 1-BDS 2                                   12/18/01
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********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
1	HDWTR	0.10278	29.96	0.00	9.90	3.00	5.21	3.19	3.32	1.49	0.00	0.00	0.00	1.30	0.00	8.23

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
1	59.85	59.77	0.10278	0.00	0.02321	0.04	1.76	2.52	354.29	201.32	4.43	0.00	0.000	0.000	0.023
TOT						0.04			354.29	201.32					
AVG					0.02321		1.76	2.52			4.43				
CUM						0.04									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
1	59.770	7.56	0.48	0.22	0.06	0.00	0.00	0.00	0.00	0.39	0.02	1.18	0.00	0.00	0.00	0.81	0.00	0.00	0.01	0.06
20 DEG C RATE				0.14		0.00	0.00			0.20		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.40		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
1	59.770	29.96	0.00	9.89	3.00	4.45	4.47	6.52	1.34	0.00	0.00	1.34	0.00	20.50	115.00	0.00	6.72

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

Bayou Desiard (including Lake Bartholemew) Watershed TMDL
For Biochemical Oxygen Demanding Substances and Nutrients
Subsegment 080701
Originated: January 14, 2002

REACH NO. 2 BDS 2-BDS 3 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
2	UPR RCH	0.10278	29.96	0.00	9.89	3.00	4.45	4.47	6.52	1.34	0.00	0.00	0.00	20.50	0.00	6.72

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
2	59.77	59.12	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
3	59.12	58.48	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
4	58.48	57.83	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
5	57.83	57.19	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
6	57.19	56.54	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
7	56.54	55.89	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
8	55.89	55.25	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
9	55.25	54.60	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
10	54.60	53.96	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
11	53.96	53.31	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
TOT						156.89			1393235.00	403856.59					
AVG					0.00048		3.45	62.52			215.67				
CUM						156.93									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
2	59.124	7.56	0.24	0.32	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.17	0.00	0.00	0.00	0.82	0.00	0.00	0.04	0.06
3	58.478	7.56	0.24	0.32	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.17	0.00	0.00	0.00	0.82	0.00	0.00	0.04	0.06
4	57.832	7.56	0.24	0.32	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.17	0.00	0.00	0.00	0.83	0.00	0.00	0.04	0.06
5	57.186	7.56	0.24	0.32	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.17	0.00	0.00	0.00	0.84	0.00	0.00	0.04	0.06
6	56.540	7.56	0.24	0.32	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.18	0.00	0.00	0.00	0.85	0.00	0.00	0.04	0.06
7	55.894	7.56	0.24	0.32	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.18	0.00	0.00	0.00	0.85	0.00	0.00	0.04	0.06
8	55.248	7.56	0.24	0.32	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.19	0.00	0.00	0.00	0.86	0.00	0.00	0.04	0.06
9	54.602	7.56	0.24	0.32	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.20	0.00	0.00	0.00	0.87	0.00	0.00	0.04	0.06
10	53.956	7.56	0.24	0.32	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.22	0.00	0.00	0.00	0.88	0.00	0.00	0.04	0.06
11	53.310	7.56	0.24	0.32	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.25	0.00	0.00	0.00	0.88	0.00	0.00	0.04	0.06

20 DEG C RATE		0.20		0.00	0.00			0.09		0.60	0.00	0.00	0.00			0.00	0.03		
AVG 20 DEG C RATE	0.20		0.05						0.01										0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
2	59.124	29.96	0.00	9.89	3.00	4.30	4.62	6.69	1.32	0.00	0.00	1.32	0.00	20.69	115.00	0.00	5.33
3	58.478	29.96	0.00	9.89	3.00	4.27	4.69	6.78	1.30	0.00	0.00	1.30	0.00	20.88	115.00	0.00	4.15
4	57.832	29.96	0.00	9.88	3.00	4.31	4.72	6.82	1.29	0.00	0.00	1.29	0.00	21.07	115.00	0.00	3.45
5	57.186	29.96	0.00	9.88	3.00	4.38	4.73	6.85	1.29	0.00	0.00	1.29	0.00	21.26	115.00	0.00	3.04
6	56.540	29.96	0.00	9.87	3.01	4.44	4.73	6.87	1.29	0.00	0.00	1.29	0.00	21.45	115.00	0.00	2.79
7	55.894	29.96	0.00	9.86	3.01	4.51	4.73	6.89	1.28	0.00	0.00	1.28	0.00	21.64	115.00	0.00	2.64
8	55.248	29.96	0.00	9.85	3.01	4.60	4.72	6.90	1.28	0.00	0.00	1.28	0.00	21.83	115.00	0.00	2.54
9	54.602	29.96	0.00	9.84	3.01	4.75	4.69	6.90	1.27	0.00	0.00	1.27	0.00	22.02	115.00	0.00	2.47
10	53.956	29.96	0.00	9.82	3.02	5.07	4.59	6.81	1.25	0.00	0.00	1.25	0.00	22.21	115.00	0.00	2.38
11	53.310	29.96	0.00	9.80	3.02	5.77	4.20	6.44	1.18	0.00	0.00	1.18	0.00	22.40	115.00	0.00	2.23

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 3 BDS 3-BDS 6 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
12	UPR RCH	0.10278	29.96	0.00	9.80	3.02	5.77	4.20	6.44	1.18	0.00	0.00	0.00	22.40	0.00	2.23

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
12	53.31	52.86	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
13	52.86	52.41	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
14	52.41	51.96	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
15	51.96	51.51	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
16	51.51	51.06	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000

17	51.06	50.61	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
18	50.61	50.16	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
19	50.16	49.71	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
20	49.71	49.26	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
21	49.26	48.81	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
TOT						166.81			1481348.38	404759.34					
AVG					0.00031		3.66	89.95			329.19				
CUM						323.75									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
12	52.860	7.56	0.23	0.30	0.06	0.00	0.00	0.00	0.00	0.10	0.02	1.29	0.00	0.00	0.00	0.94	0.00	0.00	0.06	0.06
13	52.410	7.56	0.23	0.30	0.06	0.00	0.00	0.00	0.00	0.10	0.02	1.31	0.00	0.00	0.00	1.00	0.00	0.00	0.06	0.06
14	51.960	7.56	0.23	0.30	0.06	0.00	0.00	0.00	0.00	0.10	0.02	1.33	0.00	0.00	0.00	1.05	0.00	0.00	0.06	0.06
15	51.510	7.56	0.23	0.30	0.06	0.00	0.00	0.00	0.00	0.10	0.02	1.33	0.00	0.00	0.00	1.11	0.00	0.00	0.06	0.06
16	51.060	7.56	0.23	0.30	0.06	0.00	0.00	0.00	0.00	0.10	0.02	1.33	0.00	0.00	0.00	1.16	0.00	0.00	0.06	0.06
17	50.610	7.56	0.23	0.30	0.06	0.00	0.00	0.00	0.00	0.10	0.02	1.33	0.00	0.00	0.00	1.22	0.00	0.00	0.06	0.06
18	50.160	7.56	0.23	0.30	0.06	0.00	0.00	0.00	0.00	0.10	0.02	1.33	0.00	0.00	0.00	1.27	0.00	0.00	0.06	0.06
19	49.710	7.56	0.23	0.30	0.06	0.00	0.00	0.00	0.00	0.10	0.02	1.33	0.00	0.00	0.00	1.33	0.00	0.00	0.06	0.06
20	49.260	7.56	0.23	0.30	0.06	0.00	0.00	0.00	0.00	0.10	0.02	1.33	0.00	0.00	0.00	1.38	0.00	0.00	0.06	0.06
21	48.810	7.56	0.23	0.30	0.06	0.00	0.00	0.00	0.00	0.10	0.02	1.33	0.00	0.00	0.00	1.44	0.00	0.00	0.06	0.06
20 DEG C RATE				0.19		0.00	0.00			0.05		0.60	0.00	0.00	0.00			0.00	0.04	
AVG 20 DEG C RATE			0.19		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
12	52.860	29.96	0.00	9.77	3.03	6.72	3.18	5.56	1.04	0.00	0.00	1.04	0.00	23.80	115.00	0.00	2.01
13	52.410	29.96	0.00	9.76	3.03	7.32	2.86	5.38	0.98	0.00	0.00	0.98	0.00	25.20	115.00	0.00	1.93
14	51.960	29.96	0.00	9.74	3.03	7.81	2.72	5.38	0.94	0.00	0.00	0.94	0.00	26.60	115.00	0.00	1.89
15	51.510	29.96	0.00	9.71	3.04	8.18	2.66	5.46	0.92	0.00	0.00	0.92	0.00	28.00	115.00	0.00	1.90
16	51.060	29.96	0.00	9.69	3.04	8.47	2.63	5.57	0.91	0.00	0.00	0.91	0.00	29.40	115.00	0.00	1.97
17	50.610	29.96	0.00	9.66	3.05	8.67	2.64	5.72	0.91	0.00	0.00	0.91	0.00	30.80	115.00	0.00	2.11
18	50.160	29.96	0.00	9.62	3.06	8.77	2.67	5.89	0.92	0.00	0.00	0.92	0.00	32.20	115.00	0.00	2.40
19	49.710	29.96	0.00	9.58	3.06	8.75	2.78	6.14	0.95	0.00	0.00	0.95	0.00	33.60	115.00	0.00	2.91
20	49.260	29.96	0.00	9.54	3.07	8.58	3.05	6.55	1.01	0.00	0.00	1.01	0.00	35.00	115.00	0.00	3.83
21	48.810	29.96	0.00	9.49	3.08	8.35	3.74	7.38	1.11	0.00	0.00	1.11	0.00	36.40	115.00	0.00	5.46

Bayou Desiard (including Lake Bartholemew) Watershed TMDL
For Biochemical Oxygen Demanding Substances and Nutrients
Subsegment 080701
Originated: January 14, 2002

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 4 BDS 6-US 165 GATE INLET CANAL 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
22	UPR RCH	0.10278	29.96	0.00	9.49	3.08	8.35	3.74	7.38	1.11	0.00	0.00	0.00	36.40	0.00	5.46

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
22	48.81	48.61	0.10278	0.00	0.00026	8.76	3.38	115.09	77794.46	23017.30	388.97	0.00	0.000	1.000	0.000
23	48.61	48.41	0.10278	0.00	0.00026	8.76	3.38	115.09	77794.46	23017.30	388.97	0.00	0.000	1.000	0.000
TOT						17.52			155588.92	46034.61					
AVG					0.00026		3.38	115.09			388.97				
CUM						341.27									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
22	48.610	7.52	0.25	0.30	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.36	0.00	0.00	0.00	1.61	0.00	0.00	0.02	0.06
23	48.410	7.48	0.25	0.31	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.40	0.00	0.00	0.00	1.79	0.00	0.00	0.02	0.06
20 DEG C RATE				0.19		0.00	0.00			0.09		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.21		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *

22	48.610	30.28	0.00	9.45	3.09	8.43	4.94	8.96	1.24	0.00	0.00	1.24	0.00	40.20	115.00	0.00	7.45
23	48.410	30.60	0.00	9.42	3.10	8.61	5.01	9.41	1.33	0.00	0.00	1.33	0.00	44.00	115.00	0.00	7.99

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 7 US165 GATE IN CANAL-US165 GATE 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
44	UPR RCH	0.10278	30.60	0.00	9.42	3.10	8.61	5.01	9.41	1.33	0.00	0.00	0.00	44.00	0.00	7.99
44	TRIB	0.10278	30.60	0.00	9.37	3.11	9.43	3.92	8.32	1.11	0.00	0.00	0.00	44.00	0.00	7.85

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
44	48.41	48.33	0.20556	0.00	0.02876	0.03	1.04	6.85	571.70	548.29	7.15	0.00	0.000	1.000	0.029
TOT						0.03			571.70	548.29					
AVG					0.02876		1.04	6.85			7.15				
CUM						341.30									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
44	48.330	7.64	0.80	0.29	0.06	0.00	16.27	17.08	17.08	0.19	0.02	1.27	0.03	0.00	0.00	1.77	0.00	0.00	0.02	0.06
20 DEG C RATE				0.19		0.00	9.00			0.10		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.67		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

Bayou Desiard (including Lake Bartholemew) Watershed TMDL
For Biochemical Oxygen Demanding Substances and Nutrients
Subsegment 080701
Originated: January 14, 2002

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
44	48.330	29.40	0.00	9.40	3.10	8.91	4.49	9.09	1.44	0.00	0.00	1.44	0.00	46.00	115.00	0.00	7.91

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 8 US 165 GATE/CONTROL STRUCTURE 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
45	UPR RCH	0.20556	29.40	0.00	9.40	3.10	8.91	4.49	9.09	1.44	0.00	0.00	0.00	46.00	0.00	7.91

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
45	48.33	48.25	0.20556	0.00	0.04998	0.02	1.66	2.47	329.04	197.89	4.11	0.00	0.000	1.000	0.050
TOT						0.02			329.04	197.89					
AVG					0.04998		1.66	2.47			4.11				
CUM						341.32									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
45	48.250	7.76	0.49	0.28	0.06	0.00	15.36	16.53	16.53	0.18	0.02	1.11	0.04	0.00	0.00	1.77	0.00	0.00	0.02	0.06
20 DEG C RATE				0.19		0.00	9.00			0.10		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.42		0.05						0.01									0.05

* g/m²/d ** mg/L/day

Bayou Desiard (including Lake Bartholemew) Watershed TMDL
For Biochemical Oxygen Demanding Substances and Nutrients
Subsegment 080701
Originated: January 14, 2002

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
45	48.250	28.49	0.00	9.40	3.10	5.70	3.91	8.71	1.25	0.00	0.00	1.25	0.00	48.00	115.00	0.00	7.57

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 9 US165 GATE OUTLET-BDS 7 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
46	UPR RCH	0.20556	28.49	0.00	9.40	3.10	5.70	3.91	8.71	1.25	0.00	0.00	0.00	48.00	0.00	7.57

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
46	48.25	48.14	0.20556	0.00	0.00281	0.45	1.70	42.91	8037.53	4720.50	73.07	0.00	0.000	1.000	0.003
47	48.14	48.03	0.20556	0.00	0.00281	0.45	1.70	42.91	8037.53	4720.50	73.07	0.00	0.000	1.000	0.003
48	48.03	47.92	0.20556	0.00	0.00281	0.45	1.70	42.91	8037.53	4720.50	73.07	0.00	0.000	1.000	0.003
TOT						1.36			24112.58	14161.51					
AVG					0.00281		1.70	42.91			73.07				
CUM						342.68									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
46	48.140	7.83	0.48	0.29	0.06	0.00	14.89	16.02	16.02	0.34	0.02	0.97	0.04	0.00	0.00	2.06	0.00	0.00	0.03	0.06
47	48.030	7.90	0.47	0.28	0.06	0.00	14.43	15.52	15.53	0.33	0.02	0.85	0.03	0.00	0.00	2.33	0.00	0.00	0.03	0.06
48	47.920	7.97	0.47	0.28	0.06	0.00	13.99	15.05	15.06	0.32	0.02	0.78	0.03	0.00	0.00	2.59	0.00	0.00	0.02	0.06
20 DEG C RATE				0.20		0.00	9.00			0.20		0.60	0.00	0.00	0.00			0.00	0.02	

AVG 20 DEG C RATE 0.41 0.05 0.01 0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
46	48.140	27.99	0.00	9.40	3.10	3.85	3.57	9.27	1.13	0.00	0.00	1.14	0.00	57.00	115.00	0.00	7.38
47	48.030	27.50	0.00	9.40	3.10	2.93	3.41	10.01	1.08	0.01	0.00	1.09	0.00	66.00	115.00	0.00	7.27
48	47.920	27.00	0.00	9.40	3.10	2.51	3.35	10.85	1.05	0.01	0.00	1.07	0.00	75.00	115.00	0.00	7.21

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 10 BDS 7-BDS 8 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
49	UPR RCH	0.20556	27.00	0.00	9.40	3.10	2.51	3.35	10.85	1.05	0.01	0.00	0.00	75.00	0.00	7.21

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
49	47.92	47.46	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
50	47.46	47.00	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
51	47.00	46.54	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
52	46.54	46.08	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
53	46.08	45.62	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
54	45.62	45.16	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
55	45.16	44.70	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
56	44.70	44.24	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
57	44.24	43.78	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
58	43.78	43.32	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
59	43.32	42.86	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
60	42.86	42.40	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
61	42.40	41.94	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005

62	41.94	41.48	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
63	41.48	41.02	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
64	41.02	40.56	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
TOT						17.22			305756.56	163271.91					
AVG					0.00495		1.87	22.18			41.54				
CUM						359.89									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
49	47.460	7.97	0.43	0.23	0.06	0.00	3.88	5.08	5.11	0.32	0.02	1.38	0.04	0.00	0.00	2.58	0.00	0.00	0.02	0.06
50	47.000	7.98	0.43	0.23	0.06	0.00	3.87	5.12	5.17	0.32	0.02	1.42	0.04	0.00	0.00	2.58	0.00	0.00	0.02	0.06
51	46.540	7.99	0.43	0.23	0.06	0.00	3.86	5.14	5.21	0.32	0.02	1.43	0.04	0.00	0.00	2.57	0.00	0.00	0.02	0.06
52	46.080	7.99	0.43	0.23	0.06	0.00	3.85	5.16	5.26	0.32	0.02	1.42	0.04	0.00	0.00	2.57	0.00	0.00	0.02	0.06
53	45.620	8.00	0.42	0.23	0.06	0.00	3.84	5.17	5.30	0.32	0.02	1.40	0.04	0.00	0.00	2.56	0.00	0.00	0.02	0.06
54	45.160	8.00	0.42	0.23	0.06	0.00	3.83	5.18	5.34	0.32	0.02	1.38	0.05	0.00	0.00	2.56	0.00	0.00	0.02	0.06
55	44.700	8.01	0.42	0.23	0.06	0.00	3.82	5.18	5.38	0.32	0.02	1.36	0.05	0.00	0.00	2.55	0.00	0.00	0.02	0.06
56	44.240	8.01	0.42	0.23	0.06	0.00	3.81	5.18	5.41	0.31	0.02	1.33	0.05	0.00	0.00	2.55	0.00	0.00	0.02	0.06
57	43.780	8.02	0.42	0.23	0.06	0.00	3.80	5.18	5.45	0.31	0.02	1.30	0.05	0.00	0.00	2.54	0.00	0.00	0.02	0.06
58	43.320	8.03	0.42	0.23	0.06	0.00	3.79	5.18	5.49	0.31	0.02	1.27	0.05	0.00	0.00	2.54	0.00	0.00	0.02	0.06
59	42.860	8.03	0.42	0.23	0.06	0.00	3.78	5.18	5.54	0.31	0.02	1.24	0.05	0.00	0.00	2.53	0.00	0.00	0.02	0.06
60	42.400	8.04	0.42	0.23	0.06	0.00	3.77	5.17	5.58	0.31	0.02	1.22	0.05	0.00	0.00	2.53	0.00	0.00	0.02	0.06
61	41.940	8.04	0.42	0.23	0.06	0.00	3.76	5.17	5.63	0.31	0.02	1.19	0.05	0.00	0.00	2.52	0.00	0.00	0.02	0.06
62	41.480	8.05	0.42	0.23	0.06	0.00	3.75	5.16	5.68	0.31	0.02	1.16	0.05	0.00	0.00	2.52	0.00	0.00	0.02	0.06
63	41.020	8.06	0.42	0.23	0.06	0.00	3.74	5.16	5.74	0.31	0.02	1.14	0.05	0.00	0.00	2.51	0.00	0.00	0.02	0.06
64	40.560	8.06	0.42	0.23	0.06	0.00	3.73	5.16	5.80	0.31	0.02	1.17	0.05	0.00	0.00	2.51	0.00	0.00	0.02	0.06
20 DEG C RATE				0.17		0.00	2.50			0.20		1.00	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			0.37		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
49	47.460	26.96	0.00	9.40	3.10	3.03	3.70	11.20	1.14	0.03	0.00	1.17	0.00	75.00	115.00	0.00	7.25
50	47.000	26.92	0.00	9.40	3.10	3.34	4.05	11.55	1.22	0.05	0.00	1.26	0.00	75.00	115.00	0.00	7.29
51	46.540	26.88	0.00	9.40	3.10	3.45	4.32	11.82	1.28	0.06	0.00	1.34	0.00	75.00	115.00	0.00	7.34
52	46.080	26.84	0.00	9.40	3.10	3.42	4.53	12.03	1.32	0.07	0.00	1.40	0.00	75.00	115.00	0.00	7.38
53	45.620	26.80	0.00	9.40	3.10	3.33	4.70	12.20	1.36	0.08	0.00	1.44	0.00	75.00	115.00	0.00	7.41
54	45.160	26.76	0.00	9.40	3.10	3.20	4.83	12.33	1.39	0.09	0.00	1.48	0.00	75.00	115.00	0.00	7.45
55	44.700	26.72	0.00	9.40	3.10	3.05	4.94	12.44	1.41	0.10	0.00	1.51	0.00	75.00	115.00	0.00	7.48

56	44.240	26.67	0.00	9.40	3.10	2.90	5.02	12.52	1.43	0.11	0.00	1.53	0.00	75.00	115.00	0.00	7.52
57	43.780	26.63	0.00	9.40	3.10	2.76	5.09	12.59	1.44	0.11	0.00	1.55	0.00	75.00	115.00	0.00	7.55
58	43.320	26.59	0.00	9.40	3.10	2.62	5.14	12.64	1.45	0.12	0.00	1.57	0.00	75.00	115.00	0.00	7.57
59	42.860	26.55	0.00	9.40	3.10	2.49	5.18	12.68	1.46	0.12	0.00	1.59	0.00	75.00	115.00	0.00	7.60
60	42.400	26.51	0.00	9.40	3.10	2.37	5.22	12.72	1.47	0.13	0.00	1.60	0.00	75.00	115.00	0.00	7.63
61	41.940	26.47	0.00	9.40	3.10	2.25	5.25	12.75	1.48	0.13	0.00	1.61	0.00	75.00	115.00	0.00	7.65
62	41.480	26.43	0.00	9.40	3.10	2.15	5.28	12.78	1.48	0.14	0.00	1.62	0.00	75.00	115.00	0.00	7.67
63	41.020	26.39	0.00	9.40	3.10	2.09	5.32	12.82	1.49	0.14	0.00	1.63	0.00	75.00	115.00	0.00	7.70
64	40.560	26.35	0.00	9.40	3.10	2.23	5.43	12.93	1.50	0.14	0.00	1.64	0.00	75.00	115.00	0.00	7.73

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 11 BDS 8-MILL BAYOU 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
65	UPR RCH	0.20556	26.35	0.00	9.40	3.10	2.23	5.43	12.93	1.50	0.14	0.00	0.00	75.00	0.00	7.73

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
65	40.56	40.08	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
66	40.08	39.59	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
67	39.59	39.10	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
68	39.10	38.62	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
69	38.62	38.13	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
70	38.13	37.65	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
71	37.65	37.16	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
72	37.16	36.68	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
73	36.68	36.19	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
74	36.19	35.71	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
75	35.71	35.22	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
76	35.22	34.74	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
77	34.74	34.25	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
78	34.25	33.77	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
TOT						15.88			282077.06	150627.19					
AVG					0.00495		1.87	22.18			41.54				

CUM 375.77

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
65	40.075	8.03	0.42	0.16	0.06	0.00	0.00	1.49	2.18	0.31	0.02	1.39	0.05	0.00	0.00	2.41	0.00	0.00	0.02	0.06
66	39.590	8.00	0.42	0.16	0.06	0.00	0.00	1.54	2.27	0.32	0.02	1.49	0.05	0.00	0.00	2.31	0.00	0.00	0.02	0.06
67	39.105	7.97	0.43	0.17	0.06	0.00	0.00	1.58	2.36	0.32	0.02	1.54	0.05	0.00	0.00	2.21	0.00	0.00	0.02	0.06
68	38.620	7.94	0.43	0.17	0.06	0.00	0.00	1.61	2.44	0.33	0.02	1.57	0.05	0.00	0.00	2.11	0.00	0.00	0.03	0.06
69	38.135	7.91	0.43	0.17	0.06	0.00	0.00	1.64	2.51	0.33	0.02	1.58	0.05	0.00	0.00	2.00	0.00	0.00	0.03	0.06
70	37.650	7.88	0.43	0.17	0.06	0.00	0.00	1.66	2.57	0.33	0.02	1.58	0.05	0.00	0.00	1.89	0.00	0.00	0.03	0.06
71	37.165	7.85	0.43	0.17	0.06	0.00	0.00	1.68	2.62	0.34	0.02	1.57	0.05	0.00	0.00	1.78	0.00	0.00	0.03	0.06
72	36.680	7.82	0.43	0.17	0.06	0.00	0.00	1.69	2.66	0.34	0.02	1.55	0.05	0.00	0.00	1.67	0.00	0.00	0.03	0.06
73	36.195	7.79	0.44	0.18	0.06	0.00	0.00	1.71	2.70	0.35	0.02	1.52	0.05	0.00	0.00	1.56	0.00	0.00	0.03	0.06
74	35.710	7.76	0.44	0.18	0.06	0.00	0.00	1.72	2.73	0.35	0.02	1.48	0.05	0.00	0.00	1.44	0.00	0.00	0.03	0.06
75	35.225	7.73	0.44	0.18	0.06	0.00	0.00	1.72	2.75	0.36	0.02	1.42	0.05	0.00	0.00	1.32	0.00	0.00	0.03	0.06
76	34.740	7.71	0.44	0.18	0.06	0.00	0.00	1.71	2.74	0.37	0.02	1.37	0.05	0.00	0.00	1.20	0.00	0.00	0.03	0.06
77	34.255	7.68	0.44	0.18	0.06	0.00	0.00	1.65	2.64	0.37	0.02	1.39	0.05	0.00	0.00	1.07	0.00	0.00	0.03	0.06
78	33.770	7.65	0.44	0.18	0.06	0.00	0.00	1.41	2.22	0.38	0.02	1.57	0.04	0.00	0.00	0.94	0.00	0.00	0.03	0.06
20 DEG C RATE				0.12		0.00	0.00			0.20		1.00	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			0.37		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
65	40.075	26.56	0.00	9.40	3.10	3.40	5.82	12.96	1.53	0.14	0.00	1.67	0.00	71.40	115.00	0.00	7.80
66	39.590	26.77	0.00	9.40	3.10	4.04	6.14	12.92	1.54	0.14	0.00	1.68	0.00	67.80	115.00	0.00	7.86
67	39.105	26.99	0.00	9.40	3.10	4.31	6.38	12.80	1.55	0.14	0.00	1.69	0.00	64.20	115.00	0.00	7.91
68	38.620	27.20	0.00	9.40	3.10	4.34	6.56	12.62	1.55	0.14	0.00	1.69	0.00	60.60	115.00	0.00	7.95
69	38.135	27.41	0.00	9.40	3.10	4.21	6.70	12.40	1.54	0.15	0.00	1.69	0.00	57.00	115.00	0.00	7.98
70	37.650	27.62	0.00	9.40	3.10	3.98	6.80	12.14	1.53	0.15	0.00	1.68	0.00	53.40	115.00	0.00	8.01
71	37.165	27.84	0.00	9.40	3.10	3.68	6.87	11.85	1.52	0.15	0.00	1.67	0.00	49.80	115.00	0.00	8.02
72	36.680	28.05	0.00	9.40	3.10	3.34	6.92	11.54	1.50	0.16	0.00	1.66	0.00	46.20	115.00	0.00	8.04
73	36.195	28.26	0.00	9.40	3.10	2.98	6.94	11.20	1.48	0.17	0.00	1.65	0.00	42.60	115.00	0.00	8.04
74	35.710	28.47	0.00	9.40	3.10	2.62	6.94	10.84	1.47	0.17	0.00	1.64	0.00	39.00	115.00	0.00	8.04
75	35.225	28.68	0.00	9.39	3.09	2.28	6.93	10.47	1.45	0.18	0.00	1.63	0.00	35.40	115.00	0.00	8.02
76	34.740	28.90	0.00	9.36	3.08	2.01	6.85	10.03	1.42	0.19	0.00	1.61	0.00	31.80	115.00	0.00	7.93
77	34.255	29.11	0.00	9.25	3.02	1.97	6.60	9.42	1.38	0.18	0.00	1.56	0.00	28.20	115.00	0.00	7.64
78	33.770	29.32	0.00	8.89	2.83	2.58	5.53	7.99	1.27	0.07	0.00	1.34	0.00	24.60	115.00	0.00	6.55

Bayou Desiard (including Lake Bartholemew) Watershed TMDL
For Biochemical Oxygen Demanding Substances and Nutrients
Subsegment 080701
Originated: January 14, 2002

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 12 MILL BAYOU-BDS 9 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
79	UPR RCH	0.20556	29.32	0.00	8.89	2.83	2.58	5.53	7.99	1.27	0.07	0.00	0.00	24.60	0.00	6.55

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
79	33.77	33.20	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
80	33.20	32.63	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
81	32.63	32.06	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
82	32.06	31.49	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
83	31.49	30.92	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
84	30.92	30.34	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
85	30.34	29.77	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
86	29.77	29.20	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
87	29.20	28.63	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
88	28.63	28.06	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
TOT						58.28			1035125.56	439976.53					
AVG					0.00113		2.35	77.05			181.28				
CUM						434.06									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
79	33.199	7.65	0.35	0.12	0.06	0.00	4.50	4.50	4.50	0.11	0.02	0.96	0.00	0.00	0.00	0.94	0.00	0.00	0.02	0.06
80	32.628	7.65	0.35	0.12	0.06	0.00	4.50	4.50	4.50	0.11	0.02	0.97	0.00	0.00	0.00	0.94	0.00	0.00	0.02	0.06
81	32.057	7.65	0.35	0.12	0.06	0.00	4.50	4.50	4.50	0.11	0.02	0.98	0.00	0.00	0.00	0.94	0.00	0.00	0.02	0.06
82	31.486	7.65	0.35	0.12	0.06	0.00	4.50	4.50	4.50	0.11	0.02	0.98	0.00	0.00	0.00	0.94	0.00	0.00	0.02	0.06
83	30.915	7.65	0.35	0.12	0.06	0.00	4.50	4.50	4.50	0.11	0.02	0.99	0.00	0.00	0.00	0.94	0.00	0.00	0.02	0.06

84	30.344	7.65	0.35	0.12	0.06	0.00	4.50	4.50	4.50	0.11	0.02	0.99	0.00	0.00	0.00	0.94	0.00	0.00	0.02	0.06
85	29.773	7.65	0.35	0.12	0.06	0.00	4.50	4.50	4.50	0.11	0.02	0.98	0.00	0.00	0.00	0.94	0.00	0.00	0.02	0.06
86	29.202	7.65	0.35	0.12	0.06	0.00	4.50	4.50	4.50	0.11	0.02	0.97	0.00	0.00	0.00	0.94	0.00	0.00	0.02	0.06
87	28.631	7.65	0.35	0.12	0.06	0.00	4.50	4.50	4.50	0.11	0.02	0.96	0.00	0.00	0.00	0.94	0.00	0.00	0.02	0.06
88	28.060	7.65	0.35	0.12	0.06	0.00	4.50	4.50	4.50	0.11	0.02	0.93	0.00	0.00	0.00	0.94	0.00	0.00	0.02	0.06
20 DEG C RATE				0.08		0.00	2.50			0.06		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.30		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
79	33.199	29.32	0.00	8.76	2.76	2.72	5.04	7.50	1.21	0.00	0.00	1.21	0.00	24.60	115.00	0.00	6.11
80	32.628	29.32	0.00	8.66	2.71	2.80	4.81	7.27	1.19	0.00	0.00	1.19	0.00	24.60	115.00	0.00	5.88
81	32.057	29.32	0.00	8.54	2.65	2.86	4.65	7.11	1.16	0.00	0.00	1.16	0.00	24.60	115.00	0.00	5.72
82	31.486	29.32	0.00	8.40	2.57	2.90	4.55	7.01	1.15	0.00	0.00	1.15	0.00	24.60	115.00	0.00	5.63
83	30.915	29.32	0.00	8.23	2.49	2.92	4.50	6.96	1.13	0.00	0.00	1.13	0.00	24.60	115.00	0.00	5.60
84	30.344	29.32	0.00	8.05	2.39	2.92	4.51	6.97	1.12	0.00	0.00	1.12	0.00	24.60	115.00	0.00	5.64
85	29.773	29.32	0.00	7.83	2.27	2.88	4.57	7.03	1.10	0.00	0.00	1.10	0.00	24.60	115.00	0.00	5.76
86	29.202	29.32	0.00	7.57	2.14	2.81	4.70	7.16	1.09	0.00	0.00	1.09	0.00	24.60	115.00	0.00	6.00
87	28.631	29.32	0.00	7.28	1.98	2.69	4.95	7.41	1.07	0.00	0.00	1.07	0.00	24.60	115.00	0.00	6.39
88	28.060	29.32	0.00	6.93	1.80	2.50	5.38	7.84	1.04	0.00	0.00	1.04	0.00	24.60	115.00	0.00	6.99

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 13 BDS 9-HANNAH'S RUN 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
89	UPR RCH	0.20556	29.32	0.00	6.93	1.80	2.50	5.38	7.84	1.04	0.00	0.00	0.00	24.60	0.00	6.99

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s

89	28.06	27.58	0.20556	0.00	0.00113	4.88	2.35	77.05	86653.24	36831.66	181.28	0.00	0.000	4.000	0.001
90	27.58	27.10	0.20556	0.00	0.00113	4.88	2.35	77.05	86653.24	36831.66	181.28	0.00	0.000	4.000	0.001
91	27.10	26.63	0.20556	0.00	0.00113	4.88	2.35	77.05	86653.24	36831.66	181.28	0.00	0.000	4.000	0.001
92	26.63	26.15	0.20556	0.00	0.00113	4.88	2.35	77.05	86653.24	36831.66	181.28	0.00	0.000	4.000	0.001
93	26.15	25.67	0.20556	0.00	0.00113	4.88	2.35	77.05	86653.24	36831.66	181.28	0.00	0.000	4.000	0.001
TOT						24.40			433266.22	184158.28					
AVG					0.00113		2.35	77.05			181.28				
CUM						458.45									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
89	27.582	7.63	0.35	0.12	0.06	0.00	4.53	4.53	4.53	0.11	0.02	0.91	0.00	0.00	0.00	0.86	0.00	0.00	0.02	0.06
90	27.104	7.61	0.36	0.12	0.06	0.00	4.57	4.57	4.57	0.11	0.02	0.89	0.00	0.00	0.00	0.78	0.00	0.00	0.02	0.06
91	26.626	7.59	0.36	0.13	0.06	0.00	4.61	4.61	4.61	0.12	0.02	0.88	0.00	0.00	0.00	0.70	0.00	0.00	0.02	0.06
92	26.148	7.58	0.36	0.13	0.06	0.00	4.65	4.65	4.65	0.12	0.02	0.92	0.00	0.00	0.00	0.62	0.00	0.00	0.02	0.06
93	25.670	7.56	0.36	0.13	0.06	0.00	4.69	4.69	4.69	0.12	0.02	1.04	0.00	0.00	0.00	0.54	0.00	0.00	0.02	0.06
20 DEG C RATE				0.08		0.00	2.50			0.06		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.30		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
89	27.582	29.46	0.00	6.56	1.61	2.28	6.03	8.27	1.00	0.00	0.00	1.00	0.00	22.40	115.00	0.00	7.80
90	27.104	29.59	0.00	6.18	1.41	2.09	6.70	8.72	0.97	0.00	0.00	0.97	0.00	20.20	115.00	0.00	8.39
91	26.626	29.73	0.00	5.74	1.18	2.01	7.51	9.31	0.95	0.00	0.00	0.95	0.00	18.00	115.00	0.00	8.84
92	26.148	29.86	0.00	5.25	0.92	2.19	8.61	10.19	0.93	0.00	0.00	0.93	0.00	15.80	115.00	0.00	9.17
93	25.670	30.00	0.00	4.69	0.62	2.87	10.17	11.53	0.92	0.00	0.00	0.92	0.00	13.60	115.00	0.00	9.37

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

Bayou Desiard (including Lake Bartholemew) Watershed TMDL
For Biochemical Oxygen Demanding Substances and Nutrients
Subsegment 080701
Originated: January 14, 2002

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
99	UPR RCH	0.20556	30.00	0.00	4.69	0.62	2.87	10.17	11.53	0.92	0.00	0.00	0.00	13.60	0.00	9.37
99	TRIB	1.45612	30.00	0.00	4.16	0.35	4.38	12.03	13.39	0.92	0.01	0.00	0.00	13.60	0.00	9.21

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
99	25.67	25.41	1.66168	0.00	0.00735	0.42	2.48	91.11	59941.76	24144.71	226.20	0.00	0.000	4.000	0.007
100	25.41	25.14	1.66168	0.00	0.00735	0.42	2.48	91.11	59941.76	24144.71	226.20	0.00	0.000	4.000	0.007
101	25.14	24.88	1.66168	0.00	0.00735	0.42	2.48	91.11	59941.76	24144.71	226.20	0.00	0.000	4.000	0.007
102	24.88	24.61	1.66168	0.00	0.00735	0.42	2.48	91.11	59941.76	24144.71	226.20	0.00	0.000	4.000	0.007
TOT						1.67			239767.03	96578.82					
AVG					0.00735		2.48	91.11			226.20				
CUM						460.12									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
99	25.405	7.56	0.34	0.19	0.06	0.00	4.69	4.69	4.69	0.14	0.02	1.15	0.00	0.00	0.00	0.56	0.00	0.00	0.02	0.06
100	25.140	7.56	0.34	0.19	0.06	0.00	4.69	4.69	4.69	0.14	0.02	1.12	0.00	0.00	0.00	0.59	0.00	0.00	0.02	0.06
101	24.875	7.56	0.34	0.19	0.06	0.00	4.69	4.69	4.69	0.14	0.02	1.13	0.00	0.00	0.00	0.61	0.00	0.00	0.02	0.06
102	24.610	7.56	0.34	0.19	0.06	0.00	4.69	4.69	4.69	0.14	0.02	1.17	0.00	0.00	0.00	0.63	0.00	0.00	0.02	0.06
20 DEG C RATE				0.12		0.00	2.50			0.07		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.28		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
99	25.405	30.00	0.00	4.23	0.38	4.03	11.80	13.22	0.91	0.00	0.00	0.91	0.00	14.20	115.00	0.00	9.42
100	25.140	30.00	0.00	4.23	0.38	3.70	11.77	13.25	0.89	0.00	0.00	0.89	0.00	14.80	115.00	0.00	9.98
101	24.875	30.00	0.00	4.23	0.38	3.72	11.65	13.19	0.88	0.00	0.00	0.88	0.00	15.40	115.00	0.00	10.38

102	24.610	30.00	0.00	4.23	0.38	4.22	11.40	13.00	0.87	0.00	0.00	0.87	0.00	16.00	115.00	0.00	10.56

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 20 BDS 10- L-11 CANAL PIPE INTAKE 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
103	UPR RCH	1.66168	30.00	0.00	4.23	0.38	4.22	11.40	13.00	0.87	0.00	0.00	0.00	16.00	0.00	10.56

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
103	24.61	24.35	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
104	24.35	24.09	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
105	24.09	23.82	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
106	23.82	23.56	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
107	23.56	23.30	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
108	23.30	23.04	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
109	23.04	22.78	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
110	22.78	22.51	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
111	22.51	22.25	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
112	22.25	21.99	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
113	21.99	21.73	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
114	21.73	21.47	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
115	21.47	21.20	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
116	21.20	20.94	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
117	20.94	20.68	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
118	20.68	20.42	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
119	20.42	20.16	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
120	20.16	19.89	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
121	19.89	19.63	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
122	19.63	19.37	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
123	19.37	19.11	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
124	19.11	18.85	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
125	18.85	18.58	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
126	18.58	18.32	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
127	18.32	18.06	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007

TOT								10.32				1481579.12	596784.31								
AVG						0.00735			2.48	91.11					226.20						
CUM								470.44													

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
103	24.348	7.56	3.56	0.21	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.24	0.00	0.00	0.00	0.64	0.00	0.00	0.02	0.06
104	24.086	7.56	3.56	0.21	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.27	0.00	0.00	0.00	0.64	0.00	0.00	0.02	0.06
105	23.824	7.56	3.56	0.21	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.29	0.00	0.00	0.00	0.65	0.00	0.00	0.02	0.06
106	23.562	7.57	3.56	0.21	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.30	0.00	0.00	0.00	0.65	0.00	0.00	0.02	0.06
107	23.300	7.57	3.56	0.21	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.30	0.00	0.00	0.00	0.66	0.00	0.00	0.02	0.06
108	23.038	7.57	3.56	0.21	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.30	0.00	0.00	0.00	0.66	0.00	0.00	0.02	0.06
109	22.776	7.57	3.56	0.20	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.30	0.00	0.00	0.00	0.67	0.00	0.00	0.02	0.06
110	22.514	7.57	3.56	0.20	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.30	0.00	0.00	0.00	0.67	0.00	0.00	0.02	0.06
111	22.252	7.57	3.56	0.20	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.30	0.00	0.00	0.00	0.67	0.00	0.00	0.02	0.06
112	21.990	7.58	3.56	0.20	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.30	0.00	0.00	0.00	0.68	0.00	0.00	0.02	0.06
113	21.728	7.58	3.56	0.20	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.30	0.00	0.00	0.00	0.68	0.00	0.00	0.02	0.06
114	21.466	7.58	3.56	0.20	0.06	0.00	0.00	0.00	0.00	0.18	0.02	1.30	0.00	0.00	0.00	0.69	0.00	0.00	0.02	0.06
115	21.204	7.58	3.55	0.20	0.06	0.00	0.00	0.00	0.00	0.17	0.02	1.30	0.00	0.00	0.00	0.69	0.00	0.00	0.02	0.06
116	20.942	7.58	3.55	0.20	0.06	0.00	0.00	0.00	0.00	0.17	0.02	1.30	0.00	0.00	0.00	0.70	0.00	0.00	0.02	0.06
117	20.680	7.59	3.55	0.20	0.06	0.00	0.00	0.00	0.00	0.17	0.02	1.30	0.00	0.00	0.00	0.70	0.00	0.00	0.02	0.06
118	20.418	7.59	3.55	0.20	0.06	0.00	0.00	0.00	0.00	0.17	0.02	1.29	0.00	0.00	0.00	0.71	0.00	0.00	0.02	0.06
119	20.156	7.59	3.55	0.20	0.06	0.00	0.00	0.00	0.00	0.17	0.02	1.29	0.00	0.00	0.00	0.71	0.00	0.00	0.02	0.06
120	19.894	7.59	3.55	0.20	0.06	0.00	0.00	0.00	0.00	0.17	0.02	1.29	0.00	0.00	0.00	0.72	0.00	0.00	0.02	0.06
121	19.632	7.59	3.55	0.20	0.06	0.00	0.00	0.00	0.00	0.17	0.02	1.29	0.00	0.00	0.00	0.72	0.00	0.00	0.02	0.06
122	19.370	7.59	3.55	0.20	0.06	0.00	0.00	0.00	0.00	0.17	0.02	1.29	0.00	0.00	0.00	0.73	0.00	0.00	0.02	0.06
123	19.108	7.60	3.55	0.20	0.06	0.00	0.00	0.00	0.00	0.17	0.02	1.29	0.00	0.00	0.00	0.73	0.00	0.00	0.02	0.06
124	18.846	7.60	3.55	0.20	0.06	0.00	0.00	0.00	0.00	0.17	0.02	1.29	0.00	0.00	0.00	0.73	0.00	0.00	0.02	0.06
125	18.584	7.60	3.55	0.20	0.06	0.00	0.00	0.00	0.00	0.17	0.02	1.29	0.00	0.00	0.00	0.74	0.00	0.00	0.02	0.06
126	18.322	7.60	3.55	0.20	0.06	0.00	0.00	0.00	0.00	0.17	0.02	1.29	0.00	0.00	0.00	0.74	0.00	0.00	0.02	0.06
127	18.060	7.60	3.54	0.20	0.06	0.00	0.00	0.00	0.00	0.17	0.02	1.28	0.00	0.00	0.00	0.75	0.00	0.00	0.02	0.06
20 DEG C RATE				0.13		0.00	0.00			0.09		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			2.96		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
103	24.348	29.99	0.00	4.23	0.38	5.46	10.93	12.55	0.87	0.00	0.00	0.87	0.00	16.13	115.00	0.00	10.41

104	24.086	29.97	0.00	4.23	0.38	6.17	10.51	12.14	0.87	0.00	0.00	0.87	0.00	16.26	115.00	0.00	10.27
105	23.824	29.96	0.00	4.23	0.38	6.59	10.13	11.77	0.87	0.00	0.00	0.87	0.00	16.38	115.00	0.00	10.13
106	23.562	29.95	0.00	4.23	0.38	6.83	9.78	11.43	0.87	0.00	0.00	0.87	0.00	16.51	115.00	0.00	9.99
107	23.300	29.93	0.00	4.23	0.38	6.98	9.45	11.12	0.87	0.00	0.00	0.87	0.00	16.64	115.00	0.00	9.86
108	23.038	29.92	0.00	4.23	0.38	7.07	9.16	10.84	0.87	0.00	0.00	0.87	0.00	16.77	115.00	0.00	9.73
109	22.776	29.90	0.00	4.23	0.38	7.13	8.89	10.58	0.87	0.00	0.00	0.87	0.00	16.90	115.00	0.00	9.61
110	22.514	29.89	0.00	4.23	0.38	7.17	8.65	10.35	0.87	0.00	0.00	0.87	0.00	17.02	115.00	0.00	9.49
111	22.252	29.88	0.00	4.23	0.38	7.20	8.43	10.14	0.87	0.00	0.00	0.87	0.00	17.15	115.00	0.00	9.38
112	21.990	29.86	0.00	4.23	0.38	7.22	8.22	9.95	0.87	0.00	0.00	0.87	0.00	17.28	115.00	0.00	9.27
113	21.728	29.85	0.00	4.23	0.38	7.24	8.04	9.78	0.87	0.00	0.00	0.87	0.00	17.41	115.00	0.00	9.16
114	21.466	29.84	0.00	4.23	0.38	7.26	7.87	9.62	0.87	0.00	0.00	0.87	0.00	17.54	115.00	0.00	9.05
115	21.204	29.82	0.00	4.23	0.38	7.27	7.72	9.48	0.87	0.00	0.00	0.87	0.00	17.66	115.00	0.00	8.95
116	20.942	29.81	0.00	4.23	0.38	7.29	7.57	9.35	0.87	0.00	0.00	0.87	0.00	17.79	115.00	0.00	8.85
117	20.680	29.80	0.00	4.23	0.38	7.30	7.44	9.24	0.87	0.00	0.00	0.87	0.00	17.92	115.00	0.00	8.76
118	20.418	29.78	0.00	4.23	0.38	7.31	7.33	9.13	0.87	0.00	0.00	0.87	0.00	18.05	115.00	0.00	8.67
119	20.156	29.77	0.00	4.23	0.38	7.32	7.22	9.03	0.87	0.00	0.00	0.87	0.00	18.18	115.00	0.00	8.58
120	19.894	29.76	0.00	4.23	0.38	7.33	7.12	8.95	0.87	0.00	0.00	0.87	0.00	18.30	115.00	0.00	8.49
121	19.632	29.74	0.00	4.23	0.38	7.34	7.02	8.86	0.87	0.00	0.00	0.87	0.00	18.43	115.00	0.00	8.40
122	19.370	29.73	0.00	4.23	0.38	7.35	6.93	8.78	0.87	0.00	0.00	0.87	0.00	18.56	115.00	0.00	8.32
123	19.108	29.71	0.00	4.23	0.38	7.36	6.84	8.71	0.87	0.00	0.00	0.87	0.00	18.69	115.00	0.00	8.24
124	18.846	29.70	0.00	4.23	0.38	7.37	6.74	8.62	0.86	0.00	0.00	0.86	0.00	18.82	115.00	0.00	8.16
125	18.584	29.69	0.00	4.23	0.38	7.38	6.64	8.53	0.86	0.00	0.00	0.86	0.00	18.94	115.00	0.00	8.07
126	18.322	29.67	0.00	4.23	0.38	7.39	6.51	8.42	0.86	0.00	0.00	0.86	0.00	19.07	115.00	0.00	7.98
127	18.060	29.66	0.00	4.23	0.38	7.40	6.34	8.26	0.85	0.00	0.00	0.85	0.00	19.20	115.00	0.00	7.89

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 21 L-11 CANAL CONTROL PIPE 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
128	UPR RCH	1.66168	29.66	0.00	4.23	0.38	7.40	6.34	8.26	0.85	0.00	0.00	0.00	19.20	0.00	7.89
128	WSTLD	-1.05717	30.00	0.00	4.23	0.38	7.41	6.14	6.14	0.84	0.00	0.00	0.00	31.00	0.00	7.80

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
128	18.06	17.98	0.60451	0.00	0.14101	0.01	1.67	2.57	342.97	205.67	4.29	0.00	0.000	1.000	0.141

TOT								0.01				342.97		205.67							
AVG						0.14101			1.67	2.57					4.29						
CUM								470.45													

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
128	17.980	7.56	0.50	0.22	0.06	0.00	0.00	0.00	0.00	0.16	0.02	1.32	0.00	0.00	0.00	1.23	0.00	0.00	0.03	0.06
20 DEG C RATE				0.14		0.00	0.00			0.08		0.60	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			0.42		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
128	17.980	30.00	0.00	4.23	0.38	7.41	6.14	9.24	0.84	0.00	0.00	0.84	0.00	31.00	115.00	0.00	7.80

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 22 L-11 PIPEOUTFALL-MIDWAY INTAKE 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
129	UPR RCH	0.60451	30.00	0.00	4.23	0.38	7.41	6.14	9.24	0.84	0.00	0.00	0.00	31.00	0.00	7.80

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s

129	17.98	17.51	0.60451	0.00	0.00265	2.06	2.39	95.50	107393.65	44886.77	228.50	0.00	0.000	1.000	0.003
130	17.51	17.04	0.60451	0.00	0.00265	2.06	2.39	95.50	107393.65	44886.77	228.50	0.00	0.000	1.000	0.003
131	17.04	16.57	0.60451	0.00	0.00265	2.06	2.39	95.50	107393.65	44886.77	228.50	0.00	0.000	1.000	0.003
132	16.57	16.10	0.60451	0.00	0.00265	2.06	2.39	95.50	107393.65	44886.77	228.50	0.00	0.000	1.000	0.003
133	16.10	15.63	0.60451	0.00	0.00265	2.06	2.39	95.50	107393.65	44886.77	228.50	0.00	0.000	1.000	0.003
TOT						10.28			536968.25	224433.84					
AVG					0.00265		2.39	95.50			228.50				
CUM						480.73									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
129	17.510	7.55	3.70	0.25	0.06	0.00	0.00	0.00	0.00	0.14	0.02	1.33	0.00	0.00	0.00	1.33	0.00	0.00	0.05	0.06
130	17.040	7.54	3.71	0.26	0.06	0.00	0.00	0.00	0.00	0.14	0.02	1.34	0.00	0.00	0.00	1.43	0.00	0.00	0.05	0.06
131	16.570	7.53	3.72	0.26	0.06	0.00	0.00	0.00	0.00	0.14	0.02	1.35	0.00	0.00	0.00	1.53	0.00	0.00	0.05	0.06
132	16.100	7.52	3.72	0.26	0.06	0.00	0.00	0.00	0.00	0.14	0.02	1.36	0.00	0.00	0.00	1.63	0.00	0.00	0.05	0.06
133	15.630	7.51	3.73	0.26	0.06	0.00	0.00	0.00	0.00	0.14	0.02	1.36	0.00	0.00	0.00	1.73	0.00	0.00	0.05	0.06
20 DEG C RATE				0.16		0.00	0.00			0.07		0.60	0.00	0.00	0.00			0.00	0.03	
AVG 20 DEG C RATE			3.08		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
129	17.510	30.08	0.00	4.23	0.38	7.49	4.53	7.87	0.74	0.00	0.00	0.74	0.00	33.40	115.00	0.00	7.10
130	17.040	30.16	0.00	4.23	0.38	7.59	3.36	6.94	0.66	0.00	0.00	0.66	0.00	35.80	115.00	0.00	6.46
131	16.570	30.24	0.00	4.23	0.38	7.64	3.01	6.83	0.62	0.00	0.00	0.62	0.00	38.20	115.00	0.00	6.12
132	16.100	30.32	0.00	4.23	0.38	7.56	4.22	8.28	0.68	0.00	0.00	0.68	0.00	40.60	115.00	0.00	6.37
133	15.630	30.40	0.00	4.23	0.38	7.19	9.92	14.22	0.96	0.00	0.00	0.96	0.00	43.00	115.00	0.00	8.01

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 23 MIDWAY DAM CONTROL PIPE 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
134	UPR RCH	0.60451	30.40	0.00	4.23	0.38	7.19	9.92	14.22	0.96	0.00	0.00	0.00	43.00	0.00	8.01

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
134	15.63	15.59	0.60451	0.00	0.14101	0.00	1.67	2.57	171.48	102.84	4.29	0.00	0.000	1.000	0.141
TOT						0.00			171.48	102.84					
AVG					0.14101		1.67	2.57			4.29				
CUM						480.73									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
134	15.590	7.46	0.51	0.30	0.06	0.00	0.00	0.00	0.00	0.12	0.02	1.38	0.00	0.00	0.00	2.35	0.00	0.00	0.06	0.06
20 DEG C RATE				0.18		0.00	0.00			0.06		0.60	0.00	0.00	0.00			0.00	0.04	
AVG 20 DEG C RATE			0.42		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
134	15.590	30.80	0.00	4.23	0.38	6.72	21.96	27.68	1.50	0.00	0.00	1.50	0.00	57.20	115.00	0.00	11.08

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
135	UPR RCH	0.60451	30.80	0.00	4.23	0.38	6.72	21.96	27.68	1.50	0.00	0.00	0.00	57.20	0.00	11.08

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
135	15.59	15.55	0.60451	0.00	0.00262	0.18	2.31	99.99	9229.34	3999.64	230.73	0.00	0.000	1.000	0.003
TOT						0.18			9229.34	3999.64					
AVG					0.00262		2.31	99.99			230.73				
CUM						480.91									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
135	15.550	7.42	3.91	0.38	0.07	0.00	0.00	0.00	0.00	0.11	0.02	1.41	0.00	0.00	0.00	2.16	0.00	0.00	0.08	0.07
20 DEG C RATE				0.23		0.00	0.00			0.05		0.60	0.00	0.00	0.00			0.00	0.05	
AVG 20 DEG C RATE			3.19		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
135	15.550	31.10	0.00	4.23	0.38	6.50	27.83	33.03	1.76	0.00	0.00	1.76	0.00	52.00	115.00	0.00	12.58

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
136	UPR RCH	0.60451	31.10	0.00	4.23	0.38	6.50	27.83	33.03	1.76	0.00	0.00	0.00	52.00	0.00	12.58

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
136	15.55	15.25	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
137	15.25	14.96	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
138	14.96	14.66	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
139	14.66	14.36	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
140	14.36	14.07	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
141	14.07	13.77	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
142	13.77	13.47	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
143	13.47	13.18	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
144	13.18	12.88	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
145	12.88	12.58	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
146	12.58	12.29	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
147	12.29	11.99	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
148	11.99	11.70	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
149	11.70	11.40	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
150	11.40	11.10	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
151	11.10	10.81	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
152	10.81	10.51	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
153	10.51	10.21	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
154	10.21	9.92	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
155	9.92	9.62	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
TOT						26.20			1368250.12	592946.19					
AVG					0.00262		2.31	99.99			230.73				
CUM						507.11									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
136	15.253	7.42	3.91	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.40	0.00	0.00	0.00	2.16	0.00	0.00	0.03	0.07
137	14.957	7.41	3.91	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.41	0.00	0.00	0.00	2.15	0.00	0.00	0.03	0.07
138	14.660	7.41	3.91	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.42	0.00	0.00	0.00	2.15	0.00	0.00	0.03	0.07

139	14.364	7.41	3.91	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.43	0.00	0.00	0.00	2.14	0.00	0.00	0.03	0.07
140	14.067	7.41	3.91	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.44	0.00	0.00	0.00	2.13	0.00	0.00	0.03	0.07
141	13.771	7.41	3.91	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.44	0.00	0.00	0.00	2.13	0.00	0.00	0.03	0.07
142	13.474	7.41	3.91	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.44	0.00	0.00	0.00	2.12	0.00	0.00	0.03	0.07
143	13.178	7.40	3.92	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.45	0.00	0.00	0.00	2.12	0.00	0.00	0.03	0.07
144	12.881	7.40	3.92	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.45	0.00	0.00	0.00	2.11	0.00	0.00	0.03	0.07
145	12.585	7.40	3.92	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.45	0.00	0.00	0.00	2.11	0.00	0.00	0.03	0.07
146	12.288	7.40	3.92	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.46	0.00	0.00	0.00	2.10	0.00	0.00	0.03	0.07
147	11.992	7.40	3.92	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.46	0.00	0.00	0.00	2.09	0.00	0.00	0.03	0.07
148	11.695	7.40	3.92	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.46	0.00	0.00	0.00	2.09	0.00	0.00	0.03	0.07
149	11.399	7.40	3.92	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.46	0.00	0.00	0.00	2.08	0.00	0.00	0.03	0.07
150	11.102	7.39	3.92	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.46	0.00	0.00	0.00	2.08	0.00	0.00	0.03	0.07
151	10.806	7.39	3.92	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.46	0.00	0.00	0.00	2.07	0.00	0.00	0.03	0.07
152	10.509	7.39	3.92	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.47	0.00	0.00	0.00	2.06	0.00	0.00	0.03	0.07
153	10.213	7.39	3.92	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.47	0.00	0.00	0.00	2.06	0.00	0.00	0.03	0.07
154	9.916	7.39	3.92	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.46	0.00	0.00	0.00	2.05	0.00	0.00	0.03	0.07
155	9.620	7.39	3.93	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.46	0.00	0.00	0.00	2.05	0.00	0.00	0.03	0.07
20 DEG C RATE				0.16		0.00	0.00			0.07		0.60	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			3.19		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
136	15.253	31.11	0.00	4.23	0.38	6.37	23.71	28.89	1.61	0.00	0.00	1.61	0.00	51.83	115.00	0.00	11.96
137	14.957	31.12	0.00	4.23	0.38	6.53	19.28	24.45	1.43	0.00	0.00	1.43	0.00	51.66	115.00	0.00	11.15
138	14.660	31.14	0.00	4.23	0.38	6.74	15.95	21.09	1.27	0.00	0.00	1.27	0.00	51.49	115.00	0.00	10.43
139	14.364	31.15	0.00	4.23	0.38	6.91	13.44	18.57	1.14	0.00	0.00	1.14	0.00	51.32	115.00	0.00	9.78
140	14.067	31.16	0.00	4.23	0.38	7.05	11.55	16.66	1.03	0.00	0.00	1.03	0.00	51.15	115.00	0.00	9.19
141	13.771	31.17	0.00	4.23	0.38	7.16	10.13	15.23	0.94	0.00	0.00	0.94	0.00	50.98	115.00	0.00	8.67
142	13.474	31.18	0.00	4.23	0.38	7.24	9.06	14.14	0.86	0.00	0.00	0.86	0.00	50.81	115.00	0.00	8.20
143	13.178	31.20	0.00	4.23	0.38	7.30	8.25	13.32	0.79	0.00	0.00	0.79	0.00	50.64	115.00	0.00	7.78
144	12.881	31.21	0.00	4.23	0.38	7.34	7.65	12.70	0.74	0.00	0.00	0.74	0.00	50.47	115.00	0.00	7.40
145	12.585	31.22	0.00	4.23	0.38	7.38	7.19	12.22	0.69	0.00	0.00	0.69	0.00	50.30	115.00	0.00	7.06
146	12.288	31.23	0.00	4.23	0.38	7.40	6.85	11.86	0.65	0.00	0.00	0.65	0.00	50.13	115.00	0.00	6.76
147	11.992	31.24	0.00	4.23	0.38	7.42	6.59	11.59	0.62	0.00	0.00	0.62	0.00	49.96	115.00	0.00	6.49
148	11.695	31.26	0.00	4.23	0.38	7.43	6.41	11.38	0.59	0.00	0.00	0.59	0.00	49.79	115.00	0.00	6.26
149	11.399	31.27	0.00	4.23	0.38	7.44	6.27	11.24	0.57	0.00	0.00	0.57	0.00	49.62	115.00	0.00	6.08
150	11.102	31.28	0.00	4.23	0.38	7.45	6.20	11.15	0.56	0.00	0.00	0.56	0.00	49.45	115.00	0.00	5.96
151	10.806	31.29	0.00	4.23	0.38	7.44	6.21	11.14	0.56	0.00	0.00	0.56	0.00	49.28	115.00	0.00	5.93
152	10.509	31.30	0.00	4.23	0.38	7.43	6.36	11.27	0.59	0.00	0.00	0.59	0.00	49.11	115.00	0.00	6.06
153	10.213	31.32	0.00	4.23	0.38	7.39	6.82	11.72	0.67	0.00	0.00	0.67	0.00	48.94	115.00	0.00	6.50
154	9.916	31.33	0.00	4.23	0.38	7.30	7.99	12.87	0.85	0.00	0.00	0.85	0.00	48.77	115.00	0.00	7.52
155	9.620	31.34	0.00	4.23	0.38	7.14	10.83	15.69	1.25	0.00	0.00	1.25	0.00	48.60	115.00	0.00	9.70

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 26 BDS14-STADIUM DR. PIPE INTAKE 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
156	UPR RCH	0.60451	31.34	0.00	4.23	0.38	7.14	10.83	15.69	1.25	0.00	0.00	0.00	48.60	0.00	9.70

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
156	9.62	9.57	0.60451	0.00	0.01916	0.03	2.52	12.53	1577.36	626.55	31.55	0.00	0.000	1.000	0.019
TOT						0.03			1577.36	626.55					
AVG					0.01916		2.52	12.53			31.55				
CUM						507.14									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
156	9.570	7.43	3.58	0.13	0.06	0.00	0.00	0.00	0.00	0.32	0.02	1.42	0.00	0.00	0.00	1.66	0.00	0.00	0.01	0.06
20 DEG C RATE				0.08		0.00	0.00			0.15		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			2.92		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
156	9.570	31.00	0.00	4.23	0.38	7.12	15.33	19.33	1.81	0.00	0.00	1.81	0.00	40.00	115.00	0.00	12.65

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 27 STADIUM DRIVE PIPES 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
157	UPR RCH	0.60451	31.00	0.00	4.23	0.38	7.12	15.33	19.33	1.81	0.00	0.00	0.00	40.00	0.00	12.65

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
157	9.57	9.52	0.60451	0.00	0.14101	0.00	1.67	2.57	214.36	128.55	4.29	0.00	0.000	1.000	0.141
TOT						0.00			214.36	128.55					
AVG					0.14100		1.67	2.57			4.29				
CUM						507.14									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
157	9.520	7.46	0.51	0.16	0.06	0.00	0.00	0.00	0.00	0.31	0.02	1.39	0.00	0.00	0.00	1.34	0.00	0.00	0.01	0.06
20 DEG C RATE				0.10		0.00	0.00			0.15		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.42		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *

157	9.520	30.75	0.00	4.23	0.38	7.00	13.52	16.78	1.39	0.00	0.00	1.39	0.00	32.60	115.00	0.00	11.15

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 28 STADIUM DR. PIPE OUTFALL-BDS15 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
158	UPR RCH	0.60451	30.75	0.00	4.23	0.38	7.00	13.52	16.78	1.39	0.00	0.00	0.00	32.60	0.00	11.15

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
158	9.52	8.95	0.60451	0.00	0.00189	3.47	2.71	118.29	181277.38	66952.66	320.28	0.00	0.000	1.000	0.002
159	8.95	8.39	0.60451	0.00	0.00189	3.47	2.71	118.29	181277.38	66952.66	320.28	0.00	0.000	1.000	0.002
160	8.39	7.82	0.60451	0.00	0.00189	3.47	2.71	118.29	181277.38	66952.66	320.28	0.00	0.000	1.000	0.002
161	7.82	7.26	0.60451	0.00	0.00189	3.47	2.71	118.29	181277.38	66952.66	320.28	0.00	0.000	1.000	0.002
162	7.26	6.69	0.60451	0.00	0.00189	3.47	2.71	118.29	181277.38	66952.66	320.28	0.00	0.000	1.000	0.002
TOT						17.35			906386.88	334763.28					
AVG					0.00189		2.71	118.29			320.28				
CUM						524.49									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
158	8.954	7.46	3.31	0.20	0.06	0.00	0.00	0.00	0.00	0.52	0.02	1.38	0.00	0.00	0.00	1.31	0.00	0.00	0.06	0.06
159	8.388	7.46	3.31	0.20	0.06	0.00	0.00	0.00	0.00	0.52	0.02	1.39	0.00	0.00	0.00	1.29	0.00	0.00	0.06	0.06
160	7.822	7.46	3.31	0.20	0.06	0.00	0.00	0.00	0.00	0.52	0.02	1.39	0.00	0.00	0.00	1.27	0.00	0.00	0.06	0.06
161	7.256	7.46	3.31	0.20	0.06	0.00	0.00	0.00	0.00	0.52	0.02	1.39	0.00	0.00	0.00	1.25	0.00	0.00	0.06	0.06
162	6.690	7.46	3.31	0.20	0.06	0.00	0.00	0.00	0.00	0.52	0.02	1.40	0.00	0.00	0.00	1.23	0.00	0.00	0.06	0.06
20 DEG C RATE				0.12		0.00	0.00			0.25		0.60	0.00	0.00	0.00			0.00	0.03	
AVG 20 DEG C RATE			2.72		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
158	8.954	30.75	0.00	4.23	0.38	6.88	11.70	14.91	0.97	0.09	0.00	1.06	0.00	32.08	115.00	0.00	9.64
159	8.388	30.75	0.00	4.23	0.38	6.99	10.23	13.39	0.72	0.06	0.00	0.78	0.00	31.56	115.00	0.00	8.14
160	7.822	30.75	0.00	4.23	0.38	7.12	9.35	12.45	0.61	0.02	0.00	0.63	0.00	31.04	115.00	0.00	7.02
161	7.256	30.75	0.00	4.23	0.38	7.19	8.78	11.84	0.57	0.00	0.00	0.57	0.00	30.52	115.00	0.00	6.21
162	6.690	30.75	0.00	4.23	0.38	7.22	8.35	11.35	0.58	0.01	0.00	0.59	0.00	30.00	115.00	0.00	5.67

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 29 BDS15-BDS16 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
163	UPR RCH	0.60451	30.75	0.00	4.23	0.38	7.22	8.35	11.35	0.58	0.01	0.00	0.00	30.00	0.00	5.67

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
163	6.69	6.22	0.60451	0.00	0.00189	2.88	2.71	118.29	150530.69	55596.73	320.28	0.00	0.000	1.000	0.002
164	6.22	5.75	0.60451	0.00	0.00189	2.88	2.71	118.29	150530.69	55596.73	320.28	0.00	0.000	1.000	0.002
165	5.75	5.28	0.60451	0.00	0.00189	2.88	2.71	118.29	150530.69	55596.73	320.28	0.00	0.000	1.000	0.002
166	5.28	4.81	0.60451	0.00	0.00189	2.88	2.71	118.29	150530.69	55596.73	320.28	0.00	0.000	1.000	0.002
167	4.81	4.34	0.60451	0.00	0.00189	2.88	2.71	118.29	150530.69	55596.73	320.28	0.00	0.000	1.000	0.002
168	4.34	3.87	0.60451	0.00	0.00189	2.88	2.71	118.29	150530.69	55596.73	320.28	0.00	0.000	1.000	0.002
169	3.87	3.40	0.60451	0.00	0.00189	2.88	2.71	118.29	150530.69	55596.73	320.28	0.00	0.000	1.000	0.002
TOT						20.17			1053714.75	389177.06					
AVG					0.00189		2.71	118.29			320.28				
CUM						544.67									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
163	6.220	7.46	3.31	0.20	0.06	0.00	0.00	0.00	0.00	0.52	0.02	1.86	0.00	0.00	0.00	1.17	0.00	0.00	0.06	0.06
164	5.750	7.46	3.31	0.20	0.06	0.00	0.00	0.00	0.00	0.52	0.02	1.86	0.00	0.00	0.00	1.11	0.00	0.00	0.06	0.06
165	5.280	7.45	3.32	0.20	0.06	0.00	0.00	0.00	0.00	0.52	0.02	1.86	0.00	0.00	0.00	1.06	0.00	0.00	0.06	0.06
166	4.810	7.45	3.32	0.20	0.06	0.00	0.00	0.00	0.00	0.52	0.02	1.86	0.00	0.00	0.00	1.00	0.00	0.00	0.06	0.06
167	4.340	7.45	3.32	0.20	0.06	0.00	0.00	0.00	0.00	0.52	0.02	1.87	0.00	0.00	0.00	0.94	0.00	0.00	0.06	0.06
168	3.870	7.45	3.32	0.20	0.06	0.00	0.00	0.00	0.00	0.52	0.02	1.87	0.00	0.00	0.00	0.88	0.00	0.00	0.06	0.06
169	3.400	7.44	3.32	0.20	0.06	0.00	0.00	0.00	0.00	0.52	0.02	1.87	0.00	0.00	0.00	0.82	0.00	0.00	0.06	0.06
20 DEG C RATE				0.12		0.00	0.00			0.25		0.80	0.00	0.00	0.00			0.00	0.03	
AVG 20 DEG C RATE			2.72		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
163	6.220	30.77	0.00	4.23	0.38	7.16	7.82	10.68	0.74	0.04	0.00	0.77	0.00	28.57	115.00	0.00	5.46
164	5.750	30.79	0.00	4.23	0.38	7.11	7.49	10.21	0.81	0.06	0.00	0.87	0.00	27.14	115.00	0.00	5.29
165	5.280	30.81	0.00	4.23	0.38	7.07	7.28	9.85	0.84	0.08	0.00	0.92	0.00	25.71	115.00	0.00	5.16
166	4.810	30.84	0.00	4.23	0.38	7.04	7.12	9.55	0.86	0.08	0.00	0.95	0.00	24.29	115.00	0.00	5.05
167	4.340	30.86	0.00	4.23	0.38	7.02	7.00	9.28	0.87	0.09	0.00	0.96	0.00	22.86	115.00	0.00	4.93
168	3.870	30.88	0.00	4.23	0.38	7.01	6.84	8.98	0.87	0.09	0.00	0.96	0.00	21.43	115.00	0.00	4.78
169	3.400	30.90	0.00	4.23	0.38	7.04	6.52	8.52	0.85	0.07	0.00	0.93	0.00	20.00	115.00	0.00	4.50

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 30 BDS16-BDS17 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
170	UPR RCH	0.60451	30.90	0.00	4.23	0.38	7.04	6.52	8.52	0.85	0.07	0.00	0.00	20.00	0.00	4.50

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
170	3.40	3.09	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
171	3.09	2.78	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
172	2.78	2.47	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
173	2.47	2.16	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
174	2.16	1.85	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
175	1.85	1.54	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
176	1.54	1.23	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
177	1.23	0.92	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
178	0.92	0.61	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
TOT						32.94			1720465.88	351291.41					
AVG					0.00098		4.90	125.91			616.65				
CUM						577.61									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
170	3.090	7.44	1.84	0.20	0.06	0.00	0.00	0.00	0.00	0.31	0.02	1.88	0.00	0.00	0.00	0.79	0.00	0.00	0.04	0.06
171	2.780	7.44	1.84	0.20	0.06	0.00	0.00	0.00	0.00	0.31	0.02	1.88	0.00	0.00	0.00	0.76	0.00	0.00	0.04	0.06
172	2.470	7.44	1.84	0.20	0.06	0.00	0.00	0.00	0.00	0.31	0.02	1.88	0.00	0.00	0.00	0.73	0.00	0.00	0.04	0.06
173	2.160	7.44	1.84	0.20	0.06	0.00	0.00	0.00	0.00	0.31	0.02	1.88	0.00	0.00	0.00	0.70	0.00	0.00	0.04	0.06
174	1.850	7.44	1.84	0.20	0.06	0.00	0.00	0.00	0.00	0.31	0.02	1.88	0.00	0.00	0.00	0.67	0.00	0.00	0.04	0.06
175	1.540	7.44	1.84	0.20	0.06	0.00	0.00	0.00	0.00	0.31	0.02	1.89	0.00	0.00	0.00	0.63	0.00	0.00	0.04	0.06
176	1.230	7.43	1.84	0.20	0.06	0.00	0.00	0.00	0.00	0.31	0.02	1.89	0.00	0.00	0.00	0.60	0.00	0.00	0.04	0.06
177	0.920	7.43	1.84	0.20	0.06	0.00	0.00	0.00	0.00	0.32	0.02	1.89	0.00	0.00	0.00	0.57	0.00	0.00	0.04	0.06
178	0.610	7.43	1.84	0.20	0.06	0.00	0.00	0.00	0.00	0.32	0.02	1.89	0.00	0.00	0.00	0.54	0.00	0.00	0.04	0.06
20 DEG C RATE				0.12		0.00	0.00			0.15		0.80	0.00	0.00	0.00			0.00	0.03	
AVG 20 DEG C RATE			1.50		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
170	3.090	30.91	0.00	4.23	0.38	7.08	6.02	7.94	0.82	0.01	0.00	0.83	0.00	19.22	115.00	0.00	4.15

171	2.780	30.92	0.00	4.23	0.38	7.12	5.79	7.63	0.81	0.00	0.00	0.81	0.00	18.44	115.00	0.00	3.96
172	2.470	30.93	0.00	4.23	0.38	7.13	5.63	7.40	0.80	0.00	0.00	0.80	0.00	17.67	115.00	0.00	3.81
173	2.160	30.94	0.00	4.23	0.38	7.13	5.52	7.21	0.79	0.00	0.00	0.79	0.00	16.89	115.00	0.00	3.69
174	1.850	30.94	0.00	4.23	0.38	7.12	5.44	7.05	0.79	0.00	0.00	0.79	0.00	16.11	115.00	0.00	3.59
175	1.540	30.95	0.00	4.23	0.38	7.12	5.38	6.91	0.79	0.00	0.00	0.79	0.00	15.33	115.00	0.00	3.51
176	1.230	30.96	0.00	4.23	0.38	7.11	5.32	6.77	0.79	0.00	0.00	0.79	0.00	14.56	115.00	0.00	3.44
177	0.920	30.97	0.00	4.23	0.38	7.10	5.24	6.62	0.79	0.00	0.00	0.79	0.00	13.78	115.00	0.00	3.39
178	0.610	30.98	0.00	4.23	0.38	7.11	5.13	6.43	0.80	0.00	0.00	0.80	0.00	13.00	115.00	0.00	3.35

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 31 BDS17-MONROE WTP INTAKE 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
179	UPR RCH	0.60451	30.98	0.00	4.23	0.38	7.11	5.13	6.43	0.80	0.00	0.00	0.00	13.00	0.00	3.35
179	WSTLD	-0.60450	30.85	0.00	4.23	0.38	7.14	5.01	5.01	0.82	0.00	0.00	0.00	16.70	0.00	3.32

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
179	0.61	0.54	0.00001	0.00	0.00000	49614.71	4.87	125.28	42669.82	8769.33	609.57	0.00	0.000	1.000	0.000
TOT						49614.71			42669.82	8769.33					
AVG					0.00000		4.87	125.28			609.57				
CUM						50192.32									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
179	0.540	7.45	1.85	0.16	0.06	0.00	0.00	0.00	0.00	0.15	0.02	1.40	0.00	0.00	0.00	0.69	0.00	0.00	0.06	0.06
20 DEG C RATE				0.10		0.00	0.00			0.07		0.60	0.00	0.00	0.00			0.00	0.04	
AVG 20 DEG C RATE			1.51		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
179	0.540	30.85	0.00	4.23	0.38	7.14	5.01	6.68	0.82	0.00	0.00	0.82	0.00	16.70	115.00	0.00	3.32

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

STREAM SUMMARY
LAKE BARTHOLEMEW EAS

BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
12/18/01

TRAVEL TIME = 50192.32 DAYS

MAXIMUM EFFLUENT = 0.00 PERCENT

FLOW	=	0.00001 TO	1.66168	m³/s
DISPERSION	=	0.0000 TO	4.0000	m²/s
VELOCITY	=	0.00000 TO	0.14101	m/s
DEPTH	=	1.04 TO	4.90	m
WIDTH	=	2.47 TO	125.91	m
BOD DECAY	=	0.12 TO	0.38	per day
NH3 DECAY	=	0.78 TO	1.89	per day
SDMNT OXYGEN DMND	=	0.00 TO	17.08	g/m²/d
NH3 SOURCE	=	0.00 TO	0.05	g/m²/d
REAERATION	=	0.23 TO	3.93	per day
BOD SETTLING	=	0.06 TO	0.07	per day
ORGN DECAY	=	0.10 TO	0.52	per day
ORGN SETTLING	=	0.02 TO	0.02	per day
TEMPERATURE	=	26.35 TO	31.34	deg C
DISSOLVED OXYGEN	=	1.97 TO	8.91	mg/L

FINAL REPORT LAKE BARTHOLEMEW WES
REACH NO. 5 BDS 5-BDS 4

BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *

24	HDWTR	0.10278	31.23	0.00	8.90	3.20	8.43	2.84	7.08	1.68	0.00	0.00	0.00	42.40	0.00	6.66

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
24	8.53	8.11	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
25	8.11	7.69	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
26	7.69	7.27	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
27	7.27	6.85	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
28	6.85	6.43	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
29	6.43	6.01	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
30	6.01	5.59	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
31	5.59	5.17	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
32	5.17	4.75	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
33	4.75	4.33	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
TOT						230.94			2050810.25	520533.38					
AVG					0.00021		3.94	123.94			488.29				
CUM						230.94									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
24	8.110	7.40	0.22	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.47	0.00	0.00	0.00	1.78	0.00	0.00	0.03	0.07
25	7.690	7.40	0.22	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.47	0.00	0.00	0.00	1.78	0.00	0.00	0.03	0.07
26	7.270	7.40	0.22	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.47	0.00	0.00	0.00	1.78	0.00	0.00	0.03	0.07
27	6.850	7.40	0.22	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.47	0.00	0.00	0.00	1.78	0.00	0.00	0.03	0.07
28	6.430	7.40	0.22	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.47	0.00	0.00	0.00	1.78	0.00	0.00	0.03	0.07
29	6.010	7.40	0.22	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.47	0.00	0.00	0.00	1.78	0.00	0.00	0.03	0.07
30	5.590	7.40	0.22	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.47	0.00	0.00	0.00	1.78	0.00	0.00	0.03	0.07
31	5.170	7.40	0.22	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.47	0.00	0.00	0.00	1.78	0.00	0.00	0.03	0.07
32	4.750	7.40	0.22	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.47	0.00	0.00	0.00	1.78	0.00	0.00	0.03	0.07
33	4.330	7.40	0.22	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.47	0.00	0.00	0.00	1.78	0.00	0.00	0.03	0.07
20 DEG C RATE				0.15		0.00	0.00			0.12		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.18		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
24	8.110	31.23	0.00	8.98	3.18	9.16	2.78	7.02	1.76	0.08	0.00	1.84	0.00	42.40	115.00	0.00	6.28
25	7.690	31.23	0.00	8.98	3.18	9.19	2.78	7.02	1.76	0.08	0.00	1.84	0.00	42.40	115.00	0.00	6.26
26	7.270	31.23	0.00	8.99	3.18	9.21	2.77	7.01	1.76	0.08	0.00	1.85	0.00	42.40	115.00	0.00	6.25
27	6.850	31.23	0.00	9.00	3.18	9.24	2.77	7.01	1.76	0.08	0.00	1.84	0.00	42.40	115.00	0.00	6.25
28	6.430	31.23	0.00	9.01	3.18	9.28	2.77	7.01	1.76	0.08	0.00	1.84	0.00	42.40	115.00	0.00	6.26
29	6.010	31.23	0.00	9.02	3.18	9.37	2.78	7.02	1.75	0.08	0.00	1.83	0.00	42.40	115.00	0.00	6.28
30	5.590	31.23	0.00	9.03	3.17	9.50	2.78	7.02	1.73	0.08	0.00	1.81	0.00	42.40	115.00	0.00	6.32
31	5.170	31.23	0.00	9.04	3.17	9.71	2.79	7.03	1.70	0.07	0.00	1.77	0.00	42.40	115.00	0.00	6.38
32	4.750	31.23	0.00	9.05	3.17	10.00	2.80	7.04	1.62	0.05	0.00	1.67	0.00	42.40	115.00	0.00	6.47
33	4.330	31.23	0.00	9.06	3.17	10.32	2.84	7.08	1.44	0.03	0.00	1.47	0.00	42.40	115.00	0.00	6.63

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW WES BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 6 BDS 4-US 165 GATE INLET CANAL 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
34	UPR RCH	0.10278	31.23	0.00	9.06	3.17	10.32	2.84	7.08	1.44	0.03	0.00	0.00	42.40	0.00	6.63

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
34	4.33	3.90	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
35	3.90	3.46	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
36	3.46	3.03	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
37	3.03	2.60	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
38	2.60	2.16	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
39	2.16	1.73	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
40	1.73	1.30	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
41	1.30	0.87	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
42	0.87	0.43	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
43	0.43	0.00	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
TOT						189.66			1684250.00	498324.62					

AVG						0.00026				3.38	115.09							388.97			
CUM								420.61													

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
34	3.897	7.41	0.25	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.46	0.00	0.00	0.00	1.78	0.00	0.00	0.03	0.07
35	3.464	7.42	0.25	0.25	0.07	0.00	0.00	0.00	0.00	0.25	0.02	1.45	0.00	0.00	0.00	1.78	0.00	0.00	0.02	0.07
36	3.031	7.42	0.25	0.25	0.06	0.00	0.00	0.00	0.00	0.25	0.02	1.45	0.00	0.00	0.00	1.78	0.00	0.00	0.02	0.06
37	2.598	7.43	0.25	0.25	0.06	0.00	0.00	0.00	0.00	0.25	0.02	1.44	0.00	0.00	0.00	1.78	0.00	0.00	0.02	0.06
38	2.165	7.44	0.25	0.25	0.06	0.00	0.00	0.00	0.00	0.25	0.02	1.43	0.00	0.00	0.00	1.78	0.00	0.00	0.02	0.06
39	1.732	7.45	0.25	0.25	0.06	0.00	0.00	0.00	0.00	0.25	0.02	1.43	0.00	0.00	0.00	1.78	0.00	0.00	0.02	0.06
40	1.299	7.46	0.25	0.25	0.06	0.00	0.00	0.00	0.00	0.25	0.02	1.42	0.00	0.00	0.00	1.79	0.00	0.00	0.02	0.06
41	0.866	7.46	0.25	0.25	0.06	0.00	0.00	0.00	0.00	0.25	0.02	1.41	0.00	0.00	0.00	1.79	0.00	0.00	0.02	0.06
42	0.433	7.47	0.25	0.24	0.06	0.00	0.00	0.00	0.00	0.25	0.02	1.40	0.00	0.00	0.00	1.79	0.00	0.00	0.02	0.06
43	0.000	7.48	0.25	0.24	0.06	0.00	0.00	0.00	0.00	0.25	0.02	1.40	0.00	0.00	0.00	1.79	0.00	0.00	0.02	0.06
20 DEG C RATE				0.15		0.00	0.00			0.12		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.21		0.05						0.01									0.05

* $g/m^2/d$ ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
34	3.897	31.17	0.00	9.08	3.16	10.54	2.92	7.18	1.02	0.00	0.00	1.02	0.00	42.56	115.00	0.00	6.91
35	3.464	31.10	0.00	9.10	3.16	10.65	2.98	7.25	0.79	0.00	0.00	0.79	0.00	42.72	115.00	0.00	7.13
36	3.031	31.04	0.00	9.12	3.16	10.70	3.01	7.29	0.67	0.00	0.00	0.67	0.00	42.88	115.00	0.00	7.29
37	2.598	30.98	0.00	9.15	3.15	10.72	3.03	7.33	0.61	0.00	0.00	0.61	0.00	43.04	115.00	0.00	7.40
38	2.165	30.91	0.00	9.17	3.15	10.72	3.05	7.37	0.59	0.00	0.00	0.59	0.00	43.20	115.00	0.00	7.49
39	1.732	30.85	0.00	9.21	3.14	10.68	3.08	7.41	0.59	0.00	0.00	0.59	0.00	43.36	115.00	0.00	7.56
40	1.299	30.79	0.00	9.24	3.13	10.59	3.12	7.48	0.61	0.00	0.00	0.61	0.00	43.52	115.00	0.00	7.62
41	0.866	30.73	0.00	9.28	3.12	10.40	3.22	7.59	0.67	0.00	0.00	0.67	0.00	43.68	115.00	0.00	7.68
42	0.433	30.66	0.00	9.32	3.12	10.05	3.44	7.82	0.81	0.00	0.00	0.81	0.00	43.84	115.00	0.00	7.75
43	0.000	30.60	0.00	9.37	3.11	9.43	3.92	8.32	1.11	0.00	0.00	1.11	0.00	44.00	115.00	0.00	7.85

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m^3

STREAM SUMMARY
LAKE BARTHOLEMEW WES

BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
12/18/01

```
 TRAVEL TIME      =         420.61 DAYS

 MAXIMUM EFFLUENT =           0.00 PERCENT

 FLOW             =   0.10278 TO    0.10278 m³/s
 DISPERSION       =   1.0000  TO    1.0000  m²/s
 VELOCITY         =   0.00021 TO    0.00026 m/s
 DEPTH            =   3.38    TO    3.94    m
 WIDTH            = 115.09    TO  123.94    m

 BOD DECAY        =    0.24   TO    0.25    per day
 NH3 DECAY        =    1.40   TO    1.47    per day
 SDMNT OXYGEN DMND=    0.00   TO    0.00    g/m²/d
 NH3 SOURCE       =    0.00   TO    0.00    g/m²/d
 REAERATION       =    0.22   TO    0.25    per day
 BOD SETTLING     =    0.06   TO    0.07    per day
 ORGN DECAY       =    0.25   TO    0.26    per day
 ORGN SETTLING    =    0.02   TO    0.02    per day

 TEMPERATURE      =   30.60   TO   31.23    deg C
 DISSOLVED OXYGEN =    9.16   TO   10.72    mg/L
```

FINAL REPORT HANNAH'S RUN (EAST) BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 14 HANNAH'S RUN(E)CONTROL GATES 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
94	HDWTR	1.45612	28.89	0.00	3.50	0.00	1.34	14.75	16.54	0.92	0.17	0.00	0.00	17.90	0.00	7.29

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
94	0.45	0.44	1.45612	0.00	0.29793	0.00	1.77	2.76	58.65	33.10	4.89	0.00	0.000	1.000	0.298
TOT						0.00			58.65	33.10					
AVG					0.29793		1.77	2.76			4.89				
CUM						0.00									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
94	0.440	7.64	0.47	0.12	0.06	0.00	0.00	0.00	0.00	0.21	0.02	1.27	0.00	0.00	0.00	0.69	0.00	0.00	0.02	0.06
20 DEG C RATE				0.08		0.00	0.00			0.11		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.40		0.05						0.01									0.05

* $g/m^2/d$ ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
94	0.440	29.40	0.00	3.57	0.04	7.65	14.37	16.16	0.93	0.15	0.00	1.07	0.00	17.90	115.00	0.00	7.46

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m^3

FINAL REPORT HANNAH'S RUN (EAST) BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 15 HANNAHS RUN(E)-HANNAHS RUN(W) 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m^3/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
95	UPR RCH	1.45612	29.40	0.00	3.57	0.04	7.65	14.37	16.16	0.93	0.15	0.00	0.00	17.90	0.00	7.46

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m^3	SURFACE AREA m^2	X-SECT AREA m^2	TIDAL PRISM m^3	TIDAL VELO m/s	DISPRSN m^2/s	MEAN VELO m/s
95	0.44	0.15	1.45612	0.00	0.03147	0.11	2.47	18.72	13325.77	5390.87	46.27	0.00	0.000	4.000	0.031
TOT						0.11			13325.77	5390.87					
AVG					0.03147		2.47	18.72			46.27				
CUM						0.11									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
95	0.152	7.49	0.34	0.13	0.06	0.00	0.00	0.00	0.00	0.22	0.02	1.37	0.00	0.00	0.00	0.73	0.00	0.00	0.02	0.06
20 DEG C RATE				0.08		0.00	0.00			0.11		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.28		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
95	0.152	30.54	0.00	3.65	0.08	7.10	13.90	15.69	0.94	0.12	0.00	1.05	0.00	17.90	115.00	0.00	7.68

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT HANNAH'S RUN (EAST) BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 16 HANNAH'S RUN(W) CONTROL GATES 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
96	UPR RCH	1.45612	30.54	0.00	3.65	0.08	7.10	13.90	15.69	0.94	0.12	0.00	0.00	17.90	0.00	7.68

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
96	0.15	0.14	1.45612	0.00	0.29793	0.00	1.77	2.76	58.65	33.10	4.89	0.00	0.000	1.000	0.298
TOT						0.00			58.65	33.10					
AVG					0.29793		1.77	2.76			4.89				
CUM						0.11									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
96	0.140	7.49	0.48	0.16	0.06	0.00	0.00	0.00	0.00	0.31	0.02	1.33	0.00	0.00	0.00	0.73	0.00	0.00	0.03	0.06
20 DEG C RATE				0.10		0.00	0.00			0.15		0.60	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			0.40		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
96	0.140	30.54	0.00	3.84	0.18	6.10	13.21	15.00	0.94	0.08	0.00	1.02	0.00	17.90	115.00	0.00	8.23

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT HANNAH'S RUN (EAST) BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 17 HANNAH'S RUN(W)-BDS21 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
97	UPR RCH	1.45612	30.54	0.00	3.84	0.18	6.10	13.21	15.00	0.94	0.08	0.00	0.00	17.90	0.00	8.23

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
97	0.14	0.10	1.45612	0.00	0.03147	0.01	2.47	18.72	1850.80	748.73	46.27	0.00	0.000	4.000	0.031
TOT						0.01			1850.80	748.73					
AVG					0.03147		2.47	18.72			46.27				
CUM						0.12									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
97	0.100	7.56	0.34	0.17	0.06	0.00	0.00	0.00	0.00	0.35	0.02	1.25	0.00	0.00	0.00	0.54	0.00	0.00	0.04	0.06
20 DEG C RATE				0.11		0.00	0.00			0.18		0.60	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			0.28		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
97	0.100	30.00	0.00	3.93	0.22	5.63	12.88	14.24	0.94	0.06	0.00	1.00	0.00	13.60	115.00	0.00	8.50

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT HANNAH'S RUN (EAST) BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
REACH NO. 18 BDS 21-BAYOU DESIARD 12/18/01

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
98	UPR RCH	1.45612	30.00	0.00	3.93	0.22	5.63	12.88	14.24	0.94	0.06	0.00	0.00	13.60	0.00	8.50

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
98	0.10	0.00	1.45612	0.00	0.03147	0.04	2.47	18.72	4627.00	1871.83	46.27	0.00	0.000	4.000	0.031
TOT						0.04			4627.00	1871.83					
AVG					0.03147		2.47	18.72			46.27				

CUM 0.16

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
98	0.000	7.56	0.34	0.17	0.06	0.00	0.00	0.00	0.00	0.35	0.02	1.18	0.00	0.00	0.00	0.54	0.00	0.00	0.04	0.06
20 DEG C RATE				0.11		0.00	0.00			0.18		0.60	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			0.28		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
98	0.000	30.00	0.00	4.16	0.35	4.38	12.03	13.39	0.92	0.01	0.00	0.94	0.00	13.60	115.00	0.00	9.21

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

STREAM SUMMARY
HANNAH'S RUN (EAST)

BAYOU DESIARD (080701) CALIBRATION MODEL B WITH CHLOROPHYLL A, m
12/18/01

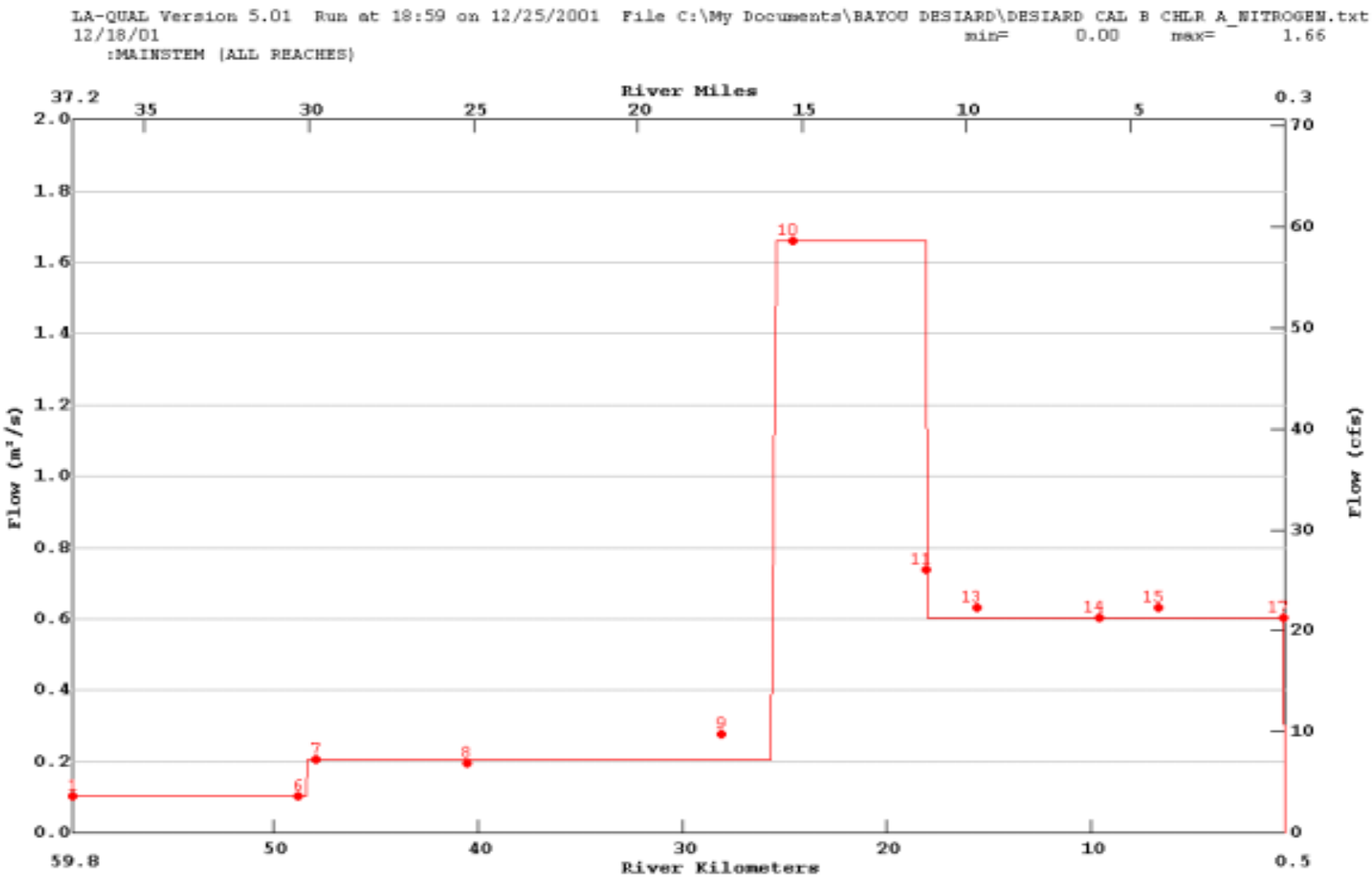
TRAVEL TIME = 0.16 DAYS

MAXIMUM EFFLUENT = 0.00 PERCENT

FLOW	=	1.45612	TO	1.45612	m³/s
DISPERSION	=	1.0000	TO	4.0000	m²/s
VELOCITY	=	0.03147	TO	0.29793	m/s
DEPTH	=	1.77	TO	2.47	m
WIDTH	=	2.76	TO	18.72	m
BOD DECAY	=	0.12	TO	0.17	per day
NH3 DECAY	=	1.18	TO	1.37	per day
SDMNT OXYGEN DMND	=	0.00	TO	0.00	g/m²/d
NH3 SOURCE	=	0.00	TO	0.00	g/m²/d
REAERATION	=	0.34	TO	0.48	per day
BOD SETTLING	=	0.06	TO	0.06	per day
ORGN DECAY	=	0.21	TO	0.35	per day
ORGN SETTLING	=	0.02	TO	0.02	per day

```
TEMPERATURE      =   29.40   TO   30.54    deg C
DISSOLVED OXYGEN =    4.38   TO    7.65    mg/L


     .....EXECUTION COMPLETED
```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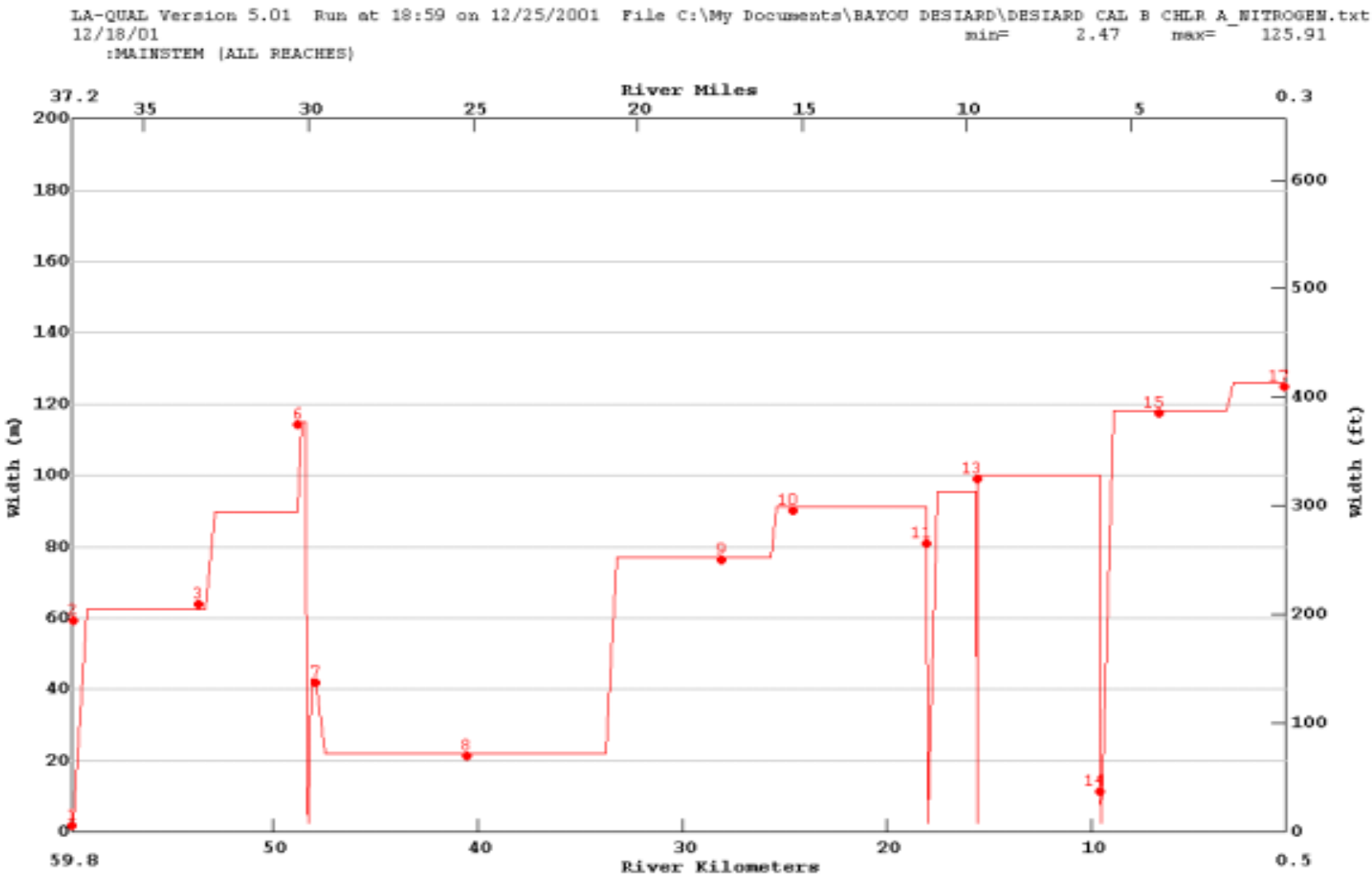
12/18/01
min= 0.00 max= 1.66
:MAINSTEM (ALL REACHES)
River Miles
37.2
35
30
25
20
15
10
5
0.3
Flow (m³/s)
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Flow (cfs)
70
60
50
40
30
20
10
0
59.8
50
40
30
20
10
0.5
River Kilometers
1
6
7
8
9
10
11
13
14
15
17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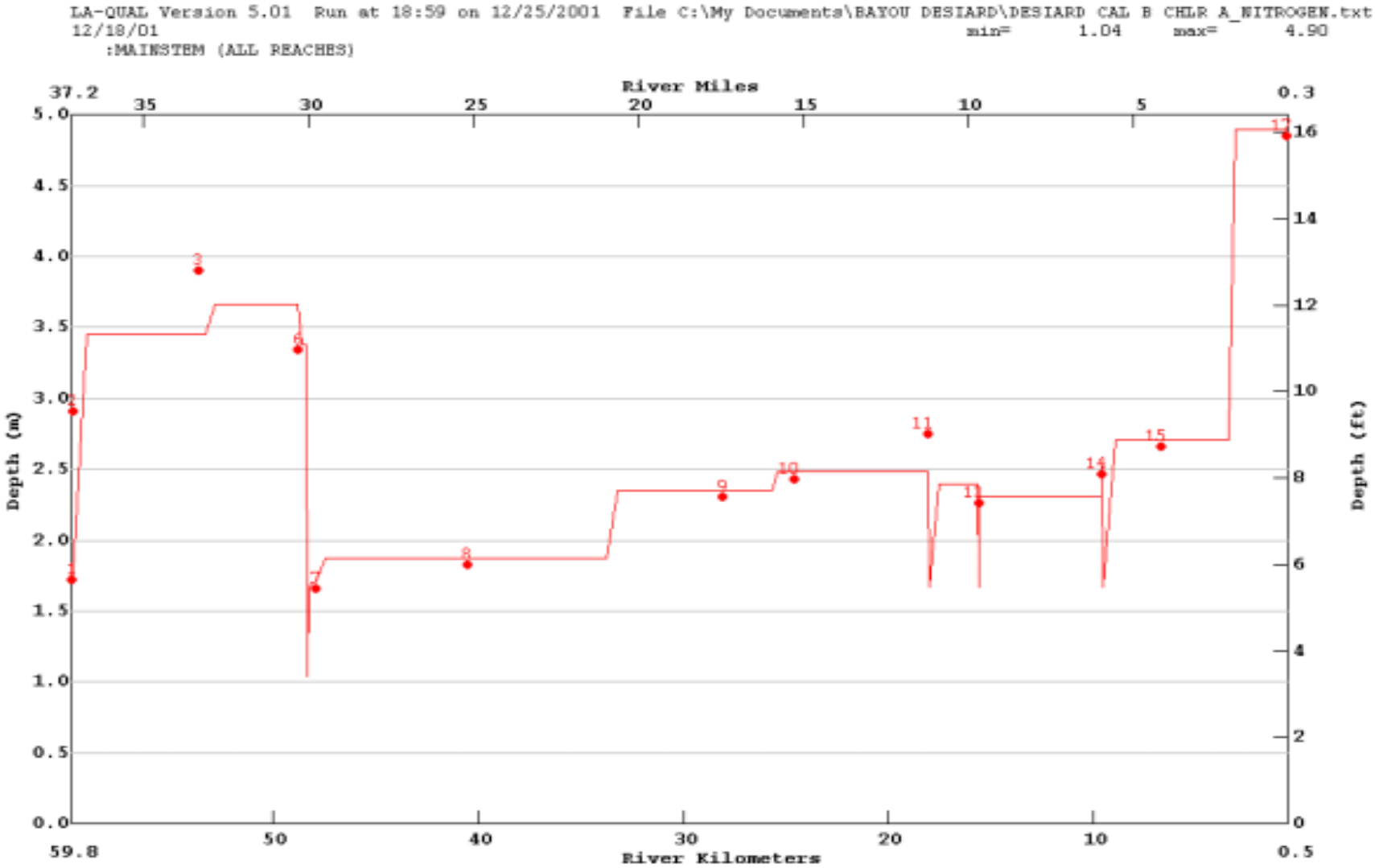
12/18/01
min= 2.47 max= 125.91
:MAINSTEM (ALL REACHES)
River Miles
37.2
35
30
25
20
15
10
5
0.3
Width (m)
Width (ft)
River Kilometers
59.8
50
40
30
20
10
0.5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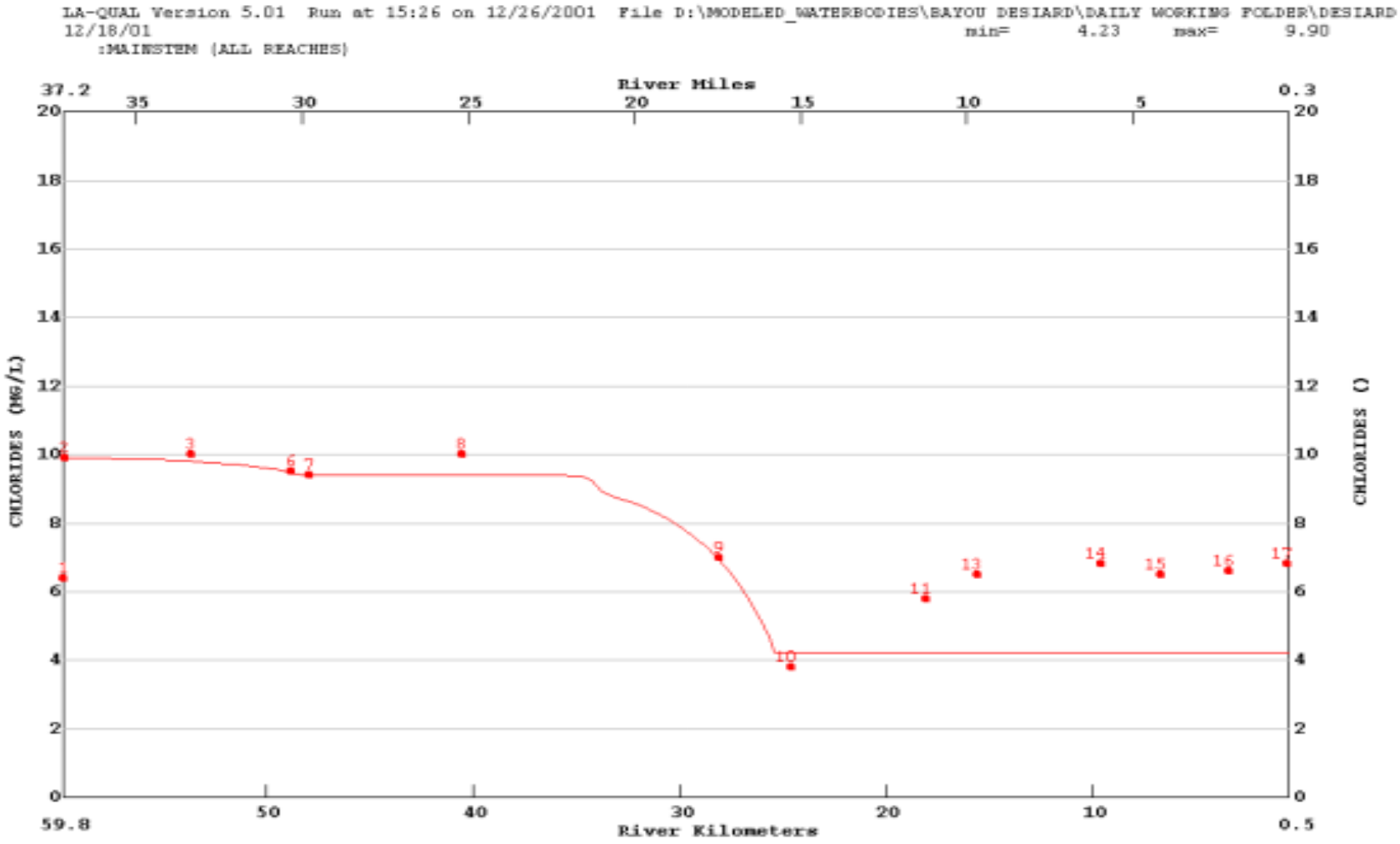
12/18/01
min= 1.04 max= 4.90
:MAINSTEM (ALL REACHES)
River Miles
37.2
35
30
25
20
15
10
5
0.3
Depth (m)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Depth (ft)
16
14
12
10
8
6
4
2
0
59.8
50
40
30
20
10
0.5
River Kilometers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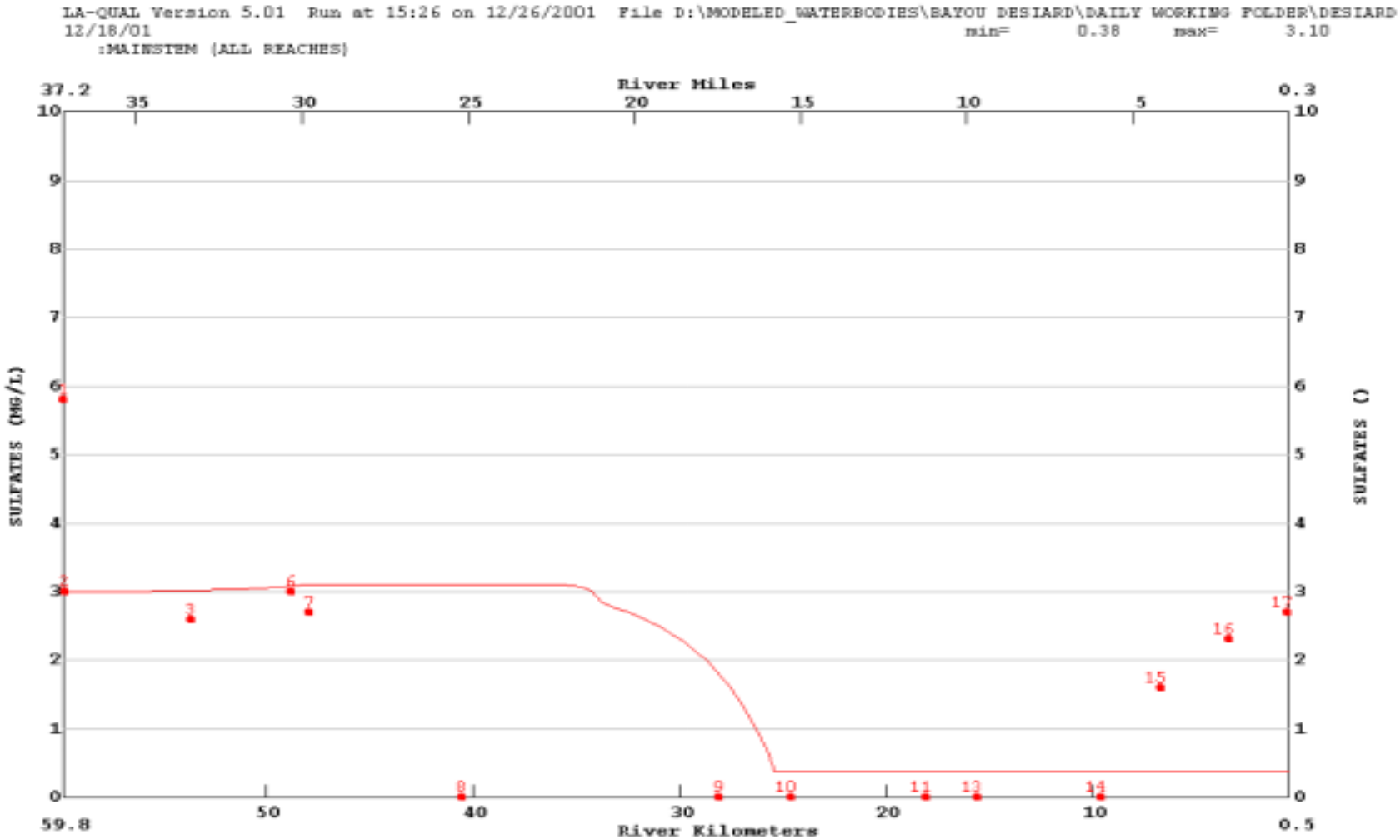
12/18/01
:MAINSTEM (ALL REACHES)
min= 4.23 max= 9.90
River Miles
37.2
35
30
25
20
15
10
5
0.3
CHLORIDES (MG/L)
CHLORIDES ()
59.8
50
40
30
20
10
0.5
River Kilometers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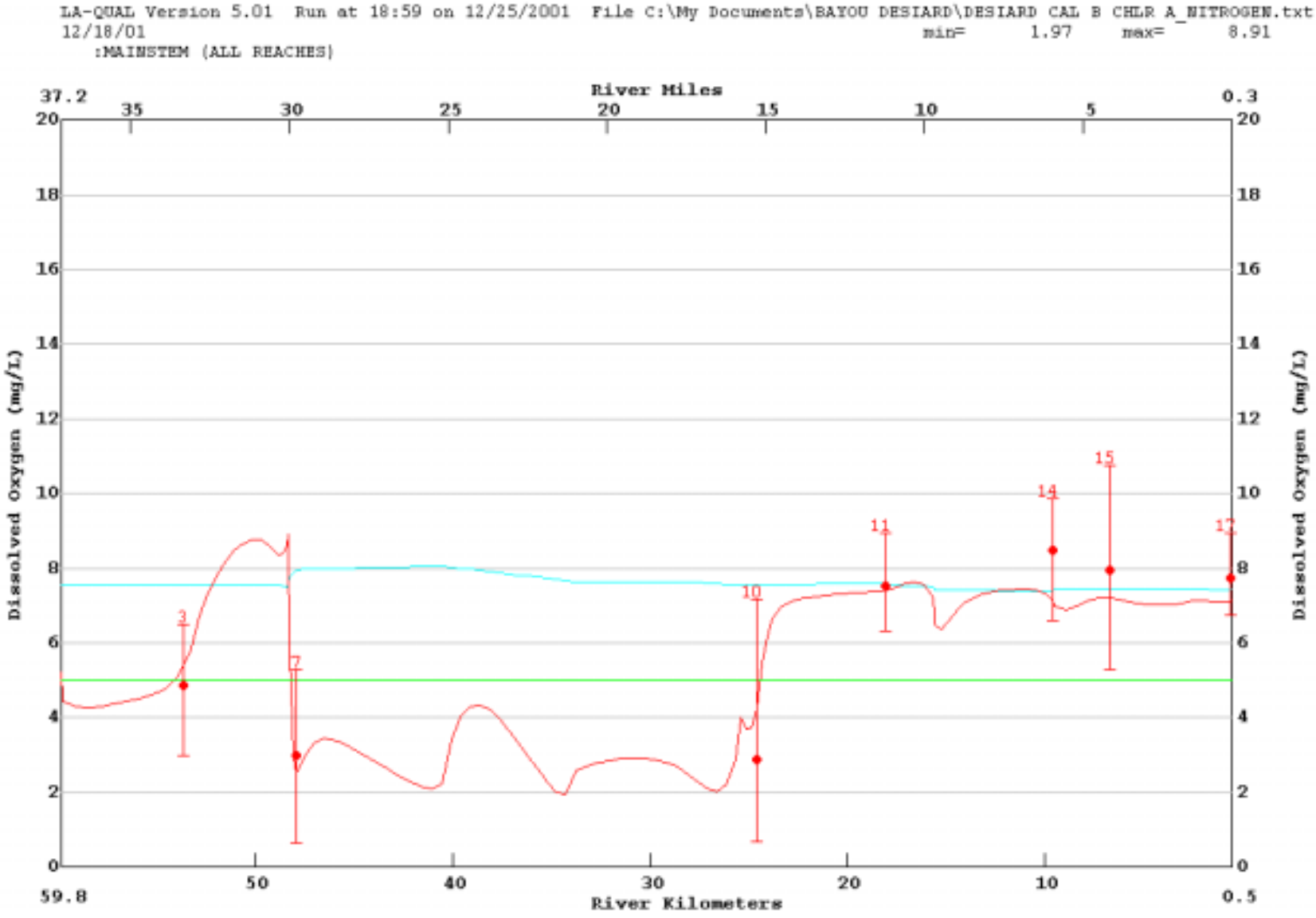
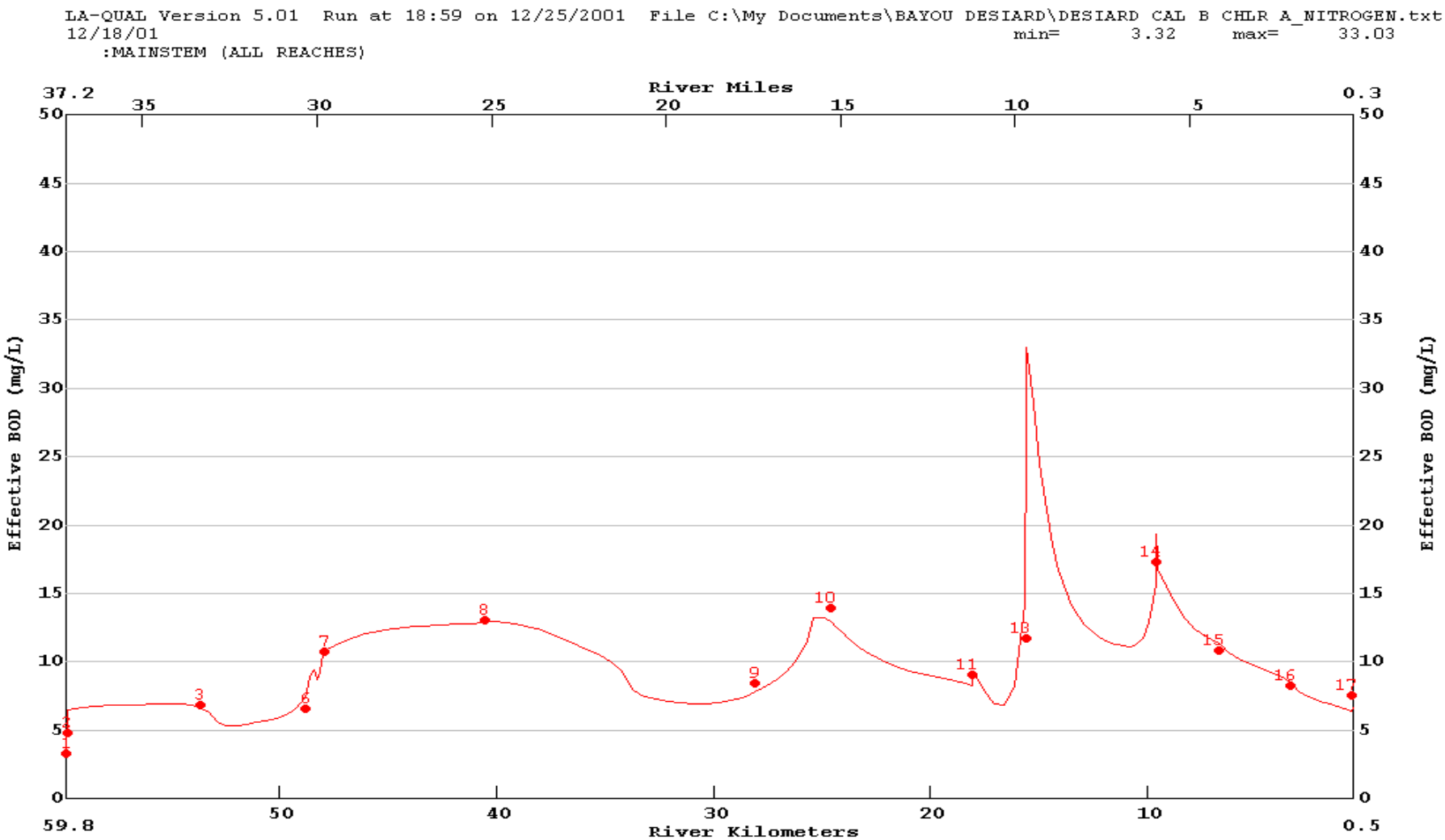
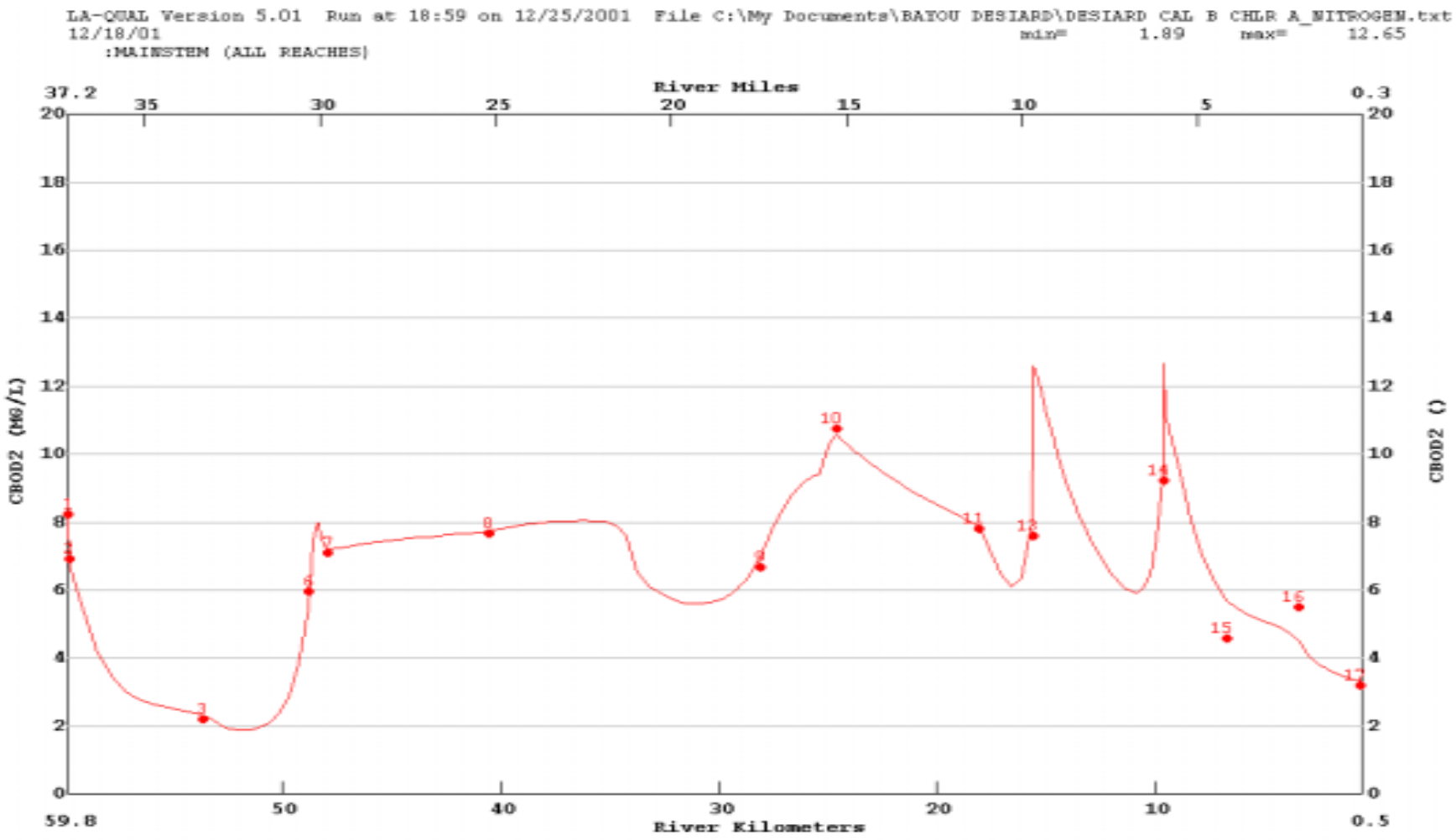
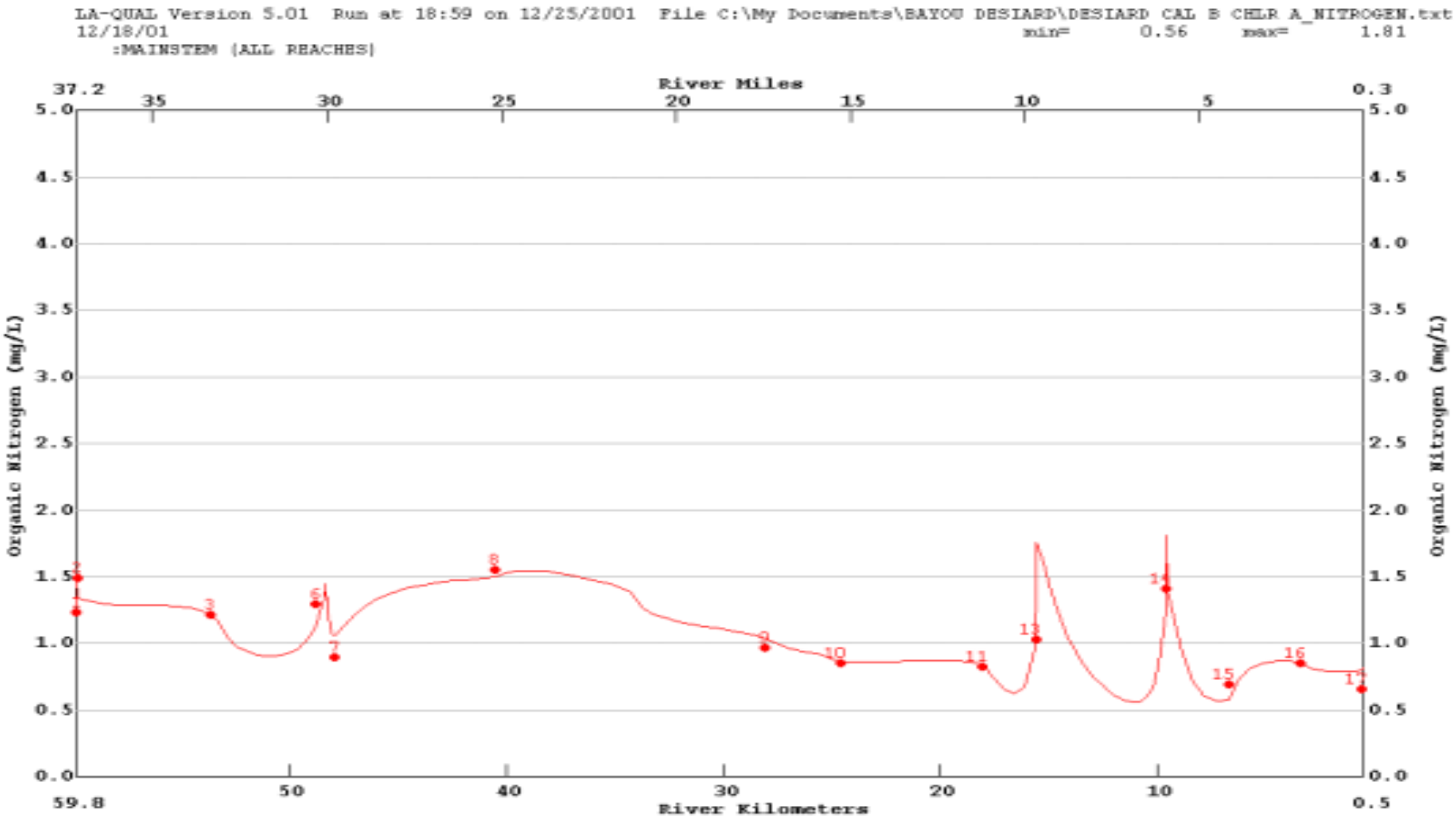
12/18/01
:MAINSTEM (ALL REACHES)
min= 0.38 max= 3.10
River Miles
37.2
35
30
25
20
15
10
5
0.3
SULFATES (MG/L)
SULFATES ()
River Kilometers
59.8
50
40
30
20
10
0.5

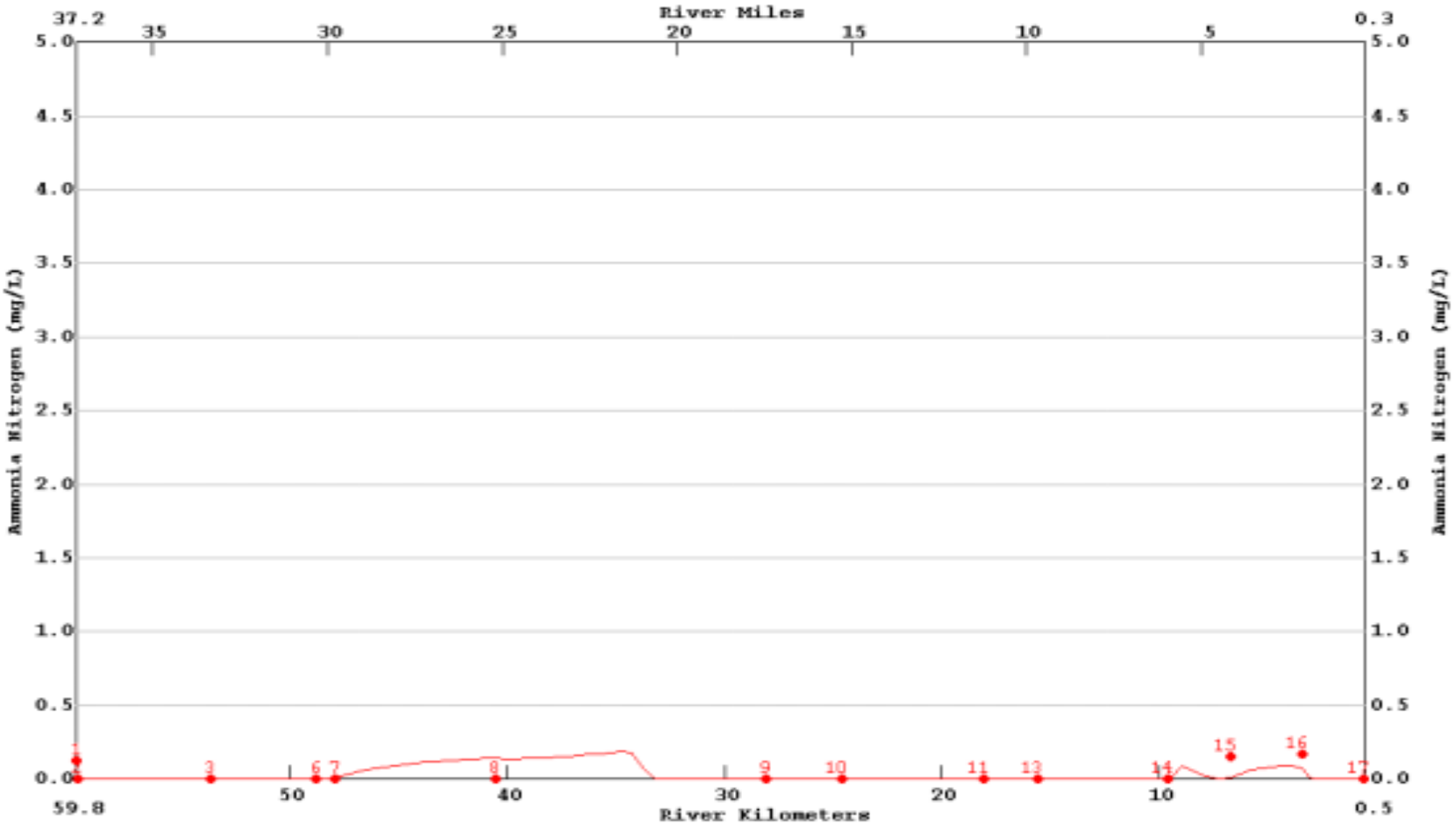

LA-QUAL Version 5.01 Run at 18:59 on 12/25/2001 File C:\My Documents\BAYOU DESIARD\DESIARD CAL B CHLR A_NITROGEN.txt
12/18/01
min= 1.97 max= 8.91
:MAINSTEM (ALL REACHES)
River Miles
37.2
35
30
25
20
15
10
5
0.3
Dissolved Oxygen (mg/L)
20
18
16
14
12
10
8
6
4
2
0
3
7
10
11
14
15
17
59.8
50
40
30
20
10
0.5
River Kilometers

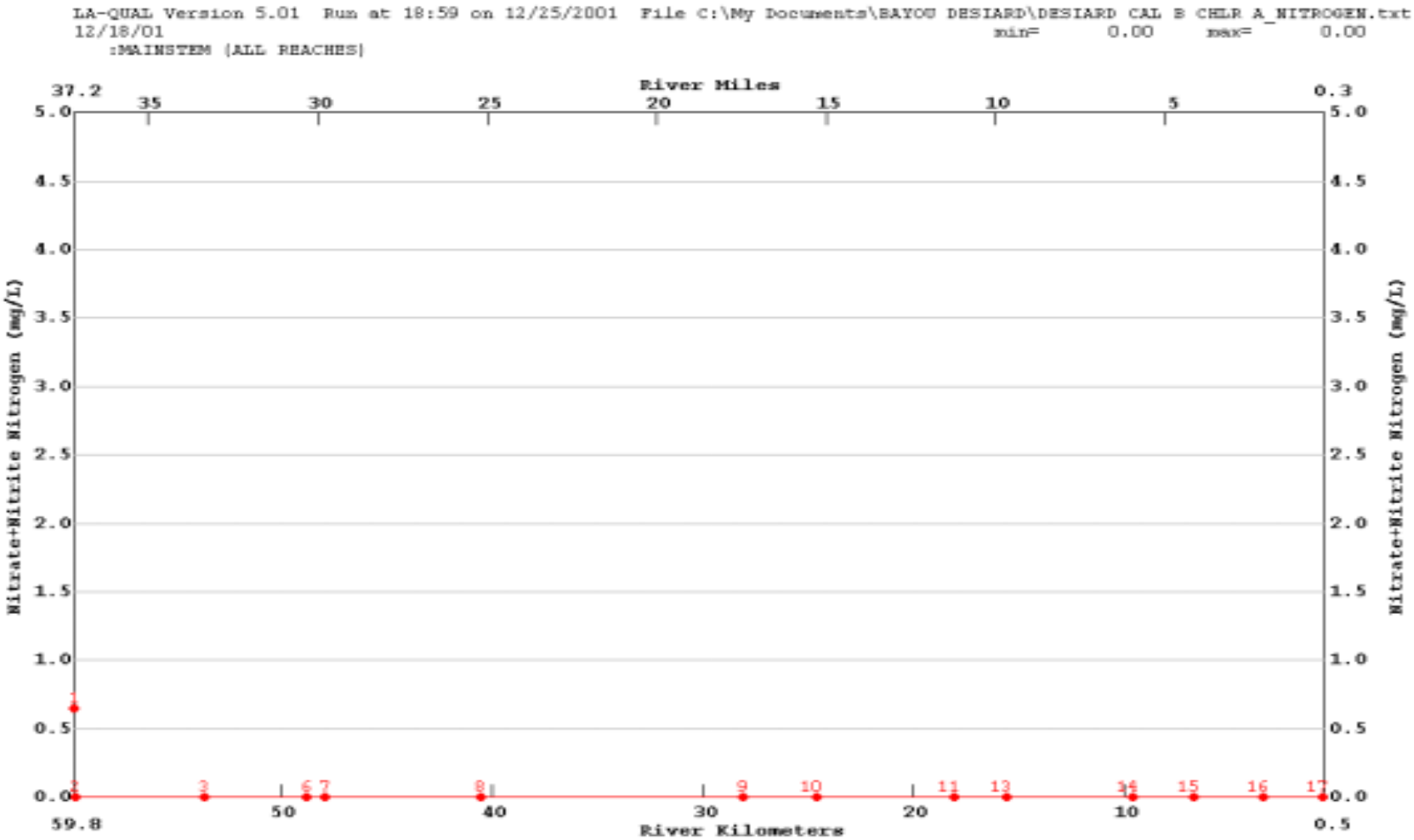

LA-QUAL Version 5.01 Run at 18:59 on 12/25/2001 File C:\My Documents\BAYOU DESIARD\DESIARD CAL B CHLR A_NITROGEN.txt
12/18/01
min= 3.32 max= 33.03
:MAINSTEM (ALL REACHES)
River Miles
37.2
35
30
25
20
15
10
5
0.3
Effective BOD (mg/L)
50
45
40
35
30
25
20
15
10
5
0
59.8
50
40
30
20
10
0.5
River Kilometers
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17

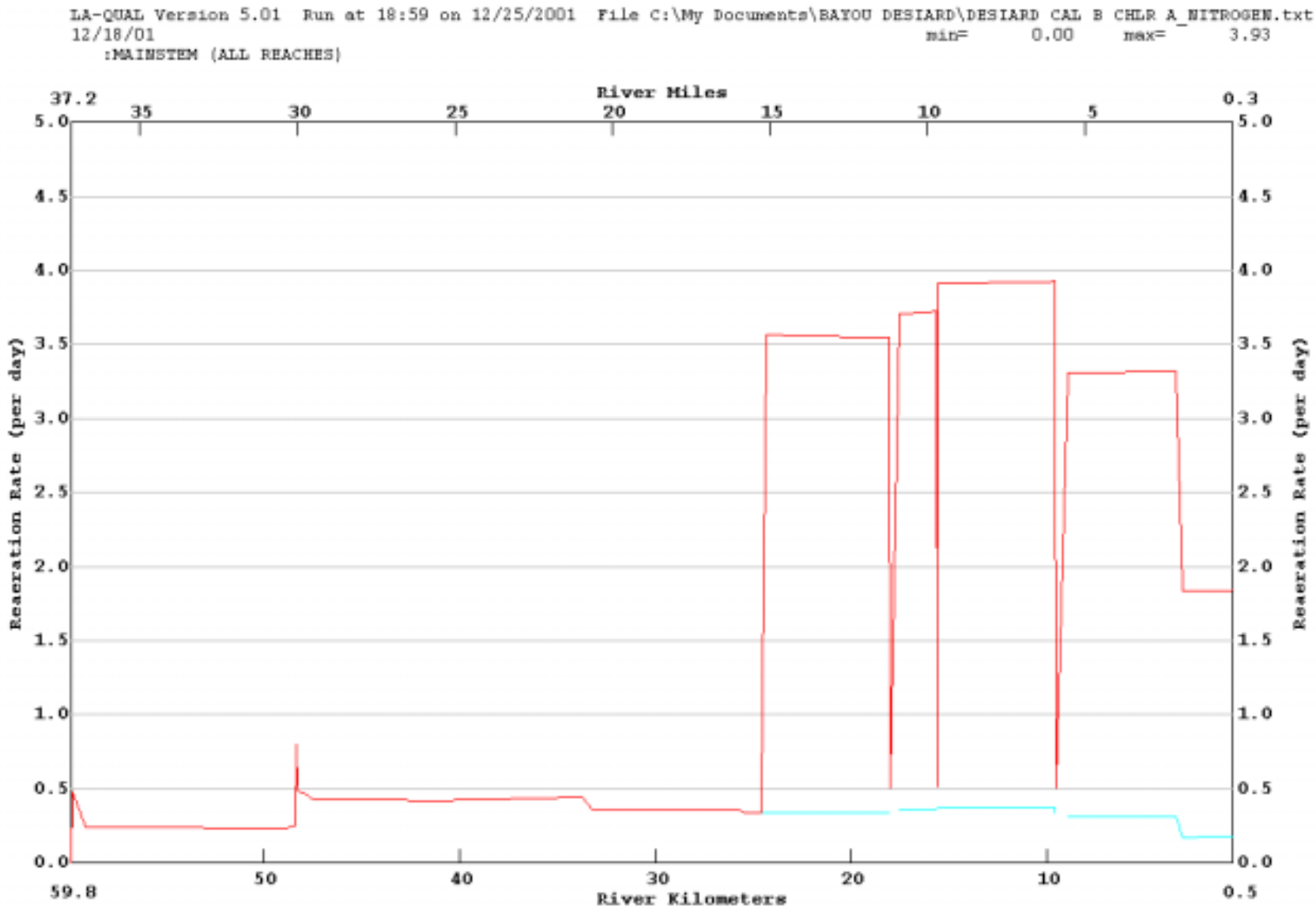

LA-QUAL Version 5.01 Run at 18:59 on 12/25/2001 File C:\My Documents\BAYOU DESIARD\DESIARD CAL B CHLR A_NITROGEN.txt
12/18/01
min= 1.89 max= 12.65
:MAINSTEM (ALL REACHES)
River Miles
37.2
35
30
25
20
15
10
5
0.3
CBOD2 (MG/L)
CBOD2 ()
River Kilometers
59.8
50
40
30
20
10
0.5

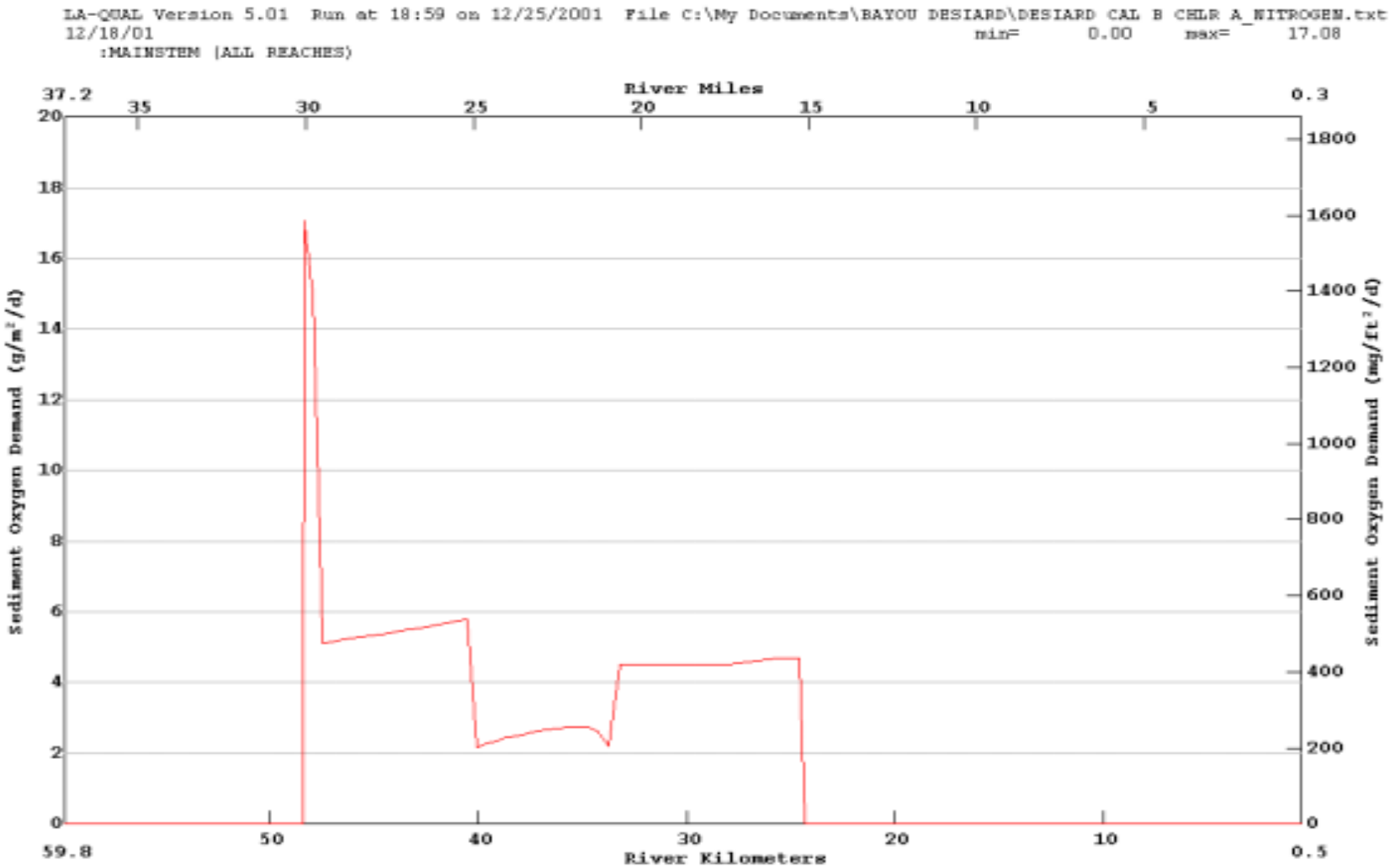

LA-QUAL Version 5.01 Run at 18:59 on 12/25/2001 File C:\My Documents\BAYOU DESIARD\DESIARD CAL B CHLR A_NITROGEN.txt
12/18/01
min= 0.56 max= 1.81
:MAINSTEM (ALL REACHES)
River Miles
37.2
35
30
25
20
15
10
5
0.3
Organic Nitrogen (mg/L)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
59.8
50
40
30
20
10
0.5
River Kilometers

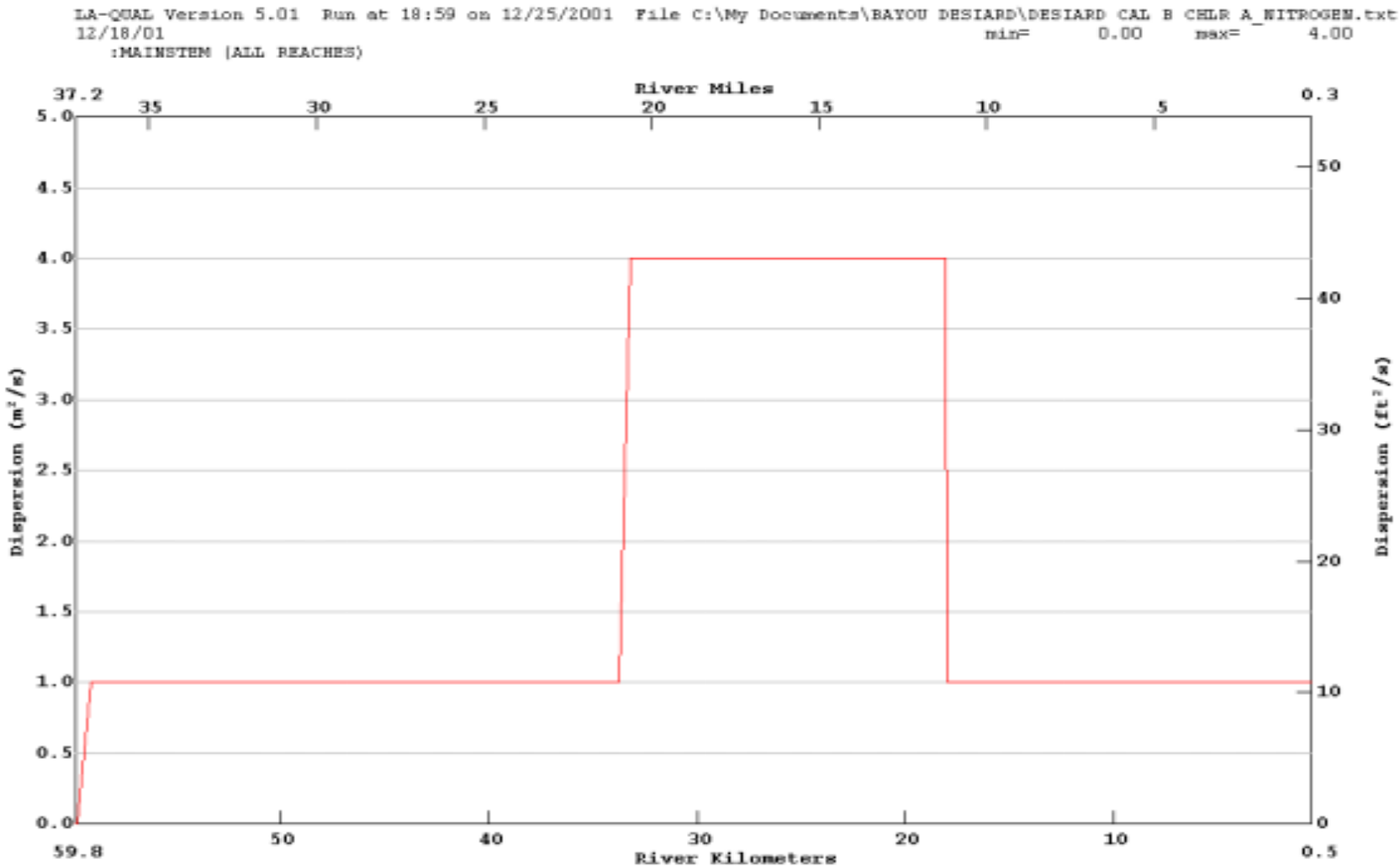
LA-QUAL Version 5.01 Run at 18:59 on 12/25/2001 File C:\My Documents\BAYOU DESIARD\DESIARD CAL B CHLR A_NITROGEN.txt
12/18/01 min= 0.00 max= 0.19
:MAINSTEM (ALL REACHES)




LA-QUAL Version 5.01 Run at 18:59 on 12/25/2001 File C:\My Documents\BAYOU DESIARD\DESIARD CAL B CHLR A_NITROGEN.txt
12/18/01
min= 0.00 max= 0.00
:MAINSTEM (ALL REACHES)
River Miles
37.2
35
30
25
20
15
10
5
0.3
Nitrate+Nitrite Nitrogen (mg/L)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1
2
3
6
7
8
9
10
11
13
14
15
16
17
59.8
50
40
30
20
10
0.5
River Kilometers


LA-QUAL Version 5.01 Run at 18:59 on 12/25/2001 File C:\My Documents\BAYOU DESIARD\DESIARD CAL B CHLR A_NITROGEN.txt
12/18/01
min= 0.00 max= 3.93
:MAINSTEM (ALL REACHES)
River Miles
37.2
35
30
25
20
15
10
5
0.3
Reaeration Rate (per day)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
59.8
50
40
30
20
10
0.5
River Kilometers


LA-QUAL Version 5.01 Run at 18:59 on 12/25/2001 File C:\My Documents\BAYOU DESIARD\DESIARD CAL B CHLR A_NITROGEN.txt
12/18/01
min= 0.00 max= 17.08
:MAINSTEM (ALL REACHES)
River Miles
37.2
35
30
25
20
15
10
5
0.3
Sediment Oxygen Demand (g/m²/d)
Sediment Oxygen Demand (mg/ft²/d)
0
2
4
6
8
10
12
14
16
18
20
0
200
400
600
800
1000
1200
1400
1600
1800
59.8
50
40
30
20
10
0.5
River Kilometers


LA-QUAL Version 5.01 Run at 18:59 on 12/25/2001 File C:\My Documents\BAYOU DESIARD\DESIARD CAL B CHLR A_NITROGEN.txt
12/18/01
min= 0.00 max= 4.00
:MAINSTEM (ALL REACHES)
River Miles
37.2
35
30
25
20
15
10
5
0.3
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Dispersion (m²/s)
50
40
30
20
10
0
Dispersion (ft²/s)
59.8
50
40
30
20
10
0.5
River Kilometers

APPENDIX C - Bayou Desiard Calibration Development

REACH AND ELEMENT LAYOUT FOR DUGDEMONA RIVER
LA-QUAL MODEL

REACH	WATERBODY	REACH DESCRIPTION	BEGINNING RIVER KILOMETER (km)	ENDING RIVER KILOMETER (km)	TOTAL LENGTH (km)	ELEMENT SIZE (km)	NUMBER OF ELEMENTS IN REACH	TOTAL NUMBER OF ELEMENTS	BEGINNING ELEMENT NUMBER	ENDING ELEMENT NUMBER
1	Lake Bartholemew (LB)	Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	59.85	59.77	0.08	0.0800000000	1	1	1	1
2	Lake Bartholemew (LB)	BDS 2 (outfall of L. Bartholemew pump) - BDS 3 (midpoint of L. Bartholemew right fork)	59.77	53.31	6.46	0.6460000000	10	11	2	11
3	Lake Bartholemew (LB)	BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	53.31	48.81	4.50	0.4500000000	10	21	12	21
4	Lake Bartholemew (LB)	BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	48.81	48.41	0.40	0.2000000000	2	23	22	23
5	Lake Bartholemew (LB)	BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	8.53	4.33	4.20	0.4200000000	10	33	24	33
6	Lake Bartholemew (LB)	BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	4.33	0.00	4.33	0.4330000000	10	43	34	43
7	Lake Bartholemew (LB)	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	48.41	48.33	0.08	0.0800000000	1	44	44	44
8	U.S. 165 Pipes (CP)	Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S. 165 Control Structure Outlet	48.33	48.25	0.08	0.0800000000	1	45	45	45
9	Bayou Desiard (BD)	Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	48.25	47.92	0.33	0.1100000000	3	48	46	48
10	Bayou Desiard (BD)	BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at LA Hwy. 134)	47.92	40.56	7.36	0.4600000000	16	64	49	64
11	Bayou Desiard (BD)	BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	40.56	33.77	6.79	0.4850000000	14	78	65	78
12	Bayou Desiard (BD)	Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	33.77	28.06	5.71	0.5710000000	10	88	79	88
13	Bayou Desiard (BD)	BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	28.06	25.67	2.39	0.4780000000	5	93	89	93
14	Hannah's Run East Pipes (HE)	Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	0.452	0.44	0.012	0.0120000000	1	94	94	94
15	Hannah's Run (HR)	Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	0.44	0.152	0.29	0.2880000000	1	95	95	95
16	Hannah's Run West Pipes (HW)	Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	0.152	0.14	0.01	0.0120000000	1	96	96	96
17	Hannah's Run (HR)	Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	0.14	0.10	0.04	0.0400000000	1	97	97	97
18	Hannah's Run (HR)	BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	0.10	0.00	0.10	0.1000000000	1	98	98	98
19	Bayou Desiard (BD)	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	25.67	24.61	1.06	0.2650000000	4	102	99	102
20	Bayou Desiard (BD)	BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	24.61	18.06	6.55	0.2620000000	25	127	103	127
21	Control Structure Pipes under L-11 Canal (CP)	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	18.06	17.98	0.08	0.0800000000	1	128	128	128
22	Bayou Desiard (BD)	Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd.	17.98	15.63	2.35	0.4700000000	5	133	129	133
23	Midway Dam Control Structure (MD)	Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd.	15.63	15.59	0.04	0.0400000000	1	134	134	134
24	Bayou Desiard (BD)	Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure)	15.59	15.55	0.04	0.0400000000	1	135	135	135
25	Bayou Desiard (BD)	BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	15.55	9.62	5.93	0.2965000000	20	155	136	155
26	Bayou Desiard (BD)	BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	9.62	9.57	0.05	0.0500000000	1	156	156	156
27	Stadium Drive (SD)	Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	9.57	9.52	0.05	0.0500000000	1	157	157	157
28	Bayou Desiard (BD)	Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	9.52	6.69	2.83	0.5660000000	5	162	158	162
29	Bayou Desiard (BD)	BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	6.69	3.40	3.29	0.4700000000	7	169	163	169
30	Bayou Desiard (BD)	BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	3.40	0.61	2.79	0.3100000000	9	178	170	178
31	Bayou Desiard (BD)	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	0.61	0.54	0.07	0.0700000000	1	179	179	179
Totals					68.29		179			

BAYOU DESIARD

Flow Calibration

Headwater streamflow =		3.63000	cfs =	0.10278	cms						
Reach No.	Stream	Point sources		Tributary Flows	Reach lengths	Distributed flows	Calibration Locations	Model flows @ Calibration Points	Measured Calibration flows	Incremental Flows	Element Numbers
		(cfs)	(cms)	(cms)	(Km)	(cms/Km)		(cms)	(cms)	(cms)	
1	LB	0.00000	0.00000	0.00000	0.08000			0.10278		0.0000	
2	LB	0.00000	0.00000	0.00000	6.46000			0.10278		0.0000	
3	LB	0.00000	0.00000	0.00000	4.50000			0.10278		0.0000	
4	LB	0.00000	0.00000	0.00000	0.40000			0.10278		0.0000	
5	LB	3.63000	0.10278	0.00000	4.20000			0.20555		0.0000	
6	LB	0.00000	0.00000	0.00000	4.33000			0.20555		0.0000	
7	LB	0.00000	0.00000	0.00000	0.08000		***BDS6-Inlet Canal To US 165 Control Structure***	0.20555	***0.20560***	*0.0000*	44.00
8	CP	0.00000	0.00000	0.00000	7.00000			0.20555		0.0000	
9	BD	0.00000	0.00000	0.00000	0.33000			0.20555		0.0000	
10	BD	0.00000	0.00000	0.00000	7.36000		***BDS7-US 165 Control Structure Outlet***	*0.20555*	***0.20780***	*0.0000*	49
11	BD	0.00000	0.00000	0.00000	6.79000		***BDS8-LA 134***	*0.20555*	***0.19540***	*0.0000*	65
12	BD	0.00000	0.00000	0.00000	5.71000			0.20555		*0.0000*	
13	BD	0.00000	0.00000	0.00000	2.39000		***BDS9-Richland Drive***	*0.20555*	***0.27890***	*0.0000*	89
14	HE	51.43000	1.45612	0.00000	0.01200			1.45612		0.0000	
15	HR	0.00000	0.00000	0.00000	0.28800			1.45612		0.0000	
16	HW	0.00000	0.00000	0.00000	0.01200			1.45612		0.0000	
17	HR	0.00000	0.00000	0.00000	0.04000			1.45612		0.0000	
18	HR	0.00000	0.00000	0.00000	0.10000			1.45612		0.0000	
19	BD	0.00000	0.00000	0.00000	1.06000			1.66167		0.0000	
20	BD	0.00000	0.00000	0.00000	6.55000		***BDS10-Treasure Island Rd.***	*1.66167*	***1.66167***	*0.0000*	103
21	CP	-37.33910	-1.05717	0.00000	0.08000		***BDS11-Upstream of L-11 Canal Control Structure***	*0.60450*	***0.73700***	*0.0000*	128
22	BD	0.00000	0.00000	0.00000	2.35000			0.60450		0.0000	
23	MD	0.00000	0.00000	0.00000	0.04000			0.60450		0.0000	
24	BD	0.00000	0.00000	0.00000	0.04000			0.60450		0.0000	
25	BD	0.00000	0.00000	0.00000	5.93000		***BDS13-Downstream of Midway Dam(Inabnet Rd.)***	*0.60450*	***0.63250***	*0.0000*	136
26	BD	0.00000	0.00000	0.00000	0.05000		***BDS14-Stadium Drive***	*0.60450*	***0.60450***	*0.0000*	156
27	SD	0.00000	0.00000	0.00000	0.05000			0.60450		0.0000	
28	BD	0.00000	0.00000	0.00000	2.83000			0.60450		0.0000	
29	BD	0.00000	0.00000	0.00000	3.29000		***BDS15-Philip's Bridge***	*0.60450*	***0.63250***	0.0000	163
30	BD	0.00000	0.00000	0.00000	2.79000			0.60450		0.0000	
31	BD	0.00000	0.00000	0.00000	0.07000		***BDS17-City of Monroe, LA Water Treatment Plant Intake***	*0.60450*	***0.60450***	*0.0000*	179

Notes:
Bold itallic print denotes measured calibration data as opposed to calculated calibration data.
The model flows at calibration points and calibration flows represent the flows at the top of the reachs. They are not affected by point source, tributary, or incremental flows within the reach.

BAYOU DESIARD STREAM GEOMETRY

Reach Number	Site/Cross-Section Description	Approximate River Kilometer	Cross-Section Width (meters)	Cross-Section Average Depth (meters)
	MAINSTEM SITES			
1	Pipes at the Lake Bartholemew Pump Station		1.72	1.72
2	BDS 2 - Bayou Bartholemew at Lake Bartholemew lakeside, located at the end of Bayou Road and the levee (has a boat launch)		59.43	2.91
2, 3	BDS 3 - Midpoint on Lake Bartholemew right fork		64.00	3.90
6	BDS 4 - Midpoint on Lake Bartholemew left fork		112.16	4.25
5	BDS 5 - Lake Bartholemew at the overflow control structure (located at the levee road)		134.11	3.54
3, 4	BDS 6 - Lake Bartholemew at U.S. Hwy. 165		114.29	3.34
8	Gates at U.S. Hwy 165; length =		1.62	1.62
9, 10	BDS 7 - 300 yds. Downstream of control pipes at U.S. Hwy. 165		42.06	1.66
10, 11	BDS 8 - 100 yds. Upstream of LA Hwy. 134 bridge		21.33	1.83
12, 13	BDS 9 - Bayou Desiard at Richland Road		76.20	2.31
19, 20	BDS 10 - Bayou Desiard, 250 yds. downstream of Treasure Island Road		90.06	2.43
20	BDS 11 - 300 yds. Upstream of Bayou Chauvin (L-11 Canal) overflow control structure		80.77	2.75
21	Pipes at L-11 Canal		1.62	1.62
23	Pipes at Inabnet Road (Midway Dam control Structure); length =		1.62	1.62
24, 25	BDS 13 - Bayou Desiard, 50 yds. downstream of the Midway Dam Control Structure at Inabnet Road		99.04	2.26
25, 26	BDS 14 - Bayou Desiard, 50 yds. upstream of Stadium Drive		11.58	2.47
27	Pipes at Stadium Drive		1.62	1.62
28, 29	BDS 15 - Bayou Desiard at Philip's Bridge next to U.S. Hwy 165		117.34	2.66
30, 31	BDS 17 - Intake to the City of Monroe Water Treatment Plant		124.96	4.85
	TRIBUTARY SITES			
14	*Pipes at Hannah's Run (east); length = 40 ft = 12.19 m*		1.72	1.72
15	*BDS 20 - Hannah's Run near Hannah's Run East (the control structure between Black Bayou Lake and Hannah's Run, treeline to treeline measurement)*		17.68	2.42
16	*Pipes between at Hannah's Run (west)*		1.72	1.72

Station: MONROE MLU AP
SRCC Preliminary Surface Airways (SA) Observations

(Date/Time)							-- WIND ---					Accum	Rn	6 Hour		Obs
YY	MM	DD	HH	Tem	Td	RH	Dir	Spd	Gst	SLP	Vis	Prcp	Cd	TMx	TMn	Time
---	CST		---	F	F	%	deg	kt	kt	mb	mi	in		F	F	(UTC)
SA 01	6	19	1	73	66	79	.	0	.	1018.1	10.0	0.00				06:53
SA 01	6	19	2	69	66	90	.	0	.	1018.0	10.0	0.00				07:53
SA 01	6	19	3	72	66	82	.	0	.	1018.0	10.0	0.00				08:53
SA 01	6	19	4	72	67	84	.	0	.	1018.3	10.0	0.00				09:53
SA 01	6	19	5	69	67	93	.	0	.	1018.8	10.0	0.00				10:53
SA 01	6	19	6	70	68	93	.	0	.	1019.5	9.0	0.00		75	68	11:53
SA 01	6	19	7	76	70	82	.	0	.	1020.1	10.0	0.00				12:53
SA 01	6	19	8	80	72	77	.	0	.	1020.8	10.0	0.00				13:53
SA 01	6	19	9	84	72	67	130	5	.	1020.8	10.0	0.00				14:53
SA 01	6	19	10	87	72	61	.	3	.	1020.9	10.0	0.00				15:53
MS 01	6	19	11													
SA 01	6	19	12	90	70	52	.	3	.	1020.6	10.0	0.00		90	70	17:53
SA 01	6	19	13	90	67	47	.	0	.	1020.1	10.0	0.00				18:53
SA 01	6	19	14	90	67	47	170	6	.	1019.2	10.0	0.00				19:53
SA 01	6	19	15	91	66	44	130	3	.	.	10.0	0.00				20:53
SA 01	6	19	16	92	66	42	.	5	.	1018.3	10.0	0.00				21:53
SA 01	6	19	17	91	66	44	80	4	.	1018.1	10.0	0.00				22:53
SA 01	6	19	18	89	67	48	80	5	.	1018.3	10.0	0.00		93	88	23:53
SA 01	6	19	19	85	70	61	.	0	.	1018.6	10.0	0.00				00:53
SA 01	6	19	20	80	71	74	.	0	.	1018.9	10.0	0.00				01:53
SA 01	6	19	21	77	70	79	70	3	.	1019.3	10.0	0.00				02:53
SA 01	6	19	22	80	69	69	140	5	.	1020.1	10.0	0.00				03:53
SA 01	6	19	23	77	70	79	150	3	.	1020.1	10.0	0.00				04:53
SA 01	6	19	24	75	71	87	.	0	.	1020.1	10.0	0.00		89	74	05:53
2001	6	19						2.0	.			0.00		93	68	(23)

Station: MONROE MLU AP
SRCC Preliminary Surface Airways (SA) Observations

(Date/Time)						-- WIND ---					Accum	Rn	6 Hour		Obs
YY	MM	DD	HH	Tem	Td	RH	Dir	Spd	Gst	SLP	Vis	Prcp	Cd	TMx	TMn	Time
---	CST	---		F	F	%	deg	kt	kt	mb	mi	in		F	F	(UTC)
SA 01	6	20	1	72	70	93	.	0	.	1020.1	9.0	0.00				06:53
SA 01	6	20	2	71	70	97	.	0	.	1019.8	8.0	0.00				07:53
SA 01	6	20	3	71	70	97	.	0	.	1019.9	7.0	0.00				08:53
SA 01	6	20	4	70	69	97	.	0	.	1020.6	7.0	0.00				09:53
SA 01	6	20	5	70	69	97	.	0	.	1020.7	5.0	0.00				10:53
SA 01	6	20	6	71	70	97	.	0	.	1021.3	4.0	0.00		75	69	11:53
SA 01	6	20	7	74	72	94	190	4	.	1021.8	4.0	0.00				12:53
SA 01	6	20	8	77	72	85	.	0	.	1022.3	9.0	0.00				13:53
SA 01	6	20	9	81	73	77	.	0	.	1022.1	9.0	0.00				14:53
SA 01	6	20	10	84	72	67	.	3	.	1022.0	10.0	0.00				15:53
SA 01	6	20	11	86	71	61	.	0	.	1021.7	10.0	0.00				16:53
SA 01	6	20	12	89	70	54	.	0	.	1021.2	10.0	0.00		89	71	17:53
SA 01	6	20	13	90	70	52	20	8	.	1020.3	10.0	0.00				18:53
SA 01	6	20	14	91	69	49	10	9	.	1019.6	10.0	0.00				19:53
SA 01	6	20	15	90	70	52	.	4	.	1018.9	10.0	0.00				20:53
SA 01	6	20	16	91	70	50	360	5	.	1018.8	10.0	0.00				21:53
SA 01	6	20	17	89	69	52	.	0	.	1018.7	10.0	0.00				22:53
SA 01	6	20	18	80	71	74	180	9	.	1019.3	10.0	0.00		92	80	23:53
SA 01	6	20	19	77	71	82	.	0	.	1019.1	10.0	0.00				00:53
SA 01	6	20	20	75	71	87	180	4	.	1018.8	10.0	0.00				01:53
SA 01	6	20	21	73	72	97	220	5	.	.	2.0	0.00				02:53
SA 01	6	20	22	73	71	93	180	4	.	1019.5	10.0	0.00				03:53
SA 01	6	20	23	73	70	90	260	4	.	1019.6	1.8	0.00				04:53
SA 01	6	20	24	72	70	93	160	5	.	1019.3	5.0	0.00		80	72	05:53
2001	6	20						2.7	.			0.00		92	69	(24)

Station: MONROE MLU AP
SRCC Preliminary Surface Airways (SA) Observations

(Date/Time)					-- WIND ---					Accum	Rn	6 Hour		Obs
YY	MM	DD	HH	Tem	Td	RH	Dir	Spd	Gst	SLP	Vis	Prcp	Cd TMx	TMn	Time
---	CST	---		F	F	%	deg	kt	kt	mb	mi	in	F	F	(UTC)
SA 01	6	21	1	71	70	97	.	0	.	1019.0	6.0	0.00			06:53
SA 01	6	21	2	70	70	100	170	3	.	1019.1	3.0	0.00			07:53
SA 01	6	21	3	71	70	97	.	0	.	1019.3	7.0	0.00			08:53
SA 01	6	21	4	70	70	100	200	3	.	1019.4	3.0	0.00			09:53
SA 01	6	21	5	72	72	100	170	4	.	.	2.0	0.00			10:53
SA 01	6	21	6	72	71	97	180	3	.	1019.4	2.5	0.00	73	70	11:53
SA 01	6	21	7	76	73	90	240	6	.	1019.6	7.0	0.00			12:53
SA 01	6	21	8	80	73	79	290	8	.	1020.4	10.0	0.00			13:53
SA 01	6	21	9	82	73	74	280	10	.	1020.7	10.0	0.00			14:53
SA 01	6	21	10	84	74	72	250	8	.	1020.1	10.0	0.00			15:53
SA 01	6	21	11	87	72	61	250	11	.	1019.4	10.0	0.00			16:53
SA 01	6	21	12	87	72	61	270	9	.	1018.3	10.0	0.00	89	72	17:53
SA 01	6	21	13	89	71	55	300	8	.	1017.9	10.0	0.00			18:53
SA 01	6	21	14	88	71	57	270	9	.	1017.0	10.0	0.00			19:53
SA 01	6	21	15	89	73	59	240	9	.	1016.5	10.0	0.00			20:53
SA 01	6	21	16	89	71	55	250	8	.	1015.5	10.0	0.00			21:53
SA 01	6	21	17	88	71	57	220	9	.	1014.5	10.0	0.00			22:53
SA 01	6	21	18	86	72	63	220	9	.	1014.9	10.0	0.00	91	86	23:53
SA 01	6	21	19	84	72	67	210	4	.	1015.4	10.0	0.00			00:53
SA 01	6	21	20	70	69	97	330	10	.	1017.1	6.0	0.51			01:53
SA 01	6	21	21	70	68	93	20	9	.	1018.0	10.0	0.18			02:53
SA 01	6	21	22	69	69	100	170	3	.	1017.7	9.0	0.03			03:53
SA 01	6	21	23	70	69	97	.	0	.	1017.2	4.0	0.01			04:53
SA 01	6	21	24	70	69	97	.	0	.	1016.7	6.0	0.00	86	69	05:53
2001	6	21						6.0	.			0.73	91	69	(24)

Bayou Desiard (including Lake Bartholemew) Watershed TMDL
For Biochemical Oxygen Demanding Substances and Nutrients
Subsegment 080701
Originated: January 14, 2002

Dates	MONTH	DAY	YEAR	Water Pumped Into Bayou Desiard (mgd)	Water Pumped From Bayou Desiard to WTP (mgd)	
6/02/95	6	2	1995	36.0	12.2	
6/03/95	6	3	1995	36.0	12.1	
6/04/95	6	4	1995	36.0	12.1	
6/01/96	6	1	1996	36.0	13.0	
6/02/96	6	2	1996	36.0	12.9	
6/03/96	6	3	1996	36.0	12.8	
6/04/96	6	4	1996	36.0	11.2	
6/05/96	6	5	1996	36.0	12.7	
6/06/96	6	6	1996	36.0	13.7	
6/07/96	6	7	1996	36.0	12.2	
6/08/96	6	8	1996	36.0	11.9	
6/01/98	6	1	1998	36.0	16.3	
6/02/98	6	2	1998	36.0	18.4	
6/03/98	6	3	1998	36.0	15.4	
6/04/98	6	4	1998	36.0	16.0	
6/05/98	6	5	1998	36.0	12.4	
6/06/98	6	6	1998	36.0	13.1	
6/07/98	6	7	1998	36.0	12.6	
6/08/98	6	8	1998	36.0	12.7	
6/09/98	6	9	1998	36.0	15.5	
6/10/98	6	10	1998	36.0	16.2	
6/11/98	6	11	1998	36.0	15.1	
6/12/98	6	12	1998	36.0	13.6	
6/13/98	6	13	1998	36.0	15.9	
6/14/98	6	14	1998	36.0	15.2	
6/15/98	6	15	1998	36.0	15.8	
6/16/98	6	16	1998	36.0	14.2	
6/17/98	6	17	1998	36.0	14.9	
6/18/98	6	18	1998	36.0	15.4	
6/19/98	6	19	1998	36.0	16.4	
6/20/98	6	20	1998	36.0	16.9	
6/21/98	6	21	1998	36.0	15.8	
6/22/98	6	22	1998	36.0	16.8	
6/23/98	6	23	1998	36.0	17.1	
6/24/98	6	24	1998	36.0	17.5	
6/25/98	6	25	1998	36.0	18.8	
6/26/98	6	26	1998	36.0	14.7	
6/27/98	6	27	1998	36.0	16.7	
6/28/98	6	28	1998	36.0	16.8	
6/29/98	6	29	1998	36.0	16.9	
6/30/98	6	30	1998	36.0	17.6	
6/07/99	6	7	1999	36.0	14.1	
6/08/99	6	8	1999	36.0	15.6	
6/09/99	6	9	1999	36.0	10.0	
6/10/99	6	10	1999	36.0	15.0	
6/11/99	6	11	1999	36.0	13.8	
6/12/99	6	12	1999	36.0	12.3	
6/13/99	6	13	1999	36.0	12.6	
NUMERICAL AVERAGE				36.0	14.6	22.58942 cfs

BAYOU DESIARD SURVEY GUAGE READINGS

BAYOU DESIARD AT LA HWY 165

	DATE	TIME (hrs)	ADJUSTED TIME	DATE-TIME	UNCORRECTED USGS WIRE WEIGHT GAUGE READING	RATE OF CHANGE OF GAUGE READING FROM TIME(1) TO TIME(2) (ft.day)	RATE OF CHANGE OF GAUGE READING FROM TIME(2) TO TIME(3) (ft/day)	RATE OF CHANGE OF GAUGE READING FROM TIME(1) TO TIME(3) (ft/day)
	A	B	C	D	E	F=(E1-E2)/(D1-D2)	G=(E2-E3)/(D2-D3)	H=(E1-E3)/(D1-D3)
1	06/19/01	1650	16:50:00	6/19/01 4:50 PM	2.00	0.00000	0.00000	0.00000
2	06/20/2001	815	8:15:00	6/20/01 8:15 AM	2.00			
3	06/21/2001	850	8:50:00	6/21/01 8:50 AM	2.00			

BLACK BAYOU LAKE (Gauge board reads correctly)

	DATE	TIME (hrs)	ADJUSTED TIME	DATE-TIME	UNCORRECTED USGS WIRE WEIGHT GAUGE READING	RATE OF CHANGE OF GAUGE READING FROM TIME(1) TO TIME(2) (ft.day)	RATE OF CHANGE OF GAUGE READING FROM TIME(2) TO TIME(3) (ft/day)	RATE OF CHANGE OF GAUGE READING FROM TIME(1) TO TIME(3) (ft/day)
	A	B	C	D	E	F=(E1-E2)/(D1-D2)	G=(E2-E3)/(D2-D3)	H=(E1-E3)/(D1-D3)
1	06/19/01			6/19/01 12:00 AM	Gate Locked	#VALUE!	0.03415	#VALUE!
2	06/20/2001	1025	10:25:00	6/20/01 10:25 AM	3.36			
3	06/21/2001	730	7:30:00	6/21/01 7:30 AM	3.33			

HANNAH'S RUN EAST (Site congested with weeds)

	DATE	TIME (hrs)	ADJUSTED TIME	DATE-TIME	UNCORRECTED USGS WIRE WEIGHT GAUGE READING	RATE OF CHANGE OF GAUGE READING FROM TIME(1) TO TIME(2) (ft.day)	RATE OF CHANGE OF GAUGE READING FROM TIME(2) TO TIME(3) (ft/day)	RATE OF CHANGE OF GAUGE READING FROM TIME(1) TO TIME(3) (ft/day)
	A	B	C	D	E	F=(E1-E2)/(D1-D2)	G=(E2-E3)/(D2-D3)	H=(E1-E3)/(D1-D3)
1	06/19/01			6/19/01 12:00 AM		0.00000	0.00000	0.00000
2	06/20/2001			6/20/01 12:00 AM				
3	06/21/2001			6/21/01 12:00 AM				

HANNAH'S RUN WEST

	DATE	TIME (hrs)	ADJUSTED TIME	DATE-TIME	UNCORRECTED USGS WIRE WEIGHT GAUGE READING	RATE OF CHANGE OF GAUGE READING FROM TIME(1) TO TIME(2) (ft.day)	RATE OF CHANGE OF GAUGE READING FROM TIME(2) TO TIME(3) (ft/day)	RATE OF CHANGE OF GAUGE READING FROM TIME(1) TO TIME(3) (ft/day)
	A	B	C	D	H	F=(E1-E2)/(D1-D2)	G=(E2-E3)/(D2-D3)	H=(E1-E3)/(D1-D3)
1	06/19/01	1615	16:15:00	6/19/01 4:15 PM	3.41	0.05189	0.00000	0.02462
2	06/20/2001	1045	10:45:00	6/20/01 10:45 AM	3.37			
3	06/21/2001	715	7:15:00	6/21/01 7:15 AM	3.37			

FINKS HIDEAWAY ROAD NORTH

	DATE	TIME (hrs)	ADJUSTED TIME	DATE-TIME	UNCORRECTED USGS WIRE WEIGHT GAUGE READING	RATE OF CHANGE OF GAUGE READING FROM TIME(1) TO TIME(2) (ft.day)	RATE OF CHANGE OF GAUGE READING FROM TIME(2) TO TIME(3) (ft/day)	RATE OF CHANGE OF GAUGE READING FROM TIME(1) TO TIME(3) (ft/day)
	A	B	C	D	E	F=(E1-E2)/(D1-D2)	G=(E2-E3)/(D2-D3)	H=(E1-E3)/(D1-D3)
1	06/19/01	1530	15:30:00	6/19/01 3:30 PM	19.21	0.04902	0.03119	0.03938
2	06/20/2001	1105	11:05:00	6/20/01 11:05 AM	19.17			
3	06/21/2001	1010	10:10:00	6/21/01 10:10 AM	19.14			

FINKS HIDEAWAY ROAD SOUTH

	DATE	TIME (hrs)	ADJUSTED TIME	DATE-TIME	UNCORRECTED USGS WIRE WEIGHT GAUGE READING	RATE OF CHANGE OF GAUGE READING FROM TIME(1) TO TIME(2) (ft.day)	RATE OF CHANGE OF GAUGE READING FROM TIME(2) TO TIME(3) (ft/day)	RATE OF CHANGE OF GAUGE READING FROM TIME(1) TO TIME(3) (ft/day)
	A	B	C	D	E	F=(E1-E2)/(D1-D2)	G=(E2-E3)/(D2-D3)	H=(E1-E3)/(D1-D3)
1	06/19/01	1430	14:30:00	6/19/01 2:30 PM	19.11	0.04608	0.05217	0.04928
2	06/20/2001	1120	11:20:00	6/20/01 11:20 AM	19.07			
3	06/21/2001	1020	10:20:00	6/21/01 10:20 AM	19.02			

MIDWAY DAM AT INABNET ROAD

	DATE	TIME (hrs)	ADJUSTED TIME	DATE-TIME	UNCORRECTED USGS WIRE WEIGHT GAUGE READING	RATE OF CHANGE OF GAUGE READING FROM TIME(1) TO TIME(2) (ft.day)	RATE OF CHANGE OF GAUGE READING FROM TIME(2) TO TIME(3) (ft/day)	RATE OF CHANGE OF GAUGE READING FROM TIME(1) TO TIME(3) (ft/day)
	A	B	C	D	E	F=(E1-E2)/(D1-D2)	G=(E2-E3)/(D2-D3)	H=(E1-E3)/(D1-D3)
1	06/19/01	1350	13:50:00	6/19/01 1:50 PM	17.41	0.04159	0.03323	0.03754
2	06/20/2001	1255	12:55:00	6/20/01 12:55 PM	17.37			
3	06/21/2001	1035	10:35:00	6/21/01 10:35 AM	17.34			

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients

Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	1.720	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.720	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
2	BDS 2 (outfall of L. Bartholemew pump) - BDS 3 (midpoint of L. Bartholemew right fork)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	61.720	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	3.410	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
3	BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	89.150	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	3.620	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
4	BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	114.290	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	3.340	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
5	BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	123.140	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	3.900	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
6	BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	114.290	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	3.340	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients

7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	6.000	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.000	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
8	Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S. 165 Control Structure Outlet	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
9	Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	42.060	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.660	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
10	BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at LA Hwy. 134)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	21.330	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.830	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
11	BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	21.330	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.830	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
12	Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	76.200	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.310	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
13	BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	76.200	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.310	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients

14	Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	1.720	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.720	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
15	Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	17.680	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.420	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
16	Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	1.720	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.720	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
17	Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	17.680	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.420	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
18	BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	17.680	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.420	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	90.060	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.430	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients

20	BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	90.060	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.430	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
22	Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd.	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	94.550	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.345	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
23	Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd.	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
24	Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	99.040	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.260	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
25	BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	99.040	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.260	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients

26	BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	11.580	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.470	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
27	Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
28	Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	117.340	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.660	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
29	BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	117.340	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.660	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
30	BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	124.960	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	4.850	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	124.960	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	4.850	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 10, Dispersive Hydraulic Coefficients

Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	0.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
2	BDS 2 (outfall of L. Bartholemew pump) - BDS 3 (midpoint of L. Bartholemew right fork)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
3	BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
4	BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
5	BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
6	BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 10, Dispersive Hydraulic Coefficients

7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
8	Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S. 165 Control Structure Outlet	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
9	Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
10	BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at LA Hwy. 134)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
11	BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	Tidal Range	Fraction		
		Dispersion "A"	Unitless	0.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
12	Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	4.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 10, Dispersive Hydraulic Coefficients

13	BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	Tidal Range	Fraction		
		Dispersion "A"	Unitless	4.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
14	Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
15	Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	Tidal Range	Fraction		
		Dispersion "A"	Unitless	4.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
16	Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
17	Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	4.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
18	BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	Tidal Range	Fraction		
		Dispersion "A"	Unitless	4.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 10, Dispersive Hydraulic Coefficients

19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	4.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
20	BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	4.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
22	Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd.	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
23	Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd.	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
24	Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
25	BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 10, Dispersive Hydraulic Coefficients

26	BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
27	Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
28	Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
29	BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
30	BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
1	Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	Temperature	^{o}Celcius	28.030	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	2.930	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	1.3	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.0	Based upon calibration and BPJ
2	BDS 2 (outfall of L. Bartholemew pump) BDS 3 (midpoint of L. Bartholemew right fork)	Temperature	^{o}Celcius	29.960	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	4.870	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	20.50	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
3	BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	Temperature	^{o}Celcius	29.960	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	4.870	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	22.40	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
4	BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	Temperature	^{o}Celcius	29.960	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	4.870	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	36.40	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
5	BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	Temperature	^{o}Celcius	31.230	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.430	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	42.40	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
6	BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	Temperature	^{o}Celcius	31.230	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.430	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	42.40	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	Temperature	^{o}Celcius	30.600	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	7.000	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	44.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
8	Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S. 165 Control Structure Outlet	Temperature	^{o}Celcius	29.400	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	5.000	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	46.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
9	Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	Temperature	^{o}Celcius	28.490	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	3.000	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	48.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
10	BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at LA Hwy. 134)	Temperature	^{o}Celcius	27.000	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	1.700	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	75.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
11	BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	Temperature	^{o}Celcius	26.350	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	0.390	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	75.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
12	Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	Temperature	^{o}Celcius	29.320	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	0.600	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	24.60	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
13	BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	Temperature	^{o}Celcius	29.320	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	1.000	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	24.60	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
14	Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	Temperature	^{o}Celcius	28.890	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	1.340	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	17.90	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
15	Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	Temperature	^{o}Celcius	29.400	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	4.200	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	17.90	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
16	Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	Temperature	^{o}Celcius	30.540	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	4.200	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	17.90	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
17	Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	Temperature	^{o}Celcius	30.540	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	5.500	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	17.90	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
18	BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	Temperature	^{o}Celcius	30.000	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.950	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	13.60	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	Temperature	^{o}Celcius	30.000	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	3.000	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	13.60	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
20	BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	Temperature	^{o}Celcius	30.000	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	2.870	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	16.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Temperature	^{o}Celcius	29.660	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	5.200	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	19.20	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
22	Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd.	Temperature	^{o}Celcius	30.000	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	7.540	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	31.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
23	Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd.	Temperature	^{o}Celcius	30.400	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	7.750	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	43.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
24	Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure)	Temperature	^{o}Celcius	30.800	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.250	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	57.20	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
25	BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	Temperature	^{o}Celcius	31.100	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.500	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	52.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
26	BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	Temperature	^{o}Celcius	31.340	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.500	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	48.60	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
27	Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	Temperature	^{o}Celcius	31.000	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.250	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	40.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
28	Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	Temperature	^{o}Celcius	30.750	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	7.940	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	32.60	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
29	BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	Temperature	^{o}Celcius	30.750	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	7.940	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	30.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
30	BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Temperature	^{o}Celcius	30.900	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	7.750	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	20.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Temperature	^{o}Celcius	30.980	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		Salinity	ppt		
		Dissolved O_2	mg/l	7.750	Based on 24 hour average temperature values obtained from continuous monitor data for the Bayou Desiard survey (7:00 am 6/20/01 - 7:00 am 6/21/01)
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	13.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.

Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	K_2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.140	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
2	BDS 2 (outfall of L. Bartholemew pump) - BDS 3 (midpoint of L. Bartholemew right fork)	K_2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_{+C139} "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.200	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
3	BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	K2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.190	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
4	BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	K2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.190	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
5	BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	K_2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.150	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.

6	BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	K2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.150	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	9.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.190	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	1.00	
		Anaerobic BOD decay	1/day		
8	Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S.	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	9.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.190	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	1.00	
		Anaerobic BOD decay	1/day		
9	Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	K_2 option	Unitless	20.00	Minimum K_2 equation
		K_2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	9.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.200	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	1.00	
		Anaerobic BOD decay	1/day		
10	BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at LA Hwy. 134)	K2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K2 "A"	Unitless	0.01	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	2.50	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.170	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	1.00	
		Anaerobic BOD decay	1/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.

11	BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	K2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K2 "A"	Unitless	0.01	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.120	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	1.00	
		Anaerobic BOD decay	1/day		
12	Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	K_2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	2.50	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.080	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
13	BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	K_2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_{-C139} "C"	Unitless		
		Background SOD	g/m^2-day	2.50	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.080	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction		
		Anaerobic BOD decay	1/day		
14	Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.080	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
15	Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.080	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.

16	Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	K_2 option	Unitless	20.00	Minimum K_2 equation
		K_2 "A"	Unitless	7.00	Metric a coefficient when using the minimum K2 equation
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.100	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
17	Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.110	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
18	BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.110	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	K2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	2.50	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.120	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
20	BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	K_2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.130	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.

21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.140	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
22	Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd.	K2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.160	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
23	Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd.	K_2 option	Unitless	20.00	Minimum K_2 equation
		K_2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K_2 "B"	Unitless		
		K_{+C139} "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.180	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
24	Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure)	K2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.230	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
25	BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	K2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.160	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.

26	BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	K_2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.080	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
27	Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.100	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
28	Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	K2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.120	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
29	BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	K2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.120	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
30	BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	K_2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.120	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.

31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	K2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the ripariar zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.100	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	Organic nitrogen decay rate	1/day	0.20	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
2	BDS 2 (outfall of L. Bartholemew pump) - BDS 3 (midpoint of L. Bartholemew right fork)	Organic nitrogen decay rate	1/day	0.09	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
3	BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	Organic nitrogen decay rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
4	BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	Organic nitrogen decay rate	1/day	0.09	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
5	BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	Organic nitrogen decay rate	1/day	0.12	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
6	BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	Organic nitrogen decay rate	1/day	0.12	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	Organic nitrogen decay rate	1/day	0.10	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	1.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
8	Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S. 165 Control Structure Outlet	Organic nitrogen decay rate	1/day	0.10	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	1.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
9	Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	Organic nitrogen decay rate	1/day	0.20	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	1.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
10	BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at LA Hwy. 134)	Organic nitrogen decay rate	1/day	0.20	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	1.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	1.00	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
11	BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	Organic nitrogen decay rate	1/day	0.20	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	1.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	1.00	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
12	Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	Organic nitrogen decay rate	1/day	0.06	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
13	BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	Organic nitrogen decay rate	1/day	0.06	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
14	Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	Organic nitrogen decay rate	1/day	0.11	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
15	Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	Organic nitrogen decay rate	1/day	0.11	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
16	Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	Organic nitrogen decay rate	1/day	0.15	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
17	Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	Organic nitrogen decay rate	1/day	0.18	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
18	BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	Organic nitrogen decay rate	1/day	0.18	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	Organic nitrogen decay rate	1/day	0.07	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
20	BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	Organic nitrogen decay rate	1/day	0.09	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Organic nitrogen decay rate	1/day	0.08	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
22	Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd.	Organic nitrogen decay rate	1/day	0.07	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
23	Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd.	Organic nitrogen decay rate	1/day	0.06	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
24	Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure)	Organic nitrogen decay rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
25	BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	Organic nitrogen decay rate	1/day	0.07	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
26	BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	Organic nitrogen decay rate	1/day	0.15	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
27	Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	Organic nitrogen decay rate	1/day	0.15	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
28	Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	Organic nitrogen decay rate	1/day	0.25	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
29	BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	Organic nitrogen decay rate	1/day	0.25	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.80	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
30	BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Organic nitrogen decay rate	1/day	0.15	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.80	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Organic nitrogen decay rate	1/day	0.07	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Calibration Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.008	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
2	BDS 2 (outfall of L. Bartholemew pump) - BDS 3 (midpoint of L. Bartholemew right fork)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.025	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Calibration Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
3	BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.035	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
4	BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.015	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Calibration Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
5	BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.015	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
6	BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.015	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Calibration Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.015	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
8	Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S. 165 Control Structure Outlet	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.015	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Calibration Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
9	Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.018	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
10	BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at LA Hwy. 134)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.018	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Calibration Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
11	BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.018	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
12	Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.014	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Calibration Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
13	BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.014	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
14	Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.012	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Calibration Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
15	Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.012	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
16	Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.018	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Calibration Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
17	Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.024	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
18	BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.024	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Calibration Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.012	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
20	BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.012	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Calibration Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.02	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
22	Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd.	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.029	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Calibration Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
23	Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd.	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.038	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
24	Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.046	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Calibration Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
25	BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.02	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
26	BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.007	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Calibration Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
27	Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.007	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
28	Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.034	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Calibration Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
29	BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.034	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
30	BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.027	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Calibration Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.037	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	BOD	kg/day	5.00	Based on calibration
		Org.-N	kg/day	0.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	50.00	Based on calibration
		Dissolved O_2	kg/day		
2	BDS 2 (outfall of L. Bartholemew pump) - BDS 3 (midpoint of L. Bartholemew right fork)	BOD	kg/day	2500.00	Based on calibration
		Org.-N	kg/day	350.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	350.00	Based on calibration
		Dissolved O_2	kg/day		
3	BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	BOD	kg/day	1400.00	Based on calibration
		Org.-N	kg/day	150.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	300.00	Based on calibration
		Dissolved O_2	kg/day		
4	BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	BOD	kg/day	500.00	Based on calibration
		Org.-N	kg/day	35.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	325.00	Based on calibration
		Dissolved O_2	kg/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

5	BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	BOD	kg/day	1800.00	Based on calibration
		Org.-N	kg/day	1000.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	1150.00	Based on calibration
		Dissolved O_2	kg/day		
6	BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	BOD	kg/day	1600.00	Based on calibration
		Org.-N	kg/day	250.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	1150.00	Based on calibration
		Dissolved O_2	kg/day		
7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	BOD	kg/day	0.00	Based on calibration
		Org.-N	kg/day	75.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration
		Dissolved O_2	kg/day		
8	Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S. 165 Control Structure Outlet	BOD	kg/day	0.00	Based on calibration
		Org.-N	kg/day	0.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration
		Dissolved O_2	kg/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

9	Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	BOD	kg/day	0.00	Based on calibration
		Org.-N	kg/day	0.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration
		Dissolved O_2	kg/day		
10	BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at LA Hwy. 134)	BOD	kg/day	470.00	Based on calibration
		Org.-N	kg/day	150.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	200.00	Based on calibration
		Dissolved O_2	kg/day		
11	BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	BOD	kg/day	470.00	Based on calibration
		Org.-N	kg/day	150.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	200.00	Based on calibration
		Dissolved O_2	kg/day		
12	Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	BOD	kg/day	800.00	Based on calibration
		Org.-N	kg/day	150.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	400.00	Based on calibration
		Dissolved O_2	kg/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

13	BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	BOD	kg/day	500.00	Based on calibration
		Org.-N	kg/day	50.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	450.00	Based on calibration
		Dissolved O_2	kg/day		
14	Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	BOD	kg/day	0.00	Based on calibration
		Org.-N	kg/day	0.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration
		Dissolved O_2	kg/day	850.00	Based on calibration and field data that showed an increase in the dissolved oxygen concentrations between the immediate upstream and downstream reaches of the weir that controls the flow from Black Bayou Lake
15	Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	BOD	kg/day	0.00	Based on calibration
		Org.-N	kg/day	5.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration
		Dissolved O_2	kg/day		
16	Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	BOD	kg/day	0.00	Based on calibration
		Org.-N	kg/day	0.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration
		Dissolved O_2	kg/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

17	Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	BOD	kg/day	0.00	Based on calibration
		Org.-N	kg/day	5.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration
		Dissolved O_2	kg/day		
18	BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	BOD	kg/day	0.00	Based on calibration
		Org.-N	kg/day	5.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration
		Dissolved O_2	kg/day		
19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	BOD	kg/day	800.00	Based on calibration
		Org.-N	kg/day	15.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	700.00	Based on calibration
		Dissolved O_2	kg/day		
20	BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	BOD	kg/day	2400.00	Based on calibration
		Org.-N	kg/day	250.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	700.00	Based on calibration
		Dissolved O_2	kg/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	BOD	kg/day	0.00	Based on calibration
		Org.-N	kg/day	0.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration
		Dissolved O_2	kg/day		
22	Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd.	BOD	kg/day	100.00	Based on calibration
		Org.-N	kg/day	25.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	150.00	Based on calibration
		Dissolved O_2	kg/day		
23	Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd.	BOD	kg/day	0.00	Based on calibration
		Org.-N	kg/day	0.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration
		Dissolved O_2	kg/day		
24	Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure)	BOD	kg/day	2400.00	Based on calibration
		Org.-N	kg/day	100.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	550.00	Based on calibration
		Dissolved O_2	kg/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

25	BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	BOD	kg/day	2650.00	Based on calibration
		Org.-N	kg/day	100.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	550.00	Based on calibration
		Dissolved O_2	kg/day		
26	BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	BOD	kg/day	750.00	Based on calibration
		Org.-N	kg/day	100.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	500.00	Based on calibration
		Dissolved O_2	kg/day		
27	Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	BOD	kg/day	0.00	Based on calibration
		Org.-N	kg/day	0.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration
		Dissolved O_2	kg/day		
28	Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	BOD	kg/day	1900.00	Based on calibration
		Org.-N	kg/day	250.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	400.00	Based on calibration
		Dissolved O_2	kg/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

29	BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	BOD	kg/day	1900.00	Based on calibration
		Org.-N	kg/day	500.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	600.00	Based on calibration
		Dissolved O_2	kg/day		
30	BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	BOD	kg/day	2400.00	Based on calibration
		Org.-N	kg/day	450.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	600.00	Based on calibration
		Dissolved O_2	kg/day		
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	BOD	kg/day	10.00	Based on calibration
		Org.-N	kg/day	10.00	Based on calibration
		Coliform	#/day		
		Nonconservative matl.	kg/day	10.00	Based on calibration
		Dissolved O_2	kg/day		

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 20, Headwater Data for Flow, Temperature, Salinity, and Conservatives

Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Lake Bartholemew (East end near the pumping station)	Element # of input	#	1	Bayou Desiard survey-Lake Bartholemew near the pumping station (Site BDS2)
		Headwater name		Lake Bartholemew (East end near the pumping station)	Bayou Desiard survey-Lake Bartholemew near the pumping station (Site BDS2)
		Headwater flow	cms	0.10278	Flow leaving Lake Bartholemew was estimated estimated based upon the rate at which the water surface elevation of Lake Bartholemew was falling and the surface area of the lake. The resulting flow was then split between the eastern and western ends of Lake Bartholemew.
		Temperature	^{o}Celcius	29.96	Data obtained from Site BDS3 continuous monitor data (24 hr. average from 7:00 am 6/20/01-7:00 am (6/61/01)
		Salinity	ppt		
		Conservative Matl. I	mg/l	9.9	Data obtained from Site BDS2 field data
		Conservative Matl. II	mg/l	3	Data obtained from Site BDS2 field data
5	Lake Bartholemew (west end near the COE overflow control structure)	Element # of input	#	24	Bayou Desiard survey-Lake Bartholemew near the COE overflow control structure (Site BDS5
		Headwater name		Lake Bartholemew (west end near the COE overflow control structure)	Bayou Desiard survey-Lake Bartholemew near the COE overflow control structure (Site BDS5)
		Headwater flow	cms	0.10278	Flow leaving Lake Bartholemew was estimated estimated based upon the rate at which the water surface elevation of Lake Bartholemew was falling and the surface area of the lake. The resulting flow was then split between the eastern and western ends of Lake Bartholemew.
		Temperature	^{o}Celcius	31.23	Data obtained from Site BDS5 continuous monitor data (24 hr. average from 7:00 am 6/20/01-7:00 am (6/61/01)
		Salinity	ppt		
		Conservative Matl. I	mg/l	8.9	Data obtained from Site BDS5 field data
		Conservative Matl. II	mg/l	3.2	Data obtained from Site BDS5 field data

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 20, Headwater Data for Flow, Temperature, Salinity, and Conservatives

14	Hannah's Run (East)	Element # of input	#	94	Bayou Desiard survey-Hannah's Run (East) Control Gates (Site BDS20)
		Headwater name		Hannah's Run (East)	Bayou Desiard survey-Hannah's Run (East) Control Gates (Site BDS20)
		Headwater flow	cms	1.45612	Headwater flow from Black Bayou Lake estimated based upon the rate at which the water surface elevation in Black Bayou Lake was falling and the surface area of Black Bayou Lake
		Temperature	^{o}Celcius	28.89	Data obtained from Site BDS20 continuous monitor data (24 hr. average from 7:00 am 6/20/01-7:00 am (6/61/01)
		Salinity	ppt		
		Conservative Matl. I	mg/l	3.5	Data obtained from Site BDS20 field data
		Conservative Matl. II	mg/l	0	Data obtained from Site BDS20 field data

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 21, Headwater Data for DO, BOD, and Nitrogen

Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Lake Bartholemew (East end near the pumping station)	Element # of input		1	Bayou Desiard survey-Lake Bartholemew near the pumping station (Site BDS2)
		Dissolved O_2	mg/l	5.21	Data obtained from Site BDS2 field data
		BOD	mg/l	3.32	Data obtained from Site BDS2 BOD data (the BOD parameter was used to simulate CBOD1)
		Org.- N	mg/l	1.49	Data obtained from Site BDS2 BOD data (the organic nitrogen parameter was used to simulate ultimate NBOD
		NH_3-N	mg/l	0	Data obtained from Site BDS1 data
		NO_{2+3}-N	mg/l	0	Data obtained from Site BDS1 data
5	Lake Bartholemew (west end near the COE overflow control structure)	Element # of input		24	Bayou Desiard survey-Lake Bartholemew near the COE overflow control structure (Site BDS5
		Dissolved O_2	mg/l	8.43	Data obtained from Cypress Creek at Union Church Rd. (Sit DR19)
		BOD	mg/l	7.08	Data obtained from Site BDS5 BOD data (the BOD parameter was used to simulate CBOD1)
		Org.- N	mg/l	1.68	Data obtained from Site BDS5 BOD data (the organic nitrogen parameter was used to simulate ultimate NBOD
		NH_3-N	mg/l	0	Data obtained from Site BDS5 data
		NO_{2+3}-N	mg/l	0	Data obtained from Site BDS5 data
14	Hannah's Run (East)	Element # of input		94	Bayou Desiard survey-Hannah's Run (East) Control Gates (Site BDS20)
		Dissolved O_2	mg/l	1.34	Data obtained from Cypress Creek at Union Church Rd. (Sit DR19)
		BOD	mg/l	16.54	Data obtained from Site BDS20 BOD data (the BOD parameter was used to simulate CBOD1)
		Org.- N	mg/l	0.92	Data obtained from Site BDS20 BOD data (the organic nitrogen parameter was used to simulate ultimate NBOD)
		NH_3-N	mg/l	0.17	Data obtained from Site BDS20 data
		NO_{2+3}-N	mg/l	0	Data obtained from Site BDS20 data

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 22, Headwater Data for Phosphorus, Chlorophyll, Coliform, and Nonconservatives

Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Lake Bartholemew (East end near the pumping station)	Element # of input		1	Bayou Desiard survey-Lake Bartholemew near the pumping station (Site BDS2)
		Phosphorus	mg/L		
		Chlorophyll a	ug/L	1.3	Based on Bayou Desiard survey data
		Coliform	#/100 mL		
		Nonconservative Material	mg/l	8.23	Data obtained from Site BDS2 BOD data (the NCM parameter was used to simulate $CBOD2_U$)
5	Lake Bartholemew (west end near the COE overflow control structure)	Element # of input		24	Bayou Desiard survey-Lake Bartholemew near the COE overflow control structure (Site BDS5)
		Phosphorus	mg/L		
		Chlorophyll a	ug/L	42.4	Based on Bayou Desiard survey data
		Coliform	#/100 mL		
		Nonconservative Material	mg/l	6.66	Data obtained from Site BDS5 BOD data (the NCM parameter was used to simulate $CBOD2_U$)
14	Hannah's Run (East)	Element # of input		94	Bayou Desiard survey-Hannah's Run (East) Control Gates (Site BDS20)
		Phosphorus	mg/L		
		Chlorophyll a	ug/L	17.9	Based on Bayou Desiard survey data
		Coliform	#/100 mL		
		Nonconservative Material	mg/l	7.29	Data obtained from Site BDS20 BOD data (the NCM parameter was used to simulate $CBOD2_U$)

Bayou Desiard Calibration Water Quality Model Input Description					
DATA TYPE 23, Junction Data					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	Computational element # of the element immediately downstream of the junction		44	Based upon stream layout during the development of the calibrated model
		Computational element # of the element immediately upstream of the junction		23	Based upon stream layout during the development of the calibrated model
		Junction name		Inlet Canal to the Bayou Desiard at U.S. 165 Control Structure	Based upon stream layout during the development of the calibrated model
19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	Computational element # of the element immediately downstream of the junction		99	Based upon stream layout during the development of the calibrated model
		Computational element # of the element immediately upstream of the junction		93	Based upon stream layout during the development of the calibrated model
		Junction name		Hannah's Run Junction With Bayou Desiard	Based upon stream layout during the development of the calibrated model

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 24, Wasteload Data for Flow, Temperature, Salinity, and Conservatives

Reach #	NAME	Parameter	Units	Value	Source/Justification
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Element # of input	#	128	Based upon stream layout during the development of the calibrated model
		Wasteload description		Bayou Chauvin Outlet	Based upon stream layout during the development of the calibrated model
		Headwater flow	cms	-1.05717	Based upon chloride data from the survay, chloride balance, and flow balance, and field observations of flow seepage through the stop-log weir into L-11 Canal
		Temperature	^{o}Celcius	NA	Temperature of the outgoing flow is calculated by the model
		Salinity	ppt		
		Conservative Matl. I	mg/l	NA	Chloride concentration in the outgoing flow is calculated by the model
		Conservative Matl. II	mg/l	NA	Sulfate concentration in the outgoing flow is calculated by the model
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Element # of input	#	179	Based upon stream layout during the development of the calibrated model
		Wasteload description		Monroe WTP Intake	Based upon stream layout during the development of the calibrated model
		Headwater flow	cms	-0.6045	Based upon flow intake data obtained from the City of Monroe WTP at the time of the survey
		Temperature	^{o}Celcius	NA	Temperature of the outgoing flow is calculated by the model
		Salinity	ppt		
		Conservative Matl. I	mg/l	NA	Chloride concentration in the outgoing flow is calculated by the model
		Conservative Matl. II	mg/l	NA	Sulfate concentration in the outgoing flow is calculated by the model

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 25, Wasteload Data for DO, BOD, and Nitrogen					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Element # of input		128	Based upon stream layout during the development of the calibrated model
		Dissolved O_2	mg/l	NA	Dissolved oxygen concentration in the outgoing flow is calculated by the model
		BOD	mg/l	NA	BOD concentration in the outgoing flow is calculated by the model
		Org.- N	mg/l	NA	Organic nitrogen concentration in the outgoing flow is calculated by the model
		NH_3-N	mg/l	NA	Ammonia nitrogen concentration in the outgoing flow is calculated by the model
		NO_{2+3}-N	mg/l	NA	Nitrate-Nitrite concentration in the outgoing flow is calculated by the model
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Element # of input		179	Based upon stream layout during the development of the calibrated model
		Dissolved O_2	mg/l	NA	Dissolved oxygen concentration in the outgoing flow is calculated by the model
		BOD	mg/l	NA	BOD concentration in the outgoing flow is calculated by the model
		Org.- N	mg/l	NA	Organic nitrogen concentration in the outgoing flow is calculated by the model
		NH_3-N	mg/l	NA	Ammonia nitrogen concentration in the outgoing flow is calculated by the model
		NO_{2+3}-N	mg/l	NA	Nitrate-Nitrite concentration in the outgoing flow is calculated by the model

Bayou Desiard Calibration Water Quality Model Input Description					
DATA TYPE 26, Wasteload Data for Phosphorus, Chlorophyll, Coliform, and Nonconservatives					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Element # of input		128	Based upon stream layout during the development of the calibrated model
		Phosphorus	mg/L		
		Chlorophyll a	ug/L	NA	Chlorophyll a concentration in the outgoing flow is calculated by the model
		Coliform	#/100 mL		
		Nonconservative Material	mg/l	NA	$CBOD2_U$ concentration in the outgoing flow is calculated by the model
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Element # of input		179	Based upon stream layout during the development of the calibrated model
		Phosphorus	mg/L		
		Chlorophyll a	ug/L	NA	Chlorophyll a concentration in the outgoing flow is calculated by the model
		Coliform	#/100 mL		
		Nonconservative Material	mg/l	NA	$CBOD2_U$ concentration in the outgoing flow is calculated by the model

Bayou Desiard Calibration Water Quality Model Input Description

DATA TYPE 27, Lower Boundary Conditions

Reach #	NAME	Parameter	Units	Value	Source/Justification
	Bayou Desiard at Site BDS17	Temperature	^{o}Celcius	30.85	Obtained from the Bayou Desiard survey data (Site BDS17) The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being force through a value
		Salinity	ppt		
		Conservative Matl. I	mg/l		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		Conservative Matl. II	mg/l		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		Dissolved O_2	mg/l		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		BOD	mg/l		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		Org.- N	mg/l		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		NH_3-N	mg/l		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		NO_{2+3}-N	mg/l		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		Phosphorus	mg/l		
		Chlorophyl A	mg/l	16.70	Obtained from the Bayou Desiard survey data
		Coliform	mg/l		
		Nonconservative Material	mg/L		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value

APPENDIX D - Bayou Desiard Projection Models Input and Output Data Sets and Plots

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LA-QUAL Version 5.01
Louisiana Department of Environmental Quality

Input file is D:\MODELED_WATERBODIES\BAYOU DESIARD\MODELS\SUMMER PROJECTIONS\DESIARD SUM B CHLR A_NITROGEN_50.txt
Output produced at 16:04 on 01/08/2002

$$$ DATA TYPE 1 (TITLES AND CONTROL CARDS) $$$

CARD TYPE       CONTROL TITLES

TITLE01         BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
TITLE02         macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT
CNTROL11   NO   SEQUENCING OUTPUT
CNTROL12  YES   METRIC UNITS
CNTROL13  YES   OXYGEN DEPENDENT RATES
ENDATA01

$$$ DATA TYPE 2 (MODEL OPTIONS) $$$

CARD TYPE       MODEL OPTION

MODOPT01   NO   TEMPERATURE
MODOPT02   NO   SALINITY
MODOPT03  YES   CONSERVATIVE MATERIAL  I = CHLORIDES                  IN MG/L
MODOPT04  YES   CONSERVATIVE MATERIAL II = SULFATES                   IN MG/L
MODOPT05  YES   DISSOLVED OXYGEN
MODOPT06  YES   BIOCHEMICAL OXYGEN DEMAND
MODOPT07  YES   NITROGEN
MODOPT08   NO   PHOSPHORUS
MODOPT09   NO   CHLOROPHYLL A
MODOPT10   NO   MACROPHYTES
MODOPT11   NO   COLIFORM
MODOPT12  YES   NONCONSERVATIVE MATERIAL = CBOD2                      IN MG/L
ENDATA02

$$$ DATA TYPE 3 (PROGRAM CONSTANTS) $$$

CARD TYPE       DESCRIPTION OF CONSTANT                        VALUE

PROGRAM         MAXIMUM ITERATION LIMIT            =       200.00000
PROGRAM         PLOT TYPE                          =         3.00000
PROGRAM         FINAL REPORT TYPE                  =         1.00000
PROGRAM         SPECIAL REPORT TYPE                =         3.00000
PROGRAM         BOD OXYGEN UPTAKE RATE             =         1.00000 mg O/mg BOD
PROGRAM         KL MINIMUM                         =         0.70000 meters/day
PROGRAM         NCM OXYGEN UPTAKE RATE             =         1.00000 mg O/mg NCM
PROGRAM         INHIBITION CONTROL VALUE           =         3.00000
PROGRAM         DISPERSION EQUATION                =         1.00000
PROGRAM         OCEAN EXCHANGE RATIO               =         0.00000
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PROGRAM         HYDRAULIC CALCULATION METHOD       =         2.00000 (widths and depths)
PROGRAM         SETTLED RATE UNITS                 =         2.00000 (per day)
PROGRAM         WIND                               =         2.56000 meters/sec
PROGRAM         EFFECTIVE BOD DUE TO ALGAE         =         0.10000 mg/L BOD per ug/L chl a
PROGRAM         ALGAE OXYGEN PRODUCTION            =         0.02500 mg O/ug chl a/day
PROGRAM         MACROPHYTE OXYGEN PRODUCTION       =         0.00000 mg O/mg macrophyte/day
PROGRAM         ORGN OXYGEN UPTAKE RATE            =         0.00000 mg O/mg N
PROGRAM         NH3 OXYGEN UPTAKE RATE             =         4.33000 mg O/mg N
PROGRAM         N PREFERENCE                       =         0.50000 (0.0=NH3 1.0=NO3)
PROGRAM         N INHIBITION EQUATION              =         1.00000
ENDATA03

$$$ DATA TYPE 4 (TEMPERATURE CORRECTION CONSTANTS FOR RATE COEFFICIENTS) $$$

 CARD TYPE     RATE CODE     THETA VALUE

THETA        NCM DECA       1.04700
THETA        ORGN DEC       1.07000
ENDATA04

$$$ CONSTANTS TYPE 5 (TEMPERATURE DATA) $$$

CARD TYPE       DESCRIPTION OF CONSTANT                        VALUE

ENDATA05

$$$ DATA TYPE 6 (ALGAE CONSTANTS) $$$

CARD TYPE       DESCRIPTION OF CONSTANT                        VALUE

ENDATA06

$$$ DATA TYPE 7 (MACROPHYTE CONSTANTS) $$$

CARD TYPE       DESCRIPTION OF CONSTANT                        VALUE

ENDATA07

$$$ DATA TYPE 8 (REACH IDENTIFICATION DATA) $$$
                                                      BEGIN         END     ELEM    REACH     ELEMS   BEGIN    END
CARD TYPE  REACH  ID  NAME                            REACH       REACH   LENGTH   LENGTH    PER RCH   ELEM   ELEM
                                                         km          km       km       km               NUM    NUM

REACH ID      1   LB    BDS 1-BDS 2                   59.85  TO   59.77   0.0800     0.08       1        1      1
REACH ID      2   LB    BDS 2-BDS 3                   59.77  TO   53.31   0.6460     6.46      10        2     11
REACH ID      3   LB    BDS 3-BDS 6                   53.31  TO   48.81   0.4500     4.50      10       12     21
REACH ID      4   LB    BDS 6-US 165 GATE INLET CANAL 48.81  TO   48.41   0.2000     0.40       2       22     23
REACH ID      5   LB    BDS 5-BDS 4                    8.53  TO    4.33   0.4200     4.20      10       24     33
REACH ID      6   LB    BDS 4-US 165 GATE INLET CANAL  4.33  TO    0.00   0.4330     4.33      10       34     43
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REACH ID	7	LB	US165 GATE IN CANAL-US165 GATE	48.41	TO	48.33	0.0800	0.08	1	44	44
REACH ID	8	CP	US 165 GATE/CONTROL STRUCTURE	48.33	TO	48.25	0.0800	0.08	1	45	45
REACH ID	9	BD	US165 GATE OUTLET-BDS 7	48.25	TO	47.92	0.1100	0.33	3	46	48
REACH ID	10	BD	BDS 7-BDS 8	47.92	TO	40.56	0.4600	7.36	16	49	64
REACH ID	11	BD	BDS 8-MILL BAYOU	40.56	TO	33.77	0.4850	6.79	14	65	78
REACH ID	12	BD	MILL BAYOU-BDS 9	33.77	TO	28.06	0.5710	5.71	10	79	88
REACH ID	13	BD	BDS 9-HANNAH'S RUN	28.06	TO	25.67	0.4780	2.39	5	89	93
REACH ID	14	HE	HANNAH'S RUN(E)CONTROL GATES	0.45	TO	0.44	0.0120	0.01	1	94	94
REACH ID	15	HR	HANNAHS RUN(E)-HANNAHS RUN(W)	0.44	TO	0.15	0.2880	0.29	1	95	95
REACH ID	16	HW	HANNAH'S RUN(W) CONTROL GATES	0.15	TO	0.14	0.0120	0.01	1	96	96
REACH ID	17	HR	HANNAH'S RUN(W)-BDS21	0.14	TO	0.10	0.0400	0.04	1	97	97
REACH ID	18	HR	BDS 21-BAYOU DESIARD	0.10	TO	0.00	0.1000	0.10	1	98	98
REACH ID	19	BD	HANNAH'S RUN-BDS10	25.67	TO	24.61	0.2650	1.06	4	99	102
REACH ID	20	BD	BDS 10- L-11 CANAL PIPE INTAKE	24.61	TO	18.06	0.2620	6.55	25	103	127
REACH ID	21	CP	L-11 CANAL CONTROL PIPE	18.06	TO	17.98	0.0800	0.08	1	128	128
REACH ID	22	BD	L-11 PIPEOUTFALL-MIDWAY INTAKE	17.98	TO	15.63	0.4700	2.35	5	129	133
REACH ID	23	MD	MIDWAY DAM CONTROL PIPE	15.63	TO	15.59	0.0400	0.04	1	134	134
REACH ID	24	BD	MIDWAY OUTFALL-BDS13	15.59	TO	15.55	0.0400	0.04	1	135	135
REACH ID	25	BD	BDS13-BDS14	15.55	TO	9.62	0.2965	5.93	20	136	155
REACH ID	26	BD	BDS14-STADIUM DR. PIPE INTAKE	9.62	TO	9.57	0.0500	0.05	1	156	156
REACH ID	27	SD	STADIUM DRIVE PIPES	9.57	TO	9.52	0.0500	0.05	1	157	157
REACH ID	28	BD	STADIUM DR. PIPE OUTFALL-BDS15	9.52	TO	6.69	0.5660	2.83	5	158	162
REACH ID	29	BD	BDS15-BDS16	6.69	TO	3.40	0.4700	3.29	7	163	169
REACH ID	30	BD	BDS16-BDS17	3.40	TO	0.61	0.3100	2.79	9	170	178
REACH ID	31	BD	BDS17-MONROE WTP INTAKE	0.61	TO	0.54	0.0700	0.07	1	179	179

ENDATA08

$$$ DATA TYPE 9 (ADVECTIVE HYDRAULIC COEFFICIENTS) $$$

CARD TYPE	REACH	ID	WIDTH "A"	WIDTH "B"	WIDTH "C"	DEPTH "D"	DEPTH "E"	DEPTH "F"	SLOPE	MANNINGS "N"
HYDR-1	1	LB	1.000	0.100	1.720	0.050	0.100	1.720	0.00010	0.035
HYDR-1	2	LB	1.000	0.100	61.720	0.050	0.100	3.410	0.00010	0.035
HYDR-1	3	LB	1.000	0.100	89.150	0.050	0.100	3.620	0.00010	0.035
HYDR-1	4	LB	1.000	0.100	114.290	0.050	0.100	3.340	0.00010	0.035
HYDR-1	5	LB	1.000	0.100	123.140	0.050	0.100	3.900	0.00010	0.035
HYDR-1	6	LB	1.000	0.100	114.290	0.050	0.100	3.340	0.00010	0.035
HYDR-1	7	LB	1.000	0.100	6.000	0.050	0.100	1.000	0.00010	0.035
HYDR-1	8	CP	1.000	0.100	1.620	0.050	0.100	1.620	0.00010	0.035
HYDR-1	9	BD	1.000	0.100	42.060	0.050	0.100	1.660	0.00010	0.035
HYDR-1	10	BD	1.000	0.100	21.330	0.050	0.100	1.830	0.00010	0.035
HYDR-1	11	BD	1.000	0.100	21.330	0.050	0.100	1.830	0.00010	0.035
HYDR-1	12	BD	1.000	0.100	76.200	0.050	0.100	2.310	0.00010	0.035
HYDR-1	13	BD	1.000	0.100	76.200	0.050	0.100	2.310	0.00010	0.035
HYDR-1	14	HE	1.000	0.100	1.720	0.050	0.100	1.720	0.00010	0.035
HYDR-1	15	HR	1.000	0.100	17.680	0.050	0.100	2.420	0.00010	0.035
HYDR-1	16	HW	1.000	0.100	1.720	0.050	0.100	1.720	0.00010	0.035
HYDR-1	17	HR	1.000	0.100	17.680	0.050	0.100	2.420	0.00010	0.035

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HYDR-1       18   HR       1.000       0.100      17.680       0.050       0.100       2.420     0.00010   0.035
HYDR-1       19   BD       1.000       0.100      90.060       0.050       0.100       2.430     0.00010   0.035
HYDR-1       20   BD       1.000       0.100      90.060       0.050       0.100       2.430     0.00010   0.035
HYDR-1       21   CP       1.000       0.100       1.620       0.050       0.100       1.620     0.00010   0.035
HYDR-1       22   BD       1.003       0.100      94.550       0.050       0.100       2.345     0.00010   0.035
HYDR-1       23   MD       1.000       0.100       1.620       0.050       0.100       1.620     0.00010   0.035
HYDR-1       24   BD       1.000       0.100      99.040       0.050       0.100       2.260     0.00010   0.035
HYDR-1       25   BD       1.000       0.100      99.040       0.050       0.100       2.260     0.00010   0.035
HYDR-1       26   BD       1.000       0.100      11.580       0.050       0.100       2.470     0.00010   0.035
HYDR-1       27   SD       1.000       0.100       1.620       0.050       0.100       1.620     0.00010   0.035
HYDR-1       28   BD       1.000       0.100     117.340       0.050       0.100       2.660     0.00010   0.035
HYDR-1       29   BD       1.000       0.100     117.340       0.050       0.100       2.660     0.00010   0.035
HYDR-1       30   BD       1.000       0.100     124.960       0.050       0.100       4.850     0.00010   0.035
HYDR-1       31   BD       1.000       0.100     124.960       0.050       0.100       4.850     0.00010   0.035
ENDATA09

$$$ DATA TYPE 10 (DISPERSIVE HYDRAULIC COEFFICIENTS) $$$

CARD TYPE  REACH  ID     TIDAL     DISPERSION     DISPERSION     DISPERSION     DISPERSION
                        RANGE        "A"            "B"            "C"            "D"

HYDR         1   LB      0.00        0.000          0.000          0.000          0.000
HYDR         2   LB      0.00        1.000          0.000          0.000          0.000
HYDR         3   LB      0.00        1.000          0.000          0.000          0.000
HYDR         4   LB      0.00        1.000          0.000          0.000          0.000
HYDR         5   LB      0.00        1.000          0.000          0.000          0.000
HYDR         6   LB      0.00        1.000          0.000          0.000          0.000
HYDR         7   LB      0.00        1.000          0.000          0.000          0.000
HYDR         8   CP      0.00        1.000          0.000          0.000          0.000
HYDR         9   BD      0.00        1.000          0.000          0.000          0.000
HYDR        10   BD      0.00        1.000          0.000          0.000          0.000
HYDR        11   BD      0.00        1.000          0.000          0.000          0.000
HYDR        12   BD      0.00        4.000          0.000          0.000          0.000
HYDR        13   BD      0.00        4.000          0.000          0.000          0.000
HYDR        14   HE      0.00        1.000          0.000          0.000          0.000
HYDR        15   HR      0.00        4.000          0.000          0.000          0.000
HYDR        16   HW      0.00        1.000          0.000          0.000          0.000
HYDR        17   HR      0.00        4.000          0.000          0.000          0.000
HYDR        18   HR      0.00        4.000          0.000          0.000          0.000
HYDR        19   BD      0.00        4.000          0.000          0.000          0.000
HYDR        20   BD      0.00        4.000          0.000          0.000          0.000
HYDR        21   CP      0.00        1.000          0.000          0.000          0.000
HYDR        22   BD      0.00        1.000          0.000          0.000          0.000
HYDR        23   MD      0.00        1.000          0.000          0.000          0.000
HYDR        24   BD      0.00        1.000          0.000          0.000          0.000
HYDR        25   BD      0.00        1.000          0.000          0.000          0.000
HYDR        26   BD      0.00        1.000          0.000          0.000          0.000
HYDR        27   SD      0.00        1.000          0.000          0.000          0.000
HYDR        28   BD      0.00        1.000          0.000          0.000          0.000
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HYDR         29   BD      0.00        1.000          0.000          0.000          0.000
HYDR         30   BD      0.00        1.000          0.000          0.000          0.000
HYDR         31   BD      0.00        1.000          0.000          0.000          0.000
ENDATA10

$$$ DATA TYPE 11 (INITIAL CONDITIONS) $$$

CARD TYPE      REACH  ID        TEMP     SALIN        DO       NH3     NO3+2      PHOS     CHL A     MACRO

INITIAL           1   LB       31.50      0.00      6.63      0.00      0.00      0.00      1.30    115.00
INITIAL           2   LB       31.50      0.00      6.63      0.00      0.00      0.00     20.50    115.00
INITIAL           3   LB       31.50      0.00      6.63      0.00      0.00      0.00     22.40    115.00
INITIAL           4   LB       31.50      0.00      6.63      0.00      0.00      0.00     36.40    115.00
INITIAL           5   LB       31.50      0.00      6.63      0.00      0.00      0.00     42.40    115.00
INITIAL           6   LB       31.50      0.00      6.63      0.00      0.00      0.00     42.40    115.00
INITIAL           7   LB       31.50      0.00      6.63      0.00      0.00      0.00     44.00    115.00
INITIAL           8   CP       31.50      0.00      6.63      0.00      0.00      0.00     46.00    115.00
INITIAL           9   BD       31.50      0.00      6.63      0.00      0.00      0.00     48.00    115.00
INITIAL          10   BD       31.50      0.00      6.63      0.00      0.00      0.00     75.00    115.00
INITIAL          11   BD       31.50      0.00      6.63      0.00      0.00      0.00     75.00    115.00
INITIAL          12   BD       31.50      0.00      6.63      0.00      0.00      0.00     24.60    115.00
INITIAL          13   BD       31.50      0.00      6.63      0.00      0.00      0.00     24.60    115.00
INITIAL          14   HE       31.50      0.00      6.63      0.00      0.00      0.00     17.90    115.00
INITIAL          15   HR       31.50      0.00      6.63      0.00      0.00      0.00     17.90    115.00
INITIAL          16   HW       31.50      0.00      6.63      0.00      0.00      0.00     17.90    115.00
INITIAL          17   HR       31.50      0.00      6.63      0.00      0.00      0.00     17.90    115.00
INITIAL          18   HR       31.50      0.00      6.63      0.00      0.00      0.00     13.60    115.00
INITIAL          19   BD       31.50      0.00      6.63      0.00      0.00      0.00     13.60    115.00
INITIAL          20   BD       31.50      0.00      6.63      0.00      0.00      0.00     16.00    115.00
INITIAL          21   CP       31.50      0.00      6.63      0.00      0.00      0.00     19.20    115.00
INITIAL          22   BD       31.50      0.00      6.63      0.00      0.00      0.00     31.00    115.00
INITIAL          23   MD       31.50      0.00      6.63      0.00      0.00      0.00     43.00    115.00
INITIAL          24   BD       31.50      0.00      6.63      0.00      0.00      0.00     57.20    115.00
INITIAL          25   BD       31.50      0.00      6.63      0.00      0.00      0.00     52.00    115.00
INITIAL          26   BD       31.50      0.00      6.63      0.00      0.00      0.00     48.60    115.00
INITIAL          27   SD       31.50      0.00      6.63      0.00      0.00      0.00     40.00    115.00
INITIAL          28   BD       31.50      0.00      6.63      0.00      0.00      0.00     32.60    115.00
INITIAL          29   BD       31.50      0.00      6.63      0.00      0.00      0.00     30.00    115.00
INITIAL          30   BD       31.50      0.00      6.63      0.00      0.00      0.00     20.00    115.00
INITIAL          31   BD       31.50      0.00      6.63      0.00      0.00      0.00     13.00    115.00
ENDATA11

$$$ DATA TYPE 12 (REAERATION, SEDIMENT OXYGEN DEMAND, BOD COEFFICIENTS) $$$
                                                                                  AEROB                          ANAER
CARD TYPE REACH  ID       K2                K2        K2        K2     BKGRND     BOD        BOD   BOD CONV     BOD
                         OPT               "A"       "B"       "C"       SOD     DECAY      SETT    TO SOD     DECAY
                                                                    g/m²/d       per day     m/d

COEF-1       1   LB  12 BANKS            1.000     0.000     0.000     0.000     0.140     0.050     0.000     0.000
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COEF-1       2   LB  12 BANKS            1.000     0.000     0.000     0.000     0.200     0.050     0.000     0.000
COEF-1       3   LB  12 BANKS            1.000     0.000     0.000     0.000     0.190     0.050     0.000     0.000
COEF-1       4   LB  12 BANKS            1.000     0.000     0.000     0.000     0.190     0.050     0.000     0.000
COEF-1       5   LB  12 BANKS            1.000     0.000     0.000     0.000     0.150     0.050     0.000     0.000
COEF-1       6   LB  12 BANKS            1.000     0.000     0.000     0.000     0.150     0.050     0.000     0.000
COEF-1       7   LB  20 K2=a/D           0.700     0.000     0.000     5.630     0.190     0.050     1.000     0.000
COEF-1       8   CP  20 K2=a/D           0.700     0.000     0.000     5.630     0.190     0.050     1.000     0.000
COEF-1       9   BD  20 K2=a/D           0.700     0.000     0.000     5.630     0.200     0.050     1.000     0.000
COEF-1      10   BD  12 BANKS            0.010     0.000     0.000     1.560     0.170     0.050     1.000     0.000
COEF-1      11   BD  12 BANKS            0.010     0.000     0.000     0.000     0.120     0.050     1.000     0.000
COEF-1      12   BD  12 BANKS            1.000     0.000     0.000     1.560     0.080     0.050     0.000     0.000
COEF-1      13   BD  12 BANKS            1.000     0.000     0.000     1.560     0.080     0.050     0.000     0.000
COEF-1      14   HE  20 K2=a/D           0.700     0.000     0.000     0.000     0.080     0.050     0.000     0.000
COEF-1      15   HR  20 K2=a/D           0.700     0.000     0.000     0.000     0.080     0.050     0.000     0.000
COEF-1      16   HW  20 K2=a/D           0.700     0.000     0.000     0.000     0.100     0.050     0.000     0.000
COEF-1      17   HR  20 K2=a/D           0.700     0.000     0.000     0.000     0.110     0.050     0.000     0.000
COEF-1      18   HR  20 K2=a/D           0.700     0.000     0.000     0.000     0.110     0.050     0.000     0.000
COEF-1      19   BD  12 BANKS            1.000     0.000     0.000     1.560     0.120     0.050     0.000     0.000
COEF-1      20   BD  13 JOHANSON         1.000     0.000     0.000     0.000     0.130     0.050     0.000     0.000
COEF-1      21   CP  20 K2=a/D           0.700     0.000     0.000     0.000     0.140     0.050     0.000     0.000
COEF-1      22   BD  13 JOHANSON         1.000     0.000     0.000     0.000     0.160     0.050     0.000     0.000
COEF-1      23   MD  20 K2=a/D           0.700     0.000     0.000     0.000     0.180     0.050     0.000     0.000
COEF-1      24   BD  13 JOHANSON         1.000     0.000     0.000     0.000     0.230     0.050     0.000     0.000
COEF-1      25   BD  13 JOHANSON         1.000     0.000     0.000     0.000     0.160     0.050     0.000     0.000
COEF-1      26   BD  13 JOHANSON         1.000     0.000     0.000     0.000     0.080     0.050     0.000     0.000
COEF-1      27   SD  20 K2=a/D           0.700     0.000     0.000     0.000     0.100     0.050     0.000     0.000
COEF-1      28   BD  13 JOHANSON         1.000     0.000     0.000     0.000     0.120     0.050     0.000     0.000
COEF-1      29   BD  13 JOHANSON         1.000     0.000     0.000     0.000     0.120     0.050     0.000     0.000
COEF-1      30   BD  13 JOHANSON         1.000     0.000     0.000     0.000     0.120     0.050     0.000     0.000
COEF-1      31   BD  13 JOHANSON         1.000     0.000     0.000     0.000     0.100     0.050     0.000     0.000
ENDATA12

$$$ DATA TYPE 13 (NITROGEN AND PHOSPHORUS COEFFICIENTS) $$$

CARD TYPE      REACH  ID       ORG-N     ORG-N   ORGN CONV       NH3       NH3      PHOS     DENIT
                                DECA      SETT  TO NH3 SRCE     DECA      SRCE      SRCE      RATE

COEF-2           1   LB       0.200     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2           2   LB       0.090     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2           3   LB       0.050     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2           4   LB       0.090     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2           5   LB       0.120     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2           6   LB       0.120     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2           7   LB       0.100     0.015     1.000       0.600     0.000     0.000     0.000
COEF-2           8   CP       0.100     0.015     1.000       0.600     0.000     0.000     0.000
COEF-2           9   BD       0.200     0.015     1.000       0.600     0.000     0.000     0.000
COEF-2          10   BD       0.200     0.015     1.000       1.000     0.000     0.000     0.000
COEF-2          11   BD       0.200     0.015     1.000       1.000     0.000     0.000     0.000
COEF-2          12   BD       0.060     0.015     0.000       0.600     0.000     0.000     0.000
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COEF-2          13   BD       0.060     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          14   HE       0.110     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          15   HR       0.110     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          16   HW       0.150     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          17   HR       0.180     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          18   HR       0.180     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          19   BD       0.070     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          20   BD       0.090     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          21   CP       0.080     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          22   BD       0.070     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          23   MD       0.060     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          24   BD       0.050     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          25   BD       0.070     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          26   BD       0.150     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          27   SD       0.150     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          28   BD       0.250     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          29   BD       0.250     0.015     0.000       0.800     0.000     0.000     0.000
COEF-2          30   BD       0.150     0.015     0.000       0.800     0.000     0.000     0.000
COEF-2          31   BD       0.070     0.015     0.000       0.600     0.000     0.000     0.000
ENDATA13

$$$ DATA TYPE 14 (ALGAE AND MACROPHYTE COEFFICIENTS) $$$

CARD TYPE      REACH  ID       SECCHI    ALGAE:     ALGAE    ALG CONV     ALGAE     ALGAE     MACRO     MACRO
                                DEPTH     CHL A      SETT     TO SOD       GROW      RESP      GROW      RESP

ENDATA14

$$$ DATA TYPE 15 (COLIFORM AND NONCONSERVATIVE COEFFICIENTS) $$$

CARD TYPE      REACH  ID    COLIFORM       NCM        NCM    NCM CONV
                             DIE-OFF     DECAY      SETT     TO SOD

COEF-4           1   LB        0.00      0.01      0.05      0.00
COEF-4           2   LB        0.00      0.03      0.05      0.00
COEF-4           3   LB        0.00      0.04      0.05      0.00
COEF-4           4   LB        0.00      0.01      0.05      0.00
COEF-4           5   LB        0.00      0.01      0.05      0.00
COEF-4           6   LB        0.00      0.01      0.05      0.00
COEF-4           7   LB        0.00      0.01      0.05      1.00
COEF-4           8   CP        0.00      0.01      0.05      1.00
COEF-4           9   BD        0.00      0.02      0.05      1.00
COEF-4          10   BD        0.00      0.02      0.05      1.00
COEF-4          11   BD        0.00      0.02      0.05      1.00
COEF-4          12   BD        0.00      0.01      0.05      0.00
COEF-4          13   BD        0.00      0.01      0.05      0.00
COEF-4          14   HE        0.00      0.01      0.05      0.00
COEF-4          15   HR        0.00      0.01      0.05      0.00
COEF-4          16   HW        0.00      0.02      0.05      0.00
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COEF-4          17   HR        0.00      0.02      0.05      0.00
COEF-4          18   HR        0.00      0.02      0.05      0.00
COEF-4          19   BD        0.00      0.01      0.05      0.00
COEF-4          20   BD        0.00      0.01      0.05      0.00
COEF-4          21   CP        0.00      0.02      0.05      0.00
COEF-4          22   BD        0.00      0.03      0.05      0.00
COEF-4          23   MD        0.00      0.04      0.05      0.00
COEF-4          24   BD        0.00      0.05      0.05      0.00
COEF-4          25   BD        0.00      0.02      0.05      0.00
COEF-4          26   BD        0.00      0.01      0.05      0.00
COEF-4          27   SD        0.00      0.01      0.05      0.00
COEF-4          28   BD        0.00      0.03      0.05      0.00
COEF-4          29   BD        0.00      0.03      0.05      0.00
COEF-4          30   BD        0.00      0.03      0.05      0.00
COEF-4          31   BD        0.00      0.04      0.05      0.00
ENDATA15

$$$ DATA TYPE 16 (INCREMENTAL DATA FOR FLOW, TEMPERATURE, SALINITY, AND CONSERVATIVES) $$$

CARD TYPE      REACH  ID       OUTFLOW      INFLOW      TEMP     SALIN      CM-I     CM-II   IN/DIST  OUT/DIST

ENDATA16

$$$ DATA TYPE 17 (INCREMENTAL DATA FOR DO, BOD, AND NITROGEN) $$$

CARD TYPE      REACH  ID          DO       BOD     ORG-N       NH3     NO3+2

ENDATA17

$$$ DATA TYPE 18 (INCREMENTAL DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NONCONSERVATIVES) $$$

 CARD TYPE      REACH  ID        PHOS     CHL A      COLI       NCM

ENDATA18

$$$ DATA TYPE 19 (NONPOINT SOURCE DATA) $$$

CARD TYPE      REACH  ID         BOD     ORG-N      COLI       NCM        DO

NONPOINT          1   LB        3.13      0.00      0.00     31.25      0.00
NONPOINT          2   LB     1562.50    218.75      0.00    218.75      0.00
NONPOINT          3   LB      875.00     93.75      0.00    187.50      0.00
NONPOINT          4   LB      312.50     21.88      0.00    203.13      0.00
NONPOINT          5   LB     1125.00    625.00      0.00    718.75      0.00
NONPOINT          6   LB     1000.00    156.25      0.00    718.75      0.00
NONPOINT          7   LB        0.00     46.88      0.00      0.00      0.00
NONPOINT          8   CP        0.00      0.00      0.00      0.00      0.00
NONPOINT          9   BD        0.00      0.00      0.00      0.00      0.00
NONPOINT         10   BD      293.75     93.75      0.00    125.00      0.00
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NONPOINT         11   BD      293.75     93.75      0.00    125.00      0.00
NONPOINT         12   BD      500.00     93.75      0.00    250.00      0.00
NONPOINT         13   BD      312.50     31.25      0.00    281.25      0.00
NONPOINT         14   HE        0.00      0.00      0.00      0.00    850.00
NONPOINT         15   HR        0.00      3.13      0.00      0.00      0.00
NONPOINT         16   HW        0.00      0.00      0.00      0.00      0.00
NONPOINT         17   HR        0.00      3.13      0.00      0.00      0.00
NONPOINT         18   HR        0.00      3.13      0.00      0.00      0.00
NONPOINT         19   BD      500.00      9.38      0.00    437.50      0.00
NONPOINT         20   BD     1500.00    156.25      0.00    437.50      0.00
NONPOINT         21   CP        0.00      0.00      0.00      0.00      0.00
NONPOINT         22   BD       62.50     15.63      0.00     93.75      0.00
NONPOINT         23   MD        0.00      0.00      0.00      0.00      0.00
NONPOINT         24   BD     1500.00     62.50      0.00    343.75      0.00
NONPOINT         25   BD     1656.25     62.50      0.00    343.75      0.00
NONPOINT         26   BD      468.75     62.50      0.00    312.50      0.00
NONPOINT         27   SD        0.00      0.00      0.00      0.00      0.00
NONPOINT         28   BD     1187.50    156.25      0.00    250.00      0.00
NONPOINT         29   BD     1187.50    312.50      0.00    375.00      0.00
NONPOINT         30   BD     1500.00    281.25      0.00    375.00      0.00
NONPOINT         31   BD        6.26      6.26      0.00      6.26      0.00
ENDATA19

$$$ DATA TYPE 20 (HEADWATER FOR FLOW, TEMPERATURE, SALINITY AND CONSERVATIVES) $$$

CARD TYPE     ELEMENT   NAME                  UNIT          FLOW      TEMP     SALIN      CM-I     CM-II

HDWTR-1          1     LAKE BARTHOLEMEW EAS    0        0.10278    31.500     0.000     9.900     3.000
HDWTR-1         24     LAKE BARTHOLEMEW WES    0        0.10278    31.500     0.000     8.900     3.200
HDWTR-1         94     HANNAH'S RUN (EAST)     0        1.45612    31.500     0.000     3.500     0.000
ENDATA20

$$$ DATA TYPE 21 (HEADWATER DATA FOR DO, BOD, AND NITROGEN) $$$

CARD TYPE     ELEMENT   NAME                         DO       BOD     ORG-N       NH3     NO3+2

HDWTR-2          1     LAKE BARTHOLEMEW EAS        6.63      2.08      0.93      0.00      0.00
HDWTR-2         24     LAKE BARTHOLEMEW WES        6.63      4.43      1.05      0.00      0.00
HDWTR-2         94     HANNAH'S RUN (EAST)         6.63     10.34      0.58      0.17      0.00
ENDATA21

$$$ DATA TYPE 22 (HEADWATER DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NONCONSERVATIVES) $$$

CARD TYPE     ELEMENT   NAME                        PHOS     CHL A      COLI       NCM

HDWTR-3          1     LAKE BARTHOLEMEW EAS         0.00      1.30      0.00      5.14
HDWTR-3         24     LAKE BARTHOLEMEW WES         0.00     42.40      0.00      4.16
HDWTR-3         94     HANNAH'S RUN (EAST)          0.00     17.90      0.00      4.56
ENDATA22
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$$$ DATA TYPE 23 (JUNCTION DATA) $$$

CARD TYPE   JUNCTION   UPSTRM     RIVER     NAME
             ELEMENT  ELEMENT     KILOM

JUNCTION          44      23      48.41  INLET CANAL TO B. DESIARD @ US 165 CONTROL STRUCTURE
JUNCTION          99      93      25.67  HANNAH'S RUN JUNCTION WITH BAYOU DESIARD
ENDATA23

$$$ DATA TYPE 24 (WASTELOAD DATA FOR FLOW, TEMPERATURE, SALINITY, AND CONSERVATIVES) $$$

CARD TYPE  ELEMENT    RKILO  NAME                           FLOW      TEMP       SAL      CM-I     CM-II

WSTLD-1      128      18.06  BAYOU CHAUVIN OUTLET       -1.05717     0.000     0.000     0.000     0.000
WSTLD-1      179       0.61  MONROE WTP INTAKE          -0.61350     0.000     0.000     0.000     0.000
ENDATA24

$$$ DATA TYPE 25 (WASTELOAD DATA FOR DO, BOD, AND NITROGEN) $$$
                                                                   % BOD                          %
CARD TYPE     ELEMENT   NAME                          DO       BOD      RMVL     ORG-N       NH3    NITRIF     NO3+2

WSTLD-2         128     BAYOU CHAUVIN OUTLET        0.00      0.00      0.00      0.00      0.00      0.00      0.00
WSTLD-2         179     MONROE WTP INTAKE           0.00      0.00      0.00      0.00      0.00      0.00      0.00
ENDATA25

$$$ DATA TYPE 26 (WASTELOAD DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NONCONSERVATIVES) $$$

CARD TYPE     ELEMENT   NAME                        PHOS     CHL A      COLI       NCM

WSTLD-3         128     BAYOU CHAUVIN OUTLET        0.00      0.00      0.00      0.00
WSTLD-3         179     MONROE WTP INTAKE           0.00      0.00      0.00      0.00
ENDATA26

$$$ DATA TYPE 27 (LOWER BOUNDARY CONDITIONS) $$$

CARD TYPE    CONSTITUENT                    CONCENTRATION

LOWER BC     TEMPERATURE                       =     31.500 deg C
LOWER BC     SALINITY                          =      0.000 ppt
LOWER BC     CONSERVATIVE MATERIAL I           =      0.000 MG/L
LOWER BC     CONSERVATIVE MATERIAL II          =      0.000 MG/L
LOWER BC     DISSOLVED OXYGEN                  =      0.000 mg/L
LOWER BC     BIOCHEMICAL OXYGEN DEMAND         =      0.000 mg/L
LOWER BC     ORGANIC NITROGEN                  =      0.000 mg/L
LOWER BC     AMMONIA NITROGEN                  =      0.000 mg/L
LOWER BC     NITRATE + NITRITE                 =      0.000 mg/L
LOWER BC     PHOSPHORUS                        =      0.000 mg/L
LOWER BC     CHLOROPHYLL A                     =     16.700 µg/L
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LOWER BC     COLIFORM                          =      0.000 #/100 mL
LOWER BC     NONCONSERVATIVE MATERIAL          =      0.000 MG/L
ENDATA27

$$$ DATA TYPE 28 (DAM DATA) $$$

CARD TYPE     ELEMENT   NAME                 EQN      "A"       "B"       "H"

ENDATA28

$$$ DATA TYPE 29 (SENSITIVITY ANALYSIS DATA) $$$

CARD TYPE       PARAMETER     COL 1     COL 2     COL 3     COL 4     COL 5     COL 6     COL 7     COL 8

ENDATA29

$$$ DATA TYPE 30 (PLOT CONTROL CARDS) $$$


NUMBER OF PLOTS =  5
NUMBER OF REACHES IN PLOT 1 =   2
PLOT RCH  5  6
NUMBER OF REACHES IN PLOT 2 =   5
PLOT RCH 14 15 16 17 18
NUMBER OF REACHES IN PLOT 3 =  11
PLOT RCH  1  2  3  4  7  8  9 10 11 12 13
NUMBER OF REACHES IN PLOT 4 =  13
PLOT RCH 19 20 21 22 23 24 25 26 27 28 29 30 31
NUMBER OF REACHES IN PLOT 4 =  24
PLOT RCH  1  2  3  4  7  8  9 10 11 12 13 19 20 21 22 23 24 25 26 27 28 29 30 31
ENDATA30

$$$ DATA TYPE 31 (OVERLAY PLOT DATA) $$$


OVERLAY 1 DESIARDSUM_LBARTHWEST_NIT.TXT       :LAKE BARTHOLEMEW (WEST)
OVERLAY 2 DESIARDSUM_HANNAHSRUN_NIT.TXT       :HANNAH'S RUN
OVERLAY 3 DESIARDSUM_MAIN_NIT.TXT             :MAINSTEM (REACHES 1-4 & 7-13)
OVERLAY 4 DESIARDSUM_MAIN_NIT.TXT             :MAINSTEM (REACHES 19-31)
OVERLAY 5 DESIARDSUM_MAIN_NIT.TXT             :MAINSTEM (ALL REACHES)
ENDATA31



     .....NO ERRORS DETECTED IN INPUT DATA
     .....HYDRAULIC CALCULATIONS COMPLETED
     .....TRIDIAGONAL MATRIX TERMS INITIALIZED
     .....OXYGEN DEPENDENT RATES CONVERGENT IN  90 ITERATIONS
     .....CONSTITUENT CALCULATIONS COMPLETED
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***** WARNING:  NEGATIVE CONCENTRATIONS SET TO ZERO FOR Ammonia Nitrogen
***** WARNING:  NEGATIVE CONCENTRATIONS SET TO ZERO FOR Nitrate+Nitrite Nitrogen
    .....GRAPHICS DATA FOR PLOT 1 WRITTEN TO UNIT 11
    .....GRAPHICS DATA FOR PLOT 2 WRITTEN TO UNIT 12
    .....GRAPHICS DATA FOR PLOT 3 WRITTEN TO UNIT 13
    .....GRAPHICS DATA FOR PLOT 4 WRITTEN TO UNIT 14
    .....GRAPHICS DATA FOR PLOT 5 WRITTEN TO UNIT 15
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FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 1 BDS 1-BDS 2

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
1	HDWTR	0.10278	31.50	0.00	9.90	3.00	6.63	1.95	2.08	0.93	0.00	0.00	0.00	1.30	0.00	5.14

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
1	59.85	59.77	0.10278	0.00	0.02321	0.04	1.76	2.52	354.29	201.32	4.43	0.00	0.000	0.000	0.023
TOT						0.04			354.29	201.32					
AVG					0.02321		1.76	2.52			4.43				
CUM						0.04									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
1	59.770	7.37	0.49	0.24	0.07	0.00	0.00	0.00	0.00	0.44	0.02	1.46	0.00	0.00	0.00	0.87	0.00	0.00	0.01	0.07
20 DEG C RATE				0.14		0.00	0.00			0.20		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.40		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
1	59.770	31.50	0.00	9.89	3.00	6.68	2.64	4.69	0.78	0.00	0.00	0.78	0.00	20.50	115.00	0.00	4.11

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 2 BDS 2-BDS 3

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
2	UPR RCH	0.10278	31.50	0.00	9.89	3.00	6.68	2.64	4.69	0.78	0.00	0.00	0.00	20.50	0.00	4.11

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
2	59.77	59.12	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
3	59.12	58.48	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
4	58.48	57.83	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
5	57.83	57.19	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
6	57.19	56.54	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
7	56.54	55.89	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
8	55.89	55.25	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
9	55.25	54.60	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
10	54.60	53.96	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
11	53.96	53.31	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
TOT						156.89			1393235.00	403856.59					
AVG					0.00048		3.45	62.52			215.67				
CUM						156.93									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O.	REAER RATE	CBOD DECAY	CBOD SETT	ANBOD DECAY	BKGD SOD	FULL SOD	CORR SOD	ORGN DECAY	ORGN SETT	NH3 DECAY	NH3 SRCE	DENIT RATE	PO4 SRCE	ALG PROD	MAC PROD	COLI DECAY	NCM DECAY	NCM SETT

		mg/L	1/da	1/da	1/da	1/da	*	*	*	1/da	1/da	1/da	*	1/da	*	**	**	1/da	1/da	1/da
2	59.124	7.37	0.25	0.34	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.46	0.00	0.00	0.00	0.88	0.00	0.00	0.04	0.07
3	58.478	7.37	0.25	0.34	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.46	0.00	0.00	0.00	0.89	0.00	0.00	0.04	0.07
4	57.832	7.37	0.25	0.34	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.47	0.00	0.00	0.00	0.89	0.00	0.00	0.04	0.07
5	57.186	7.37	0.25	0.34	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.47	0.00	0.00	0.00	0.90	0.00	0.00	0.04	0.07
6	56.540	7.37	0.25	0.34	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.47	0.00	0.00	0.00	0.91	0.00	0.00	0.04	0.07
7	55.894	7.37	0.25	0.34	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.47	0.00	0.00	0.00	0.92	0.00	0.00	0.04	0.07
8	55.248	7.37	0.25	0.34	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.93	0.00	0.00	0.04	0.07
9	54.602	7.37	0.25	0.34	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.93	0.00	0.00	0.04	0.07
10	53.956	7.37	0.25	0.34	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.49	0.00	0.00	0.00	0.94	0.00	0.00	0.04	0.07
11	53.310	7.37	0.25	0.34	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.50	0.00	0.00	0.00	0.95	0.00	0.00	0.04	0.07
20 DEG C RATE				0.20		0.00	0.00			0.09		0.60	0.00	0.00	0.00			0.00	0.03	
AVG 20 DEG C RATE			0.20		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
2	59.124	31.50	0.00	9.89	3.00	6.68	2.72	4.79	0.76	0.00	0.00	0.76	0.00	20.69	115.00	0.00	3.23
3	58.478	31.50	0.00	9.89	3.00	6.75	2.75	4.84	0.74	0.00	0.00	0.74	0.00	20.88	115.00	0.00	2.48
4	57.832	31.50	0.00	9.88	3.00	6.82	2.76	4.87	0.73	0.00	0.00	0.73	0.00	21.07	115.00	0.00	2.05
5	57.186	31.50	0.00	9.88	3.00	6.89	2.77	4.89	0.73	0.00	0.00	0.73	0.00	21.26	115.00	0.00	1.80
6	56.540	31.50	0.00	9.87	3.01	6.95	2.77	4.91	0.73	0.00	0.00	0.73	0.00	21.45	115.00	0.00	1.65
7	55.894	31.50	0.00	9.86	3.01	7.01	2.77	4.93	0.73	0.00	0.00	0.73	0.00	21.64	115.00	0.00	1.57
8	55.248	31.50	0.00	9.85	3.01	7.08	2.77	4.95	0.73	0.00	0.00	0.73	0.00	21.83	115.00	0.00	1.51
9	54.602	31.50	0.00	9.84	3.01	7.19	2.75	4.95	0.72	0.00	0.00	0.72	0.00	22.02	115.00	0.00	1.46
10	53.956	31.50	0.00	9.82	3.02	7.41	2.69	4.91	0.71	0.00	0.00	0.71	0.00	22.21	115.00	0.00	1.41
11	53.310	31.50	0.00	9.80	3.02	7.90	2.47	4.71	0.67	0.00	0.00	0.67	0.00	22.40	115.00	0.00	1.32

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 3 BDS 3-BDS 6

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *

12	UPR RCH	0.10278	31.50	0.00	9.80	3.02	7.90	2.47	4.71	0.67	0.00	0.00	0.00	22.40	0.00	1.32

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
12	53.31	52.86	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
13	52.86	52.41	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
14	52.41	51.96	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
15	51.96	51.51	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
16	51.51	51.06	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
17	51.06	50.61	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
18	50.61	50.16	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
19	50.16	49.71	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
20	49.71	49.26	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
21	49.26	48.81	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
TOT						166.81			1481348.38	404759.34					
AVG					0.00031		3.66	89.95			329.19				
CUM						323.75									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
12	52.860	7.37	0.24	0.32	0.07	0.00	0.00	0.00	0.00	0.11	0.02	1.50	0.00	0.00	0.00	1.01	0.00	0.00	0.06	0.07
13	52.410	7.37	0.24	0.32	0.07	0.00	0.00	0.00	0.00	0.11	0.02	1.50	0.00	0.00	0.00	1.07	0.00	0.00	0.06	0.07
14	51.960	7.37	0.24	0.32	0.07	0.00	0.00	0.00	0.00	0.11	0.02	1.50	0.00	0.00	0.00	1.13	0.00	0.00	0.06	0.07
15	51.510	7.37	0.24	0.32	0.07	0.00	0.00	0.00	0.00	0.11	0.02	1.50	0.00	0.00	0.00	1.19	0.00	0.00	0.06	0.07
16	51.060	7.37	0.24	0.32	0.07	0.00	0.00	0.00	0.00	0.11	0.02	1.50	0.00	0.00	0.00	1.25	0.00	0.00	0.06	0.07
17	50.610	7.37	0.24	0.32	0.07	0.00	0.00	0.00	0.00	0.11	0.02	1.50	0.00	0.00	0.00	1.31	0.00	0.00	0.06	0.07
18	50.160	7.37	0.24	0.32	0.07	0.00	0.00	0.00	0.00	0.11	0.02	1.50	0.00	0.00	0.00	1.37	0.00	0.00	0.06	0.07
19	49.710	7.37	0.24	0.32	0.07	0.00	0.00	0.00	0.00	0.11	0.02	1.50	0.00	0.00	0.00	1.42	0.00	0.00	0.06	0.07
20	49.260	7.37	0.24	0.32	0.07	0.00	0.00	0.00	0.00	0.11	0.02	1.50	0.00	0.00	0.00	1.48	0.00	0.00	0.06	0.07
21	48.810	7.37	0.24	0.32	0.07	0.00	0.00	0.00	0.00	0.11	0.02	1.50	0.00	0.00	0.00	1.54	0.00	0.00	0.06	0.07
20 DEG C RATE				0.19		0.00	0.00			0.05		0.60	0.00	0.00	0.00			0.00	0.04	
AVG 20 DEG C RATE			0.19		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
12	52.860	31.50	0.00	9.77	3.03	8.62	1.85	4.23	0.59	0.00	0.00	0.59	0.00	23.80	115.00	0.00	1.19
13	52.410	31.50	0.00	9.76	3.03	9.09	1.67	4.19	0.55	0.00	0.00	0.55	0.00	25.20	115.00	0.00	1.14
14	51.960	31.50	0.00	9.74	3.03	9.48	1.59	4.25	0.53	0.00	0.00	0.53	0.00	26.60	115.00	0.00	1.12
15	51.510	31.50	0.00	9.71	3.04	9.81	1.55	4.35	0.52	0.00	0.00	0.52	0.00	28.00	115.00	0.00	1.12
16	51.060	31.50	0.00	9.69	3.04	10.09	1.54	4.48	0.51	0.00	0.00	0.51	0.00	29.40	115.00	0.00	1.16
17	50.610	31.50	0.00	9.66	3.05	10.31	1.54	4.62	0.52	0.00	0.00	0.52	0.00	30.80	115.00	0.00	1.25
18	50.160	31.50	0.00	9.62	3.06	10.48	1.56	4.78	0.52	0.00	0.00	0.52	0.00	32.20	115.00	0.00	1.41
19	49.710	31.50	0.00	9.58	3.06	10.56	1.62	4.98	0.54	0.00	0.00	0.54	0.00	33.60	115.00	0.00	1.72
20	49.260	31.50	0.00	9.54	3.07	10.55	1.79	5.29	0.58	0.00	0.00	0.58	0.00	35.00	115.00	0.00	2.28
21	48.810	31.50	0.00	9.49	3.08	10.49	2.21	5.85	0.65	0.00	0.00	0.65	0.00	36.40	115.00	0.00	3.29

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 4 BDS 6-US 165 GATE INLET CANAL

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
22	UPR RCH	0.10278	31.50	0.00	9.49	3.08	10.49	2.21	5.85	0.65	0.00	0.00	0.00	36.40	0.00	3.29

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
22	48.81	48.61	0.10278	0.00	0.00026	8.76	3.38	115.09	77794.46	23017.30	388.97	0.00	0.000	1.000	0.000
23	48.61	48.41	0.10278	0.00	0.00026	8.76	3.38	115.09	77794.46	23017.30	388.97	0.00	0.000	1.000	0.000
TOT						17.52			155588.92	46034.61					
AVG					0.00026		3.38	115.09			388.97				
CUM						341.27									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM	ENDING	SAT	REAER	CBOD	CBOD	ANBOD	BKGD	FULL	CORR	ORGN	ORGN	NH3	NH3	DENIT	PO4	ALG	MAC	COLI	NCM	NCM

NO.	DIST	D.O. mg/L	RATE 1/da	DECAY 1/da	SETT 1/da	DECAY 1/da	SOD *	SOD *	SOD *	DECAY 1/da	SETT 1/da	DECAY 1/da	SRCE *	RATE 1/da	SRCE *	PROD **	PROD **	DECAY 1/da	DECAY 1/da	SETT 1/da
22	48.610	7.37	0.26	0.32	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.50	0.00	0.00	0.00	1.70	0.00	0.00	0.03	0.07
23	48.410	7.37	0.26	0.32	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.50	0.00	0.00	0.00	1.87	0.00	0.00	0.03	0.07
20 DEG C RATE				0.19		0.00	0.00			0.09		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.21		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
22	48.610	31.50	0.00	9.45	3.09	10.61	2.96	6.98	0.73	0.00	0.00	0.73	0.00	40.20	115.00	0.00	4.53
23	48.410	31.50	0.00	9.42	3.10	10.77	3.02	7.42	0.79	0.00	0.00	0.79	0.00	44.00	115.00	0.00	4.87

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
REACH NO. 7 US165 GATE IN CANAL-US165 GATE macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
44	UPR RCH	0.10278	31.50	0.00	9.42	3.10	10.77	3.02	7.42	0.79	0.00	0.00	0.00	44.00	0.00	4.87
44	TRIB	0.10278	31.50	0.00	9.37	3.11	11.36	2.36	6.76	0.66	0.00	0.00	0.00	44.00	0.00	4.78

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
44	48.41	48.33	0.20556	0.00	0.02876	0.03	1.04	6.85	571.70	548.29	7.15	0.00	0.000	1.000	0.029
TOT						0.03			571.70	548.29					
AVG					0.02876		1.04	6.85			7.15				
CUM						341.30									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
44	48.330	7.37	0.83	0.32	0.07	0.00	11.62	12.13	12.13	0.22	0.02	1.50	0.02	0.00	0.00	1.95	0.00	0.00	0.03	0.07
20 DEG C RATE				0.19		0.00	5.63			0.10		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.67		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
44	48.330	31.50	0.00	9.40	3.10	10.98	2.70	7.30	0.86	0.00	0.00	0.86	0.00	46.00	115.00	0.00	4.82

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 8 US 165 GATE/CONTROL STRUCTURE

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
45	UPR RCH	0.20556	31.50	0.00	9.40	3.10	10.98	2.70	7.30	0.86	0.00	0.00	0.00	46.00	0.00	4.82

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
45	48.33	48.25	0.20556	0.00	0.04998	0.02	1.66	2.47	329.04	197.89	4.11	0.00	0.000	1.000	0.050
TOT						0.02			329.04	197.89					

AVG						0.04998			1.66	2.47							4.11			
CUM								341.32												

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
45	48.250	7.37	0.52	0.32	0.07	0.00	11.62	12.37	12.37	0.22	0.02	1.50	0.02	0.00	0.00	2.04	0.00	0.00	0.03	0.07
20 DEG C RATE				0.19		0.00	5.63			0.10		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.42		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
45	48.250	31.50	0.00	9.40	3.10	8.38	2.29	7.09	0.72	0.00	0.00	0.72	0.00	48.00	115.00	0.00	4.59

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 9 US165 GATE OUTLET-BDS 7

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
46	UPR RCH	0.20556	31.50	0.00	9.40	3.10	8.38	2.29	7.09	0.72	0.00	0.00	0.00	48.00	0.00	4.59

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
46	48.25	48.14	0.20556	0.00	0.00281	0.45	1.70	42.91	8037.53	4720.50	73.07	0.00	0.000	1.000	0.003

47	48.14	48.03	0.20556	0.00	0.00281	0.45	1.70	42.91	8037.53	4720.50	73.07	0.00	0.000	1.000	0.003
48	48.03	47.92	0.20556	0.00	0.00281	0.45	1.70	42.91	8037.53	4720.50	73.07	0.00	0.000	1.000	0.003
TOT						1.36			24112.58	14161.51					
AVG					0.00281		1.70	42.91			73.07				
CUM						342.68									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
46	48.140	7.37	0.51	0.34	0.07	0.00	11.62	12.34	12.34	0.44	0.02	1.47	0.02	0.00	0.00	2.42	0.00	0.00	0.03	0.07
47	48.030	7.37	0.51	0.34	0.07	0.00	11.62	12.32	12.32	0.44	0.02	1.44	0.02	0.00	0.00	2.80	0.00	0.00	0.03	0.07
48	47.920	7.37	0.51	0.34	0.07	0.00	11.62	12.31	12.31	0.44	0.02	1.42	0.02	0.00	0.00	3.18	0.00	0.00	0.03	0.07
20 DEG C RATE				0.20		0.00	5.63			0.20		0.60	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			0.41		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
46	48.140	31.50	0.00	9.40	3.10	6.89	2.06	7.76	0.63	0.00	0.00	0.63	0.00	57.00	115.00	0.00	4.45
47	48.030	31.50	0.00	9.40	3.10	6.15	1.94	8.54	0.59	0.00	0.00	0.59	0.00	66.00	115.00	0.00	4.37
48	47.920	31.50	0.00	9.40	3.10	5.83	1.89	9.39	0.56	0.00	0.00	0.56	0.00	75.00	115.00	0.00	4.32

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 10 BDS 7-BDS 8

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
49	UPR RCH	0.20556	31.50	0.00	9.40	3.10	5.83	1.89	9.39	0.56	0.00	0.00	0.00	75.00	0.00	4.32

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
49	47.92	47.46	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
50	47.46	47.00	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
51	47.00	46.54	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
52	46.54	46.08	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
53	46.08	45.62	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
54	45.62	45.16	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
55	45.16	44.70	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
56	44.70	44.24	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
57	44.24	43.78	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
58	43.78	43.32	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
59	43.32	42.86	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
60	42.86	42.40	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
61	42.40	41.94	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
62	41.94	41.48	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
63	41.48	41.02	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
64	41.02	40.56	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
TOT						17.22			305756.56	163271.91					
AVG					0.00495		1.87	22.18			41.54				
CUM						359.89									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
49	47.460	7.37	0.46	0.29	0.07	0.00	3.22	4.00	4.00	0.44	0.02	2.41	0.02	0.00	0.00	3.18	0.00	0.00	0.03	0.07
50	47.000	7.37	0.46	0.29	0.07	0.00	3.22	4.02	4.02	0.44	0.02	2.45	0.02	0.00	0.00	3.18	0.00	0.00	0.03	0.07
51	46.540	7.37	0.46	0.29	0.07	0.00	3.22	4.04	4.04	0.44	0.02	2.46	0.02	0.00	0.00	3.18	0.00	0.00	0.03	0.07
52	46.080	7.37	0.46	0.29	0.07	0.00	3.22	4.05	4.05	0.44	0.02	2.48	0.02	0.00	0.00	3.18	0.00	0.00	0.03	0.07
53	45.620	7.37	0.46	0.29	0.07	0.00	3.22	4.06	4.06	0.44	0.02	2.48	0.02	0.00	0.00	3.18	0.00	0.00	0.03	0.07
54	45.160	7.37	0.46	0.29	0.07	0.00	3.22	4.06	4.06	0.44	0.02	2.49	0.02	0.00	0.00	3.18	0.00	0.00	0.03	0.07
55	44.700	7.37	0.46	0.29	0.07	0.00	3.22	4.07	4.07	0.44	0.02	2.49	0.02	0.00	0.00	3.18	0.00	0.00	0.03	0.07
56	44.240	7.37	0.46	0.29	0.07	0.00	3.22	4.07	4.07	0.44	0.02	2.49	0.02	0.00	0.00	3.18	0.00	0.00	0.03	0.07
57	43.780	7.37	0.46	0.29	0.07	0.00	3.22	4.07	4.07	0.44	0.02	2.49	0.02	0.00	0.00	3.18	0.00	0.00	0.03	0.07
58	43.320	7.37	0.46	0.29	0.07	0.00	3.22	4.07	4.07	0.44	0.02	2.49	0.02	0.00	0.00	3.18	0.00	0.00	0.03	0.07
59	42.860	7.37	0.46	0.29	0.07	0.00	3.22	4.07	4.07	0.44	0.02	2.49	0.02	0.00	0.00	3.18	0.00	0.00	0.03	0.07
60	42.400	7.37	0.46	0.29	0.07	0.00	3.22	4.07	4.07	0.44	0.02	2.49	0.02	0.00	0.00	3.18	0.00	0.00	0.03	0.07
61	41.940	7.37	0.46	0.29	0.07	0.00	3.22	4.08	4.08	0.44	0.02	2.49	0.02	0.00	0.00	3.18	0.00	0.00	0.03	0.07
62	41.480	7.37	0.46	0.29	0.07	0.00	3.22	4.08	4.08	0.44	0.02	2.49	0.02	0.00	0.00	3.18	0.00	0.00	0.03	0.07

63	41.020	7.37	0.46	0.29	0.07	0.00	3.22	4.08	4.08	0.44	0.02	2.49	0.02	0.00	0.00	3.18	0.00	0.00	0.03	0.07
64	40.560	7.37	0.46	0.29	0.07	0.00	3.22	4.09	4.09	0.44	0.02	2.50	0.03	0.00	0.00	3.18	0.00	0.00	0.03	0.07
20 DEG C RATE				0.17		0.00	1.56			0.20		1.00	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			0.37		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
49	47.460	31.50	0.00	9.40	3.10	6.39	2.07	9.57	0.59	0.00	0.00	0.59	0.00	75.00	115.00	0.00	4.32
50	47.000	31.50	0.00	9.40	3.10	6.85	2.23	9.73	0.62	0.00	0.00	0.62	0.00	75.00	115.00	0.00	4.31
51	46.540	31.50	0.00	9.40	3.10	7.14	2.35	9.85	0.63	0.00	0.00	0.63	0.00	75.00	115.00	0.00	4.30
52	46.080	31.50	0.00	9.40	3.10	7.33	2.45	9.95	0.65	0.00	0.00	0.65	0.00	75.00	115.00	0.00	4.30
53	45.620	31.50	0.00	9.40	3.10	7.44	2.51	10.01	0.65	0.00	0.00	0.65	0.00	75.00	115.00	0.00	4.30
54	45.160	31.50	0.00	9.40	3.10	7.51	2.57	10.07	0.66	0.00	0.00	0.66	0.00	75.00	115.00	0.00	4.29
55	44.700	31.50	0.00	9.40	3.10	7.55	2.60	10.10	0.66	0.00	0.00	0.66	0.00	75.00	115.00	0.00	4.29
56	44.240	31.50	0.00	9.40	3.10	7.57	2.63	10.13	0.67	0.00	0.00	0.67	0.00	75.00	115.00	0.00	4.28
57	43.780	31.50	0.00	9.40	3.10	7.58	2.65	10.15	0.67	0.00	0.00	0.67	0.00	75.00	115.00	0.00	4.28
58	43.320	31.50	0.00	9.40	3.10	7.58	2.67	10.17	0.67	0.00	0.00	0.67	0.00	75.00	115.00	0.00	4.28
59	42.860	31.50	0.00	9.40	3.10	7.58	2.68	10.18	0.67	0.00	0.00	0.67	0.00	75.00	115.00	0.00	4.28
60	42.400	31.50	0.00	9.40	3.10	7.58	2.69	10.19	0.67	0.00	0.00	0.67	0.00	75.00	115.00	0.00	4.27
61	41.940	31.50	0.00	9.40	3.10	7.58	2.70	10.20	0.67	0.00	0.00	0.67	0.00	75.00	115.00	0.00	4.27
62	41.480	31.50	0.00	9.40	3.10	7.59	2.70	10.20	0.67	0.00	0.00	0.67	0.00	75.00	115.00	0.00	4.27
63	41.020	31.50	0.00	9.40	3.10	7.63	2.72	10.22	0.67	0.00	0.00	0.67	0.00	75.00	115.00	0.00	4.27
64	40.560	31.50	0.00	9.40	3.10	7.83	2.77	10.27	0.68	0.00	0.00	0.68	0.00	75.00	115.00	0.00	4.28

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 11 BDS 8-MILL BAYOU

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
65	UPR RCH	0.20556	31.50	0.00	9.40	3.10	7.83	2.77	10.27	0.68	0.00	0.00	0.00	75.00	0.00	4.28

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
65	40.56	40.08	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
66	40.08	39.59	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
67	39.59	39.10	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
68	39.10	38.62	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
69	38.62	38.13	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
70	38.13	37.65	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
71	37.65	37.16	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
72	37.16	36.68	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
73	36.68	36.19	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
74	36.19	35.71	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
75	35.71	35.22	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
76	35.22	34.74	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
77	34.74	34.25	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
78	34.25	33.77	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
TOT						15.88			282077.06	150627.19					
AVG					0.00495		1.87	22.18			41.54				
CUM						375.77									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
65	40.075	7.37	0.46	0.20	0.07	0.00	0.00	0.90	0.90	0.44	0.02	2.50	0.03	0.00	0.00	3.03	0.00	0.00	0.03	0.07
66	39.590	7.37	0.46	0.20	0.07	0.00	0.00	0.93	0.93	0.44	0.02	2.50	0.03	0.00	0.00	2.87	0.00	0.00	0.03	0.07
67	39.105	7.37	0.46	0.20	0.07	0.00	0.00	0.95	0.95	0.44	0.02	2.50	0.03	0.00	0.00	2.72	0.00	0.00	0.03	0.07
68	38.620	7.37	0.46	0.20	0.07	0.00	0.00	0.96	0.96	0.44	0.02	2.50	0.03	0.00	0.00	2.57	0.00	0.00	0.03	0.07
69	38.135	7.37	0.46	0.20	0.07	0.00	0.00	0.98	0.98	0.44	0.02	2.50	0.03	0.00	0.00	2.42	0.00	0.00	0.03	0.07
70	37.650	7.37	0.46	0.20	0.07	0.00	0.00	0.99	0.99	0.44	0.02	2.50	0.03	0.00	0.00	2.26	0.00	0.00	0.03	0.07
71	37.165	7.37	0.46	0.20	0.07	0.00	0.00	1.00	1.00	0.44	0.02	2.50	0.03	0.00	0.00	2.11	0.00	0.00	0.03	0.07
72	36.680	7.37	0.46	0.20	0.07	0.00	0.00	1.01	1.01	0.44	0.02	2.50	0.03	0.00	0.00	1.96	0.00	0.00	0.03	0.07
73	36.195	7.37	0.46	0.20	0.07	0.00	0.00	1.01	1.01	0.44	0.02	2.50	0.03	0.00	0.00	1.81	0.00	0.00	0.03	0.07
74	35.710	7.37	0.46	0.20	0.07	0.00	0.00	1.02	1.02	0.44	0.02	2.50	0.03	0.00	0.00	1.65	0.00	0.00	0.03	0.07
75	35.225	7.37	0.46	0.20	0.07	0.00	0.00	1.02	1.02	0.44	0.02	2.50	0.03	0.00	0.00	1.50	0.00	0.00	0.03	0.07
76	34.740	7.37	0.46	0.20	0.07	0.00	0.00	1.01	1.01	0.44	0.02	2.49	0.03	0.00	0.00	1.35	0.00	0.00	0.03	0.07
77	34.255	7.37	0.46	0.20	0.07	0.00	0.00	0.98	0.98	0.44	0.02	2.47	0.03	0.00	0.00	1.20	0.00	0.00	0.03	0.07
78	33.770	7.37	0.46	0.20	0.07	0.00	0.00	0.84	0.84	0.44	0.02	2.40	0.02	0.00	0.00	1.04	0.00	0.00	0.03	0.07
20 DEG C RATE				0.12		0.00	0.00			0.20		1.00	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			0.37		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
65	40.075	31.50	0.00	9.40	3.10	8.88	3.01	10.15	0.69	0.00	0.00	0.69	0.00	71.40	115.00	0.00	4.31
66	39.590	31.50	0.00	9.40	3.10	9.46	3.20	9.98	0.71	0.00	0.00	0.71	0.00	67.80	115.00	0.00	4.34
67	39.105	31.50	0.00	9.40	3.10	9.73	3.35	9.77	0.71	0.00	0.00	0.71	0.00	64.20	115.00	0.00	4.36
68	38.620	31.50	0.00	9.40	3.10	9.78	3.46	9.52	0.72	0.00	0.00	0.72	0.00	60.60	115.00	0.00	4.39
69	38.135	31.50	0.00	9.40	3.10	9.70	3.55	9.25	0.72	0.00	0.00	0.72	0.00	57.00	115.00	0.00	4.41
70	37.650	31.50	0.00	9.40	3.10	9.53	3.62	8.96	0.72	0.00	0.00	0.72	0.00	53.40	115.00	0.00	4.43
71	37.165	31.50	0.00	9.40	3.10	9.29	3.67	8.65	0.73	0.00	0.00	0.73	0.00	49.80	115.00	0.00	4.44
72	36.680	31.50	0.00	9.40	3.10	9.02	3.72	8.34	0.73	0.00	0.00	0.73	0.00	46.20	115.00	0.00	4.46
73	36.195	31.50	0.00	9.40	3.10	8.72	3.75	8.01	0.73	0.00	0.00	0.73	0.00	42.60	115.00	0.00	4.47
74	35.710	31.50	0.00	9.40	3.10	8.39	3.77	7.67	0.73	0.00	0.00	0.73	0.00	39.00	115.00	0.00	4.48
75	35.225	31.50	0.00	9.39	3.09	8.04	3.79	7.33	0.73	0.00	0.00	0.73	0.00	35.40	115.00	0.00	4.48
76	34.740	31.50	0.00	9.36	3.08	7.66	3.77	6.95	0.73	0.01	0.00	0.73	0.00	31.80	115.00	0.00	4.45
77	34.255	31.50	0.00	9.25	3.02	7.20	3.66	6.48	0.72	0.01	0.00	0.73	0.00	28.20	115.00	0.00	4.30
78	33.770	31.50	0.00	8.89	2.83	6.22	3.11	5.57	0.67	0.00	0.00	0.68	0.00	24.60	115.00	0.00	3.73

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 12 MILL BAYOU-BDS 9

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
79	UPR RCH	0.20556	31.50	0.00	8.89	2.83	6.22	3.11	5.57	0.67	0.00	0.00	0.00	24.60	0.00	3.73

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
79	33.77	33.20	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
80	33.20	32.63	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
81	32.63	32.06	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001

82	32.06	31.49	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
83	31.49	30.92	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
84	30.92	30.34	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
85	30.34	29.77	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
86	29.77	29.20	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
87	29.20	28.63	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
88	28.63	28.06	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
TOT						58.28			1035125.56	439976.53					
AVG					0.00113		2.35	77.05			181.28				
CUM						434.06									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
79	33.199	7.37	0.37	0.14	0.07	0.00	3.22	3.22	3.22	0.13	0.02	1.42	0.00	0.00	0.00	1.04	0.00	0.00	0.02	0.07
80	32.628	7.37	0.37	0.14	0.07	0.00	3.22	3.22	3.22	0.13	0.02	1.41	0.00	0.00	0.00	1.04	0.00	0.00	0.02	0.07
81	32.057	7.37	0.37	0.14	0.07	0.00	3.22	3.22	3.22	0.13	0.02	1.40	0.00	0.00	0.00	1.04	0.00	0.00	0.02	0.07
82	31.486	7.37	0.37	0.14	0.07	0.00	3.22	3.22	3.22	0.13	0.02	1.40	0.00	0.00	0.00	1.04	0.00	0.00	0.02	0.07
83	30.915	7.37	0.37	0.14	0.07	0.00	3.22	3.22	3.22	0.13	0.02	1.40	0.00	0.00	0.00	1.04	0.00	0.00	0.02	0.07
84	30.344	7.37	0.37	0.14	0.07	0.00	3.22	3.22	3.22	0.13	0.02	1.39	0.00	0.00	0.00	1.04	0.00	0.00	0.02	0.07
85	29.773	7.37	0.37	0.14	0.07	0.00	3.22	3.22	3.22	0.13	0.02	1.39	0.00	0.00	0.00	1.04	0.00	0.00	0.02	0.07
86	29.202	7.37	0.37	0.14	0.07	0.00	3.22	3.22	3.22	0.13	0.02	1.39	0.00	0.00	0.00	1.04	0.00	0.00	0.02	0.07
87	28.631	7.37	0.37	0.14	0.07	0.00	3.22	3.22	3.22	0.13	0.02	1.38	0.00	0.00	0.00	1.04	0.00	0.00	0.02	0.07
88	28.060	7.37	0.37	0.14	0.07	0.00	3.22	3.22	3.22	0.13	0.02	1.38	0.00	0.00	0.00	1.04	0.00	0.00	0.02	0.07
20 DEG C RATE				0.08		0.00	1.56			0.06		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.30		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
79	33.199	31.50	0.00	8.76	2.76	5.74	2.84	5.30	0.65	0.00	0.00	0.65	0.00	24.60	115.00	0.00	3.49
80	32.628	31.50	0.00	8.66	2.71	5.57	2.72	5.18	0.64	0.00	0.00	0.64	0.00	24.60	115.00	0.00	3.37
81	32.057	31.50	0.00	8.54	2.65	5.46	2.64	5.10	0.63	0.00	0.00	0.63	0.00	24.60	115.00	0.00	3.29
82	31.486	31.50	0.00	8.40	2.57	5.40	2.59	5.05	0.62	0.00	0.00	0.62	0.00	24.60	115.00	0.00	3.24
83	30.915	31.50	0.00	8.23	2.49	5.36	2.56	5.02	0.61	0.00	0.00	0.61	0.00	24.60	115.00	0.00	3.23
84	30.344	31.50	0.00	8.05	2.39	5.33	2.57	5.03	0.61	0.00	0.00	0.61	0.00	24.60	115.00	0.00	3.26
85	29.773	31.50	0.00	7.83	2.27	5.29	2.60	5.06	0.60	0.00	0.00	0.60	0.00	24.60	115.00	0.00	3.35
86	29.202	31.50	0.00	7.57	2.14	5.23	2.68	5.14	0.59	0.00	0.00	0.59	0.00	24.60	115.00	0.00	3.51

87	28.631	31.50	0.00	7.28	1.98	5.16	2.83	5.29	0.59	0.00	0.00	0.59	0.00	24.60	115.00	0.00	3.76
88	28.060	31.50	0.00	6.93	1.80	5.06	3.08	5.54	0.57	0.00	0.00	0.57	0.00	24.60	115.00	0.00	4.13

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 13 BDS 9-HANNAH'S RUN

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
89	UPR RCH	0.20556	31.50	0.00	6.93	1.80	5.06	3.08	5.54	0.57	0.00	0.00	0.00	24.60	0.00	4.13

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
89	28.06	27.58	0.20556	0.00	0.00113	4.88	2.35	77.05	86653.24	36831.66	181.28	0.00	0.000	4.000	0.001
90	27.58	27.10	0.20556	0.00	0.00113	4.88	2.35	77.05	86653.24	36831.66	181.28	0.00	0.000	4.000	0.001
91	27.10	26.63	0.20556	0.00	0.00113	4.88	2.35	77.05	86653.24	36831.66	181.28	0.00	0.000	4.000	0.001
92	26.63	26.15	0.20556	0.00	0.00113	4.88	2.35	77.05	86653.24	36831.66	181.28	0.00	0.000	4.000	0.001
93	26.15	25.67	0.20556	0.00	0.00113	4.88	2.35	77.05	86653.24	36831.66	181.28	0.00	0.000	4.000	0.001
TOT						24.40			433266.22	184158.28					
AVG					0.00113		2.35	77.05			181.28				
CUM						458.45									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
89	27.582	7.37	0.37	0.14	0.07	0.00	3.22	3.22	3.22	0.13	0.02	1.37	0.00	0.00	0.00	0.95	0.00	0.00	0.02	0.07
90	27.104	7.37	0.37	0.14	0.07	0.00	3.22	3.22	3.22	0.13	0.02	1.37	0.00	0.00	0.00	0.86	0.00	0.00	0.02	0.07
91	26.626	7.37	0.37	0.14	0.07	0.00	3.22	3.22	3.22	0.13	0.02	1.38	0.00	0.00	0.00	0.76	0.00	0.00	0.02	0.07
92	26.148	7.37	0.37	0.14	0.07	0.00	3.22	3.22	3.22	0.13	0.02	1.40	0.00	0.00	0.00	0.67	0.00	0.00	0.02	0.07
93	25.670	7.37	0.37	0.14	0.07	0.00	3.22	3.22	3.22	0.13	0.02	1.45	0.00	0.00	0.00	0.58	0.00	0.00	0.02	0.07

20 DEG C RATE			0.08		0.00	1.56			0.06		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE		0.30		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
89	27.582	31.50	0.00	6.56	1.61	4.95	3.46	5.70	0.56	0.00	0.00	0.56	0.00	22.40	115.00	0.00	4.65
90	27.104	31.50	0.00	6.18	1.41	4.92	3.85	5.87	0.54	0.00	0.00	0.54	0.00	20.20	115.00	0.00	5.03
91	26.626	31.50	0.00	5.74	1.18	5.04	4.33	6.13	0.54	0.00	0.00	0.54	0.00	18.00	115.00	0.00	5.34
92	26.148	31.50	0.00	5.25	0.92	5.49	4.97	6.55	0.54	0.00	0.00	0.54	0.00	15.80	115.00	0.00	5.57
93	25.670	31.50	0.00	4.69	0.62	6.53	5.88	7.24	0.54	0.00	0.00	0.54	0.00	13.60	115.00	0.00	5.74

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 19 HANNAH'S RUN-BDS10

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
99	UPR RCH	0.20556	31.50	0.00	4.69	0.62	6.53	5.88	7.24	0.54	0.00	0.00	0.00	13.60	0.00	5.74
99	TRIB	1.45612	31.50	0.00	4.16	0.35	8.52	6.98	8.34	0.56	0.01	0.00	0.00	13.60	0.00	5.68

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
99	25.67	25.41	1.66168	0.00	0.00735	0.42	2.48	91.11	59941.76	24144.71	226.20	0.00	0.000	4.000	0.007
100	25.41	25.14	1.66168	0.00	0.00735	0.42	2.48	91.11	59941.76	24144.71	226.20	0.00	0.000	4.000	0.007
101	25.14	24.88	1.66168	0.00	0.00735	0.42	2.48	91.11	59941.76	24144.71	226.20	0.00	0.000	4.000	0.007
102	24.88	24.61	1.66168	0.00	0.00735	0.42	2.48	91.11	59941.76	24144.71	226.20	0.00	0.000	4.000	0.007
TOT						1.67			239767.03	96578.82					
AVG					0.00735		2.48	91.11			226.20				
CUM						460.12									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
99	25.405	7.37	0.35	0.20	0.07	0.00	3.22	3.22	3.22	0.15	0.02	1.50	0.00	0.00	0.00	0.60	0.00	0.00	0.02	0.07
100	25.140	7.37	0.35	0.20	0.07	0.00	3.22	3.22	3.22	0.15	0.02	1.49	0.00	0.00	0.00	0.63	0.00	0.00	0.02	0.07
101	24.875	7.37	0.35	0.20	0.07	0.00	3.22	3.22	3.22	0.15	0.02	1.48	0.00	0.00	0.00	0.65	0.00	0.00	0.02	0.07
102	24.610	7.37	0.35	0.20	0.07	0.00	3.22	3.22	3.22	0.15	0.02	1.47	0.00	0.00	0.00	0.68	0.00	0.00	0.02	0.07
20 DEG C RATE				0.12		0.00	1.56			0.07		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.28		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
99	25.405	31.50	0.00	4.23	0.38	8.05	6.84	8.26	0.55	0.00	0.00	0.55	0.00	14.20	115.00	0.00	5.81
100	25.140	31.50	0.00	4.23	0.38	7.48	6.83	8.31	0.53	0.00	0.00	0.53	0.00	14.80	115.00	0.00	6.15
101	24.875	31.50	0.00	4.23	0.38	7.07	6.77	8.31	0.52	0.00	0.00	0.52	0.00	15.40	115.00	0.00	6.40
102	24.610	31.50	0.00	4.23	0.38	6.89	6.62	8.22	0.51	0.00	0.00	0.51	0.00	16.00	115.00	0.00	6.50

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 20 BDS 10- L-11 CANAL PIPE INTAKE

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
103	UPR RCH	1.66168	31.50	0.00	4.23	0.38	6.89	6.62	8.22	0.51	0.00	0.00	0.00	16.00	0.00	6.50

********** HYDRAULIC PARAMETER VALUES **********

ELEM	BEGIN	ENDING	FLOW	PCT	ADVCTV	TRAVEL	DEPTH	WIDTH	VOLUME	SURFACE	X-SECT	TIDAL	TIDAL	DISPRSN	MEAN

NO.	DIST km	DIST km	m³/	EFF	VELO m/s	TIME days	m	m	m³	AREA m²	AREA m²	PRISM m³	VELO m/s	m²/s	VELO m/s
103	24.61	24.35	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
104	24.35	24.09	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
105	24.09	23.82	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
106	23.82	23.56	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
107	23.56	23.30	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
108	23.30	23.04	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
109	23.04	22.78	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
110	22.78	22.51	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
111	22.51	22.25	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
112	22.25	21.99	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
113	21.99	21.73	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
114	21.73	21.47	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
115	21.47	21.20	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
116	21.20	20.94	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
117	20.94	20.68	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
118	20.68	20.42	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
119	20.42	20.16	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
120	20.16	19.89	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
121	19.89	19.63	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
122	19.63	19.37	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
123	19.37	19.11	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
124	19.11	18.85	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
125	18.85	18.58	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
126	18.58	18.32	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
127	18.32	18.06	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
TOT						10.32			1481579.12	596784.31					
AVG					0.00735		2.48	91.11			226.20				
CUM						470.44									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
103	24.348	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.47	0.00	0.00	0.00	0.68	0.00	0.00	0.02	0.07
104	24.086	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.69	0.00	0.00	0.02	0.07
105	23.824	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.69	0.00	0.00	0.02	0.07
106	23.562	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.70	0.00	0.00	0.02	0.07
107	23.300	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.71	0.00	0.00	0.02	0.07
108	23.038	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.71	0.00	0.00	0.02	0.07
109	22.776	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.72	0.00	0.00	0.02	0.07
110	22.514	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.72	0.00	0.00	0.02	0.07
111	22.252	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.73	0.00	0.00	0.02	0.07

112	21.990	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.73	0.00	0.00	0.02	0.07
113	21.728	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.74	0.00	0.00	0.02	0.07
114	21.466	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.74	0.00	0.00	0.02	0.07
115	21.204	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.75	0.00	0.00	0.02	0.07
116	20.942	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.75	0.00	0.00	0.02	0.07
117	20.680	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.76	0.00	0.00	0.02	0.07
118	20.418	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.77	0.00	0.00	0.02	0.07
119	20.156	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.77	0.00	0.00	0.02	0.07
120	19.894	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.78	0.00	0.00	0.02	0.07
121	19.632	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.78	0.00	0.00	0.02	0.07
122	19.370	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.79	0.00	0.00	0.02	0.07
123	19.108	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.79	0.00	0.00	0.02	0.07
124	18.846	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.48	0.00	0.00	0.00	0.80	0.00	0.00	0.02	0.07
125	18.584	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.49	0.00	0.00	0.00	0.80	0.00	0.00	0.02	0.07
126	18.322	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.49	0.00	0.00	0.00	0.81	0.00	0.00	0.02	0.07
127	18.060	7.37	3.66	0.22	0.07	0.00	0.00	0.00	0.00	0.20	0.02	1.49	0.00	0.00	0.00	0.81	0.00	0.00	0.02	0.07
20 DEG C RATE				0.13		0.00	0.00			0.09		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			2.96		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
103	24.348	31.50	0.00	4.23	0.38	7.00	6.34	7.96	0.51	0.00	0.00	0.51	0.00	16.13	115.00	0.00	6.40
104	24.086	31.50	0.00	4.23	0.38	7.07	6.09	7.71	0.51	0.00	0.00	0.51	0.00	16.26	115.00	0.00	6.31
105	23.824	31.50	0.00	4.23	0.38	7.12	5.86	7.50	0.51	0.00	0.00	0.51	0.00	16.38	115.00	0.00	6.21
106	23.562	31.50	0.00	4.23	0.38	7.15	5.65	7.30	0.51	0.00	0.00	0.51	0.00	16.51	115.00	0.00	6.12
107	23.300	31.50	0.00	4.23	0.38	7.17	5.46	7.12	0.51	0.00	0.00	0.51	0.00	16.64	115.00	0.00	6.04
108	23.038	31.50	0.00	4.23	0.38	7.19	5.28	6.96	0.51	0.00	0.00	0.51	0.00	16.77	115.00	0.00	5.95
109	22.776	31.50	0.00	4.23	0.38	7.21	5.13	6.82	0.50	0.00	0.00	0.50	0.00	16.90	115.00	0.00	5.87
110	22.514	31.50	0.00	4.23	0.38	7.22	4.98	6.69	0.50	0.00	0.00	0.50	0.00	17.02	115.00	0.00	5.79
111	22.252	31.50	0.00	4.23	0.38	7.23	4.85	6.57	0.50	0.00	0.00	0.50	0.00	17.15	115.00	0.00	5.72
112	21.990	31.50	0.00	4.23	0.38	7.24	4.73	6.46	0.50	0.00	0.00	0.50	0.00	17.28	115.00	0.00	5.64
113	21.728	31.50	0.00	4.23	0.38	7.25	4.62	6.37	0.50	0.00	0.00	0.50	0.00	17.41	115.00	0.00	5.57
114	21.466	31.50	0.00	4.23	0.38	7.26	4.53	6.28	0.50	0.00	0.00	0.50	0.00	17.54	115.00	0.00	5.50
115	21.204	31.50	0.00	4.23	0.38	7.27	4.44	6.20	0.50	0.00	0.00	0.50	0.00	17.66	115.00	0.00	5.44
116	20.942	31.50	0.00	4.23	0.38	7.28	4.36	6.13	0.50	0.00	0.00	0.50	0.00	17.79	115.00	0.00	5.37
117	20.680	31.50	0.00	4.23	0.38	7.28	4.28	6.07	0.50	0.00	0.00	0.50	0.00	17.92	115.00	0.00	5.31
118	20.418	31.50	0.00	4.23	0.38	7.29	4.21	6.02	0.50	0.00	0.00	0.50	0.00	18.05	115.00	0.00	5.25
119	20.156	31.50	0.00	4.23	0.38	7.29	4.15	5.97	0.50	0.00	0.00	0.50	0.00	18.18	115.00	0.00	5.19
120	19.894	31.50	0.00	4.23	0.38	7.30	4.09	5.92	0.50	0.00	0.00	0.50	0.00	18.30	115.00	0.00	5.13
121	19.632	31.50	0.00	4.23	0.38	7.31	4.04	5.88	0.49	0.00	0.00	0.49	0.00	18.43	115.00	0.00	5.08
122	19.370	31.50	0.00	4.23	0.38	7.31	3.99	5.84	0.49	0.00	0.00	0.49	0.00	18.56	115.00	0.00	5.02
123	19.108	31.50	0.00	4.23	0.38	7.32	3.93	5.80	0.49	0.00	0.00	0.49	0.00	18.69	115.00	0.00	4.97

124	18.846	31.50	0.00	4.23	0.38	7.32	3.88	5.76	0.49	0.00	0.00	0.49	0.00	18.82	115.00	0.00	4.91
125	18.584	31.50	0.00	4.23	0.38	7.33	3.82	5.71	0.49	0.00	0.00	0.49	0.00	18.94	115.00	0.00	4.86
126	18.322	31.50	0.00	4.23	0.38	7.33	3.74	5.65	0.48	0.00	0.00	0.48	0.00	19.07	115.00	0.00	4.80
127	18.060	31.50	0.00	4.23	0.38	7.35	3.64	5.56	0.48	0.00	0.00	0.48	0.00	19.20	115.00	0.00	4.75

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 21 L-11 CANAL CONTROL PIPE

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
128	UPR RCH	1.66168	31.50	0.00	4.23	0.38	7.35	3.64	5.56	0.48	0.00	0.00	0.00	19.20	0.00	4.75
128	WSTLD	-1.05717	31.50	0.00	4.23	0.38	7.36	3.52	3.52	0.47	0.00	0.00	0.00	31.00	0.00	4.69

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
128	18.06	17.98	0.60451	0.00	0.14101	0.01	1.67	2.57	342.97	205.67	4.29	0.00	0.000	1.000	0.141
TOT						0.01			342.97	205.67					
AVG					0.14101		1.67	2.57			4.29				
CUM						470.45									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
128	17.980	7.37	0.52	0.24	0.07	0.00	0.00	0.00	0.00	0.17	0.02	1.49	0.00	0.00	0.00	1.31	0.00	0.00	0.03	0.07
20 DEG C RATE				0.14		0.00	0.00			0.08		0.60	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			0.42		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
128	17.980	31.50	0.00	4.23	0.38	7.36	3.52	6.62	0.47	0.00	0.00	0.47	0.00	31.00	115.00	0.00	4.69

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 22 L-11 PIPEOUTFALL-MIDWAY INTAKE

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
129	UPR RCH	0.60451	31.50	0.00	4.23	0.38	7.36	3.52	6.62	0.47	0.00	0.00	0.00	31.00	0.00	4.69

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
129	17.98	17.51	0.60451	0.00	0.00265	2.06	2.39	95.50	107393.65	44886.77	228.50	0.00	0.000	1.000	0.003
130	17.51	17.04	0.60451	0.00	0.00265	2.06	2.39	95.50	107393.65	44886.77	228.50	0.00	0.000	1.000	0.003
131	17.04	16.57	0.60451	0.00	0.00265	2.06	2.39	95.50	107393.65	44886.77	228.50	0.00	0.000	1.000	0.003
132	16.57	16.10	0.60451	0.00	0.00265	2.06	2.39	95.50	107393.65	44886.77	228.50	0.00	0.000	1.000	0.003
133	16.10	15.63	0.60451	0.00	0.00265	2.06	2.39	95.50	107393.65	44886.77	228.50	0.00	0.000	1.000	0.003
TOT						10.28			536968.25	224433.84					
AVG					0.00265		2.39	95.50			228.50				
CUM						480.73									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
129	17.510	7.37	3.80	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.49	0.00	0.00	0.00	1.42	0.00	0.00	0.05	0.07

130	17.040	7.37	3.80	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.49	0.00	0.00	0.00	1.52	0.00	0.00	0.05	0.07
131	16.570	7.37	3.80	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.49	0.00	0.00	0.00	1.62	0.00	0.00	0.05	0.07
132	16.100	7.37	3.80	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.49	0.00	0.00	0.00	1.72	0.00	0.00	0.05	0.07
133	15.630	7.37	3.80	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.49	0.00	0.00	0.00	1.82	0.00	0.00	0.05	0.07
20 DEG C RATE				0.16		0.00	0.00			0.07		0.60	0.00	0.00	0.00			0.00	0.03	
AVG 20 DEG C RATE			3.08		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
129	17.510	31.50	0.00	4.23	0.38	7.48	2.57	5.91	0.41	0.00	0.00	0.41	0.00	33.40	115.00	0.00	4.25
130	17.040	31.50	0.00	4.23	0.38	7.57	1.89	5.47	0.37	0.00	0.00	0.37	0.00	35.80	115.00	0.00	3.85
131	16.570	31.50	0.00	4.23	0.38	7.61	1.71	5.53	0.35	0.00	0.00	0.35	0.00	38.20	115.00	0.00	3.64
132	16.100	31.50	0.00	4.23	0.38	7.58	2.47	6.53	0.39	0.00	0.00	0.39	0.00	40.60	115.00	0.00	3.80
133	15.630	31.50	0.00	4.23	0.38	7.36	6.00	10.30	0.56	0.00	0.00	0.56	0.00	43.00	115.00	0.00	4.83

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 23 MIDWAY DAM CONTROL PIPE

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
134	UPR RCH	0.60451	31.50	0.00	4.23	0.38	7.36	6.00	10.30	0.56	0.00	0.00	0.00	43.00	0.00	4.83

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
134	15.63	15.59	0.60451	0.00	0.14101	0.00	1.67	2.57	171.48	102.84	4.29	0.00	0.000	1.000	0.141
TOT						0.00			171.48	102.84					
AVG					0.14101		1.67	2.57			4.29				

CUM 480.73

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
134	15.590	7.37	0.52	0.31	0.07	0.00	0.00	0.00	0.00	0.13	0.02	1.48	0.00	0.00	0.00	2.43	0.00	0.00	0.06	0.07
20 DEG C RATE				0.18		0.00	0.00			0.06		0.60	0.00	0.00	0.00			0.00	0.04	
AVG 20 DEG C RATE			0.42		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
134	15.590	31.50	0.00	4.23	0.38	7.10	13.52	19.24	0.90	0.00	0.00	0.90	0.00	57.20	115.00	0.00	6.76

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 24 MIDWAY OUTFALL-BDS13

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
135	UPR RCH	0.60451	31.50	0.00	4.23	0.38	7.10	13.52	19.24	0.90	0.00	0.00	0.00	57.20	0.00	6.76

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
135	15.59	15.55	0.60451	0.00	0.00262	0.18	2.31	99.99	9229.34	3999.64	230.73	0.00	0.000	1.000	0.003

TOT								0.18				9229.34		3999.64							
AVG						0.00262			2.31	99.99					230.73						
CUM								480.91													

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
135	15.550	7.37	3.94	0.39	0.07	0.00	0.00	0.00	0.00	0.11	0.02	1.47	0.00	0.00	0.00	2.20	0.00	0.00	0.08	0.07
20 DEG C RATE				0.23		0.00	0.00			0.05		0.60	0.00	0.00	0.00			0.00	0.05	
AVG 20 DEG C RATE			3.19		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
135	15.550	31.50	0.00	4.23	0.38	6.97	17.19	22.39	1.06	0.00	0.00	1.06	0.00	52.00	115.00	0.00	7.70

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 25 BDS13-BDS14

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
136	UPR RCH	0.60451	31.50	0.00	4.23	0.38	6.97	17.19	22.39	1.06	0.00	0.00	0.00	52.00	0.00	7.70

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s

136	15.55	15.25	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
137	15.25	14.96	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
138	14.96	14.66	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
139	14.66	14.36	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
140	14.36	14.07	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
141	14.07	13.77	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
142	13.77	13.47	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
143	13.47	13.18	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
144	13.18	12.88	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
145	12.88	12.58	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
146	12.58	12.29	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
147	12.29	11.99	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
148	11.99	11.70	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
149	11.70	11.40	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
150	11.40	11.10	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
151	11.10	10.81	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
152	10.81	10.51	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
153	10.51	10.21	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
154	10.21	9.92	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
155	9.92	9.62	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
TOT						26.20			1368250.12	592946.19					
AVG					0.00262		2.31	99.99			230.73				
CUM						507.11									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
136	15.253	7.37	3.94	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.47	0.00	0.00	0.00	2.20	0.00	0.00	0.03	0.07
137	14.957	7.37	3.94	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.47	0.00	0.00	0.00	2.19	0.00	0.00	0.03	0.07
138	14.660	7.37	3.94	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.48	0.00	0.00	0.00	2.18	0.00	0.00	0.03	0.07
139	14.364	7.37	3.94	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.48	0.00	0.00	0.00	2.18	0.00	0.00	0.03	0.07
140	14.067	7.37	3.94	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.49	0.00	0.00	0.00	2.17	0.00	0.00	0.03	0.07
141	13.771	7.37	3.94	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.49	0.00	0.00	0.00	2.16	0.00	0.00	0.03	0.07
142	13.474	7.37	3.94	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.49	0.00	0.00	0.00	2.15	0.00	0.00	0.03	0.07
143	13.178	7.37	3.94	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.49	0.00	0.00	0.00	2.15	0.00	0.00	0.03	0.07
144	12.881	7.37	3.94	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.49	0.00	0.00	0.00	2.14	0.00	0.00	0.03	0.07
145	12.585	7.37	3.94	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.49	0.00	0.00	0.00	2.13	0.00	0.00	0.03	0.07
146	12.288	7.37	3.94	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.49	0.00	0.00	0.00	2.13	0.00	0.00	0.03	0.07
147	11.992	7.37	3.94	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.49	0.00	0.00	0.00	2.12	0.00	0.00	0.03	0.07
148	11.695	7.37	3.94	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.49	0.00	0.00	0.00	2.11	0.00	0.00	0.03	0.07
149	11.399	7.37	3.94	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.49	0.00	0.00	0.00	2.10	0.00	0.00	0.03	0.07
150	11.102	7.37	3.94	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.49	0.00	0.00	0.00	2.10	0.00	0.00	0.03	0.07
151	10.806	7.37	3.94	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.49	0.00	0.00	0.00	2.09	0.00	0.00	0.03	0.07
152	10.509	7.37	3.94	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.49	0.00	0.00	0.00	2.08	0.00	0.00	0.03	0.07

153	10.213	7.37	3.94	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.49	0.00	0.00	0.00	2.07	0.00	0.00	0.03	0.07
154	9.916	7.37	3.94	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.49	0.00	0.00	0.00	2.07	0.00	0.00	0.03	0.07
155	9.620	7.37	3.94	0.27	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.49	0.00	0.00	0.00	2.06	0.00	0.00	0.03	0.07
20 DEG C RATE				0.16		0.00	0.00			0.07		0.60	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			3.19		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
136	15.253	31.50	0.00	4.23	0.38	6.92	14.61	19.80	0.97	0.00	0.00	0.97	0.00	51.83	115.00	0.00	7.31
137	14.957	31.50	0.00	4.23	0.38	7.03	11.85	17.02	0.86	0.00	0.00	0.86	0.00	51.66	115.00	0.00	6.82
138	14.660	31.50	0.00	4.23	0.38	7.16	9.79	14.93	0.77	0.00	0.00	0.77	0.00	51.49	115.00	0.00	6.38
139	14.364	31.50	0.00	4.23	0.38	7.27	8.24	13.37	0.69	0.00	0.00	0.69	0.00	51.32	115.00	0.00	5.98
140	14.067	31.50	0.00	4.23	0.38	7.36	7.07	12.19	0.62	0.00	0.00	0.62	0.00	51.15	115.00	0.00	5.62
141	13.771	31.50	0.00	4.23	0.38	7.43	6.20	11.30	0.56	0.00	0.00	0.56	0.00	50.98	115.00	0.00	5.30
142	13.474	31.50	0.00	4.23	0.38	7.48	5.55	10.63	0.52	0.00	0.00	0.52	0.00	50.81	115.00	0.00	5.01
143	13.178	31.50	0.00	4.23	0.38	7.51	5.06	10.12	0.48	0.00	0.00	0.48	0.00	50.64	115.00	0.00	4.76
144	12.881	31.50	0.00	4.23	0.38	7.54	4.69	9.74	0.44	0.00	0.00	0.44	0.00	50.47	115.00	0.00	4.53
145	12.585	31.50	0.00	4.23	0.38	7.56	4.42	9.45	0.42	0.00	0.00	0.42	0.00	50.30	115.00	0.00	4.32
146	12.288	31.50	0.00	4.23	0.38	7.58	4.21	9.22	0.39	0.00	0.00	0.39	0.00	50.13	115.00	0.00	4.14
147	11.992	31.50	0.00	4.23	0.38	7.59	4.06	9.05	0.37	0.00	0.00	0.37	0.00	49.96	115.00	0.00	3.98
148	11.695	31.50	0.00	4.23	0.38	7.60	3.95	8.93	0.36	0.00	0.00	0.36	0.00	49.79	115.00	0.00	3.84
149	11.399	31.50	0.00	4.23	0.38	7.60	3.87	8.83	0.35	0.00	0.00	0.35	0.00	49.62	115.00	0.00	3.73
150	11.102	31.50	0.00	4.23	0.38	7.60	3.83	8.77	0.34	0.00	0.00	0.34	0.00	49.45	115.00	0.00	3.66
151	10.806	31.50	0.00	4.23	0.38	7.60	3.84	8.76	0.34	0.00	0.00	0.34	0.00	49.28	115.00	0.00	3.64
152	10.509	31.50	0.00	4.23	0.38	7.59	3.93	8.84	0.36	0.00	0.00	0.36	0.00	49.11	115.00	0.00	3.73
153	10.213	31.50	0.00	4.23	0.38	7.57	4.22	9.12	0.41	0.00	0.00	0.41	0.00	48.94	115.00	0.00	4.01
154	9.916	31.50	0.00	4.23	0.38	7.51	4.95	9.83	0.52	0.00	0.00	0.52	0.00	48.77	115.00	0.00	4.65
155	9.620	31.50	0.00	4.23	0.38	7.41	6.72	11.58	0.77	0.00	0.00	0.77	0.00	48.60	115.00	0.00	6.01

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 26 BDS14-STADIUM DR. PIPE INTAKE

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *

156	UPR RCH	0.60451	31.50	0.00	4.23	0.38	7.41	6.72	11.58	0.77	0.00	0.00	0.00	48.60	0.00	6.01

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
156	9.62	9.57	0.60451	0.00	0.01916	0.03	2.52	12.53	1577.36	626.55	31.55	0.00	0.000	1.000	0.019
TOT						0.03			1577.36	626.55					
AVG					0.01916		2.52	12.53			31.55				
CUM						507.14									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
156	9.570	7.37	3.61	0.14	0.07	0.00	0.00	0.00	0.00	0.33	0.02	1.49	0.00	0.00	0.00	1.70	0.00	0.00	0.01	0.07
20 DEG C RATE				0.08		0.00	0.00			0.15		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			2.92		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
156	9.570	31.50	0.00	4.23	0.38	7.40	9.52	13.52	1.12	0.00	0.00	1.12	0.00	40.00	115.00	0.00	7.85

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 27 STADIUM DRIVE PIPES

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
157	UPR RCH	0.60451	31.50	0.00	4.23	0.38	7.40	9.52	13.52	1.12	0.00	0.00	0.00	40.00	0.00	7.85

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
157	9.57	9.52	0.60451	0.00	0.14101	0.00	1.67	2.57	214.36	128.55	4.29	0.00	0.000	1.000	0.141
TOT						0.00			214.36	128.55					
AVG					0.14100		1.67	2.57			4.29				
CUM						507.14									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
157	9.520	7.37	0.52	0.17	0.07	0.00	0.00	0.00	0.00	0.33	0.02	1.49	0.00	0.00	0.00	1.38	0.00	0.00	0.01	0.07
20 DEG C RATE				0.10		0.00	0.00			0.15		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.42		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
157	9.520	31.50	0.00	4.23	0.38	7.33	8.35	11.61	0.85	0.00	0.00	0.85	0.00	32.60	115.00	0.00	6.90

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
REACH NO. 28 STADIUM DR. PIPE OUTFALL-BDS15 macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
158	UPR RCH	0.60451	31.50	0.00	4.23	0.38	7.33	8.35	11.61	0.85	0.00	0.00	0.00	32.60	0.00	6.90

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
158	9.52	8.95	0.60451	0.00	0.00189	3.47	2.71	118.29	181277.38	66952.66	320.28	0.00	0.000	1.000	0.002
159	8.95	8.39	0.60451	0.00	0.00189	3.47	2.71	118.29	181277.38	66952.66	320.28	0.00	0.000	1.000	0.002
160	8.39	7.82	0.60451	0.00	0.00189	3.47	2.71	118.29	181277.38	66952.66	320.28	0.00	0.000	1.000	0.002
161	7.82	7.26	0.60451	0.00	0.00189	3.47	2.71	118.29	181277.38	66952.66	320.28	0.00	0.000	1.000	0.002
162	7.26	6.69	0.60451	0.00	0.00189	3.47	2.71	118.29	181277.38	66952.66	320.28	0.00	0.000	1.000	0.002
TOT						17.35			906386.88	334763.28					
AVG					0.00189		2.71	118.29			320.28				
CUM						524.49									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
158	8.954	7.37	3.35	0.20	0.07	0.00	0.00	0.00	0.00	0.54	0.02	1.48	0.00	0.00	0.00	1.36	0.00	0.00	0.06	0.07
159	8.388	7.37	3.35	0.20	0.07	0.00	0.00	0.00	0.00	0.54	0.02	1.48	0.00	0.00	0.00	1.34	0.00	0.00	0.06	0.07
160	7.822	7.37	3.35	0.20	0.07	0.00	0.00	0.00	0.00	0.54	0.02	1.49	0.00	0.00	0.00	1.32	0.00	0.00	0.06	0.07
161	7.256	7.37	3.35	0.20	0.07	0.00	0.00	0.00	0.00	0.54	0.02	1.49	0.00	0.00	0.00	1.29	0.00	0.00	0.06	0.07
162	6.690	7.37	3.35	0.20	0.07	0.00	0.00	0.00	0.00	0.54	0.02	1.49	0.00	0.00	0.00	1.27	0.00	0.00	0.06	0.07
20 DEG C RATE				0.12		0.00	0.00			0.25		0.60	0.00	0.00	0.00			0.00	0.03	
AVG 20 DEG C RATE			2.72		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
158	8.954	31.50	0.00	4.23	0.38	7.25	7.18	10.39	0.58	0.00	0.00	0.58	0.00	32.08	115.00	0.00	5.94

159	8.388	31.50	0.00	4.23	0.38	7.30	6.24	9.40	0.43	0.00	0.00	0.43	0.00	31.56	115.00	0.00	4.99
160	7.822	31.50	0.00	4.23	0.38	7.34	5.68	8.78	0.36	0.00	0.00	0.36	0.00	31.04	115.00	0.00	4.29
161	7.256	31.50	0.00	4.23	0.38	7.36	5.33	8.38	0.34	0.00	0.00	0.34	0.00	30.52	115.00	0.00	3.79
162	6.690	31.50	0.00	4.23	0.38	7.38	5.06	8.06	0.35	0.00	0.00	0.35	0.00	30.00	115.00	0.00	3.45

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 29 BDS15-BDS16

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
163	UPR RCH	0.60451	31.50	0.00	4.23	0.38	7.38	5.06	8.06	0.35	0.00	0.00	0.00	30.00	0.00	3.45

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
163	6.69	6.22	0.60451	0.00	0.00189	2.88	2.71	118.29	150530.69	55596.73	320.28	0.00	0.000	1.000	0.002
164	6.22	5.75	0.60451	0.00	0.00189	2.88	2.71	118.29	150530.69	55596.73	320.28	0.00	0.000	1.000	0.002
165	5.75	5.28	0.60451	0.00	0.00189	2.88	2.71	118.29	150530.69	55596.73	320.28	0.00	0.000	1.000	0.002
166	5.28	4.81	0.60451	0.00	0.00189	2.88	2.71	118.29	150530.69	55596.73	320.28	0.00	0.000	1.000	0.002
167	4.81	4.34	0.60451	0.00	0.00189	2.88	2.71	118.29	150530.69	55596.73	320.28	0.00	0.000	1.000	0.002
168	4.34	3.87	0.60451	0.00	0.00189	2.88	2.71	118.29	150530.69	55596.73	320.28	0.00	0.000	1.000	0.002
169	3.87	3.40	0.60451	0.00	0.00189	2.88	2.71	118.29	150530.69	55596.73	320.28	0.00	0.000	1.000	0.002
TOT						20.17			1053714.75	389177.06					
AVG					0.00189		2.71	118.29			320.28				
CUM						544.67									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
163	6.220	7.37	3.35	0.20	0.07	0.00	0.00	0.00	0.00	0.54	0.02	1.98	0.00	0.00	0.00	1.21	0.00	0.00	0.06	0.07
164	5.750	7.37	3.35	0.20	0.07	0.00	0.00	0.00	0.00	0.54	0.02	1.98	0.00	0.00	0.00	1.15	0.00	0.00	0.06	0.07

165	5.280	7.37	3.35	0.20	0.07	0.00	0.00	0.00	0.00	0.54	0.02	1.98	0.00	0.00	0.00	1.09	0.00	0.00	0.06	0.07
166	4.810	7.37	3.35	0.20	0.07	0.00	0.00	0.00	0.00	0.54	0.02	1.98	0.00	0.00	0.00	1.03	0.00	0.00	0.06	0.07
167	4.340	7.37	3.35	0.20	0.07	0.00	0.00	0.00	0.00	0.54	0.02	1.98	0.00	0.00	0.00	0.97	0.00	0.00	0.06	0.07
168	3.870	7.37	3.35	0.20	0.07	0.00	0.00	0.00	0.00	0.54	0.02	1.98	0.00	0.00	0.00	0.91	0.00	0.00	0.06	0.07
169	3.400	7.37	3.35	0.20	0.07	0.00	0.00	0.00	0.00	0.54	0.02	1.98	0.00	0.00	0.00	0.85	0.00	0.00	0.06	0.07
20 DEG C RATE				0.12		0.00	0.00			0.25		0.80	0.00	0.00	0.00			0.00	0.03	
AVG 20 DEG C RATE			2.72		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
163	6.220	31.50	0.00	4.23	0.38	7.38	4.74	7.60	0.44	0.00	0.00	0.44	0.00	28.57	115.00	0.00	3.32
164	5.750	31.50	0.00	4.23	0.38	7.38	4.54	7.26	0.48	0.00	0.00	0.48	0.00	27.14	115.00	0.00	3.22
165	5.280	31.50	0.00	4.23	0.38	7.37	4.41	6.98	0.50	0.00	0.00	0.50	0.00	25.71	115.00	0.00	3.14
166	4.810	31.50	0.00	4.23	0.38	7.36	4.32	6.75	0.52	0.00	0.00	0.52	0.00	24.29	115.00	0.00	3.07
167	4.340	31.50	0.00	4.23	0.38	7.35	4.25	6.54	0.52	0.00	0.00	0.52	0.00	22.86	115.00	0.00	3.01
168	3.870	31.50	0.00	4.23	0.38	7.34	4.16	6.30	0.52	0.00	0.00	0.52	0.00	21.43	115.00	0.00	2.91
169	3.400	31.50	0.00	4.23	0.38	7.33	3.97	5.97	0.51	0.00	0.00	0.51	0.00	20.00	115.00	0.00	2.75

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 30 BDS16-BDS17

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
170	UPR RCH	0.60451	31.50	0.00	4.23	0.38	7.33	3.97	5.97	0.51	0.00	0.00	0.00	20.00	0.00	2.75

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
170	3.40	3.09	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001

171	3.09	2.78	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
172	2.78	2.47	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
173	2.47	2.16	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
174	2.16	1.85	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
175	1.85	1.54	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
176	1.54	1.23	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
177	1.23	0.92	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
178	0.92	0.61	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
TOT						32.94			1720465.88	351291.41					
AVG					0.00098		4.90	125.91			616.65				
CUM						577.61									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
170	3.090	7.37	1.85	0.20	0.07	0.00	0.00	0.00	0.00	0.33	0.02	1.98	0.00	0.00	0.00	0.81	0.00	0.00	0.05	0.07
171	2.780	7.37	1.85	0.20	0.07	0.00	0.00	0.00	0.00	0.33	0.02	1.98	0.00	0.00	0.00	0.78	0.00	0.00	0.05	0.07
172	2.470	7.37	1.85	0.20	0.07	0.00	0.00	0.00	0.00	0.33	0.02	1.98	0.00	0.00	0.00	0.75	0.00	0.00	0.05	0.07
173	2.160	7.37	1.85	0.20	0.07	0.00	0.00	0.00	0.00	0.33	0.02	1.98	0.00	0.00	0.00	0.72	0.00	0.00	0.05	0.07
174	1.850	7.37	1.85	0.20	0.07	0.00	0.00	0.00	0.00	0.33	0.02	1.98	0.00	0.00	0.00	0.68	0.00	0.00	0.05	0.07
175	1.540	7.37	1.85	0.20	0.07	0.00	0.00	0.00	0.00	0.33	0.02	1.98	0.00	0.00	0.00	0.65	0.00	0.00	0.05	0.07
176	1.230	7.37	1.85	0.20	0.07	0.00	0.00	0.00	0.00	0.33	0.02	1.98	0.00	0.00	0.00	0.62	0.00	0.00	0.05	0.07
177	0.920	7.37	1.85	0.20	0.07	0.00	0.00	0.00	0.00	0.33	0.02	1.98	0.00	0.00	0.00	0.58	0.00	0.00	0.05	0.07
178	0.610	7.37	1.85	0.20	0.07	0.00	0.00	0.00	0.00	0.33	0.02	1.98	0.00	0.00	0.00	0.55	0.00	0.00	0.05	0.07
20 DEG C RATE				0.12		0.00	0.00			0.15		0.80	0.00	0.00	0.00			0.00	0.03	
AVG 20 DEG C RATE			1.50		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
170	3.090	31.50	0.00	4.22	0.38	7.34	3.67	5.59	0.49	0.00	0.00	0.49	0.00	19.22	115.00	0.00	2.53
171	2.780	31.50	0.00	4.22	0.38	7.34	3.53	5.37	0.49	0.00	0.00	0.49	0.00	18.44	115.00	0.00	2.42
172	2.470	31.50	0.00	4.22	0.38	7.34	3.43	5.20	0.48	0.00	0.00	0.48	0.00	17.67	115.00	0.00	2.33
173	2.160	31.50	0.00	4.22	0.38	7.33	3.37	5.06	0.48	0.00	0.00	0.48	0.00	16.89	115.00	0.00	2.25
174	1.850	31.50	0.00	4.21	0.38	7.32	3.32	4.93	0.48	0.00	0.00	0.48	0.00	16.11	115.00	0.00	2.19
175	1.540	31.50	0.00	4.21	0.38	7.31	3.28	4.81	0.48	0.00	0.00	0.48	0.00	15.33	115.00	0.00	2.14
176	1.230	31.50	0.00	4.20	0.38	7.29	3.24	4.70	0.48	0.00	0.00	0.48	0.00	14.56	115.00	0.00	2.10
177	0.920	31.50	0.00	4.19	0.38	7.28	3.20	4.57	0.48	0.00	0.00	0.48	0.00	13.78	115.00	0.00	2.07

178	0.610	31.50	0.00	4.18	0.38	7.28	3.12	4.42	0.48	0.00	0.00	0.48	0.00	13.00	115.00	0.00	2.04

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 31 BDS17-MONROE WTP INTAKE

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
179	UPR RCH	0.60451	31.50	0.00	4.18	0.38	7.28	3.12	4.42	0.48	0.00	0.00	0.00	13.00	0.00	2.04
179	WSTLD	-0.61350	31.50	0.00	4.17	0.38	7.29	3.04	3.04	0.49	0.00	0.00	0.00	16.70	0.00	2.02

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
179	0.61	0.54	-0.00899	0.00	-.00001	-55.24	4.88	125.58	42910.26	8790.90	613.00	0.00	0.000	1.000	0.000
TOT						-55.24			42910.26	8790.90					
AVG					-.00001		4.88	125.58			613.00				
CUM						522.37									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
179	0.540	7.37	1.86	0.17	0.07	0.00	0.00	0.00	0.00	0.15	0.02	1.48	0.00	0.00	0.00	0.71	0.00	0.00	0.06	0.07
20 DEG C RATE				0.10		0.00	0.00			0.07		0.60	0.00	0.00	0.00			0.00	0.04	
AVG 20 DEG C RATE			1.51		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
179	0.540	31.50	0.00	4.17	0.38	7.29	3.04	4.71	0.49	0.00	0.00	0.49	0.00	16.70	115.00	0.00	2.02

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

STREAM SUMMARY
LAKE BARTHOLEMEW EAS

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

TRAVEL TIME = 522.37 DAYS

MAXIMUM EFFLUENT = 0.00 PERCENT

FLOW	=	-0.00899	TO	1.66168	m³/s
DISPERSION	=	0.0000	TO	4.0000	m²/s
VELOCITY	=	-0.00001	TO	0.14101	m/s
DEPTH	=	1.04	TO	4.90	m
WIDTH	=	2.47	TO	125.91	m
BOD DECAY	=	0.14	TO	0.39	per day
NH3 DECAY	=	1.37	TO	2.50	per day
SDMNT OXYGEN DMND	=	0.00	TO	12.37	g/m²/d
NH3 SOURCE	=	0.00	TO	0.03	g/m²/d
REAERATION	=	0.24	TO	3.94	per day
BOD SETTLING	=	0.07	TO	0.07	per day
ORGN DECAY	=	0.11	TO	0.54	per day
ORGN SETTLING	=	0.02	TO	0.02	per day
TEMPERATURE	=	31.50	TO	31.50	deg C
DISSOLVED OXYGEN	=	4.92	TO	10.98	mg/L

FINAL REPORT LAKE BARTHOLEMEW WES
REACH NO. 5 BDS 5-BDS 4

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
24	HDWTR	0.10278	31.50	0.00	8.90	3.20	6.63	0.19	4.43	1.05	0.00	0.00	0.00	42.40	0.00	4.16

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
24	8.53	8.11	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
25	8.11	7.69	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
26	7.69	7.27	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
27	7.27	6.85	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
28	6.85	6.43	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
29	6.43	6.01	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
30	6.01	5.59	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
31	5.59	5.17	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
32	5.17	4.75	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
33	4.75	4.33	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
TOT						230.94			2050810.25	520533.38					
AVG					0.00021		3.94	123.94			488.29				
CUM						230.94									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
24	8.110	7.37	0.22	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.50	0.00	0.00	0.00	1.80	0.00	0.00	0.03	0.07
25	7.690	7.37	0.22	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.50	0.00	0.00	0.00	1.80	0.00	0.00	0.03	0.07
26	7.270	7.37	0.22	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.50	0.00	0.00	0.00	1.80	0.00	0.00	0.03	0.07
27	6.850	7.37	0.22	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.50	0.00	0.00	0.00	1.80	0.00	0.00	0.03	0.07
28	6.430	7.37	0.22	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.50	0.00	0.00	0.00	1.80	0.00	0.00	0.03	0.07
29	6.010	7.37	0.22	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.50	0.00	0.00	0.00	1.80	0.00	0.00	0.03	0.07
30	5.590	7.37	0.22	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.50	0.00	0.00	0.00	1.80	0.00	0.00	0.03	0.07
31	5.170	7.37	0.22	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.50	0.00	0.00	0.00	1.80	0.00	0.00	0.03	0.07
32	4.750	7.37	0.22	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.50	0.00	0.00	0.00	1.80	0.00	0.00	0.03	0.07
33	4.330	7.37	0.22	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.50	0.00	0.00	0.00	1.80	0.00	0.00	0.03	0.07
20 DEG C RATE				0.15		0.00	0.00			0.12		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.18		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *

24	8.110	31.50	0.00	8.98	3.18	12.62	1.61	5.85	1.08	0.00	0.00	1.08	0.00	42.40	115.00	0.00	3.90
25	7.690	31.50	0.00	8.98	3.18	12.86	1.66	5.90	1.08	0.00	0.00	1.08	0.00	42.40	115.00	0.00	3.89
26	7.270	31.50	0.00	8.99	3.18	12.99	1.69	5.93	1.08	0.00	0.00	1.08	0.00	42.40	115.00	0.00	3.88
27	6.850	31.50	0.00	9.00	3.18	13.05	1.70	5.94	1.08	0.00	0.00	1.08	0.00	42.40	115.00	0.00	3.88
28	6.430	31.50	0.00	9.01	3.18	13.08	1.71	5.95	1.08	0.00	0.00	1.08	0.00	42.40	115.00	0.00	3.88
29	6.010	31.50	0.00	9.02	3.18	13.08	1.71	5.95	1.08	0.00	0.00	1.08	0.00	42.40	115.00	0.00	3.89
30	5.590	31.50	0.00	9.03	3.17	13.07	1.72	5.96	1.06	0.00	0.00	1.06	0.00	42.40	115.00	0.00	3.91
31	5.170	31.50	0.00	9.04	3.17	13.04	1.72	5.96	1.04	0.00	0.00	1.04	0.00	42.40	115.00	0.00	3.95
32	4.750	31.50	0.00	9.05	3.17	12.96	1.73	5.97	0.99	0.00	0.00	0.99	0.00	42.40	115.00	0.00	4.01
33	4.330	31.50	0.00	9.06	3.17	12.83	1.75	5.99	0.89	0.00	0.00	0.89	0.00	42.40	115.00	0.00	4.10

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW WES BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
REACH NO. 6 BDS 4-US 165 GATE INLET CANAL macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
34	UPR RCH	0.10278	31.50	0.00	9.06	3.17	12.83	1.75	5.99	0.89	0.00	0.00	0.00	42.40	0.00	4.10

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
34	4.33	3.90	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
35	3.90	3.46	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
36	3.46	3.03	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
37	3.03	2.60	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
38	2.60	2.16	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
39	2.16	1.73	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
40	1.73	1.30	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
41	1.30	0.87	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
42	0.87	0.43	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
43	0.43	0.00	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
TOT						189.66			1684250.00	498324.62					
AVG					0.00026		3.38	115.09			388.97				
CUM						420.61									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
34	3.897	7.37	0.26	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.50	0.00	0.00	0.00	1.80	0.00	0.00	0.03	0.07
35	3.464	7.37	0.26	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.50	0.00	0.00	0.00	1.81	0.00	0.00	0.03	0.07
36	3.031	7.37	0.26	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.50	0.00	0.00	0.00	1.82	0.00	0.00	0.03	0.07
37	2.598	7.37	0.26	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.50	0.00	0.00	0.00	1.82	0.00	0.00	0.03	0.07
38	2.165	7.37	0.26	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.50	0.00	0.00	0.00	1.83	0.00	0.00	0.03	0.07
39	1.732	7.37	0.26	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.50	0.00	0.00	0.00	1.84	0.00	0.00	0.03	0.07
40	1.299	7.37	0.26	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.50	0.00	0.00	0.00	1.85	0.00	0.00	0.03	0.07
41	0.866	7.37	0.26	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.50	0.00	0.00	0.00	1.85	0.00	0.00	0.03	0.07
42	0.433	7.37	0.26	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.50	0.00	0.00	0.00	1.86	0.00	0.00	0.03	0.07
43	0.000	7.37	0.26	0.25	0.07	0.00	0.00	0.00	0.00	0.26	0.02	1.50	0.00	0.00	0.00	1.87	0.00	0.00	0.03	0.07
20 DEG C RATE				0.15		0.00	0.00			0.12		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.21		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
34	3.897	31.50	0.00	9.08	3.16	12.55	1.80	6.06	0.63	0.00	0.00	0.63	0.00	42.56	115.00	0.00	4.27
35	3.464	31.50	0.00	9.10	3.16	12.38	1.83	6.10	0.48	0.00	0.00	0.48	0.00	42.72	115.00	0.00	4.40
36	3.031	31.50	0.00	9.12	3.16	12.29	1.84	6.13	0.41	0.00	0.00	0.41	0.00	42.88	115.00	0.00	4.49
37	2.598	31.50	0.00	9.15	3.15	12.25	1.85	6.16	0.37	0.00	0.00	0.37	0.00	43.04	115.00	0.00	4.56
38	2.165	31.50	0.00	9.17	3.15	12.22	1.86	6.18	0.35	0.00	0.00	0.35	0.00	43.20	115.00	0.00	4.60
39	1.732	31.50	0.00	9.21	3.14	12.19	1.87	6.21	0.35	0.00	0.00	0.35	0.00	43.36	115.00	0.00	4.64
40	1.299	31.50	0.00	9.24	3.13	12.14	1.89	6.25	0.36	0.00	0.00	0.36	0.00	43.52	115.00	0.00	4.67
41	0.866	31.50	0.00	9.28	3.12	12.02	1.95	6.32	0.40	0.00	0.00	0.40	0.00	43.68	115.00	0.00	4.70
42	0.433	31.50	0.00	9.32	3.12	11.79	2.07	6.45	0.48	0.00	0.00	0.48	0.00	43.84	115.00	0.00	4.73
43	0.000	31.50	0.00	9.37	3.11	11.36	2.36	6.76	0.66	0.00	0.00	0.66	0.00	44.00	115.00	0.00	4.78

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

STREAM SUMMARY
LAKE BARTHOLEMEW WES

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

TRAVEL TIME = 420.61 DAYS

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 MAXIMUM EFFLUENT =          0.00 PERCENT

 FLOW             =   0.10278 TO    0.10278 m³/s
 DISPERSION       =   1.0000  TO    1.0000  m²/s
 VELOCITY         =   0.00021 TO    0.00026 m/s
 DEPTH            =   3.38    TO    3.94    m
 WIDTH            = 115.09    TO  123.94    m

 BOD DECAY        =    0.25   TO    0.25    per day
 NH3 DECAY        =    1.50   TO    1.50    per day
 SDMNT OXYGEN DMND=    0.00   TO    0.00    g/m²/d
 NH3 SOURCE       =    0.00   TO    0.00    g/m²/d
 REAERATION       =    0.22   TO    0.26    per day
 BOD SETTLING     =    0.07   TO    0.07    per day
 ORGN DECAY       =    0.26   TO    0.26    per day
 ORGN SETTLING    =    0.02   TO    0.02    per day

 TEMPERATURE      =   31.50   TO   31.50    deg C
 DISSOLVED OXYGEN =   11.36   TO   13.08    mg/L
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FINAL REPORT HANNAH'S RUN (EAST) BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
REACH NO. 14 HANNAH'S RUN(E)CONTROL GATES macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
94	HDWTR	1.45612	31.50	0.00	3.50	0.00	6.63	8.55	10.34	0.58	0.17	0.00	0.00	17.90	0.00	4.56

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
94	0.45	0.44	1.45612	0.00	0.29793	0.00	1.77	2.76	58.65	33.10	4.89	0.00	0.000	1.000	0.298
TOT						0.00			58.65	33.10					
AVG					0.29793		1.77	2.76			4.89				
CUM						0.00									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
94	0.440	7.37	0.49	0.14	0.07	0.00	0.00	0.00	0.00	0.24	0.02	1.50	0.00	0.00	0.00	0.76	0.00	0.00	0.02	0.07
20 DEG C RATE				0.08		0.00	0.00			0.11		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.40		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
94	0.440	31.50	0.00	3.57	0.04	12.78	8.33	10.12	0.58	0.14	0.00	0.72	0.00	17.90	115.00	0.00	4.66

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT HANNAH'S RUN (EAST)
REACH NO. 15 HANNAHS RUN(E)-HANNAHS RUN(W)

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
95	UPR RCH	1.45612	31.50	0.00	3.57	0.04	12.78	8.33	10.12	0.58	0.14	0.00	0.00	17.90	0.00	4.66

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
95	0.44	0.15	1.45612	0.00	0.03147	0.11	2.47	18.72	13325.77	5390.87	46.27	0.00	0.000	4.000	0.031
TOT						0.11			13325.77	5390.87					
AVG					0.03147		2.47	18.72			46.27				
CUM						0.11									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
95	0.152	7.37	0.35	0.14	0.07	0.00	0.00	0.00	0.00	0.24	0.02	1.50	0.00	0.00	0.00	0.76	0.00	0.00	0.02	0.07
20 DEG C RATE				0.08		0.00	0.00			0.11		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.28		0.05						0.01									0.05

* $g/m^2/d$ ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
95	0.152	31.50	0.00	3.65	0.08	12.04	8.05	9.84	0.58	0.11	0.00	0.69	0.00	17.90	115.00	0.00	4.78

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m^3

FINAL REPORT HANNAH'S RUN (EAST)
REACH NO. 16 HANNAH'S RUN(W) CONTROL GATES

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m^3/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
96	UPR RCH	1.45612	31.50	0.00	3.65	0.08	12.04	8.05	9.84	0.58	0.11	0.00	0.00	17.90	0.00	4.78

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m^3	SURFACE AREA m^2	X-SECT AREA m^2	TIDAL PRISM m^3	TIDAL VELO m/s	DISPRSN m^2/s	MEAN VELO m/s
96	0.15	0.14	1.45612	0.00	0.29793	0.00	1.77	2.76	58.65	33.10	4.89	0.00	0.000	1.000	0.298
TOT						0.00			58.65	33.10					
AVG					0.29793		1.77	2.76			4.89				
CUM						0.11									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
96	0.140	7.37	0.49	0.17	0.07	0.00	0.00	0.00	0.00	0.33	0.02	1.50	0.00	0.00	0.00	0.76	0.00	0.00	0.03	0.07
20 DEG C RATE				0.10		0.00	0.00			0.15		0.60	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			0.40		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
96	0.140	31.50	0.00	3.84	0.18	10.75	7.66	9.45	0.58	0.07	0.00	0.65	0.00	17.90	115.00	0.00	5.11

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT HANNAH'S RUN (EAST) BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
REACH NO. 17 HANNAH'S RUN(W)-BDS21 macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
97	UPR RCH	1.45612	31.50	0.00	3.84	0.18	10.75	7.66	9.45	0.58	0.07	0.00	0.00	17.90	0.00	5.11

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
97	0.14	0.10	1.45612	0.00	0.03147	0.01	2.47	18.72	1850.80	748.73	46.27	0.00	0.000	4.000	0.031
TOT						0.01			1850.80	748.73					

AVG						0.03147			2.47	18.72					46.27					
CUM								0.12												

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
97	0.100	7.37	0.35	0.19	0.07	0.00	0.00	0.00	0.00	0.39	0.02	1.50	0.00	0.00	0.00	0.58	0.00	0.00	0.04	0.07
20 DEG C RATE				0.11		0.00	0.00			0.18		0.60	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			0.28		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
97	0.100	31.50	0.00	3.93	0.22	10.13	7.46	8.82	0.58	0.06	0.00	0.63	0.00	13.60	115.00	0.00	5.27

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT HANNAH'S RUN (EAST)
REACH NO. 18 BDS 21-BAYOU DESIARD

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
98	UPR RCH	1.45612	31.50	0.00	3.93	0.22	10.13	7.46	8.82	0.58	0.06	0.00	0.00	13.60	0.00	5.27

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
98	0.10	0.00	1.45612	0.00	0.03147	0.04	2.47	18.72	4627.00	1871.83	46.27	0.00	0.000	4.000	0.031

TOT								0.04				4627.00	1871.83								
AVG						0.03147			2.47	18.72					46.27						
CUM								0.16													

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
98	0.000	7.37	0.35	0.19	0.07	0.00	0.00	0.00	0.00	0.39	0.02	1.50	0.00	0.00	0.00	0.58	0.00	0.00	0.04	0.07
20 DEG C RATE				0.11		0.00	0.00			0.18		0.60	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			0.28		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
98	0.000	31.50	0.00	4.16	0.35	8.52	6.98	8.34	0.56	0.01	0.00	0.57	0.00	13.60	115.00	0.00	5.68

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

STREAM SUMMARY
HANNAH'S RUN (EAST)

BAYOU DESIARD (080701) SUMMER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT

TRAVEL TIME = 0.16 DAYS

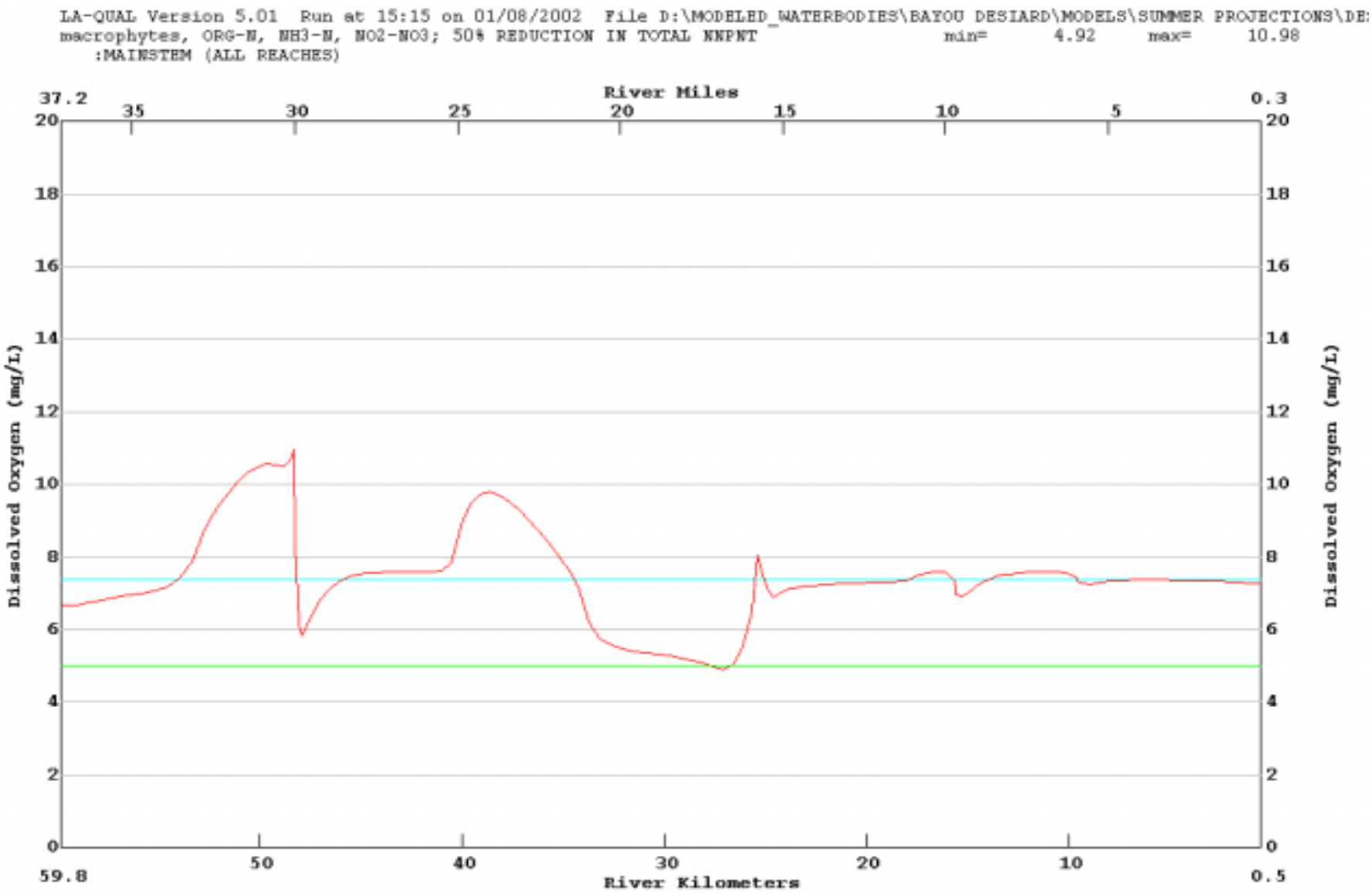
MAXIMUM EFFLUENT = 0.00 PERCENT

FLOW	=	1.45612	TO	1.45612	m³/s
DISPERSION	=	1.0000	TO	4.0000	m²/s
VELOCITY	=	0.03147	TO	0.29793	m/s
DEPTH	=	1.77	TO	2.47	m
WIDTH	=	2.76	TO	18.72	m
BOD DECAY	=	0.14	TO	0.19	per day
NH3 DECAY	=	1.50	TO	1.50	per day
SDMNT OXYGEN DMND	=	0.00	TO	0.00	g/m²/d
NH3 SOURCE	=	0.00	TO	0.00	g/m²/d

```
REAERATION       =    0.35   TO    0.49    per day
BOD SETTLING     =    0.07   TO    0.07    per day
ORGN DECAY       =    0.24   TO    0.39    per day
ORGN SETTLING    =    0.02   TO    0.02    per day

TEMPERATURE      =   31.50   TO   31.50    deg C
DISSOLVED OXYGEN =    8.52   TO   12.78    mg/L


     .....EXECUTION COMPLETED
```


LA-QUAL Version 5.01 Run at 15:15 on 01/08/2002 File D:\MODELED_WATERBODIES\BAYOU DESIARD\MODELS\SUMMER PROJECTIONS\DE
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT min= 4.92 max= 10.98
:MAINSTEM (ALL REACHES)
River Miles
37.2
35
30
25
20
15
10
5
0.3
Dissolved Oxygen (mg/L)
20
18
16
14
12
10
8
6
4
2
0
59.8
50
40
30
20
10
0.5
River Kilometers

LA-QUAL Version 5.01 Run at 15:15 on 01/08/2002 File D:\MODELED_WATERBODIES\BAYOU DESIARD\MODELS\SUMMER PROJECTIONS\DE:
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT min= 2.08 max= 22.39
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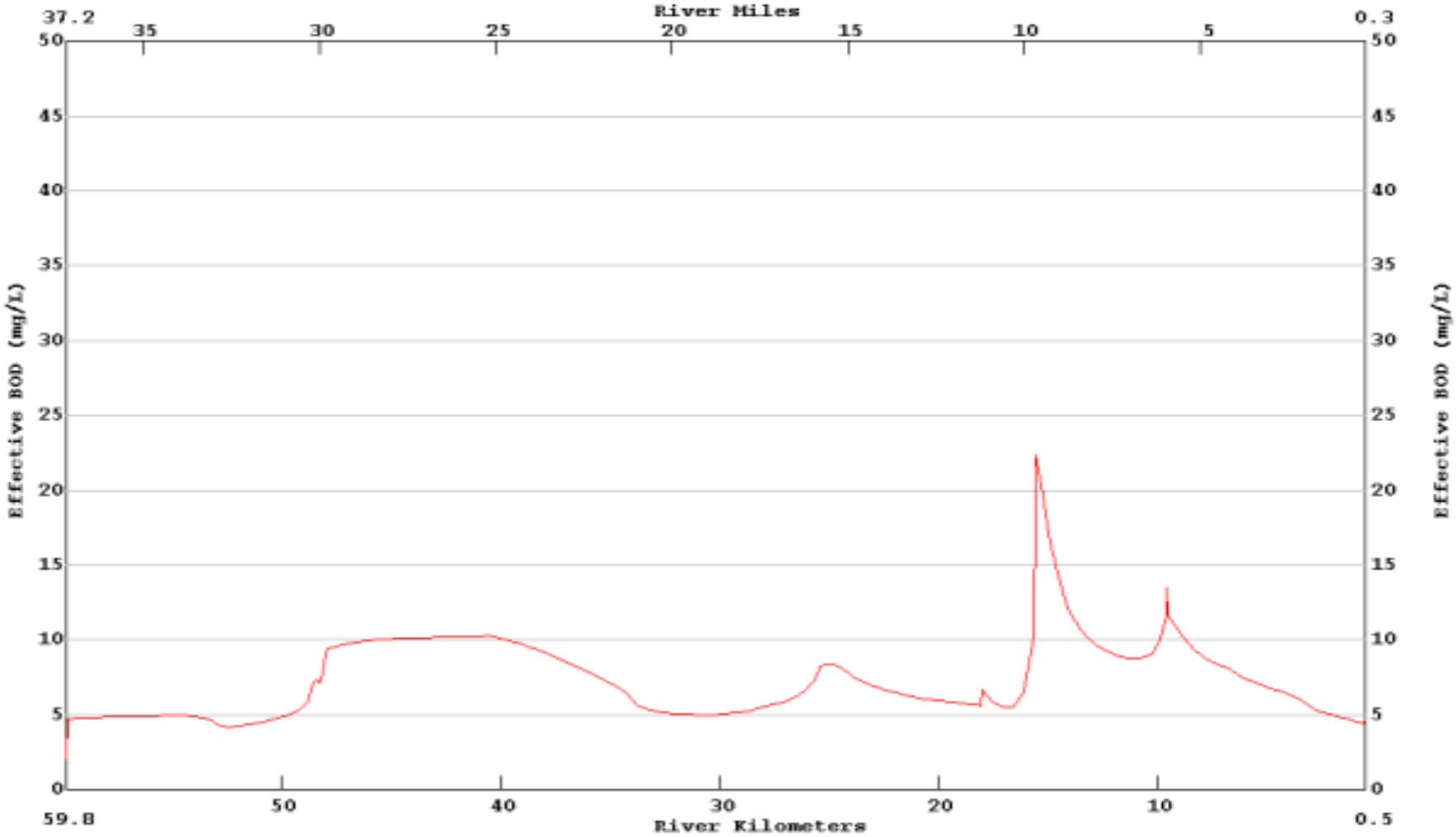
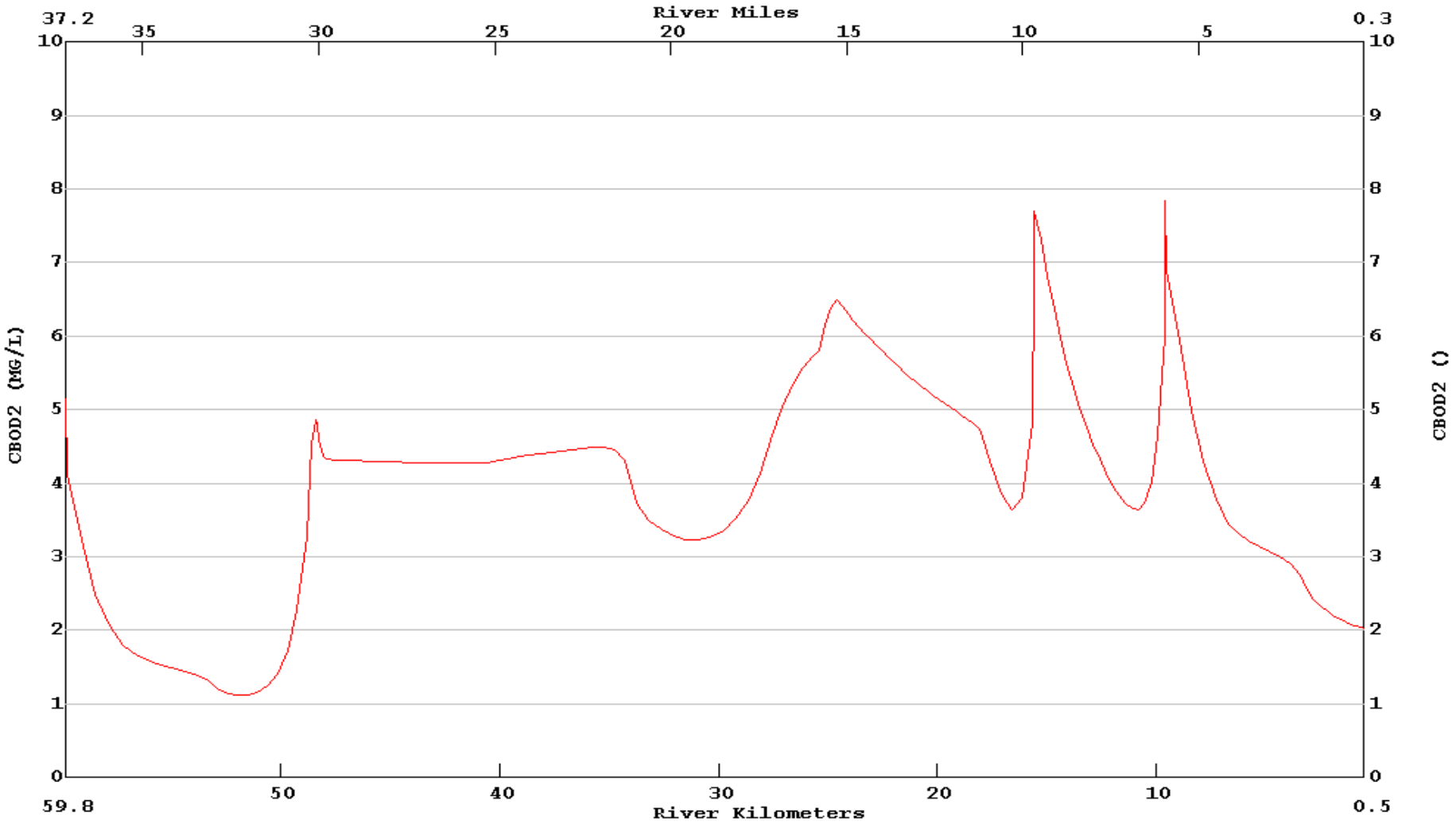


LA-QUAL Version 5.01 Run at 15:15 on 01/08/2002 File D:\MODELED_WATERBODIES\BAYOU DESIARD\MODELS\SUMMER PROJECTIONS\DE:
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT min= 1.12 max= 7.85
:MAINSTEM (ALL REACHES)



LA-QUAL Version 5.01 Run at 15:15 on 01/08/2002 File D:\MODELED_WATERBODIES\BAYOU DESIARD\MODELS\SUMMER PROJECTIONS\DE:
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT min= 0.34 max= 1.12
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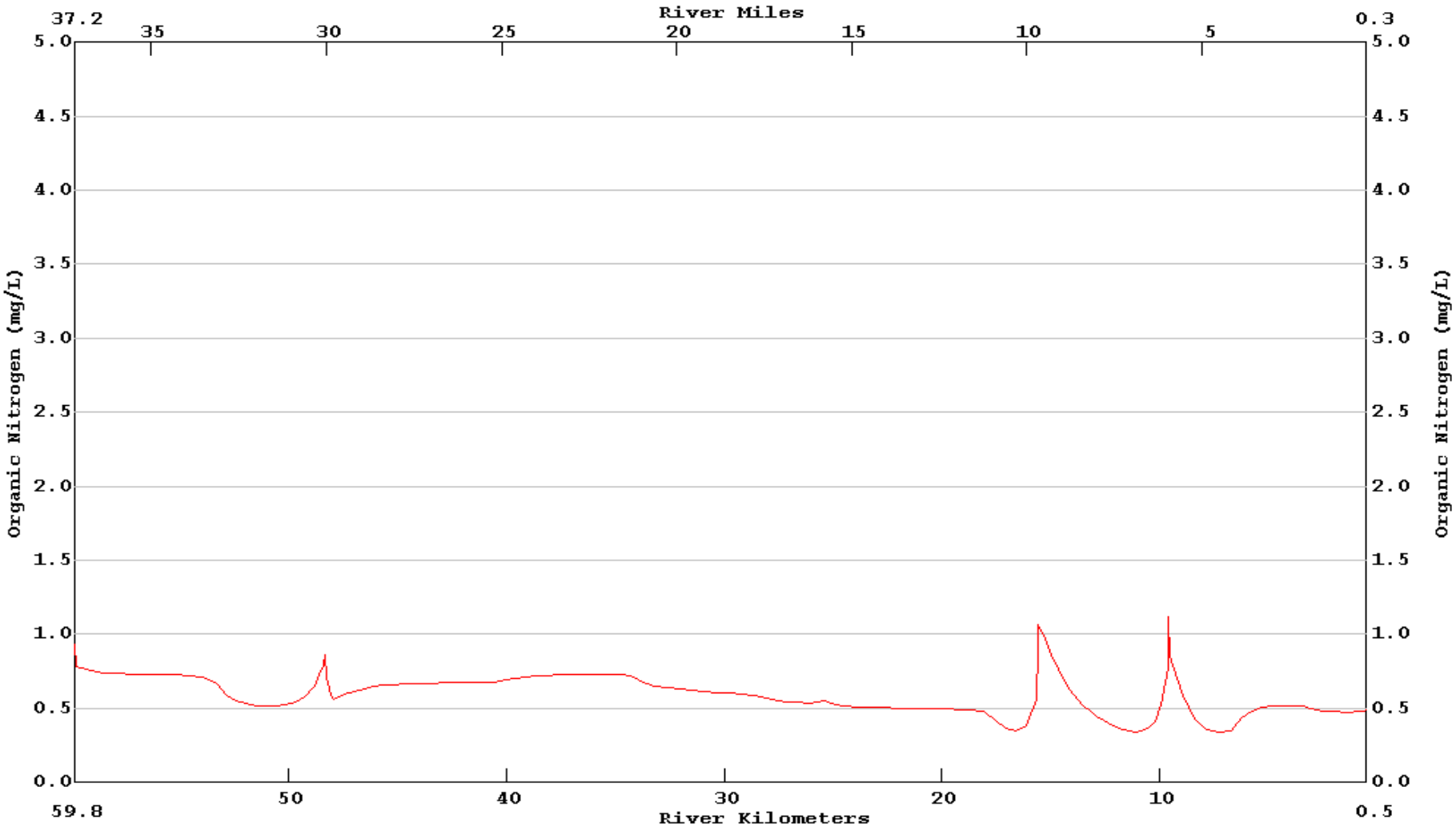
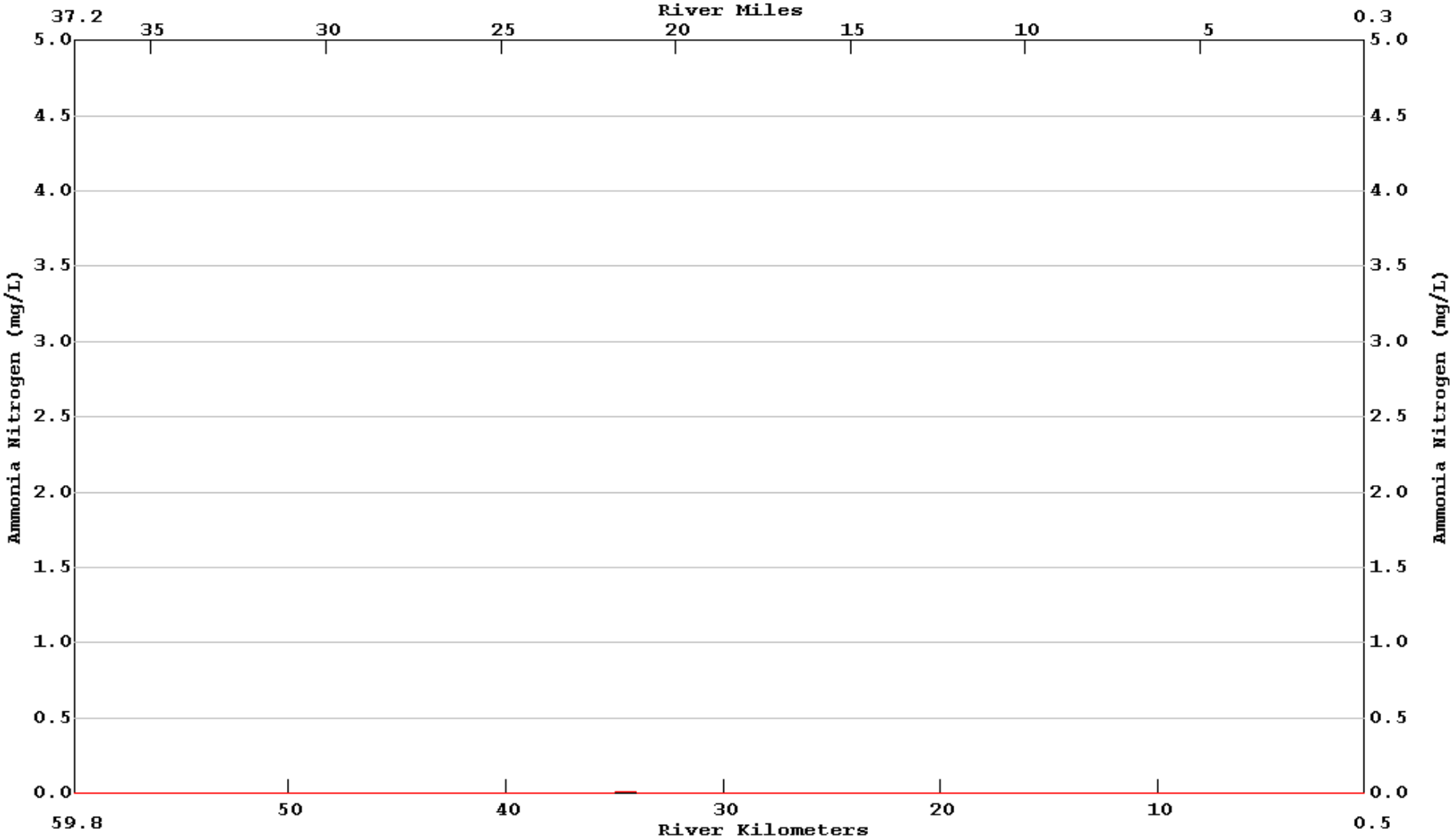
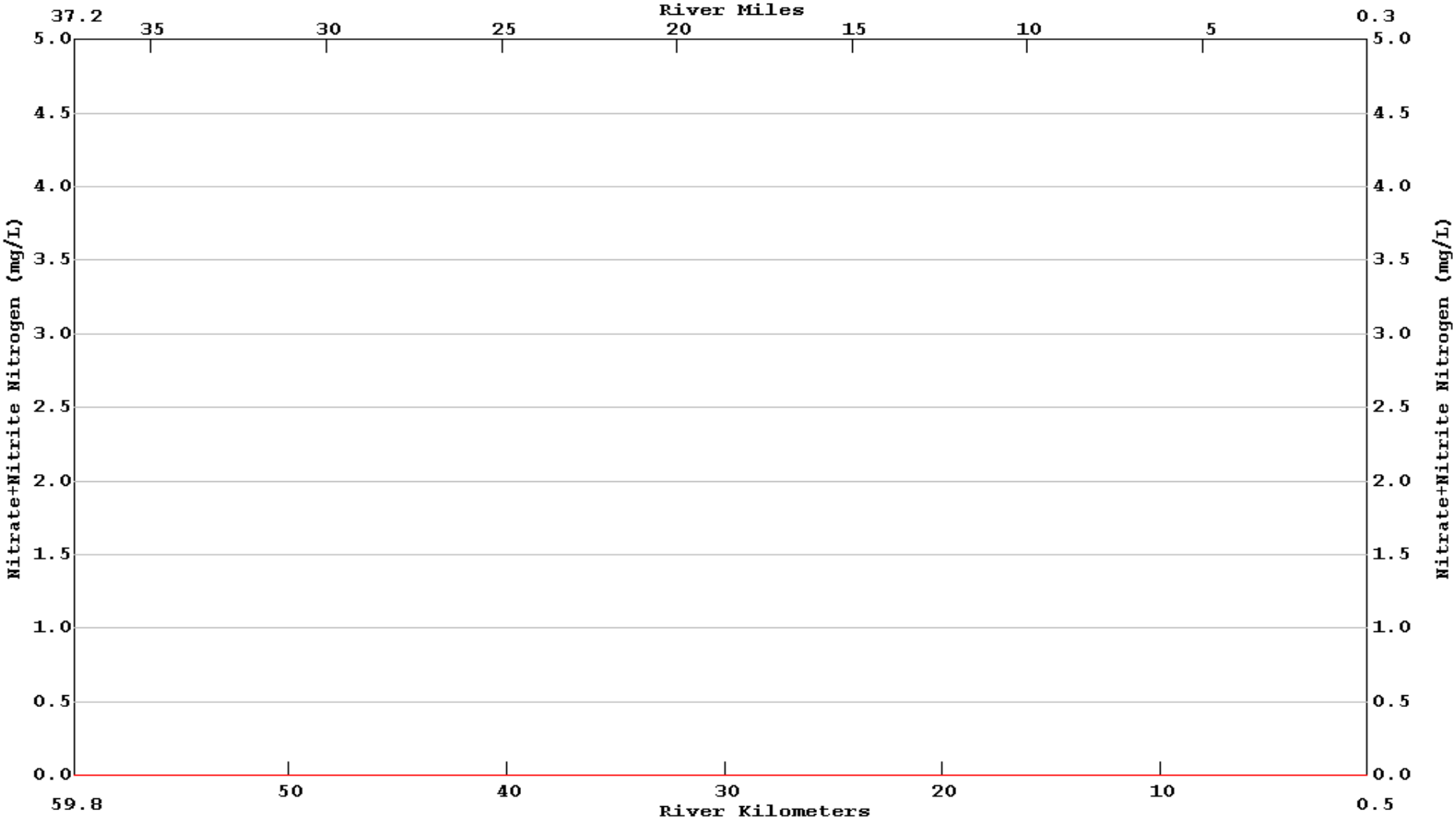


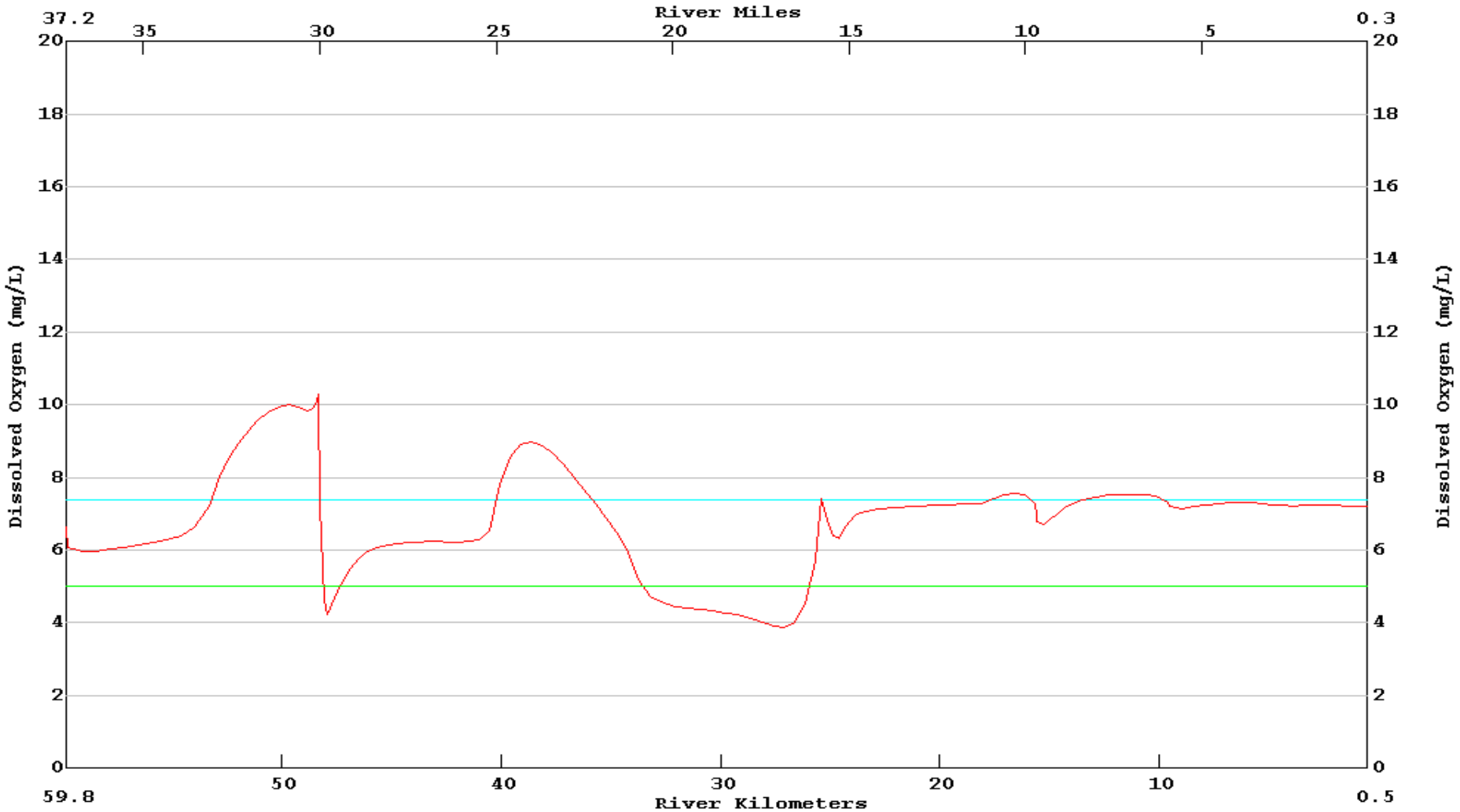
LA-QUAL Version 5.01 Run at 15:15 on 01/08/2002 File D:\MODELED_WATERBODIES\BAYOU DESIARD\MODELS\SUMMER PROJECTIONS\DE:
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT min= 0.00 max= 0.01
:MAINSTEM (ALL REACHES)



LA-QUAL Version 5.01 Run at 15:15 on 01/08/2002 File D:\MODELED_WATERBODIES\BAYOU DESIARD\MODELS\SUMMER PROJECTIONS\DE:
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% REDUCTION IN TOTAL NNPNT min= 0.00 max= 0.00
:MAINSTEM (ALL REACHES)



LA-QUAL Version 5.01 Run at 15:23 on 01/08/2002 File D:\MODELED_WATERBODIES\BAYOU DESIARD\MODELS\SUMMER PROJECTIONS\DE:
macrophytes, ORG-N, NH3-N, NO2-NO3; 40% REDUCTION IN TOTAL NNPNT min= 3.87 max= 10.31
:MAINSTEM (ALL REACHES)



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LA-QUAL Version 5.01
Louisiana Department of Environmental Quality

Input file is D:\MODELED_WATERBODIES\BAYOU DESIARD\MODELS\WINTER PROJECTIONS\DESIARD WIN B CHLR A_NITROGEN_50.txt
Output produced at 08:24 on 01/14/2002

$$$ DATA TYPE 1 (TITLES AND CONTROL CARDS) $$$

CARD TYPE       CONTROL TITLES

TITLE01         BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
TITLE02         macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt
CNTROL11   NO   SEQUENCING OUTPUT
CNTROL12  YES   METRIC UNITS
CNTROL13  YES   OXYGEN DEPENDENT RATES
ENDATA01

$$$ DATA TYPE 2 (MODEL OPTIONS) $$$

CARD TYPE       MODEL OPTION

MODOPT01   NO   TEMPERATURE
MODOPT02   NO   SALINITY
MODOPT03  YES   CONSERVATIVE MATERIAL  I = CHLORIDES                  IN MG/L
MODOPT04  YES   CONSERVATIVE MATERIAL II = SULFATES                   IN MG/L
MODOPT05  YES   DISSOLVED OXYGEN
MODOPT06  YES   BIOCHEMICAL OXYGEN DEMAND
MODOPT07  YES   NITROGEN
MODOPT08   NO   PHOSPHORUS
MODOPT09   NO   CHLOROPHYLL A
MODOPT10   NO   MACROPHYTES
MODOPT11   NO   COLIFORM
MODOPT12  YES   NONCONSERVATIVE MATERIAL = CBOD2                      IN MG/L
ENDATA02

$$$ DATA TYPE 3 (PROGRAM CONSTANTS) $$$

CARD TYPE       DESCRIPTION OF CONSTANT                        VALUE

PROGRAM         MAXIMUM ITERATION LIMIT            =       240.00000
PROGRAM         PLOT TYPE                          =         3.00000
PROGRAM         FINAL REPORT TYPE                  =         1.00000
PROGRAM         SPECIAL REPORT TYPE                =         3.00000
PROGRAM         BOD OXYGEN UPTAKE RATE             =         1.00000 mg O/mg BOD
PROGRAM         KL MINIMUM                         =         0.70000 meters/day
PROGRAM         NCM OXYGEN UPTAKE RATE             =         1.00000 mg O/mg NCM
PROGRAM         INHIBITION CONTROL VALUE           =         3.00000
PROGRAM         DISPERSION EQUATION                =         1.00000
PROGRAM         OCEAN EXCHANGE RATIO               =         0.00000
```

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PROGRAM         HYDRAULIC CALCULATION METHOD       =         2.00000 (widths and depths)
PROGRAM         SETTLED RATE UNITS                 =         2.00000 (per day)
PROGRAM         WIND                               =         2.56000 meters/sec
PROGRAM         EFFECTIVE BOD DUE TO ALGAE         =         0.10000 mg/L BOD per ug/L chl a
PROGRAM         ALGAE OXYGEN PRODUCTION            =         0.02500 mg O/ug chl a/day
PROGRAM         MACROPHYTE OXYGEN PRODUCTION       =         0.00000 mg O/mg macrophyte/day
PROGRAM         ORGN OXYGEN UPTAKE RATE            =         0.00000 mg O/mg N
PROGRAM         NH3 OXYGEN UPTAKE RATE             =         4.33000 mg O/mg N
PROGRAM         N PREFERENCE                       =         0.50000 (0.0=NH3 1.0=NO3)
PROGRAM         N INHIBITION EQUATION              =         1.00000
ENDATA03

$$$ DATA TYPE 4 (TEMPERATURE CORRECTION CONSTANTS FOR RATE COEFFICIENTS) $$$

 CARD TYPE     RATE CODE     THETA VALUE

THETA        NCM DECA       1.04700
THETA        ORGN DEC       1.07000
ENDATA04

$$$ CONSTANTS TYPE 5 (TEMPERATURE DATA) $$$

CARD TYPE       DESCRIPTION OF CONSTANT                        VALUE

ENDATA05

$$$ DATA TYPE 6 (ALGAE CONSTANTS) $$$

CARD TYPE       DESCRIPTION OF CONSTANT                        VALUE

ENDATA06

$$$ DATA TYPE 7 (MACROPHYTE CONSTANTS) $$$

CARD TYPE       DESCRIPTION OF CONSTANT                        VALUE

ENDATA07

$$$ DATA TYPE 8 (REACH IDENTIFICATION DATA) $$$
                                                      BEGIN         END     ELEM    REACH     ELEMS   BEGIN    END
CARD TYPE  REACH  ID  NAME                            REACH       REACH   LENGTH   LENGTH    PER RCH   ELEM   ELEM
                                                         km          km       km       km               NUM    NUM

REACH ID      1   LB    BDS 1-BDS 2                   59.85  TO   59.77   0.0800     0.08       1        1      1
REACH ID      2   LB    BDS 2-BDS 3                   59.77  TO   53.31   0.6460     6.46      10        2     11
REACH ID      3   LB    BDS 3-BDS 6                   53.31  TO   48.81   0.4500     4.50      10       12     21
REACH ID      4   LB    BDS 6-US 165 GATE INLET CANAL 48.81  TO   48.41   0.2000     0.40       2       22     23
REACH ID      5   LB    BDS 5-BDS 4                    8.53  TO    4.33   0.4200     4.20      10       24     33
REACH ID      6   LB    BDS 4-US 165 GATE INLET CANAL  4.33  TO    0.00   0.4330     4.33      10       34     43
```

REACH ID	7	LB	US165 GATE IN CANAL-US165 GATE	48.41	TO	48.33	0.0800	0.08	1	44	44
REACH ID	8	CP	US 165 GATE/CONTROL STRUCTURE	48.33	TO	48.25	0.0800	0.08	1	45	45
REACH ID	9	BD	US165 GATE OUTLET-BDS 7	48.25	TO	47.92	0.1100	0.33	3	46	48
REACH ID	10	BD	BDS 7-BDS 8	47.92	TO	40.56	0.4600	7.36	16	49	64
REACH ID	11	BD	BDS 8-MILL BAYOU	40.56	TO	33.77	0.4850	6.79	14	65	78
REACH ID	12	BD	MILL BAYOU-BDS 9	33.77	TO	28.06	0.5710	5.71	10	79	88
REACH ID	13	BD	BDS 9-HANNAH'S RUN	28.06	TO	25.67	0.4780	2.39	5	89	93
REACH ID	14	HE	HANNAH'S RUN(E)CONTROL GATES	0.45	TO	0.44	0.0120	0.01	1	94	94
REACH ID	15	HR	HANNAHS RUN(E)-HANNAHS RUN(W)	0.44	TO	0.15	0.2880	0.29	1	95	95
REACH ID	16	HW	HANNAH'S RUN(W) CONTROL GATES	0.15	TO	0.14	0.0120	0.01	1	96	96
REACH ID	17	HR	HANNAH'S RUN(W)-BDS21	0.14	TO	0.10	0.0400	0.04	1	97	97
REACH ID	18	HR	BDS 21-BAYOU DESIARD	0.10	TO	0.00	0.1000	0.10	1	98	98
REACH ID	19	BD	HANNAH'S RUN-BDS10	25.67	TO	24.61	0.2650	1.06	4	99	102
REACH ID	20	BD	BDS 10- L-11 CANAL PIPE INTAKE	24.61	TO	18.06	0.2620	6.55	25	103	127
REACH ID	21	CP	L-11 CANAL CONTROL PIPE	18.06	TO	17.98	0.0800	0.08	1	128	128
REACH ID	22	BD	L-11 PIPEOUTFALL-MIDWAY INTAKE	17.98	TO	15.63	0.4700	2.35	5	129	133
REACH ID	23	MD	MIDWAY DAM CONTROL PIPE	15.63	TO	15.59	0.0400	0.04	1	134	134
REACH ID	24	BD	MIDWAY OUTFALL-BDS13	15.59	TO	15.55	0.0400	0.04	1	135	135
REACH ID	25	BD	BDS13-BDS14	15.55	TO	9.62	0.2965	5.93	20	136	155
REACH ID	26	BD	BDS14-STADIUM DR. PIPE INTAKE	9.62	TO	9.57	0.0500	0.05	1	156	156
REACH ID	27	SD	STADIUM DRIVE PIPES	9.57	TO	9.52	0.0500	0.05	1	157	157
REACH ID	28	BD	STADIUM DR. PIPE OUTFALL-BDS15	9.52	TO	6.69	0.5660	2.83	5	158	162
REACH ID	29	BD	BDS15-BDS16	6.69	TO	3.40	0.4700	3.29	7	163	169
REACH ID	30	BD	BDS16-BDS17	3.40	TO	0.61	0.3100	2.79	9	170	178
REACH ID	31	BD	BDS17-MONROE WTP INTAKE	0.61	TO	0.54	0.0700	0.07	1	179	179

ENDATA08

$$$ DATA TYPE 9 (ADVECTIVE HYDRAULIC COEFFICIENTS) $$$

CARD TYPE	REACH	ID	WIDTH "A"	WIDTH "B"	WIDTH "C"	DEPTH "D"	DEPTH "E"	DEPTH "F"	SLOPE	MANNINGS "N"
HYDR-1	1	LB	1.000	0.100	1.720	0.050	0.100	1.720	0.00010	0.035
HYDR-1	2	LB	1.000	0.100	61.720	0.050	0.100	3.410	0.00010	0.035
HYDR-1	3	LB	1.000	0.100	89.150	0.050	0.100	3.620	0.00010	0.035
HYDR-1	4	LB	1.000	0.100	114.290	0.050	0.100	3.340	0.00010	0.035
HYDR-1	5	LB	1.000	0.100	123.140	0.050	0.100	3.900	0.00010	0.035
HYDR-1	6	LB	1.000	0.100	114.290	0.050	0.100	3.340	0.00010	0.035
HYDR-1	7	LB	1.000	0.100	6.000	0.050	0.100	1.000	0.00010	0.035
HYDR-1	8	CP	1.000	0.100	1.620	0.050	0.100	1.620	0.00010	0.035
HYDR-1	9	BD	1.000	0.100	42.060	0.050	0.100	1.660	0.00010	0.035
HYDR-1	10	BD	1.000	0.100	21.330	0.050	0.100	1.830	0.00010	0.035
HYDR-1	11	BD	1.000	0.100	21.330	0.050	0.100	1.830	0.00010	0.035
HYDR-1	12	BD	1.000	0.100	76.200	0.050	0.100	2.310	0.00010	0.035
HYDR-1	13	BD	1.000	0.100	76.200	0.050	0.100	2.310	0.00010	0.035
HYDR-1	14	HE	1.000	0.100	1.720	0.050	0.100	1.720	0.00010	0.035
HYDR-1	15	HR	1.000	0.100	17.680	0.050	0.100	2.420	0.00010	0.035
HYDR-1	16	HW	1.000	0.100	1.720	0.050	0.100	1.720	0.00010	0.035
HYDR-1	17	HR	1.000	0.100	17.680	0.050	0.100	2.420	0.00010	0.035

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HYDR-1       18   HR       1.000       0.100      17.680       0.050       0.100       2.420     0.00010   0.035
HYDR-1       19   BD       1.000       0.100      90.060       0.050       0.100       2.430     0.00010   0.035
HYDR-1       20   BD       1.000       0.100      90.060       0.050       0.100       2.430     0.00010   0.035
HYDR-1       21   CP       1.000       0.100       1.620       0.050       0.100       1.620     0.00010   0.035
HYDR-1       22   BD       1.003       0.100      94.550       0.050       0.100       2.345     0.00010   0.035
HYDR-1       23   MD       1.000       0.100       1.620       0.050       0.100       1.620     0.00010   0.035
HYDR-1       24   BD       1.000       0.100      99.040       0.050       0.100       2.260     0.00010   0.035
HYDR-1       25   BD       1.000       0.100      99.040       0.050       0.100       2.260     0.00010   0.035
HYDR-1       26   BD       1.000       0.100      11.580       0.050       0.100       2.470     0.00010   0.035
HYDR-1       27   SD       1.000       0.100       1.620       0.050       0.100       1.620     0.00010   0.035
HYDR-1       28   BD       1.000       0.100     117.340       0.050       0.100       2.660     0.00010   0.035
HYDR-1       29   BD       1.000       0.100     117.340       0.050       0.100       2.660     0.00010   0.035
HYDR-1       30   BD       1.000       0.100     124.960       0.050       0.100       4.850     0.00010   0.035
HYDR-1       31   BD       1.000       0.100     124.960       0.050       0.100       4.850     0.00010   0.035
ENDATA09

$$$ DATA TYPE 10 (DISPERSIVE HYDRAULIC COEFFICIENTS) $$$

CARD TYPE  REACH  ID     TIDAL     DISPERSION     DISPERSION     DISPERSION     DISPERSION
                        RANGE        "A"            "B"            "C"            "D"

HYDR         1   LB      0.00        0.000          0.000          0.000          0.000
HYDR         2   LB      0.00        1.000          0.000          0.000          0.000
HYDR         3   LB      0.00        1.000          0.000          0.000          0.000
HYDR         4   LB      0.00        1.000          0.000          0.000          0.000
HYDR         5   LB      0.00        1.000          0.000          0.000          0.000
HYDR         6   LB      0.00        1.000          0.000          0.000          0.000
HYDR         7   LB      0.00        1.000          0.000          0.000          0.000
HYDR         8   CP      0.00        1.000          0.000          0.000          0.000
HYDR         9   BD      0.00        1.000          0.000          0.000          0.000
HYDR        10   BD      0.00        1.000          0.000          0.000          0.000
HYDR        11   BD      0.00        1.000          0.000          0.000          0.000
HYDR        12   BD      0.00        4.000          0.000          0.000          0.000
HYDR        13   BD      0.00        4.000          0.000          0.000          0.000
HYDR        14   HE      0.00        1.000          0.000          0.000          0.000
HYDR        15   HR      0.00        4.000          0.000          0.000          0.000
HYDR        16   HW      0.00        1.000          0.000          0.000          0.000
HYDR        17   HR      0.00        4.000          0.000          0.000          0.000
HYDR        18   HR      0.00        4.000          0.000          0.000          0.000
HYDR        19   BD      0.00        4.000          0.000          0.000          0.000
HYDR        20   BD      0.00        4.000          0.000          0.000          0.000
HYDR        21   CP      0.00        1.000          0.000          0.000          0.000
HYDR        22   BD      0.00        1.000          0.000          0.000          0.000
HYDR        23   MD      0.00        1.000          0.000          0.000          0.000
HYDR        24   BD      0.00        1.000          0.000          0.000          0.000
HYDR        25   BD      0.00        1.000          0.000          0.000          0.000
HYDR        26   BD      0.00        1.000          0.000          0.000          0.000
HYDR        27   SD      0.00        1.000          0.000          0.000          0.000
HYDR        28   BD      0.00        1.000          0.000          0.000          0.000
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HYDR         29   BD      0.00        1.000          0.000          0.000          0.000
HYDR         30   BD      0.00        1.000          0.000          0.000          0.000
HYDR         31   BD      0.00        1.000          0.000          0.000          0.000
ENDATA10

$$$ DATA TYPE 11 (INITIAL CONDITIONS) $$$

CARD TYPE      REACH  ID        TEMP     SALIN        DO       NH3     NO3+2      PHOS     CHL A     MACRO

INITIAL           1   LB       19.20      0.00      8.32      0.00      0.00      0.00      1.30    115.00
INITIAL           2   LB       19.20      0.00      8.32      0.00      0.00      0.00     20.50    115.00
INITIAL           3   LB       19.20      0.00      8.32      0.00      0.00      0.00     22.40    115.00
INITIAL           4   LB       19.20      0.00      8.32      0.00      0.00      0.00     36.40    115.00
INITIAL           5   LB       19.20      0.00      8.32      0.00      0.00      0.00     42.40    115.00
INITIAL           6   LB       19.20      0.00      8.32      0.00      0.00      0.00     42.40    115.00
INITIAL           7   LB       19.20      0.00      8.32      0.00      0.00      0.00     44.00    115.00
INITIAL           8   CP       19.20      0.00      8.32      0.00      0.00      0.00     46.00    115.00
INITIAL           9   BD       19.20      0.00      8.32      0.00      0.00      0.00     48.00    115.00
INITIAL          10   BD       19.20      0.00      8.32      0.00      0.00      0.00     75.00    115.00
INITIAL          11   BD       19.20      0.00      8.32      0.00      0.00      0.00     75.00    115.00
INITIAL          12   BD       19.20      0.00      8.32      0.00      0.00      0.00     24.60    115.00
INITIAL          13   BD       19.20      0.00      8.32      0.00      0.00      0.00     24.60    115.00
INITIAL          14   HE       19.20      0.00      8.32      0.00      0.00      0.00     17.90    115.00
INITIAL          15   HR       19.20      0.00      8.32      0.00      0.00      0.00     17.90    115.00
INITIAL          16   HW       19.20      0.00      8.32      0.00      0.00      0.00     17.90    115.00
INITIAL          17   HR       19.20      0.00      8.32      0.00      0.00      0.00     17.90    115.00
INITIAL          18   HR       19.20      0.00      8.32      0.00      0.00      0.00     13.60    115.00
INITIAL          19   BD       19.20      0.00      8.32      0.00      0.00      0.00     13.60    115.00
INITIAL          20   BD       19.20      0.00      8.32      0.00      0.00      0.00     16.00    115.00
INITIAL          21   CP       19.20      0.00      8.32      0.00      0.00      0.00     19.20    115.00
INITIAL          22   BD       19.20      0.00      8.32      0.00      0.00      0.00     31.00    115.00
INITIAL          23   MD       19.20      0.00      8.32      0.00      0.00      0.00     43.00    115.00
INITIAL          24   BD       19.20      0.00      8.32      0.00      0.00      0.00     57.20    115.00
INITIAL          25   BD       19.20      0.00      8.32      0.00      0.00      0.00     52.00    115.00
INITIAL          26   BD       19.20      0.00      8.32      0.00      0.00      0.00     48.60    115.00
INITIAL          27   SD       19.20      0.00      8.32      0.00      0.00      0.00     40.00    115.00
INITIAL          28   BD       19.20      0.00      8.32      0.00      0.00      0.00     32.60    115.00
INITIAL          29   BD       19.20      0.00      8.32      0.00      0.00      0.00     30.00    115.00
INITIAL          30   BD       19.20      0.00      8.32      0.00      0.00      0.00     20.00    115.00
INITIAL          31   BD       19.20      0.00      8.32      0.00      0.00      0.00     13.00    115.00
ENDATA11

$$$ DATA TYPE 12 (REAERATION, SEDIMENT OXYGEN DEMAND, BOD COEFFICIENTS) $$$
                                                                                  AEROB                          ANAER
CARD TYPE REACH  ID       K2                K2        K2        K2     BKGRND     BOD        BOD   BOD CONV     BOD
                         OPT               "A"       "B"       "C"       SOD     DECAY      SETT    TO SOD     DECAY
                                                                    g/m²/d       per day     m/d

COEF-1       1   LB  12 BANKS            1.000     0.000     0.000     0.000     0.140     0.050     0.000     0.000
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COEF-1       2   LB  12 BANKS            1.000     0.000     0.000     0.000     0.200     0.050     0.000     0.000
COEF-1       3   LB  12 BANKS            1.000     0.000     0.000     0.000     0.190     0.050     0.000     0.000
COEF-1       4   LB  12 BANKS            1.000     0.000     0.000     0.000     0.190     0.050     0.000     0.000
COEF-1       5   LB  12 BANKS            1.000     0.000     0.000     0.000     0.150     0.050     0.000     0.000
COEF-1       6   LB  12 BANKS            1.000     0.000     0.000     0.000     0.150     0.050     0.000     0.000
COEF-1       7   LB  20 K2=a/D           0.700     0.000     0.000     5.630     0.190     0.050     1.000     0.000
COEF-1       8   CP  20 K2=a/D           0.700     0.000     0.000     5.630     0.190     0.050     1.000     0.000
COEF-1       9   BD  20 K2=a/D           0.700     0.000     0.000     5.630     0.200     0.050     1.000     0.000
COEF-1      10   BD  12 BANKS            0.010     0.000     0.000     1.560     0.170     0.050     1.000     0.000
COEF-1      11   BD  12 BANKS            0.010     0.000     0.000     0.000     0.120     0.050     1.000     0.000
COEF-1      12   BD  12 BANKS            1.000     0.000     0.000     1.560     0.080     0.050     0.000     0.000
COEF-1      13   BD  12 BANKS            1.000     0.000     0.000     1.560     0.080     0.050     0.000     0.000
COEF-1      14   HE  20 K2=a/D           0.700     0.000     0.000     0.000     0.080     0.050     0.000     0.000
COEF-1      15   HR  20 K2=a/D           0.700     0.000     0.000     0.000     0.080     0.050     0.000     0.000
COEF-1      16   HW  20 K2=a/D           0.700     0.000     0.000     0.000     0.100     0.050     0.000     0.000
COEF-1      17   HR  20 K2=a/D           0.700     0.000     0.000     0.000     0.110     0.050     0.000     0.000
COEF-1      18   HR  20 K2=a/D           0.700     0.000     0.000     0.000     0.110     0.050     0.000     0.000
COEF-1      19   BD  12 BANKS            1.000     0.000     0.000     1.560     0.120     0.050     0.000     0.000
COEF-1      20   BD  13 JOHANSON         1.000     0.000     0.000     0.000     0.130     0.050     0.000     0.000
COEF-1      21   CP  20 K2=a/D           0.700     0.000     0.000     0.000     0.140     0.050     0.000     0.000
COEF-1      22   BD  13 JOHANSON         1.000     0.000     0.000     0.000     0.160     0.050     0.000     0.000
COEF-1      23   MD  20 K2=a/D           0.700     0.000     0.000     0.000     0.180     0.050     0.000     0.000
COEF-1      24   BD  13 JOHANSON         1.000     0.000     0.000     0.000     0.230     0.050     0.000     0.000
COEF-1      25   BD  13 JOHANSON         1.000     0.000     0.000     0.000     0.160     0.050     0.000     0.000
COEF-1      26   BD  13 JOHANSON         1.000     0.000     0.000     0.000     0.080     0.050     0.000     0.000
COEF-1      27   SD  20 K2=a/D           0.700     0.000     0.000     0.000     0.100     0.050     0.000     0.000
COEF-1      28   BD  13 JOHANSON         1.000     0.000     0.000     0.000     0.120     0.050     0.000     0.000
COEF-1      29   BD  13 JOHANSON         1.000     0.000     0.000     0.000     0.120     0.050     0.000     0.000
COEF-1      30   BD  13 JOHANSON         1.000     0.000     0.000     0.000     0.120     0.050     0.000     0.000
COEF-1      31   BD  13 JOHANSON         1.000     0.000     0.000     0.000     0.100     0.050     0.000     0.000
ENDATA12

$$$ DATA TYPE 13 (NITROGEN AND PHOSPHORUS COEFFICIENTS) $$$

CARD TYPE      REACH  ID       ORG-N     ORG-N   ORGN CONV       NH3       NH3      PHOS     DENIT
                                DECA      SETT  TO NH3 SRCE     DECA      SRCE      SRCE      RATE

COEF-2           1   LB       0.200     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2           2   LB       0.090     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2           3   LB       0.050     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2           4   LB       0.090     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2           5   LB       0.120     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2           6   LB       0.120     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2           7   LB       0.100     0.015     1.000       0.600     0.000     0.000     0.000
COEF-2           8   CP       0.100     0.015     1.000       0.600     0.000     0.000     0.000
COEF-2           9   BD       0.200     0.015     1.000       0.600     0.000     0.000     0.000
COEF-2          10   BD       0.200     0.015     1.000       1.000     0.000     0.000     0.000
COEF-2          11   BD       0.200     0.015     1.000       1.000     0.000     0.000     0.000
COEF-2          12   BD       0.060     0.015     0.000       0.600     0.000     0.000     0.000
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COEF-2          13   BD       0.060     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          14   HE       0.110     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          15   HR       0.110     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          16   HW       0.150     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          17   HR       0.180     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          18   HR       0.180     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          19   BD       0.070     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          20   BD       0.090     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          21   CP       0.080     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          22   BD       0.070     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          23   MD       0.060     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          24   BD       0.050     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          25   BD       0.070     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          26   BD       0.150     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          27   SD       0.150     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          28   BD       0.250     0.015     0.000       0.600     0.000     0.000     0.000
COEF-2          29   BD       0.250     0.015     0.000       0.800     0.000     0.000     0.000
COEF-2          30   BD       0.150     0.015     0.000       0.800     0.000     0.000     0.000
COEF-2          31   BD       0.070     0.015     0.000       0.600     0.000     0.000     0.000
ENDATA13

$$$ DATA TYPE 14 (ALGAE AND MACROPHYTE COEFFICIENTS) $$$

CARD TYPE      REACH  ID       SECCHI    ALGAE:     ALGAE    ALG CONV     ALGAE     ALGAE     MACRO     MACRO
                                DEPTH     CHL A      SETT     TO SOD       GROW      RESP      GROW      RESP

ENDATA14

$$$ DATA TYPE 15 (COLIFORM AND NONCONSERVATIVE COEFFICIENTS) $$$

CARD TYPE      REACH  ID    COLIFORM       NCM        NCM    NCM CONV
                             DIE-OFF     DECAY      SETT     TO SOD

COEF-4           1   LB        0.00      0.01      0.05      0.00
COEF-4           2   LB        0.00      0.03      0.05      0.00
COEF-4           3   LB        0.00      0.04      0.05      0.00
COEF-4           4   LB        0.00      0.01      0.05      0.00
COEF-4           5   LB        0.00      0.01      0.05      0.00
COEF-4           6   LB        0.00      0.01      0.05      0.00
COEF-4           7   LB        0.00      0.01      0.05      1.00
COEF-4           8   CP        0.00      0.01      0.05      1.00
COEF-4           9   BD        0.00      0.02      0.05      1.00
COEF-4          10   BD        0.00      0.02      0.05      1.00
COEF-4          11   BD        0.00      0.02      0.05      1.00
COEF-4          12   BD        0.00      0.01      0.05      0.00
COEF-4          13   BD        0.00      0.01      0.05      0.00
COEF-4          14   HE        0.00      0.01      0.05      0.00
COEF-4          15   HR        0.00      0.01      0.05      0.00
COEF-4          16   HW        0.00      0.02      0.05      0.00
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COEF-4          17   HR        0.00      0.02      0.05      0.00
COEF-4          18   HR        0.00      0.02      0.05      0.00
COEF-4          19   BD        0.00      0.01      0.05      0.00
COEF-4          20   BD        0.00      0.01      0.05      0.00
COEF-4          21   CP        0.00      0.02      0.05      0.00
COEF-4          22   BD        0.00      0.03      0.05      0.00
COEF-4          23   MD        0.00      0.04      0.05      0.00
COEF-4          24   BD        0.00      0.05      0.05      0.00
COEF-4          25   BD        0.00      0.02      0.05      0.00
COEF-4          26   BD        0.00      0.01      0.05      0.00
COEF-4          27   SD        0.00      0.01      0.05      0.00
COEF-4          28   BD        0.00      0.03      0.05      0.00
COEF-4          29   BD        0.00      0.03      0.05      0.00
COEF-4          30   BD        0.00      0.03      0.05      0.00
COEF-4          31   BD        0.00      0.04      0.05      0.00
ENDATA15

$$$ DATA TYPE 16 (INCREMENTAL DATA FOR FLOW, TEMPERATURE, SALINITY, AND CONSERVATIVES) $$$

CARD TYPE      REACH  ID       OUTFLOW      INFLOW      TEMP     SALIN      CM-I     CM-II   IN/DIST  OUT/DIST

ENDATA16

$$$ DATA TYPE 17 (INCREMENTAL DATA FOR DO, BOD, AND NITROGEN) $$$

CARD TYPE      REACH  ID          DO       BOD     ORG-N       NH3     NO3+2

ENDATA17

$$$ DATA TYPE 18 (INCREMENTAL DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NONCONSERVATIVES) $$$

 CARD TYPE      REACH  ID        PHOS     CHL A      COLI       NCM

ENDATA18

$$$ DATA TYPE 19 (NONPOINT SOURCE DATA) $$$

CARD TYPE      REACH  ID         BOD     ORG-N      COLI       NCM        DO

NONPOINT          1   LB        3.13      0.00      0.00     31.25      0.00
NONPOINT          2   LB     1562.50    218.75      0.00    218.75      0.00
NONPOINT          3   LB      875.00     93.75      0.00    187.50      0.00
NONPOINT          4   LB      312.50     21.88      0.00    203.13      0.00
NONPOINT          5   LB     1125.00    625.00      0.00    718.75      0.00
NONPOINT          6   LB     1000.00    156.25      0.00    718.75      0.00
NONPOINT          7   LB        0.00     46.88      0.00      0.00      0.00
NONPOINT          8   CP        0.00      0.00      0.00      0.00      0.00
NONPOINT          9   BD        0.00      0.00      0.00      0.00      0.00
NONPOINT         10   BD      293.75     93.75      0.00    125.00      0.00
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NONPOINT         11   BD      293.75     93.75      0.00    125.00      0.00
NONPOINT         12   BD      500.00     93.75      0.00    250.00      0.00
NONPOINT         13   BD      312.50     31.25      0.00    281.25      0.00
NONPOINT         14   HE        0.00      0.00      0.00      0.00    850.00
NONPOINT         15   HR        0.00      3.13      0.00      0.00      0.00
NONPOINT         16   HW        0.00      0.00      0.00      0.00      0.00
NONPOINT         17   HR        0.00      3.13      0.00      0.00      0.00
NONPOINT         18   HR        0.00      3.13      0.00      0.00      0.00
NONPOINT         19   BD      500.00      9.38      0.00    437.50      0.00
NONPOINT         20   BD     1500.00    156.25      0.00    437.50      0.00
NONPOINT         21   CP        0.00      0.00      0.00      0.00      0.00
NONPOINT         22   BD       62.50     15.63      0.00     93.75      0.00
NONPOINT         23   MD        0.00      0.00      0.00      0.00      0.00
NONPOINT         24   BD     1500.00     62.50      0.00    343.75      0.00
NONPOINT         25   BD     1656.25     62.50      0.00    343.75      0.00
NONPOINT         26   BD      468.75     62.50      0.00    312.50      0.00
NONPOINT         27   SD        0.00      0.00      0.00      0.00      0.00
NONPOINT         28   BD     1187.50    156.25      0.00    250.00      0.00
NONPOINT         29   BD     1187.50    312.50      0.00    375.00      0.00
NONPOINT         30   BD     1500.00    281.25      0.00    375.00      0.00
NONPOINT         31   BD        6.27      6.27      0.00      6.27      0.00
ENDATA19

$$$ DATA TYPE 20 (HEADWATER FOR FLOW, TEMPERATURE, SALINITY AND CONSERVATIVES) $$$

CARD TYPE     ELEMENT   NAME                  UNIT          FLOW      TEMP     SALIN      CM-I     CM-II

HDWTR-1          1     LAKE BARTHOLEMEW EAS    0        0.10278    19.200     0.000     9.900     3.000
HDWTR-1         24     LAKE BARTHOLEMEW WES    0        0.10278    19.200     0.000     8.900     3.200
HDWTR-1         94     HANNAH'S RUN (EAST)     0        1.45612    19.200     0.000     3.500     0.000
ENDATA20

$$$ DATA TYPE 21 (HEADWATER DATA FOR DO, BOD, AND NITROGEN) $$$

CARD TYPE     ELEMENT   NAME                         DO       BOD     ORG-N       NH3     NO3+2

HDWTR-2          1     LAKE BARTHOLEMEW EAS        8.32      2.08      0.93      0.00      0.00
HDWTR-2         24     LAKE BARTHOLEMEW WES        8.32      4.43      1.05      0.00      0.00
HDWTR-2         94     HANNAH'S RUN (EAST)         8.32     10.34      0.58      0.17      0.00
ENDATA21

$$$ DATA TYPE 22 (HEADWATER DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NONCONSERVATIVES) $$$

CARD TYPE     ELEMENT   NAME                        PHOS     CHL A      COLI       NCM

HDWTR-3          1     LAKE BARTHOLEMEW EAS         0.00      1.30      0.00      5.14
HDWTR-3         24     LAKE BARTHOLEMEW WES         0.00     42.40      0.00      4.16
HDWTR-3         94     HANNAH'S RUN (EAST)          0.00     17.90      0.00      4.56
ENDATA22
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$$$ DATA TYPE 23 (JUNCTION DATA) $$$

CARD TYPE   JUNCTION   UPSTRM     RIVER     NAME
             ELEMENT  ELEMENT     KILOM

JUNCTION          44      23      48.41  INLET CANAL TO B. DESIARD @ US 165 CONTROL STRUCTURE
JUNCTION          99      93      25.67  HANNAH'S RUN JUNCTION WITH BAYOU DESIARD
ENDATA23

$$$ DATA TYPE 24 (WASTELOAD DATA FOR FLOW, TEMPERATURE, SALINITY, AND CONSERVATIVES) $$$

CARD TYPE  ELEMENT    RKILO  NAME                           FLOW      TEMP       SAL      CM-I     CM-II

WSTLD-1      128      18.06  BAYOU CHAUVIN OUTLET       -1.05717     0.000     0.000     0.000     0.000
WSTLD-1      179       0.61  MONROE WTP INTAKE          -0.49920     0.000     0.000     0.000     0.000
ENDATA24

$$$ DATA TYPE 25 (WASTELOAD DATA FOR DO, BOD, AND NITROGEN) $$$
                                                                   % BOD                          %
CARD TYPE     ELEMENT   NAME                          DO       BOD      RMVL     ORG-N       NH3    NITRIF     NO3+2

WSTLD-2         128     BAYOU CHAUVIN OUTLET        0.00      0.00      0.00      0.00      0.00      0.00      0.00
WSTLD-2         179     MONROE WTP INTAKE           0.00      0.00      0.00      0.00      0.00      0.00      0.00
ENDATA25

$$$ DATA TYPE 26 (WASTELOAD DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NONCONSERVATIVES) $$$

CARD TYPE     ELEMENT   NAME                        PHOS     CHL A      COLI       NCM

WSTLD-3         128     BAYOU CHAUVIN OUTLET        0.00      0.00      0.00      0.00
WSTLD-3         179     MONROE WTP INTAKE           0.00      0.00      0.00      0.00
ENDATA26

$$$ DATA TYPE 27 (LOWER BOUNDARY CONDITIONS) $$$

CARD TYPE    CONSTITUENT                    CONCENTRATION

LOWER BC     TEMPERATURE                       =     19.200 deg C
LOWER BC     SALINITY                          =      0.000 ppt
LOWER BC     CONSERVATIVE MATERIAL I           =      0.000 MG/L
LOWER BC     CONSERVATIVE MATERIAL II          =      0.000 MG/L
LOWER BC     DISSOLVED OXYGEN                  =      0.000 mg/L
LOWER BC     BIOCHEMICAL OXYGEN DEMAND         =      0.000 mg/L
LOWER BC     ORGANIC NITROGEN                  =      0.000 mg/L
LOWER BC     AMMONIA NITROGEN                  =      0.000 mg/L
LOWER BC     NITRATE + NITRITE                 =      0.000 mg/L
LOWER BC     PHOSPHORUS                        =      0.000 mg/L
LOWER BC     CHLOROPHYLL A                     =     16.700 µg/L
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LOWER BC     COLIFORM                          =      0.000 #/100 mL
LOWER BC     NONCONSERVATIVE MATERIAL          =      0.000 MG/L
ENDATA27

$$$ DATA TYPE 28 (DAM DATA) $$$

CARD TYPE     ELEMENT   NAME                 EQN      "A"       "B"       "H"

ENDATA28

$$$ DATA TYPE 29 (SENSITIVITY ANALYSIS DATA) $$$

CARD TYPE       PARAMETER     COL 1     COL 2     COL 3     COL 4     COL 5     COL 6     COL 7     COL 8

ENDATA29

$$$ DATA TYPE 30 (PLOT CONTROL CARDS) $$$


NUMBER OF PLOTS =  5
NUMBER OF REACHES IN PLOT 1 =   2
PLOT RCH  5  6
NUMBER OF REACHES IN PLOT 2 =   5
PLOT RCH 14 15 16 17 18
NUMBER OF REACHES IN PLOT 3 =  11
PLOT RCH  1  2  3  4  7  8  9 10 11 12 13
NUMBER OF REACHES IN PLOT 4 =  13
PLOT RCH 19 20 21 22 23 24 25 26 27 28 29 30 31
NUMBER OF REACHES IN PLOT 4 =  24
PLOT RCH  1  2  3  4  7  8  9 10 11 12 13 19 20 21 22 23 24 25 26 27 28 29 30 31
ENDATA30

$$$ DATA TYPE 31 (OVERLAY PLOT DATA) $$$


OVERLAY 1 DESIARDWIN_LBARTHWEST_NIT.TXT       :LAKE BARTHOLEMEW (WEST)
OVERLAY 2 DESIARDWIN_HANNAHSRUN_NIT.TXT       :HANNAH'S RUN
OVERLAY 3 DESIARDWIN_MAIN_NIT.TXT             :MAINSTEM (REACHES 1-4 & 7-13)
OVERLAY 4 DESIARDWIN_MAIN_NIT.TXT             :MAINSTEM (REACHES 19-31)
OVERLAY 5 DESIARDWIN_MAIN_NIT.TXT             :MAINSTEM (ALL REACHES)
ENDATA31



     .....NO ERRORS DETECTED IN INPUT DATA
     .....HYDRAULIC CALCULATIONS COMPLETED
     .....TRIDIAGONAL MATRIX TERMS INITIALIZED
     .....OXYGEN DEPENDENT RATES CONVERGENT IN 170 ITERATIONS
     .....CONSTITUENT CALCULATIONS COMPLETED
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***** WARNING:  NEGATIVE CONCENTRATIONS SET TO ZERO FOR Ammonia Nitrogen
***** WARNING:  NEGATIVE CONCENTRATIONS SET TO ZERO FOR Nitrate+Nitrite Nitrogen
    .....GRAPHICS DATA FOR PLOT 1 WRITTEN TO UNIT 11
    .....GRAPHICS DATA FOR PLOT 2 WRITTEN TO UNIT 12
    .....GRAPHICS DATA FOR PLOT 3 WRITTEN TO UNIT 13
    .....GRAPHICS DATA FOR PLOT 4 WRITTEN TO UNIT 14
    .....GRAPHICS DATA FOR PLOT 5 WRITTEN TO UNIT 15
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FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 1 BDS 1-BDS 2

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
1	HDWTR	0.10278	19.20	0.00	9.90	3.00	8.32	1.95	2.08	0.93	0.00	0.00	0.00	1.30	0.00	5.14

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
1	59.85	59.77	0.10278	0.00	0.02321	0.04	1.76	2.52	354.29	201.32	4.43	0.00	0.000	0.000	0.023
TOT						0.04			354.29	201.32					
AVG					0.02321		1.76	2.52			4.43				
CUM						0.04									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
1	59.770	9.24	0.39	0.13	0.05	0.00	0.00	0.00	0.00	0.19	0.01	0.56	0.00	0.00	0.00	0.49	0.00	0.00	0.01	0.05
20 DEG C RATE				0.14		0.00	0.00			0.20		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.40		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
1	59.770	19.20	0.00	9.89	3.00	7.46	3.95	6.00	1.32	0.00	0.00	1.32	0.00	20.50	115.00	0.00	4.86

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 2 BDS 2-BDS 3

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
2	UPR RCH	0.10278	19.20	0.00	9.89	3.00	7.46	3.95	6.00	1.32	0.00	0.00	0.00	20.50	0.00	4.86

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
2	59.77	59.12	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
3	59.12	58.48	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
4	58.48	57.83	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
5	57.83	57.19	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
6	57.19	56.54	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
7	56.54	55.89	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
8	55.89	55.25	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
9	55.25	54.60	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
10	54.60	53.96	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
11	53.96	53.31	0.10278	0.00	0.00048	15.69	3.45	62.52	139323.50	40385.66	215.67	0.00	0.000	1.000	0.000
TOT						156.89			1393235.00	403856.59					
AVG					0.00048		3.45	62.52			215.67				
CUM						156.93									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O.	REAER RATE	CBOD DECAY	CBOD SETT	ANBOD DECAY	BKGD SOD	FULL SOD	CORR SOD	ORGN DECAY	ORGN SETT	NH3 DECAY	NH3 SRCE	DENIT RATE	PO4 SRCE	ALG PROD	MAC PROD	COLI DECAY	NCM DECAY	NCM SETT

		mg/L	1/da	1/da	1/da	1/da	*	*	*	1/da	1/da	1/da	*	1/da	*	**	**	1/da	1/da	1/da
2	59.124	9.24	0.20	0.19	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.50	0.00	0.00	0.02	0.05
3	58.478	9.24	0.20	0.19	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.55	0.00	0.00	0.00	0.50	0.00	0.00	0.02	0.05
4	57.832	9.24	0.20	0.19	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.55	0.00	0.00	0.00	0.51	0.00	0.00	0.02	0.05
5	57.186	9.24	0.20	0.19	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.55	0.00	0.00	0.00	0.51	0.00	0.00	0.02	0.05
6	56.540	9.24	0.20	0.19	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.55	0.00	0.00	0.00	0.52	0.00	0.00	0.02	0.05
7	55.894	9.24	0.20	0.19	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.55	0.00	0.00	0.00	0.52	0.00	0.00	0.02	0.05
8	55.248	9.24	0.20	0.19	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.55	0.00	0.00	0.00	0.53	0.00	0.00	0.02	0.05
9	54.602	9.24	0.20	0.19	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.53	0.00	0.00	0.02	0.05
10	53.956	9.24	0.20	0.19	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.54	0.00	0.00	0.02	0.05
11	53.310	9.24	0.20	0.19	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.54	0.00	0.00	0.02	0.05
20 DEG C RATE				0.20		0.00	0.00			0.09		0.60	0.00	0.00	0.00			0.00	0.03	
AVG 20 DEG C RATE			0.20		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
2	59.124	19.20	0.00	9.89	3.00	7.29	4.28	6.35	1.40	0.00	0.00	1.40	0.00	20.69	115.00	0.00	4.13
3	58.478	19.20	0.00	9.89	3.00	7.14	4.48	6.57	1.47	0.00	0.00	1.47	0.00	20.88	115.00	0.00	3.43
4	57.832	19.20	0.00	9.88	3.00	7.08	4.57	6.68	1.51	0.00	0.00	1.51	0.00	21.07	115.00	0.00	2.98
5	57.186	19.20	0.00	9.88	3.00	7.07	4.61	6.73	1.53	0.00	0.00	1.53	0.00	21.26	115.00	0.00	2.69
6	56.540	19.20	0.00	9.87	3.01	7.08	4.62	6.77	1.55	0.00	0.00	1.55	0.00	21.45	115.00	0.00	2.49
7	55.894	19.20	0.00	9.86	3.01	7.12	4.63	6.79	1.55	0.00	0.00	1.55	0.00	21.64	115.00	0.00	2.36
8	55.248	19.20	0.00	9.85	3.01	7.18	4.61	6.80	1.55	0.00	0.00	1.55	0.00	21.83	115.00	0.00	2.27
9	54.602	19.20	0.00	9.84	3.01	7.31	4.57	6.77	1.53	0.00	0.00	1.53	0.00	22.02	115.00	0.00	2.19
10	53.956	19.20	0.00	9.82	3.02	7.55	4.44	6.66	1.50	0.00	0.00	1.50	0.00	22.21	115.00	0.00	2.11
11	53.310	19.20	0.00	9.80	3.02	8.04	4.05	6.29	1.41	0.00	0.00	1.41	0.00	22.40	115.00	0.00	1.99

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 3 BDS 3-BDS 6

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *

12	UPR RCH	0.10278	19.20	0.00	9.80	3.02	8.04	4.05	6.29	1.41	0.00	0.00	0.00	22.40	0.00	1.99

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
12	53.31	52.86	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
13	52.86	52.41	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
14	52.41	51.96	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
15	51.96	51.51	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
16	51.51	51.06	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
17	51.06	50.61	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
18	50.61	50.16	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
19	50.16	49.71	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
20	49.71	49.26	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
21	49.26	48.81	0.10278	0.00	0.00031	16.68	3.66	89.95	148134.83	40475.93	329.19	0.00	0.000	1.000	0.000
TOT						166.81			1481348.38	404759.34					
AVG					0.00031		3.66	89.95			329.19				
CUM						323.75									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
12	52.860	9.24	0.19	0.18	0.05	0.00	0.00	0.00	0.00	0.05	0.01	0.56	0.00	0.00	0.00	0.57	0.00	0.00	0.03	0.05
13	52.410	9.24	0.19	0.18	0.05	0.00	0.00	0.00	0.00	0.05	0.01	0.56	0.00	0.00	0.00	0.61	0.00	0.00	0.03	0.05
14	51.960	9.24	0.19	0.18	0.05	0.00	0.00	0.00	0.00	0.05	0.01	0.56	0.00	0.00	0.00	0.64	0.00	0.00	0.03	0.05
15	51.510	9.24	0.19	0.18	0.05	0.00	0.00	0.00	0.00	0.05	0.01	0.56	0.00	0.00	0.00	0.67	0.00	0.00	0.03	0.05
16	51.060	9.24	0.19	0.18	0.05	0.00	0.00	0.00	0.00	0.05	0.01	0.56	0.00	0.00	0.00	0.71	0.00	0.00	0.03	0.05
17	50.610	9.24	0.19	0.18	0.05	0.00	0.00	0.00	0.00	0.05	0.01	0.56	0.00	0.00	0.00	0.74	0.00	0.00	0.03	0.05
18	50.160	9.24	0.19	0.18	0.05	0.00	0.00	0.00	0.00	0.05	0.01	0.56	0.00	0.00	0.00	0.78	0.00	0.00	0.03	0.05
19	49.710	9.24	0.19	0.18	0.05	0.00	0.00	0.00	0.00	0.05	0.01	0.56	0.00	0.00	0.00	0.81	0.00	0.00	0.03	0.05
20	49.260	9.24	0.19	0.18	0.05	0.00	0.00	0.00	0.00	0.05	0.01	0.56	0.00	0.00	0.00	0.84	0.00	0.00	0.03	0.05
21	48.810	9.24	0.19	0.18	0.05	0.00	0.00	0.00	0.00	0.05	0.01	0.56	0.00	0.00	0.00	0.88	0.00	0.00	0.03	0.05
20 DEG C RATE				0.19		0.00	0.00			0.05		0.60	0.00	0.00	0.00			0.00	0.04	
AVG 20 DEG C RATE			0.19		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
12	52.860	19.20	0.00	9.77	3.03	8.66	3.20	5.58	1.28	0.00	0.00	1.28	0.00	23.80	115.00	0.00	1.84
13	52.410	19.20	0.00	9.76	3.03	9.06	2.90	5.42	1.22	0.00	0.00	1.22	0.00	25.20	115.00	0.00	1.78
14	51.960	19.20	0.00	9.74	3.03	9.41	2.73	5.39	1.17	0.00	0.00	1.17	0.00	26.60	115.00	0.00	1.76
15	51.510	19.20	0.00	9.71	3.04	9.69	2.65	5.45	1.14	0.00	0.00	1.14	0.00	28.00	115.00	0.00	1.78
16	51.060	19.20	0.00	9.69	3.04	9.91	2.62	5.56	1.12	0.00	0.00	1.12	0.00	29.40	115.00	0.00	1.86
17	50.610	19.20	0.00	9.66	3.05	10.07	2.62	5.70	1.12	0.00	0.00	1.12	0.00	30.80	115.00	0.00	2.01
18	50.160	19.20	0.00	9.62	3.06	10.16	2.67	5.89	1.13	0.00	0.00	1.13	0.00	32.20	115.00	0.00	2.28
19	49.710	19.20	0.00	9.58	3.06	10.18	2.79	6.15	1.16	0.00	0.00	1.16	0.00	33.60	115.00	0.00	2.73
20	49.260	19.20	0.00	9.54	3.07	10.14	3.05	6.55	1.21	0.00	0.00	1.21	0.00	35.00	115.00	0.00	3.48
21	48.810	19.20	0.00	9.49	3.08	10.09	3.63	7.27	1.30	0.00	0.00	1.30	0.00	36.40	115.00	0.00	4.71

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m^3

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 4 BDS 6-US 165 GATE INLET CANAL

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m^3/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
22	UPR RCH	0.10278	19.20	0.00	9.49	3.08	10.09	3.63	7.27	1.30	0.00	0.00	0.00	36.40	0.00	4.71

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m^3	SURFACE AREA m^2	X-SECT AREA m^2	TIDAL PRISM m^3	TIDAL VELO m/s	DISPRSN m^2/s	MEAN VELO m/s
22	48.81	48.61	0.10278	0.00	0.00026	8.76	3.38	115.09	77794.46	23017.30	388.97	0.00	0.000	1.000	0.000
23	48.61	48.41	0.10278	0.00	0.00026	8.76	3.38	115.09	77794.46	23017.30	388.97	0.00	0.000	1.000	0.000
TOT						17.52			155588.92	46034.61					
AVG					0.00026		3.38	115.09			388.97				
CUM						341.27									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM	ENDING	SAT	REAER	CBOD	CBOD	ANBOD	BKGD	FULL	CORR	ORGN	ORGN	NH3	NH3	DENIT	PO4	ALG	MAC	COLI	NCM	NCM

NO.	DIST	D.O. mg/L	RATE 1/da	DECAY 1/da	SETT 1/da	DECAY 1/da	SOD *	SOD *	SOD *	DECAY 1/da	SETT 1/da	DECAY 1/da	SRCE *	RATE 1/da	SRCE *	PROD **	PROD **	DECAY 1/da	DECAY 1/da	SETT 1/da
22	48.610	9.24	0.20	0.18	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.97	0.00	0.00	0.01	0.05
23	48.410	9.24	0.20	0.18	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	1.06	0.00	0.00	0.01	0.05
20 DEG C RATE				0.19		0.00	0.00			0.09		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.21		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
22	48.610	19.20	0.00	9.45	3.09	10.22	4.50	8.52	1.40	0.00	0.00	1.40	0.00	40.20	115.00	0.00	6.10
23	48.410	19.20	0.00	9.42	3.10	10.37	4.57	8.97	1.45	0.00	0.00	1.45	0.00	44.00	115.00	0.00	6.50

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 7 US165 GATE IN CANAL-US165 GATE

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
44	UPR RCH	0.10278	19.20	0.00	9.42	3.10	10.37	4.57	8.97	1.45	0.00	0.00	0.00	44.00	0.00	6.50
44	TRIB	0.10278	19.20	0.00	9.37	3.11	10.86	3.83	8.23	1.30	0.00	0.00	0.00	44.00	0.00	6.55

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
44	48.41	48.33	0.20556	0.00	0.02876	0.03	1.04	6.85	571.70	548.29	7.15	0.00	0.000	1.000	0.029
TOT						0.03			571.70	548.29					
AVG					0.02876		1.04	6.85			7.15				
CUM						341.30									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
44	48.330	9.24	0.66	0.18	0.05	0.00	5.35	5.90	5.90	0.09	0.01	0.56	0.02	0.00	0.00	1.11	0.00	0.00	0.01	0.05
20 DEG C RATE				0.19		0.00	5.63			0.10		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.67		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
44	48.330	19.20	0.00	9.40	3.10	10.57	4.21	8.81	1.52	0.00	0.00	1.52	0.00	46.00	115.00	0.00	6.52

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 8 US 165 GATE/CONTROL STRUCTURE

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
45	UPR RCH	0.20556	19.20	0.00	9.40	3.10	10.57	4.21	8.81	1.52	0.00	0.00	0.00	46.00	0.00	6.52

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
45	48.33	48.25	0.20556	0.00	0.04998	0.02	1.66	2.47	329.04	197.89	4.11	0.00	0.000	1.000	0.050
TOT						0.02			329.04	197.89					

AVG						0.04998			1.66	2.47						4.11				
CUM								341.32												

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
45	48.250	9.24	0.41	0.18	0.05	0.00	5.35	6.18	6.18	0.09	0.01	0.56	0.03	0.00	0.00	1.16	0.00	0.00	0.01	0.05
20 DEG C RATE				0.19		0.00	5.63			0.10		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.42		0.05						0.01									0.05

* $g/m^2/d$ ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
45	48.250	19.20	0.00	9.40	3.10	9.24	3.79	8.59	1.38	0.00	0.00	1.38	0.00	48.00	115.00	0.00	6.29

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m^3

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 9 US165 GATE OUTLET-BDS 7

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m^3/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
46	UPR RCH	0.20556	19.20	0.00	9.40	3.10	9.24	3.79	8.59	1.38	0.00	0.00	0.00	48.00	0.00	6.29

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m^3	SURFACE AREA m^2	X-SECT AREA m^2	TIDAL PRISM m^3	TIDAL VELO m/s	DISPRSN m^2/s	MEAN VELO m/s
46	48.25	48.14	0.20556	0.00	0.00281	0.45	1.70	42.91	8037.53	4720.50	73.07	0.00	0.000	1.000	0.003

47	48.14	48.03	0.20556	0.00	0.00281	0.45	1.70	42.91	8037.53	4720.50	73.07	0.00	0.000	1.000	0.003
48	48.03	47.92	0.20556	0.00	0.00281	0.45	1.70	42.91	8037.53	4720.50	73.07	0.00	0.000	1.000	0.003
TOT						1.36			24112.58	14161.51					
AVG					0.00281		1.70	42.91			73.07				
CUM						342.68									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
46	48.140	9.24	0.40	0.19	0.05	0.00	5.35	6.16	6.16	0.19	0.01	0.56	0.03	0.00	0.00	1.37	0.00	0.00	0.02	0.05
47	48.030	9.24	0.40	0.19	0.05	0.00	5.35	6.15	6.15	0.19	0.01	0.56	0.03	0.00	0.00	1.59	0.00	0.00	0.02	0.05
48	47.920	9.24	0.40	0.19	0.05	0.00	5.35	6.14	6.14	0.19	0.01	0.56	0.03	0.00	0.00	1.81	0.00	0.00	0.02	0.05
20 DEG C RATE				0.20		0.00	5.63			0.20		0.60	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			0.41		0.05						0.01									0.05

* $g/m^2/d$ ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
46	48.140	19.20	0.00	9.40	3.10	8.48	3.54	9.24	1.30	0.00	0.00	1.30	0.00	57.00	115.00	0.00	6.16
47	48.030	19.20	0.00	9.40	3.10	8.10	3.41	10.01	1.26	0.00	0.00	1.26	0.00	66.00	115.00	0.00	6.09
48	47.920	19.20	0.00	9.40	3.10	7.92	3.35	10.85	1.24	0.00	0.00	1.24	0.00	75.00	115.00	0.00	6.05

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m^3

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 10 BDS 7-BDS 8

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m^3/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
49	UPR RCH	0.20556	19.20	0.00	9.40	3.10	7.92	3.35	10.85	1.24	0.00	0.00	0.00	75.00	0.00	6.05

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
49	47.92	47.46	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
50	47.46	47.00	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
51	47.00	46.54	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
52	46.54	46.08	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
53	46.08	45.62	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
54	45.62	45.16	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
55	45.16	44.70	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
56	44.70	44.24	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
57	44.24	43.78	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
58	43.78	43.32	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
59	43.32	42.86	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
60	42.86	42.40	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
61	42.40	41.94	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
62	41.94	41.48	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
63	41.48	41.02	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
64	41.02	40.56	0.20556	0.00	0.00495	1.08	1.87	22.18	19109.79	10204.49	41.54	0.00	0.000	1.000	0.005
TOT						17.22			305756.56	163271.91					
AVG					0.00495		1.87	22.18			41.54				
CUM						359.89									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
49	47.460	9.24	0.37	0.16	0.05	0.00	1.48	2.36	2.36	0.19	0.01	0.94	0.04	0.00	0.00	1.81	0.00	0.00	0.02	0.05
50	47.000	9.24	0.37	0.16	0.05	0.00	1.48	2.38	2.38	0.19	0.01	0.94	0.04	0.00	0.00	1.81	0.00	0.00	0.02	0.05
51	46.540	9.24	0.37	0.16	0.05	0.00	1.48	2.39	2.39	0.19	0.01	0.94	0.04	0.00	0.00	1.81	0.00	0.00	0.02	0.05
52	46.080	9.24	0.37	0.16	0.05	0.00	1.48	2.40	2.40	0.19	0.01	0.94	0.04	0.00	0.00	1.81	0.00	0.00	0.02	0.05
53	45.620	9.24	0.37	0.16	0.05	0.00	1.48	2.41	2.41	0.19	0.01	0.94	0.04	0.00	0.00	1.81	0.00	0.00	0.02	0.05
54	45.160	9.24	0.37	0.16	0.05	0.00	1.48	2.42	2.42	0.19	0.01	0.94	0.04	0.00	0.00	1.81	0.00	0.00	0.02	0.05
55	44.700	9.24	0.37	0.16	0.05	0.00	1.48	2.43	2.43	0.19	0.01	0.94	0.04	0.00	0.00	1.81	0.00	0.00	0.02	0.05
56	44.240	9.24	0.37	0.16	0.05	0.00	1.48	2.43	2.43	0.19	0.01	0.94	0.04	0.00	0.00	1.81	0.00	0.00	0.02	0.05
57	43.780	9.24	0.37	0.16	0.05	0.00	1.48	2.44	2.44	0.19	0.01	0.94	0.04	0.00	0.00	1.81	0.00	0.00	0.02	0.05
58	43.320	9.24	0.37	0.16	0.05	0.00	1.48	2.44	2.44	0.19	0.01	0.94	0.04	0.00	0.00	1.81	0.00	0.00	0.02	0.05
59	42.860	9.24	0.37	0.16	0.05	0.00	1.48	2.45	2.45	0.19	0.01	0.94	0.04	0.00	0.00	1.81	0.00	0.00	0.02	0.05
60	42.400	9.24	0.37	0.16	0.05	0.00	1.48	2.45	2.45	0.19	0.01	0.94	0.04	0.00	0.00	1.81	0.00	0.00	0.02	0.05
61	41.940	9.24	0.37	0.16	0.05	0.00	1.48	2.45	2.45	0.19	0.01	0.93	0.04	0.00	0.00	1.81	0.00	0.00	0.02	0.05
62	41.480	9.24	0.37	0.16	0.05	0.00	1.48	2.45	2.45	0.19	0.01	0.93	0.04	0.00	0.00	1.81	0.00	0.00	0.02	0.05

63	41.020	9.24	0.37	0.16	0.05	0.00	1.48	2.46	2.46	0.19	0.01	0.93	0.04	0.00	0.00	1.81	0.00	0.00	0.02	0.05
64	40.560	9.24	0.37	0.16	0.05	0.00	1.48	2.46	2.46	0.19	0.01	0.94	0.04	0.00	0.00	1.81	0.00	0.00	0.02	0.05
20 DEG C RATE				0.17		0.00	1.56			0.20		1.00	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			0.37		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
49	47.460	19.20	0.00	9.40	3.10	8.11	3.52	11.02	1.28	0.00	0.00	1.28	0.00	75.00	115.00	0.00	6.05
50	47.000	19.20	0.00	9.40	3.10	8.21	3.69	11.19	1.31	0.02	0.00	1.33	0.00	75.00	115.00	0.00	6.06
51	46.540	19.20	0.00	9.40	3.10	8.23	3.84	11.34	1.35	0.03	0.00	1.38	0.00	75.00	115.00	0.00	6.06
52	46.080	19.20	0.00	9.40	3.10	8.20	3.96	11.46	1.37	0.04	0.00	1.42	0.00	75.00	115.00	0.00	6.07
53	45.620	19.20	0.00	9.40	3.10	8.13	4.05	11.55	1.39	0.05	0.00	1.45	0.00	75.00	115.00	0.00	6.08
54	45.160	19.20	0.00	9.40	3.10	8.06	4.13	11.63	1.41	0.06	0.00	1.47	0.00	75.00	115.00	0.00	6.08
55	44.700	19.20	0.00	9.40	3.10	7.98	4.20	11.70	1.43	0.06	0.00	1.49	0.00	75.00	115.00	0.00	6.09
56	44.240	19.20	0.00	9.40	3.10	7.91	4.25	11.75	1.44	0.07	0.00	1.51	0.00	75.00	115.00	0.00	6.09
57	43.780	19.20	0.00	9.40	3.10	7.84	4.30	11.80	1.45	0.07	0.00	1.52	0.00	75.00	115.00	0.00	6.09
58	43.320	19.20	0.00	9.40	3.10	7.77	4.34	11.84	1.46	0.07	0.00	1.53	0.00	75.00	115.00	0.00	6.10
59	42.860	19.20	0.00	9.40	3.10	7.72	4.37	11.87	1.47	0.07	0.00	1.54	0.00	75.00	115.00	0.00	6.10
60	42.400	19.20	0.00	9.40	3.10	7.67	4.39	11.89	1.47	0.07	0.00	1.55	0.00	75.00	115.00	0.00	6.11
61	41.940	19.20	0.00	9.40	3.10	7.62	4.42	11.92	1.48	0.08	0.00	1.55	0.00	75.00	115.00	0.00	6.11
62	41.480	19.20	0.00	9.40	3.10	7.59	4.44	11.94	1.48	0.08	0.00	1.56	0.00	75.00	115.00	0.00	6.11
63	41.020	19.20	0.00	9.40	3.10	7.57	4.47	11.97	1.49	0.08	0.00	1.57	0.00	75.00	115.00	0.00	6.12
64	40.560	19.20	0.00	9.40	3.10	7.65	4.54	12.04	1.49	0.08	0.00	1.58	0.00	75.00	115.00	0.00	6.13

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 11 BDS 8-MILL BAYOU

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
65	UPR RCH	0.20556	19.20	0.00	9.40	3.10	7.65	4.54	12.04	1.49	0.08	0.00	0.00	75.00	0.00	6.13

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
65	40.56	40.08	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
66	40.08	39.59	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
67	39.59	39.10	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
68	39.10	38.62	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
69	38.62	38.13	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
70	38.13	37.65	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
71	37.65	37.16	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
72	37.16	36.68	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
73	36.68	36.19	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
74	36.19	35.71	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
75	35.71	35.22	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
76	35.22	34.74	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
77	34.74	34.25	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
78	34.25	33.77	0.20556	0.00	0.00495	1.13	1.87	22.18	20148.36	10759.08	41.54	0.00	0.000	1.000	0.005
TOT						15.88			282077.06	150627.19					
AVG					0.00495		1.87	22.18			41.54				
CUM						375.77									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
65	40.075	9.24	0.37	0.12	0.05	0.00	0.00	1.01	1.01	0.19	0.01	0.94	0.04	0.00	0.00	1.72	0.00	0.00	0.02	0.05
66	39.590	9.24	0.37	0.12	0.05	0.00	0.00	1.03	1.03	0.19	0.01	0.94	0.04	0.00	0.00	1.63	0.00	0.00	0.02	0.05
67	39.105	9.24	0.37	0.12	0.05	0.00	0.00	1.05	1.05	0.19	0.01	0.94	0.04	0.00	0.00	1.55	0.00	0.00	0.02	0.05
68	38.620	9.24	0.37	0.12	0.05	0.00	0.00	1.07	1.07	0.19	0.01	0.94	0.04	0.00	0.00	1.46	0.00	0.00	0.02	0.05
69	38.135	9.24	0.37	0.12	0.05	0.00	0.00	1.09	1.09	0.19	0.01	0.94	0.04	0.00	0.00	1.37	0.00	0.00	0.02	0.05
70	37.650	9.24	0.37	0.12	0.05	0.00	0.00	1.10	1.10	0.19	0.01	0.94	0.04	0.00	0.00	1.29	0.00	0.00	0.02	0.05
71	37.165	9.24	0.37	0.12	0.05	0.00	0.00	1.11	1.11	0.19	0.01	0.94	0.04	0.00	0.00	1.20	0.00	0.00	0.02	0.05
72	36.680	9.24	0.37	0.12	0.05	0.00	0.00	1.12	1.12	0.19	0.01	0.93	0.04	0.00	0.00	1.11	0.00	0.00	0.02	0.05
73	36.195	9.24	0.37	0.12	0.05	0.00	0.00	1.13	1.13	0.19	0.01	0.93	0.04	0.00	0.00	1.03	0.00	0.00	0.02	0.05
74	35.710	9.24	0.37	0.12	0.05	0.00	0.00	1.14	1.14	0.19	0.01	0.92	0.04	0.00	0.00	0.94	0.00	0.00	0.02	0.05
75	35.225	9.24	0.37	0.12	0.05	0.00	0.00	1.14	1.14	0.19	0.01	0.92	0.04	0.00	0.00	0.85	0.00	0.00	0.02	0.05
76	34.740	9.24	0.37	0.12	0.05	0.00	0.00	1.14	1.14	0.19	0.01	0.91	0.04	0.00	0.00	0.77	0.00	0.00	0.02	0.05
77	34.255	9.24	0.37	0.12	0.05	0.00	0.00	1.10	1.10	0.19	0.01	0.91	0.04	0.00	0.00	0.68	0.00	0.00	0.02	0.05
78	33.770	9.24	0.37	0.12	0.05	0.00	0.00	0.96	0.96	0.19	0.01	0.92	0.04	0.00	0.00	0.59	0.00	0.00	0.02	0.05
20 DEG C RATE				0.12		0.00	0.00			0.20		1.00	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			0.37		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
65	40.075	19.20	0.00	9.40	3.10	8.18	4.81	11.95	1.52	0.09	0.00	1.60	0.00	71.40	115.00	0.00	6.17
66	39.590	19.20	0.00	9.40	3.10	8.45	5.03	11.81	1.54	0.09	0.00	1.63	0.00	67.80	115.00	0.00	6.20
67	39.105	19.20	0.00	9.40	3.10	8.53	5.23	11.65	1.55	0.10	0.00	1.65	0.00	64.20	115.00	0.00	6.23
68	38.620	19.20	0.00	9.40	3.10	8.49	5.39	11.45	1.57	0.11	0.00	1.68	0.00	60.60	115.00	0.00	6.26
69	38.135	19.20	0.00	9.40	3.10	8.35	5.53	11.23	1.58	0.12	0.00	1.69	0.00	57.00	115.00	0.00	6.29
70	37.650	19.20	0.00	9.40	3.10	8.15	5.65	10.99	1.59	0.12	0.00	1.71	0.00	53.40	115.00	0.00	6.32
71	37.165	19.20	0.00	9.40	3.10	7.91	5.75	10.73	1.59	0.13	0.00	1.72	0.00	49.80	115.00	0.00	6.34
72	36.680	19.20	0.00	9.40	3.10	7.64	5.83	10.45	1.60	0.14	0.00	1.74	0.00	46.20	115.00	0.00	6.36
73	36.195	19.20	0.00	9.40	3.10	7.35	5.91	10.17	1.60	0.14	0.00	1.75	0.00	42.60	115.00	0.00	6.38
74	35.710	19.20	0.00	9.40	3.10	7.06	5.96	9.86	1.61	0.15	0.00	1.76	0.00	39.00	115.00	0.00	6.40
75	35.225	19.20	0.00	9.39	3.09	6.78	6.00	9.54	1.61	0.15	0.00	1.76	0.00	35.40	115.00	0.00	6.40
76	34.740	19.20	0.00	9.36	3.08	6.55	6.00	9.18	1.61	0.16	0.00	1.76	0.00	31.80	115.00	0.00	6.36
77	34.255	19.20	0.00	9.25	3.02	6.52	5.83	8.65	1.58	0.15	0.00	1.73	0.00	28.20	115.00	0.00	6.17
78	33.770	19.20	0.00	8.89	2.83	7.14	5.03	7.49	1.47	0.06	0.00	1.53	0.00	24.60	115.00	0.00	5.44

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 12 MILL BAYOU-BDS 9

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
79	UPR RCH	0.20556	19.20	0.00	8.89	2.83	7.14	5.03	7.49	1.47	0.06	0.00	0.00	24.60	0.00	5.44

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
79	33.77	33.20	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
80	33.20	32.63	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
81	32.63	32.06	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001

82	32.06	31.49	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
83	31.49	30.92	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
84	30.92	30.34	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
85	30.34	29.77	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
86	29.77	29.20	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
87	29.20	28.63	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
88	28.63	28.06	0.20556	0.00	0.00113	5.83	2.35	77.05	103512.55	43997.65	181.28	0.00	0.000	4.000	0.001
TOT						58.28			1035125.56	439976.53					
AVG					0.00113		2.35	77.05			181.28				
CUM						434.06									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
79	33.199	9.24	0.29	0.08	0.05	0.00	1.48	1.48	1.48	0.06	0.01	0.56	0.00	0.00	0.00	0.59	0.00	0.00	0.01	0.05
80	32.628	9.24	0.29	0.08	0.05	0.00	1.48	1.48	1.48	0.06	0.01	0.56	0.00	0.00	0.00	0.59	0.00	0.00	0.01	0.05
81	32.057	9.24	0.29	0.08	0.05	0.00	1.48	1.48	1.48	0.06	0.01	0.56	0.00	0.00	0.00	0.59	0.00	0.00	0.01	0.05
82	31.486	9.24	0.29	0.08	0.05	0.00	1.48	1.48	1.48	0.06	0.01	0.56	0.00	0.00	0.00	0.59	0.00	0.00	0.01	0.05
83	30.915	9.24	0.29	0.08	0.05	0.00	1.48	1.48	1.48	0.06	0.01	0.56	0.00	0.00	0.00	0.59	0.00	0.00	0.01	0.05
84	30.344	9.24	0.29	0.08	0.05	0.00	1.48	1.48	1.48	0.06	0.01	0.56	0.00	0.00	0.00	0.59	0.00	0.00	0.01	0.05
85	29.773	9.24	0.29	0.08	0.05	0.00	1.48	1.48	1.48	0.06	0.01	0.56	0.00	0.00	0.00	0.59	0.00	0.00	0.01	0.05
86	29.202	9.24	0.29	0.08	0.05	0.00	1.48	1.48	1.48	0.06	0.01	0.56	0.00	0.00	0.00	0.59	0.00	0.00	0.01	0.05
87	28.631	9.24	0.29	0.08	0.05	0.00	1.48	1.48	1.48	0.06	0.01	0.56	0.00	0.00	0.00	0.59	0.00	0.00	0.01	0.05
88	28.060	9.24	0.29	0.08	0.05	0.00	1.48	1.48	1.48	0.06	0.01	0.56	0.00	0.00	0.00	0.59	0.00	0.00	0.01	0.05
20 DEG C RATE				0.08		0.00	1.56			0.06		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.30		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
79	33.199	19.20	0.00	8.76	2.76	7.38	4.67	7.13	1.42	0.00	0.00	1.42	0.00	24.60	115.00	0.00	5.14
80	32.628	19.20	0.00	8.66	2.71	7.50	4.49	6.95	1.39	0.00	0.00	1.39	0.00	24.60	115.00	0.00	4.99
81	32.057	19.20	0.00	8.54	2.65	7.59	4.36	6.82	1.36	0.00	0.00	1.36	0.00	24.60	115.00	0.00	4.87
82	31.486	19.20	0.00	8.40	2.57	7.65	4.28	6.74	1.34	0.00	0.00	1.34	0.00	24.60	115.00	0.00	4.80
83	30.915	19.20	0.00	8.23	2.49	7.69	4.23	6.69	1.31	0.00	0.00	1.31	0.00	24.60	115.00	0.00	4.76
84	30.344	19.20	0.00	8.05	2.39	7.71	4.23	6.69	1.29	0.00	0.00	1.29	0.00	24.60	115.00	0.00	4.78
85	29.773	19.20	0.00	7.83	2.27	7.71	4.27	6.73	1.27	0.00	0.00	1.27	0.00	24.60	115.00	0.00	4.86
86	29.202	19.20	0.00	7.57	2.14	7.70	4.37	6.83	1.24	0.00	0.00	1.24	0.00	24.60	115.00	0.00	5.00

87	28.631	19.20	0.00	7.28	1.98	7.68	4.54	7.00	1.20	0.00	0.00	1.20	0.00	24.60	115.00	0.00	5.24
88	28.060	19.20	0.00	6.93	1.80	7.66	4.84	7.30	1.15	0.00	0.00	1.15	0.00	24.60	115.00	0.00	5.59

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
REACH NO. 13 BDS 9-HANNAH'S RUN macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
89	UPR RCH	0.20556	19.20	0.00	6.93	1.80	7.66	4.84	7.30	1.15	0.00	0.00	0.00	24.60	0.00	5.59

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
89	28.06	27.58	0.20556	0.00	0.00113	4.88	2.35	77.05	86653.24	36831.66	181.28	0.00	0.000	4.000	0.001
90	27.58	27.10	0.20556	0.00	0.00113	4.88	2.35	77.05	86653.24	36831.66	181.28	0.00	0.000	4.000	0.001
91	27.10	26.63	0.20556	0.00	0.00113	4.88	2.35	77.05	86653.24	36831.66	181.28	0.00	0.000	4.000	0.001
92	26.63	26.15	0.20556	0.00	0.00113	4.88	2.35	77.05	86653.24	36831.66	181.28	0.00	0.000	4.000	0.001
93	26.15	25.67	0.20556	0.00	0.00113	4.88	2.35	77.05	86653.24	36831.66	181.28	0.00	0.000	4.000	0.001
TOT						24.40			433266.22	184158.28					
AVG					0.00113		2.35	77.05			181.28				
CUM						458.45									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
89	27.582	9.24	0.29	0.08	0.05	0.00	1.48	1.48	1.48	0.06	0.01	0.56	0.00	0.00	0.00	0.54	0.00	0.00	0.01	0.05
90	27.104	9.24	0.29	0.08	0.05	0.00	1.48	1.48	1.48	0.06	0.01	0.56	0.00	0.00	0.00	0.49	0.00	0.00	0.01	0.05
91	26.626	9.24	0.29	0.08	0.05	0.00	1.48	1.48	1.48	0.06	0.01	0.56	0.00	0.00	0.00	0.43	0.00	0.00	0.01	0.05
92	26.148	9.24	0.29	0.08	0.05	0.00	1.48	1.48	1.48	0.06	0.01	0.56	0.00	0.00	0.00	0.38	0.00	0.00	0.01	0.05
93	25.670	9.24	0.29	0.08	0.05	0.00	1.48	1.48	1.48	0.06	0.01	0.56	0.00	0.00	0.00	0.33	0.00	0.00	0.01	0.05

20 DEG C RATE			0.08		0.00	1.56			0.06		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE		0.30		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
89	27.582	19.20	0.00	6.56	1.61	7.65	5.26	7.50	1.10	0.00	0.00	1.10	0.00	22.40	115.00	0.00	6.07
90	27.104	19.20	0.00	6.18	1.41	7.73	5.66	7.68	1.04	0.00	0.00	1.04	0.00	20.20	115.00	0.00	6.39
91	26.626	19.20	0.00	5.74	1.18	7.96	6.12	7.92	0.98	0.00	0.00	0.98	0.00	18.00	115.00	0.00	6.58
92	26.148	19.20	0.00	5.25	0.92	8.47	6.67	8.25	0.91	0.00	0.00	0.91	0.00	15.80	115.00	0.00	6.65
93	25.670	19.20	0.00	4.69	0.62	9.47	7.38	8.74	0.82	0.00	0.00	0.82	0.00	13.60	115.00	0.00	6.57

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 19 HANNAH'S RUN-BDS10

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
99	UPR RCH	0.20556	19.20	0.00	4.69	0.62	9.47	7.38	8.74	0.82	0.00	0.00	0.00	13.60	0.00	6.57
99	TRIB	1.45612	19.20	0.00	4.16	0.35	11.15	8.08	9.44	0.74	0.01	0.00	0.00	13.60	0.00	6.21

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
99	25.67	25.41	1.66168	0.00	0.00735	0.42	2.48	91.11	59941.76	24144.71	226.20	0.00	0.000	4.000	0.007
100	25.41	25.14	1.66168	0.00	0.00735	0.42	2.48	91.11	59941.76	24144.71	226.20	0.00	0.000	4.000	0.007
101	25.14	24.88	1.66168	0.00	0.00735	0.42	2.48	91.11	59941.76	24144.71	226.20	0.00	0.000	4.000	0.007
102	24.88	24.61	1.66168	0.00	0.00735	0.42	2.48	91.11	59941.76	24144.71	226.20	0.00	0.000	4.000	0.007
TOT						1.67			239767.03	96578.82					
AVG					0.00735		2.48	91.11			226.20				
CUM						460.12									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
99	25.405	9.24	0.28	0.12	0.05	0.00	1.48	1.48	1.48	0.07	0.01	0.56	0.00	0.00	0.00	0.34	0.00	0.00	0.01	0.05
100	25.140	9.24	0.28	0.12	0.05	0.00	1.48	1.48	1.48	0.07	0.01	0.56	0.00	0.00	0.00	0.36	0.00	0.00	0.01	0.05
101	24.875	9.24	0.28	0.12	0.05	0.00	1.48	1.48	1.48	0.07	0.01	0.56	0.00	0.00	0.00	0.37	0.00	0.00	0.01	0.05
102	24.610	9.24	0.28	0.12	0.05	0.00	1.48	1.48	1.48	0.07	0.01	0.56	0.00	0.00	0.00	0.39	0.00	0.00	0.01	0.05
20 DEG C RATE				0.12		0.00	1.56			0.07		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.28		0.05						0.01									0.05

* $g/m^2/d$ ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
99	25.405	19.20	0.00	4.23	0.38	10.77	8.05	9.47	0.74	0.00	0.00	0.74	0.00	14.20	115.00	0.00	6.39
100	25.140	19.20	0.00	4.23	0.38	10.28	8.21	9.69	0.74	0.00	0.00	0.74	0.00	14.80	115.00	0.00	6.78
101	24.875	19.20	0.00	4.23	0.38	9.86	8.31	9.85	0.74	0.00	0.00	0.74	0.00	15.40	115.00	0.00	7.07
102	24.610	19.20	0.00	4.23	0.38	9.53	8.30	9.90	0.75	0.00	0.00	0.75	0.00	16.00	115.00	0.00	7.23

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m^3

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 20 BDS 10- L-11 CANAL PIPE INTAKE

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m^3/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
103	UPR RCH	1.66168	19.20	0.00	4.23	0.38	9.53	8.30	9.90	0.75	0.00	0.00	0.00	16.00	0.00	7.23

********** HYDRAULIC PARAMETER VALUES **********

ELEM	BEGIN	ENDING	FLOW	PCT	ADVCTV	TRAVEL	DEPTH	WIDTH	VOLUME	SURFACE	X-SECT	TIDAL	TIDAL	DISPRSN	MEAN

NO.	DIST km	DIST km	m³/	EFF	VELO m/s	TIME days	m	m	m³	AREA m²	AREA m²	PRISM m³	VELO m/s	m²/s	VELO m/s
103	24.61	24.35	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
104	24.35	24.09	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
105	24.09	23.82	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
106	23.82	23.56	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
107	23.56	23.30	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
108	23.30	23.04	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
109	23.04	22.78	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
110	22.78	22.51	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
111	22.51	22.25	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
112	22.25	21.99	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
113	21.99	21.73	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
114	21.73	21.47	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
115	21.47	21.20	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
116	21.20	20.94	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
117	20.94	20.68	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
118	20.68	20.42	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
119	20.42	20.16	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
120	20.16	19.89	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
121	19.89	19.63	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
122	19.63	19.37	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
123	19.37	19.11	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
124	19.11	18.85	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
125	18.85	18.58	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
126	18.58	18.32	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
127	18.32	18.06	1.66168	0.00	0.00735	0.41	2.48	91.11	59263.17	23871.37	226.20	0.00	0.000	4.000	0.007
TOT						10.32			1481579.12	596784.31					
AVG					0.00735		2.48	91.11			226.20				
CUM						470.44									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
103	24.348	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.39	0.00	0.00	0.01	0.05
104	24.086	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.39	0.00	0.00	0.01	0.05
105	23.824	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.39	0.00	0.00	0.01	0.05
106	23.562	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.40	0.00	0.00	0.01	0.05
107	23.300	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.40	0.00	0.00	0.01	0.05
108	23.038	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.40	0.00	0.00	0.01	0.05
109	22.776	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.41	0.00	0.00	0.01	0.05
110	22.514	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.41	0.00	0.00	0.01	0.05
111	22.252	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.41	0.00	0.00	0.01	0.05

112	21.990	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.42	0.00	0.00	0.01	0.05
113	21.728	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.42	0.00	0.00	0.01	0.05
114	21.466	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.42	0.00	0.00	0.01	0.05
115	21.204	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.43	0.00	0.00	0.01	0.05
116	20.942	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.43	0.00	0.00	0.01	0.05
117	20.680	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.43	0.00	0.00	0.01	0.05
118	20.418	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.43	0.00	0.00	0.01	0.05
119	20.156	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.44	0.00	0.00	0.01	0.05
120	19.894	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.44	0.00	0.00	0.01	0.05
121	19.632	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.44	0.00	0.00	0.01	0.05
122	19.370	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.45	0.00	0.00	0.01	0.05
123	19.108	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.45	0.00	0.00	0.01	0.05
124	18.846	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.45	0.00	0.00	0.01	0.05
125	18.584	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.46	0.00	0.00	0.01	0.05
126	18.322	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.46	0.00	0.00	0.01	0.05
127	18.060	9.24	2.92	0.13	0.05	0.00	0.00	0.00	0.00	0.09	0.01	0.56	0.00	0.00	0.00	0.46	0.00	0.00	0.01	0.05
20 DEG C RATE				0.13		0.00	0.00			0.09		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			2.96		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
103	24.348	19.20	0.00	4.23	0.38	9.32	8.15	9.76	0.76	0.00	0.00	0.76	0.00	16.13	115.00	0.00	7.17
104	24.086	19.20	0.00	4.23	0.38	9.19	8.01	9.64	0.77	0.00	0.00	0.77	0.00	16.26	115.00	0.00	7.12
105	23.824	19.20	0.00	4.23	0.38	9.12	7.88	9.52	0.78	0.00	0.00	0.78	0.00	16.38	115.00	0.00	7.06
106	23.562	19.20	0.00	4.23	0.38	9.08	7.75	9.41	0.79	0.00	0.00	0.79	0.00	16.51	115.00	0.00	7.01
107	23.300	19.20	0.00	4.23	0.38	9.06	7.64	9.30	0.80	0.00	0.00	0.80	0.00	16.64	115.00	0.00	6.96
108	23.038	19.20	0.00	4.23	0.38	9.05	7.53	9.20	0.81	0.00	0.00	0.81	0.00	16.77	115.00	0.00	6.91
109	22.776	19.20	0.00	4.23	0.38	9.04	7.42	9.11	0.82	0.00	0.00	0.82	0.00	16.90	115.00	0.00	6.87
110	22.514	19.20	0.00	4.23	0.38	9.04	7.33	9.03	0.83	0.00	0.00	0.83	0.00	17.02	115.00	0.00	6.82
111	22.252	19.20	0.00	4.23	0.38	9.04	7.23	8.95	0.84	0.00	0.00	0.84	0.00	17.15	115.00	0.00	6.77
112	21.990	19.20	0.00	4.23	0.38	9.05	7.15	8.88	0.84	0.00	0.00	0.84	0.00	17.28	115.00	0.00	6.73
113	21.728	19.20	0.00	4.23	0.38	9.05	7.07	8.81	0.85	0.00	0.00	0.85	0.00	17.41	115.00	0.00	6.69
114	21.466	19.20	0.00	4.23	0.38	9.05	6.99	8.75	0.86	0.00	0.00	0.86	0.00	17.54	115.00	0.00	6.64
115	21.204	19.20	0.00	4.23	0.38	9.06	6.92	8.69	0.87	0.00	0.00	0.87	0.00	17.66	115.00	0.00	6.60
116	20.942	19.20	0.00	4.23	0.38	9.06	6.85	8.63	0.87	0.00	0.00	0.87	0.00	17.79	115.00	0.00	6.56
117	20.680	19.20	0.00	4.23	0.38	9.07	6.79	8.58	0.88	0.00	0.00	0.88	0.00	17.92	115.00	0.00	6.52
118	20.418	19.20	0.00	4.23	0.38	9.07	6.73	8.53	0.89	0.00	0.00	0.89	0.00	18.05	115.00	0.00	6.48
119	20.156	19.20	0.00	4.23	0.38	9.07	6.67	8.49	0.89	0.00	0.00	0.89	0.00	18.18	115.00	0.00	6.45
120	19.894	19.20	0.00	4.23	0.38	9.08	6.61	8.44	0.90	0.00	0.00	0.90	0.00	18.30	115.00	0.00	6.41
121	19.632	19.20	0.00	4.23	0.38	9.08	6.56	8.40	0.90	0.00	0.00	0.90	0.00	18.43	115.00	0.00	6.37
122	19.370	19.20	0.00	4.23	0.38	9.08	6.50	8.36	0.91	0.00	0.00	0.91	0.00	18.56	115.00	0.00	6.33
123	19.108	19.20	0.00	4.23	0.38	9.09	6.45	8.32	0.91	0.00	0.00	0.91	0.00	18.69	115.00	0.00	6.30

124	18.846	19.20	0.00	4.23	0.38	9.09	6.38	8.27	0.91	0.00	0.00	0.91	0.00	18.82	115.00	0.00	6.26
125	18.584	19.20	0.00	4.23	0.38	9.10	6.31	8.20	0.92	0.00	0.00	0.92	0.00	18.94	115.00	0.00	6.22
126	18.322	19.20	0.00	4.23	0.38	9.10	6.22	8.13	0.91	0.00	0.00	0.91	0.00	19.07	115.00	0.00	6.18
127	18.060	19.20	0.00	4.23	0.38	9.11	6.10	8.02	0.91	0.00	0.00	0.91	0.00	19.20	115.00	0.00	6.13

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 21 L-11 CANAL CONTROL PIPE

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
128	UPR RCH	1.66168	19.20	0.00	4.23	0.38	9.11	6.10	8.02	0.91	0.00	0.00	0.00	19.20	0.00	6.13
128	WSTLD	-1.05717	19.20	0.00	4.23	0.38	9.12	5.96	5.96	0.90	0.00	0.00	0.00	31.00	0.00	6.08

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
128	18.06	17.98	0.60451	0.00	0.14101	0.01	1.67	2.57	342.97	205.67	4.29	0.00	0.000	1.000	0.141
TOT						0.01			342.97	205.67					
AVG					0.14101		1.67	2.57			4.29				
CUM						470.45									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
128	17.980	9.24	0.41	0.13	0.05	0.00	0.00	0.00	0.00	0.08	0.01	0.56	0.00	0.00	0.00	0.75	0.00	0.00	0.02	0.05
20 DEG C RATE				0.14		0.00	0.00			0.08		0.60	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			0.42		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
128	17.980	19.20	0.00	4.23	0.38	9.12	5.96	9.06	0.90	0.00	0.00	0.90	0.00	31.00	115.00	0.00	6.08

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 22 L-11 PIPEOUTFALL-MIDWAY INTAKE

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
129	UPR RCH	0.60451	19.20	0.00	4.23	0.38	9.12	5.96	9.06	0.90	0.00	0.00	0.00	31.00	0.00	6.08

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
129	17.98	17.51	0.60451	0.00	0.00265	2.06	2.39	95.50	107393.65	44886.77	228.50	0.00	0.000	1.000	0.003
130	17.51	17.04	0.60451	0.00	0.00265	2.06	2.39	95.50	107393.65	44886.77	228.50	0.00	0.000	1.000	0.003
131	17.04	16.57	0.60451	0.00	0.00265	2.06	2.39	95.50	107393.65	44886.77	228.50	0.00	0.000	1.000	0.003
132	16.57	16.10	0.60451	0.00	0.00265	2.06	2.39	95.50	107393.65	44886.77	228.50	0.00	0.000	1.000	0.003
133	16.10	15.63	0.60451	0.00	0.00265	2.06	2.39	95.50	107393.65	44886.77	228.50	0.00	0.000	1.000	0.003
TOT						10.28			536968.25	224433.84					
AVG					0.00265		2.39	95.50			228.50				
CUM						480.73									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
129	17.510	9.24	3.03	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	0.80	0.00	0.00	0.03	0.05

130	17.040	9.24	3.03	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	0.86	0.00	0.00	0.03	0.05
131	16.570	9.24	3.03	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	0.92	0.00	0.00	0.03	0.05
132	16.100	9.24	3.03	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	0.98	0.00	0.00	0.03	0.05
133	15.630	9.24	3.03	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	1.04	0.00	0.00	0.03	0.05
20 DEG C RATE				0.16		0.00	0.00			0.07		0.60	0.00	0.00	0.00			0.00	0.03	
AVG 20 DEG C RATE			3.08		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
129	17.510	19.20	0.00	4.23	0.38	9.19	4.81	8.15	0.85	0.00	0.00	0.85	0.00	33.40	115.00	0.00	5.71
130	17.040	19.20	0.00	4.23	0.38	9.26	3.91	7.49	0.80	0.00	0.00	0.80	0.00	35.80	115.00	0.00	5.36
131	16.570	19.20	0.00	4.23	0.38	9.30	3.63	7.45	0.78	0.00	0.00	0.78	0.00	38.20	115.00	0.00	5.21
132	16.100	19.20	0.00	4.23	0.38	9.26	4.60	8.66	0.83	0.00	0.00	0.83	0.00	40.60	115.00	0.00	5.44
133	15.630	19.20	0.00	4.23	0.38	9.08	8.85	13.15	1.05	0.00	0.00	1.05	0.00	43.00	115.00	0.00	6.57

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 23 MIDWAY DAM CONTROL PIPE

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
134	UPR RCH	0.60451	19.20	0.00	4.23	0.38	9.08	8.85	13.15	1.05	0.00	0.00	0.00	43.00	0.00	6.57

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
134	15.63	15.59	0.60451	0.00	0.14101	0.00	1.67	2.57	171.48	102.84	4.29	0.00	0.000	1.000	0.141
TOT						0.00			171.48	102.84					
AVG					0.14101		1.67	2.57			4.29				

CUM 480.73

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
134	15.590	9.24	0.41	0.17	0.05	0.00	0.00	0.00	0.00	0.06	0.01	0.56	0.00	0.00	0.00	1.38	0.00	0.00	0.04	0.05
20 DEG C RATE				0.18		0.00	0.00			0.06		0.60	0.00	0.00	0.00			0.00	0.04	
AVG 20 DEG C RATE			0.42		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
134	15.590	19.20	0.00	4.23	0.38	8.88	16.98	22.70	1.41	0.00	0.00	1.41	0.00	57.20	115.00	0.00	8.57

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 24 MIDWAY OUTFALL-BDS13

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
135	UPR RCH	0.60451	19.20	0.00	4.23	0.38	8.88	16.98	22.70	1.41	0.00	0.00	0.00	57.20	0.00	8.57

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
135	15.59	15.55	0.60451	0.00	0.00262	0.18	2.31	99.99	9229.34	3999.64	230.73	0.00	0.000	1.000	0.003

TOT								0.18					9229.34		3999.64						
AVG							0.00262			2.31	99.99							230.73			
CUM								480.91													

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
135	15.550	9.24	3.14	0.22	0.05	0.00	0.00	0.00	0.00	0.05	0.01	0.56	0.00	0.00	0.00	1.25	0.00	0.00	0.04	0.05
20 DEG C RATE				0.23		0.00	0.00			0.05		0.60	0.00	0.00	0.00			0.00	0.05	
AVG 20 DEG C RATE			3.19		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
135	15.550	19.20	0.00	4.23	0.38	8.78	20.95	26.15	1.58	0.00	0.00	1.58	0.00	52.00	115.00	0.00	9.54

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
REACH NO. 25 BDS13-BDS14 macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
136	UPR RCH	0.60451	19.20	0.00	4.23	0.38	8.78	20.95	26.15	1.58	0.00	0.00	0.00	52.00	0.00	9.54

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s

136	15.55	15.25	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
137	15.25	14.96	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
138	14.96	14.66	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
139	14.66	14.36	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
140	14.36	14.07	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
141	14.07	13.77	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
142	13.77	13.47	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
143	13.47	13.18	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
144	13.18	12.88	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
145	12.88	12.58	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
146	12.58	12.29	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
147	12.29	11.99	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
148	11.99	11.70	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
149	11.70	11.40	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
150	11.40	11.10	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
151	11.10	10.81	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
152	10.81	10.51	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
153	10.51	10.21	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
154	10.21	9.92	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
155	9.92	9.62	0.60451	0.00	0.00262	1.31	2.31	99.99	68412.51	29647.31	230.73	0.00	0.000	1.000	0.003
TOT						26.20			1368250.12	592946.19					
AVG					0.00262		2.31	99.99			230.73				
CUM						507.11									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
136	15.253	9.24	3.14	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	1.25	0.00	0.00	0.02	0.05
137	14.957	9.24	3.14	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	1.24	0.00	0.00	0.02	0.05
138	14.660	9.24	3.14	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	1.24	0.00	0.00	0.02	0.05
139	14.364	9.24	3.14	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	1.24	0.00	0.00	0.02	0.05
140	14.067	9.24	3.14	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	1.23	0.00	0.00	0.02	0.05
141	13.771	9.24	3.14	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	1.23	0.00	0.00	0.02	0.05
142	13.474	9.24	3.14	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	1.22	0.00	0.00	0.02	0.05
143	13.178	9.24	3.14	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	1.22	0.00	0.00	0.02	0.05
144	12.881	9.24	3.14	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	1.22	0.00	0.00	0.02	0.05
145	12.585	9.24	3.14	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	1.21	0.00	0.00	0.02	0.05
146	12.288	9.24	3.14	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	1.21	0.00	0.00	0.02	0.05
147	11.992	9.24	3.14	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	1.20	0.00	0.00	0.02	0.05
148	11.695	9.24	3.14	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	1.20	0.00	0.00	0.02	0.05
149	11.399	9.24	3.14	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	1.20	0.00	0.00	0.02	0.05
150	11.102	9.24	3.14	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	1.19	0.00	0.00	0.02	0.05
151	10.806	9.24	3.14	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	1.19	0.00	0.00	0.02	0.05
152	10.509	9.24	3.14	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	1.18	0.00	0.00	0.02	0.05

153	10.213	9.24	3.14	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	1.18	0.00	0.00	0.02	0.05
154	9.916	9.24	3.14	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	1.18	0.00	0.00	0.02	0.05
155	9.620	9.24	3.14	0.15	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	1.17	0.00	0.00	0.02	0.05
20 DEG C RATE				0.16		0.00	0.00			0.07		0.60	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			3.19		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
136	15.253	19.20	0.00	4.23	0.38	8.71	18.97	24.16	1.52	0.00	0.00	1.52	0.00	51.83	115.00	0.00	9.23
137	14.957	19.20	0.00	4.23	0.38	8.76	16.65	21.82	1.44	0.00	0.00	1.44	0.00	51.66	115.00	0.00	8.81
138	14.660	19.20	0.00	4.23	0.38	8.84	14.75	19.90	1.36	0.00	0.00	1.36	0.00	51.49	115.00	0.00	8.42
139	14.364	19.20	0.00	4.23	0.38	8.91	13.18	18.32	1.29	0.00	0.00	1.29	0.00	51.32	115.00	0.00	8.06
140	14.067	19.20	0.00	4.23	0.38	8.98	11.90	17.01	1.23	0.00	0.00	1.23	0.00	51.15	115.00	0.00	7.73
141	13.771	19.20	0.00	4.23	0.38	9.04	10.84	15.94	1.17	0.00	0.00	1.17	0.00	50.98	115.00	0.00	7.43
142	13.474	19.20	0.00	4.23	0.38	9.08	9.97	15.05	1.12	0.00	0.00	1.12	0.00	50.81	115.00	0.00	7.14
143	13.178	19.20	0.00	4.23	0.38	9.12	9.25	14.32	1.07	0.00	0.00	1.07	0.00	50.64	115.00	0.00	6.88
144	12.881	19.20	0.00	4.23	0.38	9.15	8.67	13.71	1.03	0.00	0.00	1.03	0.00	50.47	115.00	0.00	6.64
145	12.585	19.20	0.00	4.23	0.38	9.18	8.19	13.22	0.99	0.00	0.00	0.99	0.00	50.30	115.00	0.00	6.42
146	12.288	19.20	0.00	4.23	0.38	9.20	7.79	12.80	0.95	0.00	0.00	0.95	0.00	50.13	115.00	0.00	6.22
147	11.992	19.20	0.00	4.23	0.38	9.21	7.47	12.46	0.92	0.00	0.00	0.92	0.00	49.96	115.00	0.00	6.04
148	11.695	19.20	0.00	4.23	0.38	9.23	7.21	12.19	0.89	0.00	0.00	0.89	0.00	49.79	115.00	0.00	5.87
149	11.399	19.20	0.00	4.23	0.38	9.24	7.01	11.97	0.87	0.00	0.00	0.87	0.00	49.62	115.00	0.00	5.74
150	11.102	19.20	0.00	4.23	0.38	9.24	6.87	11.81	0.85	0.00	0.00	0.85	0.00	49.45	115.00	0.00	5.65
151	10.806	19.20	0.00	4.23	0.38	9.24	6.81	11.74	0.85	0.00	0.00	0.85	0.00	49.28	115.00	0.00	5.62
152	10.509	19.20	0.00	4.23	0.38	9.24	6.89	11.80	0.87	0.00	0.00	0.87	0.00	49.11	115.00	0.00	5.70
153	10.213	19.20	0.00	4.23	0.38	9.22	7.22	12.11	0.92	0.00	0.00	0.92	0.00	48.94	115.00	0.00	5.99
154	9.916	19.20	0.00	4.23	0.38	9.18	8.06	12.94	1.05	0.00	0.00	1.05	0.00	48.77	115.00	0.00	6.66
155	9.620	19.20	0.00	4.23	0.38	9.11	9.99	14.85	1.31	0.00	0.00	1.31	0.00	48.60	115.00	0.00	8.06

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
REACH NO. 26 BDS14-STADIUM DR. PIPE INTAKE macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *

156	UPR RCH	0.60451	19.20	0.00	4.23	0.38	9.11	9.99	14.85	1.31	0.00	0.00	0.00	48.60	0.00	8.06

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
156	9.62	9.57	0.60451	0.00	0.01916	0.03	2.52	12.53	1577.36	626.55	31.55	0.00	0.000	1.000	0.019
TOT						0.03			1577.36	626.55					
AVG					0.01916		2.52	12.53			31.55				
CUM						507.14									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
156	9.570	9.24	2.88	0.08	0.05	0.00	0.00	0.00	0.00	0.14	0.01	0.56	0.00	0.00	0.00	0.96	0.00	0.00	0.01	0.05
20 DEG C RATE				0.08		0.00	0.00			0.15		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			2.92		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
156	9.570	19.20	0.00	4.23	0.38	9.09	12.84	16.84	1.67	0.00	0.00	1.67	0.00	40.00	115.00	0.00	9.92

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 27 STADIUM DRIVE PIPES

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
157	UPR RCH	0.60451	19.20	0.00	4.23	0.38	9.09	12.84	16.84	1.67	0.00	0.00	0.00	40.00	0.00	9.92

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
157	9.57	9.52	0.60451	0.00	0.14101	0.00	1.67	2.57	214.36	128.55	4.29	0.00	0.000	1.000	0.141
TOT						0.00			214.36	128.55					
AVG					0.14100		1.67	2.57			4.29				
CUM						507.14									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
157	9.520	9.24	0.41	0.10	0.05	0.00	0.00	0.00	0.00	0.14	0.01	0.56	0.00	0.00	0.00	0.79	0.00	0.00	0.01	0.05
20 DEG C RATE				0.10		0.00	0.00			0.15		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.42		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
157	9.520	19.20	0.00	4.23	0.38	9.01	11.87	15.13	1.43	0.00	0.00	1.43	0.00	32.60	115.00	0.00	9.06

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
REACH NO. 28 STADIUM DR. PIPE OUTFALL-BDS15 macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
158	UPR RCH	0.60451	19.20	0.00	4.23	0.38	9.01	11.87	15.13	1.43	0.00	0.00	0.00	32.60	0.00	9.06

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
158	9.52	8.95	0.60451	0.00	0.00189	3.47	2.71	118.29	181277.38	66952.66	320.28	0.00	0.000	1.000	0.002
159	8.95	8.39	0.60451	0.00	0.00189	3.47	2.71	118.29	181277.38	66952.66	320.28	0.00	0.000	1.000	0.002
160	8.39	7.82	0.60451	0.00	0.00189	3.47	2.71	118.29	181277.38	66952.66	320.28	0.00	0.000	1.000	0.002
161	7.82	7.26	0.60451	0.00	0.00189	3.47	2.71	118.29	181277.38	66952.66	320.28	0.00	0.000	1.000	0.002
162	7.26	6.69	0.60451	0.00	0.00189	3.47	2.71	118.29	181277.38	66952.66	320.28	0.00	0.000	1.000	0.002
TOT						17.35			906386.88	334763.28					
AVG					0.00189		2.71	118.29			320.28				
CUM						524.49									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
158	8.954	9.24	2.67	0.12	0.05	0.00	0.00	0.00	0.00	0.24	0.01	0.56	0.00	0.00	0.00	0.77	0.00	0.00	0.03	0.05
159	8.388	9.24	2.67	0.12	0.05	0.00	0.00	0.00	0.00	0.24	0.01	0.56	0.00	0.00	0.00	0.76	0.00	0.00	0.03	0.05
160	7.822	9.24	2.67	0.12	0.05	0.00	0.00	0.00	0.00	0.24	0.01	0.56	0.00	0.00	0.00	0.75	0.00	0.00	0.03	0.05
161	7.256	9.24	2.67	0.12	0.05	0.00	0.00	0.00	0.00	0.24	0.01	0.56	0.00	0.00	0.00	0.74	0.00	0.00	0.03	0.05
162	6.690	9.24	2.67	0.12	0.05	0.00	0.00	0.00	0.00	0.24	0.01	0.56	0.00	0.00	0.00	0.72	0.00	0.00	0.03	0.05
20 DEG C RATE				0.12		0.00	0.00			0.25		0.60	0.00	0.00	0.00			0.00	0.03	
AVG 20 DEG C RATE			2.72		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
158	8.954	19.20	0.00	4.23	0.38	8.94	10.89	14.10	1.19	0.05	0.00	1.24	0.00	32.08	115.00	0.00	8.19

159	8.388	19.20	0.00	4.23	0.38	8.94	9.98	13.14	0.99	0.07	0.00	1.07	0.00	31.56	115.00	0.00	7.26
160	7.822	19.20	0.00	4.23	0.38	8.97	9.35	12.45	0.88	0.06	0.00	0.94	0.00	31.04	115.00	0.00	6.52
161	7.256	19.20	0.00	4.23	0.38	9.01	8.88	11.93	0.82	0.05	0.00	0.87	0.00	30.52	115.00	0.00	5.94
162	6.690	19.20	0.00	4.23	0.38	9.03	8.48	11.48	0.82	0.05	0.00	0.87	0.00	30.00	115.00	0.00	5.52

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
REACH NO. 29 BDS15-BDS16 macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
163	UPR RCH	0.60451	19.20	0.00	4.23	0.38	9.03	8.48	11.48	0.82	0.05	0.00	0.00	30.00	0.00	5.52

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
163	6.69	6.22	0.60451	0.00	0.00189	2.88	2.71	118.29	150530.69	55596.73	320.28	0.00	0.000	1.000	0.002
164	6.22	5.75	0.60451	0.00	0.00189	2.88	2.71	118.29	150530.69	55596.73	320.28	0.00	0.000	1.000	0.002
165	5.75	5.28	0.60451	0.00	0.00189	2.88	2.71	118.29	150530.69	55596.73	320.28	0.00	0.000	1.000	0.002
166	5.28	4.81	0.60451	0.00	0.00189	2.88	2.71	118.29	150530.69	55596.73	320.28	0.00	0.000	1.000	0.002
167	4.81	4.34	0.60451	0.00	0.00189	2.88	2.71	118.29	150530.69	55596.73	320.28	0.00	0.000	1.000	0.002
168	4.34	3.87	0.60451	0.00	0.00189	2.88	2.71	118.29	150530.69	55596.73	320.28	0.00	0.000	1.000	0.002
169	3.87	3.40	0.60451	0.00	0.00189	2.88	2.71	118.29	150530.69	55596.73	320.28	0.00	0.000	1.000	0.002
TOT						20.17			1053714.75	389177.06					
AVG					0.00189		2.71	118.29			320.28				
CUM						544.67									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
163	6.220	9.24	2.67	0.12	0.05	0.00	0.00	0.00	0.00	0.24	0.01	0.75	0.00	0.00	0.00	0.69	0.00	0.00	0.03	0.05
164	5.750	9.24	2.67	0.12	0.05	0.00	0.00	0.00	0.00	0.24	0.01	0.75	0.00	0.00	0.00	0.65	0.00	0.00	0.03	0.05

165	5.280	9.24	2.67	0.12	0.05	0.00	0.00	0.00	0.00	0.24	0.01	0.75	0.00	0.00	0.00	0.62	0.00	0.00	0.03	0.05
166	4.810	9.24	2.67	0.12	0.05	0.00	0.00	0.00	0.00	0.24	0.01	0.75	0.00	0.00	0.00	0.59	0.00	0.00	0.03	0.05
167	4.340	9.24	2.67	0.12	0.05	0.00	0.00	0.00	0.00	0.24	0.01	0.75	0.00	0.00	0.00	0.55	0.00	0.00	0.03	0.05
168	3.870	9.24	2.67	0.12	0.05	0.00	0.00	0.00	0.00	0.24	0.01	0.75	0.00	0.00	0.00	0.52	0.00	0.00	0.03	0.05
169	3.400	9.24	2.67	0.12	0.05	0.00	0.00	0.00	0.00	0.24	0.01	0.75	0.00	0.00	0.00	0.48	0.00	0.00	0.03	0.05
20 DEG C RATE				0.12		0.00	0.00			0.25		0.80	0.00	0.00	0.00			0.00	0.03	
AVG 20 DEG C RATE			2.72		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
163	6.220	19.20	0.00	4.23	0.38	9.01	8.03	10.88	0.95	0.06	0.00	1.01	0.00	28.57	115.00	0.00	5.31
164	5.750	19.20	0.00	4.23	0.38	8.99	7.71	10.42	1.03	0.09	0.00	1.11	0.00	27.14	115.00	0.00	5.15
165	5.280	19.20	0.00	4.23	0.38	8.96	7.47	10.04	1.08	0.10	0.00	1.18	0.00	25.71	115.00	0.00	5.01
166	4.810	19.20	0.00	4.23	0.38	8.94	7.28	9.71	1.11	0.12	0.00	1.23	0.00	24.29	115.00	0.00	4.88
167	4.340	19.20	0.00	4.23	0.38	8.93	7.12	9.40	1.13	0.13	0.00	1.26	0.00	22.86	115.00	0.00	4.75
168	3.870	19.20	0.00	4.23	0.38	8.92	6.93	9.07	1.14	0.13	0.00	1.27	0.00	21.43	115.00	0.00	4.58
169	3.400	19.20	0.00	4.23	0.38	8.95	6.60	8.60	1.13	0.10	0.00	1.24	0.00	20.00	115.00	0.00	4.32

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 30 BDS16-BDS17

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
170	UPR RCH	0.60451	19.20	0.00	4.23	0.38	8.95	6.60	8.60	1.13	0.10	0.00	0.00	20.00	0.00	4.32

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
170	3.40	3.09	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001

171	3.09	2.78	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
172	2.78	2.47	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
173	2.47	2.16	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
174	2.16	1.85	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
175	1.85	1.54	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
176	1.54	1.23	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
177	1.23	0.92	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
178	0.92	0.61	0.60451	0.00	0.00098	3.66	4.90	125.91	191162.88	39032.38	616.65	0.00	0.000	1.000	0.001
TOT						32.94			1720465.88	351291.41					
AVG					0.00098		4.90	125.91			616.65				
CUM						577.61									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
170	3.090	9.24	1.48	0.12	0.05	0.00	0.00	0.00	0.00	0.14	0.01	0.75	0.00	0.00	0.00	0.46	0.00	0.00	0.03	0.05
171	2.780	9.24	1.48	0.12	0.05	0.00	0.00	0.00	0.00	0.14	0.01	0.75	0.00	0.00	0.00	0.44	0.00	0.00	0.03	0.05
172	2.470	9.24	1.48	0.12	0.05	0.00	0.00	0.00	0.00	0.14	0.01	0.75	0.00	0.00	0.00	0.43	0.00	0.00	0.03	0.05
173	2.160	9.24	1.48	0.12	0.05	0.00	0.00	0.00	0.00	0.14	0.01	0.75	0.00	0.00	0.00	0.41	0.00	0.00	0.03	0.05
174	1.850	9.24	1.48	0.12	0.05	0.00	0.00	0.00	0.00	0.14	0.01	0.75	0.00	0.00	0.00	0.39	0.00	0.00	0.03	0.05
175	1.540	9.24	1.48	0.12	0.05	0.00	0.00	0.00	0.00	0.14	0.01	0.75	0.00	0.00	0.00	0.37	0.00	0.00	0.03	0.05
176	1.230	9.24	1.48	0.12	0.05	0.00	0.00	0.00	0.00	0.14	0.01	0.75	0.00	0.00	0.00	0.35	0.00	0.00	0.03	0.05
177	0.920	9.24	1.48	0.12	0.05	0.00	0.00	0.00	0.00	0.14	0.01	0.75	0.00	0.00	0.00	0.33	0.00	0.00	0.03	0.05
178	0.610	9.24	1.48	0.12	0.05	0.00	0.00	0.00	0.00	0.14	0.01	0.75	0.00	0.00	0.00	0.31	0.00	0.00	0.03	0.05
20 DEG C RATE				0.12		0.00	0.00			0.15		0.80	0.00	0.00	0.00			0.00	0.03	
AVG 20 DEG C RATE			1.50		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
170	3.090	19.20	0.00	4.23	0.38	8.94	6.16	8.09	1.10	0.04	0.00	1.14	0.00	19.22	115.00	0.00	4.02
171	2.780	19.20	0.00	4.23	0.38	8.97	5.95	7.79	1.09	0.01	0.00	1.10	0.00	18.44	115.00	0.00	3.85
172	2.470	19.20	0.00	4.23	0.38	8.99	5.78	7.55	1.08	0.00	0.00	1.08	0.00	17.67	115.00	0.00	3.70
173	2.160	19.20	0.00	4.23	0.38	9.00	5.65	7.34	1.07	0.00	0.00	1.07	0.00	16.89	115.00	0.00	3.58
174	1.850	19.20	0.00	4.23	0.38	9.00	5.55	7.17	1.06	0.00	0.00	1.06	0.00	16.11	115.00	0.00	3.48
175	1.540	19.20	0.00	4.23	0.38	9.00	5.47	7.01	1.06	0.00	0.00	1.06	0.00	15.33	115.00	0.00	3.39
176	1.230	19.20	0.00	4.23	0.38	9.00	5.40	6.86	1.06	0.00	0.00	1.06	0.00	14.56	115.00	0.00	3.32
177	0.920	19.20	0.00	4.23	0.38	8.99	5.33	6.71	1.06	0.00	0.00	1.06	0.00	13.78	115.00	0.00	3.27

178	0.610	19.20	0.00	4.23	0.38	9.00	5.24	6.54	1.07	0.00	0.00	1.07	0.00	13.00	115.00	0.00	3.23

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW EAS
REACH NO. 31 BDS17-MONROE WTP INTAKE

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
179	UPR RCH	0.60451	19.20	0.00	4.23	0.38	9.00	5.24	6.54	1.07	0.00	0.00	0.00	13.00	0.00	3.23
179	WSTLD	-0.49920	19.20	0.00	4.23	0.38	9.01	5.16	5.16	1.08	0.00	0.00	0.00	16.70	0.00	3.21

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
179	0.61	0.54	0.10531	0.00	0.00017	4.73	4.89	125.76	43046.43	8803.09	614.95	0.00	0.000	1.000	0.000
TOT						4.73			43046.43	8803.09					
AVG					0.00017		4.89	125.76			614.95				
CUM						582.34									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
179	0.540	9.24	1.48	0.10	0.05	0.00	0.00	0.00	0.00	0.07	0.01	0.56	0.00	0.00	0.00	0.40	0.00	0.00	0.04	0.05
20 DEG C RATE				0.10		0.00	0.00			0.07		0.60	0.00	0.00	0.00			0.00	0.04	
AVG 20 DEG C RATE			1.50		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
179	0.540	19.20	0.00	4.23	0.38	9.01	5.16	6.83	1.08	0.00	0.00	1.08	0.00	16.70	115.00	0.00	3.21

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

STREAM SUMMARY
LAKE BARTHOLEMEW EAS

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

TRAVEL TIME = 582.34 DAYS

MAXIMUM EFFLUENT = 0.00 PERCENT

FLOW	=	0.10278	TO	1.66168	m³/s
DISPERSION	=	0.0000	TO	4.0000	m²/s
VELOCITY	=	0.00017	TO	0.14101	m/s
DEPTH	=	1.04	TO	4.90	m
WIDTH	=	2.47	TO	125.91	m
BOD DECAY	=	0.08	TO	0.22	per day
NH3 DECAY	=	0.55	TO	0.94	per day
SDMNT OXYGEN DMND	=	0.00	TO	6.18	g/m²/d
NH3 SOURCE	=	0.00	TO	0.04	g/m²/d
REAERATION	=	0.19	TO	3.14	per day
BOD SETTLING	=	0.05	TO	0.05	per day
ORGN DECAY	=	0.05	TO	0.24	per day
ORGN SETTLING	=	0.01	TO	0.01	per day
TEMPERATURE	=	19.20	TO	19.20	deg C
DISSOLVED OXYGEN	=	6.52	TO	10.77	mg/L

FINAL REPORT LAKE BARTHOLEMEW WES
REACH NO. 5 BDS 5-BDS 4

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
24	HDWTR	0.10278	19.20	0.00	8.90	3.20	8.32	0.19	4.43	1.05	0.00	0.00	0.00	42.40	0.00	4.16

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
24	8.53	8.11	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
25	8.11	7.69	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
26	7.69	7.27	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
27	7.27	6.85	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
28	6.85	6.43	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
29	6.43	6.01	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
30	6.01	5.59	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
31	5.59	5.17	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
32	5.17	4.75	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
33	4.75	4.33	0.10278	0.00	0.00021	23.09	3.94	123.94	205081.05	52053.33	488.29	0.00	0.000	1.000	0.000
TOT						230.94			2050810.25	520533.38					
AVG					0.00021		3.94	123.94			488.29				
CUM						230.94									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
24	8.110	9.24	0.17	0.14	0.05	0.00	0.00	0.00	0.00	0.11	0.01	0.56	0.00	0.00	0.00	1.02	0.00	0.00	0.01	0.05
25	7.690	9.24	0.17	0.14	0.05	0.00	0.00	0.00	0.00	0.11	0.01	0.56	0.00	0.00	0.00	1.02	0.00	0.00	0.01	0.05
26	7.270	9.24	0.17	0.14	0.05	0.00	0.00	0.00	0.00	0.11	0.01	0.56	0.00	0.00	0.00	1.02	0.00	0.00	0.01	0.05
27	6.850	9.24	0.17	0.14	0.05	0.00	0.00	0.00	0.00	0.11	0.01	0.56	0.00	0.00	0.00	1.02	0.00	0.00	0.01	0.05
28	6.430	9.24	0.17	0.14	0.05	0.00	0.00	0.00	0.00	0.11	0.01	0.56	0.00	0.00	0.00	1.02	0.00	0.00	0.01	0.05
29	6.010	9.24	0.17	0.14	0.05	0.00	0.00	0.00	0.00	0.11	0.01	0.56	0.00	0.00	0.00	1.02	0.00	0.00	0.01	0.05
30	5.590	9.24	0.17	0.14	0.05	0.00	0.00	0.00	0.00	0.11	0.01	0.56	0.00	0.00	0.00	1.02	0.00	0.00	0.01	0.05
31	5.170	9.24	0.17	0.14	0.05	0.00	0.00	0.00	0.00	0.11	0.01	0.56	0.00	0.00	0.00	1.02	0.00	0.00	0.01	0.05
32	4.750	9.24	0.17	0.14	0.05	0.00	0.00	0.00	0.00	0.11	0.01	0.56	0.00	0.00	0.00	1.02	0.00	0.00	0.01	0.05
33	4.330	9.24	0.17	0.14	0.05	0.00	0.00	0.00	0.00	0.11	0.01	0.56	0.00	0.00	0.00	1.02	0.00	0.00	0.01	0.05
20 DEG C RATE				0.15		0.00	0.00			0.12		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.18		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *

24	8.110	19.20	0.00	8.98	3.18	10.58	2.58	6.82	2.20	0.11	0.00	2.31	0.00	42.40	115.00	0.00	5.29
25	7.690	19.20	0.00	8.98	3.18	10.63	2.69	6.93	2.26	0.12	0.00	2.38	0.00	42.40	115.00	0.00	5.36
26	7.270	19.20	0.00	8.99	3.18	10.63	2.75	6.99	2.30	0.12	0.00	2.42	0.00	42.40	115.00	0.00	5.41
27	6.850	19.20	0.00	9.00	3.18	10.62	2.79	7.03	2.31	0.13	0.00	2.44	0.00	42.40	115.00	0.00	5.46
28	6.430	19.20	0.00	9.01	3.18	10.63	2.81	7.05	2.31	0.13	0.00	2.44	0.00	42.40	115.00	0.00	5.50
29	6.010	19.20	0.00	9.02	3.18	10.68	2.82	7.06	2.30	0.12	0.00	2.42	0.00	42.40	115.00	0.00	5.54
30	5.590	19.20	0.00	9.03	3.17	10.78	2.83	7.07	2.27	0.12	0.00	2.38	0.00	42.40	115.00	0.00	5.59
31	5.170	19.20	0.00	9.04	3.17	10.94	2.85	7.09	2.20	0.10	0.00	2.30	0.00	42.40	115.00	0.00	5.66
32	4.750	19.20	0.00	9.05	3.17	11.13	2.86	7.10	2.09	0.08	0.00	2.16	0.00	42.40	115.00	0.00	5.74
33	4.330	19.20	0.00	9.06	3.17	11.33	2.90	7.14	1.89	0.04	0.00	1.93	0.00	42.40	115.00	0.00	5.87

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT LAKE BARTHOLEMEW WES
REACH NO. 6 BDS 4-US 165 GATE INLET CANAL

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
34	UPR RCH	0.10278	19.20	0.00	9.06	3.17	11.33	2.90	7.14	1.89	0.04	0.00	0.00	42.40	0.00	5.87

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
34	4.33	3.90	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
35	3.90	3.46	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
36	3.46	3.03	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
37	3.03	2.60	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
38	2.60	2.16	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
39	2.16	1.73	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
40	1.73	1.30	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
41	1.30	0.87	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
42	0.87	0.43	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
43	0.43	0.00	0.10278	0.00	0.00026	18.97	3.38	115.09	168425.00	49832.46	388.97	0.00	0.000	1.000	0.000
TOT						189.66			1684250.00	498324.62					
AVG					0.00026		3.38	115.09			388.97				
CUM						420.61									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
34	3.897	9.24	0.20	0.14	0.05	0.00	0.00	0.00	0.00	0.11	0.01	0.56	0.00	0.00	0.00	1.03	0.00	0.00	0.01	0.05
35	3.464	9.24	0.20	0.14	0.05	0.00	0.00	0.00	0.00	0.11	0.01	0.56	0.00	0.00	0.00	1.03	0.00	0.00	0.01	0.05
36	3.031	9.24	0.20	0.14	0.05	0.00	0.00	0.00	0.00	0.11	0.01	0.56	0.00	0.00	0.00	1.03	0.00	0.00	0.01	0.05
37	2.598	9.24	0.20	0.14	0.05	0.00	0.00	0.00	0.00	0.11	0.01	0.56	0.00	0.00	0.00	1.04	0.00	0.00	0.01	0.05
38	2.165	9.24	0.20	0.14	0.05	0.00	0.00	0.00	0.00	0.11	0.01	0.56	0.00	0.00	0.00	1.04	0.00	0.00	0.01	0.05
39	1.732	9.24	0.20	0.14	0.05	0.00	0.00	0.00	0.00	0.11	0.01	0.56	0.00	0.00	0.00	1.04	0.00	0.00	0.01	0.05
40	1.299	9.24	0.20	0.14	0.05	0.00	0.00	0.00	0.00	0.11	0.01	0.56	0.00	0.00	0.00	1.05	0.00	0.00	0.01	0.05
41	0.866	9.24	0.20	0.14	0.05	0.00	0.00	0.00	0.00	0.11	0.01	0.56	0.00	0.00	0.00	1.05	0.00	0.00	0.01	0.05
42	0.433	9.24	0.20	0.14	0.05	0.00	0.00	0.00	0.00	0.11	0.01	0.56	0.00	0.00	0.00	1.06	0.00	0.00	0.01	0.05
43	0.000	9.24	0.20	0.14	0.05	0.00	0.00	0.00	0.00	0.11	0.01	0.56	0.00	0.00	0.00	1.06	0.00	0.00	0.01	0.05
20 DEG C RATE				0.15		0.00	0.00			0.12		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.21		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
34	3.897	19.20	0.00	9.08	3.16	11.48	2.97	7.22	1.49	0.00	0.00	1.50	0.00	42.56	115.00	0.00	6.07
35	3.464	19.20	0.00	9.10	3.16	11.58	3.01	7.28	1.21	0.00	0.00	1.21	0.00	42.72	115.00	0.00	6.24
36	3.031	19.20	0.00	9.12	3.16	11.63	3.04	7.33	1.04	0.00	0.00	1.04	0.00	42.88	115.00	0.00	6.37
37	2.598	19.20	0.00	9.15	3.15	11.65	3.06	7.36	0.94	0.00	0.00	0.94	0.00	43.04	115.00	0.00	6.45
38	2.165	19.20	0.00	9.17	3.15	11.64	3.08	7.40	0.88	0.00	0.00	0.88	0.00	43.20	115.00	0.00	6.52
39	1.732	19.20	0.00	9.21	3.14	11.62	3.11	7.45	0.86	0.00	0.00	0.86	0.00	43.36	115.00	0.00	6.56
40	1.299	19.20	0.00	9.24	3.13	11.56	3.16	7.52	0.88	0.00	0.00	0.88	0.00	43.52	115.00	0.00	6.58
41	0.866	19.20	0.00	9.28	3.12	11.44	3.26	7.63	0.94	0.00	0.00	0.94	0.00	43.68	115.00	0.00	6.59
42	0.433	19.20	0.00	9.32	3.12	11.23	3.45	7.84	1.06	0.00	0.00	1.06	0.00	43.84	115.00	0.00	6.58
43	0.000	19.20	0.00	9.37	3.11	10.86	3.83	8.23	1.30	0.00	0.00	1.30	0.00	44.00	115.00	0.00	6.55

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

STREAM SUMMARY
LAKE BARTHOLEMEW WES

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

TRAVEL TIME = 420.61 DAYS

```
MAXIMUM EFFLUENT =          0.00 PERCENT

FLOW             =   0.10278 TO    0.10278 m³/s
DISPERSION       =   1.0000  TO    1.0000  m²/s
VELOCITY         =   0.00021 TO    0.00026 m/s
DEPTH            =   3.38    TO    3.94    m
WIDTH            = 115.09    TO  123.94    m

BOD DECAY        =    0.14   TO    0.14    per day
NH3 DECAY        =    0.56   TO    0.56    per day
SDMNT OXYGEN DMND=    0.00   TO    0.00    g/m²/d
NH3 SOURCE       =    0.00   TO    0.00    g/m²/d
REAERATION       =    0.17   TO    0.20    per day
BOD SETTLING     =    0.05   TO    0.05    per day
ORGN DECAY       =    0.11   TO    0.11    per day
ORGN SETTLING    =    0.01   TO    0.01    per day

TEMPERATURE      =   19.20   TO   19.20    deg C
DISSOLVED OXYGEN =   10.58   TO   11.65    mg/L
```

FINAL REPORT HANNAH'S RUN (EAST) BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
REACH NO. 14 HANNAH'S RUN(E)CONTROL GATES macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
94	HDWTR	1.45612	19.20	0.00	3.50	0.00	8.32	8.55	10.34	0.58	0.17	0.00	0.00	17.90	0.00	4.56

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
94	0.45	0.44	1.45612	0.00	0.29793	0.00	1.77	2.76	58.65	33.10	4.89	0.00	0.000	1.000	0.298
TOT						0.00			58.65	33.10					
AVG					0.29793		1.77	2.76			4.89				
CUM						0.00									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
94	0.440	9.24	0.39	0.08	0.05	0.00	0.00	0.00	0.00	0.10	0.01	0.56	0.00	0.00	0.00	0.43	0.00	0.00	0.01	0.05
20 DEG C RATE				0.08		0.00	0.00			0.11		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.40		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
94	0.440	19.20	0.00	3.57	0.04	14.60	8.46	10.25	0.60	0.15	0.00	0.75	0.00	17.90	115.00	0.00	4.72

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT HANNAH'S RUN (EAST) BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
REACH NO. 15 HANNAHS RUN(E)-HANNAHS RUN(W) macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
95	UPR RCH	1.45612	19.20	0.00	3.57	0.04	14.60	8.46	10.25	0.60	0.15	0.00	0.00	17.90	0.00	4.72

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
95	0.44	0.15	1.45612	0.00	0.03147	0.11	2.47	18.72	13325.77	5390.87	46.27	0.00	0.000	4.000	0.031
TOT						0.11			13325.77	5390.87					
AVG					0.03147		2.47	18.72			46.27				
CUM						0.11									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
95	0.152	9.24	0.28	0.08	0.05	0.00	0.00	0.00	0.00	0.10	0.01	0.56	0.00	0.00	0.00	0.43	0.00	0.00	0.01	0.05
20 DEG C RATE				0.08		0.00	0.00			0.11		0.60	0.00	0.00	0.00			0.00	0.01	
AVG 20 DEG C RATE			0.28		0.05						0.01									0.05

* $g/m^2/d$ ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
95	0.152	19.20	0.00	3.65	0.08	14.02	8.35	10.14	0.63	0.12	0.00	0.75	0.00	17.90	115.00	0.00	4.91

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m^3

FINAL REPORT HANNAH'S RUN (EAST)
REACH NO. 16 HANNAH'S RUN(W) CONTROL GATES

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m^3/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
96	UPR RCH	1.45612	19.20	0.00	3.65	0.08	14.02	8.35	10.14	0.63	0.12	0.00	0.00	17.90	0.00	4.91

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m^3	SURFACE AREA m^2	X-SECT AREA m^2	TIDAL PRISM m^3	TIDAL VELO m/s	DISPRSN m^2/s	MEAN VELO m/s
96	0.15	0.14	1.45612	0.00	0.29793	0.00	1.77	2.76	58.65	33.10	4.89	0.00	0.000	1.000	0.298
TOT						0.00			58.65	33.10					
AVG					0.29793		1.77	2.76			4.89				
CUM						0.11									

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
96	0.140	9.24	0.39	0.10	0.05	0.00	0.00	0.00	0.00	0.14	0.01	0.56	0.00	0.00	0.00	0.43	0.00	0.00	0.02	0.05
20 DEG C RATE				0.10		0.00	0.00			0.15		0.60	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			0.40		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
96	0.140	19.20	0.00	3.84	0.18	12.96	8.25	10.04	0.67	0.08	0.00	0.76	0.00	17.90	115.00	0.00	5.39

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

FINAL REPORT HANNAH'S RUN (EAST)
REACH NO. 17 HANNAH'S RUN(W)-BDS21

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m³/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
97	UPR RCH	1.45612	19.20	0.00	3.84	0.18	12.96	8.25	10.04	0.67	0.08	0.00	0.00	17.90	0.00	5.39

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m³	SURFACE AREA m²	X-SECT AREA m²	TIDAL PRISM m³	TIDAL VELO m/s	DISPRSN m²/s	MEAN VELO m/s
97	0.14	0.10	1.45612	0.00	0.03147	0.01	2.47	18.72	1850.80	748.73	46.27	0.00	0.000	4.000	0.031
TOT						0.01			1850.80	748.73					

AVG						0.03147			2.47	18.72					46.27					
CUM								0.12												

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
97	0.100	9.24	0.28	0.11	0.05	0.00	0.00	0.00	0.00	0.17	0.01	0.56	0.00	0.00	0.00	0.33	0.00	0.00	0.02	0.05
20 DEG C RATE				0.11		0.00	0.00			0.18		0.60	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			0.28		0.05						0.01									0.05

* $g/m^2/d$ ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
97	0.100	19.20	0.00	3.93	0.22	12.46	8.20	9.56	0.69	0.06	0.00	0.76	0.00	13.60	115.00	0.00	5.61

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m^3

FINAL REPORT HANNAH'S RUN (EAST)
REACH NO. 18 BDS 21-BAYOU DESIARD

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

********** REACH INPUTS **********

ELEM NO.	TYPE	FLOW m^3/	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
98	UPR RCH	1.45612	19.20	0.00	3.93	0.22	12.46	8.20	9.56	0.69	0.06	0.00	0.00	13.60	0.00	5.61

********** HYDRAULIC PARAMETER VALUES **********

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME m^3	SURFACE AREA m^2	X-SECT AREA m^2	TIDAL PRISM m^3	TIDAL VELO m/s	DISPRSN m^2/s	MEAN VELO m/s
98	0.10	0.00	1.45612	0.00	0.03147	0.04	2.47	18.72	4627.00	1871.83	46.27	0.00	0.000	4.000	0.031

TOT								0.04				4627.00		1871.83							
AVG						0.03147			2.47	18.72					46.27						
CUM								0.16													

********** BIOLOGICAL AND PHYSICAL COEFFICIENTS **********

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
98	0.000	9.24	0.28	0.11	0.05	0.00	0.00	0.00	0.00	0.17	0.01	0.56	0.00	0.00	0.00	0.33	0.00	0.00	0.02	0.05
20 DEG C RATE				0.11		0.00	0.00			0.18		0.60	0.00	0.00	0.00			0.00	0.02	
AVG 20 DEG C RATE			0.28		0.05						0.01									0.05

* g/m²/d ** mg/L/day

********** WATER QUALITY CONSTITUENT VALUES **********

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
98	0.000	19.20	0.00	4.16	0.35	11.15	8.08	9.44	0.74	0.01	0.00	0.75	0.00	13.60	115.00	0.00	6.21

* CM-I = CHLORIDES MG/L CM-II = SULFATES MG/L NCM = CBOD2 MG/L
** g/m³

STREAM SUMMARY
HANNAH'S RUN (EAST)

BAYOU DESIARD (080701) WINTER PROJECTION MODEL B WITH CHLOROPHYL
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt

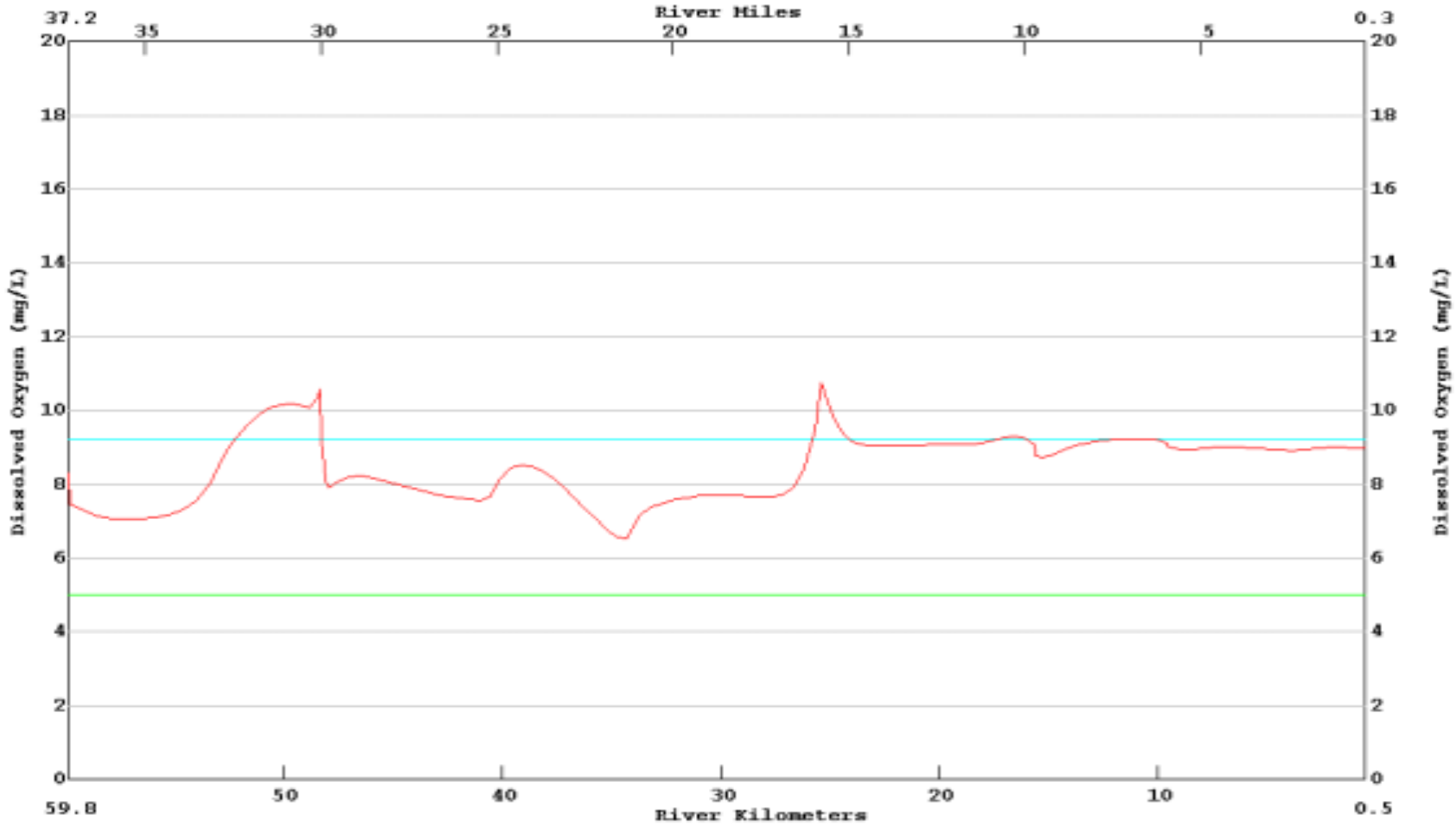
TRAVEL TIME = 0.16 DAYS

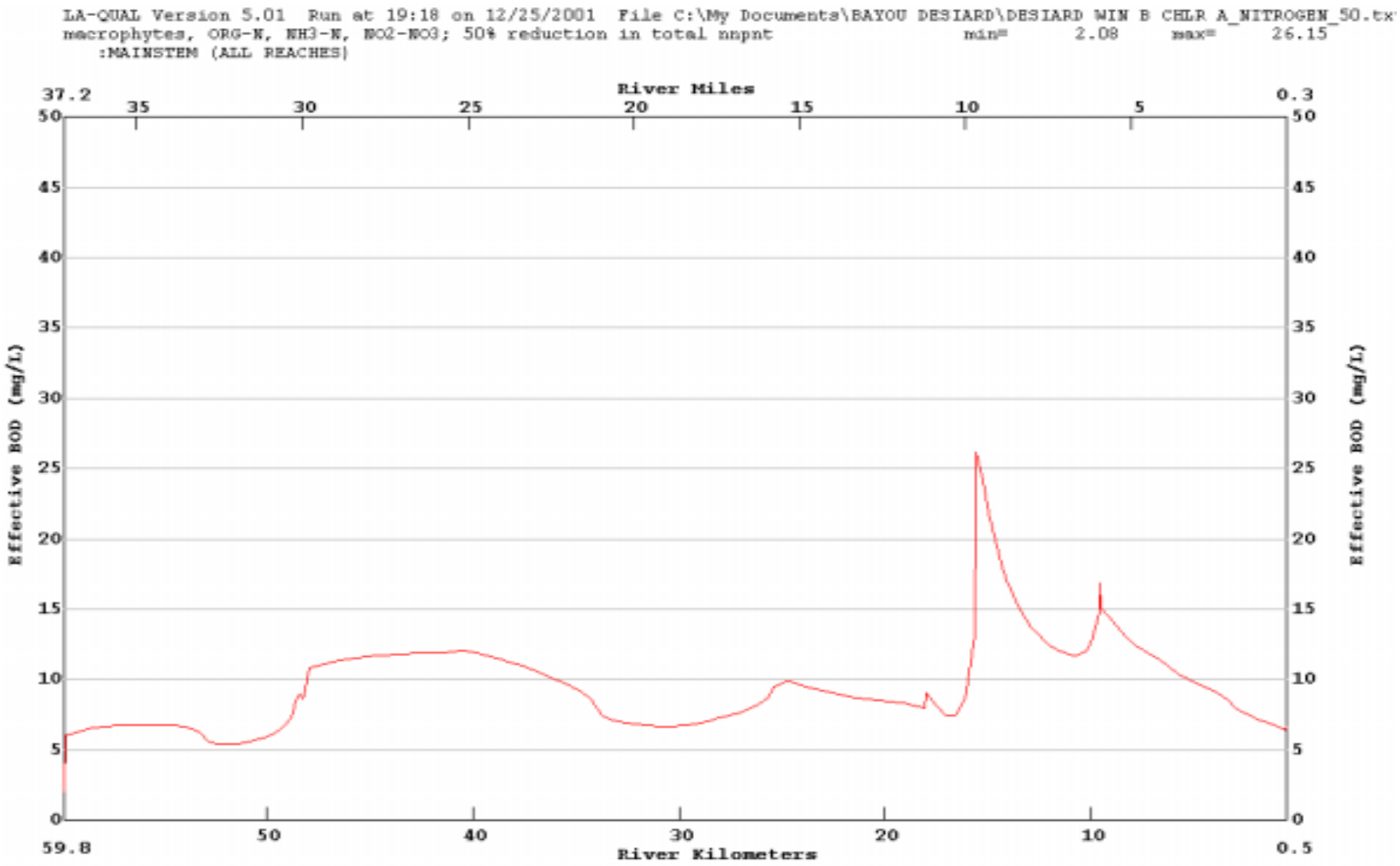
MAXIMUM EFFLUENT = 0.00 PERCENT

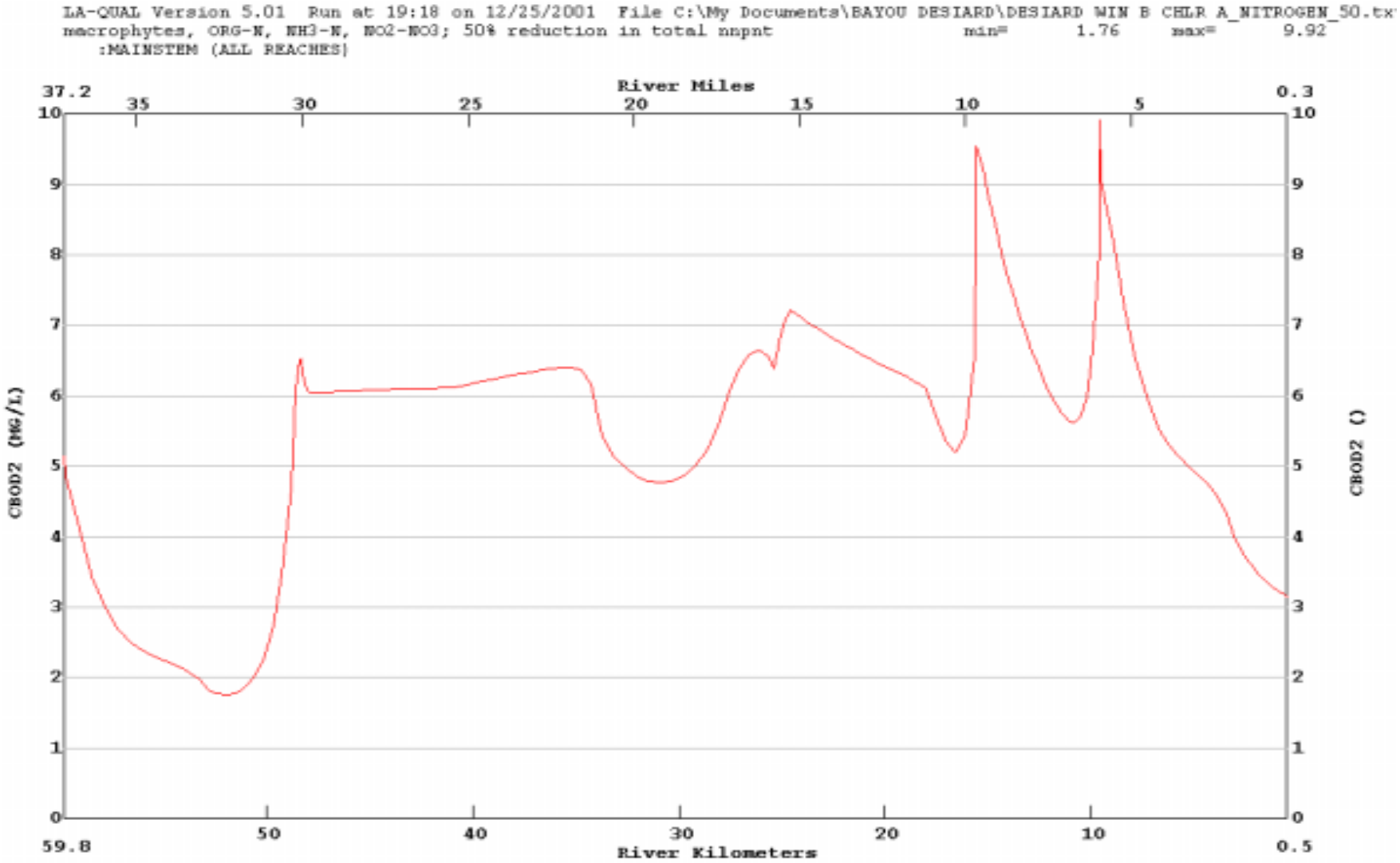
FLOW	=	1.45612	TO	1.45612	m³/s
DISPERSION	=	1.0000	TO	4.0000	m²/s
VELOCITY	=	0.03147	TO	0.29793	m/s
DEPTH	=	1.77	TO	2.47	m
WIDTH	=	2.76	TO	18.72	m
BOD DECAY	=	0.08	TO	0.11	per day
NH3 DECAY	=	0.56	TO	0.56	per day
SDMNT OXYGEN DMND	=	0.00	TO	0.00	g/m²/d
NH3 SOURCE	=	0.00	TO	0.00	g/m²/d

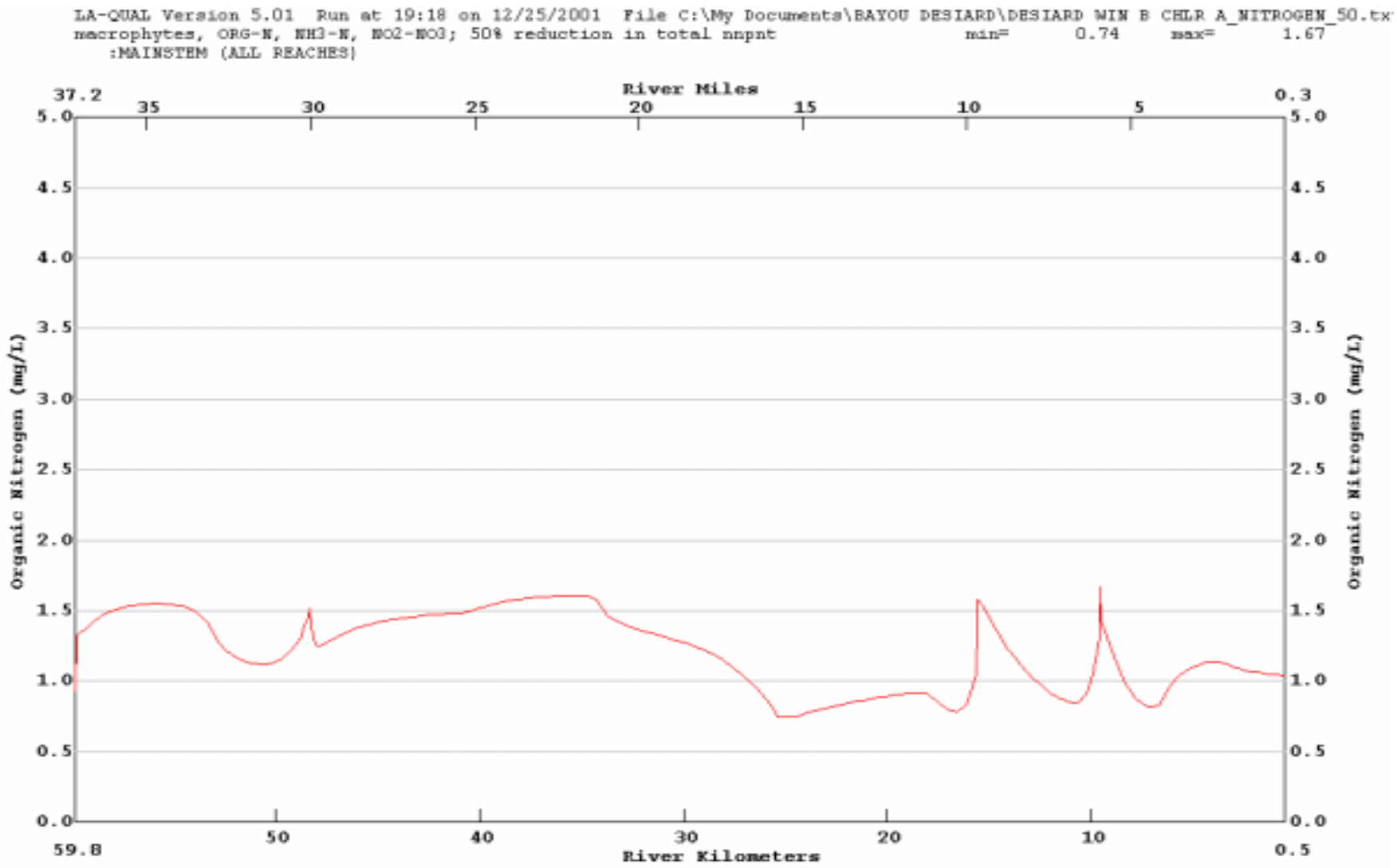
```
REAERATION       =    0.28   TO    0.39    per day
BOD SETTLING     =    0.05   TO    0.05    per day
ORGN DECAY       =    0.10   TO    0.17    per day
ORGN SETTLING    =    0.01   TO    0.01    per day

TEMPERATURE      =   19.20   TO   19.20    deg C
DISSOLVED OXYGEN =   11.15   TO   14.60    mg/L


     .....EXECUTION COMPLETED
```

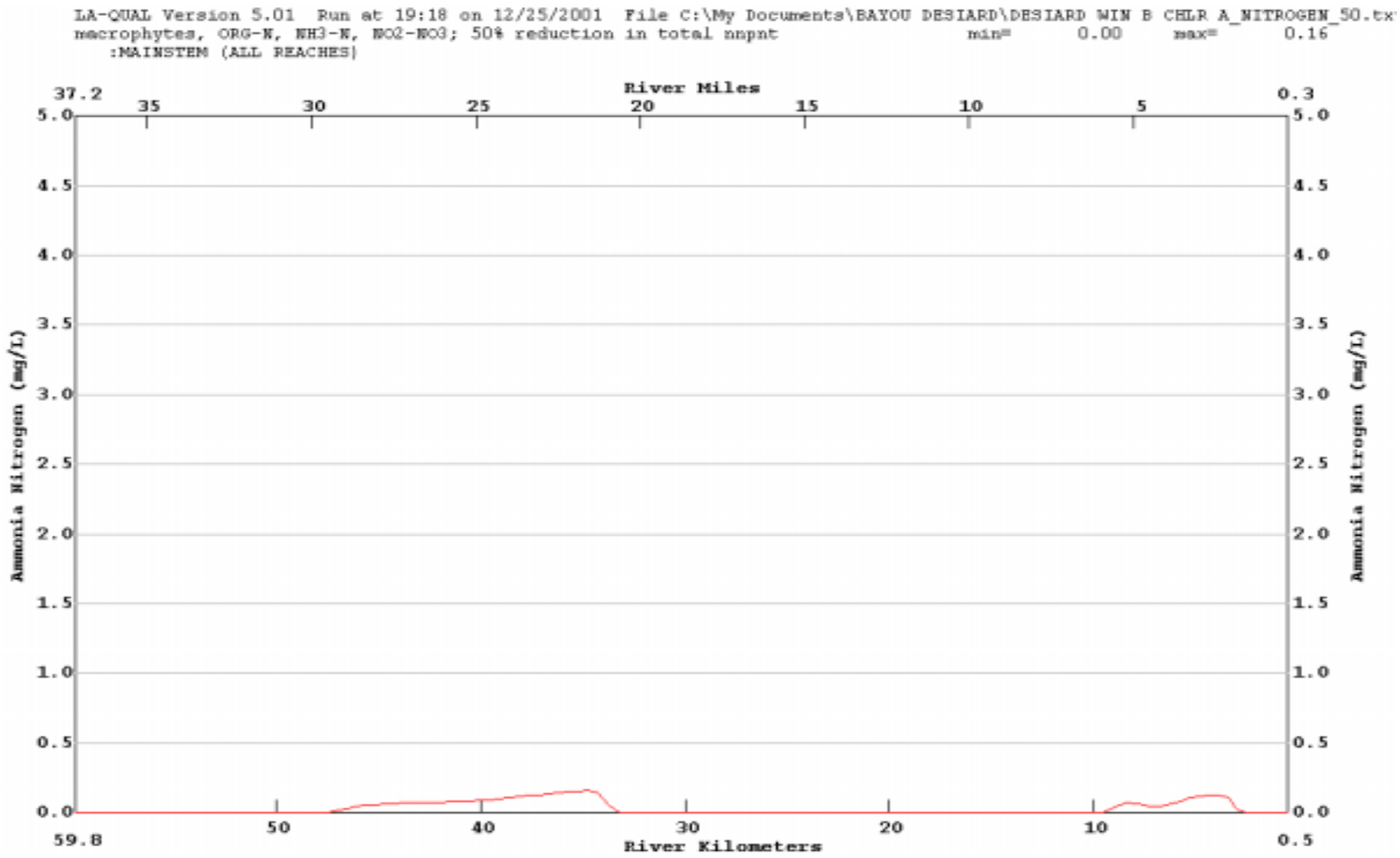
LA-QUAL Version 5.01 Run at 08:37 on 01/14/2002 File D:\MODELED_WATERBODIES\BAYOU DESIARD\MODELS\WINTER PROJECTIONS\DE:
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt min= 6.52 max= 10.77
:MAINSTEM (ALL REACHES)



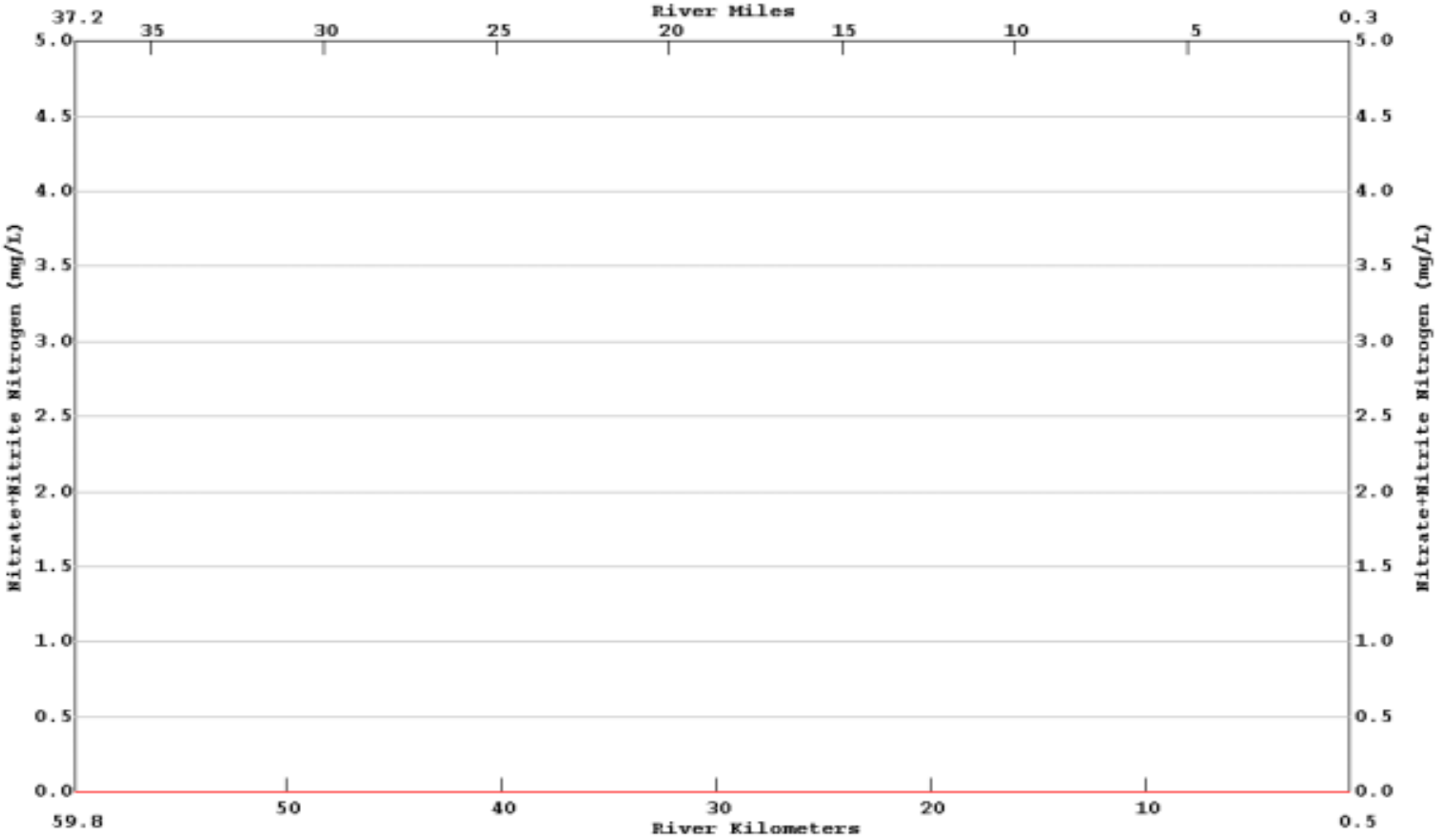

LA-QUAL Version 5.01 Run at 19:18 on 12/25/2001 File C:\My Documents\BAYOU DESIARD\DESIARD WIN B CHLR A_NITROGEN_50.tx
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt min= 2.08 max= 26.15
:MAINSTEM (ALL REACHES)
River Miles
37.2
35
30
25
20
15
10
5
0.3
Effective BOD (mg/L)
50
45
40
35
30
25
20
15
10
5
0
59.8
50
40
30
20
10
0.5
River Kilometers


LA-QUAL Version 5.01 Run at 19:18 on 12/25/2001 File C:\My Documents\BAYOU DESIARD\DESIARD WIN B CHLR A_NITROGEN_50.tx
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt min= 1.76 max= 9.92
:MAINSTEM (ALL REACHES)
River Miles
37.2
35
30
25
20
15
10
5
0.3
CBOD2 (MG/L)
CBOD2 ()
0
1
2
3
4
5
6
7
8
9
10
59.8
50
40
30
20
10
0.5
River Kilometers


LA-QUAL Version 5.01 Run at 19:18 on 12/25/2001 File C:\My Documents\BAYOU DESIARD\DESIARD WIN B CHLR A_NITROGEN_50.tx
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt min= 0.74 max= 1.67
:MAINSTEM (ALL REACHES)
River Miles
37.2
35
30
25
20
15
10
5
0.3
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Organic Nitrogen (mg/L)
59.8
50
40
30
20
10
0.5
River Kilometers


LA-QUAL Version 5.01 Run at 19:18 on 12/25/2001 File C:\My Documents\BAYOU DESIARD\DESIARD WIN B CHLR A_NITROGEN_50.tx
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt min= 0.00 max= 0.16
:MAINSTEM (ALL REACHES)
River Miles
37.2
35
30
25
20
15
10
5
0.3
Ammonia Nitrogen (mg/L)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
59.8
50
40
30
20
10
0.5
River Kilometers

LA-QUAL Version 5.01 Run at 19:18 on 12/25/2001 File C:\My Documents\BAYOU DESIARD\DESIARD WIN B CHLR A_NITROGEN_50.tx
macrophytes, ORG-N, NH3-N, NO2-NO3; 50% reduction in total nnpnt min= 0.00 max= 0.00
:MAINSTEM (ALL REACHES)



APPENDIX E - Bayou Desiard Projection Model Development

Bayou Desiard (including Lake Bartholemew) Watershed TMDL
For Biochemical Oxygen Demanding Substances and Nutrients
Subsegment 080701
Originated: January 14, 2002

SUMMER CRITICAL SEASON (MAY-OCT)

Dates	MONTH	DAY	YEAR	Water Pumped Into Bayou Desiard (mgd)	Water Pumped From Bayou Desiard to WTP (mgd)
5/18/96	5	18	1996	36.0	14.4
5/19/96	5	19	1996	36.0	13.7
5/20/96	5	20	1996	36.0	14.8
5/21/96	5	21	1996	36.0	13.5
5/22/96	5	22	1996	36.0	14.9
5/23/96	5	23	1996	36.0	14.8
5/24/96	5	24	1996	36.0	15.7
5/25/96	5	25	1996	36.0	13.6
5/26/96	5	26	1996	36.0	13.6
5/27/96	5	27	1996	36.0	13.5
5/28/96	5	28	1996	36.0	14.5
5/29/96	5	29	1996	36.0	14.4
5/30/96	5	30	1996	36.0	11.9
5/31/96	5	31	1996	36.0	12.8
5/13/97	5	13	1997	36.0	12.1
5/14/97	5	14	1997	36.0	13.1
5/15/97	5	15	1997	36.0	13.8
5/26/98	5	26	1998	36.0	10.3
5/27/98	5	27	1998	36.0	11.4
5/28/98	5	28	1998	36.0	11.3
5/29/98	5	29	1998	36.0	10.0
5/30/98	5	30	1998	36.0	12.7
5/01/99	5	1	1999	36.0	11.9
5/02/99	5	2	1999	36.0	10.9
5/03/99	5	3	1999	36.0	12.2
5/04/99	5	4	1999	36.0	12.0
5/05/99	5	5	1999	36.0	11.8
5/06/99	5	6	1999	36.0	12.1
5/07/99	5	7	1999	36.0	12.0
5/08/99	5	8	1999	36.0	11.1
5/09/99	5	9	1999	36.0	12.1
5/10/99	5	10	1999	36.0	12.1
5/21/99	5	21	1999	36.0	13.5
5/22/99	5	22	1999	36.0	13.3
5/23/99	5	23	1999	36.0	12.4
5/24/99	5	24	1999	36.0	12.9
5/25/99	5	25	1999	36.0	13.8
5/26/99	5	26	1999	36.0	13.3
5/27/99	5	27	1999	36.0	14.1
6/02/95	6	2	1995	36.0	12.2
6/03/95	6	3	1995	36.0	12.1
6/04/95	6	4	1995	36.0	12.1
6/01/96	6	1	1996	36.0	13.0
6/02/96	6	2	1996	36.0	12.9
6/03/96	6	3	1996	36.0	12.8
6/04/96	6	4	1996	36.0	11.2
6/05/96	6	5	1996	36.0	12.7
6/06/96	6	6	1996	36.0	13.7
6/07/96	6	7	1996	36.0	12.2
6/08/96	6	8	1996	36.0	11.9
6/01/98	6	1	1998	36.0	16.3
6/02/98	6	2	1998	36.0	18.4
6/03/98	6	3	1998	36.0	15.4
6/04/98	6	4	1998	36.0	16.0
6/05/98	6	5	1998	36.0	12.4
6/06/98	6	6	1998	36.0	13.1
6/07/98	6	7	1998	36.0	12.6
6/08/98	6	8	1998	36.0	12.7
6/09/98	6	9	1998	36.0	15.5
6/10/98	6	10	1998	36.0	16.2
6/11/98	6	11	1998	36.0	15.1
6/12/98	6	12	1998	36.0	13.6
6/13/98	6	13	1998	36.0	15.9
6/14/98	6	14	1998	36.0	15.2

6/14/98	6	14	1998	36.0	15.2
6/15/98	6	15	1998	36.0	15.8
6/16/98	6	16	1998	36.0	14.2
6/17/98	6	17	1998	36.0	14.9
6/18/98	6	18	1998	36.0	15.4
6/19/98	6	19	1998	36.0	16.4
6/20/98	6	20	1998	36.0	16.9
6/21/98	6	21	1998	36.0	15.8
6/22/98	6	22	1998	36.0	16.8
6/23/98	6	23	1998	36.0	17.1
6/24/98	6	24	1998	36.0	17.5
6/25/98	6	25	1998	36.0	18.8
6/26/98	6	26	1998	36.0	14.7
6/27/98	6	27	1998	36.0	16.7
6/28/98	6	28	1998	36.0	16.8
6/29/98	6	29	1998	36.0	16.9
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6/07/99	6	7	1999	36.0	14.1
6/08/99	6	8	1999	36.0	15.6
6/09/99	6	9	1999	36.0	10.0
6/10/99	6	10	1999	36.0	15.0
6/11/99	6	11	1999	36.0	13.8
6/12/99	6	12	1999	36.0	12.3
6/13/99	6	13	1999	36.0	12.6
7/26/95	7	26	1995	36.0	14.1
7/27/95	7	27	1995	36.0	15.1
7/28/95	7	28	1995	36.0	14.8
7/29/95	7	29	1995	36.0	11.1
7/30/95	7	30	1995	36.0	10.5
7/31/95	7	31	1995	36.0	12.4
7/16/97	7	16	1997	36.0	13.5
7/17/97	7	17	1997	36.0	12.9
7/18/97	7	18	1997	36.0	14.2
7/19/97	7	19	1997	36.0	13.6
7/20/97	7	20	1997	36.0	13.0
7/21/97	7	21	1997	36.0	11.8
7/22/97	7	22	1997	36.0	12.3
7/23/97	7	23	1997	36.0	12.9
7/24/97	7	24	1997	36.0	14.0
7/25/97	7	25	1997	36.0	13.6
7/26/97	7	26	1997	36.0	13.4
7/27/97	7	27	1997	36.0	14.8
7/28/97	7	28	1997	36.0	13.7
7/29/97	7	29	1997	36.0	14.6
7/30/97	7	30	1997	36.0	13.7
7/31/97	7	31	1997	36.0	13.9
7/01/98	7	1	1998	72.0	14.2
7/02/98	7	2	1998	72.0	15.1
7/03/98	7	3	1998	72.0	13.7
7/04/98	7	4	1998	72.0	13.8
7/05/98	7	5	1998	72.0	14.3
7/06/98	7	6	1998	72.0	16.4
7/07/98	7	7	1998	72.0	17.3
7/08/98	7	8	1998	36.0	17.6
7/09/98	7	9	1998	36.0	17.2
7/10/98	7	10	1998	72.0	16.2
7/11/98	7	11	1998	72.0	16.1
7/12/98	7	12	1998	72.0	15.3
7/13/98	7	13	1998	36.0	12.4
7/14/98	7	14	1998	36.0	13.3
7/15/98	7	15	1998	36.0	13.5
7/16/98	7	16	1998	36.0	15.3
7/17/98	7	17	1998	36.0	15.8
7/18/98	7	18	1998	36.0	15.4
7/19/98	7	19	1998	36.0	15.0
7/20/98	7	20	1998	36.0	16.5
7/21/98	7	21	1998	36.0	16.4
7/22/98	7	22	1998	36.0	16.5
7/23/98	7	23	1998	36.0	16.4
7/24/98	7	24	1998	36.0	15.3

7/25/98	7	25	1998	36.0	15.4
7/26/98	7	26	1998	36.0	12.8
7/27/98	7	27	1998	36.0	14.2
7/28/98	7	28	1998	36.0	15.4
7/29/98	7	29	1998	36.0	16.9
7/30/98	7	30	1998	36.0	16.2
7/31/98	7	31	1998	36.0	17.5
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7/31/00	7	31	2000	36.0	14.3
8/28/95	8	28	1995	36.0	16.2
8/29/95	8	29	1995	36.0	15.0
8/30/95	8	30	1995	36.0	16.1
8/31/95	8	31	1995	36.0	16.9
8/02/96	8	2	1996	36.0	13.7
8/03/96	8	3	1996	36.0	12.9
8/04/96	8	4	1996	36.0	9.6
8/05/96	8	5	1996	36.0	12.8
8/06/96	8	6	1996	36.0	12.7
8/07/96	8	7	1996	36.0	12.1
8/08/96	8	8	1996	36.0	12.1
8/09/96	8	9	1996	36.0	12.0
8/10/96	8	10	1996	36.0	12.1
8/11/96	8	11	1996	36.0	12.1
8/12/96	8	12	1996	36.0	12.0
8/22/96	8	22	1996	36.0	14.9
8/23/96	8	23	1996	36.0	15.5
8/24/96	8	24	1996	36.0	14.6
8/25/96	8	25	1996	36.0	14.5
8/26/96	8	26	1996	36.0	14.5
8/27/96	8	27	1996	36.0	12.3
8/28/96	8	28	1996	36.0	12.2
8/29/96	8	29	1996	36.0	11.3
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8/02/97	8	2	1997	36.0	13.5
8/03/97	8	3	1997	36.0	13.6
8/04/97	8	4	1997	36.0	13.6
8/05/97	8	5	1997	36.0	14.6
8/06/97	8	6	1997	36.0	12.9
8/07/97	8	7	1997	36.0	15.2
8/18/97	8	18	1997	36.0	13.9
8/19/97	8	19	1997	36.0	13.8
8/20/97	8	20	1997	36.0	14.5
8/21/97	8	21	1997	36.0	13.2
8/22/97	8	22	1997	36.0	12.1
8/26/97	8	26	1997	36.0	13.7
8/27/97	8	27	1997	36.0	14.7
8/28/97	8	28	1997	36.0	12.5
8/29/97	8	29	1997	36.0	14.0
8/30/97	8	30	1997	36.0	14.8
8/31/97	8	31	1997	36.0	13.4
8/01/98	8	1	1998	36.0	18.4
8/02/98	8	2	1998	36.0	16.4
8/03/98	8	3	1998	36.0	17.0
8/04/98	8	4	1998	36.0	17.4
8/05/98	8	5	1998	36.0	17.1
8/06/98	8	6	1998	36.0	15.8
8/07/98	8	7	1998	36.0	13.3
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8/09/98	8	9	1998	36.0	13.6
8/11/98	8	11	1998	36.0	14.1
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8/27/98	8	27	1998	36.0	16.8
8/28/98	8	28	1998	36.0	15.6
8/29/98	8	29	1998	36.0	16.5
8/30/98	8	30	1998	36.0	15.9
8/31/98	8	31	1998	36.0	14.1

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8/02/99	8	2	1999	36.0	14.2
8/03/99	8	3	1999	36.0	16.7
8/04/99	8	4	1999	36.0	16.9
8/05/99	8	5	1999	36.0	15.9
8/06/99	8	6	1999	36.0	16.6
8/07/99	8	7	1999	36.0	16.6
8/08/99	8	8	1999	36.0	16.2
8/30/99	8	30	1999	36.0	15.7
8/31/99	8	31	1999	36.0	14.8
8/16/00	8	16	2000	36.0	17.7
8/17/00	8	17	2000	36.0	18.2
8/18/00	8	18	2000	36.0	18.1
8/19/00	8	19	2000	36.0	17.7
8/20/00	8	20	2000	36.0	18.1
8/21/00	8	21	2000	36.0	17.9
8/22/00	8	22	2000	36.0	18.9
8/23/00	8	23	2000	36.0	18.1
8/24/00	8	24	2000	36.0	18.2
8/25/00	8	25	2000	36.0	18.5
8/26/00	8	26	2000	36.0	18.6
8/27/00	8	27	2000	36.0	18.6
8/28/00	8	28	2000	36.0	18.6
8/29/00	8	29	2000	36.0	18.5
8/30/00	8	30	2000	36.0	19.1
8/31/00	8	31	2000	36.0	18.0
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9/02/95	9	2	1995	36.0	16.3
9/03/95	9	3	1995	36.0	16.4
9/04/95	9	4	1995	36.0	15.5
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9/06/95	9	6	1995	36.0	15.1
9/07/95	9	7	1995	36.0	13.4
9/08/95	9	8	1995	36.0	14.9
9/09/95	9	9	1995	36.0	15.0
9/10/95	9	10	1995	36.0	14.6
9/27/95	9	27	1995	72.0	15.3
9/28/95	9	28	1995	72.0	12.6
9/29/95	9	29	1995	72.0	11.8
9/30/95	9	30	1995	72.0	13.1
9/17/96	9	17	1996	36.0	12.3
9/18/96	9	18	1996	36.0	14.6
9/19/96	9	19	1996	36.0	11.4
9/20/96	9	20	1996	36.0	11.2
9/21/96	9	21	1996	36.0	10.7
9/22/96	9	22	1996	36.0	11.5
9/23/96	9	23	1996	36.0	10.1
9/24/96	9	24	1996	36.0	12.2
9/25/96	9	25	1996	36.0	13.3
9/26/96	9	26	1996	36.0	12.6
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9/03/97	9	3	1997	36.0	13.2
9/04/97	9	4	1997	36.0	13.9
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9/07/97	9	7	1997	36.0	14.3
9/08/97	9	8	1997	36.0	13.1
9/09/97	9	9	1997	36.0	12.2
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9/13/97	9	13	1997	36.0	13.6
9/14/97	9	14	1997	36.0	13.3
9/15/97	9	15	1997	36.0	13.0
9/16/97	9	16	1997	36.0	13.4
9/17/97	9	17	1997	36.0	13.4
9/18/97	9	18	1997	36.0	14.9
9/19/97	9	19	1997	36.0	13.1
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9/02/98	9	2	1998	36.0	16.1
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9/04/98	9	4	1998	36.0	16.0
9/05/98	9	5	1998	36.0	16.8
9/06/98	9	6	1998	36.0	16.1
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9/02/99	9	2	1999	36.0	12.0
9/03/99	9	3	1999	36.0	12.7
9/04/99	9	4	1999	36.0	12.7
9/05/99	9	5	1999	36.0	12.0
9/06/99	9	6	1999	36.0	12.4
9/07/99	9	7	1999	36.0	12.9
9/08/99	9	8	1999	36.0	12.0
9/09/99	9	9	1999	36.0	12.5
9/17/99	9	17	1999	36.0	14.2
9/18/99	9	18	1999	36.0	13.8
9/19/99	9	19	1999	36.0	13.0
9/20/99	9	20	1999	36.0	14.2
9/21/99	9	21	1999	36.0	14.4
9/22/99	9	22	1999	36.0	13.9
9/01/00	9	1	2000	36.0	18.5
9/02/00	9	2	2000	36.0	17.5
9/03/00	9	3	2000	36.0	18.5
9/04/00	9	4	2000	36.0	18.9
9/05/00	9	5	2000	36.0	17.5
9/06/00	9	6	2000	36.0	14.0
9/07/00	9	7	2000	36.0	15.9
9/08/00	9	8	2000	36.0	13.0
9/09/00	9	9	2000	36.0	14.6
9/10/00	9	10	2000	36.0	15.9
9/11/00	9	11	2000	72.0	18.1
10/01/95	10	1	1995	72.0	14.1
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10/06/95	10	6	1995	72.0	14.9
10/07/95	10	7	1995	72.0	11.3
10/08/95	10	8	1995	36.0	10.5
10/09/95	10	9	1995	36.0	11.4
10/10/95	10	10	1995	36.0	12.1
10/11/95	10	11	1995	36.0	12.1
10/12/95	10	12	1995	36.0	13.5
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10/14/95	10	14	1995	36.0	11.1
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10/16/95	10	16	1995	36.0	12.9
10/17/95	10	17	1995	36.0	12.9
10/18/95	10	18	1995	36.0	13.4
10/19/95	10	19	1995	36.0	13.6
10/20/95	10	20	1995	36.0	13.2
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10/23/95	10	23	1995	36.0	10.1
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10/25/95	10	25	1995	36.0	11.8
10/26/95	10	26	1995	36.0	11.8
10/27/95	10	27	1995	36.0	11.8
10/28/95	10	28	1995	36.0	10.2
10/29/95	10	29	1995	36.0	10.5
10/30/95	10	30	1995	36.0	11.5
10/31/95	10	31	1995	36.0	11.6
10/17/96	10	17	1996	36.0	11.9
10/18/96	10	18	1996	36.0	11.5
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10/20/96	10	20	1996	36.0	9.9
10/21/96	10	21	1996	36.0	11.8
10/22/96	10	22	1996	36.0	10.1
10/23/96	10	23	1996	36.0	12.0

10/24/95	10	24	1995	36.0	13.8			
10/25/95	10	25	1995	36.0	11.8			
10/26/95	10	26	1995	36.0	11.8			
10/27/95	10	27	1995	36.0	11.8			
10/28/95	10	28	1995	36.0	10.2			
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10/30/95	10	30	1995	36.0	11.5			
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10/17/96	10	17	1996	36.0	11.9			
10/18/96	10	18	1996	36.0	11.5			
10/19/96	10	19	1996	36.0	12.6			
10/20/96	10	20	1996	36.0	9.9			
10/21/96	10	21	1996	36.0	11.8			
10/22/96	10	22	1996	36.0	10.1			
10/23/96	10	23	1996	36.0	12.0			
10/24/96	10	24	1996	36.0	11.3			
10/25/96	10	25	1996	36.0	10.0			
10/26/96	10	26	1996	36.0	11.8			
10/27/96	10	27	1996	36.0	10.8			
10/01/97	10	1	1997	36.0	13.4			
10/02/97	10	2	1997	36.0	12.3			
10/03/97	10	3	1997	36.0	11.6			
10/04/97	10	4	1997	36.0	12.9			
10/05/97	10	5	1997	36.0	12.9			
10/06/97	10	6	1997	36.0	12.1			
10/07/97	10	7	1997	36.0	13.1			
10/08/97	10	8	1997	36.0	12.9			
10/09/97	10	9	1997	36.0	12.0			
10/10/97	10	10	1997	36.0	13.5			
10/11/97	10	11	1997	36.0	3.4			
10/12/97	10	12	1997	36.0	12.1			
10/13/97	10	13	1997	36.0	11.0			
10/17/97	10	17	1997	36.0	10.4			
10/18/97	10	18	1997	36.0	11.4			
10/19/97	10	19	1997	36.0	9.0			
10/20/97	10	20	1997	36.0	11.7			
10/21/97	10	21	1997	36.0	11.5			
10/22/97	10	22	1997	36.0	12.4			
NUMERICAL AVERAGE				38.0	14.0	=	21.66983 cfs =	0.613532 cms
ACTUAL AVERAGE FOR THE TOTAL NUMBER OF DAYS IN THE SUMMER CRITICAL TIME PERIOD				12.6	4.6			

Bayou Desiard (including Lake Bartholemew) Watershed TMDL
For Biochemical Oxygen Demanding Substances and Nutrients
Subsegment 080701
Originated: January 14, 2002

WINTER CRITICAL SEASON (NOV-APR)

Dates	MONTH	DAY	YEAR	Water Pumped Into Bayou Desiard (mgd)	Water Pumped From Bayou Desiard to WTP (mgd)
1/20/00	1	20	2000	36.0	12.3
1/21/00	1	21	2000	36.0	11.2
1/22/00	1	22	2000	36.0	10.6
1/23/00	1	23	2000	36.0	10.9
1/24/00	1	24	2000	36.0	11.3
1/25/00	1	25	2000	36.0	10.7
1/26/00	1	26	2000	36.0	10.4
2/04/00	2	4	2000	36.0	10.5
2/05/00	2	5	2000	36.0	10.8
2/06/00	2	6	2000	36.0	11.8
2/07/00	2	7	2000	36.0	10.5
2/08/00	2	8	2000	36.0	10.6
2/09/00	2	9	2000	36.0	11.7
2/11/00	2	11	2000	36.0	10.0
2/12/00	2	12	2000	36.0	11.4
2/13/00	2	13	2000	36.0	10.9
2/14/00	2	14	2000	36.0	8.7
3/07/96	3	7	1996	36.0	11.8
3/08/96	3	8	1996	36.0	9.1
3/09/96	3	9	1996	36.0	9.1
3/10/96	3	10	1996	36.0	12.1
3/11/96	3	11	1996	36.0	10.2
3/12/96	3	12	1996	36.0	11.8
3/13/96	3	13	1996	36.0	12.2
3/14/96	3	14	1996	36.0	9.2
3/15/96	3	15	1996	36.0	11.4
3/16/96	3	16	1996	36.0	11.6
3/17/96	3	17	1996	36.0	11.7
3/18/96	3	18	1996	36.0	12.0
3/19/96	3	19	1996	36.0	12.2
3/20/96	3	20	1996	36.0	11.6
3/21/96	3	21	1996	36.0	9.6
3/22/96	3	22	1996	36.0	10.5
3/23/96	3	23	1996	36.0	9.5
3/24/96	3	24	1996	36.0	11.7
3/03/00	3	3	2000	36.0	12.3
3/04/00	3	4	2000	36.0	9.6
3/05/00	3	5	2000	36.0	11.2
3/06/00	3	6	2000	36.0	11.9
3/07/00	3	7	2000	36.0	12.1
3/08/00	3	8	2000	36.0	11.7
3/09/00	3	9	2000	36.0	10.0
3/10/00	3	10	2000	36.0	11.9
3/11/00	3	11	2000	36.0	10.3
3/12/00	3	12	2000	36.0	19.2
4/25/97	4	25	1997	72.0	9.3
4/07/98	4	7	1998	36.0	12.7
4/08/98	4	8	1998	36.0	12.9
4/09/98	4	9	1998	36.0	12.8
4/10/98	4	10	1998	36.0	10.2
4/11/98	4	11	1998	36.0	12.3
4/12/98	4	12	1998	36.0	12.2
4/13/98	4	13	1998	36.0	12.3
4/14/98	4	14	1998	36.0	10.7
4/15/98	4	15	1998	36.0	12.0
4/16/98	4	16	1998	36.0	13.9
4/17/98	4	17	1998	36.0	12.9
11/15/99	11	15	1999	36.0	12.1
11/16/99	11	16	1999	36.0	12.1
11/17/99	11	17	1999	36.0	12.0
11/18/99	11	18	1999	36.0	12.6
11/19/99	11	19	1999	36.0	12.1
11/20/99	11	20	1999	36.0	11.9

Bayou Desiard (including Lake Bartholemew) Watershed TMDL
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11/21/99	11	21	1999	36.0	10.7				
NUMERICAL AVERAGE				36.6	11.4	=	17.63338 cfs =	0.499249 cms	
ACTUAL AVERAGE FOR THE TOTAL NUMBER OF DAYS IN THE SUMMER CRITICAL TIME PERIOD				2.2	0.7				

Solubility of Oxygen in Water Exposed to Water-Saturated Air at Atmospheric Pressure (101.3 kPa).

Input your stream/site name and temperatures into the shaded area.

Stream Name: **Bayou Desiard**

Calculated Oxy. Solubility (mg/l) (note1)	Input Temperature (C^o) (note2)	Site Name / Description	Chlorinity (ppt) (note3)	Calculated Temperature (K^o) (note 1)
7.367	31.50	Ambient WQN Site 0786-Bayou Desiard at contruol structure in Monroe, LA (summer critical temp.)	0.00	304.650
9.239	19.20	Ambient WQN Site 0786-Bayou Desiard at contruol structure in Monroe, LA (winter critical temp.)	0.00	292.350
			0.00	273.150
			0.00	273.150
			0.00	273.150
			0.00	273.150
			0.00	273.150
			0.00	273.150
			0.00	273.150
			0.00	273.150
			0.00	273.150

Note1 - Equation used to calculate Oxygen Solubility was taken from the Standard Methods 18th ed., 1992, Page 4-101. Equation is acceptable for an atmospheric pres. of 101.3 kPa.

note1 - $K^o = (C^o + 273.151)$

Note 2 - Calculations for Oxy. Solubility are accurate for Temperatures between 0 & 40 C^o.

Note 3 - Calculations for Oxy. Solubility are accurate for chlorinities between 0 & 25 parts per thousand.
Chlorinity concentrations can be calculated from salinity by the following equation:
Chlorinity = Salinity/1.80655

Worksheet revised 7/2/2001 by JTB.

Critical Temperature and DO Determinations:

Site Description: Bayou Desiard at control structure in Monroe, Louisiana

Site 0786

Raw Data

Date			DO	Temperature
Mo	D	Yr	(mg/l)	(C^o)
12	14	1999	5.1	13.8
11	16	1999	7.3	17.9
10	19	1999	2.8	22
9	21	1999	2.8	26.2
8	17	1999	5.5	31.2
7	20	1999	5.6	31.7
6	15	1999	7.4	29.8
5	18	1999	8	27.2
4	20	1999	8.9	20.4
3	16	1999	7.9	13.5
2	16	1999	9.7	14.8
1	19	1999	11.9	10.4

Input values into shaded area

Summer Season 90th Percentile, Temperature(^oC):	**31.5**
Winter Season 90th Percentile, Temperature(^oC):	**19.2**
Summer Season Median, DO(mg/l):	**5.55**
Winter Season Median, DO(mg/l):	**8.40**
Annual Median, DO(mg/l):	**7.35**
Annual 10th Percentile, DO(mg/l):	**3.03**

Summer Seasonal Months
5
6
7
8
9
10

Winter Seasonal Months
11
12
1
2
3
4

Summer season DO data count:	**6**
Winter season DO data count:	**6**
Summer season Temperature data count:	**6**
Winter season Temperature data count:	**6**

Calibration Model Non-Point Load Equivalent Calculations:

Modeled stream or water body:	BAYOU DESIARD (SUBSEGMENT 080701)

Shaded cells are input values for calculations.

REACH NUMBER & DESCRIPTION	Calibration Model Reach Length (km)	Calibration Model Average Reach Width (meters)	Calibration Model UCBOD Nonpoint loading (kg/day)	Calibration Model UNBOD Nonpoint loading (kg/day)	Calibration Model UCBOD Nonpoint loading (gm O_2/m^2/day)	Calibration Model UNBOD Nonpoint loading (gm O_2/m^2/day)	Calibration Model SOD (gm O_2/m^2/day)	Calibration Model TOTAL Benthic Load (gm O_2/m^2/day)
	A	B	C	D	E = C / (A x B)	F = D / (A x B)	G	H = E + F + G
REACH 1: Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	0.08	2.52	55	0.0	272.817	0.000	0.00	**272.82**
REACH 2: BDS 2 (outfall of L. Bartholemew pump) - BDS 3 (midpoint of L. Bartholemew right fork)	6.46	62.52	2850	1599.5	7.057	3.960	0.00	**11.02**
REACH 3: BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	4.50	89.95	1700	685.5	4.200	1.694	0.00	**5.89**
REACH 4: BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	0.40	115.09	825	160.0	17.921	3.474	0.00	**21.40**
REACH 5: BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	4.20	123.94	2950	4570.0	5.667	8.779	0.00	**14.45**
REACH 6: BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	4.33	115.09	2750	1142.5	5.518	2.293	0.00	**7.81**
REACH 7: Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	0.08	6.85	0	342.8	0.000	625.456	9.0	**634.46**
REACH 8: Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S. 165 Control Structure Outlet	0.08	2.47	0	0.0	0.000	0.000	9.0	**9.00**
REACH 9: Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	0.33	42.91	0	0.0	0.000	0.000	9.0	**9.00**
REACH 10: BDS 7 (B. Desiard at U.S. 165) BDS 8 (B. Desiard at LA Hwy. 134)	7.36	22.18	670	685.5	4.104	4.199	2.5	**10.80**
REACH 11: BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	6.79	22.18	670	685.5	4.449	4.552	0.0	**9.00**
REACH 12: Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	5.71	77.05	1200	685.5	2.728	1.558	2.5	**6.79**
REACH 13: BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	2.39	77.05	950	228.5	5.159	1.241	2.5	**8.90**
REACH 14: Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	0.01	2.76	0	0.0	0.000	0.000	0.0	**0.00**
REACH 15: Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	0.29	18.72	0	22.9	0.000	4.238	0.0	**4.24**
REACH 16: Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	0.01	2.76	0	0.0	0.000	0.000	0.0	**0.00**
REACH 17: Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	0.04	18.72	0	22.9	0.000	30.515	0.0	**30.52**
REACH 18: BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	0.10	18.72	0	22.9	0.000	12.206	0.0	**12.21**
REACH 19: Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	1.06	91.11	1500	68.6	15.532	0.710	2.5	**18.74**
REACH 20: BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	6.55	91.11	3100	1142.5	5.195	1.914	0.0	**7.11**

Bayou Desiard (including Lake Bartholemew) Watershed TMDL
For Biochemical Oxygen Demanding Substances and Nutrients
Subsegment 080701
Originated: January 14, 2002

Calibration Model Non-Point Load Equivalent Calculations:

Modeled stream or water body:	BAYOU DESIARD (SUBSEGMENT 080701)

Shaded cells are input values for calculations.

REACH NUMBER & DESCRIPTION	Calibration Model Reach Length (km)	Calibration Model Average Reach Width (meters)	Calibration Model UCBOD Nonpoint loading (kg/day)	Calibration Model UNBOD Nonpoint loading (kg/day)	Calibration Model UCBOD Nonpoint loading (gm O_2/m^2/day)	Calibration Model UNBOD Nonpoint loading (gm O_2/m^2/day)	Calibration Model SOD (gm O_2/m^2/day)	Calibration Model TOTAL Benthic Load (gm O_2/m^2/day)
	A	**B**	**C**	**D**	**E = C / (A x B)**	**F = D / (A x B)**	**G**	**H = E + F + G**
REACH 21: Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	0.08	2.57	0	0.0	0.000	0.000	0.0	**0.00**
REACH 22: Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd.	2.35	95.50	250	114.3	1.114	0.509	0.0	**1.62**
REACH 23: Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd.	0.04	2.57	0	0.0	0.000	0.000	0.0	**0.00**
REACH 24: Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downstream of the Midway Dam Control Structure)	0.04	99.99	2950	457.0	737.574	114.261	0.0	**851.84**
REACH 25: BDS 13 (Bayou Desiard Downstream of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	5.93	99.99	3200	457.0	5.397	0.771	0.0	**6.17**
REACH 26: BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	0.05	12.53	1250	457.0	1995.211	729.449	0.0	**2724.66**
REACH 27: Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	0.05	2.57	0	0.0	0.000	0.000	0.0	**0.00**
REACH 28: Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	2.83	118.29	2300	1142.5	6.871	3.413	0.0	**10.28**
REACH 29: BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	3.29	118.29	2500	2285.0	6.424	5.871	0.0	**12.30**
REACH 30: BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	2.79	125.91	3000	2056.5	8.540	5.854	0.0	**14.39**
REACH 31: BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	0.07	125.28	20	45.7	2.281	5.211	0.0	**7.49**

Summer Projection, Non-Point Benthic Load Input and TMDL Calculations:

Modeled stream or water body: BAYOU DESIARD (SUBSEGMENT 080701)

Shaded cells are input values for calculations.
Values to be used in the projection models.

Reach Number and Description	Calibration Model Values: Non-Point UCBOD gm O2/[m²*day] A (note 1)	Non-Point UNBOD gm O2/[m²*day] B (note 1)	SOD @ 20°C gm O2/[m²*day] C (note 1)	Total Calb. Benthic Load (TCBL) gm O2/[m²*day] D (note 1)	Reach Length Kilometer E (note 1)	Back-ground Benthic Load gm O2/[m²*day] F0	Back-ground percentage reduction % F1	Back-ground Benthic Load adjusted for % reduction gm O2/[m²*day] F = F0*(1-F1)	Proj. Model Avg. Reach Width Meters G	Proj. Temp. degrees Celsius I	Percentage Reduction of man-made sources % H	TCBL adjusted for % reduction (Reduced TCBL) gm O2/[m²*day] J (note 2)
REACH 1: Length of Pipe: BDS 1 (Bayou Bartholomew at pump intake) - BDS 2	272.117	0.000	0.00	272.117	0.00	0.00	0%	0.00	2.52	30.50	30.0%	136.41
REACH 2: BDS 2 (outfall of L. Bartholomew pump) - BDS 3 (midpoint of L. Bartholomew right fork)	7.057	3.960	0.00	11.017	6.46	0.00	0%	0.00	62.52	30.30	30.0%	5.51
REACH 3: BDS 3 (midpoint of L. Bartholomew right fork) - BDS 4 (L. Bartholomew at U.S. Hwy. 165)	4.200	1.694	0.00	5.893	4.38	0.00	0%	0.00	89.95	30.30	30.0%	2.95
REACH 4: BDS 4 (L. Bartholomew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	17.921	3.474	0.00	21.395	0.48	0.00	0%	0.00	115.09	30.30	30.0%	10.70
REACH 5: BDS 5 (L. Bartholomew overflow control structure) - BDS 6 (midpoint of L. Bartholomew left fork)	5.667	8.779	0.00	14.446	4.28	0.00	0%	0.00	125.94	30.30	30.0%	7.22
REACH 6: BDS 6 (midpoint of L. Bartholomew left fork) - Inlet canal to U.S. 165 Control Structure	5.518	2.293	0.00	7.811	4.33	0.00	0%	0.00	115.09	30.30	30.0%	3.91
REACH 7: Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	0.000	623.456	9.00	634.456	0.00	0.00	0%	0.00	6.85	30.30	30.0%	317.23
REACH 8: Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S. 165 Control Structure Outlet	0.000	0.000	9.00	9.000	0.00	0.00	0%	0.00	2.47	30.30	30.0%	4.50
REACH 9: Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	0.000	0.000	9.00	9.000	0.33	0.00	0%	0.00	42.91	30.30	30.0%	4.50
REACH 10: BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at La Hwy. 134)	4.104	4.299	1.50	10.853	7.36	0.00	0%	0.00	22.15	30.30	30.0%	5.40
REACH 11: BDS 8 (B. Desiard at La Hwy 134) - Mill Bayou	4.449	4.552	0.00	9.001	6.79	0.00	0%	0.00	22.22	30.30	30.0%	4.50
REACH 12: Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	2.728	1.338	1.50	6.786	3.71	0.00	0%	0.00	77.05	30.30	30.0%	3.39
REACH 13: BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	3.159	1.241	1.50	5.900	2.39	0.00	0%	0.00	77.05	30.30	30.0%	4.45
REACH 14: Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	0.000	0.000	0.00	0.000	0.01	0.00	0%	0.00	2.55	30.30	30.0%	0.00
REACH 15: Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	0.000	4.238	0.00	4.238	0.29	0.00	0%	0.00	18.72	30.30	30.0%	2.12
REACH 16: Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	0.000	0.000	0.00	0.000	0.01	0.00	0%	0.00	2.55	30.30	30.0%	0.00
REACH 17: Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	0.000	30.513	0.00	30.515	0.04	0.00	0%	0.00	18.72	30.30	30.0%	15.26
REACH 18: BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	0.000	12.206	0.00	12.206	0.38	0.00	0%	0.00	18.72	30.30	30.0%	6.10
REACH 19: Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	15.532	0.708	1.50	18.742	3.86	0.00	0%	0.00	91.11	30.30	30.0%	9.37
REACH 20: BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	5.195	1.914	0.00	7.109	6.33	0.00	0%	0.00	91.11	30.30	30.0%	3.55
REACH 21: Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	0.000	0.000	0.00	0.000	0.00	0.00	0%	0.00	2.57	30.30	30.0%	0.00
REACH 22: Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Indiant Rd.	1.114	0.509	0.00	1.623	2.33	0.00	0%	0.00	95.50	30.30	30.0%	0.81
REACH 23: Length of pipe: Pipe intake at Midway Dam Control Structure at Indiant Rd. - Pipe outfall at the Midway Dam Control Structure at Indiant Rd.	0.000	0.000	0.00	0.000	0.04	0.00	0%	0.00	2.57	30.30	30.0%	0.00
REACH 24: Pipe outfall at the Midway Dam Control Structure at Indiant Rd. - BDS 13 (Bayou Desiard Downstream of the Midway Dam Control Structure)	737.574	104.361	0.00	851.935	0.04	0.00	0%	0.00	99.99	30.30	30.0%	425.92
REACH 25: BDS 13 (Bayou Desiard Downstream of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	5.397	0.771	0.00	6.168	3.93	0.00	0%	0.00	99.99	30.30	30.0%	3.08
REACH 26: BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	1995.211	729.449	0.00	2724.661	0.03	0.00	0%	0.00	11.55	30.30	30.0%	1362.33
REACH 27: Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	0.000	0.000	0.00	0.000	0.03	0.00	0%	0.00	2.57	30.30	30.0%	0.00
REACH 28: Pipe outfall at Stadium Drive - BDS 15 (Philip's Bridge near U.S. 165)	6.871	3.413	0.00	10.283	2.03	0.00	0%	0.00	115.29	30.30	30.0%	5.14
REACH 29: BDS 15 (Philip's Bridge near U.S. 165) - BDS 16 (Bogg Bayou Outlet Control Structure)	6.424	5.871	0.00	12.295	3.29	0.00	0%	0.00	115.29	30.30	30.0%	6.15
REACH 30: BDS 16 (Bogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, La Water Treatment Plant Intake)	8.540	5.854	0.00	14.394	2.79	0.00	0%	0.00	125.91	30.30	30.0%	7.20
REACH 31: BDS 17 (City of Monroe, La Water Treatment Plant Intake)	2.281	5.211	0.00	7.492	0.07	0.00	0%	0.00	125.58	30.30	30.0%	3.75
Sub-Total												2361.44

Reach Number	Projection Model Equivalents: Reduced TCBL adjusted for MOS gm O2/[m²*day] K (note 3)	Non-Point UCBOD gm O2/[m²*day] L = (K)(A / D)	Non-Point UNBOD gm O2/[m²*day] M = (K)(B / D)	SOD @ 20°C gm O2/[m²*day] N = (K)(C / D)	Projected Model Loads: Non-Point UCBOD INPUTS (kg/day) O = (E)(G)(L)	Non-Point UNBOD INPUTS (kg/day) P = (E)(G)(M)	SOD load @ Proj. temp. (kg/day) Q (note 4)	Total Projection Benthic Load (LA+MOS) (kg/day) O + P + Q	Margin of Safety Loads: MOS Total Benthic Load @ 20°C (kg/day) R = (K-J)(E)(G)	MOS SOD @ 20°C (kg/day) S = (E)(G)(N)	Non-Point UCBOD MOS Loads (kg/day) T = (R)(A/D)	Non-Point UNBOD MOS Loads (kg/day) U = (R)(B/D)	Adjusted SOD MOS @ Proj. temp. (kg/day) V (note 5)	Adjusted Total MOS @ Proj. temp. (kg/day) T + U + V
REACH 1	170.51	170.511	0.000	0.00	34.33	0.00	0	34.33	7	0	7	0	0	7
REACH 2	6.89	4.480	2.457	0.00	1701.27	999.69	0	2700.94	556	0	356	200	0	556
REACH 3	3.68	2.625	1.058	0.00	1062.38	428.44	0	1490.94	298	0	213	86	0	298
REACH 4	13.37	11.200	2.172	0.00	513.63	99.57	0	613.39	123	0	103	20	0	123
REACH 5	9.03	3.542	5.487	0.00	1843.73	2856.23	0	4700.00	940	0	369	571	0	940
REACH 6	4.88	3.449	1.433	0.00	1718.73	714.06	0	2432.81	487	0	344	143	0	487
REACH 7	396.54	0.000	390.918	5.63	0.00	214.22	6	220.30	43	1	0	43	1	44
REACH 8	5.63	0.000	0.000	5.63	0.00	0.00	2	2.29	0	0	0	0	0	0
REACH 9	5.63	0.000	0.000	5.63	0.00	0.00	164	164.33	16	16	0	0	33	33
REACH 10	6.75	2.565	2.615	1.36	418.73	428.44	526	1373.42	220	35	84	86	105	275
REACH 11	5.63	2.781	2.843	0.00	418.73	428.44	0	847.19	169	0	84	86	0	169
REACH 12	4.24	1.705	0.974	1.36	738.88	428.44	1483	2396.63	373	137	150	86	284	519
REACH 13	5.56	3.224	0.776	1.36	383.73	142.83	594	1338.19	205	35	119	29	119	266
REACH 14	0.00	0.000	0.000	0.00	0.00	0.00	0	0.00	0	0	0	0	0	0
REACH 15	2.65	0.000	2.648	0.00	0.00	14.28	0	14.28	3	0	0	3	0	3
REACH 16	0.00	0.000	0.000	0.00	0.00	0.00	0	0.00	0	0	0	0	0	0
REACH 17	19.07	0.000	19.072	0.00	0.00	14.28	0	14.28	3	0	0	3	0	3
REACH 18	7.63	0.000	7.629	0.00	0.00	14.28	0	14.28	3	0	0	3	0	3
REACH 19	11.71	9.708	0.444	1.36	937.38	42.84	311	1291.47	226	38	188	9	62	258
REACH 20	4.44	3.245	1.197	0.00	1937.38	714.06	0	2651.36	530	0	388	143	0	530
REACH 21	0.00	0.000	0.000	0.00	0.00	0.00	0	0.00	0	0	0	0	0	0
REACH 22	1.01	0.696	0.318	0.00	156.27	71.41	0	227.68	46	0	31	14	0	46
REACH 23	0.00	0.000	0.000	0.00	0.00	0.00	0	0.00	0	0	0	0	0	0
REACH 24	532.40	460.984	71.413	0.00	1843.73	285.63	0	2129.35	426	0	369	57	0	426
REACH 25	3.85	3.373	0.482	0.00	2000.00	285.63	0	2285.63	457	0	400	57	0	457
REACH 26	1702.91	1247.007	455.906	0.00	781.25	285.63	0	1066.88	213	0	156	57	0	213
REACH 27	0.00	0.000	0.000	0.00	0.00	0.00	0	0.00	0	0	0	0	0	0
REACH 28	6.43	4.296	2.133	0.00	1437.38	714.06	0	2151.36	430	0	288	143	0	430
REACH 29	7.68	4.015	3.670	0.00	1562.38	1428.13	0	2990.63	598	0	313	286	0	598
REACH 30	9.00	5.339	3.659	0.00	1875.00	1285.11	0	3160.11	632	0	375	257	0	632
REACH 31	4.68	1.425	3.257	0.00	32.33	28.63	0	61.16	8	0	5	6	0	8
Sub-Total					21,681	11,905	3022	**36629**	7014		4036	2383	604	**7,326**

Notes: Note 1. Data was calculated in and brought from the Calibration worksheet dataset.
Note 2. J = [(1 - H) x (D - F) + F]
Note 3. K = [(J - F) / (1 - MOS) + F]
Note 4. $Q = E \times G \times N \times 1.065^{(T-20)}$
Note 5. $V = S \times 1.065^{(T-20)}$
Note 6. $AC = E \times G \times Z \times 1.065^{(T-20)}$

EXPLICIT MARGINS:

MARGIN OF SAFETY (MOS) (%) = (MOG + MOU) = **20%**

Summer TMDL calculations and Projection model calculations for Headwater / Tributary loads:

BAYOU DESIARD (SUBSEGMENT 080701)

Shaded cells are input values for calculations.
Values to be used in the projection models.

Headwater / Tributary load determinations

Headwater / Tributary Description and Reach #	Seasonal Critical flow (cms)	UCBOD (mg/l)	UNBOD (mg/l)	UCBOD (kg/day)	UNBOD (kg/day)	Background UCBOD conc. (mg/l)	Background UNBOD conc. (mg/l)	Background % Reduction	Background UCBOD Load (kg/day)	Background UNBOD Load (kg/day)	Percent reduction of Man-Made loads	UCBOD load adjusted for % Reduction (kg/day)	UNBOD load adjusted for % Reduction (kg/day)	Reduced UCBOD load adjusted for MOS (kg/day)	Reduced UNBOD load adjusted for MOS (kg/day)	Projection UCBOD input conc. (mg/l)	Projection UNBOD input conc. (mg/l)	Total MOS (kg/day)	Total LA (kg/day)
	A	B	C	D = (86.4)(A)(B)	E = (86.4)(A)(C)	F	G	H1	H = (1-H1)(86.4)(A)(F)	I = (1-H1)(86.4)(A)(G)	J	K = (D-H)(1-J) + H	L = (D-I)(1-J) + I	M = (K - H) / (1 - MOS) + H	N = (L - I) / (1 - MOS) + I	(M)/[(A)(86.4)]	(N)/[(A)(86.4)]	(M+N) - (K+L)	K + L
Lake Bartholemew near the pumping station at Levee Road (east end)	0.10278	11.55	6.81	102.57	60.47			0%	0.00	0.00	50%	51.28	30.23	64.10	37.79	7.22	4.26	**20.38**	**81.52**
Lake Bartholemew near the overflow control structure(west end)	0.10278	13.74	7.68	122.01	68.18			0%	0.00	0.00	50%	61.01	34.09	76.26	42.61	8.59	4.80	**23.77**	**95.10**
Hannah's Run (East) at the Black Bayou Lake Control Structure	1.45612	23.83	4.20	2,998.02	528.95			0%	0.00	0.00	50%	1499.01	264.48	1873.76	330.59	14.89	2.63	**440.87**	**1,763.49**
SUB-TOTAL TMDL LOADING				**3,223**	**658**				**0**	**0**		**1,611**	**329**	**2,014**	**411**			**485**	**1,940**

EXPLICIT MARGINS:

MARGIN OF SAFETY (MOS) (%) = **20%**

Winter Projection, Non-Point Benthic Load Input and TMDL Calculations:

Modeled stream or water body: BAYOU DESIARD (SUBSEGMENT 080701)

Shaded cells are input values for calculations

Values to be used in the projection models

Reach Number and Description	Calibration Model Values: Non-Point BCBOD	Non-Point BNBOD	SOD @ 20°C	Total Calib. Benthic Load (TCBL)	Reach Length	Back-ground Benthic Load	Back-ground percentage reduction	Back-ground Benthic Load adjusted for % reduction	Proj. Model Avg. Reach Width	Proj. Temp.	Percentage Reduction of man-made sources	TCBL adjusted for % reduction (Reduced TCBL)	Projection Model Equations: Reduced TCBL adjusted for MOS	Non-Point BCBOD	Non-Point BNBOD	SOD @ 20°C	Projected Model Loads: Non-Point BCBOD DEPOSIT	Non-Point BNBOD DEPOSIT	SOD Load @ Proj. Temp.	Total Projection Benthic Load (LA+BOD)	Margin of Safety Loads: MOS Total Benthic Load @ 20°C	MOS SOD @ 20°C	Non-Point BCBOD MOS Loads	Non-Point BNBOD MOS Loads	Adjusted SOD MOS @ Proj. Temp	Adjusted Total MOS @ Proj. Temp
	gm O_2 / [m²*day]	gm O_2 / [m²*day]	gm O_2 / [m²*day]	gm O_2 / [m²*day]	Kilo-meters	gm O_2 / [m²*day]	%	gm O_2 / [m²*day]	Meters	Degrees Celsius	%	gm O_2 / [m²*day]	gm O_2 / [m²*day]	gm O_2 / [m²*day]	gm O_2 / [m²*day]	gm O_2 / [m²*day]	(kg/day)	(kg/day)	(kg/day)	(kg/day)	(kg/day)	(kg/day)	(kg/day)	(kg/day)	(kg/day)	(kg/day)
	A, (note 1)	B, (note 1)	C, (note 1)	D, (note 1)	E, (note 1)	F1	F2	F = F1*(1-F2)	G	I	H	J, (note 2)	K, (note 3)	L = (K/(A+B))*A	M = (K/(A+B))*B	N = (K/C)*C	O = (E*G*L)	P = (E*G*M)	Q, (note 4)	O + P + Q	R = (K-J)*E*G	S = (E*G*N)	T = (E*G*L)	U = (E*G*M)	V, (note 5)	T + U + V
REACH 1: Length of Pipe: BDS 1 (Bayou Bartholomew at pump intake) - BDS 2	272.817	0.000	0.00	272.817	0.00	0.00	0%	0.00	1.53	19.20	50.0%	136.41	170.51	170.511	0.0000	0.00	34.38	0.00	0	34.38	7	0	7	0	0	7
REACH 2: BDS 2 (outfall of L. Bartholomew pump) - BDS 3 (midpoint of L. Bartholomew right fork)	7.057	3.960	0.00	11.017	6.46	0.00	0%	0.00	61.52	19.20	50.0%	5.51	6.89	4.418	2.473	0.00	1780.20	999.69	0	2708.94	556	0	356	200	0	556
REACH 3: BDS 3 (midpoint of L. Bartholomew right fork) - BDS 4 (L. Bartholomew at U.S. Hwy. 165)	4.200	1.684	0.00	5.883	4.50	0.00	0%	0.00	89.90	19.20	50.0%	2.93	3.68	2.623	1.058	0.00	1062.50	428.44	0	1490.94	298	0	213	0	0	213
REACH 4: BDS 4 (L. Bartholomew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	17.823	3.474	0.00	21.297	0.40	0.00	0%	0.00	111.88	19.20	50.0%	10.78	13.37	11.200	2.172	0.00	515.63	99.97	0	615.59	123	0	103	0	0	103
REACH 5: BDS 3 (L. Bartholomew overflow control structure) - BDS 4 (midpoint of L. Bartholomew left fork)	5.667	8.779	0.00	14.446	4.20	0.00	0%	0.00	111.94	19.20	50.0%	7.22	9.03	3.542	5.487	0.00	1840.75	2856.25	0	4788.00	948	0	369	0	0	369
REACH 6: BDS 4 (midpoint of L. Bartholomew left fork) - Inlet canal to U.S. 165 Control Structure	5.528	2.285	0.00	7.811	4.50	0.00	0%	0.00	111.09	19.20	50.0%	3.91	4.88	3.449	1.433	0.00	1718.75	714.06	0	2432.81	487	0	344	0	0	344
REACH 7: Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	0.000	633.406	9.00	634.436	0.00	0.00	0%	0.00	4.83	19.20	50.0%	317.23	396.54	0.0000	390.918	5.63	0.00	214.23	3	217.15	43	1	0	0	1	1
REACH 8: Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S. 165 Control Structure Outlet	0.000	0.000	9.00	9.000	0.00	0.00	0%	0.00	1.47	19.20	50.0%	4.50	5.63	0.0000	0.0000	5.63	0.00	0.00	1	1.06	0	0	0	0	0	0
REACH 9: Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	0.000	0.000	9.00	9.000	0.33	0.00	0%	0.00	42.90	19.20	50.0%	4.50	5.63	0.0000	0.0000	5.63	0.00	0.00	56	55.74	56	56	0	0	11	11
REACH 10: BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at La. Hwy. 134)	4.204	4.199	2.50	10.903	7.36	0.00	0%	0.00	22.18	19.20	50.0%	5.40	6.75	2.563	2.633	1.56	408.75	428.44	248	1089.75	220	51	84	0	49	133
REACH 11: BDS 8 (B. Desiard at La. Hwy. 134) - Mill Bayou	4.489	4.552	0.00	9.061	6.79	0.00	0%	0.00	22.18	19.20	50.0%	4.58	5.63	2.781	2.845	0.00	408.75	428.44	0	847.19	169	0	84	86	0	169
REACH 12: Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	2.528	1.558	2.50	6.786	3.71	0.00	0%	0.00	77.83	19.20	50.0%	3.39	4.24	1.783	0.974	1.56	750.00	428.44	654	1832.89	373	137	150	86	131	366
REACH 13: BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	5.159	1.248	2.50	8.908	2.39	0.00	0%	0.00	77.83	19.20	50.0%	4.45	5.56	3.224	0.776	1.56	593.75	142.81	274	1010.16	203	58	119	29	55	203
REACH 14: Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	0.000	0.000	0.00	0.000	0.01	0.00	0%	0.00	2.76	19.20	50.0%	0.00	0.00	0.0000	0.0000	0.00	0.00	0.00	0	0.00	0	0	0	0	0	0
REACH 15: Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	0.000	4.238	0.00	4.238	0.29	0.00	0%	0.00	10.72	19.20	50.0%	2.12	2.65	0.0000	2.649	0.00	0.00	34.28	0	34.28	7	0	0	7	0	7
REACH 16: Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	0.000	0.000	0.00	0.000	0.01	0.00	0%	0.00	2.76	19.20	50.0%	0.00	0.00	0.0000	0.0000	0.00	0.00	0.00	0	0.00	0	0	0	0	0	0
REACH 17: Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	0.000	30.513	0.00	30.513	0.04	0.00	0%	0.00	10.72	19.20	50.0%	15.26	19.07	0.0000	19.070	0.00	0.00	34.28	0	34.28	7	0	0	7	0	7
REACH 18: BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	0.000	12.206	0.00	12.206	0.10	0.00	0%	0.00	10.72	19.20	50.0%	6.10	7.63	0.0000	7.629	0.00	0.00	34.28	0	34.28	7	0	0	7	0	7
REACH 19: Hannah's Run - BDS 10 (B. Desiard at Tanner Island Rd.)	15.582	0.710	2.50	18.742	1.86	0.00	0%	0.00	91.10	19.20	50.0%	9.37	11.71	9.787	0.444	1.56	937.50	42.84	148	1128.83	226	30	188	9	29	225
REACH 20: BDS 10 (B. Desiard at Tanner Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Charvet)	5.295	1.914	0.00	7.209	4.55	0.00	0%	0.00	91.10	19.20	50.0%	3.55	4.44	3.247	1.187	0.00	1937.50	714.06	0	2651.56	530	0	388	143	0	530
REACH 21: Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Charvet) - Pipe outfall on downstream side of L-11 Canal (B. Charvet)	0.000	0.000	0.00	0.000	0.00	0.00	0%	0.00	1.57	19.20	50.0%	0.00	0.00	0.0000	0.0000	0.00	0.00	0.00	0	0.00	0	0	0	0	0	0
REACH 22: Pipe outfall on downstream side of L-11 Canal (B. Charvet) - Pipe intake at Midway Dam Control Structure at Indiant Rd.	1.114	0.509	0.00	1.623	2.35	0.00	0%	0.00	91.38	19.20	50.0%	0.81	1.01	0.696	0.318	0.00	156.25	71.41	0	227.66	46	0	31	0	0	31
REACH 23: Length of pipe: Pipe intake at Midway Dam Control Structure at Indiant Rd. - Pipe outfall at the Midway Dam Control Structure at Indiant Rd.	0.000	0.000	0.00	0.000	0.04	0.00	0%	0.00	1.57	19.20	50.0%	0.00	0.00	0.0000	0.0000	0.00	0.00	0.00	0	0.00	0	0	0	0	0	0
REACH 24: Pipe outfall at the Midway Dam Control Structure at Indiant Rd. - BDS 13 (Bayou Desiard downstream of the Midway Dam Control Structure)	755.554	104.268	0.00	851.833	0.04	0.00	0%	0.00	99.99	19.20	50.0%	425.92	532.40	460.984	71.413	0.00	1843.75	283.63	0	2129.38	426	0	369	57	0	426
REACH 25: BDS 13 (Bayou Desiard downstream of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	5.397	0.771	0.00	6.168	3.93	0.00	0%	0.00	99.99	19.20	50.0%	3.08	3.85	3.373	0.482	0.00	2000.00	283.63	0	2283.63	457	0	400	57	0	457
REACH 26: BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	1995.211	729.449	0.00	2724.661	0.05	0.00	0%	0.00	11.33	19.20	50.0%	1362.33	1702.91	1247.01	455.91	0.00	781.25	283.63	0	1066.88	213	0	156	57	0	213
REACH 27: Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive	0.000	0.000	0.00	0.000	0.05	0.00	0%	0.00	1.57	19.20	50.0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0	0	0	0	0	0
REACH 28: Pipe outfall at Stadium Drive - BDS 15 (Phillips Bridge near U.S. 165)	6.871	3.413	0.00	10.283	2.03	0.00	0%	0.00	118.29	19.20	50.0%	5.14	6.43	4.29	2.13	0.00	1437.50	714.06	0	2151.56	430	0	288	143	0	430
REACH 29: BDS 15 (Phillips Bridge near U.S. 165) - BDS 16 (Slogg Bayou Outlet Control Structure)	6.424	5.871	0.00	12.295	3.29	0.00	0%	0.00	118.29	19.20	50.0%	6.15	7.68	4.01	3.67	0.00	1562.50	1428.13	0	2990.63	598	0	313	0	0	313
REACH 30: BDS 16 (Slogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	8.548	5.804	0.00	14.394	2.79	0.00	0%	0.00	123.91	19.20	50.0%	7.20	9.00	5.34	3.66	0.00	1875.00	1283.38	0	3168.31	632	0	375	257	0	632
REACH 31: BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	2.281	5.211	0.00	7.492	0.07	0.00	0%	0.00	123.76	19.20	50.0%	3.75	4.68	1.43	3.26	0.00	11.33	28.67	0	40.22	8	0	3	6	0	8
Sub-Total												1361.44					28,683	11,925	1,308	**34,999**	7814		4836	1107	278	**5752**

Notes: Note 1, Data was calculated in and brought from the Calibration worksheet-dataset.
Note 2, $J = [(1 - H) \times (D - F) + F]$
Note 3, $K = [(J - F)/(1 - MOS) + F]$
Note 4, $Q = E \times G \times N \times 1.065^{(I-20)}$
Note 5, $V = S \times 1.065^{(I-20)}$
Note 6, $AC = E \times G \times Z \times 1.065^{(I-20)}$

EXPLICIT MARGINS:

MARGIN OF SAFETY (MOS) (%) = (MOS + MOS) = 20%

Winter TMDL calculations and Projection model calculations for Headwater / Tributary loads:

BAYOU DESIARD (SUBSEGMENT 080701)

Shaded cells are input values for calculations.
Values to be used in the projection models.

Headwater / Tributary load determinations

Headwater / Tributary Description and Reach #	Seasonal Critical flow (cms)	UCBOD (mg/l)	UNBOD (mg/l)	UCBOD (kg/day)	UNBOD (kg/day)	Background UCBOD conc. (mg/l)	Background UNBOD conc. (mg/l)	Background % Reduction	Background UCBOD Load (kg/day)	Background UNBOD Load (kg/day)	Percent reduction of Man-Made loads	UCBOD load adjusted for % Reduction (kg/day)	UNBOD load adjusted for % Reduction (kg/day)	Reduced UCBOD load adjusted for MOS (kg/day)	Reduced UNBOD load adjusted for MOS (kg/day)	Projection UCBOD input conc. (mg/l)	Projection UNBOD input conc. (mg/l)	Total MOS (kg/day)	Total LA (kg/day)
	A	B	C	D = (86.4)(A)(B)	E = (86.4)(A)(C)	F	G	H1	H = (1-H1)(86.4)(A)(F)	I = (1-H1)(86.4)(A)(G)	J	K = (D-H)(1-J) + H	L = (D-I)(1-J) + I	M = (K - H) / (1 - MOS) + H	N = (L - I) / (1 - MOS) + I	(M)/[(A)(86.4)]	(N)/[(A)(86.4)]	(M+N) - (K+L)	K + L
Lake Bartholemew near the pumping station at Levee Road (east end)	0.10278	11.55	6.81	102.57	60.47			0%	0.00	0.00	50%	51.28	30.23	64.10	37.79	7.22	4.26	**20.38**	**81.52**
Lake Bartholemew near the overflow control structure(west end)	0.10278	13.74	7.68	122.01	68.18			0%	0.00	0.00	50%	61.01	34.09	76.26	42.61	8.59	4.80	**23.77**	**95.10**
Hannah's Run (East) at the Black Bayou Lake Control Structure	1.45612	23.83	4.20	2,998.02	528.95			0%	0.00	0.00	50%	1499.01	264.48	1873.76	330.59	14.89	2.63	**440.87**	**1,763.49**
SUB-TOTAL TMDL LOADING				**3,223**	**658**				**0**	**0**		**1,611**	**329**	**2,014**	**411**			**485**	**1,940**

EXPLICIT MARGINS:

MARGIN OF SAFETY (MOS) (%) = **20%**

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients

Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	1.720	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.720	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
2	BDS 2 (outfall of L. Bartholemew pump) - BDS 3 (midpoint of L. Bartholemew right fork)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	61.720	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	3.410	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
3	BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	89.150	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	3.620	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
4	BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	114.290	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	3.340	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
5	BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	123.140	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	3.900	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
6	BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	114.290	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	3.340	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients

7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	6.000	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.000	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
8	Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S. 165 Control Structure Outlet	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
9	Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	42.060	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.660	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
10	BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at LA Hwy. 134)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	21.330	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.830	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
11	BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	21.330	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.830	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
12	Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	76.200	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.310	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
13	BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	76.200	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.310	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients

14	Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	1.720	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.720	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
15	Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	17.680	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.420	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
16	Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	1.720	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.720	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
17	Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	17.680	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.420	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
18	BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	17.680	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.420	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	90.060	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.430	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients

20	BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	90.060	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.430	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
22	Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd.	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	94.550	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.345	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
23	Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd.	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
24	Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	99.040	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.260	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
25	BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	99.040	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.260	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients

26	BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	11.580	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.470	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
27	Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
28	Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	117.340	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.660	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
29	BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	117.340	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.660	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
30	BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	124.960	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	4.850	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	124.960	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	4.850	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 10, Dispersive Hydraulic Coefficients

Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	0.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
2	BDS 2 (outfall of L. Bartholemew pump) - BDS 3 (midpoint of L. Bartholemew right fork)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
3	BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
4	BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
5	BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
6	BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 10, Dispersive Hydraulic Coefficients

7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
8	Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S. 165 Control Structure Outlet	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
9	Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
10	BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at LA Hwy. 134)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
11	BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	Tidal Range	Fraction		
		Dispersion "A"	Unitless	0.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
12	Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	4.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 10, Dispersive Hydraulic Coefficients

13	BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	Tidal Range	Fraction		
		Dispersion "A"	Unitless	4.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
14	Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
15	Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	Tidal Range	Fraction		
		Dispersion "A"	Unitless	4.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
16	Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
17	Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	4.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
18	BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	Tidal Range	Fraction		
		Dispersion "A"	Unitless	4.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 10, Dispersive Hydraulic Coefficients

19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	4.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
20	BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	4.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
22	Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd.	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
23	Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd.	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
24	Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
25	BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 10, Dispersive Hydraulic Coefficients

26	BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
27	Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
28	Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
29	BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
30	BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
1	Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	1.3	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.0	Based upon calibration and BPJ
2	BDS 2 (outfall of L. Bartholemew pump) BDS 3 (midpoint of L. Bartholemew right fork)	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	20.50	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
3	BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	22.40	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
4	BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	36.40	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
5	BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	42.40	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
6	BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	42.40	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	44.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
8	Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S. 165 Control Structure Outlet	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	46.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
9	Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	48.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
10	BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at LA Hwy. 134)	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	75.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
11	BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	75.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
12	Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	24.60	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
13	BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	24.60	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
14	Length of Pipe: BDS 26 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	17.90	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
15	Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	17.90	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
16	Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	17.90	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
17	Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	17.90	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
18	BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	13.60	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	13.60	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
20	BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	16.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	19.20	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
22	Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	31.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
23	Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	43.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
24	Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure)	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	57.20	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
25	BDS 13 (Bayou Desiard Downstream of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	52.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
26	BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	48.60	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
27	Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	40.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
28	Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	32.60	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
29	BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	30.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
30	BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	20.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Temperature	^{o}Celcius	31.500	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	6.630	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	13.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.

Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	K_2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.140	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
2	BDS 2 (outfall of L. Bartholemew pump) - BDS 3 (midpoint of L. Bartholemew right fork)	K_2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_{+C139} "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.200	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
3	BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	K2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.190	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
4	BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	K2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.190	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
5	BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	K_2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.150	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.

6	BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	K2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.150	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	5.63	Based upon Best Professional Judgement (BPJ), calibration, and a 50 percent reduction of the total nonpoint load
		Aerobic BOD decay	1/day	0.190	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	1.00	
		Anaerobic BOD decay	1/day		
8	Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S.	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	5.63	Based upon Best Professional Judgement (BPJ), calibration, and a 50 percent reduction of the total nonpoint load
		Aerobic BOD decay	1/day	0.190	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	1.00	
		Anaerobic BOD decay	1/day		
9	Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	K_2 option	Unitless	20.00	Minimum K_2 equation
		K_2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	5.63	Based upon Best Professional Judgement (BPJ), calibration, and a 50 percent reduction of the total nonpoint load
		Aerobic BOD decay	1/day	0.200	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	1.00	
		Anaerobic BOD decay	1/day		
10	BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at LA Hwy. 134)	K2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K2 "A"	Unitless	0.01	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	1.56	Based upon Best Professional Judgement (BPJ), calibration, and a 50 percent reduction of the total nonpoint load
		Aerobic BOD decay	1/day	0.170	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	1.00	
		Anaerobic BOD decay	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.

11	BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	K2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K2 "A"	Unitless	0.01	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.120	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	1.00	
		Anaerobic BOD decay	1/day		
12	Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	K_2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	1.56	Based upon Best Professional Judgement (BPJ), calibration, and a 50 percent reduction of the total nonpoint load
		Aerobic BOD decay	1/day	0.080	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
13	BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	K_2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_{-C139} "C"	Unitless		
		Background SOD	g/m^2-day	1.56	Based upon Best Professional Judgement (BPJ), calibration, and a 50 percent reduction of the total nonpoint load
		Aerobic BOD decay	1/day	0.080	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction		
		Anaerobic BOD decay	1/day		
14	Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.080	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
15	Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.080	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.

16	Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	K_2 option	Unitless	20.00	Minimum K_2 equation
		K_2 "A"	Unitless	7.00	Metric a coefficient when using the minimum K2 equation
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.100	Based upon Best Professional Judgement (BPJ), laboratory CBOD$_5$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
17	Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.110	Based upon Best Professional Judgement (BPJ), laboratory CBOD$_5$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
18	BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.110	Based upon Best Professional Judgement (BPJ), laboratory CBOD$_5$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	K2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	1.56	Based upon Best Professional Judgement (BPJ), calibration, and a 50 percent reduction of the total nonpoint load
		Aerobic BOD decay	1/day	0.120	Based upon Best Professional Judgement (BPJ), laboratory CBOD$_5$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
20	BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	K_2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.130	Based upon Best Professional Judgement (BPJ), laboratory CBOD$_5$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.

21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.140	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
22	Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd.	K2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.160	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
23	Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd.	K_2 option	Unitless	20.00	Minimum K_2 equation
		K_2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K_2 "B"	Unitless		
		K_{+C139} "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.180	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
24	Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure)	K2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.230	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
25	BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	K2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.160	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.

26	BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	K_2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.080	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
27	Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.100	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
28	Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	K2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.120	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
29	BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	K2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.120	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
30	BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	K_2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.120	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.

31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	K2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the ripariar zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.100	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_5$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	Organic nitrogen decay rate	1/day	0.20	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
2	BDS 2 (outfall of L. Bartholemew pump) - BDS 3 (midpoint of L. Bartholemew right fork)	Organic nitrogen decay rate	1/day	0.09	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
3	BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	Organic nitrogen decay rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
4	BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	Organic nitrogen decay rate	1/day	0.09	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
5	BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	Organic nitrogen decay rate	1/day	0.12	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
6	BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	Organic nitrogen decay rate	1/day	0.12	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	Organic nitrogen decay rate	1/day	0.10	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	1.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
8	Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S. 165 Control Structure Outlet	Organic nitrogen decay rate	1/day	0.10	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	1.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
9	Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	Organic nitrogen decay rate	1/day	0.20	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	1.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
10	BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at LA Hwy. 134)	Organic nitrogen decay rate	1/day	0.20	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	1.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	1.00	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
11	BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	Organic nitrogen decay rate	1/day	0.20	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	1.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	1.00	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
12	Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	Organic nitrogen decay rate	1/day	0.06	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
13	BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	Organic nitrogen decay rate	1/day	0.06	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
14	Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	Organic nitrogen decay rate	1/day	0.11	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
15	Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	Organic nitrogen decay rate	1/day	0.11	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
16	Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	Organic nitrogen decay rate	1/day	0.15	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
17	Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	Organic nitrogen decay rate	1/day	0.18	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
18	BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	Organic nitrogen decay rate	1/day	0.18	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	Organic nitrogen decay rate	1/day	0.07	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
20	BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	Organic nitrogen decay rate	1/day	0.09	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Organic nitrogen decay rate	1/day	0.08	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
22	Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd.	Organic nitrogen decay rate	1/day	0.07	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
23	Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd.	Organic nitrogen decay rate	1/day	0.06	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
24	Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure)	Organic nitrogen decay rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
25	BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	Organic nitrogen decay rate	1/day	0.07	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
26	BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	Organic nitrogen decay rate	1/day	0.15	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
27	Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	Organic nitrogen decay rate	1/day	0.15	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
28	Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	Organic nitrogen decay rate	1/day	0.25	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
29	BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	Organic nitrogen decay rate	1/day	0.25	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.80	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
30	BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Organic nitrogen decay rate	1/day	0.15	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.80	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Organic nitrogen decay rate	1/day	0.07	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Summer Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.008	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
2	BDS 2 (outfall of L. Bartholemew pump) - BDS 3 (midpoint of L. Bartholemew right fork)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.025	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Summer Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
3	BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.035	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
4	BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.015	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Summer Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
5	BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.015	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
6	BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.015	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Summer Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.015	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
8	Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S. 165 Control Structure Outlet	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.015	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Summer Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
9	Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.018	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
10	BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at LA Hwy. 134)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.018	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Summer Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
11	BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.018	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
12	Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.014	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Summer Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
13	BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.014	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
14	Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.012	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Summer Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
15	Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.012	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
16	Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.018	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Summer Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
17	Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.024	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
18	BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.024	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Summer Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.012	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
20	BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.012	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Summer Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.02	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
22	Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd.	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.029	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Summer Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
23	Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd.	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.038	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
24	Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.046	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Summer Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
25	BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.02	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
26	BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.007	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Summer Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
27	Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.007	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
28	Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.034	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Summer Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
29	BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.034	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
30	BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.027	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Summer Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.037	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	BOD	kg/day	3.13	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	31.25	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
2	BDS 2 (outfall of L. Bartholemew pump) - BDS 3 (midpoint of L. Bartholemew right fork)	BOD	kg/day	1562.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	218.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	218.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
3	BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	BOD	kg/day	875.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	93.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	187.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
4	BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	BOD	kg/day	312.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	21.88	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	203.13	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

5	BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	BOD	kg/day	1125.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	625.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	718.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
6	BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	BOD	kg/day	1000.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	156.25	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	718.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	BOD	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	46.88	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
8	Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S. 165 Control Structure Outlet	BOD	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

9	Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	BOD	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
10	BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at LA Hwy. 134)	BOD	kg/day	293.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	93.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	125.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
11	BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	BOD	kg/day	293.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	93.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	125.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
12	Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	BOD	kg/day	500.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	93.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	250.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

13	BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	BOD	kg/day	312.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	31.25	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	281.25	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
14	Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	BOD	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day	850.00	Based on calibration and field data that showed an increase in the dissolved oxygen concentrations between the immediate upstream and downstream reaches of the weir that controls the flow from Black Bayou Lake
15	Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	BOD	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	3.13	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
16	Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	BOD	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

17	Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	BOD	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	3.13	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
18	BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	BOD	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	3.13	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	BOD	kg/day	500.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	9.38	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	437.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
20	BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	BOD	kg/day	1500.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	156.25	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	437.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	BOD	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
22	Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd.	BOD	kg/day	62.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	15.63	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	93.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
23	Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd.	BOD	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
24	Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure)	BOD	kg/day	1500.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	62.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	343.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

25	BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	BOD	kg/day	1656.25	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	62.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	343.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
26	BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	BOD	kg/day	468.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	62.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	312.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
27	Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	BOD	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
28	Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	BOD	kg/day	1187.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	156.25	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	250.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

29	BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	BOD	kg/day	1187.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	312.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	375.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
30	BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	BOD	kg/day	1500.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	281.25	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	375.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	BOD	kg/day	6.26	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	6.26	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	6.26	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 20, Headwater Data for Flow, Temperature, Salinity, and Conservatives

Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Lake Bartholemew (East end near the pumping station)	Element # of input	#	1	Bayou Desiard survey-Lake Bartholemew near the pumping station (Site BDS2)
		Headwater name		Lake Bartholemew (East end near the pumping station)	Bayou Desiard survey-Lake Bartholemew near the pumping station (Site BDS2)
		Headwater flow	cms	0.10278	Flow leaving Lake Bartholemew was estimated estimated based upon the rate at which the water surface elevation of Lake Bartholemew was falling and the surface area of the lake. The resulting flow was then split between the eastern and western ends of Lake Bartholemew. 7Q10 values were not available and the flow was greater than the 1.0 cfs as recommended in the LTP.
		Temperature	^{o}Celcius	31.5	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Conservative Matl. I	mg/l	9.9	Data obtained from Site BDS2 field data
		Conservative Matl. II	mg/l	3	Data obtained from Site BDS2 field data
5	Lake Bartholemew (west end near the COE overflow control structure)	Element # of input	#	24	Bayou Desiard survey-Lake Bartholemew near the COE overflow control structure (Site BDS5
		Headwater name		Lake Bartholemew (west end near the COE overflow control structure)	Bayou Desiard survey-Lake Bartholemew near the COE overflow control structure (Site BDS5)
		Headwater flow	cms	0.10278	Flow leaving Lake Bartholemew was estimated estimated based upon the rate at which the water surface elevation of Lake Bartholemew was falling and the surface area of the lake. The resulting flow was then split between the eastern and western ends of Lake Bartholemew. 7Q10 values were not available and the flow was greater than the 1.0 cfs as recommended in the LTP.
		Temperature	^{o}Celcius	31.5	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Conservative Matl. I	mg/l	8.9	Data obtained from Site BDS5 field data
		Conservative Matl. II	mg/l	3.2	Data obtained from Site BDS5 field data

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 20, Headwater Data for Flow, Temperature, Salinity, and Conservatives

14	Hannah's Run (East)	Element # of input	#	94	Bayou Desiard survey-Hannah's Run (East) Control Gates (Site BDS20)
		Headwater name		Hannah's Run (East)	Bayou Desiard survey-Hannah's Run (East) Control Gates (Site BDS20)
		Headwater flow	cms	1.45612	Headwater flow from Black Bayou Lake estimated based upon the rate at which the water surface elevation in Black Bayou Lake was falling and the surface area of Black Bayou Lake. 7Q10 values were not available and the flow was greater than the 1.0 cfs as recommended in the LTP.
		Temperature	^{o}Celcius	31.5	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Conservative Matl. I	mg/l	3.5	Data obtained from Site BDS20 field data
		Conservative Matl. II	mg/l	0	Data obtained from Site BDS20 field data

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 21, Headwater Data for DO, BOD, and Nitrogen

Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Lake Bartholemew (East end near the pumping station)	Element # of input		1	Bayou Desiard survey-Lake Bartholemew near the pumping station (Site BDS2)
		Dissolved O_2	mg/l	6.63	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		BOD	mg/l	2.08	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.- N	mg/l	0.93	Based on calibration and a 50 percent reduction of the total nonpoint load
		NH_3-N	mg/l	0	Data obtained from Site BDS1 data
		NO_{2+3}-N	mg/l	0	Data obtained from Site BDS1 data
5	Lake Bartholemew (west end near the COE overflow control structure)	Element # of input		24	Bayou Desiard survey-Lake Bartholemew near the COE overflow control structure (Site BDS5)
		Dissolved O_2	mg/l	6.63	Data obtained from Cypress Creek at Union Church Rd. (Sit DR19)
		BOD	mg/l	4.43	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.- N	mg/l	1.05	Based on calibration and a 50 percent reduction of the total nonpoint load
		NH_3-N	mg/l	0	Data obtained from Site BDS5 data
		NO_{2+3}-N	mg/l	0	Data obtained from Site BDS5 data
14	Hannah's Run (East)	Element # of input		94	Bayou Desiard survey-Hannah's Run (East) Control Gates (Site BDS20)
		Dissolved O_2	mg/l	6.63	Data obtained from Cypress Creek at Union Church Rd. (Sit DR19)
		BOD	mg/l	10.34	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.- N	mg/l	0.58	Based on calibration and a 50 percent reduction of the total nonpoint load
		NH_3-N	mg/l	0.17	Based on calibration and a 50 percent reduction of the total nonpoint load
		NO_{2+3}-N	mg/l	0	Data obtained from Site BDS20 data

Bayou Desiard Summer Projection Water Quality Model Input Description					
DATA TYPE 22, Headwater Data for Phosphorus, Chlorophyll, Coliform, and Nonconservatives					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Lake Bartholemew (East end near the pumping station)	Element # of input		1	Bayou Desiard survey-Lake Bartholemew near the pumping station (Site BDS2)
		Phosphorus	mg/L		
		Chlorophyll a	ug/L	1.3	Based on Bayou Desiard survey data
		Coliform	#/100 mL		
		Nonconservative Material	mg/l	5.14	Data obtained from Site BDS20 BOD data (the NCM parameter was used to simulate $CBOD2_U$) and a 50 percent reduction of the total nonpoint load
5	Lake Bartholemew (west end near the COE overflow control structure)	Element # of input		24	Bayou Desiard survey-Lake Bartholemew near the COE overflow control structure (Site BDS5)
		Phosphorus	mg/L		
		Chlorophyll a	ug/L	42.4	Based on Bayou Desiard survey data
		Coliform	#/100 mL		
		Nonconservative Material	mg/l	4.16	Data obtained from Site BDS20 BOD data (the NCM parameter was used to simulate $CBOD2_U$) and a 50 percent reduction of the total nonpoint load
14	Hannah's Run (East)	Element # of input		94	Bayou Desiard survey-Hannah's Run (East) Control Gates (Site BDS20)
		Phosphorus	mg/L		
		Chlorophyll a	ug/L	17.9	Based on Bayou Desiard survey data
		Coliform	#/100 mL		
		Nonconservative Material	mg/l	4.56	Data obtained from Site BDS20 BOD data (the NCM parameter was used to simulate $CBOD2_U$) and a 50 percent reduction of the total nonpoint load

Bayou Desiard Summer Projection Water Quality Model Input Description					
DATA TYPE 23, Junction Data					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	Computational element # of the element immediately downstream of the junction		44	Based upon stream layout during the development of the calibrated model
		Computational element # of the element immediately upstream of the junction		23	Based upon stream layout during the development of the calibrated model
		Junction name		Inlet Canal to the Bayou Desiard at U.S. 165 Control Structure	Based upon stream layout during the development of the calibrated model
19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	Computational element # of the element immediately downstream of the junction		99	Based upon stream layout during the development of the calibrated model
		Computational element # of the element immediately upstream of the junction		93	Based upon stream layout during the development of the calibrated model
		Junction name		Hannah's Run Junction With Bayou Desiard	Based upon stream layout during the development of the calibrated model

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 24, Wasteload Data for Flow, Temperature, Salinity, and Conservatives

Reach #	NAME	Parameter	Units	Value	Source/Justification
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Element # of input	#	128	Based upon stream layout during the development of the calibrated model
		Wasteload description		Bayou Chauvin Outlet	Based upon stream layout during the development of the calibrated model
		Headwater flow	cms	-1.05717	Based upon chloride data from the survay, chloride balance, and flow balance, and field observations of flow seepage through the stop-log weir into L-11 Canal
		Temperature	^{o}Celcius	NA	Temperature of the outgoing flow is calculated by the model
		Salinity	ppt		
		Conservative Matl. I	mg/l	NA	Chloride concentration in the outgoing flow is calculated by the model
		Conservative Matl. II	mg/l	NA	Sulfate concentration in the outgoing flow is calculated by the model
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Element # of input	#	179	Based upon stream layout during the development of the calibrated model
		Wasteload description		Monroe WTP Intake	Based upon stream layout during the development of the calibrated model
		Headwater flow	cms	-0.6045	Based upon flow intake data obtained from the City of Monroe WTP at the time of the survey
		Temperature	^{o}Celcius	NA	Temperature of the outgoing flow is calculated by the model
		Salinity	ppt		
		Conservative Matl. I	mg/l	NA	Chloride concentration in the outgoing flow is calculated by the model
		Conservative Matl. II	mg/l	NA	Sulfate concentration in the outgoing flow is calculated by the model

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 25, Wasteload Data for DO, BOD, and Nitrogen					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Element # of input		128	Based upon stream layout during the development of the calibrated model
		Dissolved O_2	mg/l	NA	Dissolved oxygen concentration in the outgoing flow is calculated by the model
		BOD	mg/l	NA	BOD concentration in the outgoing flow is calculated by the model
		Org.- N	mg/l	NA	Organic nitrogen concentration in the outgoing flow is calculated by the model
		NH_3-N	mg/l	NA	Ammonia nitrogen concentration in the outgoing flow is calculated by the model
		NO_{2+3}-N	mg/l	NA	Nitrate-Nitrite concentration in the outgoing flow is calculated by the model
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Element # of input		179	Based upon stream layout during the development of the calibrated model
		Dissolved O_2	mg/l	NA	Dissolved oxygen concentration in the outgoing flow is calculated by the model
		BOD	mg/l	NA	BOD concentration in the outgoing flow is calculated by the model
		Org.- N	mg/l	NA	Organic nitrogen concentration in the outgoing flow is calculated by the model
		NH_3-N	mg/l	NA	Ammonia nitrogen concentration in the outgoing flow is calculated by the model
		NO_{2+3}-N	mg/l	NA	Nitrate-Nitrite concentration in the outgoing flow is calculated by the model

Bayou Desiard Summer Projection Water Quality Model Input Description					
DATA TYPE 26, Wasteload Data for Phosphorus, Chlorophyll, Coliform, and Nonconservatives					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Element # of input		128	Based upon stream layout during the development of the calibrated model
		Phosphorus	mg/L		
		Chlorophyll a	ug/L	NA	Chlorophyll a concentration in the outgoing flow is calculated by the model
		Coliform	#/100 mL		
		Nonconservative Material	mg/l	NA	$CBOD2_U$ concentration in the outgoing flow is calculated by the model
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Element # of input		179	Based upon stream layout during the development of the calibrated model
		Phosphorus	mg/L		
		Chlorophyll a	ug/L	NA	Chlorophyll a concentration in the outgoing flow is calculated by the model
		Coliform	#/100 mL		
		Nonconservative Material	mg/l	NA	$CBOD2_U$ concentration in the outgoing flow is calculated by the model

Bayou Desiard Summer Projection Water Quality Model Input Description

DATA TYPE 27, Lower Boundary Conditions

Reach #	NAME	Parameter	Units	Value	Source/Justification
	Bayou Desiard at Site BDS17	Temperature	^{o}Celcius	31.50	Based on the summer 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786) The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		Salinity	ppt		
		Conservative Matl. I	mg/l		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		Conservative Matl. II	mg/l		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		Dissolved O_2	mg/l		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		BOD	mg/l		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		Org.- N	mg/l		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		NH_3-N	mg/l		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		NO_{2+3}-N	mg/l		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		Phosphorus	mg/l		
		Chlorophyl A	mg/l	16.70	Obtained from the Bayou Desiard survey data
		Coliform	mg/l		
		Nonconservative Material	mg/L		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients

Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	1.720	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.720	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
2	BDS 2 (outfall of L. Bartholemew pump) - BDS 3 (midpoint of L. Bartholemew right fork)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	61.720	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	3.410	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
3	BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	89.150	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	3.620	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
4	BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	114.290	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	3.340	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
5	BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	123.140	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	3.900	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
6	BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	114.290	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	3.340	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients

7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	6.000	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.000	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
8	Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S. 165 Control Structure Outlet	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
9	Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	42.060	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.660	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
10	BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at LA Hwy. 134)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	21.330	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.830	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
11	BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	21.330	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.830	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
12	Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	76.200	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.310	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
13	BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	76.200	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.310	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients

14	Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	1.720	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.720	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
15	Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	17.680	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.420	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
16	Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	1.720	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.720	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
17	Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	17.680	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.420	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
18	BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	17.680	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.420	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	90.060	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.430	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients

20	BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	90.060	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.430	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
22	Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd.	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	94.550	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.345	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
23	Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd.	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
24	Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	99.040	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.260	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
25	BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	99.040	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.260	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients

26	BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	11.580	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.470	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
27	Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	1.620	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
28	Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	117.340	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.660	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
29	BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	117.340	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	2.660	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
30	BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	124.960	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	4.850	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Width "a"	Unitless	1.000	Determined by Best Professional Judgement (BPJ) and hydrologic calibration
		Width "b"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Width "c"	Unitless	124.960	Determined by field data, BPJ, and hydrologic calibration
		Depth "d"	Unitless	0.050	Determined by BPJ and hydrologic calibration
		Depth "e"	Unitless	0.100	Determined by BPJ and hydrologic calibration
		Depth "f"	Unitless	4.850	Determined by field data, BPJ, and hydrologic calibration
		Slope	Unitless	0.0001	Estimated value based upon USGS topography maps
		Manning's - N	Unitless	0.035	Envr. Engr. Examination Guide and Handbook, Table 5-4, p. 113

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 10, Dispersive Hydraulic Coefficients

Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	0.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
2	BDS 2 (outfall of L. Bartholemew pump) - BDS 3 (midpoint of L. Bartholemew right fork)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
3	BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
4	BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
5	BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
6	BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 10, Dispersive Hydraulic Coefficients

7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
8	Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S. 165 Control Structure Outlet	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
9	Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
10	BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at LA Hwy. 134)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
11	BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	Tidal Range	Fraction		
		Dispersion "A"	Unitless	0.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
12	Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	4.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 10, Dispersive Hydraulic Coefficients

13	BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	Tidal Range	Fraction		
		Dispersion "A"	Unitless	4.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
14	Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
15	Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	Tidal Range	Fraction		
		Dispersion "A"	Unitless	4.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
16	Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
17	Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	4.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
18	BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	Tidal Range	Fraction		
		Dispersion "A"	Unitless	4.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 10, Dispersive Hydraulic Coefficients

19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	4.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
20	BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	4.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
22	Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd.	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
23	Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd.	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
24	Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
25	BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 10, Dispersive Hydraulic Coefficients

26	BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
27	Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
28	Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
29	BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
30	BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Tidal Range	Fraction		
		Dispersion "A"	Unitless	1.00	Estimated value based on the observation of field data and BPJ
		Dispersion "B"	Unitless		
		Dispersion "C"	Unitless		
		Dispersion "D"	Unitless		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
1	Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	1.3	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.0	Based upon calibration and BPJ
2	BDS 2 (outfall of L. Bartholemew pump) BDS 3 (midpoint of L. Bartholemew right fork)	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	20.50	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
3	BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	22.40	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
4	BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	36.40	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
5	BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	42.40	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
6	BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	42.40	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	44.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
8	Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S. 165 Control Structure Outlet	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	46.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
9	Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	48.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
10	BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at LA Hwy. 134)	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	75.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
11	BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	75.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
12	Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	24.60	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
13	BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	24.60	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
14	Length of Pipe: BDS 26 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	17.90	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
15	Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	17.90	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
16	Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	17.90	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
17	Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	17.90	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
18	BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	13.60	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	13.60	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
20	BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	16.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	19.20	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
22	Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	31.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
23	Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	43.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
24	Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure)	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	57.20	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
25	BDS 13 (Bayou Desiard Downstream of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	52.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
26	BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	48.60	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
27	Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	40.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
28	Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	32.60	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 11, INITIAL CONDITIONS

Reach #	NAME	Initial Parameter	Units	Value	Source/Justification
29	BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	30.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
30	BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	20.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Temperature	^{o}Celcius	19.200	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Dissolved O_2	mg/l	8.320	Set to ninety percent of the dissolved oxygen saturation concentration at the 90th percentile temperature
		NH_4-N	mg/l		
		NO_{2+3} - N	mg/l		
		Phosphorus	mg/l		
		Chlorophyll a	ug/l	13.00	Based upon chlorophyll a data obtained during the Bayou Desiard survey (6/19-21/01)
		Macrophytes	g/m^3 or mg/ft^3	115.00	Based upon calibration and BPJ

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.

Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	K_2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.140	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
2	BDS 2 (outfall of L. Bartholemew pump) - BDS 3 (midpoint of L. Bartholemew right fork)	K_2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_{+C139} "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.200	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
3	BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	K2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.190	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
4	BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	K2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.190	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
5	BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	K_2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.150	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.

6	BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	K2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.150	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	5.63	Based upon Best Professional Judgement (BPJ), calibration, and a 50 percent reduction of the total nonpoint load
		Aerobic BOD decay	1/day	0.190	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	1.00	
		Anaerobic BOD decay	1/day		
8	Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S.	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	5.63	Based upon Best Professional Judgement (BPJ), calibration, and a 50 percent reduction of the total nonpoint load
		Aerobic BOD decay	1/day	0.190	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	1.00	
		Anaerobic BOD decay	1/day		
9	Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	K_2 option	Unitless	20.00	Minimum K_2 equation
		K_2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	5.63	Based upon Best Professional Judgement (BPJ), calibration, and a 50 percent reduction of the total nonpoint load
		Aerobic BOD decay	1/day	0.200	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	1.00	
		Anaerobic BOD decay	1/day		
10	BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at LA Hwy. 134)	K2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K2 "A"	Unitless	0.01	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	1.56	Based upon Best Professional Judgement (BPJ), calibration, and a 50 percent reduction of the total nonpoint load
		Aerobic BOD decay	1/day	0.170	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	1.00	
		Anaerobic BOD decay	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.

11	BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	K2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K2 "A"	Unitless	0.01	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.120	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	1.00	
		Anaerobic BOD decay	1/day		
12	Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	K_2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	1.56	Based upon Best Professional Judgement (BPJ), calibration, and a 50 percent reduction of the total nonpoint load
		Aerobic BOD decay	1/day	0.080	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
13	BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	K_2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_{-C139} "C"	Unitless		
		Background SOD	g/m^2-day	1.56	Based upon Best Professional Judgement (BPJ), calibration, and a 50 percent reduction of the total nonpoint load
		Aerobic BOD decay	1/day	0.080	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction		
		Anaerobic BOD decay	1/day		
14	Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.080	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
15	Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.080	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.

16	Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	K_2 option	Unitless	20.00	Minimum K_2 equation
		K_2 "A"	Unitless	7.00	Metric a coefficient when using the minimum K2 equation
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.100	Based upon Best Professional Judgement (BPJ), laboratory CBOD$_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
17	Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.110	Based upon Best Professional Judgement (BPJ), laboratory CBOD$_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
18	BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.110	Based upon Best Professional Judgement (BPJ), laboratory CBOD$_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	K2 option	Unitless	12.00	Banks (1985) wind reaeration equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	1.56	Based upon Best Professional Judgement (BPJ), calibration, and a 50 percent reduction of the total nonpoint load
		Aerobic BOD decay	1/day	0.120	Based upon Best Professional Judgement (BPJ), laboratory CBOD$_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
20	BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	K_2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.130	Based upon Best Professional Judgement (BPJ), laboratory CBOD$_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.

21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.140	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
22	Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd.	K2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.160	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
23	Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd.	K_2 option	Unitless	20.00	Minimum K_2 equation
		K_2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K_2 "B"	Unitless		
		K_{-C139} "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.180	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
24	Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure)	K2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.230	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
25	BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	K2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.160	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.

26	BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	K_2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.080	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
27	Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	K2 option	Unitless	20.00	Minimum K_2 equation
		K2 "A"	Unitless	0.70	Metric a coefficient when using the minimum K2 equation
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.100	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
28	Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	K2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.120	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
29	BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	K2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.120	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		
30	BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	K_2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K_2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the riparian zone)
		K_2 "B"	Unitless		
		K_2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.120	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_L$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.

31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	K2 option	Unitless	13.00	Johanson (1977) wind aided rearation equation
		K2 "A"	Unitless	1.00	Wind shielding coefficient, estimated during calibration (based upon field observation of the ripariar zone)
		K2 "B"	Unitless		
		K2 "C"	Unitless		
		Background SOD	g/m^2-day	0.00	Based upon Best Professional Judgement (BPJ) and calibration
		Aerobic BOD decay	1/day	0.100	Based upon Best Professional Judgement (BPJ), laboratory $CBOD_5$ decay rates, and calibration
		BOD Settling rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual Revision 7, (5/22/01)
		BOD conv. to SOD	Fraction	0.00	
		Anaerobic BOD decay	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	Organic nitrogen decay rate	1/day	0.20	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
2	BDS 2 (outfall of L. Bartholemew pump) - BDS 3 (midpoint of L. Bartholemew right fork)	Organic nitrogen decay rate	1/day	0.09	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
3	BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	Organic nitrogen decay rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
4	BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	Organic nitrogen decay rate	1/day	0.09	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
5	BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	Organic nitrogen decay rate	1/day	0.12	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
6	BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	Organic nitrogen decay rate	1/day	0.12	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	Organic nitrogen decay rate	1/day	0.10	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	1.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
8	Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S. 165 Control Structure Outlet	Organic nitrogen decay rate	1/day	0.10	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	1.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
9	Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	Organic nitrogen decay rate	1/day	0.20	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	1.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
10	BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at LA Hwy. 134)	Organic nitrogen decay rate	1/day	0.20	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	1.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	1.00	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
11	BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	Organic nitrogen decay rate	1/day	0.20	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	1.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	1.00	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
12	Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	Organic nitrogen decay rate	1/day	0.06	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
13	BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	Organic nitrogen decay rate	1/day	0.06	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
14	Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	Organic nitrogen decay rate	1/day	0.11	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
15	Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	Organic nitrogen decay rate	1/day	0.11	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
16	Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	Organic nitrogen decay rate	1/day	0.15	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
17	Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	Organic nitrogen decay rate	1/day	0.18	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
18	BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	Organic nitrogen decay rate	1/day	0.18	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	Organic nitrogen decay rate	1/day	0.07	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
20	BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	Organic nitrogen decay rate	1/day	0.09	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Organic nitrogen decay rate	1/day	0.08	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
22	Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd.	Organic nitrogen decay rate	1/day	0.07	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
23	Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd.	Organic nitrogen decay rate	1/day	0.06	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
24	Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure)	Organic nitrogen decay rate	1/day	0.05	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
25	BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	Organic nitrogen decay rate	1/day	0.07	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
26	BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	Organic nitrogen decay rate	1/day	0.15	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
27	Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	Organic nitrogen decay rate	1/day	0.15	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
28	Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	Organic nitrogen decay rate	1/day	0.25	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
29	BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	Organic nitrogen decay rate	1/day	0.25	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.80	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		
30	BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Organic nitrogen decay rate	1/day	0.15	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.80	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Organic nitrogen decay rate	1/day	0.07	Based upon Best Professional Judgement (BPJ), laboratory $NBOD_U$ decay rates, and calibration
		Organic nitrogen settling rate rate	m/day or ft/day	0.015	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled organic nitrogen conversion to ammonia benthos source rate	Unitless	0.00	Based upon calibration and BPJ
		Ammonia nitrogen oxidation rate	1/day	0.60	Based upon calibration and BPJ
		Background benthos source rate for ammonia nitrogen	g/m^2-day or orgm/ft-day		
		Background benthos source rate for phosphorus	g/m^2-day or mg/ft^2-day		
		Denitrification rate	1/day		

Bayou Desiard Winter Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.008	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
2	BDS 2 (outfall of L. Bartholemew pump) - BDS 3 (midpoint of L. Bartholemew right fork)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.025	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Winter Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
3	BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.035	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
4	BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.015	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Winter Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
5	BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.015	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
6	BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.015	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Winter Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.015	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
8	Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S. 165 Control Structure Outlet	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.015	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Winter Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
9	Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.018	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
10	BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at LA Hwy. 134)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.018	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Winter Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
11	BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.018	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
12	Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.014	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Winter Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
13	BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.014	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
14	Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.012	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Winter Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
15	Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.012	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
16	Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.018	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Winter Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
17	Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.024	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
18	BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.024	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Winter Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.012	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
20	BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.012	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Winter Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.02	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
22	Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd.	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.029	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Winter Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
23	Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd.	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.038	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
24	Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.046	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Winter Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
25	BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.02	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
26	BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.007	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Winter Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
27	Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.007	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
28	Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.034	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Winter Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
29	BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.034	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			
30	BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.027	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Winter Projection Water Quality Model Input Description					
DATA TYPE 15, Coliform and Nonconservative Coefficients					
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Coliform decay rate	1/day		
		Nonconservative material decay rate	1/day	0.037	Based upon Best Professional Judgement (BPJ), laboratory $CBOD2_U$ decay rates, and calibration
		Nonconservative material settling rate	m/day, ft/day, or 1/day	0.05	Based upon Best Professional Judgement (BPJ), calibration, and the Louisiana Total Maximum Daily Load Technical Procedures Manual, Revision 7, (5/22/01)
		Settled nonconservative material conversion to sediment oxygen demand			

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Length of Pipe: BDS 1 (Bayou Bartholemew at pump intake) - BDS 2 (outfall of L. Bartholemew pump)	BOD	kg/day	3.13	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	31.25	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
2	BDS 2 (outfall of L. Bartholemew pump) - BDS 3 (midpoint of L. Bartholemew right fork)	BOD	kg/day	1562.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	218.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	218.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
3	BDS 3 (midpoint of L. Bartholemew right fork) - BDS 6 (L. Bartholemew at U.S. Hwy. 165)	BOD	kg/day	875.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	93.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	187.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
4	BDS 6 (L. Bartholemew at U.S. Hwy. 165) - Inlet canal to U.S. 165 Control Structure	BOD	kg/day	312.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	21.88	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	203.13	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

5	BDS 5 (L. Bartholemew overflow control structure) - BDS 4 (midpoint of L. Bartholemew left fork)	BOD	kg/day	1125.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	625.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	718.75	Based on calibration and a 50 percent reduction of the total nonpoi load
		Dissolved O_2	kg/day		
6	BDS 4 (midpoint of L. Bartholemew left fork) - Inlet canal to U.S. 165 Control Structure	BOD	kg/day	1000.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	156.25	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	718.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	BOD	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	46.88	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
8	Length of pipe: Bayou Desiard at U.S. Hwy 165 Control Structure Inlet to Bayou Desiard at U.S. 165 Control Structure Outlet	BOD	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

9	Bayou Desiard at U.S. 165 Control Structure Outlet - BDS 7	BOD	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
10	BDS 7 (B. Desiard at U.S. 165) - BDS 8 (B. Desiard at LA Hwy. 134)	BOD	kg/day	293.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	93.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	125.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
11	BDS 8 (B. Desiard at LA Hwy. 134) - Mill Bayou	BOD	kg/day	293.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	93.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	125.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
12	Mill Bayou - BDS 9 (B. Desiard at Richland Dr.)	BOD	kg/day	500.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	93.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	250.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

13	BDS 9 (B. Desiard at Richland Dr.) - Hannah's Run	BOD	kg/day	312.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	31.25	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	281.25	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
14	Length of Pipe: BDS 20 (Hannah's Run (East) control structure intake in Black Bayou Lake) - Hannah's Run (East) control structure outfall	BOD	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day	850.00	Based on calibration and field data that showed an increase in the dissolved oxygen concentrations between the immediate upstream and downstream reaches of the weir that controls the flow from Black Bayou Lake
15	Hannah's Run (East) control structure outfall - Hannah's Run (West) Control Structure intake	BOD	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	3.13	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
16	Length of Pipe: Hannah's Run (West) Control Structure intake - Hannah's Run (West) Control Structure outfall	BOD	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

17	Hannah's Run (West) Control Structure outfall - BDS 21 (Hannah's Run (West) at Bayou Desiard)	BOD	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	3.13	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
18	BDS 21 (Hannah's Run (West) at Bayou Desiard) - Bayou Desiard	BOD	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	3.13	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	BOD	kg/day	500.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	9.38	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	437.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
20	BDS 10 (B. Desiard at Treasure Island Rd.) - Pipe intake on upstream side of L-11 Canal (B. Chauvin)	BOD	kg/day	1500.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	156.25	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	437.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	BOD	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
22	Pipe outfall on downstream side of L-11 Canal (B. Chauvin) - Pipe intake at Midway Dam Control Structure at Inabnet Rd.	BOD	kg/day	62.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	15.63	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	93.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
23	Length of pipe: Pipe intake at Midway Dam Control Structure at Inabnet Rd. - Pipe outfall at the Midway Dam Control Structure at Inabnet Rd.	BOD	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
24	Pipe outfall at the Midway Dam Control Structure at Inabnet Rd. - BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure)	BOD	kg/day	1500.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	62.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	343.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

25	BDS 13 (Bayou Desiard Downsteam of the Midway Dam Control Structure) - BDS 14 (Bayou Desiard at Stadium Drive)	BOD	kg/day	1656.25	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	62.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	343.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
26	BDS 14 (Bayou Desiard at Stadium Drive) - Intake at Stadium Drive	BOD	kg/day	468.75	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	62.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	312.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
27	Length of Pipe: Pipe intake at Stadium Drive - Pipe outfall at Stadium Drive.	BOD	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	0.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
28	Pipe outfall at Stadium Drive. - BDS 15 (Philip's Bridge near U.S. 165	BOD	kg/day	1187.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	156.25	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	250.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 19, Nonpoint Source Data

29	BDS 15 (Philip's Bridge near U.S. 165 - BDS 16 (Hogg Bayou Outlet Control Structure)	BOD	kg/day	1187.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	312.50	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	375.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
30	BDS 16 (Hogg Bayou Outlet Control Structure) - BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	BOD	kg/day	1500.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	281.25	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	375.00	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	BOD	kg/day	6.27	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.-N	kg/day	6.27	Based on calibration and a 50 percent reduction of the total nonpoint load
		Coliform	#/day		
		Nonconservative matl.	kg/day	6.27	Based on calibration and a 50 percent reduction of the total nonpoint load
		Dissolved O_2	kg/day		

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 20, Headwater Data for Flow, Temperature, Salinity, and Conservatives

Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Lake Bartholemew (East end near the pumping station)	Element # of input	#	1	Bayou Desiard survey-Lake Bartholemew near the pumping station (Site BDS2)
		Headwater name		Lake Bartholemew (East end near the pumping station)	Bayou Desiard survey-Lake Bartholemew near the pumping station (Site BDS2)
		Headwater flow	cms	0.10278	Flow leaving Lake Bartholemew was estimated estimated based upon the rate at which the water surface elevation of Lake Bartholemew was falling and the surface area of the lake. The resulting flow was then split between the eastern and western ends of Lake Bartholemew. 7Q10 values were not available and the flow was greater than the 1.0 cfs as recommended in the LTP
		Temperature	^{o}Celcius	19.2	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Conservative Matl. I	mg/l	9.9	Data obtained from Site BDS2 field data
		Conservative Matl. II	mg/l	3	Data obtained from Site BDS2 field data
5	Lake Bartholemew (west end near the COE overflow control structure)	Element # of input	#	24	Bayou Desiard survey-Lake Bartholemew near the COE overflow control structure (Site BDS5
		Headwater name		Lake Bartholemew (west end near the COE overflow control structure)	Bayou Desiard survey-Lake Bartholemew near the COE overflow control structure (Site BDS5)
		Headwater flow	cms	0.10278	Flow leaving Lake Bartholemew was estimated estimated based upon the rate at which the water surface elevation of Lake Bartholemew was falling and the surface area of the lake. The resulting flow was then split between the eastern and western ends of Lake Bartholemew. 7Q10 values were not available and the flow was greater than the 1.0 cfs as recommended in the LTP
		Temperature	^{o}Celcius	19.2	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Conservative Matl. I	mg/l	8.9	Data obtained from Site BDS5 field data
		Conservative Matl. II	mg/l	3.2	Data obtained from Site BDS5 field data

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 20, Headwater Data for Flow, Temperature, Salinity, and Conservatives

14	Hannah's Run (East)	Element # of input	#	94	Bayou Desiard survey-Hannah's Run (East) Control Gates (Site BDS20)
		Headwater name		Hannah's Run (East)	Bayou Desiard survey-Hannah's Run (East) Control Gates (Site BDS20)
		Headwater flow	cms	1.45612	Headwater flow from Black Bayou Lake estimated based upon the rate at which the water surface elevation in Black Bayou Lake was falling and the surface area of Black Bayou Lake. 7Q10 values were not available and the flow was greater than the 1.0 cfs as recommended in the LTP
		Temperature	^{o}Celcius	19.2	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		Salinity	ppt		
		Conservative Matl. I	mg/l	3.5	Data obtained from Site BDS20 field data
		Conservative Matl. II	mg/l	0	Data obtained from Site BDS20 field data

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 21, Headwater Data for DO, BOD, and Nitrogen

Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Lake Bartholemew (East end near the pumping station)	Element # of input		1	Bayou Desiard survey-Lake Bartholemew near the pumping station (Site BDS2)
		Dissolved O_2	mg/l	8.32	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		BOD	mg/l	2.08	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.- N	mg/l	0.93	Based on calibration and a 50 percent reduction of the total nonpoint load
		NH_3-N	mg/l	0	Data obtained from Site BDS1 data
		NO_{2+3}-N	mg/l	0	Data obtained from Site BDS1 data
5	Lake Bartholemew (west end near the COE overflow control structure)	Element # of input		24	Bayou Desiard survey-Lake Bartholemew near the COE overflow control structure (Site BDS5)
		Dissolved O_2	mg/l	8.32	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		BOD	mg/l	4.43	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.- N	mg/l	1.05	Based on calibration and a 50 percent reduction of the total nonpoint load
		NH_3-N	mg/l	0	Data obtained from Site BDS5 data
		NO_{2+3}-N	mg/l	0	Data obtained from Site BDS5 data
14	Hannah's Run (East)	Element # of input		94	Bayou Desiard survey-Hannah's Run (East) Control Gates (Site BDS20)
		Dissolved O_2	mg/l	8.32	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786)
		BOD	mg/l	10.34	Based on calibration and a 50 percent reduction of the total nonpoint load
		Org.- N	mg/l	0.58	Based on calibration and a 50 percent reduction of the total nonpoint load
		NH_3-N	mg/l	0.17	Based on calibration and a 50 percent reduction of the total nonpoint load
		NO_{2+3}-N	mg/l	0	Data obtained from Site BDS20 data

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 22, Headwater Data for Phosphorus, Chlorophyll, Coliform, and Nonconservatives

Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Lake Bartholemew (East end near the pumping station)	Element # of input		1	Bayou Desiard survey-Lake Bartholemew near the pumping station (Site BDS2)
		Phosphorus	mg/L		
		Chlorophyll a	ug/L	1.3	Based on Bayou Desiard survey data
		Coliform	#/100 mL		
		Nonconservative Material	mg/l	5.14	Data obtained from Site BDS20 BOD data (the NCM parameter was used to simulate $CBOD2_U$) and a 50 percent reduction of the total nonpoint load
5	Lake Bartholemew (west end near the COE overflow control structure)	Element # of input		24	Bayou Desiard survey-Lake Bartholemew near the COE overflow control structure (Site BDS5)
		Phosphorus	mg/L		
		Chlorophyll a	ug/L	42.4	Based on Bayou Desiard survey data
		Coliform	#/100 mL		
		Nonconservative Material	mg/l	4.16	Data obtained from Site BDS20 BOD data (the NCM parameter was used to simulate $CBOD2_U$) and a 50 percent reduction of the total nonpoint load
14	Hannah's Run (East)	Element # of input		94	Bayou Desiard survey-Hannah's Run (East) Control Gates (Site BDS20)
		Phosphorus	mg/L		
		Chlorophyll a	ug/L	17.9	Based on Bayou Desiard survey data
		Coliform	#/100 mL		
		Nonconservative Material	mg/l	4.56	Data obtained from Site BDS20 BOD data (the NCM parameter was used to simulate $CBOD2_U$) and a 50 percent reduction of the total nonpoint load

Bayou Desiard Winter Projection Water Quality Model Input Description					
DATA TYPE 23, Junction Data					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
7	Inlet Canal to Bayou Desiard at U.S. 165 Control Structure	Computational element # of the element immediately downstream of the junction		44	Based upon stream layout during the development of the calibrated model
		Computational element # of the element immediately upstream of the junction		23	Based upon stream layout during the development of the calibrated model
		Junction name		Inlet Canal to the Bayou Desiard at U.S. 165 Control Structure	Based upon stream layout during the development of the calibrated model
19	Hannah's Run - BDS 10 (B. Desiard at Treasure Island Rd.)	Computational element # of the element immediately downstream of the junction		99	Based upon stream layout during the development of the calibrated model
		Computational element # of the element immediately upstream of the junction		93	Based upon stream layout during the development of the calibrated model
		Junction name		Hannah's Run Junction With Bayou Desiard	Based upon stream layout during the development of the calibrated model

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 24, Wasteload Data for Flow, Temperature, Salinity, and Conservatives

Reach #	NAME	Parameter	Units	Value	Source/Justification
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Element # of input	#	128	Based upon stream layout during the development of the calibrated model
		Wasteload description		Bayou Chauvin Outlet	Based upon stream layout during the development of the calibrated model
		Headwater flow	cms	-1.05717	Based upon chloride data from the survay, chloride balance, and flow balance, and field observations of flow seepage through the stop-log weir into L-11 Canal
		Temperature	^{o}Celcius	NA	Temperature of the outgoing flow is calculated by the model
		Salinity	ppt		
		Conservative Matl. I	mg/l	NA	Chloride concentration in the outgoing flow is calculated by the model
		Conservative Matl. II	mg/l	NA	Sulfate concentration in the outgoing flow is calculated by the model
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Element # of input	#	179	Based upon stream layout during the development of the calibrated model
		Wasteload description		Monroe WTP Intake	Based upon stream layout during the development of the calibrated model
		Headwater flow	cms	-0.6045	Based upon flow intake data obtained from the City of Monroe WTP at the time of the survey
		Temperature	^{o}Celcius	NA	Temperature of the outgoing flow is calculated by the model
		Salinity	ppt		
		Conservative Matl. I	mg/l	NA	Chloride concentration in the outgoing flow is calculated by the model
		Conservative Matl. II	mg/l	NA	Sulfate concentration in the outgoing flow is calculated by the model

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 25, Wasteload Data for DO, BOD, and Nitrogen					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Element # of input		128	Based upon stream layout during the development of the calibrated model
		Dissolved O_2	mg/l	NA	Dissolved oxygen concentration in the outgoing flow is calculated by the model
		BOD	mg/l	NA	BOD concentration in the outgoing flow is calculated by the model
		Org.- N	mg/l	NA	Organic nitrogen concentration in the outgoing flow is calculated by the model
		NH_3-N	mg/l	NA	Ammonia nitrogen concentration in the outgoing flow is calculated by the model
		NO_{2+3}-N	mg/l	NA	Nitrate-Nitrite concentration in the outgoing flow is calculated by the model
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Element # of input		179	Based upon stream layout during the development of the calibrated model
		Dissolved O_2	mg/l	NA	Dissolved oxygen concentration in the outgoing flow is calculated by the model
		BOD	mg/l	NA	BOD concentration in the outgoing flow is calculated by the model
		Org.- N	mg/l	NA	Organic nitrogen concentration in the outgoing flow is calculated by the model
		NH_3-N	mg/l	NA	Ammonia nitrogen concentration in the outgoing flow is calculated by the model
		NO_{2+3}-N	mg/l	NA	Nitrate-Nitrite concentration in the outgoing flow is calculated by the model

Bayou Desiard Winter Projection Water Quality Model Input Description					
DATA TYPE 26, Wasteload Data for Phosphorus, Chlorophyll, Coliform, and Nonconservatives					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
21	Length of Pipe: Pipe intake on upstream side of L-11 Canal (B. Chauvin) - Pipe outfall on downstream side of L-11 Canal (B. Chauvin)	Element # of input		128	Based upon stream layout during the development of the calibrated model
		Phosphorus	mg/L		
		Chlorophyll a	ug/L	NA	Chlorophyll a concentration in the outgoing flow is calculated by the model
		Coliform	#/100 mL		
		Nonconservative Material	mg/l	NA	$CBOD2_U$ concentration in the outgoing flow is calculated by the model
31	BDS 17 (City of Monroe, LA Water Treatment Plant Intake)	Element # of input		179	Based upon stream layout during the development of the calibrated model
		Phosphorus	mg/L		
		Chlorophyll a	ug/L	NA	Chlorophyll a concentration in the outgoing flow is calculated by the model
		Coliform	#/100 mL		
		Nonconservative Material	mg/l	NA	$CBOD2_U$ concentration in the outgoing flow is calculated by the model

Bayou Desiard Winter Projection Water Quality Model Input Description

DATA TYPE 27, Lower Boundary Conditions

Reach #	NAME	Parameter	Units	Value	Source/Justification
	Bayou Desiard at Site BDS17	Temperature	^{o}Celcius	19.20	Based on the winter 90th percentile temperature value for the LDEQ Water Quaity Assessment Site (Sta. 0786) The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		Salinity	ppt		
		Conservative Matl. I	mg/l		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		Conservative Matl. II	mg/l		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		Dissolved O_2	mg/l		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		BOD	mg/l		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		Org.- N	mg/l		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		NH_3-N	mg/l		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		NO_{2+3}-N	mg/l		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value
		Phosphorus	mg/l		
		Chlorophyl A	mg/l	16.70	Obtained from the Bayou Desiard survey data
		Coliform	mg/l		
		Nonconservative Material	mg/L		The ocean exchange ratio was set to 0.0 and the lower boundary condition was not used so that the model would simluate the parameter instead of being forced through a value

APPENDIX F - Survey Data Measurements and Analysis Results

Site Number	Site Description	Site Location	Collection Date	Collection Time	Gage Height (ft)	Sample Depth (M)	Meter Type	Battery	pH (SU)	T (degrees C)	In Situ DO Value (mg/L)	Continuous Monitor D.O. Value (mg/L)	Cond (uhoms/cm)	Secchi Disc	Oil Sheen Present (Y/N)	Salinity (ppt)	% Saturated DO
BDS1A	Bayou Desiard	Bayou Bartholomew @ Lake Bartholomew pump	06/20/01	8:50 AM	56.5	1.0	QT00132	4.1	6.88	28.03	2.93		105	12.0			55.3
BDS2A	Bayou Desiard	Lake Bartholomew pump	06/20/01	9:45 AM		1.0	QT 00132	4.4	7.58	29.93	5.21		128	48.0			67.6
BDS3A	Bayou Desiard	Midpoint on Lake Bartholomew, right fork	06/20/01	10:30 AM		1.0	QT 00132	4.4	7.54	30.71	6.84	4.04	124	60.0			83.3
BDS4A	Bayou Desiard	Midpoint on Lake Bartholomew, left fork	06/20/01	12:40 PM		1.0	QT 00132	4.2	8.87	30.85	7.93		117	36.0			105.2
BDS6A	Bayou Desiard	Lake Bartholomew @ US 165 control structure	06/20/01	11:20 AM		1.0	QT 00132	4.1	7.06	30.54	7.06		121	36.0			98.5
BDS7A	Bayou Desiard	Bayou Desiard @ US 165 control structure	06/20/01	8:40 AM		1.0	Hydrolab Mini Sonde 37761	7.4	6.91	28.20	4.54	3.47	127.5	18.0			58.4
BDS8A	Bayou Desiard	Bayou Desiard @ LA 134 near Fairbanks, LA	06/20/01	8:25 AM		1.0	QT 00131	4.0	6.58	26.62	1.79	0.39	131	31.2		0.07	22.8
BDS9A	Bayou Desiard	Bayou Desiard @ Richland Drive off US 16	06/20/01	9:20 AM		1.0	QT 00131	4.1	6.73	29.32	4.25		101	30.0		.05	56.9

Site Number	Site Description	Site Location	Collection Date	Collection Time	Gage Height (ft)	Sample Depth (M)	Meter Type	Battery	pH (SU)	T (degrees C)	DO (mg/L)		Cond (uhoms/cm)	Secchi Disc	Oil Sheen Present (Y/N)	Salinity (ppt)	% Saturated DO
BDS 10	Bayou Desiard	siard @ Treasure Isla	06/20/2001	1:30 PM		1	QT 00131		6.84	33.21	6.35	3.43	67	2.5		0.04	88.7
BDS 11	Bayou Desiard	Bayou Desiard @ the Bayou Chauvin (L-11 Canal) Overflow Control Structure	06/20/2001	?		1	Hydrolab Mini Sonde 37761		7.22	29.1	7.75		85.2	3.5			101.5
BDS 11	Bayou Desiard	Bayou Desiard @ the Bayou Chauvin (L-11 Canal) Overflow Control Structure	06/20/2001	?		1?	Hydrolab Mini Sonde 37761		7.02	28.91	6.06		85.4				81
BDS 12																	
BDS 13	Bayou Desiard	Bayou Desiard @ Inabnet Road	06/20/2001	2:00 PM		1	Hydrolab Mini Sonde 37761		6.85	29.21	4.61		90.5	3.0			58.8
BDS 14	Bayou Desiard	Bayou Desiard @ Stadium Drive	06/20/2001	3:00 PM		1	Hydrolab Mini Sonde 37761		9.12	31.56	9.5	9.39	93.8	2.8			130.1
BDS 15	Bayou Desiard	Bayou Desiard @ Philpps Bridge	06/20/2001	6:45 AM		1	#37762	7.3	7.46	29.12	6.17	6.53	92.8	1.8			80.2
BDS 16	Bayou Desiard	Bayou Desiard @ the Hogg Bayou Outlet Control Structure	06/20/2001	8:00 AM		1	#37762	7.2	7.67	30	6.68		99.5	2.0			88.5
BDS 17	Bayou Desiard	Bayou Desiard @ the City of Monroe Water Treatment Plant Intake	06/20/2001	7:30 AM		1	#37762	7.2	8.1	30.85	7.37	7.43	100.9	3.8			99
BDS 20	Black Bayou Lake	Black Bayou Lake @ control structure	06/20/2001	12:00 AM			QT 00131		6.03	29.17	0.48	1.34	57	1.0		0.03	5.8
BDS 21	Hannah's Run	Hannah's Run at the Control Structure between	06/20/2001	12:00 AM		1	Hydrolab Mini Sonde 37761		6.94	29.86	6.41	7.72	71.9	3.0			84.8

Site #	Stream Name	Site Description	Total Suspended Solids	Total Dissolved Solids	Alkalinity	Turbidity	Specific Conductance	True Color	Chloride, Ion Chromato grap	Sulfate	Sodium	Hardness	Nitrate+ Nitrite Nitrogen	Total Phosphorus (TP) (mg/L)	Total Kjehldahl Nitrogen	Ammonia-Nitrogen	Total Organic Carbon	Total Nitrogen (TN) (mg/L)	TN/TP	ORGANIC NITROGEN (mg/L)
			A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P = K + M	Q = S / O	R = M - N
BDS1	Bayou Desiard	Bayou Bartholomew @ Lake Bartholomew pump station	24.7	154	32.7	95	110	140	6.4	5.8	7.4	39.1	0.65	0.36	1.36	0.13	10.3	2.01	5.58	1.23
BDS2	Bayou Desiard	Bayou Bartholomew @ Lake Bartholomew lak	9.3	77.3	47.5	5.9	139	55	9.9	3.0	11.4	40.4	ND	0.09	1.49	ND	7.5	1.49	16.56	1.49
BDS3	Bayou Desiard	Midpoint on Lake Bartholomew right fork	4.0	78.0	46.4	3.2	134	28	10.0	2.6	11.1	38.0	ND	0.10	1.22	ND	7.8	1.22	12.20	1.22
BDS4	Bayou Desiard	Midpoint on Lake Bartholomew left fork	6.0	35.3	41.9	6.0	124	20	8.9	3.2	10.2	35.0	ND	0.11	1.52	ND	8.4	1.52	13.82	1.52
BDS4	Bayou Desiard	Midpoint on Lake Bartholomew left fork	6.0	72.0	42.4	6.1	125	22	8.9	3.2	10.1	35.4	ND	0.12	1.84	ND	6.9	1.84	15.33	1.84
BDS6	Bayou Desiard	Lake Bartholomew @ US 165 control struct	5.0	83.3	44.2	6.6	129	21	9.5	3.0	10.8	36.6	ND	0.10	1.30	ND	6.9	1.30	13.00	1.30
BDS7	Bayou Desiard	Bayou Desiard @ US 165 control structure	18.0	75.3	47.5	15	136	28	9.4	2.7	11.0	41.6	ND	0.24	0.90	ND	7.7	0.90	3.75	0.90
BDS8	Bayou Desiard	Bayou Desiard @ LA 134 near Fairbanks, L	8.0	93.3	50.3	5.1	136	55	10.0	ND	10.8	43.9	ND	0.28	1.55	ND	9.3	1.55	5.54	1.55
BDS9	Bayou Desiard	Bayou Desiard @ Richland Drive off US 16	6.4	68.7	39.5	4.6	106	50	7.0	ND	8.4	34.5	ND	0.14	0.97	ND	12.3	0.97	6.93	0.97
BDS10	Bayou Desiard	Bayou Desiard @ Treasure Island Rd nr La	ND	60.0	26.1	5.3	71.1	55	3.8	ND	4.8	23.7	ND	0.12	0.85	ND	15.3	0.85	7.08	0.85
BDS11	Bayou Desiard	Bayou Desiard @ overflow to Bayou Chauvi	4.8	58.7	33.6	4.9	91.6	40	5.7	ND	6.4	28.0	ND	0.11	0.86	ND	13.1	0.86	7.82	0.86
BDS11	Bayou Desiard	Bayou Desiard @ overflow to Bayou Chauvi	4.0	62.0	33.5	4.8	92.1	42	5.9	ND	6.5	28.4	ND	0.11	0.80	ND	13.1	0.80	7.27	0.80
BDS13	Bayou Desiard	Bayou Desiard 200 ft to 300 ft downstrea	6.0	72.3	35.5	6.2	99.6	40	6.5	ND	6.9	29.8	ND	0.14	1.03	ND	13.1	1.03	7.36	1.03
BDS14	Bayou Desiard	Bayou Desiard @ Stadium Dr	11.0	68.0	34.3	9.0	97.7	40	6.8	ND	7.4	26.3	ND	0.08	1.41	ND	11.0	1.41	17.63	1.41
BDS15	Bayou Desiard	Bayou Desiard @ Phillips Bridge	7.0	68.0	36.6	7.1	103	39	6.5	1.6	7.3	32.2	ND	0.15	0.84	0.15	9.9	0.84	5.60	0.69
BDS16	Bayou Desiard	Hog Bayou outlet from Bayou Desiard	10.0	56.7	38.0	8.2	111	26	6.6	2.3	7.5	33.1	ND	0.10	1.02	0.17	8.5	1.02	10.20	0.85
BDS17	Bayou Desiard	Intake to the City of Monroe WTP	4.0	69.3	38.2	4.2	107	20	6.8	2.7	7.8	28.5	ND	0.07	0.66	ND	8.9	0.66	9.43	0.66
BDS20	Bayou Desiard	Control structure between Black Bayou La	22.0	50.0	22.4	7.8	58.9	55	3.5	ND	4.1	26.7	ND	0.15	1.09	0.17	12.1	1.09	7.27	0.92

							Anions										Cations											
Site description	Site #	Sample date	Measured TDS (mg/l)	Field Conductivity (umhos)	Lab Conductivity (umhos)	Silicate (mg/l)	Alkalinity (mg/l)	Chlorides (mg/l)	Sulfate (mg/l)	Nox (mg/l)	Alkalinity (MEQ/L)	Chlorides (MEQ/L)	Sulfate (MEQ/L)	Nox (MEQ/L)	Total Anion (MEQ/l)	Ratio of anions to conductivity	Hardness (mg/l)	Sodium (mg/l)	Hardness (MEQ/L)	Sodium (MEQ/L)	Total Cation (MEQ/l)	Ratio of cations to conductivity	Sum of Detemined constituents (S.D.C.) (mg/l)	Ratio of S.D.C. to meas. TDS	Ratio of Meas. TDS to Lab Cond.	Ratio of S.D.C. to Lab Cond.	Ratio of Meas. TDS to Field Cond.	Ratio of S.D.C. to Field Cond.
			A	B	C	C1	D	E	F	G	D x U	E x U	F x U	G x U	L (note 2)	(L x 100) / C	M	N	M x U	N x U	Q (note 3)	(Q x 100) / C	T (note 1)	T / A	A / C	T / C	A / B	T / B
Bayou Bartholomew @ Lake Bartholomew pump station	BDS1		154	105	110		32.7	6.4	5.8	0.65	0.653	0.181	0.121	0.010	0.965	0.88	39.1	7.4	0.781	0.322	1.103	1.00	58.8	0.38	1.400	0.534	1.467	0.560
Lake Bartholomew @ Pump outlet	BDS2		77.3	128	139		47.5	9.9	3.0	0	0.949	0.279	0.062	0.000	1.291	0.929	40.4	11.4	0.807	0.496	1.303	0.937	73.0	0.94	0.556	0.525	0.604	0.570
Midpoint on Lake Bartholomew right fork	BDS3		78.0	124	134		46.4	10.0	2.6	0	0.927	0.282	0.054	0.000	1.263	0.943	38.0	11.1	0.759	0.483	1.242	0.927	70.5	0.90	0.582	0.526	0.629	0.569
Midpoint on Lake Bartholomew left fork	BDS4		35.3	117	124		41.9	8.9	3.2	0	0.837	0.251	0.067	0.000	1.155	0.931	35.0	10.2	0.699	0.443	1.143	0.922	64.9	1.84	0.285	0.524	0.302	0.555
Midpoint on Lake Bartholomew left fork	BDS4		72.0	117	125		42.4	8.9	3.2	0	0.847	0.251	0.067	0.000	1.165	0.932	35.4	10.1	0.707	0.439	1.146	0.917	65.3	0.91	0.576	0.523	0.615	0.558
Lake Bartholomew @ US 165 control struct	BDS6		83.3	121	129		44.2	9.5	3.0	0	0.883	0.268	0.062	0.000	1.214	0.941	36.6	10.8	0.731	0.470	1.201	0.931	68.1	0.82	0.646	0.528	0.688	0.563
Bayou Desiard @ US 165 control structure	BDS7		75.3	127.5	136		47.5	9.4	2.7	0	0.949	0.265	0.056	0.000	1.270	0.934	41.6	11.0	0.831	0.478	1.309	0.963	72.4	0.96	0.554	0.532	0.591	0.568
Bayou Desiard @ LA 134 near Fairbanks, L	BDS8		93.3	131	136		50.3	10.0	0	0	1.005	0.282	0.000	0.000	1.287	0.946	43.9	10.8	0.877	0.470	1.347	0.990	72.9	0.78	0.686	0.536	0.712	0.557
Bayou Desiard @ Richland Drive off US 165	BDS9		68.7	101	106		39.5	7.0	0	0	0.789	0.197	0.000	0.000	0.987	0.931	34.5	8.4	0.689	0.365	1.055	0.995	66.4	0.82	0.648	0.532	0.680	0.598
Bayou Desiard @ Treasure Island Rd nr Lamkin, LA	BDS10		60.0		71.1		26.1	3.8	0	0	0.521	0.107	0.000	0.000	0.629	0.884	23.7	4.8	0.474	0.209	0.682	0.960	36.1	0.60	0.844	0.508	#DIV/0!	#DIV/0!
Bayou Desiard @ overflow to Bayou Chauvin (L-11 Canal)	BDS11		58.7		91.6		33.6	5.7	0	0	0.671	0.161	0.000	0.000	0.832	0.908	28.0	6.4	0.559	0.278	0.838	0.915	46.3	0.79	0.641	0.505	#DIV/0!	#DIV/0!
Bayou Desiard @ overflow to Bayou Chauvin (L-11 Canal)	BDS11		62.0		92.1		33.5	5.9	0	0	0.669	0.166	0.000	0.000	0.836	0.907	28.4	6.5	0.567	0.283	0.850	0.923	46.7	0.75	0.673	0.507	#DIV/0!	#DIV/0!
Bayou Desiard 200 ft to 300 ft downstream	BDS13		72.3		99.6		35.5	6.5	0	0	0.709	0.183	0.000	0.000	0.893	0.896	29.8	6.9	0.595	0.300	0.895	0.899	49.6	0.69	0.726	0.498	#DIV/0!	#DIV/0!
Bayou Desiard @ Stadium Dr	BDS14		68.0		97.7		34.3	6.8	0	0	0.685	0.192	0.000	0.000	0.877	0.898	26.3	7.4	0.525	0.322	0.847	0.867	47.9	0.70	0.696	0.491	#DIV/0!	#DIV/0!
Bayou Desiard @ Phillips Bridge	BDS15		68.0		103		36.6	6.5	1.6	0	0.731	0.183	0.033	0.000	0.948	0.920	32.2	7.3	0.643	0.317	0.961	0.933	53.5	0.79	0.660	0.519	#DIV/0!	#DIV/0!
Hog Bayou outlet from Bayou Desiard	BDS16		66.7		111		38.0	6.6	2.3	0	0.759	0.186	0.048	0.000	0.993	0.895	33.1	7.5	0.661	0.326	0.987	0.890	55.8	0.98	0.511	0.502	#DIV/0!	#DIV/0!
Intake to the City of Monroe WTP	BDS17		69.3		107		38.2	6.8	2.7	0	0.763	0.192	0.056	0.000	1.011	0.945	28.5	7.8	0.569	0.339	0.909	0.849	54.5	0.79	0.648	0.509	#DIV/0!	#DIV/0!
Control structure between Black Bayou Lake	BDS20		50.0		58.9		22.4	3.5	0		0.448	0.099	0.000		0.546		26.7	4.1	0.533	0.178	0.712	1.208	34.4	0.69	0.849	0.584	#DIV/0!	#DIV/0!
Hannah Run @ the control structure between	BDS21		69.3		88.4		32.4	4.8	1.9	0	0.647	0.135	0.040	0.000	0.822	0.930	30.5	6.9	0.609	0.300	0.909	1.029	48.3	0.70	0.784	0.546	#DIV/0!	#DIV/0!
Factor for converting to MEQ/L = U =											0.01998	0.02821	0.02082	0.01613					0.01998	0.04348								
Minimum value in sample control check:																0.9						0.90		0.85	0.50	0.50	0.50	0.50
Maximum value in sample control check:																1.05						1.05		1.05	0.65	0.65	0.65	0.65

Note 1 = This is the sum of the determined constituents. **T = [(D * 0.6) + E + F + (M / 2) + N + C1].**

Note 2 = The sum of the measured (MEQ/L) Anions which include alkalinity, chlorides, sulfates, NOx.

Note 3 = The sum of the measured (MEQ/L) Cations which include hardness and sodium.

Check for problems

Instructions for the worksheet:

1. Left mouse click the "Clear UBOD, k rates, and Lag times" command button to clear the current data.
2. Left mouse click on the "Calculate UBOD, k rates and Lag times" command button (follow the given instructions for the CBOD dataset).
   The Day values are in green and BOD data is in blue, only highlight the populated cells.
3. Left mouse click on the "Calculate UBOD, k rates and Lag times" command button (follow the given instructions for the NBOD dataset).
   The Day values are in green and BOD data is in blue, only highlight the populated cells.
4. Goto the "Output sheet" and view the individual sample data determinations for quality control purposes.
5. This sheet can be printed for reporting purposes.

Calculate UBOD, k rates and Lag times

Clear UBOD, k rates and Lag times

Survey Stream and date: Bayou Desiard

Calculated CBOD (Note 2)		Days from analysis start date:															Rates and ultimate CBOD values for the first CBOD component			Rates and ultimate CBOD values for the second CBOD component			
Item No.	Sample No.	0	0	0	0	0	1	4	6	12	15	20	29	40	48	60	k rate (1/day)	UBOD1 (mg/l)	Lag time (days)	k rate (1/day)	UBOD2 (mg/l)	Lag time (days)	Subtotal residuals squared
1	BDS1 / Bayou Desiard Bayou Bartholomew @ Lake Bartholomew pum						0.30	1.20	1.70	2.89	2.89	2.98	3.03	4.30	4.79	5.39	0.14	3.32	0.48	0.0000	8.23	23.48	0.09
2	BDS10 / Bayou Desiard Bayou Desiard @ Treasure Island Rd nr La						0.70	4.70	6.90	10.40	11.70	12.62	13.93	15.35	16.47	17.43	0.12	13.90	0.59	0.0110	10.76	25.08	0.08
3	BDS11 / Bayou Desiard Bayou Desiard @ overflow to Bayou Chauvi						0.50	3.70	4.70	7.10	8.02	8.84	10.31	11.51	12.32	13.17	0.14	9.10	0.54	0.0174	7.82	17.52	0.12
4	BDS13 / Bayou Desiard Bayou Desiard 200 ft to 300 ft downstrea						0.00	0.00	0.00	10.60	11.32	13.00	15.00	16.81	17.40	18.45	0.23	11.60	0.66	0.0457	7.98	15.00	0.70
5	BDS14 / Bayou Desiard Bayou Desiard @ Stadium Dr						0.70	8.10	9.80	10.60	12.00	14.20	15.61	16.69	17.79	18.66	0.08	17.33	0.65	0.0067	9.23	35.08	0.43
6	BDS15 / Bayou Desiard Bayou Desiard @ Phillips Bridge						0.40	4.00	4.90	7.80	8.80	9.81	10.49	12.01	12.87	13.78	0.12	10.87	0.55	0.0343	4.67	30.72	0.25
7	BDS16 / Bayou Desiard Hog Bayou outlet from Bayou Desiard						0.60	3.30	4.10	6.61	7.02	7.98	9.23	10.73	11.33	11.90	0.13	8.28	0.48	0.0272	5.51	19.07	0.14
8	BDS17 / Bayou Desiard intake to the City of Monroe WTP						0.60	2.10	3.20	5.30	5.88	6.48	7.38	8.67	9.21	9.78	0.10	7.58	0.52	0.0366	3.20	27.95	0.85
9	BDS2 / Bayou Desiard Bayou Bartholomew @ Lake Bartholomew lak						0.40	2.70	3.10	4.39	4.85	5.08	5.66	6.56	7.02	7.83	0.21	4.80	0.55	0.0116	6.94	15.02	0.09
10	BDS20 / Bayou Desiard Control structure between Black Bayou La						1.40	4.60	5.90	9.80	11.10	12.95	14.75	16.06	17.14	18.17	0.08	16.54	0.61	0.0115	7.29	35.00	0.21
11	BDS21 / Bayou Desiard Hannah Run @ the control structure betwe						1.30	4.90	5.80	9.10	9.80	10.34	11.41	12.84	13.80	14.69	0.11	11.48	0.61	0.0235	6.66	29.30	0.98
12	BDS3 / Bayou Desiard Midpoint on Lake Bartholomew right fork						0.60	3.30	3.90	5.52	5.89	6.48	6.93	7.67	8.16	8.62	0.15	6.05	0.24	0.0551	2.22	31.40	0.77
13	BDS4 / Bayou Desiard Midpoint on Lake Bartholomew left fork						0.40	2.70	3.80	5.80	6.18	6.87	7.98	8.83	9.49	10.07	0.15	7.08	0.63	0.0145	6.08	18.12	0.02
14	BDS6 / Bayou Desiard Lake Bartholomew @ US 165 control struct						0.40	3.10	4.20	6.73	6.26	6.62	7.28	8.18	8.72	8.28	0.19	6.62	0.66	0.0147	5.96	19.57	0.03
15	BDS7 / Bayou Desiard Bayou Desiard @ US 165 control structure						0.60	3.70	7.00	9.66	10.25	11.30	12.20	13.39	14.00	14.75	0.20	10.76	0.55	0.0184	7.98	15.00	0.14
																						TOTAL =	3.54

Calculated NBOD (Note 1)		Days from analysis start date:																		
Item No.	Sample No.	0	0	0	0	0	1	4	6	12	15	20	29	40	48	60	k rate (1/day)	UBOD (mg/l)	Lag time (days)	Sum of errors squared
1	BDS1 / Bayou Desiard Bayou Bartholomew @ Lake Bartholomew pum						0.16	0.00	0.05	0.00	0.41	0.73	0.07	0.69	0.73	1.28	0.26	0.91	11.96	0.25
2	BDS10 / Bayou Desiard Bayou Desiard @ Treasure Island Rd nr La						0.00	0.00	0.00	0.00	0.00	0.66	1.51	1.68	2.01	2.24	0.07	2.27	15.70	0.05
3	BDS11 / Bayou Desiard Bayou Desiard @ overflow to Bayou Chauvi						0.00	0.00	0.00	0.00	0.27	0.98	1.68	1.83	1.92	2.10	0.10	2.05	13.47	0.02
4	BDS13 / Bayou Desiard Bayou Desiard 200 ft to 300 ft downstrea						0.00	0.00	0.27	0.32	0.41	2.74	1.46	3.66	1.63	4.07	0.05	3.59	9.82	5.33
5	BDS14 / Bayou Desiard Bayou Desiard @ Stadium Dr						0.16	0.00	0.00	0.00	0.14	1.14	2.97	3.02	3.56	3.88	0.09	3.81	15.98	0.35
6	BDS15 / Bayou Desiard Bayou Desiard @ Phillips Bridge						0.14	0.00	0.00	0.00	0.41	1.28	3.47	3.98	3.70	4.11	0.20	3.84	17.94	0.33
7	BDS16 / Bayou Desiard Hog Bayou outlet from Bayou Desiard						0.00	0.00	0.00	0.23	1.28	1.87	2.18	2.47	2.60	1.14	0.34	2.07	11.72	1.34
8	BDS17 / Bayou Desiard intake to the City of Monroe WTP						0.00	0.00	0.00	0.00	0.27	0.69	1.68	1.97	2.01	2.24	0.07	2.32	13.51	0.04
9	BDS2 / Bayou Desiard Bayou Bartholomew @ Lake Bartholomew lak						0.00	0.00	0.00	0.55	0.69	1.06	1.33	1.37	1.48	1.55	0.09	1.52	7.29	0.01
10	BDS20 / Bayou Desiard Control structure between Black Bayou La						0.00	0.00	0.00	0.23	0.00	0.32	1.68	1.63	2.06	2.42	0.11	2.29	18.47	0.17
11	BDS21 / Bayou Desiard Hannah Run @ the control structure betwe						0.00	0.00	0.00	0.00	0.00	1.05	2.33	2.47	2.51	2.74	0.10	2.61	17.06	0.04
12	BDS3 / Bayou Desiard Midpoint on Lake Bartholomew right fork						0.00	0.00	0.00	0.00	0.00	0.67	1.23	1.48	1.51	1.83	0.07	1.73	11.38	0.05
13	BDS4 / Bayou Desiard Midpoint on Lake Bartholomew left fork						0.00	0.00	0.00	0.00	0.18	0.59	1.23	1.37	1.55	1.60	0.12	1.51	13.76	0.03
14	BDS6 / Bayou Desiard Lake Bartholomew @ US 165 control struct						0.00	0.00	0.00	0.00	0.70	1.05	1.28	1.46	1.60	1.97	0.09	1.74	10.80	0.19
15	BDS7 / Bayou Desiard Bayou Desiard @ US 165 control structure						0.00	0.00	0.00	0.73	1.23	1.92	2.36	2.65	2.74	2.97	0.09	2.88	8.75	0.03

Note 1 - Calculated by multiplying the measured (NO_2 +NO_3 as nitrogen) minus the day zero (NO_2 +NO_3 as nitrogen) by 4.57.

Note 2 - Determined by subtracting the calculated NBOD from the measured total BOD.

Instructions for the worksheet:

1. Left mouse click the "Clear UBOD, k rates, and Lag times" command button to clear the current data.
2. Left mouse click on the "Calculate UBOD, k rates and Lag times" command button (follow the given instructions for the CBOD dataset). The Day values are in green and BOD data is in blue, only highlight the populated cells.
3. Left mouse click on the "Calculate UBOD, k rates and Lag times" command button (follow the given instructions for the NBOD dataset). The Day values are in green and BOD data is in blue, only highlight the populated cells.
4. Goto the "Output sheet" and view the individual sample data determinations for quality control purposes.
5. This sheet can be printed for reporting purposes.

Calculate UNBOD, k rates and Lag times

Clear UNBOD, k rates and Lag times

Survey Stream and date: **Bayou Desiard**

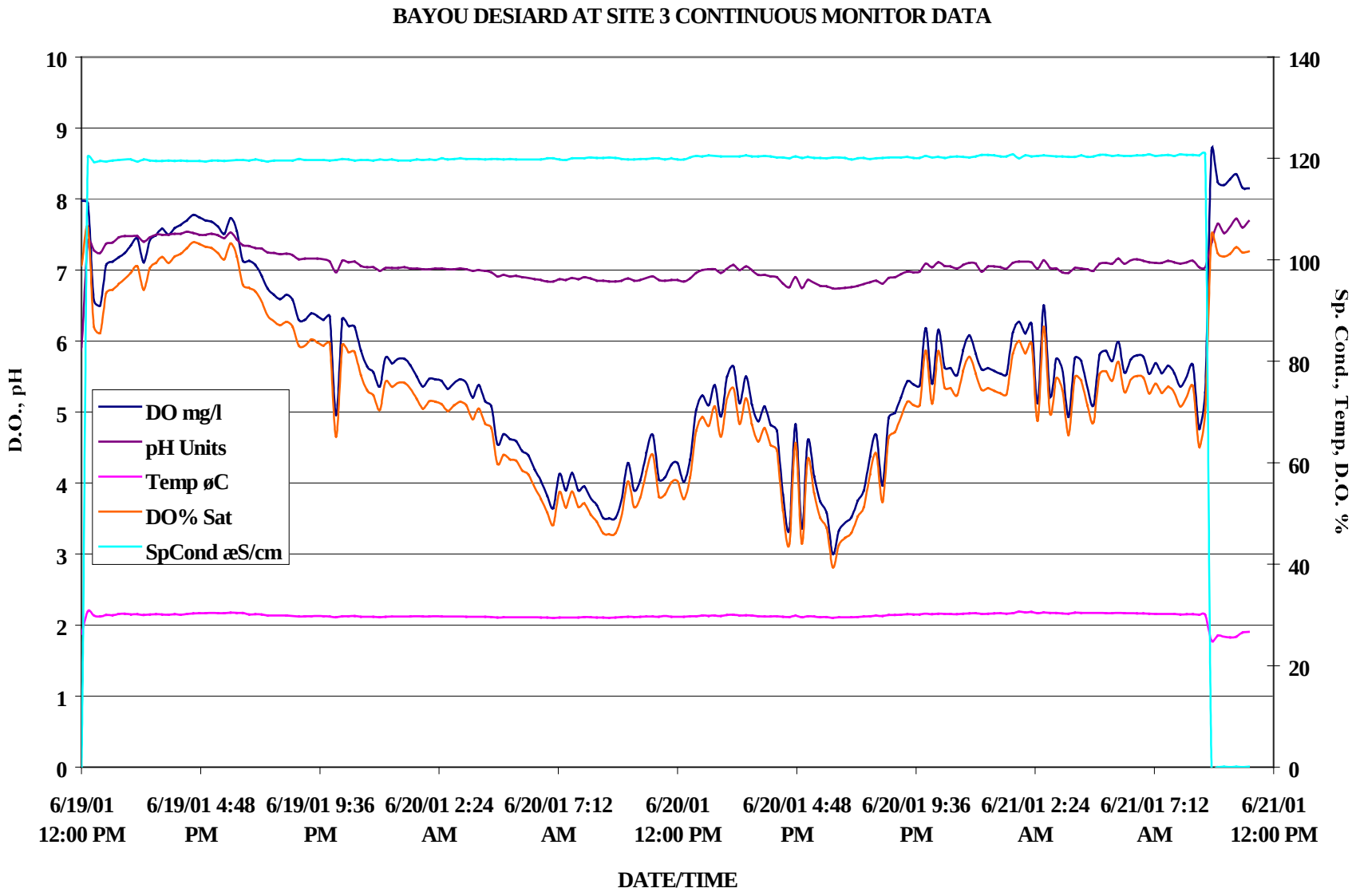
Calculated CBOD (Note 2)		Days from analysis start date:															Rates and ultimate CBOD values for the first CBOD component			Rates and ultimate CBOD values for the second CBOD component			
Item No.	Sample No.	0	0	0	0	0	1	4	6	12	15	20	29	40	48	60	k rate (1/day)	UCBOD1 (mg/l)	Lag time (days)	k rate (1/day)	UCBOD2 (mg/l)	Lag time (days)	Subtotal residuals squared
1	BO03 / Bayou Desiard @ LA 134 near Fairbanks, LA						2.30	9.10	10.00	12.30	13.21	14.11	15.54	17.32	18.22	19.12	0.29	13.01	0.25	0.0131	7.68	15.00	0.98
2	BO03 / Bayou Desiard @ Richland Drive off U.S. 165						0.60	4.80	5.50	7.50	8.12	9.03	10.11	11.32	12.22	12.94	0.20	8.41	0.47	0.0241	6.66	15.00	0.28
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							
13																							
14																							
15																							
																						TOTAL =	1.22

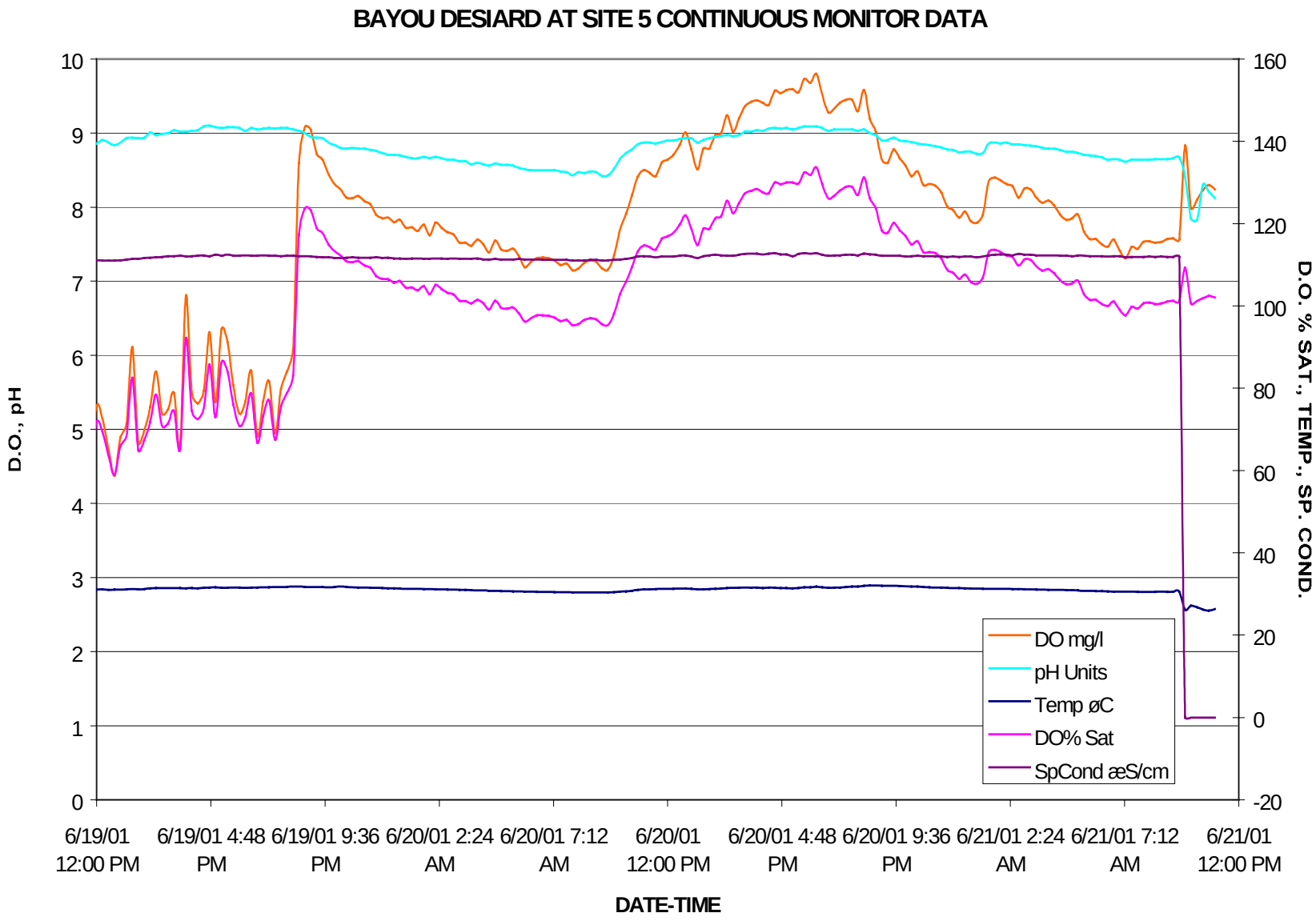
Calculated NBOD (Note 1)		Days from analysis start date:																		
Item No.	Sample No.	0	0	0	0	0	1	4	6	12	15	20	29	40	48	60	k rate (1/day)	UNBOD (mg/l)	Lag time (days)	Sum of errors squared
1	BO03 / Bayou Desiard @ LA 134 near Fairbanks, LA						0.00	0.00	0.37	0.32	0.69	2.53	2.88	3.15	1.65	3.47	0.34	2.78	14.15	2.16
2	BO03 / Bayou Desiard @ Richland Drive off U.S. 165						0.00	0.00	0.00	0.00	0.00	0.82	1.37	1.78	2.06	2.33	0.06	2.43	14.39	0.04
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				

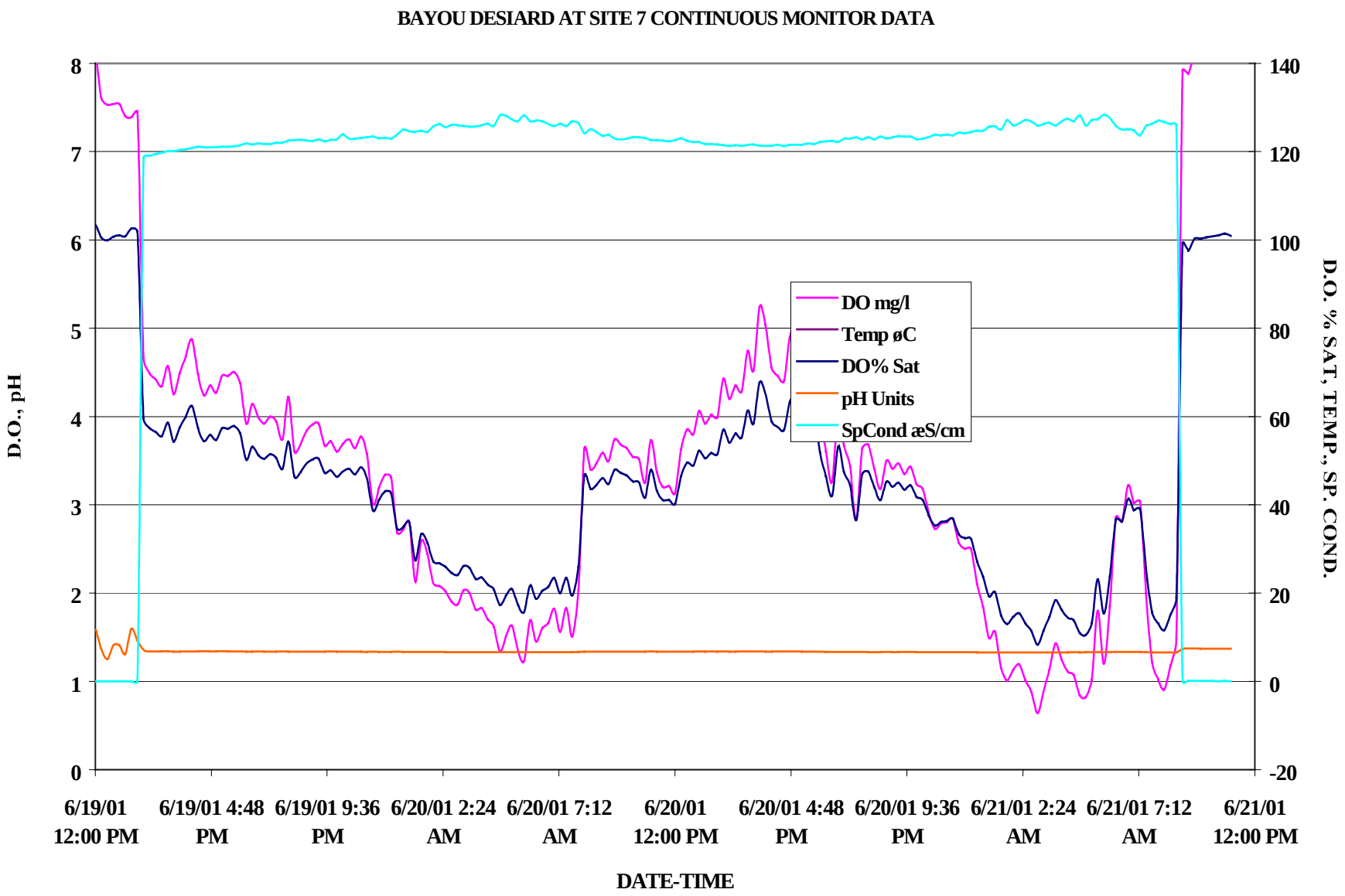
Note 1 - Calculated by multiplying the measured (NO_2 +NO_3 as nitrogen) minus the day zero (NO_2 +NO_3 as nitrogen) by 4.57.
Note 2 - Determined by subtracting the calculated NBOD from the measured total BOD.

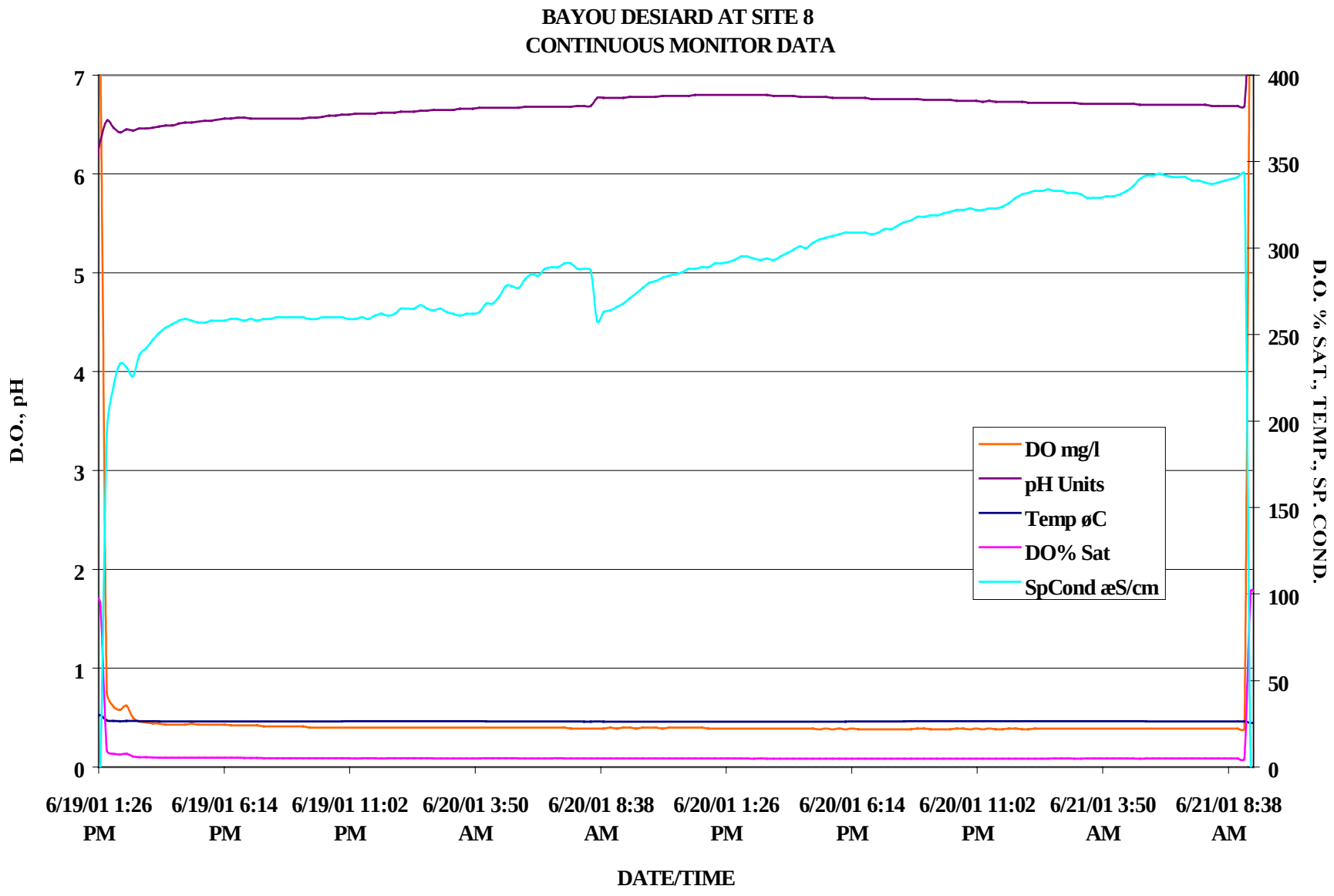
BAYOU DESIARD
CONTINUOUS MONITOR DATA SUMMARY
AVERAGE, MAXIMUM, AND MINIMUM VALUES
FOR THE TIME PERIOD (7:00 am 6/20/01-7:00 am 6/21/01)

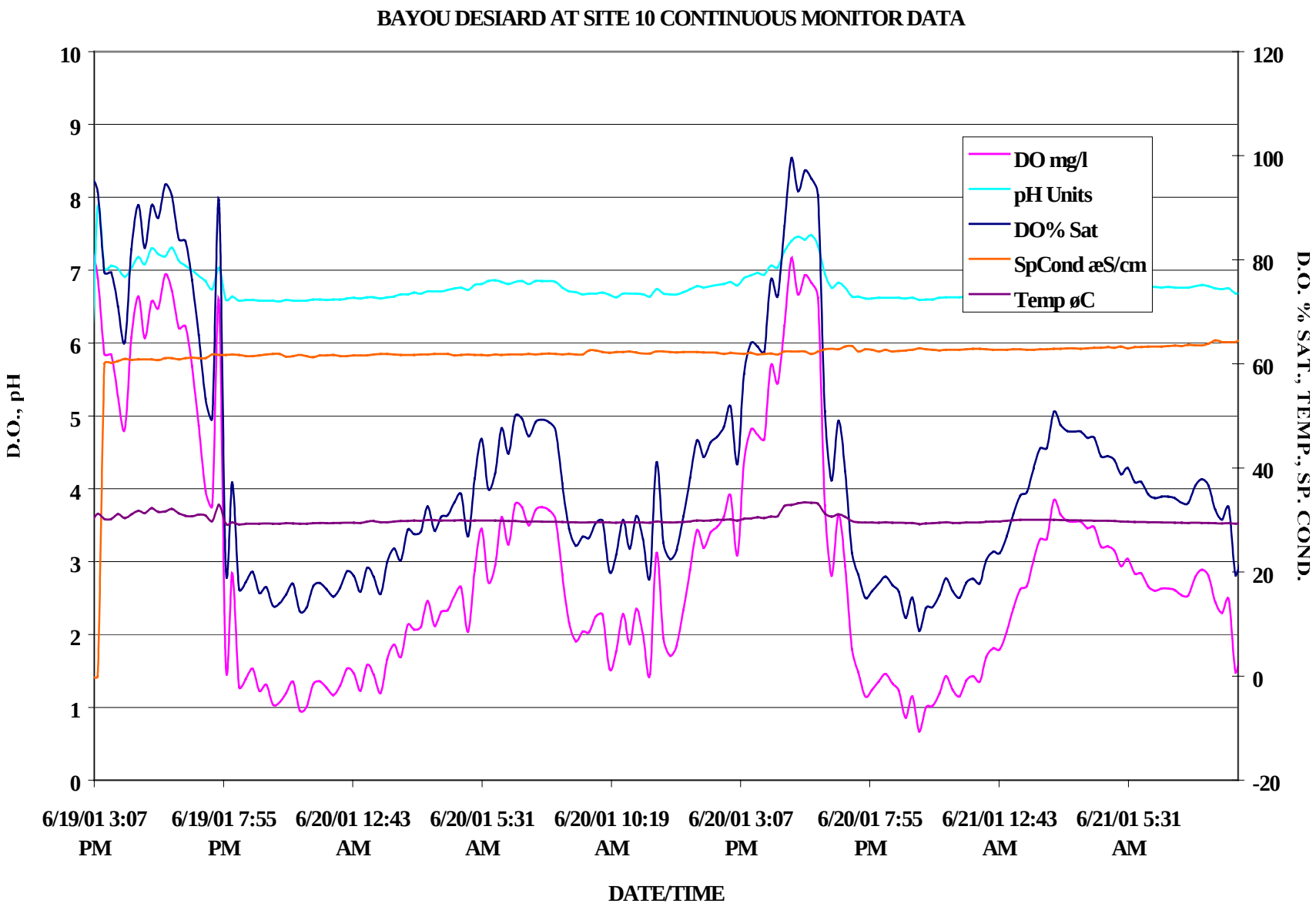
		Temp øC	DO% Sat	DO mg/l	SpCond æS/cm	pH Units
BDS3	MAX	30.68	86.8	6.5	120.8	7.16
	AVERAGE	29.96	64.46	4.87	120.26	6.95
	MIN	29.41	39.4	3	119.7	6.74
BDS5	MAX	32.08	133.7	9.8	112.8	9.09
	AVERAGE	31.23	113.98	8.43	112.09	8.83
	MIN	30.35	95.3	7.15	111	8.42
BDS7	MAX	28.79	68.4	5.28	128.3	6.8
	AVERAGE	28.49	38.69	3.00	123.86	6.65
	MIN	28.08	8.3	0.64	121.2	6.53
BDS8	MAX	26.52	5	0.4	343	6.8
	AVERAGE	26.35	4.85	0.39	308.79	6.75
	MIN	26.17	4.7	0.38	258	6.68
BDS10	MAX	33.41	99.50	7.16	63.40	7.48
	AVERAGE	30.00	38.23	2.87	62.53	6.79
	MIN	29.22	8.70	0.67	61.80	6.59
BDS11	MAX	30.76	118.00	8.96	82.90	7.51
	AVERAGE	29.66	99.23	7.54	82.37	7.07
	MIN	28.93	82.90	6.33	81.90	6.81
BDS14	MAX	34.53	137.90	9.88	75.90	9.01
	AVERAGE	31.34	115.19	8.50	73.10	8.62
	MIN	30.13	90.70	6.61	71.60	8.04
BDS15	MAX	32.67	56.00	10.74	165.40	9.01
	AVERAGE	30.75	163.53	7.94	50.80	8.02
	MIN	29.08	47.00	5.28	162.00	7.12
BDS17	MAX	31.69		8.95	103.10	8.60
	AVERAGE	30.98		7.75	99.84	8.13
	MIN	30.34		6.76	98.20	7.60
BDS20	MAX	29.27	47.00	1.44	62.00	5.91
	AVERAGE	28.89	45.91	1.34	58.01	5.88
	MIN	28.49	45.00	1.33	55.80	5.84
BDS21	MAX	32.06	76.00	8.74	77.90	7.07
	AVERAGE	30.54	71.05	6.95	69.52	6.88
	MIN	29.32	66.00	5.75	66.10	6.69

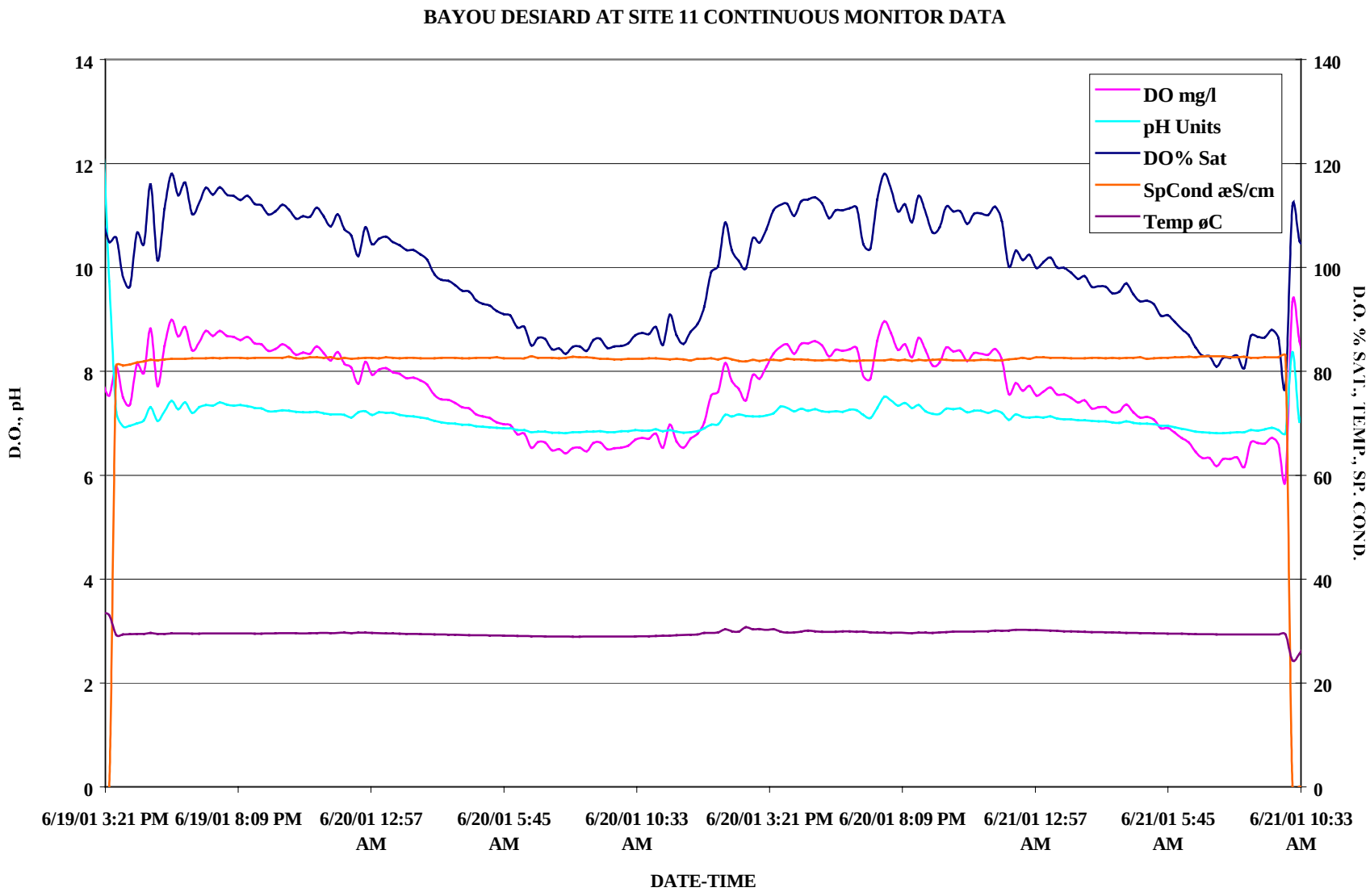

BAYOU DESIARD AT SITE 3 CONTINUOUS MONITOR DATA
D.O., pH
Sp. Cond., Temp, D.O. %
DO mg/l
pH Units
Temp øC
DO% Sat
SpCond æS/cm
10
9
8
7
6
5
4
3
2
1
0
140
120
100
80
60
40
20
0
6/19/01 12:00 PM
6/19/01 4:48 PM
6/19/01 9:36 PM
6/20/01 2:24 AM
6/20/01 7:12 AM
6/20/01 12:00 PM
6/20/01 4:48 PM
6/20/01 9:36 PM
6/21/01 2:24 AM
6/21/01 7:12 AM
6/21/01 12:00 PM
DATE/TIME

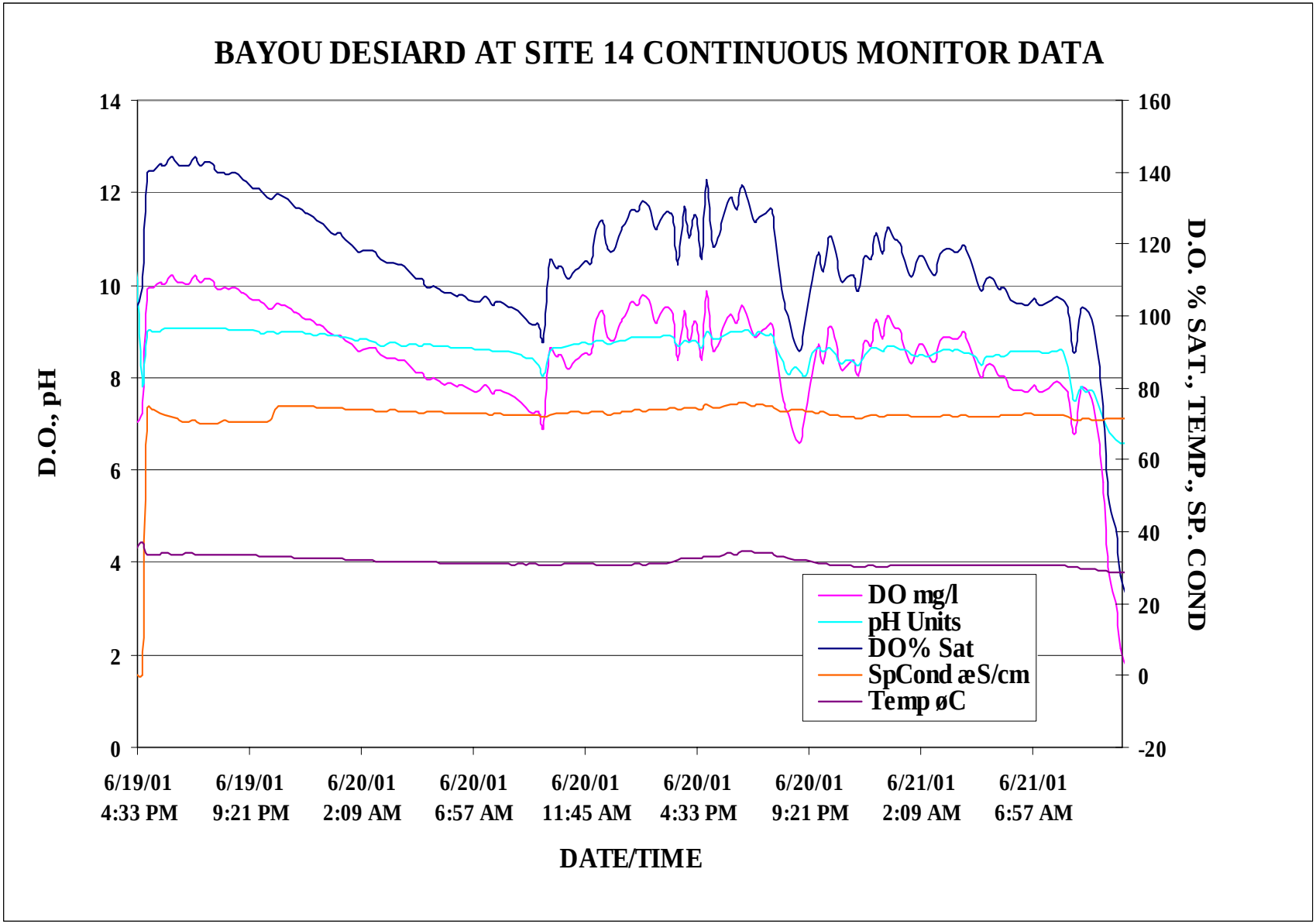

BAYOU DESIARD AT SITE 5 CONTINUOUS MONITOR DATA
D.O., pH
D.O. % SAT., TEMP., SP. COND.
DATE-TIME
10
9
8
7
6
5
4
3
2
1
0
160
140
120
100
80
60
40
20
0
-20
6/19/01 12:00 PM
6/19/01 4:48 PM
6/19/01 9:36 PM
6/20/01 2:24 AM
6/20/01 7:12 AM
6/20/01 12:00 PM
6/20/01 4:48 PM
6/20/01 9:36 PM
6/21/01 2:24 AM
6/21/01 7:12 AM
6/21/01 12:00 PM
DO mg/l
pH Units
Temp øC
DO% Sat
SpCond æS/cm

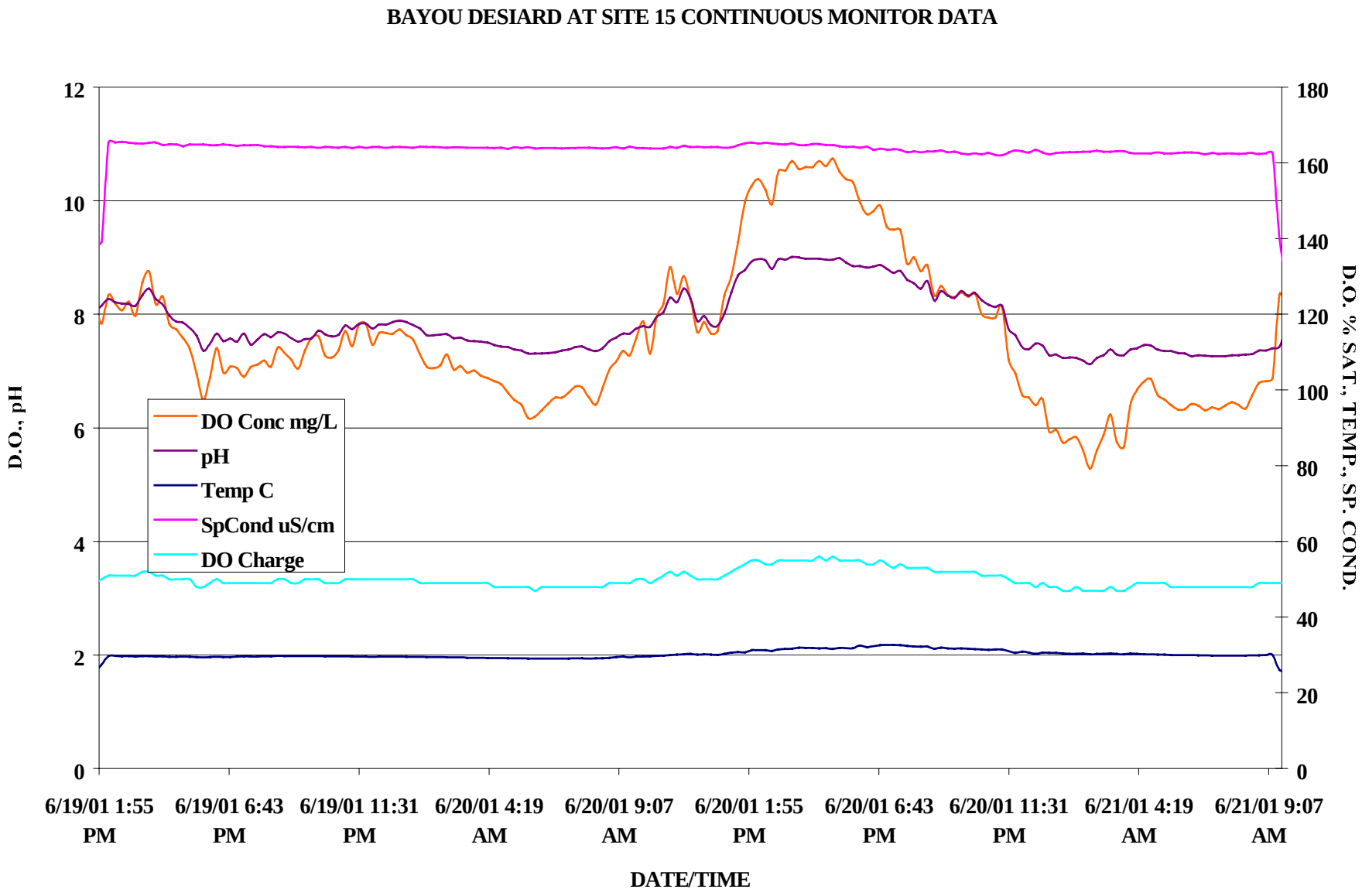

BAYOU DESIARD AT SITE 7 CONTINUOUS MONITOR DATA
D.O., pH
D.O. % SAT, TEMP., SP. COND.
DO mg/l
Temp øC
DO% Sat
pH Units
SpCond æS/cm
8
7
6
5
4
3
2
1
0
140
120
100
80
60
40
20
0
-20
6/19/01 12:00 PM
6/19/01 4:48 PM
6/19/01 9:36 PM
6/20/01 2:24 AM
6/20/01 7:12 AM
6/20/01 12:00 PM
6/20/01 4:48 PM
6/20/01 9:36 PM
6/21/01 2:24 AM
6/21/01 7:12 AM
6/21/01 12:00 PM
DATE-TIME

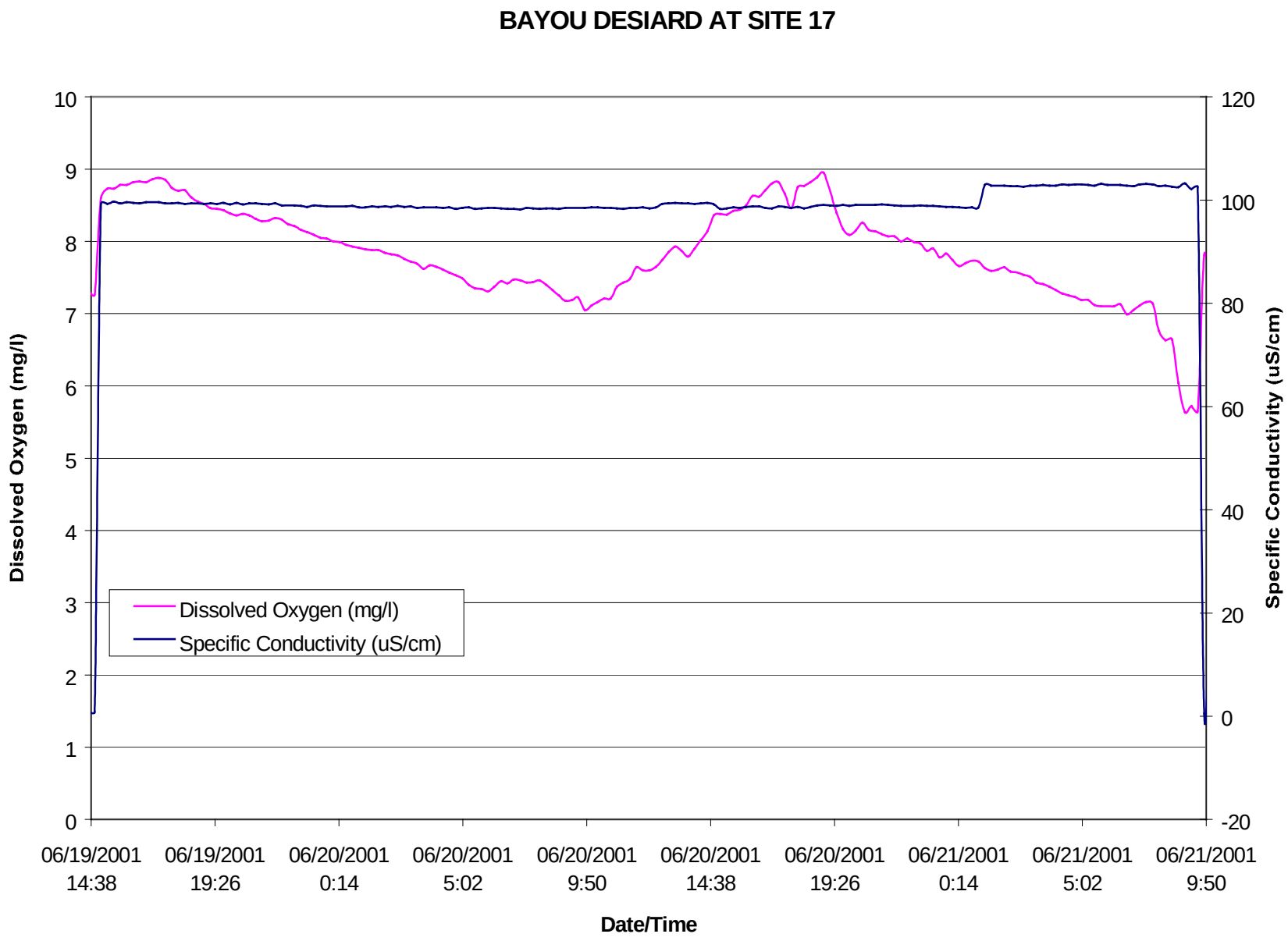

BAYOU DESIARD AT SITE 8
CONTINUOUS MONITOR DATA
D.O., pH
D.O. % SAT., TEMP., SP. COND.
DATE/TIME
DO mg/l
pH Units
Temp øC
DO% Sat
SpCond æS/cm
0
1
2
3
4
5
6
7
0
50
100
150
200
250
300
350
400
6/19/01 1:26 PM
6/19/01 6:14 PM
6/19/01 11:02 PM
6/20/01 3:50 AM
6/20/01 8:38 AM
6/20/01 1:26 PM
6/20/01 6:14 PM
6/20/01 11:02 PM
6/21/01 3:50 AM
6/21/01 8:38 AM

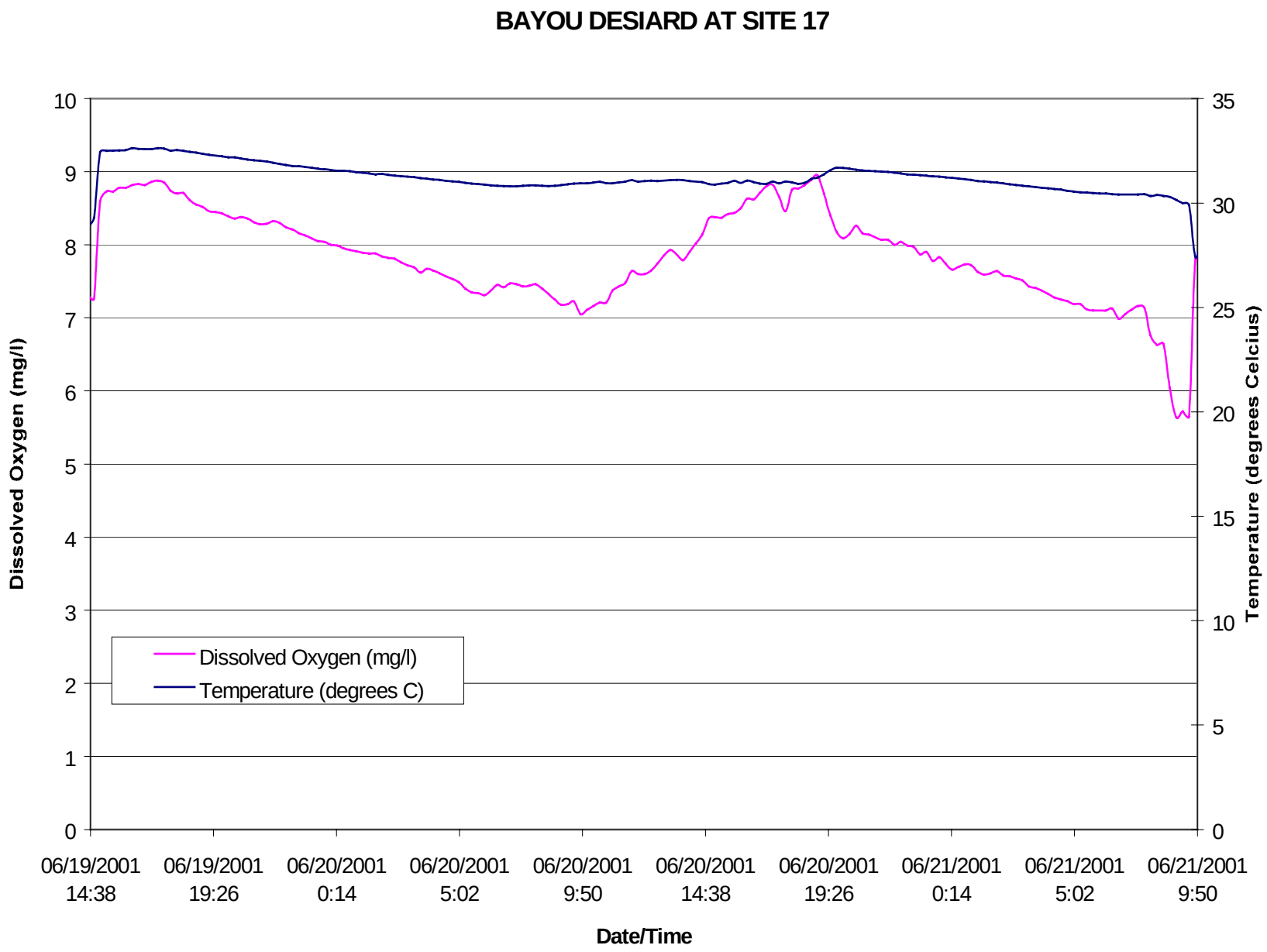

BAYOU DESIARD AT SITE 10 CONTINUOUS MONITOR DATA
D.O., pH
D.O. % SAT., TEMP., SP. COND.
DO mg/l
pH Units
DO% Sat
SpCond æS/cm
Temp øC
10
9
8
7
6
5
4
3
2
1
0
120
100
80
60
40
20
0
-20
6/19/01 3:07 PM
6/19/01 7:55 PM
6/20/01 12:43 AM
6/20/01 5:31 AM
6/20/01 10:19 AM
6/20/01 3:07 PM
6/20/01 7:55 PM
6/21/01 12:43 AM
6/21/01 5:31 AM
DATE/TIME

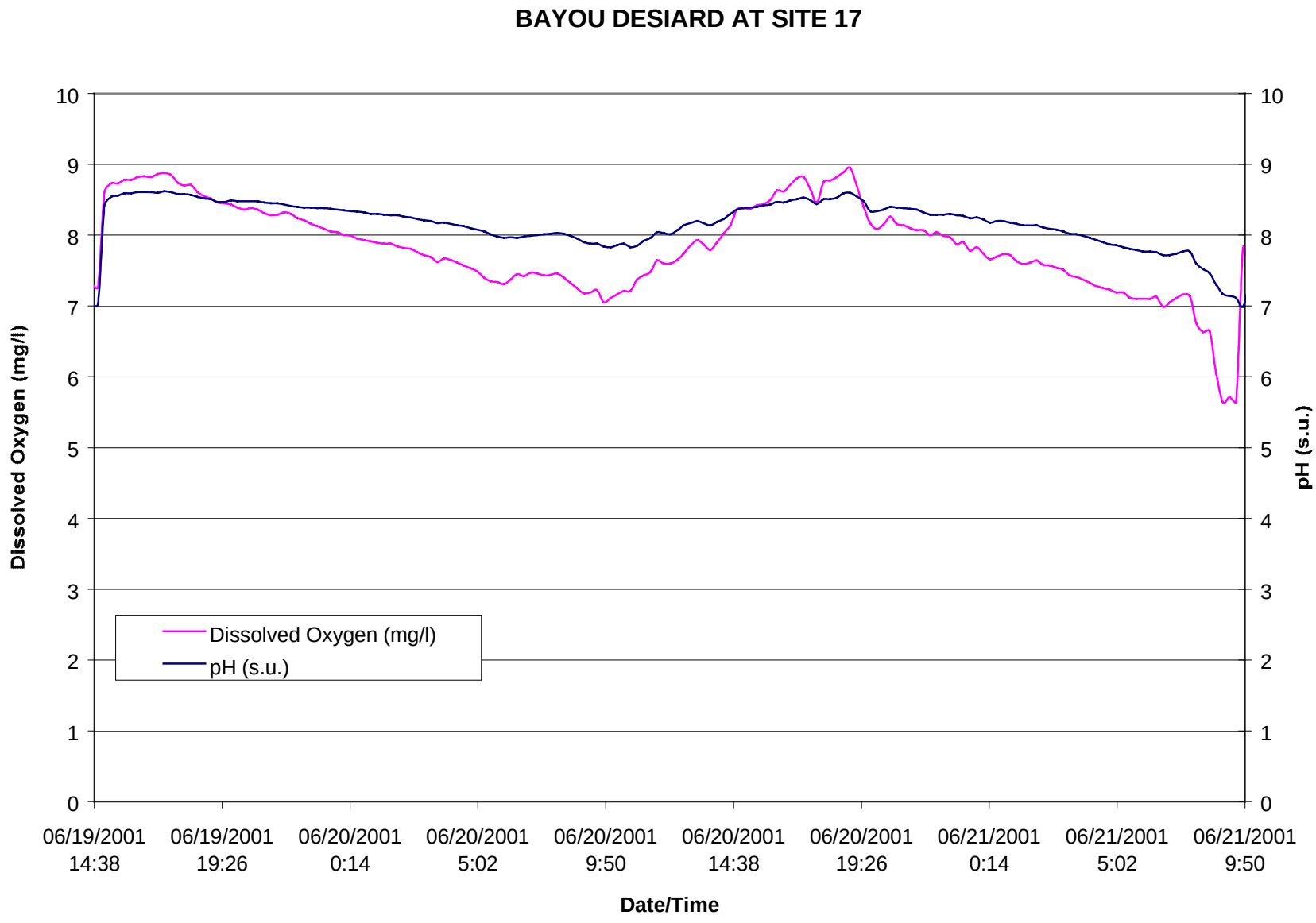

BAYOU DESIARD AT SITE 11 CONTINUOUS MONITOR DATA
DO mg/l
pH Units
DO% Sat
SpCond æS/cm
Temp øC
D.O., pH
D.O. % SAT., TEMP., SP. COND.
14
12
10
8
6
4
2
0
140
120
100
80
60
40
20
0
6/19/01 3:21 PM
6/19/01 8:09 PM
6/20/01 12:57 AM
6/20/01 5:45 AM
6/20/01 10:33 AM
6/20/01 3:21 PM
6/20/01 8:09 PM
6/21/01 12:57 AM
6/21/01 5:45 AM
6/21/01 10:33 AM
DATE-TIME

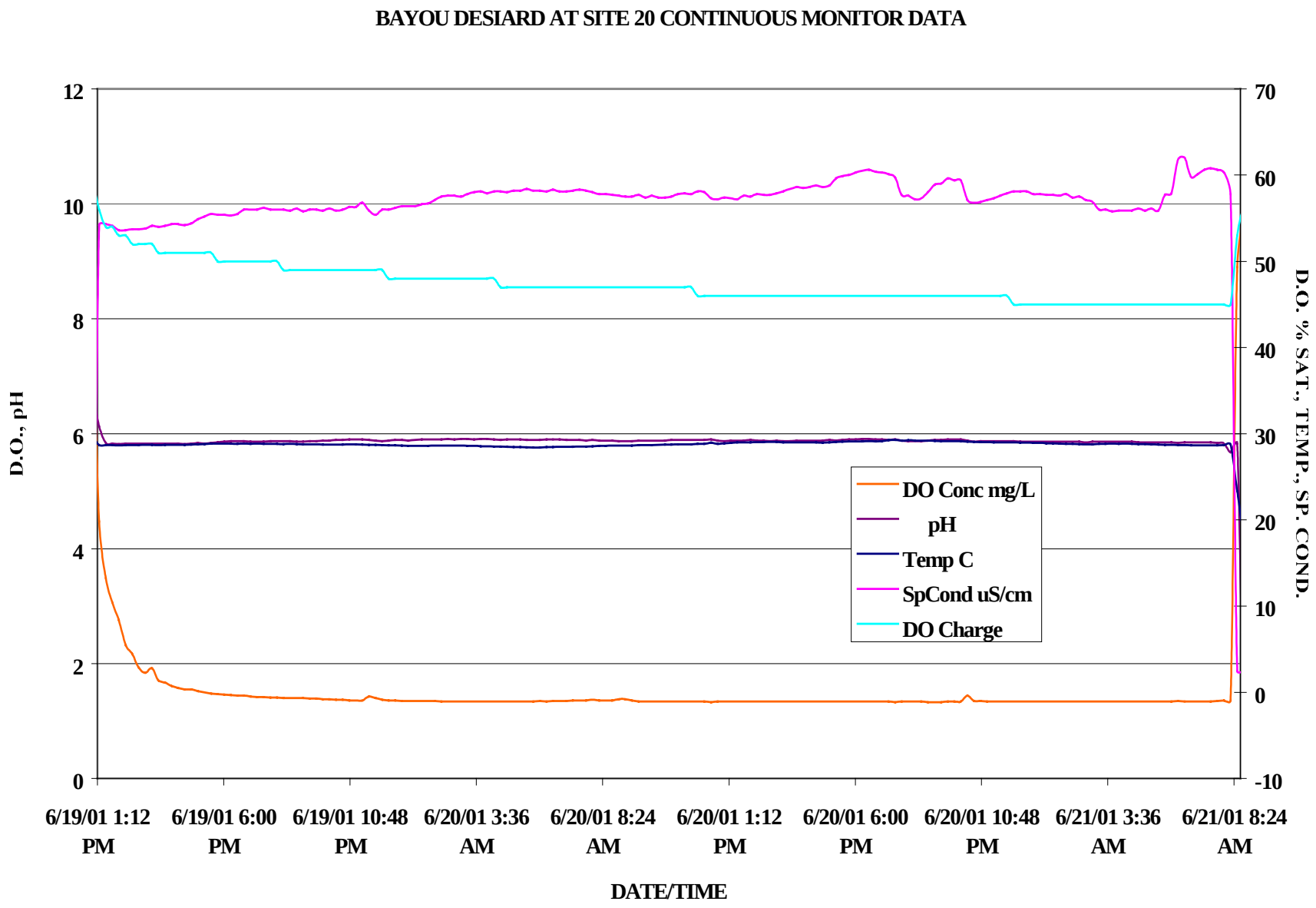

BAYOU DESIARD AT SITE 14 CONTINUOUS MONITOR DATA
D.O., pH
D.O. % SAT., TEMP., SP. COND
DATE/TIME
14
12
10
8
6
4
2
0
160
140
120
100
80
60
40
20
0
-20
6/19/01 4:33 PM
6/19/01 9:21 PM
6/20/01 2:09 AM
6/20/01 6:57 AM
6/20/01 11:45 AM
6/20/01 4:33 PM
6/20/01 9:21 PM
6/21/01 2:09 AM
6/21/01 6:57 AM
DO mg/l
pH Units
DO% Sat
SpCond æS/cm
Temp øC


BAYOU DESIARD AT SITE 15 CONTINUOUS MONITOR DATA
D.O., pH
D.O. % SAT., TEMP., SP. COND.
DO Conc mg/L
pH
Temp C
SpCond uS/cm
DO Charge
0
2
4
6
8
10
12
0
20
40
60
80
100
120
140
160
180
6/19/01 1:55 PM
6/19/01 6:43 PM
6/19/01 11:31 PM
6/20/01 4:19 AM
6/20/01 9:07 AM
6/20/01 1:55 PM
6/20/01 6:43 PM
6/20/01 11:31 PM
6/21/01 4:19 AM
6/21/01 9:07 AM
DATE/TIME

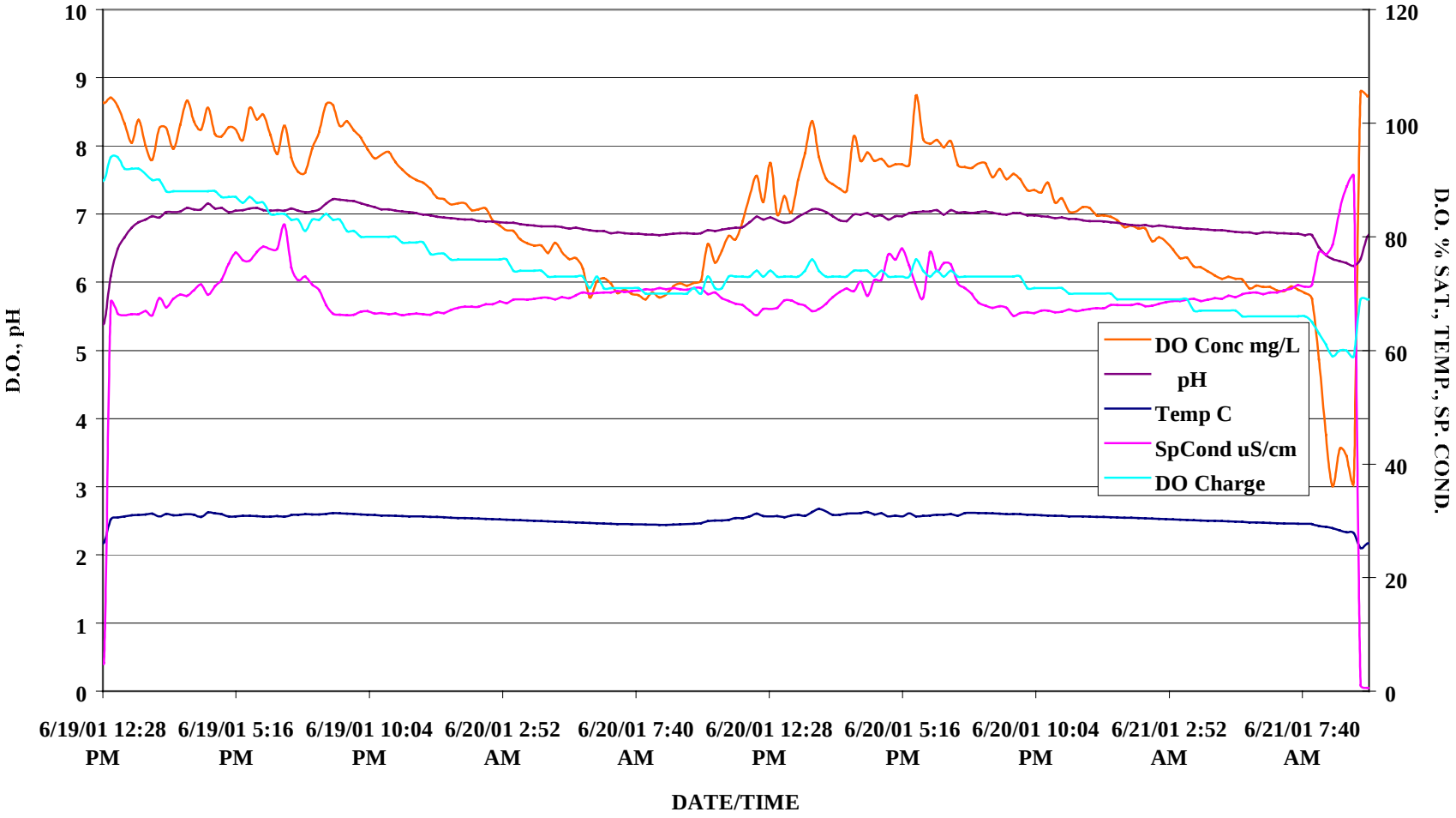

BAYOU DESIARD AT SITE 17
Dissolved Oxygen (mg/l)
Specific Conductivity (uS/cm)
Date/Time
Dissolved Oxygen (mg/l)
Specific Conductivity (uS/cm)
10
9
8
7
6
5
4
3
2
1
0
120
100
80
60
40
20
0
-20
06/19/2001 14:38
06/19/2001 19:26
06/20/2001 0:14
06/20/2001 5:02
06/20/2001 9:50
06/20/2001 14:38
06/20/2001 19:26
06/21/2001 0:14
06/21/2001 5:02
06/21/2001 9:50


BAYOU DESIARD AT SITE 17
Dissolved Oxygen (mg/l)
Temperature (degrees Celcius)
Date/Time
Dissolved Oxygen (mg/l)
Temperature (degrees C)
0
1
2
3
4
5
6
7
8
9
10
0
5
10
15
20
25
30
35
06/19/2001 14:38
06/19/2001 19:26
06/20/2001 0:14
06/20/2001 5:02
06/20/2001 9:50
06/20/2001 14:38
06/20/2001 19:26
06/21/2001 0:14
06/21/2001 5:02
06/21/2001 9:50


BAYOU DESIARD AT SITE 17
Dissolved Oxygen (mg/l)
pH (s.u.)
Dissolved Oxygen (mg/l)
pH (s.u.)
0
1
2
3
4
5
6
7
8
9
10
06/19/2001 14:38
06/19/2001 19:26
06/20/2001 0:14
06/20/2001 5:02
06/20/2001 9:50
06/20/2001 14:38
06/20/2001 19:26
06/21/2001 0:14
06/21/2001 5:02
06/21/2001 9:50
Date/Time


BAYOU DESIARD AT SITE 20 CONTINUOUS MONITOR DATA
D.O., pH
D.O. % SAT., TEMP., SP. COND.
12
10
8
6
4
2
0
70
60
50
40
30
20
10
0
-10
DO Conc mg/L
pH
Temp C
SpCond uS/cm
DO Charge
6/19/01 1:12 PM
6/19/01 6:00 PM
6/19/01 10:48 PM
6/20/01 3:36 AM
6/20/01 8:24 AM
6/20/01 1:12 PM
6/20/01 6:00 PM
6/20/01 10:48 PM
6/21/01 3:36 AM
6/21/01 8:24 AM
DATE/TIME

BAYOU DESIARD AT SITE 21 CONTINUOUS MONITOR DATA



Bayou DeSaird Survey
080701

Bayou Desiard Log Notes
6/19/01

Bayou Desiard 080701
6/19/01 Lafleur, Schwartzenburg, Gianelloni

Acid Lot #
HCL Lot# HA-0271070
H2SO4 Lot# SA-0271090
HNO3 Lot# Na-0271080

Sample Containers Lot#
UBOD Lot# 051501-4LPC128500C99
A bottle Lot# 051501-2LPY032100C99
B bottle Lot# 051501-2LPY008100C99
C and chloro a Lot# 060101-4LPW032501C99
TOC bottle Lot# 00070779
DI bottleLot# 060101-4LPC320600C99

Used QT00132

BDs 5 Set out continuous monitor at 1105hrs;Hydrolab Data Sonde 4a S/N 37757

BDs 3 Set out continuous monitor at 1210hrs;Hydrolab Data Sonde 4a S/N 37755

6/19/01 Brignac, Kinard, Cooley

Lot# for samples bottles
UBOD-051501-4LPC128500C99
DI water-060101-4LPC320600C99
C and Chloro a-060101-4CPW032503C99
TOC-00070779
A bottle-051501-2LPY032100C99
B bottle-051501-2LPY008100C99

BDs 8 Deployed continuous monitor at 1335hrs:Hydrolan Data Sonde 4a 37756

BDs 7 Deployed continuous monitor at 1400hrs;Hydrolab Data Sonde 4a 37754

BDs 10 Deployed continuous monitor at 1530hrs:Hydrolab Data Sonde 4a 37759

BDs 11 Deployed continuous monitor at 1545hrs;Hydrolab Data Sonde 4a 37753

BDs 14 Deployed continuous monitor at 1700hrs;Hydrolab Data Sonde 4a 37752

Bayou Desiard Survey (080701)
Farlow, Blanchard, Champagne, Phillippe **6/19/01**

BDs 21 Deployed monitor #YSI 99DO994AA at 1240hrs

BDs 20 Deployed monitor at 1255hrs #YSI 99DO994AB
Train on railroad tracks near monitor
Lock combination 4045

BDs 18 Intake Pipe about 1 ft out of water
Not flowing; not a site for survey

BDs 19 No measurable flow

BDs 8 Flowing
Lots of algae in water
About 5ft deep in thalwag

BDs 9 Flowing backwards
Tapedown 13.60ft
About 9ft deep in thalwag

BDs 10 Flowing

BDs 11 Finks Hideaway Rd. North height of box weir
Bench mark = 85.82
Height of instrument +2.80 = 88.62

Sta	BS	HI	FS	Elev.
	2.80	88.62		85.82
	0.71	83.91	5.42	83.20
Brass Cap			10.75	73.16
East weir			13.89	70.02
North weir			14.37	69.54
West weir			13.84	70.07

Diagram in logbook

North: Water is 0.05 of a foot over log shot
One more log to top of concrete

East: Water is about 0.2 below top of log, which is shot for elevation
One log from being very top of where water would come over top of weir
West: Water is about 0.2 below top of weir
One log on top is 0.45 over concrete side

Crew Kevin Masden, Bill Baldwin
6/19/01 Bayou Desiard

BDs 15 Monitor deployed at 1500 and cross-section;YSI S/N 98E0645 AB

BDs 17 Monitor deployed at 1600 and cross-section; YSI S/N 98E0645 AA

Bayou Desiard 6/19/01 Greenwood
Gauge Height Readings

Bayou Pump Station 70.4 1250hrs (pump station at levee)

No water coming over or through weir at Hogg Bayou. Checked pipes running under road at Hogg Bayou. There is absolutely no flow.

NLU 70.4 1340hrs (Stadium Drive)

Midway Dam 70.45 1350hrs. Wire weight gauge 17.41 at 1350

Finks Hideaway Road N. 70.4 1530hrs. Wire weight gauge 19.21 1530

Finks Hideaway Road S. 70.4 1430hrs. Wire weight gauge 19.11 at 1430

Hannah's Run West 69.8 1615hrs Wire weight gauge 3.41 1615hrs
Hannah's Run East- weeds
Combination 4045 Black Bayou Lake (wildlife and Fishery's gate was locked 1735hrs

Hwy 134 70.8 1640

Hwy 165 70.4 1650 Wire weight gauge 2.00' 1650

Bridge over Lake Bartholomew 71.35 1700hrs

Bayou Bartholomew at pump station 56.5 1715hrs not pumping

Bayou Desiard Log Notes
6/20/01

6/20/01		**Lafleur, Schwartzenburg, Gianelloni**				
BDs 1		Pump not pumping Water quality taken at 850hrs, GPS, and staff gauge 56.5ft				
BDs 2		Water quality and In-Situ taken at 945hrs, GPS Profile was not taken because depth was less than 2 meters				
BDs 3		Water quality and In-Situ taken at 1030hrs, GPS Profile				
	1M	DO 6.84	Temp 30.71	PH 7.54	Cond 124	DO% 83.3
	2M	DO 4.6	Temp 29.85	PH 7.12	Cond 125	DO% 58.2
	3M	DO 0.17	Temp 27.88	PH 6.67	Cond 126	DO% 1.5
	4M	DO 0.10	Temp 23.84	PH 6.58	Cond 142	DO% 0.8
	5M	DO 0.05	Temp 19.19	PH 6.54	Cond 182	DO% 0.5

	6M	DO 0.03	Temp 16.6	PH 6.56	Cond 225	DO% 0.5

BDs 6 Water quality and In-Situ taken at 1120hrs, GPS
In-Situ parameter profile:

1M	DO 7.06	Temp 30.54	PH 7.99	Cond 121	DO% 98.5
2M	DO 3.62	Temp 29.6	PH 7.13	Cond 121	DO% 47.0
3M	DO 0.25	Temp 27.49	PH 6.75	Cond 123	DO% 0.8
4M	DO 0.14	Temp 21.94	PH 6.67	Cond 156	DO% 0.8
5M	DO 0.06	Temp 17.72	PH 6.7	Cond 189	DO% 0.5
6M	DO 0.03	Temp 15.71	PH 6.73	Cond 208	DO% 0.4

BDs 5 Not flowing, GPS site

BDs 4 Water quality and In-Situ taken at 1240hrs, GPS
In-Situ parameter profile

1M	DO 7.93	Temp 30.85	PH 8.87	Cond 117	DO% 105.2
2M	DO 4.95	Temp 29.32	PH 7.48	Cond 116	DO% 60.3
3M	DO 0.19	Temp 25.79	PH 6.92	Cond 126	DO% 1.7
4M	DO 0.08	Temp 22.55	PH 6.82	Cond 140	DO% 0.8
5M	DO 0.10	Temp 19.41	PH 6.74	Cond 142	DO% 1.2
6M	DO 0.08	Temp 16.39	PH 6.71	Cond 174	DO% 0.8
7M	DO 0.10	Temp 15.33	PH 6.70	Cond 193	DO% 0.8

6/20/01 Brignac, Kinard, Cooley

Used hydro lab minisound 37761

BDs 7 Bayou Desiard at 165 bridge 50 yards downstream
Water quality taken at 0840
Cross-section, GPS taken, and Secchi disk 1.5ft
Water quality parameters sample depth 1 meter
PH 6.91 Temp 28.20 DO 4.54 Cond 127.5
DO% 58.4 Batt 7.4

BDs 8 HWY 134 bridge
100 yards upstream of hwy 134 bridge

Cross section, GPS

BDs 10 Treasure Island Road
GPS, Cross section

BDs 11 Bayou Chauvin Overflow
GPS, Cross section,
Water quality, duplicate- sample depth 1 meter
Water quality parameters
1M PH-7.22 Temp 29.10 DO 7.75 DO% 101.5
Cond 85.2 Secchi disk 3.5ft
1M PH 7.02 Temp 28.91 DO 6.06
DO% 81 Cond 85.4

BDs 9 Richland road
GPS 50 yards downstream of boat launch
Cross section done with Fathometer 1245

BDs 13 Inabet road
GPS Cross section 50 yards downstream of Inabet road at 1400
Water quality
In-Situ
1M PH6.85 Temp 29.21 DO 4.61 Cond 90.5
Secchi disk 3.0ft DO% 58.8
2M PH 7.4 Temp 28.66 DO 0.58 Cond 92.1
DO% 7.6

BDs 14 Stadium drive
GPS, Cross section 50 yards upstream of stadium drive
Water quality at 1500hrs
In-Situ
1M PH 9.12 Temp 31.56 DO 9.5 Cond 93.8
Secchi disk 2.8 DO% 130.1

2M PH 6.82 Temp 26.57 DO 0.82 Cond 115.8
DO% 10.0

BDs 21 Hannah Run control structure
GPS and water quality at 1730
In Situ
1M PH 6.94 Temp 29.86 DO 6.41 Cond 71.9
DO% 84.8 Secchi disk 3.0ft

Bayou Desiard Survey (080701)
Farlow, Blanchard, Champagne, Phillippe **6/20/01**

BDs 6 Bayou Desiard at HWY 165 at 730hrs
Elevation at control structure is 78.10

	BS	HI	FS	Elevation
	13.50	91.60		
Control structure water level	22.38			69.22
Lake side water level	20.46			71.14

Staff gauge at control structure reads 70.4

BDs 19 Mill Bayou no flow

BDs 8 Bayou Desiard at HWY 134 Bridge
Downstream side taken at 0825 hrs
In-Situ:
Temp 26.62 Spc 131 DO 1.79 Ph 6.58 Batt 3.9 Salin 0.07pss DO% 22.8
Tape down 14.68
No measurable flow
Drogue #1 35ft in 270sec
Drogue #2 35ft in 243 sec
First drogue went back to starting point making a circle from start to finish
Water was eddying so no flow at this site

BDs 9 Bayou Desiard at Richland Drive Bridge
All In-Situ taken with quanta #00131
Downstream side taken at 0925hrs at 1m depths
In-Situ
Temp 29.32 Spc 101 DO 4.25 PH 6.73 Batt 4.1
Salin 0.05 DO% 56.9
Tapedown 13.62
No measurable flow eddying
Drogue 27 ft in 150 sec backwards flow
Drogue circled around to starting point once again, so no flow here

BDs 11 Bayou Desiard at L11 Canal
Topside
Water height is 3.45 under height of weir, so water height is 69.71
Length of log in contact with water is 4.7ft
All water is entering as seepage into L11 canal
Bottom side
Taken at 1045hrs
4.68 above benchmark 73.61 elevation of benchmark
HI is 78.29
Water elevation is 8.53 below HI, so water elevation is 69.76
Staff gauge 70.5
In-Situ
Temp 30.54 Spc 86 DO 5.09 PH 7.02 Batt 4.0
Salin 0.05 DO% 87
Depth of water 0.04 to shallow to use a pygmy for flow

BDs 12 Bayou Desiard at midway dam
Staff gauge 69.5
Benchmark 76.37
Height of instrument +3.26, so 79.63
Water elevation on downstream side –9.94, so 69.49
Water elevation on upstream side –9.98, so 69.45

BDs 14 Bayou Desiard at Stadium Dr.
Assumed instrument elevation is 100ft

Water elevation on upstream side –11, so 89ft
Water elevation on downstream side –11.13, so 89.13

BDs 20 Black Bayou Lake
Elevation of benchmark is 74.67
HI elevation +5.95, so 80.62
Black bayou water level –9.17, so 71.45
Hanna's Run water elevation –10.88, so 69.74
Staff Gauge 71.4
In-Situ taken at 1410hrs
PH 6.03 Temp 29.17 DO 0.48 Cond 57 Salin 0.03
DO% 5.8 Secchi disc at 1 ft
Tape down 4.8

BDs 10 Bayou Desiard at Treasure Island Bridge
No measurable flow water eddying badly
Water Quality taken at 1330hrs
In-Situ taken with QT00131
Tape down 10.85
PH 6.84 T 33.21 DO 6.35 Cond 67 Salin 0.04
DO% 88.7 Secchi disk 2.5ft
Water seen moving in circles sop no drogue taken

BDs21 Bayou Desiard at Hanna's Run
Benchmark is 83.33
HI elevation +2.56, so 85.89
Bayou Desiard –15.79, so 70.10
Hanna's Run –15.77, so 70.12

All samples taken with:

A	lot# 051501-2LPY032100C99
C and Chloro a	lot# 060101-4LPW032503C99
UBOD	lot# 051501-4LPC128500C99
TOC	lot# 00070779
B	Lot# 051501-2LPY008100C99

HCL (part# 02684)	Lot# HA-0271070
H2SO4 (part# 02704)	Lot# NA-0271090
HNO3 (part# 02694)	Lot# SA-0271090

6/20/01
BDs 15 Bayou Desiard at Philips Bridge
Hot, sunny 80º at 0645
Crew Kevin Masden, Bill Baldwin
GPS taken
In-Situ #37762 used for all three sites
PH 7.46 Temp 29.12 DO 6.17 DO% 80.2 Cond 92.8
Secchi Disk 1.75ft Battery 7.3
Sample taken at 1 meter
A, B, C, TOC, UBOD, Chlorophyll a
Chlorophyll a taken at 1-meter depth

All samples taken with:
UBOD, 1 Gal Lot# 051501-4LPC128500C99
A Lot# 051501-2LPY032100C99
B Lot# 051501-2LPY008100C99
C and Chloro a Lot# 060101-4LPW032501C99
Toc Lot# 00070779

HCL Lot# HA-0271070
H2SO4 Lot# SA-0271090
HNO3 Lot# NA-0271080

BDs 17 City intake
Time 0730 80º Hot and sunny
Crew Baldwin, Masden
In-Situ
PH 8.10 Temp 30.85 DO 7.37 DO% 99.0 Cond 100.9
Secchi 3.75 Batt 7.2
Sample depth 1 meter for A, B, C, TOC, BOD, 2 Chlorophyll a
Chlorophyll a taken at 1ft and 6ft depth

BDs 16 Bayou Desiard at Hog Bayou
Time 0800
In-Situ
PH 7.67 Temp 30.00 DO 6.68 Cond 99.5 Secci disk 2ft
DO% 88.5 Battery 7.2
Sample depth at 1 meter for A, B, C, TOC, BOD and Chlorophyll a
Chlorophyll a taken at 3 ft

Bayou Desiard 6/20/01 Greenwood

Hwy165 70.40 at 0815 Wire weight gauge 2.00 at 0815

Bridge over Lake Bartholomew 71.30 at 0825hrs

Bayou Bartholomew at pump station 56.5 at 0900hrs not pumping

Black Bayou Lake 71.41 at 1025hrs Wire weight gauge 3.36 at 1025

Hannah's Run West 69.75 1047hrs Wire weight gauge 3.37 1045hrs
Hannah's Run East- weeds

Finks Hideaway Road N. 70.37 1105hrs. Wire weight gauge 19.17 at 1105

Finks Hideaway Road S. 70.38 1120hrs. Wire weight gauge 19.07 at 1120

Hwy 134 70.78 1205hrs

Midway Dam 70.41 1255hrs. Wire weight gauge 17.37 at 1255hrs

NLU 70.38 at 1305hrs (Stadium Dr.)

Bayou Pump Station 70.37 1400hrs (pump station at Levee

No water coming over or through weir at Hogg Bayou. Checked pipes running under road at Hogg Bayou. There is absolutely no flow. This was monitored at 1410hrs.

Bayou Desiard Log Notes
6/21/01

6/21/01 Lafleur, Schwartzenburg, Gianelloni
Picked up site BDs 3 continuous monitor at 920hrs
Picked up site BDs 5 continuous monitor at 940hrs

6/21/01 Brignac, Kinard, Cooley

BDs 7 Picked up continuous monitors at 0850 GPS and cross-section

BDs 8 Picked up continuous monitors at 0915 GPS and cross-section

BDs 21 Picked up continuous monitors at 0945

BDs 10 Picked up continuous monitors at 0950

BDs 11 Picked up continuous monitors at 1015

BDs 20 Picked up continuous monitors at 1050 GPS'd

BDs 14 Picked up continuous monitors at 1130

GPS sites with GPS unit B

Bayou Desiard 6/21/01 Greenwood

Meet with Murray Gros at 0730 at Black bayou Lake control structure Ben McGee

Hannah's Run West 69.75 0715hrs Wire weight gauge 3.37 1045hrs
Hannah's Run East- weeds

Black Bayou Lake 71.38 at 0730hrs Wire weight gauge 3.33 at 0730hrs
Pulled monitor at 0800hrs

Hwy 165 70.35 at 0850hrs wire weight gauge 2.00 at 0850hrs

Bridge over lake Bartholomew 71.30 at 0900hrs

Bayou Bartholomew at pump station 55.5 at 0915hrs (not pumping)

Hwy 134 70.72 0940hrs

Finks Hideaway Road N. 70.35 1010hrs. Wire weight gauge 19.14 at 1010hrs

Finks Hideaway Road S. 70.38 1020hrs. Wire weight gauge 19.02 at 1020hrs

Midway Dam 70.38 1035hrs. Wire weight gauge 17.34 at 1035hrs

NLU 70.37 1045hrs (Stadium Dr)

Bayou Pump station 70.27 1100hrs

STREAMFLOW ESTIMATION BASED ON CHLORIDE MASS BALANCE EQUATIONS

SITE NUMBER	MEASURED CHLORIDE CONCENTRATION, mg/L	MEASURED FLOW, cms (if available)	CALCULATED FLOW BASED ON CHLORIDE MASS BALANCE, cms
BDS17*	6.8	0.6045	
BDS16	6.6		0.6228
BDS15	6.5		0.6325
BDS14	6.8		0.6045
BDS13	6.5		0.6325
BDS11	5.7		0.737
BDS7*	9.4	0.2078	
BDS8	10.0		0.1954
BDS9	7.0		0.2789
BDS10	3.8		1.66167
BDS20**	3.5	1.45612	

* The intake flow at the City of Monroe (for the day 6/20/01) was used as the flow at BDS17. The data was provided by personnel at the City of Monroe Water Treatment Plant.

** The flow at site BDS7 was estimated based on the rate at which the water surface elevation in Lake Bartholemew was falling (per day) during the survey and the surface area of Lake Bartholemew. The flow at BDS20 was estimated based on the rate at which the water surface elevation in Black Bayou Lake was falling (per day) during the survey and the surface area of Black Bayou Lake. The stage levels were collected daily during the survey (6/19-21/01).

The only measured flow available during the survey was at BDS17. This data was obtained from the City of Monroe Water Treatment Plant. Therefore, this site was used as the starting point. Working upstream from BDS17, the streamflows at various sites were estimated as follows:

$Q_{16} = (Q_{17} \text{ x } Cl_{17})/Cl_{16}$ = 0.6045 cms x 6.8 mg/L)/ 6.6 mg/L = 0.6228 cms
Similarly,
Q_{15} = (0.6228 cms x 6.6 mg/L)/ 6.5 mg/L = 0.6325 cms
Q_{14} = (0.6325 cms x 6.5 mg/L)/ 6.8 mg/L = 0.6045 cms
Q_{13} = (0.6045 cms x 6.8 mg/L)/ 6.5 mg/L = 0.6325 cms
Q_{11} = (0.6325 cms x 6.5 mg/L)/ 5.7 mg/L = 0.737 cms

The flow entering Bayou Desiard at BDS7 from Lake Bartholemew was estimated as explained above. Although the gates at U.S. 165 were closed during the survey, reconnaissance survey observations had revealed that water did leak through the gates. Starting at BDS7 and working downstream, the streamflows at various sites were estimated as follows:

Q_7 = 0.03 ft/day x 1meter/3.281ft x 1,941,808 meters^2 x 1 day/86,400 sec = 0.20556 cms
$Q_8 = (Q_7 \text{ x } Cl_7)/Cl_8$ = (0.20556 cms x 9.4 mg/L)/ 10 mg/L = 0.1954 cms
Similarly,
Q_9 = (0.1954 cms x 10 mg/L)/ 7.0 mg/L = 0.2789 cms

The streamflow at BDS 10 was based upon the most reliable estimated streamflows . The chloride values at BDS9 appeared to be impacted by dispersion from the flow from Black Bayou Lake. Therefore any flow estimated using the chloride data at BDS9 was considered even less reliable. As a result, the streamflow at BDS10 was based upon the streamflows at BDS7 and BDS20. The streamflow entering Hannah's Run at BDS20 from Black Bayou Lake was also estimated based upon the rate at which the water surface was falling during the survey and the water surface area. This estimation was based on the assumption that water was leaking through the stop-lof weir between Black Bayou Lake and Hannah's Run. Reconaissance survey observations had revealed that water did leak through the weir. The calculations were as follows:

Q_{20} = 0.034 ft/day x 1 meter/3.281 ft x 3,000 acres x 4,047 meters^2/acre x
1 day/86,400 sec = 1.45612 cms
$Q_{10} = Q_7 + Q_{20}$ = 0.20556 cms + 1.45612 cms = 1.66167

Streamflow in excess of the values estimated at BDS14 was assumed to be leaving at L-11 Canal. This assumption was based on the reconnaissance survey observations of water leaking through the stop-log weir between Bayou Desiard and L-11 Canal. The amount of streamflow exiting Bayou Desiard at the stop-log weir to L-11 Canal was estimated as follows:

$Q_{\text{to L-11 Canal}} = Q_{10} - Q_{14}$ = 1.66167 cms – 0.6045 cms = 1.05717 cms

Note: Most of the original calculation were done in English units and then converted to metric units. This may cause slight differences between the calculations as stated and the streamflows that resulted.

DataSonde 4a 37755
Log File Name : Bayou Desiard Site 3
Setup Date (MMDDYY) : 061801
Setup Time (HHMMSS) : 154626
Starting Date (MMDDYY) : 061901
Starting Time (HHMMSS) : 110000
Stopping Date (MMDDYY) : 062101
Stopping Time (HHMMSS) : 110000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000200

Date MMDDYY	Time HHMMSS	Temp øC	DO% Sat	DO mg/l	SpCond æS/cm	pH Units	IBatt Volts
06/19/2001	110000	22.89	102.2	8.79	0	5.25	12.5
06/19/2001	111500	23.23	100.5	8.59	0	5.29	12.4
06/19/2001	113000	23.84	99.4	8.39	0	5.33	12.4
06/19/2001	114500	25.07	100.1	8.26	0.1	5.63	12.4
06/19/2001	120000	26.41	99	7.98	0.1	5.92	12.5
06/19/2001	121500	30.72	106.4	7.94	120.3	7.41	12.4
06/19/2001	123000	29.87	86.8	6.57	119.3	7.28	12.2
06/19/2001	124500	29.72	85.6	6.5	119.5	7.24	12.5
06/19/2001	130000	29.98	93.5	7.07	119.4	7.37	12.3
06/19/2001	131500	29.95	94.1	7.12	119.6	7.39	12.3
06/19/2001	133000	30.18	95.3	7.18	119.7	7.46	12.3
06/19/2001	134500	30.24	96.3	7.24	119.8	7.48	12.4
06/19/2001	140000	30.12	97.5	7.35	119.8	7.48	12.4
06/19/2001	141500	30.15	98.7	7.44	119.4	7.48	12.3
06/19/2001	143000	30	94.1	7.11	119.8	7.4	12.2
06/19/2001	144500	30.09	98.4	7.42	119.6	7.46	12.3
06/19/2001	150000	30.15	99.4	7.49	119.5	7.5	12.3
06/19/2001	151500	30.11	100.6	7.58	119.5	7.5	12.3
06/19/2001	153000	30.06	99.4	7.5	119.6	7.5	12.3
06/19/2001	154500	30.13	100.7	7.59	119.5	7.51	12.2
06/19/2001	160000	30.04	101.2	7.64	119.6	7.51	12.3
06/19/2001	161500	30.19	102.3	7.7	119.5	7.54	12.3
06/19/2001	163000	30.33	103.5	7.78	119.5	7.52	12.3
06/19/2001	164500	30.35	103.1	7.74	119.5	7.5	12.2
06/19/2001	170000	30.36	102.6	7.7	119.4	7.5	12.2
06/19/2001	171500	30.39	102.3	7.68	119.6	7.51	12.2
06/19/2001	173000	30.34	101.3	7.61	119.6	7.49	12.3
06/19/2001	174500	30.38	100.1	7.51	119.5	7.45	12.2
06/19/2001	180000	30.47	103.2	7.73	119.6	7.53	12.3
06/19/2001	181500	30.43	100.7	7.55	119.7	7.43	12.3
06/19/2001	183000	30.39	95.1	7.13	119.7	7.35	12.3
06/19/2001	184500	30.1	94.5	7.13	119.6	7.34	12.3
06/19/2001	190000	30.13	93.8	7.07	119.8	7.31	12.2
06/19/2001	191500	30.09	91.8	6.92	119.6	7.3	12.3
06/19/2001	193000	29.89	89	6.74	119.4	7.25	12.2
06/19/2001	194500	29.88	87.9	6.65	119.6	7.24	12.2

06/19/2001	200000	29.88	87.1	6.59	119.6	7.22	12.2
06/19/2001	201500	29.88	87.8	6.65	119.6	7.23	12.2
06/19/2001	203000	29.83	86.8	6.58	119.6	7.21	12.2
06/19/2001	204500	29.74	83.1	6.3	119.9	7.15	12.2
06/19/2001	210000	29.79	83.1	6.3	119.7	7.16	12.2
06/19/2001	211500	29.8	84.3	6.39	119.7	7.16	12.2
06/19/2001	213000	29.82	83.7	6.35	119.7	7.16	12.2
06/19/2001	214500	29.77	83.1	6.3	119.7	7.15	12.2
06/19/2001	220000	29.73	83.6	6.35	119.6	7.12	12.1
06/19/2001	221500	29.59	65.1	4.96	119.7	6.97	12.2
06/19/2001	223000	29.79	83.2	6.31	119.9	7.13	12.1
06/19/2001	224500	29.76	81.8	6.21	119.8	7.11	12.2
06/19/2001	230000	29.82	81.8	6.2	119.6	7.12	12.1
06/19/2001	231500	29.7	77.3	5.87	119.7	7.06	12.2
06/19/2001	233000	29.65	74.3	5.64	119.7	7.04	12.2
06/19/2001	234500	29.69	73.3	5.56	119.6	7.04	12.2
06/20/2001	0	29.58	70.4	5.36	119.8	6.99	12.2
06/20/2001	1500	29.7	76	5.77	119.7	7.03	12.1
06/20/2001	3000	29.72	75	5.69	119.8	7.03	12.1
06/20/2001	4500	29.73	75.8	5.75	119.6	7.03	12.1
06/20/2001	10000	29.75	75.8	5.75	119.6	7.04	12.1
06/20/2001	11500	29.75	74.6	5.66	119.6	7.02	12.1
06/20/2001	13000	29.8	72.6	5.5	119.8	7.02	12.2
06/20/2001	14500	29.72	70.7	5.36	119.7	7.01	12.1
06/20/2001	20000	29.75	72.1	5.47	119.8	7.01	12.1
06/20/2001	21500	29.8	72	5.46	119.7	7.02	12.1
06/20/2001	23000	29.74	71.6	5.44	120	7.02	12.1
06/20/2001	24500	29.71	70.2	5.33	119.8	7.01	12.1
06/20/2001	30000	29.74	71.3	5.41	119.9	7.01	12.1
06/20/2001	31500	29.73	72	5.46	120	7.02	12.1
06/20/2001	33000	29.68	71.3	5.41	119.9	7.01	12.1
06/20/2001	34500	29.67	68.6	5.21	119.9	6.99	12.1
06/20/2001	40000	29.66	70.7	5.38	119.9	7	12.1
06/20/2001	41500	29.65	67.7	5.15	119.8	6.99	12.1
06/20/2001	43000	29.61	66.8	5.08	119.9	6.97	12.1
06/20/2001	44500	29.52	59.8	4.55	119.9	6.91	12.1
06/20/2001	50000	29.56	61.6	4.69	119.8	6.93	12.1
06/20/2001	51500	29.55	60.7	4.62	119.9	6.91	12.1
06/20/2001	53000	29.58	60.4	4.59	119.8	6.92	12.1
06/20/2001	54500	29.56	58.5	4.45	119.8	6.9	12.1
06/20/2001	60000	29.55	57.7	4.39	119.8	6.89	12.1
06/20/2001	61500	29.55	55.1	4.19	119.8	6.87	12.1
06/20/2001	63000	29.54	52.9	4.03	119.8	6.86	12.1
06/20/2001	64500	29.5	50.2	3.82	120	6.84	12.1
06/20/2001	70000	29.41	47.8	3.65	120	6.84	12.1
06/20/2001	71500	29.54	54.2	4.13	119.8	6.87	12.1
06/20/2001	73000	29.49	51.2	3.9	119.7	6.86	12.1
06/20/2001	74500	29.54	54.3	4.14	120	6.89	12.1
06/20/2001	80000	29.52	51.3	3.9	120	6.87	12.1
06/20/2001	81500	29.62	52	3.95	120	6.9	12.1
06/20/2001	83000	29.55	49.8	3.79	120.2	6.88	12.1
06/20/2001	84500	29.51	48.4	3.69	120.1	6.85	12

06/20/2001	90000	29.5	46.1	3.51	120.1	6.85	12.1
06/20/2001	91500	29.48	45.9	3.5	120.2	6.84	12.1
06/20/2001	93000	29.5	46.1	3.51	120.1	6.84	12.1
06/20/2001	94500	29.61	49.6	3.77	119.9	6.85	12
06/20/2001	100000	29.68	56.3	4.28	119.8	6.88	12.1
06/20/2001	101500	29.62	51.3	3.9	119.8	6.85	12.1
06/20/2001	103000	29.65	53.1	4.04	119.9	6.86	12.1
06/20/2001	104500	29.74	58.3	4.43	119.9	6.89	12.1
06/20/2001	110000	29.74	61.6	4.68	120	6.91	12.1
06/20/2001	111500	29.7	53.3	4.05	120	6.86	12.1
06/20/2001	113000	29.82	53.8	4.08	119.8	6.85	12.1
06/20/2001	114500	29.7	56.1	4.26	120	6.86	12
06/20/2001	120000	29.69	56.4	4.28	119.8	6.86	12.1
06/20/2001	121500	29.67	52.9	4.02	119.8	6.84	12.1
06/20/2001	123000	29.78	57.1	4.33	120.2	6.88	11.9
06/20/2001	124500	29.8	66.3	5.03	120.5	6.96	12.1
06/20/2001	130000	29.87	69	5.23	120.4	7	12
06/20/2001	131500	29.81	67.3	5.1	120.6	7.01	12.1
06/20/2001	133000	29.89	71.1	5.38	120.5	7.01	12
06/20/2001	134500	29.85	65.2	4.94	120.4	6.96	11.9
06/20/2001	140000	29.97	72.7	5.5	120.4	7.02	12
06/20/2001	141500	30.02	74.7	5.64	120.4	7.07	12
06/20/2001	143000	29.86	67.7	5.13	120.4	7	12
06/20/2001	144500	29.93	72.7	5.5	120.6	7.05	11.9
06/20/2001	150000	29.91	67.6	5.11	120.4	7	12
06/20/2001	151500	29.79	64.2	4.87	120.4	6.93	11.9
06/20/2001	153000	29.75	66.9	5.08	120.5	6.93	12
06/20/2001	154500	29.75	63.5	4.82	120.4	6.91	12
06/20/2001	160000	29.78	62.5	4.74	120.2	6.9	12
06/20/2001	161500	29.68	50.5	3.84	120.2	6.81	12
06/20/2001	163000	29.63	44	3.35	120	6.76	12
06/20/2001	164500	29.9	63.9	4.83	120.4	6.9	12
06/20/2001	170000	29.57	44.1	3.36	120.1	6.75	12
06/20/2001	171500	29.78	60.7	4.6	120.3	6.86	12
06/20/2001	173000	29.71	54	4.1	120.1	6.82	12
06/20/2001	174500	29.59	49.1	3.74	120.1	6.78	11.9
06/20/2001	180000	29.63	47.1	3.58	120	6.77	12
06/20/2001	181500	29.44	39.4	3	120.2	6.74	12
06/20/2001	183000	29.55	43.8	3.33	120.2	6.74	12
06/20/2001	184500	29.56	45.2	3.44	120.1	6.75	12
06/20/2001	190000	29.56	46.2	3.52	119.8	6.76	11.8
06/20/2001	191500	29.64	49.4	3.75	120	6.78	12
06/20/2001	193000	29.72	51.2	3.89	120.1	6.8	11.9
06/20/2001	194500	29.8	57.7	4.37	119.9	6.83	12
06/20/2001	200000	29.9	61.8	4.68	120	6.85	12
06/20/2001	201500	29.82	52.3	3.97	120.1	6.81	12
06/20/2001	203000	29.97	65	4.92	120.2	6.89	12
06/20/2001	204500	30.01	66	4.99	120.2	6.9	12
06/20/2001	210000	30.06	69	5.21	120.2	6.94	11.9
06/20/2001	211500	30.13	72	5.43	120.3	6.98	11.8
06/20/2001	213000	30.1	71.4	5.39	120.1	6.97	11.9
06/20/2001	214500	30.09	71.3	5.37	120.1	6.98	12

06/20/2001	220000	30.24	82.1	6.18	120.5	7.09	11.8
06/20/2001	221500	30.16	71.7	5.4	120.2	7.04	11.9
06/20/2001	223000	30.27	82	6.16	120.3	7.11	11.9
06/20/2001	224500	30.21	74.8	5.63	120.1	7.06	12
06/20/2001	230000	30.19	74.7	5.62	120.3	7.05	12
06/20/2001	231500	30.16	73.3	5.52	120.4	7.02	12
06/20/2001	233000	30.26	78.1	5.87	120.3	7.07	11.9
06/20/2001	234500	30.31	80.9	6.08	120.2	7.1	11.9
06/21/2001	0	30.36	77.6	5.82	120.4	7.09	11.9
06/21/2001	1500	30.18	74.4	5.6	120.7	6.98	11.9
06/21/2001	3000	30.28	74.7	5.62	120.7	7.05	11.9
06/21/2001	4500	30.3	74.2	5.58	120.6	7.05	11.9
06/21/2001	10000	30.34	73.7	5.54	120.4	7.04	11.9
06/21/2001	11500	30.25	73.5	5.53	120.4	7.02	11.9
06/21/2001	13000	30.34	81.5	6.12	120.8	7.1	11.9
06/21/2001	14500	30.68	84	6.27	120	7.12	11.8
06/21/2001	20000	30.53	81.6	6.11	120.6	7.12	11.9
06/21/2001	21500	30.63	83.5	6.24	120.4	7.11	11.9
06/21/2001	23000	30.35	68.3	5.13	120.5	7.02	11.9
06/21/2001	24500	30.5	86.8	6.5	120.6	7.14	11.9
06/21/2001	30000	30.44	69.7	5.23	120.5	7.03	11.9
06/21/2001	31500	30.43	76.7	5.75	120.4	7.02	11.9
06/21/2001	33000	30.31	74.3	5.59	120.4	6.97	11.9
06/21/2001	34500	30.28	65.5	4.93	120.3	6.96	11.8
06/21/2001	40000	30.46	76.9	5.76	120.3	7.03	11.8
06/21/2001	41500	30.4	76.2	5.72	120.6	7.02	11.8
06/21/2001	43000	30.39	71.3	5.35	120.3	7.01	11.9
06/21/2001	44500	30.39	68	5.1	120.4	6.99	11.9
06/21/2001	50000	30.39	77.5	5.81	120.7	7.09	11.8
06/21/2001	51500	30.38	78	5.86	120.7	7.1	11.8
06/21/2001	53000	30.36	76.2	5.72	120.5	7.09	11.9
06/21/2001	54500	30.41	79.9	5.99	120.6	7.16	11.8
06/21/2001	60000	30.34	74	5.56	120.5	7.09	11.8
06/21/2001	61500	30.34	76.4	5.74	120.5	7.14	11.9
06/21/2001	63000	30.32	77.1	5.8	120.6	7.15	11.9
06/21/2001	64500	30.29	76.8	5.78	120.6	7.13	11.8
06/21/2001	70000	30.24	73.7	5.54	120.8	7.11	11.8
06/21/2001	71500	30.22	75.6	5.69	120.5	7.1	11.9
06/21/2001	73000	30.21	73.8	5.55	120.6	7.1	11.9
06/21/2001	74500	30.18	75	5.65	120.7	7.13	11.8
06/21/2001	80000	30.2	73.8	5.55	120.5	7.11	11.9
06/21/2001	81500	30.1	71.1	5.36	120.8	7.09	11.9
06/21/2001	83000	30.14	73	5.5	120.7	7.11	11.8
06/21/2001	84500	30.13	75.1	5.66	120.7	7.13	11.8
06/21/2001	90000	30.07	63.1	4.76	120.6	7.04	11.8
06/21/2001	91500	30.07	69.9	5.28	120.9	7.04	11.8
06/21/2001	93000	24.98	105	8.68	0	7.38	11.9
06/21/2001	94500	25.89	101.3	8.24	0	7.65	11.9
06/21/2001	100000	25.77	100.7	8.2	0.1	7.52	11.8
06/21/2001	101500	25.57	101.2	8.28	0	7.61	11.8
06/21/2001	103000	25.77	102.5	8.35	0.1	7.72	11.8
06/21/2001	104500	26.54	101.5	8.16	0	7.6	11.5

06/21/2001	110000	26.72	101.7	8.15	0.1	7.69	11.8

Recovery finished at 062201 074708

DataSonde 4a 37757
Log File Name : Bayou Desiard Site 5
Setup Date (MMDDYY) : 061801
Setup Time (HHMMSS) : 154932
Starting Date (MMDDYY) : 061901
Starting Time (HHMMSS) : 110000
Stopping Date (MMDDYY) : 062101
Stopping Time (HHMMSS) : 110000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000200

Date MMDDYY	Time HHMMSS	Temp øC	DO% Sat	DO mg/l	pH Units	SpCond æS/cm	IBatt Volts
06/19/2001	110000	22.67	102.2	8.82	7.12	0.1	11.2
06/19/2001	111500	30.96	65.2	4.85	8.8	110.8	11.2
06/19/2001	113000	30.97	67.5	5.02	8.82	111	11.2
06/19/2001	114500	31.02	62.3	4.62	8.86	111	11.2
06/19/2001	120000	31.08	71.8	5.32	8.86	111.1	11.2
06/19/2001	121500	31.14	69.3	5.14	8.91	111	11.2
06/19/2001	123000	31	63.5	4.72	8.87	111	11.2
06/19/2001	124500	31.02	58.9	4.38	8.84	111	11.2
06/19/2001	130000	31.06	65.9	4.89	8.87	111.1	11.1
06/19/2001	131500	31.14	68.5	5.08	8.93	111.3	11.2
06/19/2001	133000	31.18	82.5	6.11	8.94	111.4	11.2
06/19/2001	134500	31.14	65	4.82	8.93	111.4	11.2
06/19/2001	140000	31.21	67.4	4.99	8.94	111.6	11.2
06/19/2001	141500	31.37	71.8	5.3	9.01	111.7	11.2
06/19/2001	143000	31.45	78.4	5.78	8.97	111.8	11.2
06/19/2001	144500	31.47	70.8	5.21	8.99	111.9	11.2
06/19/2001	150000	31.47	71.5	5.27	9	112.1	11.1
06/19/2001	151500	31.46	74.5	5.49	9.04	112.1	11.2
06/19/2001	153000	31.44	65.2	4.8	9.02	112.2	11.2
06/19/2001	154500	31.4	92.2	6.8	9.02	112	11.2
06/19/2001	160000	31.47	74.5	5.49	9.03	112.1	11.2
06/19/2001	161500	31.4	72.5	5.35	9.04	112.2	11.2
06/19/2001	163000	31.54	75.1	5.52	9.09	112.3	11.2
06/19/2001	164500	31.6	85.8	6.31	9.1	112.1	11.1
06/19/2001	170000	31.62	73	5.37	9.08	112.4	11.1
06/19/2001	171500	31.54	86.3	6.35	9.07	112.2	11.2
06/19/2001	173000	31.49	84	6.18	9.08	112.4	11.1
06/19/2001	174500	31.56	76	5.59	9.08	112.2	11.2
06/19/2001	180000	31.55	70.8	5.21	9.07	112.2	11.2
06/19/2001	181500	31.5	73	5.38	9.03	112.3	11.1
06/19/2001	183000	31.58	78.7	5.79	9.07	112.2	11.2
06/19/2001	184500	31.56	66.8	4.91	9.05	112.2	11.2
06/19/2001	190000	31.62	73.2	5.38	9.06	112.3	11.2
06/19/2001	191500	31.68	77	5.65	9.07	112.2	11.2
06/19/2001	193000	31.69	67.5	4.95	9.06	112.2	11.2
06/19/2001	194500	31.74	75.6	5.55	9.07	112.1	11.2
06/19/2001	200000	31.72	78.8	5.78	9.07	112.2	11.1
06/19/2001	201500	31.78	83	6.08	9.05	112.2	11.2
06/19/2001	203000	31.78	117.3	8.6	9.03	112.1	11.2
06/19/2001	204500	31.71	123.7	9.08	9	112.1	11.2
06/19/2001	210000	31.74	123.2	9.04	8.95	112	11.1
06/19/2001	211500	31.72	118.9	8.72	8.94	111.9	11.1
06/19/2001	213000	31.7	117.7	8.64	8.93	111.8	11.2
06/19/2001	214500	31.67	114.9	8.44	8.87	111.8	11.1
06/19/2001	220000	31.73	113.3	8.31	8.84	111.6	11.1
06/19/2001	221500	31.75	112.3	8.24	8.8	111.6	11.1
06/19/2001	223000	31.7	110.8	8.13	8.79	111.7	11.1
06/19/2001	224500	31.65	110.6	8.12	8.8	111.8	11.1
06/19/2001	230000	31.61	110.9	8.15	8.79	111.7	11.1
06/19/2001	231500	31.58	109.8	8.08	8.79	111.7	11.1
06/19/2001	233000	31.53	109.3	8.04	8.77	111.7	11.1
06/19/2001	234500	31.49	107.3	7.9	8.76	111.8	11.1
06/20/2001	0	31.45	106.6	7.85	8.73	111.6	11.1
06/20/2001	1500	31.4	106.5	7.86	8.71	111.7	11.2
06/20/2001	3000	31.37	105.7	7.8	8.71	111.5	11.1
06/20/2001	4500	31.33	106	7.83	8.7	111.5	11.1
06/20/2001	10000	31.28	104.4	7.72	8.68	111.4	11.2
06/20/2001	11500	31.25	104.5	7.73	8.66	111.5	11.1
06/20/2001	13000	31.23	103.8	7.68	8.66	111.5	11.1
06/20/2001	14500	31.2	104.8	7.76	8.68	111.4	11.1
06/20/2001	20000	31.16	102.9	7.62	8.66	111.4	11.1
06/20/2001	21500	31.12	105.1	7.79	8.68	111.5	11.1
06/20/2001	23000	31.09	104.1	7.72	8.66	111.5	11.1
06/20/2001	24500	31.04	103.2	7.66	8.64	111.4	11.1
06/20/2001	30000	31.02	102.8	7.63	8.64	111.5	11.1
06/20/2001	31500	30.99	101.3	7.52	8.62	111.4	11.1
06/20/2001	33000	30.95	101.2	7.52	8.62	111.4	11.1
06/20/2001	34500	30.91	100.6	7.48	8.58	111.4	11.1
06/20/2001	40000	30.87	101.5	7.56	8.6	111.5	11.1
06/20/2001	41500	30.84	100.7	7.5	8.58	111.3	11.1
06/20/2001	43000	30.81	99.1	7.39	8.56	111.3	11.1

06/20/2001	44500	30.77	101.3	7.55	8.59	111.4	11.1
06/20/2001	50000	30.73	99.6	7.43	8.57	111.3	11.1
06/20/2001	51500	30.71	99.3	7.41	8.57	111.3	11.1
06/20/2001	53000	30.66	99.6	7.44	8.56	111.3	11.1
06/20/2001	54500	30.65	98.2	7.34	8.53	111.4	11.1
06/20/2001	60000	30.6	96.2	7.19	8.51	111.3	11.1
06/20/2001	61500	30.56	97	7.26	8.5	111.3	11.1
06/20/2001	63000	30.52	97.7	7.31	8.5	111.3	11.1
06/20/2001	64500	30.51	97.7	7.32	8.5	111.2	11.1
06/20/2001	70000	30.48	97.6	7.31	8.5	111.2	11.1
06/20/2001	71500	30.46	97.1	7.28	8.5	111.2	11.1
06/20/2001	73000	30.45	96.3	7.22	8.48	111.2	11.1
06/20/2001	74500	30.43	96.6	7.24	8.47	111.2	11.1
06/20/2001	80000	30.4	95.3	7.15	8.43	111	11.1
06/20/2001	81500	30.4	95.6	7.17	8.47	111.1	11.1
06/20/2001	83000	30.37	96.6	7.25	8.46	111	11.1
06/20/2001	84500	30.38	97	7.28	8.48	111.2	11.1
06/20/2001	90000	30.37	96.7	7.26	8.47	111.2	11.1
06/20/2001	91500	30.35	95.5	7.17	8.42	111	11.1
06/20/2001	93000	30.36	95.4	7.16	8.43	111.1	11.1
06/20/2001	94500	30.44	98.1	7.35	8.52	111.2	11.1
06/20/2001	100000	30.55	102.8	7.69	8.65	111.3	11.1
06/20/2001	101500	30.67	105.9	7.91	8.73	111.4	11.1
06/20/2001	103000	30.77	109.5	8.16	8.78	111.6	11.1
06/20/2001	104500	30.99	113.2	8.41	8.85	112	11.1
06/20/2001	110000	31.13	114.7	8.5	8.87	112.1	11.1
06/20/2001	111500	31.12	114.2	8.46	8.87	112	11.1
06/20/2001	113000	31.16	113.7	8.42	8.86	111.8	11.1
06/20/2001	114500	31.25	116.3	8.6	8.88	112	11.1
06/20/2001	120000	31.28	116.9	8.64	8.9	112	11.1
06/20/2001	121500	31.25	117.8	8.71	8.9	112	11
06/20/2001	123000	31.34	119.7	8.84	8.92	112.2	11.1
06/20/2001	124500	31.31	122	9.01	8.93	112.3	11.1
06/20/2001	130000	31.24	118.7	8.78	8.93	112	11.1
06/20/2001	131500	31.11	114.8	8.51	8.87	111.6	11.1
06/20/2001	133000	31.13	118.7	8.79	8.91	112.1	11.1
06/20/2001	134500	31.2	118.7	8.79	8.93	112.3	11.1
06/20/2001	140000	31.25	121.3	8.97	8.95	112.4	11.1
06/20/2001	141500	31.33	121.8	9	8.96	112.3	11.1
06/20/2001	143000	31.48	125.5	9.24	8.97	112.2	11.1
06/20/2001	144500	31.53	122.5	9.02	8.96	112.2	11
06/20/2001	150000	31.52	125	9.2	8.97	112.4	11.1
06/20/2001	151500	31.58	127.3	9.36	9.02	112.6	11
06/20/2001	153000	31.52	127.9	9.42	9.02	112.7	11.1
06/20/2001	154500	31.57	128.4	9.44	9.04	112.7	11.1
06/20/2001	160000	31.44	127.6	9.41	9.03	112.5	11.1
06/20/2001	161500	31.56	127.4	9.38	9.06	112.7	11
06/20/2001	163000	31.5	130	9.57	9.07	112.8	11.1
06/20/2001	164500	31.47	129.5	9.54	9.06	112.5	11.1
06/20/2001	170000	31.46	130	9.58	9.07	112.5	11
06/20/2001	171500	31.39	130	9.59	9.05	112.1	11.1
06/20/2001	173000	31.47	129.7	9.55	9.07	112.6	11.1
06/20/2001	174500	31.62	132.4	9.73	9.09	112.8	11.1
06/20/2001	180000	31.66	131.9	9.68	9.09	112.7	11.1
06/20/2001	181500	31.75	133.7	9.8	9.09	112.8	11
06/20/2001	183000	31.65	129.6	9.52	9.07	112.4	11.1
06/20/2001	184500	31.52	126.1	9.28	9.03	112.2	11.1
06/20/2001	190000	31.57	126.8	9.33	9.05	112.3	11.1
06/20/2001	191500	31.6	128	9.41	9.05	112.3	11
06/20/2001	193000	31.73	128.9	9.45	9.05	112.4	11.1
06/20/2001	194500	31.75	128.9	9.45	9.05	112.4	11.1
06/20/2001	200000	31.78	127	9.3	9.03	112.3	11.1
06/20/2001	201500	32.01	131.2	9.58	9.05	112.7	11.1
06/20/2001	203000	32.08	126.1	9.19	9	112.5	11.1
06/20/2001	204500	32.06	123.7	9.02	8.97	112.4	11.1
06/20/2001	210000	32.01	118.3	8.64	8.9	112.2	11.1
06/20/2001	211500	31.99	117.8	8.6	8.91	112.2	11.1
06/20/2001	213000	31.96	120.2	8.78	8.94	112.2	11.1
06/20/2001	214500	31.91	118.4	8.66	8.9	112.2	11.1
06/20/2001	220000	31.86	117	8.56	8.89	112	11.1
06/20/2001	221500	31.81	115	8.42	8.88	112.1	11
06/20/2001	223000	31.77	115.7	8.48	8.86	112.2	11.1
06/20/2001	224500	31.7	113.1	8.3	8.85	112.1	11.1
06/20/2001	230000	31.66	113.1	8.31	8.84	112.1	11.1
06/20/2001	231500	31.61	112.8	8.29	8.82	112.1	11.1
06/20/2001	233000	31.57	111.5	8.2	8.81	112	11.1
06/20/2001	234500	31.52	108.8	8.01	8.78	111.9	11.1
06/21/2001	0	31.47	108	7.96	8.77	112	11
06/21/2001	1500	31.42	106.6	7.86	8.74	111.9	11
06/21/2001	3000	31.39	107.6	7.94	8.75	112	11.1
06/21/2001	4500	31.34	105.8	7.81	8.75	112	11
06/21/2001	10000	31.29	105.4	7.79	8.72	111.8	11.1
06/21/2001	11500	31.26	106.9	7.9	8.73	112	11.1
06/21/2001	13000	31.26	113	8.35	8.86	112.3	11.1
06/21/2001	14500	31.26	113.6	8.4	8.87	112.4	11.1
06/21/2001	20000	31.24	113	8.36	8.86	112.5	11
06/21/2001	21500	31.24	112.3	8.31	8.87	112.4	11.1

06/21/2001	23000	31.2	111.8	8.28	8.85	112.3	11
06/21/2001	24500	31.17	109.8	8.13	8.85	112.6	11.1
06/21/2001	30000	31.14	111.3	8.25	8.84	112.4	11.1
06/21/2001	31500	31.12	111.2	8.24	8.83	112.4	11.1
06/21/2001	33000	31.08	109.6	8.13	8.82	112.3	11.1
06/21/2001	34500	31.05	108.6	8.06	8.8	112.3	11
06/21/2001	40000	31.01	108.9	8.09	8.79	112.3	11.1
06/21/2001	41500	30.98	107.9	8.02	8.79	112.3	11
06/21/2001	43000	30.95	106.3	7.9	8.77	112.2	11.1
06/21/2001	44500	30.91	105.3	7.83	8.75	112.2	11.1
06/21/2001	50000	30.89	105.5	7.85	8.75	112.1	11
06/21/2001	51500	30.86	106.1	7.9	8.73	112.3	11.1
06/21/2001	53000	30.8	102.9	7.67	8.71	112.2	11.1
06/21/2001	54500	30.76	101.5	7.57	8.7	112.1	11.1
06/21/2001	60000	30.74	101.5	7.57	8.69	112.1	11
06/21/2001	61500	30.7	100.5	7.5	8.67	112.1	11.1
06/21/2001	63000	30.66	100	7.47	8.64	112	11.1
06/21/2001	64500	30.61	101.1	7.56	8.65	112.1	11
06/21/2001	70000	30.6	99	7.41	8.64	112.1	11
06/21/2001	71500	30.57	97.7	7.31	8.61	111.8	11.1
06/21/2001	73000	30.55	99.7	7.46	8.64	111.9	11
06/21/2001	74500	30.54	99.4	7.44	8.64	111.9	11.1
06/21/2001	80000	30.53	100.6	7.53	8.64	111.9	11
06/21/2001	81500	30.53	100.8	7.54	8.64	112	11.1
06/21/2001	83000	30.54	100.5	7.52	8.65	111.9	11
06/21/2001	84500	30.55	100.6	7.53	8.65	112	11.1
06/21/2001	90000	30.53	101.1	7.57	8.65	111.9	11.1
06/21/2001	91500	30.55	101.3	7.58	8.66	111.9	11.1
06/21/2001	93000	30.57	101.1	7.56	8.67	111.9	11.1
06/21/2001	94500	26.2	109.3	8.83	8.41	0.1	11.1
06/21/2001	100000	27.18	100.7	7.99	7.85	0	11.1
06/21/2001	101500	26.77	101.2	8.1	7.83	0	11.1
06/21/2001	103000	26.26	101.9	8.23	8.3	0	11.1
06/21/2001	104500	26	102.4	8.3	8.21	0	11.1
06/21/2001	110000	26.27	102.1	8.24	8.12	0	11.1

Recovery finished at 062201 075002

DataSonde 4a 37754
Log File Name : Bayou Desiard Site 7
Setup Date (MMDDYY) : 061801
Setup Time (HHMMSS) : 154340
Starting Date (MMDDYY) : 061901
Starting Time (HHMMSS) : 110000
Stopping Date (MMDDYY) : 062101
Stopping Time (HHMMSS) : 110000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000200

Date MMDDYY	Time HHMMSS	Temp øC	DO% Sat	DO mg/l	pH Units	SpCond æS/cm	IBatt Volts
06/19/2001	110000	25.74	95.2	7.76	7.61	0.1	11.4
06/19/2001	111500	25.95	95.2	7.73	7.73	0	11.8
06/19/2001	113000	26.26	94.9	7.66	7.63	0.1	11.6
06/19/2001	114500	26.12	99.8	8.08	8.22	0.2	11.8
06/19/2001	120000	27.61	103.3	8.14	11.63	0	11.9
06/19/2001	121500	29.92	100.5	7.61	7.29	0	11.9
06/19/2001	123000	30.13	99.9	7.53	5.04	0	11.8
06/19/2001	124500	30.57	100.7	7.54	8.19	0	11.7
06/19/2001	130000	30.68	101	7.54	8.15	0	11.1
06/19/2001	131500	31.7	100.8	7.4	6.23	0	11.8
06/19/2001	133000	32.84	102.6	7.39	11.89	0	11.4
06/19/2001	134500	31.93	101.9	7.45	9.22	0	11.8
06/19/2001	140000	27.98	59.5	4.66	7.11	118.6	11.8
06/19/2001	141500	27.98	57.4	4.49	6.78	119	11.8
06/19/2001	143000	28.01	56.5	4.42	6.75	119.5	11.8
06/19/2001	144500	28	55.5	4.34	6.8	119.7	11.8
06/19/2001	150000	28.06	58.5	4.57	6.81	120.1	11.8
06/19/2001	151500	28.05	54.3	4.25	6.73	120.1	11.8
06/19/2001	153000	28.1	57.5	4.49	6.74	120.4	11.8
06/19/2001	154500	28.2	60	4.68	6.78	120.5	11.8
06/19/2001	160000	28.2	62.4	4.87	6.78	120.8	11.8
06/19/2001	161500	28.14	57.4	4.48	6.76	121.1	11.8
06/19/2001	163000	28.18	54.4	4.24	6.83	121	11.8
06/19/2001	164500	28.19	55.8	4.35	6.77	121	11.8
06/19/2001	170000	28.2	54.7	4.27	6.77	121	11.8
06/19/2001	171500	28.26	57.3	4.46	6.83	121.1	11.8
06/19/2001	173000	28.29	57.2	4.46	6.77	121.1	11.8
06/19/2001	174500	28.29	57.8	4.5	6.77	121.2	11.8
06/19/2001	180000	28.24	56.2	4.38	6.76	121.4	11.8
06/19/2001	181500	28.21	50.2	3.92	6.73	121.8	11.8
06/19/2001	183000	28.25	53.1	4.14	6.74	121.6	11.8
06/19/2001	184500	28.25	51.2	3.99	6.79	121.9	11.8
06/19/2001	190000	28.28	50.4	3.92	6.74	121.7	11.8
06/19/2001	191500	28.3	51.4	4	6.73	121.7	11.8
06/19/2001	193000	28.32	50.6	3.94	6.74	122	11.8
06/19/2001	194500	28.33	48.1	3.74	6.8	122	11.8
06/19/2001	200000	28.31	54.3	4.22	6.73	122.5	11.8
06/19/2001	201500	28.27	46.3	3.6	6.7	122.6	11.8
06/19/2001	203000	28.3	47.4	3.69	6.69	122.7	11.8
06/19/2001	204500	28.34	49.4	3.84	6.7	122.5	11.8
06/19/2001	210000	28.36	50.3	3.91	6.7	122.4	11.8
06/19/2001	211500	28.36	50.4	3.92	6.7	122.8	11.8
06/19/2001	213000	28.35	47.2	3.67	6.69	122.3	11.8
06/19/2001	214500	28.35	47.8	3.72	6.76	122.7	11.8
06/19/2001	220000	28.34	46.3	3.6	6.74	122.8	11.8
06/19/2001	221500	28.38	47.5	3.69	6.69	123.9	11.8
06/19/2001	223000	28.37	48.1	3.74	6.72	122.9	11.8
06/19/2001	224500	28.38	46.9	3.64	6.73	122.9	11.8
06/19/2001	230000	28.37	48.5	3.77	6.7	123.1	11.8
06/19/2001	231500	28.39	46.1	3.58	6.68	123.2	11.8
06/19/2001	233000	28.38	38.7	3.01	6.72	123.4	11.7
06/19/2001	234500	28.41	41.1	3.19	6.67	123	11.8
06/20/2001	0	28.4	43	3.34	6.67	123.1	11.8
06/20/2001	1500	28.42	42.6	3.31	6.67	122.9	11.7
06/20/2001	3000	28.34	34.5	2.68	6.7	123.9	11.8
06/20/2001	4500	28.31	35	2.72	6.68	125	11.7
06/20/2001	10000	28.32	36.1	2.81	6.64	124.6	11.7
06/20/2001	11500	28.32	27.4	2.13	6.68	124.5	11.7
06/20/2001	13000	28.32	33.3	2.59	6.67	124.7	11.7
06/20/2001	14500	28.35	31.3	2.44	6.64	124.5	11.7
06/20/2001	20000	28.32	27.1	2.11	6.65	125.7	11.8
06/20/2001	21500	28.3	26.7	2.08	6.66	126.2	11.7
06/20/2001	23000	28.31	25.9	2.02	6.62	125.5	11.7
06/20/2001	24500	28.29	24.5	1.9	6.62	126.1	11.7
06/20/2001	30000	28.28	24.1	1.87	6.62	126	11.7
06/20/2001	31500	28.3	26.1	2.03	6.62	125.8	11.7
06/20/2001	33000	28.29	25.7	2	6.62	125.6	11.7
06/20/2001	34500	28.28	23.2	1.81	6.62	125.7	11.7
06/20/2001	40000	28.25	23.5	1.83	6.61	126	11.8
06/20/2001	41500	28.25	21.9	1.7	6.6	126.3	11.7
06/20/2001	43000	28.25	20.8	1.62	6.61	125.8	11.7

06/20/2001	44500	28.23	17.3	1.34	6.6	128.2	11.7
06/20/2001	50000	28.24	19.4	1.51	6.6	128.1	11.7
06/20/2001	51500	28.24	20.9	1.63	6.6	127.3	11.7
06/20/2001	53000	28.25	17.3	1.35	6.59	126.9	11.7
06/20/2001	54500	28.21	15.7	1.23	6.59	128.2	11.7
06/20/2001	60000	28.28	21.7	1.69	6.6	126.9	11.7
06/20/2001	61500	28.25	18.7	1.45	6.59	127	11.7
06/20/2001	63000	28.24	20.5	1.6	6.6	126.9	11.7
06/20/2001	64500	28.26	21.4	1.66	6.61	126.2	11.7
06/20/2001	70000	28.26	23.4	1.82	6.62	125.8	11.8
06/20/2001	71500	28.24	20	1.56	6.61	126.3	11.8
06/20/2001	73000	28.24	23.4	1.83	6.62	125.8	11.7
06/20/2001	74500	28.2	19.4	1.51	6.61	126.9	11.7
06/20/2001	80000	28.22	26	2.03	6.63	126.4	11.7
06/20/2001	81500	28.18	46.6	3.63	6.72	124.2	11.6
06/20/2001	83000	28.11	43.6	3.4	6.72	125.1	11.7
06/20/2001	84500	28.09	44.5	3.47	6.73	124.4	11.7
06/20/2001	90000	28.08	46	3.59	6.72	123.6	11.6
06/20/2001	91500	28.1	44.7	3.49	6.72	123.8	11.6
06/20/2001	93000	28.11	47.9	3.74	6.74	123	11.7
06/20/2001	94500	28.12	47.2	3.68	6.74	122.8	11.6
06/20/2001	100000	28.11	46.6	3.64	6.73	122.9	11.6
06/20/2001	101500	28.11	45.3	3.54	6.72	123.3	11.6
06/20/2001	103000	28.13	45.1	3.52	6.69	123.2	11.7
06/20/2001	104500	28.13	41.6	3.25	6.7	123.1	11.7
06/20/2001	110000	28.19	47.9	3.73	6.75	122.6	11.6
06/20/2001	111500	28.16	43.2	3.37	6.73	122.6	11.7
06/20/2001	113000	28.15	41.1	3.2	6.73	122.5	11.7
06/20/2001	114500	28.15	41.1	3.21	6.72	122.3	11.7
06/20/2001	120000	28.17	40.2	3.13	6.7	122.6	11.6
06/20/2001	121500	28.21	46.5	3.63	6.73	123	10.8
06/20/2001	123000	28.29	49.5	3.85	6.73	122.4	11.4
06/20/2001	124500	28.32	48.9	3.8	6.74	122.1	11.7
06/20/2001	130000	28.34	52.2	4.06	6.75	122.2	11.6
06/20/2001	131500	28.36	50.5	3.92	6.74	121.7	11.6
06/20/2001	133000	28.37	51.7	4.02	6.76	121.7	11.6
06/20/2001	134500	28.37	51.4	3.99	6.74	121.6	11.6
06/20/2001	140000	28.43	57	4.43	6.76	121.4	11.6
06/20/2001	141500	28.44	54.1	4.2	6.73	121.3	11.5
06/20/2001	143000	28.44	56.1	4.35	6.73	121.4	11.5
06/20/2001	144500	28.49	55.2	4.28	6.75	121.3	11.6
06/20/2001	150000	28.64	61.3	4.74	6.8	121.5	11.6
06/20/2001	151500	28.6	58.4	4.52	6.79	121.6	11.6
06/20/2001	153000	28.64	67.7	5.24	6.78	121.3	11.6
06/20/2001	154500	28.64	65	5.03	6.74	121.3	11.5
06/20/2001	160000	28.59	58.8	4.55	6.73	121.3	11.5
06/20/2001	161500	28.63	57.6	4.46	6.77	121.5	11.5
06/20/2001	163000	28.65	56.9	4.4	6.75	121.2	11.6
06/20/2001	164500	28.67	63.3	4.9	6.75	121.5	11.5
06/20/2001	170000	28.71	65.8	5.09	6.75	121.5	11.6
06/20/2001	171500	28.79	68.4	5.28	6.74	121.5	11.6
06/20/2001	173000	28.75	64.3	4.97	6.73	121.8	11.5
06/20/2001	174500	28.74	61.9	4.78	6.71	121.7	11.6
06/20/2001	180000	28.61	51.9	4.02	6.69	122.2	11.6
06/20/2001	181500	28.59	46.4	3.6	6.68	122.3	11.5
06/20/2001	183000	28.55	42.1	3.26	6.65	122.4	11.5
06/20/2001	184500	28.63	53.2	4.11	6.66	122.2	11.5
06/20/2001	190000	28.59	47.4	3.67	6.64	122.9	11.5
06/20/2001	191500	28.59	44.3	3.43	6.63	122.9	11.5
06/20/2001	193000	28.62	36.5	2.83	6.63	123.2	11.6
06/20/2001	194500	28.63	47	3.64	6.63	122.8	11.5
06/20/2001	200000	28.58	47.5	3.68	6.61	123.2	11.6
06/20/2001	201500	28.62	43.9	3.4	6.62	122.8	11.6
06/20/2001	203000	28.58	41.1	3.18	6.61	123.4	11.5
06/20/2001	204500	28.7	45.2	3.5	6.63	123	11.5
06/20/2001	210000	28.72	44.1	3.41	6.62	123.2	11.5
06/20/2001	211500	28.75	45	3.47	6.63	123.5	11.5
06/20/2001	213000	28.74	43.4	3.35	6.63	123.4	11.5
06/20/2001	214500	28.73	44.4	3.43	6.64	123.4	11.5
06/20/2001	220000	28.72	41.8	3.23	6.61	122.8	11.5
06/20/2001	221500	28.71	41.1	3.18	6.62	122.9	11.6
06/20/2001	223000	28.71	37.6	2.91	6.59	123.3	11.5
06/20/2001	224500	28.71	35.3	2.73	6.6	123.8	11.5
06/20/2001	230000	28.76	36.1	2.79	6.61	123.7	11.5
06/20/2001	231500	28.75	36.3	2.8	6.61	123.8	11.5
06/20/2001	233000	28.74	36.8	2.84	6.58	123.7	11.4
06/20/2001	234500	28.72	33.3	2.57	6.58	124.3	11.5
06/21/2001	0	28.74	32.4	2.5	6.57	124.2	11.5
06/21/2001	1500	28.69	32.3	2.5	6.57	124.4	11.5
06/21/2001	3000	28.65	27.1	2.1	6.55	124.7	11.6
06/21/2001	4500	28.67	23.7	1.84	6.55	124.7	11.6
06/21/2001	10000	28.68	19.3	1.49	6.55	125.6	11.5
06/21/2001	11500	28.67	20.2	1.56	6.55	125.7	11.5
06/21/2001	13000	28.68	14.9	1.15	6.54	125	11.5
06/21/2001	14500	28.66	13	1.01	6.55	127.1	11.5
06/21/2001	20000	28.68	14.6	1.13	6.55	125.9	11.6
06/21/2001	21500	28.62	15.4	1.19	6.55	126.4	11.5

06/21/2001	23000	28.63	13.1	1.01	6.54	127.1	11.6
06/21/2001	24500	28.61	11.4	0.88	6.54	126.8	11.5
06/21/2001	30000	28.61	8.3	0.64	6.53	125.9	11.4
06/21/2001	31500	28.61	11.4	0.88	6.53	126.2	11.4
06/21/2001	33000	28.6	14.6	1.13	6.53	126.5	11.5
06/21/2001	34500	28.61	18.4	1.43	6.54	125.9	11.6
06/21/2001	40000	28.59	16.2	1.25	6.56	126.8	11.5
06/21/2001	41500	28.58	14.4	1.11	6.55	127.4	11.5
06/21/2001	43000	28.57	13.8	1.07	6.58	126.9	11.4
06/21/2001	44500	28.55	10.9	0.84	6.55	128.2	11.5
06/21/2001	50000	28.51	10.5	0.82	6.61	125.9	11.4
06/21/2001	51500	28.46	13.2	1.02	6.59	127.1	11.4
06/21/2001	53000	28.43	23.1	1.8	6.59	127.3	11.4
06/21/2001	54500	28.38	15.4	1.2	6.59	128.3	11.5
06/21/2001	60000	28.36	23.8	1.85	6.61	127.6	11.5
06/21/2001	61500	28.34	36.7	2.86	6.64	125.8	11.5
06/21/2001	63000	28.32	36.2	2.81	6.63	125	11.4
06/21/2001	64500	28.29	41.3	3.22	6.66	125.1	11.5
06/21/2001	70000	28.26	38.8	3.02	6.65	124.8	11.5
06/21/2001	71500	28.3	39	3.04	6.65	123.7	11.5
06/21/2001	73000	28.18	25.6	2	6.58	125.8	11.5
06/21/2001	74500	28.13	15.6	1.22	6.53	126.3	11.4
06/21/2001	80000	28.08	13.1	1.02	6.52	127	11.4
06/21/2001	81500	28.06	11.6	0.91	6.51	126.7	11.5
06/21/2001	83000	28.04	15.1	1.18	6.52	126.2	11.5
06/21/2001	84500	28.06	19	1.48	6.54	126	11.5
06/21/2001	90000	26.89	99.2	7.92	7.32	0	11.3
06/21/2001	91500	26.24	97.6	7.88	7.46	0.1	11.3
06/21/2001	93000	26.21	100.2	8.1	7.41	0.1	10.9
06/21/2001	94500	26.13	100.3	8.12	7.4	0.1	11.5
06/21/2001	100000	26.04	100.6	8.15	7.36	0.1	11.5
06/21/2001	101500	26.02	100.8	8.17	7.36	0.1	11.5
06/21/2001	103000	26.02	101	8.19	7.39	0	11.4
06/21/2001	104500	26.02	101.4	8.22	7.37	0.1	11.5
06/21/2001	110000	26.17	100.9	8.16	7.36	0	11.2

Recovery finished at 062201 071832

DataSonde 4a 37756
Log File Name : Bayou Desiard Site 8
Setup Date (MMDDYY) : 061801
Setup Time (HHMMSS) : 155535
Starting Date (MMDDYY) : 061901
Starting Time (HHMMSS) : 110000
Stopping Date (MMDDYY) : 062101
Stopping Time (HHMMSS) : 110000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000200

Date MMDDYY	Time HHMMSS	Temp øC	DO% Sat	DO mg/l	SpCond æS/cm	pH Units	IBatt Volts
06/19/2001	110000	23.12	106	9.08	0	6.88	12.3
06/19/2001	111500	23.63	104.1	8.82	0	7.02	11.3
06/19/2001	113000	24.21	101.3	8.49	0	6.98	12.3
06/19/2001	114500	25.68	98.3	8.02	0	7.06	12.4
06/19/2001	120000	26.68	97.9	7.84	0	7.22	12.4
06/19/2001	121500	28.06	97.1	7.59	0	6.48	12.5
06/19/2001	123000	28.96	97.1	7.47	0	6.15	12.4
06/19/2001	124500	29.57	97.3	7.41	0	6.08	12.5
06/19/2001	130000	28.65	97.5	7.54	0	6.43	12.5
06/19/2001	131500	28.49	98.8	7.67	0	6.04	12.4
06/19/2001	133000	29.84	95.3	7.22	0	6.33	12.4
06/19/2001	134500	26.9	9.5	0.76	192.9	6.54	12.3
06/19/2001	140000	26.7	7.6	0.61	220	6.47	12.4
06/19/2001	141500	26.57	7.2	0.58	233	6.42	12.4
06/19/2001	143000	26.64	7.7	0.62	231	6.45	12.4
06/19/2001	144500	26.58	6.2	0.5	226	6.44	12.3
06/19/2001	150000	26.54	5.7	0.46	238	6.46	12.4
06/19/2001	151500	26.49	5.6	0.45	242	6.46	12.4
06/19/2001	153000	26.45	5.5	0.44	247	6.47	12.3
06/19/2001	154500	26.41	5.4	0.44	251	6.48	12.4
06/19/2001	160000	26.38	5.4	0.43	254	6.49	12.4
06/19/2001	161500	26.36	5.3	0.43	256	6.49	12.4
06/19/2001	163000	26.34	5.4	0.43	258	6.51	12.4
06/19/2001	164500	26.33	5.3	0.43	259	6.52	12.4
06/19/2001	170000	26.33	5.4	0.44	258	6.52	12.4
06/19/2001	171500	26.33	5.4	0.43	257	6.53	12.3
06/19/2001	173000	26.32	5.3	0.43	257	6.54	12.4
06/19/2001	174500	26.32	5.3	0.43	258	6.54	12.3
06/19/2001	180000	26.33	5.3	0.43	258	6.55	12.4
06/19/2001	181500	26.34	5.3	0.43	258	6.56	12.3
06/19/2001	183000	26.34	5.3	0.42	259	6.56	12.3
06/19/2001	184500	26.35	5.3	0.42	259	6.57	12.4
06/19/2001	190000	26.36	5.2	0.42	258	6.57	12.3
06/19/2001	191500	26.36	5.2	0.42	259	6.56	12.3
06/19/2001	193000	26.37	5.2	0.42	258	6.56	12.4
06/19/2001	194500	26.38	5.1	0.41	259	6.56	12.3
06/19/2001	200000	26.39	5.1	0.41	259	6.56	12.4
06/19/2001	201500	26.39	5.1	0.41	260	6.56	12.3
06/19/2001	203000	26.39	5.1	0.41	260	6.56	12.3
06/19/2001	204500	26.4	5.1	0.41	260	6.56	12.3
06/19/2001	210000	26.4	5.1	0.41	260	6.56	12.4
06/19/2001	211500	26.41	5.1	0.41	260	6.56	12.4
06/19/2001	213000	26.41	5	0.4	259	6.57	12.3
06/19/2001	214500	26.41	5	0.4	259	6.57	12.2
06/19/2001	220000	26.41	5	0.4	260	6.58	12.4
06/19/2001	221500	26.42	5	0.4	260	6.59	12.3
06/19/2001	223000	26.42	5	0.4	260	6.59	12.3
06/19/2001	224500	26.42	5	0.4	260	6.6	12.3
06/19/2001	230000	26.43	5	0.4	259	6.6	12.3
06/19/2001	231500	26.44	4.9	0.4	259	6.61	12.4
06/19/2001	233000	26.44	5	0.4	260	6.61	12.3
06/19/2001	234500	26.45	5	0.4	259	6.61	12.2
06/20/2001	0	26.46	5	0.4	261	6.61	12.3
06/20/2001	1500	26.46	4.9	0.4	262	6.62	12.3
06/20/2001	3000	26.47	5	0.4	261	6.62	12.3
06/20/2001	4500	26.49	5	0.4	262	6.62	12.2
06/20/2001	10000	26.51	5	0.4	265	6.63	12.3
06/20/2001	11500	26.51	5	0.4	265	6.63	12.3
06/20/2001	13000	26.52	5	0.4	265	6.63	12.2
06/20/2001	14500	26.52	5	0.4	267	6.64	12.2
06/20/2001	20000	26.52	5	0.4	265	6.64	12.3
06/20/2001	21500	26.51	4.9	0.4	264	6.65	12.2
06/20/2001	23000	26.5	4.9	0.4	265	6.65	12.2
06/20/2001	24500	26.48	4.9	0.4	263	6.65	12.2
06/20/2001	30000	26.46	4.9	0.4	262	6.65	12.2
06/20/2001	31500	26.46	4.9	0.4	261	6.66	12.2
06/20/2001	33000	26.44	4.9	0.4	262	6.66	12.2
06/20/2001	34500	26.44	4.9	0.4	262	6.66	12.1
06/20/2001	40000	26.43	4.9	0.4	263	6.67	12.3
06/20/2001	41500	26.42	5	0.4	268	6.67	12.1
06/20/2001	43000	26.41	5	0.4	268	6.67	12.2

06/20/2001	44500	26.4	5	0.4	272	6.67	12.2
06/20/2001	50000	26.38	5	0.4	278	6.67	12.2
06/20/2001	51500	26.37	5	0.4	278	6.67	12.2
06/20/2001	53000	26.36	4.9	0.4	277	6.67	12.2
06/20/2001	54500	26.34	4.9	0.4	282	6.68	12.2
06/20/2001	60000	26.33	4.9	0.4	285	6.68	12.2
06/20/2001	61500	26.32	4.9	0.4	284	6.68	12.1
06/20/2001	63000	26.32	4.9	0.4	288	6.68	12.2
06/20/2001	64500	26.31	4.9	0.4	289	6.68	12.2
06/20/2001	70000	26.3	5	0.4	289	6.68	12.2
06/20/2001	71500	26.29	4.9	0.4	291	6.68	12.1
06/20/2001	73000	26.29	4.9	0.39	291	6.68	12.1
06/20/2001	74500	26.28	4.9	0.39	288	6.69	12.2
06/20/2001	80000	26.26	4.9	0.39	288	6.69	12.2
06/20/2001	81500	26.25	4.9	0.39	287	6.69	12.2
06/20/2001	83000	26.3	4.9	0.39	258	6.77	12.1
06/20/2001	84500	26.26	4.9	0.39	263	6.77	12.1
06/20/2001	90000	26.24	4.9	0.4	264	6.77	12.2
06/20/2001	91500	26.22	4.9	0.39	266	6.77	12.1
06/20/2001	93000	26.21	4.9	0.4	268	6.77	12.1
06/20/2001	94500	26.2	4.9	0.4	271	6.78	12.1
06/20/2001	100000	26.2	4.9	0.39	274	6.78	12.1
06/20/2001	101500	26.19	4.9	0.4	277	6.78	12.1
06/20/2001	103000	26.18	4.9	0.4	280	6.78	12.1
06/20/2001	104500	26.18	4.9	0.4	281	6.78	12.1
06/20/2001	110000	26.17	4.9	0.39	283	6.79	12.1
06/20/2001	111500	26.17	4.9	0.4	284	6.79	12.1
06/20/2001	113000	26.18	4.9	0.4	285	6.79	12.1
06/20/2001	114500	26.18	4.9	0.4	286	6.79	12.1
06/20/2001	120000	26.18	4.9	0.4	288	6.79	12.1
06/20/2001	121500	26.18	4.9	0.4	288	6.8	12.1
06/20/2001	123000	26.18	4.9	0.4	289	6.8	12.1
06/20/2001	124500	26.18	4.9	0.39	289	6.8	12.1
06/20/2001	130000	26.18	4.9	0.39	291	6.8	12.1
06/20/2001	131500	26.19	4.9	0.39	291	6.8	12.1
06/20/2001	133000	26.2	4.9	0.39	292	6.8	12.1
06/20/2001	134500	26.2	4.9	0.39	293	6.8	12.1
06/20/2001	140000	26.2	4.9	0.39	295	6.8	12.1
06/20/2001	141500	26.21	4.9	0.39	295	6.8	12.1
06/20/2001	143000	26.22	4.8	0.39	294	6.8	12.1
06/20/2001	144500	26.22	4.9	0.39	293	6.8	12.1
06/20/2001	150000	26.23	4.8	0.39	294	6.8	12.1
06/20/2001	151500	26.23	4.8	0.39	293	6.79	12.1
06/20/2001	153000	26.24	4.8	0.39	295	6.79	12.1
06/20/2001	154500	26.25	4.8	0.39	297	6.79	12.1
06/20/2001	160000	26.25	4.8	0.39	299	6.79	12.1
06/20/2001	161500	26.25	4.8	0.39	301	6.78	12.1
06/20/2001	163000	26.25	4.8	0.39	300	6.78	12.1
06/20/2001	164500	26.26	4.8	0.39	303	6.78	12.1
06/20/2001	170000	26.25	4.8	0.38	305	6.78	12.1
06/20/2001	171500	26.25	4.8	0.39	306	6.78	12.1
06/20/2001	173000	26.25	4.8	0.38	307	6.77	12.1
06/20/2001	174500	26.26	4.8	0.39	308	6.77	12.1
06/20/2001	180000	26.27	4.8	0.38	309	6.77	12.1
06/20/2001	181500	26.3	4.8	0.39	309	6.77	12.1
06/20/2001	183000	26.31	4.8	0.38	309	6.77	12.1
06/20/2001	184500	26.31	4.8	0.38	309	6.77	12.1
06/20/2001	190000	26.34	4.8	0.38	308	6.76	12
06/20/2001	191500	26.36	4.8	0.38	309	6.76	12.1
06/20/2001	193000	26.38	4.8	0.38	311	6.76	12.1
06/20/2001	194500	26.4	4.8	0.38	311	6.76	12.1
06/20/2001	200000	26.41	4.8	0.38	313	6.76	12.1
06/20/2001	201500	26.42	4.7	0.38	315	6.76	12.1
06/20/2001	203000	26.43	4.8	0.38	316	6.76	12.1
06/20/2001	204500	26.44	4.8	0.39	318	6.76	12
06/20/2001	210000	26.45	4.8	0.39	318	6.75	12
06/20/2001	211500	26.45	4.8	0.38	319	6.75	12
06/20/2001	213000	26.46	4.8	0.38	319	6.75	12.1
06/20/2001	214500	26.47	4.8	0.38	320	6.75	12.1
06/20/2001	220000	26.47	4.8	0.38	321	6.75	12
06/20/2001	221500	26.48	4.8	0.39	322	6.74	12.1
06/20/2001	223000	26.49	4.8	0.39	322	6.74	12.1
06/20/2001	224500	26.49	4.8	0.38	323	6.74	12
06/20/2001	230000	26.49	4.8	0.39	322	6.74	12.1
06/20/2001	231500	26.5	4.8	0.38	322	6.73	12
06/20/2001	233000	26.5	4.8	0.39	323	6.74	12
06/20/2001	234500	26.51	4.8	0.38	323	6.73	12
06/21/2001	0	26.52	4.8	0.38	324	6.73	12.1
06/21/2001	1500	26.52	4.8	0.39	326	6.73	11.9
06/21/2001	3000	26.52	4.8	0.39	329	6.73	12.1
06/21/2001	4500	26.51	4.8	0.38	331	6.73	12
06/21/2001	10000	26.52	4.8	0.38	332	6.72	12
06/21/2001	11500	26.51	4.8	0.39	333	6.72	12
06/21/2001	13000	26.52	4.8	0.39	333	6.72	12
06/21/2001	14500	26.51	4.8	0.39	334	6.72	12
06/21/2001	20000	26.52	4.9	0.39	333	6.72	12
06/21/2001	21500	26.51	4.9	0.39	333	6.72	12

06/21/2001	23000	26.51	4.9	0.39	332	6.72	12
06/21/2001	24500	26.5	4.8	0.39	332	6.72	11.9
06/21/2001	30000	26.5	4.8	0.39	331	6.71	12
06/21/2001	31500	26.49	4.9	0.39	329	6.71	12
06/21/2001	33000	26.49	4.9	0.39	329	6.71	12
06/21/2001	34500	26.48	4.9	0.39	329	6.71	12
06/21/2001	40000	26.48	4.9	0.39	330	6.71	12
06/21/2001	41500	26.47	4.9	0.39	330	6.71	12
06/21/2001	43000	26.46	4.9	0.39	331	6.71	12
06/21/2001	44500	26.45	4.9	0.39	333	6.71	12
06/21/2001	50000	26.44	4.9	0.39	336	6.71	11.9
06/21/2001	51500	26.43	4.8	0.39	340	6.7	12
06/21/2001	53000	26.42	4.9	0.39	342	6.7	12
06/21/2001	54500	26.4	4.9	0.39	342	6.7	12
06/21/2001	60000	26.39	4.9	0.39	343	6.7	11.9
06/21/2001	61500	26.38	4.9	0.39	342	6.7	12
06/21/2001	63000	26.38	4.9	0.39	341	6.7	11.9
06/21/2001	64500	26.37	4.9	0.39	341	6.7	11.9
06/21/2001	70000	26.36	4.9	0.39	341	6.7	12
06/21/2001	71500	26.35	4.9	0.39	339	6.7	12
06/21/2001	73000	26.35	4.9	0.39	339	6.7	11.9
06/21/2001	74500	26.34	4.9	0.39	338	6.7	12
06/21/2001	80000	26.33	4.9	0.39	337	6.69	12
06/21/2001	81500	26.33	4.9	0.39	338	6.69	12
06/21/2001	83000	26.32	4.9	0.39	339	6.69	11.9
06/21/2001	84500	26.3	4.9	0.39	340	6.69	11.9
06/21/2001	90000	26.3	4.9	0.39	341	6.69	12
06/21/2001	91500	26.29	4.9	0.39	343	6.69	12
06/21/2001	93000	25.42	101.5	8.33	0	7.77	11.9
06/21/2001	94500	25.9	100.4	8.16	0	7.59	11.9
06/21/2001	100000	26.08	100.2	8.12	0	7.61	11.9
06/21/2001	101500	26.26	100.1	8.08	0	7.6	11.9
06/21/2001	103000	26.41	99.7	8.03	0	7.58	12
06/21/2001	104500	26.43	99.7	8.03	0	7.53	12
06/21/2001	110000	26.67	99.3	7.96	0	7.59	12

Recovery finished at 062201 072632

Bayou DeSaird Survey
080701
Continuous Monitor Data

DataSonde 4a 37759
Log File Name : Bayou Desiard Site 10
Setup Date (MMDDYY) : 061801
Setup Time (HHMMSS) : 155303
Starting Date (MMDDYY) : 061901
Starting Time (HHMMSS) : 110000
Stopping Date (MMDDYY) : 062101
Stopping Time (HHMMSS) : 110000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000200

Date MMDDYY	Time HHMMSS	Temp øC	DO% Sat	DO mg/l	SpCond æS/cm	pH Units	IBatt Volts
06/19/2001	110000	22.91	101	8.68	0	5.43	12.2
06/19/2001	111500	23.43	98.1	8.35	0	5.44	12.2
06/19/2001	113000	23.86	97.2	8.21	0	5.49	12.4
06/19/2001	114500	24.37	98.4	8.23	0	5.63	12.3
06/19/2001	120000	25.06	98.6	8.14	0	5.54	12.2
06/19/2001	121500	26.03	99	8.03	0	5.67	12.2
06/19/2001	123000	26.61	96.2	7.72	0	5.69	12.3
06/19/2001	124500	26.38	99.1	7.98	0	5.59	12.2
06/19/2001	130000	25.67	100.5	8.21	0	5.37	12.2
06/19/2001	131500	26.43	99.3	7.99	0	5.37	12.1
06/19/2001	133000	27.02	98.6	7.86	0	5.27	12.2
06/19/2001	134500	27.64	98.4	7.75	0	5.45	12.2
06/19/2001	140000	28.29	95.9	7.47	0	5.5	12.2
06/19/2001	141500	28.14	99.5	7.77	0	5.46	12.2
06/19/2001	143000	27.96	98.7	7.73	0	5.57	12.2
06/19/2001	144500	28.53	96.9	7.51	0	5.57	12.2
06/19/2001	150000	29.55	96	7.32	0	5.61	12.2
06/19/2001	151500	31.18	93.1	6.9	0	7.86	12.2
06/19/2001	153000	30.19	77.6	5.85	60	7.02	12.1
06/19/2001	154500	30.19	77.5	5.84	60.2	7.06	12.1
06/19/2001	160000	31.15	71.1	5.27	60.5	7.02	12.1
06/19/2001	161500	30.34	64.2	4.82	61	6.91	12.2
06/19/2001	163000	31.09	82	6.08	60.8	7.03	12.1
06/19/2001	164500	31.75	90.5	6.64	60.9	7.18	12.1
06/19/2001	170000	31.37	82.3	6.07	60.9	7.08	12.1
06/19/2001	171500	32.27	90.4	6.57	60.9	7.3	12.2
06/19/2001	173000	31.58	88.1	6.48	60.7	7.22	12.1
06/19/2001	174500	31.64	94.4	6.94	61.1	7.19	12.1
06/19/2001	180000	32.13	92.3	6.72	61.1	7.31	12.1
06/19/2001	181500	31.29	84	6.21	60.9	7.13	12.1
06/19/2001	183000	30.81	83.6	6.23	61.1	7.06	12.1
06/19/2001	184500	30.72	76.1	5.68	61.2	7	12.1
06/19/2001	190000	31.05	65.6	4.87	61.1	6.92	12.1
06/19/2001	191500	30.88	53.3	3.97	61.1	6.85	12
06/19/2001	193000	29.79	49.7	3.77	61.8	6.74	12.1
06/19/2001	194500	32.89	91.4	6.58	61.7	7.03	12.1

Bayou DeSaird Survey
080701
Continuous Monitor Data

06/19/2001	200000	29.25	20.5	1.57	61.7	6.6	12
06/19/2001	201500	29.51	37.2	2.84	61.8	6.64	12.1
06/19/2001	203000	29.15	16.7	1.28	61.7	6.58	12
06/19/2001	204500	29.26	18.1	1.39	61.5	6.59	12
06/19/2001	210000	29.25	20	1.53	61.5	6.59	12.1
06/19/2001	211500	29.26	16	1.23	61.6	6.58	12
06/19/2001	213000	29.32	17.1	1.31	61.8	6.58	12.1
06/19/2001	214500	29.25	13.5	1.04	61.9	6.58	11.9
06/19/2001	220000	29.27	14	1.07	61.9	6.57	12
06/19/2001	221500	29.4	15.7	1.2	61.4	6.59	12
06/19/2001	223000	29.32	17.7	1.35	61.5	6.58	12.1
06/19/2001	224500	29.26	12.5	0.96	61.7	6.58	12
06/19/2001	230000	29.27	13.2	1.01	61.5	6.58	11.9
06/19/2001	231500	29.4	17.3	1.32	61.3	6.6	12
06/19/2001	233000	29.44	17.9	1.36	61.6	6.6	12
06/19/2001	234500	29.38	16.7	1.27	61.6	6.59	11.9
06/20/2001	0	29.41	15.3	1.17	61.7	6.6	12
06/20/2001	1500	29.41	17	1.3	61.5	6.6	12
06/20/2001	3000	29.49	20.1	1.53	61.5	6.61	12
06/20/2001	4500	29.49	19.3	1.47	61.6	6.62	12
06/20/2001	10000	29.42	16.2	1.23	61.6	6.61	11.9
06/20/2001	11500	29.68	20.8	1.58	61.6	6.63	11.9
06/20/2001	13000	29.79	19.1	1.45	61.8	6.63	12
06/20/2001	14500	29.59	15.8	1.2	61.9	6.61	11.9
06/20/2001	20000	29.61	21.9	1.66	61.9	6.63	12
06/20/2001	21500	29.76	24.5	1.86	61.8	6.64	11.9
06/20/2001	23000	29.81	22.3	1.69	61.7	6.67	12
06/20/2001	24500	29.81	28.1	2.13	61.7	6.67	11.9
06/20/2001	30000	29.9	27.3	2.07	61.7	6.69	11.8
06/20/2001	31500	29.85	27.8	2.11	61.8	6.68	11.9
06/20/2001	33000	30	32.6	2.46	61.8	6.71	12
06/20/2001	34500	29.93	28	2.12	61.9	6.71	11.8
06/20/2001	40000	29.92	30.6	2.31	61.9	6.71	11.8
06/20/2001	41500	29.92	31	2.34	61.9	6.73	11.8
06/20/2001	43000	29.92	33.4	2.53	61.6	6.75	11.8
06/20/2001	44500	29.94	34.9	2.64	61.7	6.76	11.8
06/20/2001	50000	29.85	26.9	2.04	61.8	6.73	11.8
06/20/2001	51500	29.9	38	2.88	61.7	6.8	12
06/20/2001	53000	29.91	45.6	3.45	61.7	6.81	11.9
06/20/2001	54500	29.92	36	2.72	61.6	6.85	11.8
06/20/2001	60000	29.89	39	2.95	61.8	6.86	11.9
06/20/2001	61500	29.85	47.6	3.61	61.7	6.84	11.9
06/20/2001	63000	29.81	42.8	3.24	61.8	6.81	11.8
06/20/2001	64500	29.79	50	3.79	61.8	6.84	11.8
06/20/2001	70000	29.74	49.5	3.75	61.8	6.85	11.9
06/20/2001	71500	29.71	46.1	3.5	61.9	6.81	11.9
06/20/2001	73000	29.72	48.8	3.71	61.8	6.85	11.8
06/20/2001	74500	29.69	49.3	3.75	61.9	6.85	11.8
06/20/2001	80000	29.68	48.8	3.71	62	6.85	11.8
06/20/2001	81500	29.69	47.2	3.58	61.9	6.84	11.8
06/20/2001	83000	29.62	37	2.82	61.8	6.76	11.8
06/20/2001	84500	29.59	28.3	2.16	61.9	6.71	11.8

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06/20/2001	90000	29.58	25.1	1.91	61.8	6.7	11.8
06/20/2001	91500	29.55	26.8	2.04	61.8	6.67	11.9
06/20/2001	93000	29.58	26.6	2.03	62.6	6.68	11.8
06/20/2001	94500	29.57	29.5	2.25	62.6	6.68	11.8
06/20/2001	100000	29.6	29.8	2.27	62.3	6.69	11.8
06/20/2001	101500	29.51	20.1	1.53	62.1	6.66	11.8
06/20/2001	103000	29.5	23.3	1.77	62.3	6.63	11.8
06/20/2001	104500	29.56	30	2.28	62.3	6.68	11.8
06/20/2001	110000	29.58	24.5	1.87	62.4	6.68	11.8
06/20/2001	111500	29.53	30.8	2.35	62.2	6.68	11.8
06/20/2001	113000	29.53	26.3	2	62	6.67	11.8
06/20/2001	114500	29.47	19	1.45	62	6.64	11.8
06/20/2001	120000	29.74	41.1	3.12	62.4	6.74	11.8
06/20/2001	121500	29.6	25.6	1.95	62.4	6.68	11.8
06/20/2001	123000	29.55	22.5	1.71	62.3	6.67	11.7
06/20/2001	124500	29.56	24.3	1.85	62.2	6.67	11.8
06/20/2001	130000	29.63	30.7	2.34	62.3	6.7	11.8
06/20/2001	131500	29.75	38.1	2.89	62.3	6.74	11.4
06/20/2001	133000	29.88	45.3	3.43	62.3	6.78	11.8
06/20/2001	134500	29.83	42.1	3.19	62.2	6.76	11.8
06/20/2001	140000	29.89	44.9	3.4	62.2	6.78	11.8
06/20/2001	141500	30.04	46	3.48	62.1	6.8	11.7
06/20/2001	143000	30.06	47.9	3.62	61.9	6.81	11.5
06/20/2001	144500	30.08	51.8	3.91	62.1	6.84	11.6
06/20/2001	150000	29.9	40.8	3.09	62	6.79	11.7
06/20/2001	151500	30.27	58.1	4.37	61.9	6.89	11.8
06/20/2001	153000	30.33	64	4.81	62.1	6.93	11.8
06/20/2001	154500	30.53	63.3	4.74	61.8	6.96	11.7
06/20/2001	160000	30.36	62.3	4.68	61.9	6.94	11.7
06/20/2001	161500	30.68	76.1	5.69	62	7.06	11.7
06/20/2001	163000	30.76	73.1	5.45	61.8	7.04	11.8
06/20/2001	164500	32.72	86.5	6.24	62.4	7.26	11.8
06/20/2001	170000	32.88	99.5	7.16	62.4	7.4	11.7
06/20/2001	171500	33.21	93.2	6.67	62.4	7.46	11.7
06/20/2001	173000	33.41	97.1	6.93	62.4	7.42	11.8
06/20/2001	174500	33.34	95.6	6.83	61.9	7.48	11.7
06/20/2001	180000	33.09	92.4	6.62	62.4	7.33	11.7
06/20/2001	181500	31.22	50.9	3.77	62.8	6.95	11.7
06/20/2001	183000	30.66	37.6	2.81	62.9	6.76	11.7
06/20/2001	184500	31.07	49	3.64	62.8	6.83	11.7
06/20/2001	190000	30.61	39.4	2.94	63.3	6.76	11.7
06/20/2001	191500	29.79	23.7	1.8	63.4	6.64	11.7
06/20/2001	193000	29.6	19.5	1.48	62.4	6.64	11.6
06/20/2001	194500	29.55	15.1	1.15	62.8	6.61	11.7
06/20/2001	200000	29.52	16.3	1.24	62.7	6.61	11.6
06/20/2001	201500	29.49	17.8	1.36	62.4	6.62	11.6
06/20/2001	203000	29.56	19.1	1.46	62.7	6.62	11.7
06/20/2001	204500	29.5	17.5	1.33	62.4	6.62	11.6
06/20/2001	210000	29.5	16.2	1.23	62.5	6.62	11.7
06/20/2001	211500	29.42	11.2	0.86	62.6	6.61	11.7
06/20/2001	213000	29.45	15.1	1.15	62.7	6.62	11.6
06/20/2001	214500	29.22	8.7	0.67	63	6.59	11.6

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06/20/2001	220000	29.34	13.1	1	62.8	6.6	11.7
06/20/2001	221500	29.39	13.3	1.02	62.7	6.6	11.7
06/20/2001	223000	29.48	15.6	1.19	62.6	6.62	11.7
06/20/2001	224500	29.57	18.8	1.43	62.7	6.63	11.7
06/20/2001	230000	29.45	16.3	1.24	62.7	6.63	11.5
06/20/2001	231500	29.45	15.1	1.15	62.7	6.63	11.6
06/20/2001	233000	29.52	18	1.37	62.8	6.64	11.6
06/20/2001	234500	29.52	18.7	1.43	62.9	6.65	11.5
06/21/2001	0	29.54	17.9	1.36	62.9	6.64	11.7
06/21/2001	1500	29.71	22.3	1.69	62.8	6.66	11.6
06/21/2001	3000	29.75	23.9	1.81	62.7	6.67	11.7
06/21/2001	4500	29.74	23.7	1.8	62.7	6.67	11.6
06/21/2001	10000	29.87	26.9	2.04	62.7	6.7	11.7
06/21/2001	11500	29.94	31.2	2.36	62.8	6.71	11.6
06/21/2001	13000	30.05	34.7	2.62	62.8	6.76	11.6
06/21/2001	14500	30.06	35.4	2.67	62.7	6.77	11.7
06/21/2001	20000	30.04	39.9	3.02	62.7	6.79	11.5
06/21/2001	21500	30.05	43.8	3.31	62.8	6.83	11.6
06/21/2001	23000	30.03	43.9	3.32	62.8	6.84	11.6
06/21/2001	24500	30.03	50.8	3.84	62.9	6.87	11.5
06/21/2001	30000	30.01	48.3	3.65	62.9	6.86	11.6
06/21/2001	31500	29.97	47.1	3.56	63	6.85	11.6
06/21/2001	33000	29.94	47	3.55	63	6.84	11.6
06/21/2001	34500	29.92	47	3.55	62.9	6.85	11.5
06/21/2001	40000	29.89	45.8	3.46	63	6.84	11.5
06/21/2001	41500	29.87	45.8	3.47	63.1	6.84	11.5
06/21/2001	43000	29.84	42.3	3.21	63.1	6.81	11.5
06/21/2001	44500	29.82	42.3	3.21	63.2	6.81	11.7
06/21/2001	50000	29.78	41.5	3.15	63.1	6.81	11.5
06/21/2001	51500	29.73	38.8	2.94	63.3	6.79	11.5
06/21/2001	53000	29.71	40	3.04	63	6.8	11.6
06/21/2001	54500	29.66	37.3	2.84	63.2	6.77	11.7
06/21/2001	60000	29.63	37.3	2.84	63.2	6.78	11.5
06/21/2001	61500	29.58	35	2.66	63.3	6.77	11.6
06/21/2001	63000	29.56	34.2	2.6	63.3	6.77	11.5
06/21/2001	64500	29.52	34.5	2.63	63.3	6.76	11.5
06/21/2001	70000	29.51	34.5	2.63	63.4	6.77	11.6
06/21/2001	71500	29.48	34.2	2.61	63.5	6.76	11.5
06/21/2001	73000	29.47	33.3	2.54	63.4	6.76	11.5
06/21/2001	74500	29.45	33.3	2.54	63.7	6.76	11.6
06/21/2001	80000	29.46	36.6	2.79	63.6	6.78	11.6
06/21/2001	81500	29.45	37.8	2.89	63.6	6.8	11.5
06/21/2001	83000	29.44	36.6	2.8	63.9	6.78	11.5
06/21/2001	84500	29.36	32	2.45	64.5	6.75	11.4
06/21/2001	90000	29.35	30.1	2.3	64.2	6.74	11.4
06/21/2001	91500	29.37	32.4	2.48	64.2	6.75	11.4
06/21/2001	93000	29.29	19.4	1.48	64.2	6.68	11.5
06/21/2001	94500	29.29	24.7	1.89	64.2	6.7	11.4
06/21/2001	100000	26.69	99	7.93	0	999999	11.5
06/21/2001	101500	26.25	98.4	7.94	0	8.8	11.4
06/21/2001	103000	27.21	97.3	7.72	0	9.61	11.6
06/21/2001	104500	27.52	96.2	7.6	0	10.43	11.7

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06/21/2001	110000	27.11	94.6	7.53	0	999999	11.7

Recovery finished at 062201 072646

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DataSonde 4a 37753
Log File Name : Bayou Desiard Site 11
Setup Date (MMDDYY) : 061801
Setup Time (HHMMSS) : 155620
Starting Date (MMDDYY) : 061901
Starting Time (HHMMSS) : 110000
Stopping Date (MMDDYY) : 062101
Stopping Time (HHMMSS) : 110000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000200

Date MMDDYY	Time HHMMSS	Temp øC	DO% Sat	DO mg/l	SpCond æS/cm	pH Units	IBatt Volts
06/19/2001	110000	25.11	97.5	8.04	0	6.59	11.8
06/19/2001	111500	25.5	96.9	7.94	0	6.27	11.7
06/19/2001	113000	26	96.5	7.83	0	6.09	11.7
06/19/2001	114500	25.92	101.5	8.24	0	7.98	11.6
06/19/2001	120000	25.59	111.6	9.12	0.2	7.51	11.6
06/19/2001	121500	27.38	114.1	9.03	0	2.59	11.7
06/19/2001	123000	26.29	113.4	9.15	0	0	11.6
06/19/2001	124500	29.24	108.1	8.28	0	4.93	11.6
06/19/2001	130000	29.08	105.8	8.13	0	6.07	11.7
06/19/2001	131500	29.57	104.4	7.95	0	5.42	11.7
06/19/2001	133000	31.91	104.9	7.67	0	5.46	11.6
06/19/2001	134500	31.77	109.3	8.02	0	6.25	11.7
06/19/2001	140000	33.29	110	7.86	0	5.95	11.7
06/19/2001	141500	31.79	108.2	7.93	0	5.75	11.7
06/19/2001	143000	32.37	106.9	7.76	0	7.53	11.7
06/19/2001	144500	32.79	105.3	7.59	0	7.14	11.6
06/19/2001	150000	35.19	106.9	7.41	0	9.52	11.6
06/19/2001	151500	33.63	108.8	7.74	0	12.33	11.6
06/19/2001	153000	33.01	104.9	7.53	0	9.73	11.7
06/19/2001	154500	29.28	105.7	8.09	81.1	7.22	11.4
06/19/2001	160000	29.38	98.2	7.5	81.1	6.94	11.6
06/19/2001	161500	29.44	96.4	7.36	81.3	6.95	11.5
06/19/2001	163000	29.45	106.6	8.13	81.7	7	11.6
06/19/2001	164500	29.47	104.5	7.97	81.9	7.06	11.7
06/19/2001	170000	29.69	116	8.82	82.2	7.31	11.5
06/19/2001	171500	29.48	101.3	7.72	82.1	7.05	11.5
06/19/2001	173000	29.49	111.3	8.49	82.3	7.23	11.7
06/19/2001	174500	29.56	118	8.99	82.4	7.43	11.6
06/19/2001	180000	29.55	113.9	8.67	82.4	7.27	11.6
06/19/2001	181500	29.57	116.3	8.85	82.4	7.4	11.6
06/19/2001	183000	29.53	110.3	8.4	82.5	7.2	11.6
06/19/2001	184500	29.53	112.4	8.56	82.5	7.31	11.5
06/19/2001	190000	29.55	115.3	8.78	82.5	7.35	11.7
06/19/2001	191500	29.56	114	8.68	82.6	7.34	11.5
06/19/2001	193000	29.59	115.4	8.78	82.5	7.4	11.5
06/19/2001	194500	29.59	114	8.68	82.6	7.36	11.5

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06/19/2001	200000	29.59	113.8	8.66	82.6	7.34	11.5
06/19/2001	201500	29.56	113	8.6	82.6	7.35	11.5
06/19/2001	203000	29.58	113.8	8.66	82.5	7.33	11.5
06/19/2001	204500	29.54	112.2	8.54	82.6	7.3	11.5
06/19/2001	210000	29.53	111.9	8.52	82.6	7.29	11.5
06/19/2001	211500	29.55	110.2	8.39	82.6	7.23	11.6
06/19/2001	213000	29.59	110.8	8.43	82.6	7.23	11.5
06/19/2001	214500	29.64	112	8.52	82.6	7.25	11.5
06/19/2001	220000	29.61	111.1	8.45	82.8	7.24	11.6
06/19/2001	221500	29.6	109.4	8.32	82.5	7.22	11.5
06/19/2001	223000	29.59	109.8	8.36	82.5	7.21	11.6
06/19/2001	224500	29.63	109.7	8.34	82.7	7.21	11.4
06/19/2001	230000	29.63	111.5	8.48	82.7	7.22	11.5
06/19/2001	231500	29.66	109.8	8.35	82.6	7.19	11.5
06/19/2001	233000	29.61	107.9	8.21	82.7	7.17	11.6
06/19/2001	234500	29.65	110.2	8.37	82.4	7.17	11.5
06/20/2001	0	29.7	107.4	8.15	82.6	7.16	11.6
06/20/2001	1500	29.6	106.1	8.07	82.4	7.11	11.5
06/20/2001	3000	29.73	102.2	7.76	82.5	7.21	11.4
06/20/2001	4500	29.7	107.7	8.18	82.6	7.23	11.5
06/20/2001	10000	29.65	104.5	7.94	82.6	7.16	11.5
06/20/2001	11500	29.63	105.5	8.03	82.5	7.21	11.5
06/20/2001	13000	29.59	105.9	8.06	82.7	7.2	11.4
06/20/2001	14500	29.56	104.9	7.98	82.6	7.2	11.5
06/20/2001	20000	29.52	104.3	7.95	82.5	7.16	11.5
06/20/2001	21500	29.49	103.3	7.87	82.6	7.14	11.5
06/20/2001	23000	29.47	103.3	7.88	82.6	7.13	11.5
06/20/2001	24500	29.44	102.5	7.82	82.5	7.11	11.5
06/20/2001	30000	29.4	101.4	7.74	82.5	7.09	11.5
06/20/2001	31500	29.37	98.7	7.54	82.5	7.05	11.4
06/20/2001	33000	29.34	97.6	7.46	82.6	7.02	11.5
06/20/2001	34500	29.31	97.4	7.45	82.6	7	11.4
06/20/2001	40000	29.3	96.6	7.39	82.6	6.99	11.4
06/20/2001	41500	29.27	95.5	7.31	82.5	6.97	11.4
06/20/2001	43000	29.23	95.3	7.29	82.5	6.97	11.5
06/20/2001	44500	29.22	93.7	7.17	82.6	6.94	11.4
06/20/2001	50000	29.19	93	7.13	82.6	6.93	11.4
06/20/2001	51500	29.17	92.6	7.1	82.6	6.92	11.5
06/20/2001	53000	29.14	91.6	7.02	82.7	6.91	11.5
06/20/2001	54500	29.1	91	6.98	82.5	6.9	11.5
06/20/2001	60000	29.09	90.7	6.96	82.5	6.9	11.5
06/20/2001	61500	29.07	88.4	6.79	82.5	6.87	11.4
06/20/2001	63000	29.04	88.5	6.8	82.5	6.87	11.4
06/20/2001	64500	29.02	85	6.53	82.9	6.83	11.5
06/20/2001	70000	28.99	86.4	6.64	82.6	6.84	11.4
06/20/2001	71500	28.98	86.2	6.63	82.6	6.84	11.5
06/20/2001	73000	28.96	84.2	6.48	82.6	6.82	11.5
06/20/2001	74500	28.94	84.4	6.5	82.5	6.82	11.4
06/20/2001	80000	28.94	83.4	6.42	82.6	6.81	11.5
06/20/2001	81500	28.93	84.7	6.52	82.8	6.83	11.4
06/20/2001	83000	28.93	84.8	6.53	82.7	6.83	11.4
06/20/2001	84500	28.95	83.9	6.46	82.7	6.84	11.5

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06/20/2001	90000	28.95	86	6.62	82.6	6.84	11.4
06/20/2001	91500	28.96	86.2	6.63	82.4	6.85	11.5
06/20/2001	93000	28.95	84.5	6.5	82.4	6.83	11.4
06/20/2001	94500	28.94	84.8	6.52	82.3	6.83	11.4
06/20/2001	100000	28.95	84.9	6.53	82.3	6.85	11.4
06/20/2001	101500	28.96	85.4	6.57	82.4	6.85	11.4
06/20/2001	103000	28.95	86.9	6.68	82.4	6.87	11.4
06/20/2001	104500	29.03	87.4	6.72	82.4	6.86	11.5
06/20/2001	110000	29.02	87.2	6.7	82.5	6.86	11.5
06/20/2001	111500	29.05	88.5	6.8	82.5	6.88	11.4
06/20/2001	113000	29.09	85.1	6.53	82.4	6.85	11.4
06/20/2001	114500	29.13	90.9	6.97	82.3	6.87	11.4
06/20/2001	120000	29.21	86.9	6.65	82.4	6.84	11.5
06/20/2001	121500	29.24	85.3	6.53	82.3	6.82	11.5
06/20/2001	123000	29.29	87.6	6.7	82.1	6.83	11.4
06/20/2001	124500	29.37	89.1	6.8	82.4	6.85	11.4
06/20/2001	130000	29.65	92.4	7.02	82.4	6.9	11.4
06/20/2001	131500	29.67	99.1	7.53	82.5	6.97	11.4
06/20/2001	133000	29.76	100.3	7.61	82.3	6.98	11.4
06/20/2001	134500	30.35	108.6	8.16	82.6	7.16	11.4
06/20/2001	140000	29.98	103.3	7.81	82.3	7.13	11.4
06/20/2001	141500	29.94	101.2	7.66	82	7.17	11.4
06/20/2001	143000	30.76	99.8	7.44	81.9	7.14	11.4
06/20/2001	144500	30.32	105.6	7.93	82.2	7.13	11.4
06/20/2001	150000	30.39	104.8	7.86	82	7.13	11.4
06/20/2001	151500	30.21	107.4	8.09	82.2	7.15	11.4
06/20/2001	153000	30.31	111	8.34	82.2	7.19	11.4
06/20/2001	154500	29.92	112	8.47	82.1	7.32	11.4
06/20/2001	160000	29.7	112.2	8.52	82.4	7.3	11.4
06/20/2001	161500	29.75	109.9	8.34	82.3	7.23	11.4
06/20/2001	163000	29.93	112.7	8.53	82.3	7.28	11.4
06/20/2001	164500	30.07	113.1	8.54	82.2	7.24	11.3
06/20/2001	170000	29.98	113.5	8.58	82.1	7.27	11.4
06/20/2001	171500	29.86	112.3	8.5	82.1	7.23	11.4
06/20/2001	173000	29.88	109.5	8.29	82.2	7.22	11.4
06/20/2001	174500	29.85	111	8.41	82.1	7.23	11.4
06/20/2001	180000	29.99	111	8.39	82.2	7.22	11.4
06/20/2001	181500	29.97	111.4	8.42	82	7.26	11.4
06/20/2001	183000	29.88	111.5	8.45	82	7.25	11.4
06/20/2001	184500	29.93	104.5	7.91	82.1	7.16	11.4
06/20/2001	190000	29.75	103.6	7.86	82.1	7.1	11.4
06/20/2001	191500	29.71	113.1	8.59	82.1	7.3	11.4
06/20/2001	193000	29.71	118	8.96	82.1	7.51	11.3
06/20/2001	194500	29.68	115.1	8.74	82.3	7.44	11.4
06/20/2001	200000	29.72	110.8	8.41	82.1	7.34	11.4
06/20/2001	201500	29.67	112.1	8.52	82.2	7.39	11.4
06/20/2001	203000	29.61	108.7	8.27	82	7.3	11.3
06/20/2001	204500	29.73	113.8	8.64	82.2	7.35	11.4
06/20/2001	210000	29.7	110.6	8.4	82.1	7.23	11.4
06/20/2001	211500	29.67	106.7	8.11	82.2	7.18	11.4
06/20/2001	213000	29.78	107.7	8.17	82.3	7.18	11.4
06/20/2001	214500	29.83	111.7	8.46	82.2	7.28	11.3

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06/20/2001	220000	29.94	110.8	8.38	82.1	7.27	11.4
06/20/2001	221500	29.91	110.8	8.39	82.1	7.29	11.4
06/20/2001	223000	29.9	108.4	8.2	82.1	7.21	11.4
06/20/2001	224500	29.93	110.3	8.35	82.1	7.24	11.4
06/20/2001	230000	29.99	110.4	8.34	82.2	7.24	11.4
06/20/2001	231500	30	110.1	8.32	82.2	7.2	11.4
06/20/2001	233000	30.07	111.7	8.43	82.1	7.24	11.4
06/20/2001	234500	30.02	108.9	8.23	82.1	7.2	11.4
06/21/2001	0	30.09	100.2	7.56	82.3	7.07	11.4
06/21/2001	1500	30.22	103.2	7.77	82.4	7.17	11.4
06/21/2001	3000	30.22	101.4	7.63	82.6	7.12	11.4
06/21/2001	4500	30.16	102.4	7.72	82.4	7.11	11.4
06/21/2001	10000	30.16	99.9	7.53	82.7	7.12	11.4
06/21/2001	11500	30.11	101	7.61	82.7	7.11	11.4
06/21/2001	13000	30.08	101.9	7.69	82.6	7.13	11.4
06/21/2001	14500	30.03	100	7.55	82.6	7.09	11.4
06/21/2001	20000	29.98	99.9	7.55	82.6	7.08	11.3
06/21/2001	21500	29.95	99	7.49	82.5	7.08	11.4
06/21/2001	23000	29.92	97.8	7.4	82.5	7.06	11.3
06/21/2001	24500	29.88	98.3	7.44	82.5	7.06	11.4
06/21/2001	30000	29.84	96.3	7.29	82.6	7.05	11.4
06/21/2001	31500	29.81	96.4	7.31	82.6	7.04	11.4
06/21/2001	33000	29.78	96.3	7.31	82.5	7.04	11.3
06/21/2001	34500	29.75	95	7.21	82.6	7.02	11.4
06/21/2001	40000	29.72	95.3	7.23	82.5	7.01	11.4
06/21/2001	41500	29.69	96.9	7.36	82.6	7.04	11.4
06/21/2001	43000	29.67	94.8	7.21	82.6	7.01	11.4
06/21/2001	44500	29.64	93.5	7.11	82.7	6.99	11.4
06/21/2001	50000	29.62	93.6	7.12	82.4	6.99	11.4
06/21/2001	51500	29.59	92.9	7.07	82.5	6.98	11.4
06/21/2001	53000	29.56	90.7	6.9	82.6	6.95	11.4
06/21/2001	54500	29.54	90.8	6.91	82.6	6.95	11.3
06/21/2001	60000	29.52	89.5	6.82	82.7	6.92	11.4
06/21/2001	61500	29.5	88.1	6.71	82.7	6.89	11.3
06/21/2001	63000	29.46	86.9	6.63	82.8	6.87	11.4
06/21/2001	64500	29.44	84.6	6.45	82.7	6.84	11.4
06/21/2001	70000	29.42	83	6.33	82.9	6.83	11.3
06/21/2001	71500	29.4	82.9	6.33	82.9	6.82	11.4
06/21/2001	73000	29.37	80.9	6.18	82.9	6.81	11.4
06/21/2001	74500	29.37	82.6	6.31	82.9	6.81	11.3
06/21/2001	80000	29.36	82.6	6.31	82.7	6.82	11.4
06/21/2001	81500	29.34	83	6.34	82.7	6.83	11.4
06/21/2001	83000	29.36	80.6	6.16	82.8	6.83	11.4
06/21/2001	84500	29.36	86.8	6.63	82.6	6.87	11.3
06/21/2001	90000	29.37	86.6	6.62	82.6	6.86	11.3
06/21/2001	91500	29.37	86.5	6.61	82.7	6.88	11.4
06/21/2001	93000	29.38	88	6.72	82.7	6.91	11.3
06/21/2001	94500	29.36	86.3	6.59	82.7	6.87	11.4
06/21/2001	100000	29.37	77.3	5.91	83	6.81	11.3
06/21/2001	101500	24.36	111.8	9.34	0.1	8.37	11.3
06/21/2001	103000	25.66	105.1	8.58	0	7.03	11.4
06/21/2001	104500	27.35	104.2	8.25	0	7.31	11.3

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06/21/2001	110000	26.34	105.6	8.51	0	0	11.1

Recovery finished at 062201 073223

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DataSonde 4a 37752
Log File Name : Bayou Desiard Site 14
Setup Date (MMDDYY) : 061801
Setup Time (HHMMSS) : 155034
Starting Date (MMDDYY) : 061901
Starting Time (HHMMSS) : 110000
Stopping Date (MMDDYY) : 062101
Stopping Time (HHMMSS) : 110000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000200

Date MMDDYY	Time HHMMSS	Temp øC	DO% Sat	DO mg/l	SpCond æS/cm	pH Units	IBatt Volts
06/19/2001	110000	23.83	102	8.61	0	8.96	12.1
06/19/2001	111500	24.27	99.3	8.32	0	8.73	12.6
06/19/2001	113000	26.11	97.5	7.9	0	9.2	12.5
06/19/2001	114500	26.57	97.9	7.86	0	8.83	12.5
06/19/2001	120000	27.87	97.1	7.62	0	8.94	12.5
06/19/2001	121500	28.68	97.4	7.53	0	4.75	12.4
06/19/2001	123000	28.57	97.6	7.56	0	8.91	12.5
06/19/2001	124500	29.16	97.5	7.48	0	9.07	12.6
06/19/2001	130000	29.7	97.6	7.41	0	9.08	12.6
06/19/2001	131500	30.12	97.6	7.36	0	9.11	12.6
06/19/2001	133000	30.44	97.7	7.33	0	9.14	12.5
06/19/2001	134500	30.66	97.9	7.31	0	9.16	12.5
06/19/2001	140000	30.86	98	7.3	0	9.18	12.5
06/19/2001	141500	31.06	97.9	7.27	0	9.1	12.5
06/19/2001	143000	31.19	98	7.26	0	9.12	12.5
06/19/2001	144500	31.17	98.1	7.27	0	9.38	12.5
06/19/2001	150000	31.16	98	7.26	0	9.16	12.6
06/19/2001	151500	31.22	98.1	7.26	0	9.18	12.5
06/19/2001	153000	31.29	98.1	7.25	0	9.19	12.5
06/19/2001	154500	31.36	98.1	7.24	0	9.19	12.5
06/19/2001	160000	31.25	98.3	7.27	0	10.39	12.5
06/19/2001	161500	30.07	97.6	7.37	0	11.45	12.5
06/19/2001	163000	35.23	101.8	7.05	0	10.38	12.5
06/19/2001	164500	37.15	107.7	7.22	0	7.86	12.5
06/19/2001	170000	33.85	139.7	9.89	74.3	8.99	12.5
06/19/2001	171500	33.84	140.2	9.93	73.9	9	12.5
06/19/2001	173000	33.85	142.1	10.06	73.1	9	12.4
06/19/2001	174500	33.86	141.8	10.04	72.5	9.08	12.4
06/19/2001	180000	33.85	144.3	10.22	72	9.05	12.5
06/19/2001	181500	33.84	142.2	10.07	71.5	9.06	12.4
06/19/2001	183000	33.85	142	10.05	70.7	9.06	12.5
06/19/2001	184500	33.86	141.9	10.04	70.6	9.07	12.5
06/19/2001	190000	33.8	144.4	10.23	71	9.06	12.5
06/19/2001	191500	33.77	141.8	10.06	70.1	9.07	12.5
06/19/2001	193000	33.72	142.6	10.12	70.2	9.07	12.5
06/19/2001	194500	33.73	142.2	10.09	70.1	9.07	12.4

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06/19/2001	200000	33.73	139.7	9.91	70	9.06	12.4
06/19/2001	201500	33.7	139.9	9.93	70.8	9.05	12.5
06/19/2001	203000	33.64	139.3	9.9	70.7	9.04	12.5
06/19/2001	204500	33.59	139.6	9.93	70.7	9.04	12.4
06/19/2001	210000	33.51	138.2	9.84	70.4	9.02	12.5
06/19/2001	211500	33.44	137.4	9.79	70.3	9.02	12.5
06/19/2001	213000	33.38	135.5	9.67	70.7	9.01	12.4
06/19/2001	214500	33.31	135.5	9.68	70.5	9	12.5
06/19/2001	220000	33.13	134.1	9.61	70.5	8.96	12.5
06/19/2001	221500	33.17	132.6	9.5	70.9	8.98	12.4
06/19/2001	223000	33.04	134	9.62	74.6	8.94	11.9
06/19/2001	224500	32.97	133.2	9.57	75	9	12.2
06/19/2001	230000	32.9	132.4	9.52	74.9	8.99	12.3
06/19/2001	231500	32.84	130.5	9.4	74.8	8.99	12.5
06/19/2001	233000	32.79	130.2	9.39	74.7	8.99	12.5
06/19/2001	234500	32.72	128.5	9.27	74.7	8.96	12.5
06/20/2001	0	32.66	128	9.25	74.8	8.96	12.4
06/20/2001	1500	32.63	126.6	9.15	74.5	8.93	12.4
06/20/2001	3000	32.58	125.7	9.09	74.3	8.94	12.5
06/20/2001	4500	32.5	124.1	8.99	74.2	8.91	12.4
06/20/2001	10000	32.42	122.8	8.9	74.3	8.91	12.4
06/20/2001	11500	32.38	122.9	8.91	74.3	8.89	12.3
06/20/2001	13000	32.29	121	8.79	74.1	8.87	12.4
06/20/2001	14500	32.13	119.7	8.72	74	8.82	12.3
06/20/2001	20000	32.05	117.5	8.57	73.9	8.81	12.4
06/20/2001	21500	32.06	118.1	8.61	73.8	8.83	12.4
06/20/2001	23000	31.92	118	8.63	73.7	8.81	12.3
06/20/2001	24500	31.68	117.7	8.64	73.4	8.75	12.3
06/20/2001	30000	31.62	115.6	8.49	73.2	8.7	12.4
06/20/2001	31500	31.67	114.8	8.43	73.2	8.73	12.3
06/20/2001	33000	31.73	115	8.43	73.7	8.77	12.3
06/20/2001	34500	31.65	114.2	8.38	73.2	8.74	12.2
06/20/2001	40000	31.53	113.9	8.39	73.2	8.7	12.4
06/20/2001	41500	31.59	112.4	8.27	73.5	8.71	12.3
06/20/2001	43000	31.55	110.3	8.11	73.4	8.72	12.4
06/20/2001	44500	31.48	110.1	8.11	73.1	8.67	12.2
06/20/2001	50000	31.49	108.1	7.96	73.4	8.72	12.2
06/20/2001	51500	31.42	108.5	8	73.2	8.7	12.2
06/20/2001	53000	31.38	107.5	7.93	73.2	8.68	12.3
06/20/2001	54500	31.31	106.3	7.85	73.1	8.67	12.2
06/20/2001	60000	31.26	106.5	7.88	73.1	8.66	12.2
06/20/2001	61500	31.2	105.3	7.79	73.1	8.65	12.3
06/20/2001	63000	31.16	106	7.85	73	8.64	12.2
06/20/2001	64500	31.11	104.6	7.75	72.9	8.63	12.3
06/20/2001	70000	31.07	103.7	7.69	72.8	8.62	12.3
06/20/2001	71500	31.03	103.8	7.71	72.8	8.6	12.3
06/20/2001	73000	30.98	105.5	7.84	72.8	8.6	12.2
06/20/2001	74500	30.97	103.1	7.66	72.6	8.56	12.2
06/20/2001	80000	30.95	103.8	7.72	72.8	8.58	12.2
06/20/2001	81500	30.91	103.2	7.68	72.7	8.58	12.2
06/20/2001	83000	30.91	102.6	7.64	72.7	8.57	12.2
06/20/2001	84500	30.9	102.1	7.59	72.7	8.53	12.2

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06/20/2001	90000	30.93	100.5	7.47	72.6	8.51	12.2
06/20/2001	91500	30.9	99	7.36	72.3	8.4	12.3
06/20/2001	93000	30.94	97.4	7.24	72.4	8.42	12.2
06/20/2001	94500	30.85	97.5	7.26	72.3	8.27	12.2
06/20/2001	100000	30.87	93.2	6.94	72.2	8.04	12.2
06/20/2001	101500	30.67	115.2	8.61	72.3	8.56	12.3
06/20/2001	103000	30.8	113.5	8.46	72.8	8.64	12.1
06/20/2001	104500	30.77	113.9	8.49	72.9	8.66	12.1
06/20/2001	110000	30.91	110.2	8.2	73	8.67	12.2
06/20/2001	111500	31.05	112.4	8.34	73.2	8.73	12.1
06/20/2001	113000	31.12	113.3	8.4	73.3	8.74	12.3
06/20/2001	114500	31.04	115.1	8.54	73.1	8.77	12.1
06/20/2001	120000	30.95	114.6	8.52	73.2	8.74	12.3
06/20/2001	121500	30.71	124.2	9.27	73.3	8.8	12.2
06/20/2001	123000	30.66	126.4	9.45	73.4	8.81	12.2
06/20/2001	124500	30.73	118.7	8.86	72.7	8.72	12.3
06/20/2001	130000	30.88	118.4	8.81	73.1	8.75	12.2
06/20/2001	131500	30.79	123.3	9.19	73	8.79	12.3
06/20/2001	133000	30.84	125.4	9.34	73.2	8.79	12.3
06/20/2001	134500	30.82	129.5	9.65	73.6	8.89	12.2
06/20/2001	140000	30.94	128.9	9.58	73.7	8.89	12.3
06/20/2001	141500	30.87	131.8	9.81	73.6	8.89	12.1
06/20/2001	143000	30.98	130.4	9.69	73.7	8.89	12.1
06/20/2001	144500	31.29	124	9.17	73.9	8.87	12.2
06/20/2001	150000	31.16	126.8	9.39	73.7	8.87	12.1
06/20/2001	151500	31.21	128.9	9.54	74.1	8.9	12.1
06/20/2001	153000	31.44	127.4	9.39	74.2	8.87	12.2
06/20/2001	154500	31.92	114.5	8.37	73.8	8.68	12.2
06/20/2001	160000	32.45	130.5	9.46	74.3	8.81	12.1
06/20/2001	161500	32.66	121.4	8.76	74.5	8.77	12.2
06/20/2001	163000	32.73	128	9.23	74.4	8.79	12.2
06/20/2001	164500	32.73	115.9	8.36	73.9	8.66	12.2
06/20/2001	170000	33.17	137.9	9.88	75.4	8.99	12.2
06/20/2001	171500	32.94	119.9	8.62	74.4	8.82	12.2
06/20/2001	173000	33.22	122.6	8.77	74.4	8.82	12.2
06/20/2001	174500	33.63	128.7	9.14	75.1	8.92	12.1
06/20/2001	180000	33.95	132.8	9.38	75.4	8.98	12.1
06/20/2001	181500	33.84	129.4	9.17	75.2	8.97	12.1
06/20/2001	183000	34.38	136.4	9.58	75.9	9	12.1
06/20/2001	184500	34.53	132.1	9.25	75.6	9.01	12.2
06/20/2001	190000	34.18	126.2	8.89	74.7	8.91	12.1
06/20/2001	191500	34.33	127.4	8.95	75.2	8.97	12.2
06/20/2001	193000	34.17	128.6	9.06	74.9	8.91	12.2
06/20/2001	194500	34.06	129.6	9.14	75	8.93	12.1
06/20/2001	200000	33.35	117.6	8.4	73.8	8.6	12.1
06/20/2001	201500	33.06	104.7	7.51	73.4	8.35	12.1
06/20/2001	203000	32.66	100	7.22	73.5	8.08	12.2
06/20/2001	204500	32.25	92.4	6.72	73.7	8.23	12.1
06/20/2001	210000	32.14	90.7	6.61	73.8	8.11	12.1
06/20/2001	211500	31.92	99.4	7.27	73.4	8.05	12.1
06/20/2001	213000	31.42	109.7	8.09	73.2	8.53	12.1
06/20/2001	214500	31.13	117.7	8.72	73	8.63	12.1

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06/20/2001	220000	31.17	112.1	8.3	73.2	8.55	12.1
06/20/2001	221500	30.86	122.2	9.1	72.7	8.64	12.2
06/20/2001	223000	30.67	117.3	8.76	72.4	8.49	12.2
06/20/2001	224500	30.55	109.6	8.2	72	8.29	12.1
06/20/2001	230000	30.54	110.6	8.28	72.1	8.39	12.1
06/20/2001	231500	30.36	111.4	8.37	71.8	8.35	12.1
06/20/2001	233000	30.31	106.7	8.02	71.6	8.26	12.2
06/20/2001	234500	30.23	116.7	8.79	72	8.5	12.1
06/21/2001	0	30.45	115.9	8.69	72.3	8.64	12.1
06/21/2001	1500	30.16	122.9	9.26	72.4	8.64	12.1
06/21/2001	3000	30.13	117.2	8.84	72.1	8.57	12.1
06/21/2001	4500	30.31	124.4	9.35	72.5	8.68	12.1
06/21/2001	10000	30.42	121.5	9.11	72.5	8.68	12.1
06/21/2001	11500	30.44	120.4	9.03	72.4	8.61	12.1
06/21/2001	13000	30.6	115.2	8.62	72.3	8.6	12.1
06/21/2001	14500	30.65	111	8.29	72	8.49	12.1
06/21/2001	20000	30.59	115.5	8.64	71.9	8.46	12.1
06/21/2001	21500	30.57	116.6	8.72	71.8	8.5	12.1
06/21/2001	23000	30.52	113.1	8.47	71.9	8.47	12.1
06/21/2001	24500	30.63	111.3	8.32	72.1	8.53	12.1
06/21/2001	30000	30.48	117.1	8.78	72.2	8.58	12.1
06/21/2001	31500	30.59	118.5	8.87	72.4	8.6	12.1
06/21/2001	33000	30.48	118	8.84	72.2	8.57	12.1
06/21/2001	34500	30.47	117.6	8.82	72.2	8.59	12.1
06/21/2001	40000	30.42	119.5	8.97	72.3	8.54	12.1
06/21/2001	41500	30.5	116.6	8.73	72.2	8.52	12.1
06/21/2001	43000	30.5	111.3	8.34	72.1	8.45	12.1
06/21/2001	44500	30.49	106.9	8.01	71.9	8.28	12.1
06/21/2001	50000	30.55	110.4	8.27	72.2	8.44	12.1
06/21/2001	51500	30.64	110.5	8.26	72.2	8.46	12.1
06/21/2001	53000	30.71	107.4	8.02	72.2	8.48	12.1
06/21/2001	54500	30.67	107.7	8.04	72.3	8.46	12.1
06/21/2001	60000	30.73	104.2	7.77	72.7	8.57	12.1
06/21/2001	61500	30.7	103.5	7.72	72.7	8.58	12.1
06/21/2001	63000	30.64	103.2	7.71	72.7	8.55	12
06/21/2001	64500	30.61	102.8	7.69	72.8	8.56	12.1
06/21/2001	70000	30.56	104.8	7.84	72.6	8.56	12
06/21/2001	71500	30.54	102.8	7.7	72.6	8.55	12
06/21/2001	73000	30.53	103.4	7.74	72.7	8.54	12.1
06/21/2001	74500	30.52	104.6	7.83	72.7	8.55	12
06/21/2001	80000	30.5	105.6	7.91	72.6	8.55	12.1
06/21/2001	81500	30.48	104.4	7.82	72.7	8.55	12.1
06/21/2001	83000	30.33	102.3	7.69	71.8	8.24	12
06/21/2001	84500	30.01	89.8	6.78	71.1	7.49	12
06/21/2001	90000	29.65	102	7.75	71.1	7.81	12.1
06/21/2001	91500	29.6	101.8	7.75	71.4	7.7	12
06/21/2001	93000	29.56	98.8	7.52	71.2	7.72	12
06/21/2001	94500	29.31	88.5	6.77	71.2	7.41	12.1
06/21/2001	100000	29.2	74.7	5.73	71.2	7.1	12
06/21/2001	101500	28.89	48.1	3.71	71.4	6.79	12
06/21/2001	103000	28.75	40.8	3.15	71.6	6.67	12.1
06/21/2001	104500	28.67	27.6	2.13	71.4	6.59	12

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06/21/2001	110000	28.65	21.7	1.68	71.3	6.57	12.1

Recovery finished at 062201 072218

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BAYOU DESIARD SITE 15 (BDS15)

Date M/D/Y	Time hh:mm:ss	Temp C	SpCond uS/cm	DO Conc mg/L	DO Charge	pH	pHmV mV
06/19/2001	11:01:00	26.24	78.9	7.98	49	7.8	-62.1
06/19/2001	11:16:00	26.54	79.4	7.93	50	7.82	-63.4
06/19/2001	11:31:00	26.84	79.6	7.87	50	7.8	-62.8
06/19/2001	11:46:00	27.15	79.7	7.82	50	7.81	-62.9
06/19/2001	12:01:00	27.45	79.4	7.78	50	7.8	-62.4
06/19/2001	12:16:00	27.75	79.3	7.73	50	7.72	-58
06/19/2001	12:31:00	27.94	104.2	7.75	50	7.85	-65.9
06/19/2001	12:46:00	27.9	121.1	7.77	50	7.93	-70.6
06/19/2001	13:01:00	27.01	137	7.92	50	7.96	-71.9
06/19/2001	13:16:00	26.99	136.9	7.91	50	7.98	-73.4
06/19/2001	13:31:00	25.82	139.2	8.16	50	8.01	-74.8
06/19/2001	13:46:00	25.65	138.8	8.18	49	8.05	-77.3
06/19/2001	14:01:00	27.45	139.1	7.84	50	8.15	-83.6
06/19/2001	14:16:00	29.72	165.4	8.34	51	8.27	-91.5
06/19/2001	14:31:00	29.75	165.4	8.19	51	8.21	-87.8
06/19/2001	14:46:00	29.62	165.5	8.07	51	8.19	-86.5
06/19/2001	15:01:00	29.71	165.3	8.22	51	8.18	-85.6
06/19/2001	15:16:00	29.56	165.2	7.98	51	8.15	-84.1
06/19/2001	15:31:00	29.73	165.1	8.56	52	8.34	-95.6
06/19/2001	15:46:00	29.69	165.3	8.75	52	8.45	-102.4
06/19/2001	16:01:00	29.56	165.4	8.18	51	8.27	-91.1
06/19/2001	16:16:00	29.63	164.7	8.31	51	8.17	-85.1
06/19/2001	16:31:00	29.51	164.9	7.83	50	7.98	-73.8
06/19/2001	16:46:00	29.52	164.8	7.73	50	7.87	-67.3
06/19/2001	17:01:00	29.58	164.4	7.58	50	7.85	-65.9
06/19/2001	17:16:00	29.48	164.8	7.39	50	7.76	-60.7
06/19/2001	17:31:00	29.44	164.8	6.95	48	7.62	-51.9
06/19/2001	17:46:00	29.34	164.8	6.49	48	7.36	-36.5
06/19/2001	18:01:00	29.42	164.6	6.89	49	7.48	-43.6
06/19/2001	18:16:00	29.49	164.6	7.4	50	7.66	-54.3
06/19/2001	18:31:00	29.41	164.8	6.97	49	7.53	-46.6
06/19/2001	18:46:00	29.43	164.7	7.08	49	7.57	-49.4
06/19/2001	19:01:00	29.56	164.5	7.05	49	7.52	-45.8
06/19/2001	19:16:00	29.61	164.6	6.9	49	7.66	-54.3
06/19/2001	19:31:00	29.58	164.6	7.07	49	7.47	-43
06/19/2001	19:46:00	29.57	164.7	7.11	49	7.55	-47.7
06/19/2001	20:01:00	29.67	164.4	7.18	49	7.65	-53.9
06/19/2001	20:16:00	29.66	164.4	7.08	49	7.6	-50.8
06/19/2001	20:31:00	29.75	164.2	7.41	50	7.68	-55.8
06/19/2001	20:46:00	29.7	164.2	7.32	50	7.66	-54.3
06/19/2001	21:01:00	29.74	164.3	7.2	49	7.58	-50
06/19/2001	21:16:00	29.72	164.2	7.04	49	7.52	-46.3
06/19/2001	21:31:00	29.68	164.1	7.36	50	7.56	-48.3
06/19/2001	21:46:00	29.7	164.2	7.58	50	7.58	-49.6
06/19/2001	22:01:00	29.69	164	7.61	50	7.71	-57.6
06/19/2001	22:16:00	29.64	164.2	7.28	49	7.65	-54.1
06/19/2001	22:31:00	29.62	164.1	7.24	49	7.61	-51.8

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06/19/2001	22:46:00	29.61	164.1	7.67	49	7.64	-53.1
06/19/2001	23:01:00	29.61	164.2	7.7	50	7.8	-63.2
06/19/2001	23:16:00	29.59	163.9	7.44	50	7.74	-59.4
06/19/2001	23:31:00	29.59	164.2	7.82	50	7.83	-64.8
06/19/2001	23:46:00	29.59	164	7.83	50	7.84	-65.3
06/20/2001	0:01:00	29.52	164.2	7.47	50	7.75	-59.9
06/20/2001	0:16:00	29.54	164.2	7.67	50	7.82	-64.5
06/20/2001	0:31:00	29.54	164	7.67	50	7.82	-64
06/20/2001	0:46:00	29.55	164.2	7.66	50	7.86	-66.5
06/20/2001	1:01:00	29.54	164.2	7.73	50	7.89	-68.2
06/20/2001	1:16:00	29.53	164.1	7.63	50	7.86	-66.8
06/20/2001	1:31:00	29.51	164	7.55	50	7.81	-63.5
06/20/2001	1:46:00	29.47	164.3	7.29	49	7.75	-60.1
06/20/2001	2:01:00	29.43	164.2	7.08	49	7.63	-53
06/20/2001	2:16:00	29.43	164.2	7.05	49	7.63	-52.9
06/20/2001	2:31:00	29.42	164.1	7.1	49	7.64	-53.2
06/20/2001	2:46:00	29.39	164	7.29	49	7.65	-54
06/20/2001	3:01:00	29.37	164.1	7.03	49	7.58	-49.9
06/20/2001	3:16:00	29.34	164.1	7.09	49	7.59	-50.4
06/20/2001	3:31:00	29.32	164	6.97	49	7.54	-47.4
06/20/2001	3:46:00	29.3	164	7.01	49	7.53	-46.8
06/20/2001	4:01:00	29.28	164	6.92	49	7.52	-45.8
06/20/2001	4:16:00	29.25	164	6.88	49	7.5	-44.9
06/20/2001	4:31:00	29.23	163.9	6.82	48	7.46	-42.7
06/20/2001	4:46:00	29.21	164	6.77	48	7.43	-40.5
06/20/2001	5:01:00	29.17	163.7	6.62	48	7.42	-40.3
06/20/2001	5:16:00	29.15	164.1	6.49	48	7.38	-37.4
06/20/2001	5:31:00	29.13	163.9	6.4	48	7.36	-36.3
06/20/2001	5:46:00	29.1	164.1	6.17	48	7.31	-33.4
06/20/2001	6:01:00	29.11	163.8	6.2	47	7.31	-33.5
06/20/2001	6:16:00	29.09	163.9	6.31	48	7.31	-33.6
06/20/2001	6:31:00	29.08	163.9	6.43	48	7.32	-33.9
06/20/2001	6:46:00	29.08	163.9	6.53	48	7.33	-34.8
06/20/2001	7:01:00	29.08	163.8	6.53	48	7.36	-36.6
06/20/2001	7:16:00	29.1	163.9	6.62	48	7.38	-37.5
06/20/2001	7:31:00	29.17	163.9	6.73	48	7.42	-40.2
06/20/2001	7:46:00	29.16	164	6.71	48	7.43	-40.3
06/20/2001	8:01:00	29.11	164	6.53	48	7.38	-37.5
06/20/2001	8:16:00	29.13	163.9	6.41	48	7.35	-35.6
06/20/2001	8:31:00	29.17	163.8	6.7	48	7.4	-39.1
06/20/2001	8:46:00	29.3	163.9	7.03	49	7.53	-46.5
06/20/2001	9:01:00	29.41	164.1	7.17	49	7.59	-50.4
06/20/2001	9:16:00	29.54	163.8	7.35	49	7.66	-54.4
06/20/2001	9:31:00	29.37	164.3	7.28	49	7.66	-54.5
06/20/2001	9:46:00	29.6	163.9	7.59	50	7.75	-60
06/20/2001	10:01:00	29.54	163.9	7.87	50	7.79	-62.6
06/20/2001	10:16:00	29.64	163.8	7.31	49	7.78	-61.6
06/20/2001	10:31:00	29.77	163.8	7.97	50	7.96	-72.3
06/20/2001	10:46:00	29.84	163.8	8.19	51	8.04	-77.6
06/20/2001	11:01:00	30.02	164.2	8.83	52	8.29	-92.5
06/20/2001	11:16:00	30.12	164	8.36	51	8.21	-87.5
06/20/2001	11:31:00	30.21	164.5	8.67	52	8.45	-102.2

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06/20/2001	11:46:00	30.24	164.1	8.26	51	8.28	-92.2
06/20/2001	12:01:00	30.15	164.3	7.69	50	7.88	-67.9
06/20/2001	12:16:00	30.22	164.1	7.86	50	7.97	-73.6
06/20/2001	12:31:00	30.1	164.2	7.66	50	7.81	-63.8
06/20/2001	12:46:00	30.09	164.2	7.71	50	7.8	-63
06/20/2001	13:01:00	30.24	164	8.33	51	8.01	-75.5
06/20/2001	13:16:00	30.65	164.1	8.67	52	8.38	-98.4
06/20/2001	13:31:00	30.76	164.6	9.26	53	8.68	-116.3
06/20/2001	13:46:00	30.66	165.2	9.97	54	8.78	-122.4
06/20/2001	14:01:00	31.25	165.4	10.26	55	8.93	-131.8
06/20/2001	14:16:00	31.22	165.1	10.38	55	8.97	-134.1
06/20/2001	14:31:00	31.24	165.3	10.2	54	8.95	-132.8
06/20/2001	14:46:00	31.1	165.1	9.94	54	8.8	-123.6
06/20/2001	15:01:00	31.44	165	10.52	55	8.97	-134
06/20/2001	15:16:00	31.6	164.8	10.53	55	8.96	-133.9
06/20/2001	15:31:00	31.69	165.1	10.7	55	9.01	-136.8
06/20/2001	15:46:00	31.94	164.7	10.56	55	9	-135.9
06/20/2001	16:01:00	31.91	164.6	10.59	55	8.98	-134.8
06/20/2001	16:16:00	31.85	165	10.59	55	8.98	-135.2
06/20/2001	16:31:00	31.77	165	10.7	56	8.98	-135.1
06/20/2001	16:46:00	31.79	164.7	10.61	55	8.96	-133.9
06/20/2001	17:01:00	31.61	164.7	10.74	56	8.96	-133.7
06/20/2001	17:16:00	31.86	164.4	10.51	55	8.99	-135.5
06/20/2001	17:31:00	31.79	164.2	10.38	55	8.91	-130.9
06/20/2001	17:46:00	31.79	164.3	10.32	55	8.85	-127.1
06/20/2001	18:01:00	32.42	164	9.98	55	8.85	-127.6
06/20/2001	18:16:00	32.08	164.3	9.76	54	8.82	-125.4
06/20/2001	18:31:00	32.29	163.5	9.82	54	8.84	-126.8
06/20/2001	18:46:00	32.6	163.7	9.91	55	8.87	-128.2
06/20/2001	19:01:00	32.66	163.5	9.54	54	8.8	-124.3
06/20/2001	19:16:00	32.67	163.6	9.49	53	8.73	-119.9
06/20/2001	19:31:00	32.62	163.4	9.48	54	8.76	-122
06/20/2001	19:46:00	32.37	162.8	8.89	53	8.61	-112.8
06/20/2001	20:01:00	32.25	163	9	53	8.55	-109.3
06/20/2001	20:16:00	32.19	162.8	8.76	53	8.45	-102.7
06/20/2001	20:31:00	32.25	163	8.86	53	8.58	-110.7
06/20/2001	20:46:00	31.68	163	8.33	52	8.24	-90
06/20/2001	21:01:00	31.94	163.3	8.5	52	8.41	-100.1
06/20/2001	21:16:00	31.76	162.8	8.34	52	8.33	-95.7
06/20/2001	21:31:00	31.68	162.9	8.3	52	8.29	-93
06/20/2001	21:46:00	31.74	162.5	8.38	52	8.41	-100.1
06/20/2001	22:01:00	31.7	162.3	8.31	52	8.33	-95.5
06/20/2001	22:16:00	31.53	162.5	8.37	52	8.37	-97.7
06/20/2001	22:31:00	31.45	162.3	8	51	8.25	-90.3
06/20/2001	22:46:00	31.29	162.6	7.94	51	8.17	-85.6
06/20/2001	23:01:00	31.45	162.1	7.94	51	8.13	-83.5
06/20/2001	23:16:00	31.46	162	8.14	51	8.15	-84.2
06/20/2001	23:31:00	31.03	162.7	7.2	50	7.74	-59.6
06/20/2001	23:46:00	30.57	163.3	6.96	49	7.63	-52.7
06/21/2001	0:01:00	30.91	163	6.58	49	7.42	-40.4
06/21/2001	0:16:00	30.65	162.7	6.53	49	7.39	-38.3
06/21/2001	0:31:00	30.27	163.4	6.4	48	7.48	-43.8

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06/21/2001	0:46:00	30.61	162.7	5.56	49	7.45	-42
06/21/2001	1:01:00	30.56	162.3	5.93	48	7.28	-31.9
06/21/2001	1:16:00	30.52	162.6	5.97	48	7.29	-32.6
06/21/2001	1:31:00	30.44	162.7	5.74	47	7.23	-28.4
06/21/2001	1:46:00	30.26	162.8	5.8	47	7.24	-29.1
06/21/2001	2:01:00	30.27	162.8	5.83	48	7.23	-28.5
06/21/2001	2:16:00	30.36	162.9	5.6	47	7.18	-25.6
06/21/2001	2:31:00	30.22	162.9	5.28	47	7.12	-22.2
06/21/2001	2:46:00	30.26	163.2	5.6	47	7.23	-28.6
06/21/2001	3:01:00	30.3	162.9	5.87	47	7.28	-31.7
06/21/2001	3:16:00	30.38	162.9	6.23	48	7.38	-37.9
06/21/2001	3:31:00	30.3	163.1	5.75	47	7.29	-32.1
06/21/2001	3:46:00	30.21	163.1	5.66	47	7.28	-31.6
06/21/2001	4:01:00	30.33	162.6	6.41	48	7.38	-37.9
06/21/2001	4:16:00	30.27	162.5	6.67	49	7.4	-39.2
06/21/2001	4:31:00	30.23	162.5	6.81	49	7.46	-42.7
06/21/2001	4:46:00	30.21	162.5	6.86	49	7.45	-42.2
06/21/2001	5:01:00	30.13	162.7	6.58	49	7.38	-37.7
06/21/2001	5:16:00	30.1	162.5	6.5	49	7.35	-35.8
06/21/2001	5:31:00	30.02	162.5	6.4	48	7.35	-35.8
06/21/2001	5:46:00	30.01	162.6	6.32	48	7.32	-34
06/21/2001	6:01:00	29.98	162.7	6.33	48	7.31	-33.4
06/21/2001	6:16:00	29.96	162.7	6.42	48	7.26	-30.6
06/21/2001	6:31:00	29.92	162.6	6.39	48	7.28	-31.7
06/21/2001	6:46:00	29.89	162.3	6.31	48	7.27	-31
06/21/2001	7:01:00	29.87	162.6	6.36	48	7.26	-30.5
06/21/2001	7:16:00	29.88	162.4	6.33	48	7.26	-30.7
06/21/2001	7:31:00	29.88	162.5	6.39	48	7.26	-30.3
06/21/2001	7:46:00	29.88	162.5	6.45	48	7.28	-32
06/21/2001	8:01:00	29.88	162.4	6.4	48	7.28	-31.7
06/21/2001	8:16:00	29.87	162.5	6.34	48	7.29	-32.4
06/21/2001	8:31:00	29.91	162.6	6.58	48	7.3	-33.1
06/21/2001	8:46:00	29.95	162.4	6.79	49	7.36	-36.7
06/21/2001	9:01:00	29.97	162.5	6.82	49	7.36	-36.4
06/21/2001	9:16:00	29.98	162.5	6.88	49	7.4	-38.8
06/21/2001	9:31:00	26.08	139.9	8.35	49	7.43	-40.6
06/21/2001	9:46:00	26.24	131	8.2	49	7.74	-59.1
06/21/2001	10:01:00	26.91	130.2	8.02	49	7.79	-61.9
06/21/2001	10:16:00	26.99	130	7.96	49	7.63	-52.1
06/21/2001	10:31:00	26.99	129.6	7.95	49	7.65	-53.8
06/21/2001	10:46:00	26.89	129.4	7.97	49	7.64	-52.7
06/21/2001	11:01:00	26.75	129.1	8	49	7.63	-52.2
06/21/2001	11:16:00	26.63	128.6	8.01	49	7.59	-49.9
06/21/2001	11:31:00	26.5	128.2	8.04	49	7.58	-49.6
06/21/2001	11:46:00	26.33	127.9	8.07	49	7.57	-48.8
06/21/2001	12:01:00	26.15	127.6	8.1	49	7.53	-46.3
06/21/2001	12:16:00	26.13	127.1	8.07	49	7.52	-45.5
06/21/2001	12:31:00	26.11	126.8	8.09	49	7.53	-46.3
06/21/2001	12:46:00	25.98	126.8	8.05	49	7.54	-46.8
06/21/2001	13:01:00	25.87	126.6	8.08	49	7.52	-45.9
06/21/2001	13:16:00	25.76	128.9	8.15	49	7.51	-44.9
06/21/2001	13:31:00	25.68	129.6	8.17	49	7.51	-45

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06/21/2001	13:46:00	25.53	129.7	8.2	49	7.51	-45.2
06/21/2001	14:01:00	25.43	129.6	8.22	49	7.46	-42.2
06/21/2001	14:16:00	25.59	128.8	8.22	49	7.66	-54.1
06/21/2001	14:31:00	25.64	128.9	8.21	49	7.75	-59.6
06/21/2001	14:46:00	25.65	128.7	8.21	49	7.78	-61.2
06/21/2001	15:01:00	25.52	129	8.23	49	7.79	-61.5
06/21/2001	15:16:00	25.42	129.2	8.25	49	7.8	-62.5
06/21/2001	15:31:00	25.3	129.2	8.27	49	7.8	-62.1
06/21/2001	15:46:00	25.18	129.3	8.28	49	7.8	-62.5
06/21/2001	16:01:00	25.13	129.5	8.29	49	7.82	-63.6
06/21/2001	16:16:00	25.06	129.6	8.3	49	7.84	-64.5
06/21/2001	16:31:00	25.02	129.7	8.3	49	7.85	-65.4
06/21/2001	16:46:00	25.07	129.8	8.28	49	7.87	-66.5
06/21/2001	17:01:00	25.13	129.9	8.27	49	7.88	-66.8
06/21/2001	17:16:00	25.15	130	8.26	49	7.88	-67
06/21/2001	17:31:00	25.15	130.2	8.26	49	7.88	-66.8
06/21/2001	17:46:00	25.15	130.3	8.26	49	7.88	-67.3
06/21/2001	18:01:00	25.15	129.6	8.26	49	7.88	-67.3
06/21/2001	18:16:00	25.14	130.5	8.26	49	7.89	-67.6
06/21/2001	18:31:00	25.09	130.6	8.27	49	7.9	-68.1
06/21/2001	18:46:00	25.03	129.9	8.28	49	7.9	-68.4
06/21/2001	19:01:00	24.97	130.9	8.29	49	7.91	-68.8
06/21/2001	19:16:00	24.87	130.1	8.31	49	7.92	-69.4
06/21/2001	19:31:00	24.78	131.2	8.33	49	7.93	-69.9
06/21/2001	19:46:00	24.65	131.4	8.36	49	7.94	-70.3
06/21/2001	20:01:00	24.54	130.4	8.38	49	7.95	-70.7
06/21/2001	20:16:00	24.43	131.5	8.4	49	7.95	-71
06/21/2001	20:31:00	24.28	130.7	8.43	49	7.95	-71.2
06/21/2001	20:46:00	24.14	131.8	8.46	49	7.96	-71.5
06/21/2001	21:01:00	23.98	130.7	8.49	49	7.96	-71.8
06/21/2001	21:16:00	23.79	131.8	8.52	49	7.97	-71.8
06/21/2001	21:31:00	23.64	131.2	8.55	48	7.97	-72.3
06/21/2001	21:46:00	23.53	131.9	8.57	48	7.99	-72.9
06/21/2001	22:01:00	23.4	132.1	8.59	48	8	-73.5
06/21/2001	22:16:00	23.27	130.9	8.62	48	8.01	-74.1
06/21/2001	22:31:00	23.14	132.4	8.64	48	8.01	-74.5
06/21/2001	22:46:00	23.04	132.5	8.66	48	8.02	-75.1
06/21/2001	23:01:00	22.95	131.2	8.67	48	8.03	-75.7
06/21/2001	23:16:00	22.94	132.7	8.67	48	8.05	-76.8
06/21/2001	23:31:00	22.88	132.8	8.68	48	8.06	-77.3
06/21/2001	23:46:00	22.8	133.1	8.69	48	8.06	-77.5
06/22/2001	0:01:00	22.78	133.2	8.69	48	8.08	-78.3
06/22/2001	0:16:00	22.72	132.1	8.7	48	8.08	-78.4
06/22/2001	0:31:00	22.71	132.4	8.7	48	8.09	-79
06/22/2001	0:46:00	22.67	133.9	8.71	48	8.1	-79.5
06/22/2001	1:01:00	22.65	134.1	8.71	48	8.11	-79.8
06/22/2001	1:16:00	22.6	134.3	8.72	48	8.11	-80
06/22/2001	1:31:00	22.62	134.4	8.71	48	8.12	-80.9
06/22/2001	1:46:00	22.57	134.6	8.72	48	8.12	-80.7
06/22/2001	2:01:00	22.57	134.8	8.72	48	8.13	-81.5
06/22/2001	2:16:00	22.55	135.1	8.72	48	8.14	-81.8
06/22/2001	2:31:00	22.56	135.4	8.71	48	8.15	-82.5

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06/22/2001	2:46:00	22.49	135.7	8.72	48	8.15	-82.2
06/22/2001	3:01:00	22.48	135.9	8.73	48	8.15	-82.5
06/22/2001	3:16:00	22.46	136.2	8.72	48	8.15	-82.4
06/22/2001	3:31:00	22.39	136.5	8.75	48	8.15	-82.3
06/22/2001	3:46:00	22.38	136.8	8.74	48	8.15	-82.7
06/22/2001	4:01:00	22.38	137.1	8.75	48	8.16	-82.8
06/22/2001	4:16:00	22.34	137.4	8.75	48	8.16	-82.9
06/22/2001	4:31:00	22.33	137.6	8.75	48	8.16	-83.3
06/22/2001	4:46:00	22.3	137.9	8.76	48	8.17	-83.4
06/22/2001	5:01:00	22.25	138.3	8.77	48	8.17	-83.6
06/22/2001	5:16:00	22.23	138.5	8.78	48	8.17	-83.8
06/22/2001	5:31:00	22.22	138.8	8.78	48	8.17	-83.6
06/22/2001	5:46:00	22.17	139.1	8.79	48	8.17	-83.5
06/22/2001	6:01:00	22.17	139.3	8.79	48	8.17	-83.8
06/22/2001	6:16:00	22.15	139.6	8.79	48	8.15	-82.5
06/22/2001	6:31:00	22.06	140	8.81	48	8.13	-81
06/22/2001	6:46:00	21.37	142	8.98	48	8.07	-77.6

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BAYOU DESIARD SITE 17 (BDS17)

Date D/M/Y	Time hh:mm:ss	Temp C	SpCond uS/cm	DO Conc mg/L	DO Charge	pH	pHmV mV
19/06/01	11:01:00	26.14	0.8	7.59	60	6.84	-28.3
19/06/01	11:16:00	26.46	0.8	7.63	60	6.85	-29
19/06/01	11:31:00	26.77	0.8	7.63	60	6.85	-28.5
19/06/01	11:46:00	27.09	0.8	7.61	60	6.85	-28.5
19/06/01	12:01:00	27.4	0.8	7.58	60	6.84	-27.9
19/06/01	12:16:00	27.69	0.8	7.53	60	6.78	-24.4
19/06/01	12:31:00	27.99	0.9	7.5	60	6.82	-26.9
19/06/01	12:46:00	28.34	0.9	7.44	60	6.93	-33.7
19/06/01	13:01:00	28.48	0.9	7.42	60	6.97	-36.1
19/06/01	13:16:00	28.53	0.9	7.4	59	6.97	-36.3
19/06/01	13:31:00	28.52	0.9	7.41	59	6.98	-36.7
19/06/01	13:46:00	28.44	0.9	7.42	59	6.98	-36.9
19/06/01	14:01:00	28.2	0.9	7.47	59	7.05	-41.3
19/06/01	14:16:00	28.51	0.9	7.4	59	7.04	-40.1
19/06/01	14:31:00	28.88	0.9	7.33	59	7.02	-39.3
19/06/01	14:46:00	29.29	0.8	7.26	59	7.02	-39.1
19/06/01	15:01:00	32.44	99.3	8.6	63	8.41	-125.8
19/06/01	15:16:00	32.5	99.3	8.73	63	8.54	-134.3
19/06/01	15:31:00	32.51	99.7	8.73	63	8.56	-135.7
19/06/01	15:46:00	32.52	99.4	8.78	63	8.59	-137.3
19/06/01	16:01:00	32.53	99.6	8.78	63	8.59	-137.5
19/06/01	16:16:00	32.63	99.5	8.82	63	8.61	-138.9
19/06/01	16:31:00	32.6	99.4	8.83	63	8.61	-138.9
19/06/01	16:46:00	32.58	99.6	8.82	62	8.61	-138.4
19/06/01	17:01:00	32.59	99.6	8.86	62	8.6	-138.2
19/06/01	17:16:00	32.63	99.6	8.88	62	8.62	-139.5
19/06/01	17:31:00	32.61	99.4	8.85	62	8.61	-138.6
19/06/01	17:46:00	32.51	99.4	8.74	62	8.58	-136.7
19/06/01	18:01:00	32.53	99.5	8.7	62	8.58	-136.8
19/06/01	18:16:00	32.5	99.3	8.71	62	8.57	-136
19/06/01	18:31:00	32.45	99.4	8.61	61	8.54	-134.2
19/06/01	18:46:00	32.41	99.4	8.55	61	8.52	-133.1
19/06/01	19:01:00	32.36	99.3	8.52	61	8.51	-132.1
19/06/01	19:16:00	32.31	99.4	8.46	61	8.47	-129.9
19/06/01	19:31:00	32.27	99.3	8.45	61	8.47	-129.8
19/06/01	19:46:00	32.24	99.5	8.43	61	8.49	-130.8
19/06/01	20:01:00	32.18	99.2	8.39	61	8.48	-130.2
19/06/01	20:16:00	32.19	99.5	8.36	61	8.48	-130.6
19/06/01	20:31:00	32.14	99.2	8.38	61	8.48	-130.3
19/06/01	20:46:00	32.09	99.4	8.36	60	8.48	-130.1
19/06/01	21:01:00	32.05	99.4	8.31	60	8.46	-129.2
19/06/01	21:16:00	32.02	99.3	8.28	60	8.45	-128.7
19/06/01	21:31:00	31.99	99.2	8.29	60	8.45	-128.4
19/06/01	21:46:00	31.93	99.4	8.32	60	8.43	-127
19/06/01	22:01:00	31.88	99	8.3	60	8.41	-126.2
19/06/01	22:16:00	31.83	99	8.24	60	8.4	-125.2
19/06/01	22:31:00	31.77	99	8.21	60	8.39	-124.9

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19/06/01	22:46:00	31.76	98.9	8.19	60	8.39	-124.5
19/06/01	23:01:00	31.73	98.7	8.13	60	8.38	-124
19/06/01	23:16:00	31.69	99	8.09	60	8.38	-124
19/06/01	23:31:00	31.64	98.9	8.05	59	8.37	-123.4
19/06/01	23:46:00	31.62	98.8	8.04	59	8.36	-122.7
20/06/01	0:01:00	31.59	98.8	8	59	8.35	-122
20/06/01	0:16:00	31.55	98.8	7.99	59	8.34	-121.3
20/06/01	0:31:00	31.55	98.8	7.95	59	8.33	-121.1
20/06/01	0:46:00	31.52	98.9	7.93	59	8.32	-120.2
20/06/01	1:01:00	31.48	98.6	7.91	59	8.3	-119.1
20/06/01	1:16:00	31.45	98.6	7.89	59	8.3	-118.9
20/06/01	1:31:00	31.42	98.8	7.88	59	8.29	-118.1
20/06/01	1:46:00	31.38	98.7	7.88	59	8.28	-118
20/06/01	2:01:00	31.39	98.8	7.84	59	8.28	-117.6
20/06/01	2:16:00	31.35	98.7	7.82	59	8.26	-116.5
20/06/01	2:31:00	31.32	98.9	7.81	59	8.25	-115.7
20/06/01	2:46:00	31.29	98.7	7.76	59	8.23	-114.6
20/06/01	3:01:00	31.26	98.8	7.72	58	8.21	-113.5
20/06/01	3:16:00	31.24	98.5	7.69	58	8.2	-112.7
20/06/01	3:31:00	31.19	98.6	7.62	58	8.17	-111
20/06/01	3:46:00	31.17	98.6	7.67	58	8.18	-111.4
20/06/01	4:01:00	31.13	98.6	7.65	58	8.16	-110.4
20/06/01	4:16:00	31.11	98.5	7.61	58	8.14	-109.1
20/06/01	4:31:00	31.06	98.6	7.57	58	8.13	-108
20/06/01	4:46:00	31.04	98.3	7.53	58	8.1	-106.6
20/06/01	5:01:00	31.01	98.5	7.49	58	8.08	-105.2
20/06/01	5:16:00	30.97	98.6	7.4	58	8.05	-103
20/06/01	5:31:00	30.93	98.3	7.35	58	8.01	-100.5
20/06/01	5:46:00	30.9	98.4	7.34	58	7.98	-99.2
20/06/01	6:01:00	30.88	98.5	7.31	58	7.96	-97.7
20/06/01	6:16:00	30.85	98.5	7.37	58	7.97	-98.2
20/06/01	6:31:00	30.83	98.4	7.45	58	7.96	-97.9
20/06/01	6:46:00	30.82	98.3	7.42	58	7.98	-98.7
20/06/01	7:01:00	30.8	98.3	7.47	58	7.99	-99.4
20/06/01	7:16:00	30.8	98.2	7.46	58	8	-100.3
20/06/01	7:31:00	30.83	98.5	7.43	58	8.01	-100.5
20/06/01	7:46:00	30.85	98.4	7.44	58	8.02	-101.2
20/06/01	8:01:00	30.85	98.3	7.46	58	8.03	-102.1
20/06/01	8:16:00	30.83	98.4	7.4	58	8.02	-101.1
20/06/01	8:31:00	30.82	98.4	7.33	57	7.99	-99.2
20/06/01	8:46:00	30.83	98.3	7.25	57	7.95	-97
20/06/01	9:01:00	30.87	98.5	7.18	57	7.9	-93.9
20/06/01	9:16:00	30.89	98.5	7.19	57	7.88	-92.9
20/06/01	9:31:00	30.93	98.5	7.22	57	7.88	-92.8
20/06/01	9:46:00	30.94	98.5	7.05	57	7.84	-90.2
20/06/01	10:01:00	30.94	98.6	7.11	57	7.83	-89.3
20/06/01	10:16:00	30.98	98.6	7.16	57	7.86	-91.2
20/06/01	10:31:00	31.01	98.5	7.21	57	7.88	-92.8
20/06/01	10:46:00	30.95	98.5	7.21	57	7.83	-89.5
20/06/01	11:01:00	30.94	98.4	7.37	57	7.85	-91.1
20/06/01	11:16:00	30.99	98.3	7.43	58	7.92	-95.2
20/06/01	11:31:00	31.03	98.5	7.48	58	7.96	-98

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20/06/01	11:46:00	31.1	98.5	7.69	58	8.04	-103
20/06/01	12:01:00	31.03	98.6	7.6	58	8.03	-101.9
20/06/01	12:16:00	31.05	98.4	7.6	58	8.01	-101
20/06/01	12:31:00	31.08	98.6	7.65	58	8.07	-104.5
20/06/01	12:46:00	31.05	99.3	7.74	58	8.14	-109.1
20/06/01	13:01:00	31.08	99.4	7.85	58	8.17	-110.8
20/06/01	13:16:00	31.1	99.5	7.93	58	8.2	-112.7
20/06/01	13:31:00	31.11	99.4	7.87	58	8.17	-111.1
20/06/01	13:46:00	31.1	99.4	7.79	58	8.14	-109.1
20/06/01	14:01:00	31.05	99.3	7.9	58	8.19	-111.8
20/06/01	14:16:00	31.03	99.4	8.02	58	8.23	-114.2
20/06/01	14:31:00	31	99.5	8.14	58	8.3	-118.6
20/06/01	14:46:00	30.9	99.2	8.36	59	8.36	-122.7
20/06/01	15:01:00	30.88	98.3	8.38	59	8.38	-123.6
20/06/01	15:16:00	30.93	98.4	8.37	59	8.39	-124.3
20/06/01	15:31:00	30.96	98.6	8.42	59	8.4	-124.8
20/06/01	15:46:00	31.06	98.5	8.44	59	8.42	-126.3
20/06/01	16:01:00	30.96	98.7	8.5	59	8.43	-127
20/06/01	16:16:00	31.08	98.8	8.63	59	8.47	-129.2
20/06/01	16:31:00	31	98.8	8.62	59	8.46	-128.7
20/06/01	16:46:00	30.93	98.5	8.71	59	8.49	-130.7
20/06/01	17:01:00	30.91	98.4	8.8	59	8.51	-132.1
20/06/01	17:16:00	31.03	98.8	8.82	59	8.53	-132.9
20/06/01	17:31:00	30.94	98.7	8.66	59	8.5	-131.1
20/06/01	17:46:00	31.03	98.5	8.46	59	8.44	-127.3
20/06/01	18:01:00	30.99	98.7	8.75	59	8.51	-132.1
20/06/01	18:16:00	30.92	98.4	8.77	59	8.51	-132.1
20/06/01	18:31:00	30.97	98.7	8.82	59	8.53	-132.9
20/06/01	18:46:00	31.15	99	8.89	60	8.59	-136.7
20/06/01	19:01:00	31.21	99.1	8.95	60	8.6	-137.5
20/06/01	19:16:00	31.38	99	8.7	59	8.55	-134.6
20/06/01	19:31:00	31.58	98.9	8.4	59	8.48	-130
20/06/01	19:46:00	31.69	99.1	8.17	59	8.34	-121.6
20/06/01	20:01:00	31.68	98.9	8.09	58	8.34	-121.5
20/06/01	20:16:00	31.64	99.1	8.15	59	8.36	-122.9
20/06/01	20:31:00	31.6	99.1	8.26	59	8.4	-124.9
20/06/01	20:46:00	31.56	99.1	8.16	59	8.39	-124.9
20/06/01	21:01:00	31.54	99.1	8.14	58	8.38	-124.3
20/06/01	21:16:00	31.52	99.2	8.1	58	8.37	-123.6
20/06/01	21:31:00	31.5	99.1	8.07	58	8.36	-122.6
20/06/01	21:46:00	31.49	99	8.07	58	8.32	-120.2
20/06/01	22:01:00	31.45	98.9	8	58	8.29	-118.3
20/06/01	22:16:00	31.41	98.9	8.04	58	8.29	-118.1
20/06/01	22:31:00	31.38	98.9	7.99	58	8.29	-118.5
20/06/01	22:46:00	31.36	99	7.97	58	8.3	-118.8
20/06/01	23:01:00	31.34	98.9	7.87	58	8.28	-117.7
20/06/01	23:16:00	31.31	98.9	7.9	58	8.27	-117.1
20/06/01	23:31:00	31.28	98.8	7.78	58	8.24	-115.2
20/06/01	23:46:00	31.27	98.7	7.83	58	8.25	-116
21/06/01	0:01:00	31.23	98.7	7.74	58	8.22	-113.7
21/06/01	0:16:00	31.2	98.6	7.66	58	8.18	-111.6
21/06/01	0:31:00	31.17	98.5	7.7	58	8.2	-112.5

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21/06/01	0:46:00	31.14	98.6	7.78	58	8.2	-112.5
21/06/01	1:01:00	31.11	98.6	7.72	58	8.18	-111.4
21/06/01	1:16:00	31.05	102.9	7.63	57	8.16	-110
21/06/01	1:31:00	31.04	102.8	7.59	57	8.14	-108.6
21/06/01	1:46:00	31	102.8	7.61	57	8.14	-108.8
21/06/01	2:01:00	30.98	102.8	7.64	57	8.14	-108.7
21/06/01	2:16:00	30.94	102.7	7.58	57	8.11	-107.3
21/06/01	2:31:00	30.89	102.7	7.57	57	8.09	-105.7
21/06/01	2:46:00	30.87	102.6	7.54	57	8.08	-105.3
21/06/01	3:01:00	30.83	102.8	7.51	57	8.05	-103.1
21/06/01	3:16:00	30.81	102.8	7.43	57	8.02	-101.6
21/06/01	3:31:00	30.77	102.9	7.41	57	8.01	-100.9
21/06/01	3:46:00	30.73	102.8	7.37	57	7.99	-99.7
21/06/01	4:01:00	30.7	102.8	7.33	57	7.96	-97.4
21/06/01	4:16:00	30.67	103	7.28	57	7.93	-95.5
21/06/01	4:31:00	30.64	102.9	7.25	57	7.9	-93.8
21/06/01	4:46:00	30.59	103	7.23	57	7.87	-92
21/06/01	5:01:00	30.56	103	7.19	57	7.86	-91.2
21/06/01	5:16:00	30.52	102.9	7.19	57	7.83	-89.4
21/06/01	5:31:00	30.51	102.8	7.12	56	7.81	-88.1
21/06/01	5:46:00	30.48	103.1	7.1	56	7.79	-86.7
21/06/01	6:01:00	30.46	102.9	7.1	56	7.77	-85.8
21/06/01	6:16:00	30.45	102.9	7.1	56	7.77	-85.9
21/06/01	6:31:00	30.42	102.9	7.13	56	7.76	-85.4
21/06/01	6:46:00	30.41	102.8	6.99	56	7.72	-82.8
21/06/01	7:01:00	30.41	102.7	7.05	56	7.72	-82.7
21/06/01	7:16:00	30.41	103	7.11	56	7.74	-84.2
21/06/01	7:31:00	30.41	103.1	7.16	57	7.77	-86.1
21/06/01	7:46:00	30.42	103	7.14	56	7.77	-85.8
21/06/01	8:01:00	30.34	102.7	6.76	56	7.6	-75.4
21/06/01	8:16:00	30.38	102.8	6.63	56	7.52	-70.1
21/06/01	8:31:00	30.34	102.6	6.64	56	7.46	-66.8
21/06/01	8:46:00	30.29	102.5	6.04	55	7.3	-56.3
21/06/01	9:01:00	30.15	103.2	5.64	54	7.17	-48.5
21/06/01	9:16:00	29.99	102.1	5.72	54	7.14	-46.8
21/06/01	9:31:00	29.91	102.5	5.65	54	7.11	-44.8
21/06/01	9:46:00	27.42	0.5	7.81	56	6.99	-37
21/06/01	10:01:00	28.33	20.4	7.52	56	7.3	-56.4
21/06/01	10:16:00	28.3	0.6	7.48	56	7.23	-52.1
21/06/01	10:31:00	28.37	0.6	7.45	56	7.25	-53.5
21/06/01	10:46:00	28.18	0.6	7.49	56	7.27	-54.6
21/06/01	11:01:00	27.91	0.5	7.54	56	7.32	-57.6
21/06/01	11:16:00	27.65	8.6	7.58	56	7.3	-56.6
21/06/01	11:31:00	27.49	8.4	7.61	56	7.32	-57.5
21/06/01	11:46:00	27.24	8.6	7.67	56	7.27	-54.4
21/06/01	12:01:00	27.03	8.6	7.71	56	7.19	-49.7
21/06/01	12:16:00	27.14	8.7	7.65	56	7.2	-50.2
21/06/01	12:31:00	27.05	8.6	7.68	56	7.16	-48
21/06/01	12:46:00	26.9	8.5	7.64	56	7.11	-44.6
21/06/01	13:01:00	26.8	8.5	7.67	56	7.06	-41.6
21/06/01	13:16:00	26.67	8.4	7.73	56	7.01	-38.3
21/06/01	13:31:00	26.73	8.2	7.74	56	7	-37.7

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21/06/01	13:46:00	26.47	8.2	YSI S/N 98E0645 A	56	6.91	-32.7
21/06/01	14:01:00	26.21	8.5	7.86	56	6.86	-29.6
21/06/01	14:16:00	26.67	8.5	7.77	56	7.08	-42.8
21/06/01	14:31:00	26.43	8.5	7.83	56	7.1	-43.8
21/06/01	14:46:00	26.22	8.5	7.87	56	7.04	-40.1
21/06/01	15:01:00	26.08	8.5	7.89	56	7.02	-39.2
21/06/01	15:16:00	26	7.9	7.91	56	7.03	-40
21/06/01	15:31:00	25.84	0.5	7.94	56	7.03	-39.5
21/06/01	15:46:00	25.8	3.3	7.94	55	7.04	-40.4
21/06/01	16:01:00	25.76	3.3	7.95	56	7.05	-40.9
21/06/01	16:16:00	25.78	3.4	7.93	56	7.06	-41.4
21/06/01	16:31:00	25.84	3.4	7.91	56	7.09	-43.6
21/06/01	16:46:00	26.03	3.4	7.86	56	7.15	-47.2
21/06/01	17:01:00	26.06	0.5	7.87	56	7.18	-48.8
21/06/01	17:16:00	26.03	0.5	7.87	56	7.19	-49.5
21/06/01	17:31:00	25.97	0.5	7.89	56	7.19	-49.8
21/06/01	17:46:00	25.99	0.5	7.88	56	7.2	-49.9
21/06/01	18:01:00	26.03	0.5	7.87	56	7.2	-50.1
21/06/01	18:16:00	25.9	0.5	7.9	56	7.2	-50
21/06/01	18:31:00	25.84	0.5	7.91	56	7.19	-49.5
21/06/01	18:46:00	25.74	0.5	7.93	56	7.17	-48.6
21/06/01	19:01:00	25.68	0.5	7.95	56	7.16	-48
21/06/01	19:16:00	25.53	0.5	7.97	56	7.13	-46
21/06/01	19:31:00	25.35	0.5	8.02	56	7.1	-44.1
21/06/01	19:46:00	25.31	0.5	8.02	55	7.1	-44.1
21/06/01	20:01:00	25.13	0.5	8.06	56	7.07	-42.4
21/06/01	20:16:00	25.03	0.5	8.08	55	7.06	-41.7
21/06/01	20:31:00	24.85	0.6	8.11	55	7.04	-40.4
21/06/01	20:46:00	24.65	0.6	8.16	55	7.02	-39.2
21/06/01	21:01:00	24.45	0.6	8.2	55	7	-38.2
21/06/01	21:16:00	24.24	0.6	8.24	55	6.99	-37.5
21/06/01	21:31:00	24.09	0.6	8.27	55	6.99	-37.4
21/06/01	21:46:00	24	0.6	8.29	55	7	-37.8
21/06/01	22:01:00	23.88	0.6	8.31	55	7	-38.1
21/06/01	22:16:00	23.7	0.5	8.35	55	6.99	-37.4
21/06/01	22:31:00	23.6	0.5	8.37	55	7	-37.8
21/06/01	22:46:00	23.57	0.5	8.37	55	7.02	-39.4
21/06/01	23:01:00	23.44	0.5	8.4	55	7.02	-39.3
21/06/01	23:16:00	23.5	0.5	8.38	55	7.07	-42.4
21/06/01	23:31:00	23.49	0.5	8.38	55	7.09	-43.2
21/06/01	23:46:00	23.39	0.5	8.4	55	7.08	-42.9
22/06/01	0:01:00	23.34	0.5	8.42	55	7.1	-43.8
22/06/01	0:16:00	23.4	0.5	8.39	55	7.12	-45.4
22/06/01	0:31:00	23.38	0.5	8.4	55	7.14	-46.4
22/06/01	0:46:00	23.29	0.5	8.42	55	7.13	-46
22/06/01	1:01:00	23.34	0.5	8.41	55	7.16	-47.9
22/06/01	1:16:00	23.3	0.5	8.41	55	7.16	-47.9
22/06/01	1:31:00	23.29	0.5	8.42	55	7.19	-49.2
22/06/01	1:46:00	23.32	0.5	8.4	55	7.2	-49.8
22/06/01	2:01:00	23.27	0.5	8.42	55	7.2	-50.3
22/06/01	2:16:00	23.23	0.5	8.43	55	7.2	-50.3
22/06/01	2:31:00	23.23	0.5	8.43	55	7.22	-51.4

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22/06/01	2:46:00	23.22	0.5	8.42	55	7.22	-51.3
22/06/01	3:01:00	23.12	0.5	8.45	55	7.22	-51
22/06/01	3:16:00	23.18	0.5	8.43	55	7.24	-52.6
22/06/01	3:31:00	23.13	0.5	8.44	55	7.23	-51.8
22/06/01	3:46:00	23.07	0.5	8.45	55	7.23	-52
22/06/01	4:01:00	23.15	0.5	8.44	55	7.26	-53.5
22/06/01	4:16:00	23.13	0.5	8.44	55	7.25	-53.3
22/06/01	4:31:00	23.03	0.5	8.47	55	7.25	-52.9
22/06/01	4:46:00	23.04	0.5	8.47	55	7.25	-53.4
22/06/01	5:01:00	23.03	0.5	8.46	55	7.25	-52.9
22/06/01	5:16:00	22.97	0.5	8.48	55	7.25	-52.9
22/06/01	5:31:00	23.03	0.5	8.47	55	7.26	-53.9
22/06/01	5:46:00	22.99	0.5	8.47	55	7.26	-53.5
22/06/01	6:01:00	22.91	0.5	8.53	55	7.25	-52.9
22/06/01	6:16:00	22.9	0.5	8.53	55	7.24	-52.6
22/06/01	6:31:00	22.8	0.5	8.55	55	7.21	-50.4
22/06/01	6:46:00	22.61	0.5	8.6	55	7.11	-44.7

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CONTINUOUS MONITOR DATA YSI S/N 99D0994 AB
BAYOU DESIARD SITE 20 (BDS20)

Date M/D/Y	Time hh:mm:ss	Temp C	SpCond uS/cm	DO Conc mg/L	DO Charge	Depth m	pH	pHmV mV
06/19/2001	11:01:00	25.34	1.8	8.38	58	-0.08	6.52	1.5
06/19/2001	11:16:00	25.67	1.9	8.27	58	-0.092	6.51	2.1
06/19/2001	11:31:00	26	1.9	8.21	58	-0.124	6.51	2.1
06/19/2001	11:46:00	26.34	1.9	8.16	58	-0.132	6.51	2
06/19/2001	12:01:00	26.69	1.9	8.11	58	-0.213	6.51	2
06/19/2001	12:16:00	27.28	2	8.04	58	-0.318	6.57	-0.7
06/19/2001	12:31:00	28.07	2	7.94	58	-0.402	6.62	-3.2
06/19/2001	12:46:00	28.9	2.1	7.82	58	-0.453	6.63	-4
06/19/2001	13:01:00	29.58	2.1	7.78	59	-0.473	6.66	-5.1
06/19/2001	13:16:00	28.66	54.2	4.47	56	-0.081	6.13	21.2
06/19/2001	13:31:00	28.66	54.3	3.49	54	-0.005	5.84	35.8
06/19/2001	13:46:00	28.68	54.1	3.06	54	0.042	5.83	36.7
06/19/2001	14:01:00	28.65	53.6	2.76	53	0.055	5.82	36.7
06/19/2001	14:16:00	28.67	53.6	2.32	53	0.041	5.83	36.2
06/19/2001	14:31:00	28.67	53.7	2.17	52	0.056	5.83	36.4
06/19/2001	14:46:00	28.67	53.7	1.93	52	0.061	5.83	36.6
06/19/2001	15:01:00	28.69	53.8	1.84	52	0.073	5.83	36.3
06/19/2001	15:16:00	28.69	54.1	1.92	52	0.079	5.83	36.4
06/19/2001	15:31:00	28.68	54	1.71	51	0.074	5.83	36.6
06/19/2001	15:46:00	28.7	54.1	1.67	51	0.075	5.83	36.5
06/19/2001	16:01:00	28.7	54.3	1.61	51	0.075	5.83	36.5
06/19/2001	16:16:00	28.7	54.3	1.58	51	0.077	5.83	36.6
06/19/2001	16:31:00	28.71	54.2	1.55	51	0.078	5.82	36.8
06/19/2001	16:46:00	28.73	54.4	1.55	51	0.076	5.83	36.4
06/19/2001	17:01:00	28.76	54.9	1.52	51	0.077	5.84	36
06/19/2001	17:16:00	28.79	55.2	1.5	51	0.078	5.83	36.2
06/19/2001	17:31:00	28.85	55.5	1.48	51	0.078	5.84	35.8
06/19/2001	17:46:00	28.85	55.4	1.47	50	0.08	5.85	35.5
06/19/2001	18:01:00	28.87	55.4	1.46	50	0.081	5.86	34.9
06/19/2001	18:16:00	28.87	55.3	1.45	50	0.082	5.87	34.7
06/19/2001	18:31:00	28.84	55.5	1.44	50	0.083	5.87	34.5
06/19/2001	18:46:00	28.87	56	1.44	50	0.086	5.87	34.6
06/19/2001	19:01:00	28.84	56	1.43	50	0.089	5.86	34.7
06/19/2001	19:16:00	28.85	56	1.42	50	0.093	5.86	34.9
06/19/2001	19:31:00	28.84	56.2	1.42	50	0.096	5.86	34.9
06/19/2001	19:46:00	28.83	56	1.41	50	0.099	5.87	34.4
06/19/2001	20:01:00	28.84	56	1.41	50	0.103	5.87	34.6
06/19/2001	20:16:00	28.81	56	1.4	49	0.105	5.87	34.5
06/19/2001	20:31:00	28.82	55.9	1.4	49	0.108	5.87	34.5
06/19/2001	20:46:00	28.8	56.1	1.4	49	0.113	5.86	34.7
06/19/2001	21:01:00	28.78	55.8	1.4	49	0.117	5.86	34.8
06/19/2001	21:16:00	28.77	56	1.39	49	0.122	5.87	34.5
06/19/2001	21:31:00	28.76	56	1.39	49	0.125	5.87	34.5
06/19/2001	21:46:00	28.75	55.9	1.38	49	0.129	5.88	34.1
06/19/2001	22:01:00	28.75	56.1	1.38	49	0.134	5.88	33.8
06/19/2001	22:16:00	28.75	55.9	1.37	49	0.138	5.89	33.5
06/19/2001	22:31:00	28.75	56	1.37	49	0.142	5.89	33.3

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06/19/2001	22:46:00	28.76	56.3	YSI S/N 96D0994 AB 1.36	49	0.147	5.9	33.1
06/19/2001	23:01:00	28.76	56.3	1.36	49	0.152	5.9	32.9
06/19/2001	23:16:00	28.75	56.8	1.36	49	0.156	5.9	32.8
06/19/2001	23:31:00	28.71	55.9	1.43	49	0.158	5.89	33.6
06/19/2001	23:46:00	28.69	55.4	1.4	49	0.161	5.88	33.9
06/20/2001	0:01:00	28.66	56	1.37	49	0.166	5.87	34.3
06/20/2001	0:16:00	28.64	56	1.36	48	0.166	5.88	33.7
06/20/2001	0:31:00	28.63	56.2	1.36	48	0.167	5.89	33.6
06/20/2001	0:46:00	28.61	56.4	1.35	48	0.168	5.89	33.6
06/20/2001	1:01:00	28.58	56.4	1.35	48	0.17	5.88	33.6
06/20/2001	1:16:00	28.58	56.4	1.35	48	0.171	5.89	33.3
06/20/2001	1:31:00	28.57	56.6	1.35	48	0.172	5.9	33
06/20/2001	1:46:00	28.58	56.7	1.35	48	0.173	5.9	32.7
06/20/2001	2:01:00	28.6	57.1	1.35	48	0.172	5.9	33
06/20/2001	2:16:00	28.6	57.5	1.34	48	0.171	5.9	33.1
06/20/2001	2:31:00	28.6	57.6	1.34	48	0.17	5.91	32.6
06/20/2001	2:46:00	28.6	57.6	1.34	48	0.172	5.9	32.8
06/20/2001	3:01:00	28.6	57.5	1.34	48	0.171	5.91	32.5
06/20/2001	3:16:00	28.59	57.8	1.34	48	0.171	5.91	32.5
06/20/2001	3:31:00	28.58	58	1.34	48	0.17	5.9	32.8
06/20/2001	3:46:00	28.56	58.1	1.34	48	0.173	5.91	32.6
06/20/2001	4:01:00	28.55	57.9	1.34	48	0.174	5.91	32.5
06/20/2001	4:16:00	28.53	58.1	1.34	48	0.175	5.9	33
06/20/2001	4:31:00	28.51	58.1	1.34	47	0.179	5.89	33.4
06/20/2001	4:46:00	28.49	58	1.34	47	0.182	5.9	32.7
06/20/2001	5:01:00	28.46	58.2	1.34	47	0.183	5.9	33
06/20/2001	5:16:00	28.46	58.2	1.34	47	0.185	5.9	33
06/20/2001	5:31:00	28.42	58.4	1.34	47	0.186	5.89	33.2
06/20/2001	5:46:00	28.4	58.2	1.34	47	0.186	5.89	33.3
06/20/2001	6:01:00	28.4	58.2	1.35	47	0.187	5.89	33.3
06/20/2001	6:16:00	28.44	58.1	1.34	47	0.191	5.9	33
06/20/2001	6:31:00	28.46	58.3	1.35	47	0.191	5.9	33
06/20/2001	6:46:00	28.48	58.1	1.35	47	0.191	5.9	33
06/20/2001	7:01:00	28.49	58.1	1.35	47	0.191	5.89	33.3
06/20/2001	7:16:00	28.5	58.2	1.36	47	0.193	5.89	33.6
06/20/2001	7:31:00	28.52	58.3	1.36	47	0.192	5.89	33.4
06/20/2001	7:46:00	28.52	58.2	1.36	47	0.19	5.88	33.8
06/20/2001	8:01:00	28.54	58	1.37	47	0.192	5.89	33.6
06/20/2001	8:16:00	28.57	57.8	1.36	47	0.192	5.88	33.8
06/20/2001	8:31:00	28.58	57.8	1.36	47	0.185	5.88	33.8
06/20/2001	8:46:00	28.61	57.7	1.36	47	0.192	5.88	34.1
06/20/2001	9:01:00	28.62	57.6	1.38	47	0.181	5.87	34.2
06/20/2001	9:16:00	28.61	57.5	1.38	47	0.145	5.87	34.4
06/20/2001	9:31:00	28.62	57.5	1.36	47	0.154	5.87	34.2
06/20/2001	9:46:00	28.66	57.7	1.34	47	0.151	5.88	34.1
06/20/2001	10:01:00	28.66	57.4	1.34	47	0.15	5.88	34
06/20/2001	10:16:00	28.68	57.6	1.34	47	0.144	5.88	33.9
06/20/2001	10:31:00	28.71	57.4	1.34	47	0.139	5.88	34
06/20/2001	10:46:00	28.73	57.4	1.34	47	0.13	5.88	33.7
06/20/2001	11:01:00	28.75	57.5	1.34	47	0.13	5.89	33.5
06/20/2001	11:16:00	28.76	57.8	1.34	47	0.125	5.89	33.4
06/20/2001	11:31:00	28.76	57.9	1.34	47	0.116	5.89	33.3

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06/20/2001	11:46:00	28.78	57.8	YSI S/N 94D0994 AB 1.34	47	0.136	5.89	33.2
06/20/2001	12:01:00	28.82	58.1	1.34	46	0.095	5.89	33.3
06/20/2001	12:16:00	28.82	58	1.34	46	0.107	5.89	33.4
06/20/2001	12:31:00	28.94	57.3	1.33	46	0.139	5.9	33.1
06/20/2001	12:46:00	28.84	57.2	1.34	46	0.085	5.88	34.1
06/20/2001	13:01:00	28.89	57.4	1.34	46	0.087	5.87	34.2
06/20/2001	13:16:00	28.92	57.3	1.34	46	0.108	5.88	33.9
06/20/2001	13:31:00	28.97	57.2	1.34	46	0.081	5.88	33.8
06/20/2001	13:46:00	28.97	57.6	1.34	46	0.087	5.88	33.8
06/20/2001	14:01:00	28.99	57.5	1.34	46	0.085	5.89	33.7
06/20/2001	14:16:00	29.02	57.8	1.34	46	0.077	5.88	34.1
06/20/2001	14:31:00	29.02	57.7	1.34	46	0.058	5.88	34
06/20/2001	14:46:00	29.05	57.7	1.34	46	0.094	5.87	34.5
06/20/2001	15:01:00	29.04	57.9	1.34	46	0.07	5.88	34.1
06/20/2001	15:16:00	29	58.1	1.34	46	0.065	5.87	34.3
06/20/2001	15:31:00	29	58.4	1.34	46	0.062	5.87	34.3
06/20/2001	15:46:00	28.99	58.6	1.34	46	0.062	5.88	34
06/20/2001	16:01:00	29	58.5	1.34	46	0.063	5.88	33.9
06/20/2001	16:16:00	28.98	58.6	1.34	46	0.059	5.88	33.9
06/20/2001	16:31:00	28.97	58.8	1.34	46	0.063	5.88	34
06/20/2001	16:46:00	28.96	58.6	1.34	46	0.056	5.88	33.9
06/20/2001	17:01:00	29	58.8	1.34	46	0.06	5.89	33.7
06/20/2001	17:16:00	29.04	59.6	1.34	46	0.06	5.88	34.1
06/20/2001	17:31:00	29.09	59.9	1.34	46	0.066	5.89	33.3
06/20/2001	17:46:00	29.1	60	1.34	46	0.059	5.9	33
06/20/2001	18:01:00	29.11	60.3	1.34	46	0.063	5.9	32.8
06/20/2001	18:16:00	29.11	60.5	1.34	46	0.068	5.91	32.6
06/20/2001	18:31:00	29.14	60.6	1.34	46	0.069	5.91	32.5
06/20/2001	18:46:00	29.12	60.4	1.34	46	0.069	5.9	33.1
06/20/2001	19:01:00	29.13	60.3	1.34	46	0.079	5.9	33.1
06/20/2001	19:16:00	29.24	60.1	1.34	46	0.079	5.89	33.3
06/20/2001	19:31:00	29.27	59.7	1.33	46	0.083	5.9	33
06/20/2001	19:46:00	29.21	57.7	1.34	46	0.083	5.88	33.9
06/20/2001	20:01:00	29.24	57.6	1.34	46	0.087	5.87	34.4
06/20/2001	20:16:00	29.2	57.2	1.34	46	0.091	5.87	34.5
06/20/2001	20:31:00	29.19	57.3	1.34	46	0.092	5.87	34.7
06/20/2001	20:46:00	29.19	58	1.33	46	0.097	5.88	34.1
06/20/2001	21:01:00	29.17	58.9	1.33	46	0.102	5.89	33.8
06/20/2001	21:16:00	29.15	59	1.33	46	0.104	5.89	33.4
06/20/2001	21:31:00	29.15	59.6	1.34	46	0.107	5.9	33.2
06/20/2001	21:46:00	29.14	59.4	1.34	46	0.114	5.9	32.8
06/20/2001	22:01:00	29.14	59.4	1.34	46	0.122	5.9	33.1
06/20/2001	22:16:00	29.08	57.1	1.44	46	0.127	5.88	33.8
06/20/2001	22:31:00	29.04	56.8	1.35	46	0.129	5.86	34.9
06/20/2001	22:46:00	29.01	56.9	1.35	46	0.135	5.87	34.5
06/20/2001	23:01:00	29.01	57.1	1.34	46	0.136	5.87	34.7
06/20/2001	23:16:00	29	57.3	1.34	46	0.141	5.87	34.5
06/20/2001	23:31:00	28.99	57.6	1.34	46	0.142	5.87	34.5
06/20/2001	23:46:00	28.97	57.9	1.34	46	0.143	5.87	34.4
06/21/2001	0:01:00	28.97	58.1	1.34	45	0.142	5.87	34.4
06/21/2001	0:16:00	28.96	58.1	1.34	45	0.143	5.86	34.7
06/21/2001	0:31:00	28.94	58.1	1.34	45	0.146	5.86	34.8

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06/21/2001	0:46:00	28.93	57.8	1.34	45	0.143	5.86	34.8
06/21/2001	1:01:00	28.91	57.8	1.34	45	0.143	5.86	34.8
06/21/2001	1:16:00	28.88	57.7	1.34	45	0.142	5.86	34.8
06/21/2001	1:31:00	28.89	57.7	1.34	45	0.142	5.86	34.9
06/21/2001	1:46:00	28.85	57.6	1.34	45	0.143	5.86	35
06/21/2001	2:01:00	28.83	57.8	1.34	45	0.144	5.86	35
06/21/2001	2:16:00	28.82	57.4	1.34	45	0.144	5.86	35.2
06/21/2001	2:31:00	28.79	57.5	1.34	45	0.145	5.86	35
06/21/2001	2:46:00	28.76	57.1	1.34	45	0.147	5.85	35.2
06/21/2001	3:01:00	28.78	56.9	1.34	45	0.146	5.86	35.1
06/21/2001	3:16:00	28.82	56	1.34	45	0.149	5.86	34.9
06/21/2001	3:31:00	28.83	56	1.34	45	0.147	5.86	34.9
06/21/2001	3:46:00	28.85	55.8	1.34	45	0.147	5.86	34.8
06/21/2001	4:01:00	28.84	55.9	1.34	45	0.149	5.86	34.8
06/21/2001	4:16:00	28.85	55.9	1.34	45	0.15	5.86	35
06/21/2001	4:31:00	28.83	55.9	1.34	45	0.15	5.86	35.2
06/21/2001	4:46:00	28.81	56.1	1.34	45	0.149	5.85	35.4
06/21/2001	5:01:00	28.8	55.9	1.34	45	0.15	5.85	35.4
06/21/2001	5:16:00	28.77	56.1	1.34	45	0.15	5.85	35.4
06/21/2001	5:31:00	28.75	55.9	1.34	45	0.15	5.85	35.6
06/21/2001	5:46:00	28.72	57.7	1.34	45	0.15	5.85	35.6
06/21/2001	6:01:00	28.71	57.9	1.34	45	0.15	5.85	35.6
06/21/2001	6:16:00	28.68	61.8	1.35	45	0.152	5.84	35.7
06/21/2001	6:31:00	28.66	62	1.34	45	0.153	5.85	35.6
06/21/2001	6:46:00	28.64	59.8	1.34	45	0.153	5.85	35.6
06/21/2001	7:01:00	28.64	60.1	1.34	45	0.152	5.85	35.5
06/21/2001	7:16:00	28.64	60.6	1.34	45	0.151	5.85	35.4
06/21/2001	7:31:00	28.64	60.8	1.34	45	0.151	5.85	35.4
06/21/2001	7:46:00	28.65	60.6	1.35	45	0.151	5.84	36.1
06/21/2001	8:01:00	28.66	60.3	1.36	45	0.15	5.83	36.3
06/21/2001	8:16:00	28.75	57.8	1.36	45	-0.096	5.68	44.1
06/21/2001	8:31:00	23.33	2.5	8.9	53	-0.066	5.83	35.6
06/21/2001	8:46:00	19.06	2.5	9.74	56	-0.008	1.68	236.4
06/21/2001	9:01:00	23.52	2.2	8.71	53	0.007	5.85	34.5
06/21/2001	9:16:00	23.65	2.2	8.68	53	0.002	5.78	38
06/21/2001	9:31:00	24.82	2.2	8.38	53	-0.004	5.78	38.1
06/21/2001	9:46:00	25.41	2.2	7.85	52	-0.008	6.59	-2.1
06/21/2001	10:01:00	25.58	2.3	6.79	51	-0.003	7.34	-39.1
06/21/2001	10:16:00	25.63	2.3	6.8	51	-0.018	7.56	-50.2
06/21/2001	10:31:00	25.66	2.3	6.31	51	-0.034	7.66	-55.4
06/21/2001	10:46:00	25.66	2.3	6.92	51	-0.045	7.72	-58.3
06/21/2001	11:01:00	25.73	2.3	7.95	52	-0.064	7.77	-60.8
06/21/2001	11:16:00	25.92	2.3	7.71	52	-0.069	7.7	-57.4
06/21/2001	11:31:00	26.05	2.3	6.94	51	-0.042	7.7	-57.3
06/21/2001	11:46:00	26.07	2.3	7.92	53	-0.072	7.65	-54.9
06/21/2001	12:01:00	26.28	2.3	7.62	52	-0.078	7.73	-58.7
06/21/2001	12:16:00	26.44	2.3	7.92	53	-0.071	7.74	-59.3
06/21/2001	12:31:00	26.54	2.3	7.94	53	-0.076	7.75	-59.9
06/21/2001	12:46:00	26.74	2.3	7.92	53	-0.045	7.69	-57.1
06/21/2001	13:01:00	26.78	2.3	7.94	53	-0.025	7.74	-59.4
06/21/2001	13:16:00	26.84	2.3	7.93	53	-0.011	7.7	-57.3
06/21/2001	13:31:00	27	2.6	5.68	50	0.003	7.7	-57.3

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06/21/2001	13:46:00	26.99	2.7	YSI S/N 94D0994 AB 7.94	53	-0.002	7.76	-60.5
06/21/2001	14:01:00	27.1	2.7	7.75	53	-0.024	7.72	-58.3
06/21/2001	14:16:00	27.34	2.7	7.77	53	-0.039	7.72	-58.2
06/21/2001	14:31:00	27.52	2.7	7.7	53	-0.087	7.78	-61.3
06/21/2001	14:46:00	27.68	2.7	7.66	53	-0.098	7.79	-61.9
06/21/2001	15:01:00	27.85	2.7	7.18	52	-0.032	7.75	-60.1
06/21/2001	15:16:00	27.95	2.7	7.64	53	-0.035	7.77	-60.8
06/21/2001	15:31:00	28.28	2.7	7.15	52	-0.02	7.7	-57.6
06/21/2001	15:46:00	28.2	2.8	7.19	52	-0.013	7.74	-59.7
06/21/2001	16:01:00	28.45	4.5	3.42	48	-0.006	7.5	-47.3
06/21/2001	16:16:00	28.3	4.4	3.55	48	0.003	7.37	-41
06/21/2001	16:31:00	28.16	4.3	3.14	47	0.005	7.32	-38.6
06/21/2001	16:46:00	28.03	4.2	3.34	48	0.003	7.31	-37.9
06/21/2001	17:01:00	27.9	4.2	3.17	47	0	7.25	-34.9
06/21/2001	17:16:00	27.78	4.2	2.64	47	-0.004	7.21	-32.7
06/21/2001	17:31:00	27.65	4.1	2.35	46	-0.005	7.19	-31.9
06/21/2001	17:46:00	27.53	4.1	2.17	46	-0.01	7.18	-31.3
06/21/2001	18:01:00	27.42	4.1	2.03	46	-0.014	7.17	-30.8
06/21/2001	18:16:00	27.32	4	1.66	45	-0.009	7.16	-30.5
06/21/2001	18:31:00	27.24	3.9	1.39	45	-0.012	7.16	-30.3
06/21/2001	18:46:00	27.15	4	1.98	46	-0.01	7.15	-30
06/21/2001	19:01:00	27.07	3.9	2.13	46	-0.009	7.15	-29.8
06/21/2001	19:16:00	26.99	3.8	1.72	45	-0.005	7.15	-29.8
06/21/2001	19:31:00	26.92	3.9	1.47	45	0.002	7.15	-29.7
06/21/2001	19:46:00	26.84	3.8	1.36	45	0.006	7.15	-29.7
06/21/2001	20:01:00	26.77	3.8	1.37	45	0.01	7.15	-29.7
06/21/2001	20:16:00	26.7	3.7	1.41	45	0.02	7.15	-29.7
06/21/2001	20:31:00	26.62	3.7	1.31	45	0.025	7.15	-29.7
06/21/2001	20:46:00	26.54	3.7	1.46	45	0.035	7.15	-29.7
06/21/2001	21:01:00	26.45	3.6	1.4	45	0.042	7.14	-29.6
06/21/2001	21:16:00	26.37	3.6	1.32	44	0.051	7.14	-29.5
06/21/2001	21:31:00	26.29	3.6	1.33	45	0.059	7.14	-29.5
06/21/2001	21:46:00	26.2	3.6	1.33	45	0.07	7.14	-29.4
06/21/2001	22:01:00	26.12	3.5	1.38	45	0.08	7.14	-29.4
06/21/2001	22:16:00	26.02	3.5	1.37	45	0.092	7.14	-29.4
06/21/2001	22:31:00	25.92	3.4	1.28	45	0.098	7.14	-29.4
06/21/2001	22:46:00	25.82	3.4	1.32	45	0.104	7.14	-29.5
06/21/2001	23:01:00	25.72	3.4	1.33	45	0.114	7.14	-29.5
06/21/2001	23:16:00	25.62	3.3	1.3	45	0.119	7.14	-29.4
06/21/2001	23:31:00	25.52	3.3	1.33	45	0.127	7.14	-29.5
06/21/2001	23:46:00	25.41	3.3	1.38	45	0.133	7.14	-29.5
06/22/2001	0:01:00	25.31	3.3	1.66	45	0.139	7.14	-29.4
06/22/2001	0:16:00	25.21	3.2	1.56	45	0.133	7.14	-29.5
06/22/2001	0:31:00	25.11	3.2	1.37	45	0.138	7.14	-29.6
06/22/2001	0:46:00	25.02	3.2	1.37	45	0.146	7.15	-29.6
06/22/2001	1:01:00	24.93	3.2	1.84	45	0.142	7.15	-29.7
06/22/2001	1:16:00	24.83	3.1	1.74	45	0.147	7.15	-29.8
06/22/2001	1:31:00	24.75	3.2	1.36	45	0.144	7.15	-29.7
06/22/2001	1:46:00	24.67	3.1	1.59	45	0.148	7.15	-29.7
06/22/2001	2:01:00	24.59	3.1	1.9	45	0.144	7.15	-29.8
06/22/2001	2:16:00	24.52	3.1	1.63	45	0.15	7.15	-29.8
06/22/2001	2:31:00	24.45	3.1	1.35	44	0.14	7.15	-29.9

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06/22/2001	2:46:00	24.38	3	YSI S/N 98D0994 AB 1.48	45	0.149	7.15	-29.8
06/22/2001	3:01:00	24.31	3.1	1.7	45	0.148	7.15	-29.8
06/22/2001	3:16:00	24.25	3	1.41	44	0.147	7.16	-30.5
06/22/2001	3:31:00	24.19	3.1	2.38	45	0.144	7.16	-30.4
06/22/2001	3:46:00	24.13	3	2.56	46	0.142	7.16	-30.5
06/22/2001	4:01:00	24.08	3	2.67	46	0.137	7.16	-30.2
06/22/2001	4:16:00	24.02	3	2.61	46	0.132	7.16	-30.3
06/22/2001	4:31:00	23.97	3	2.61	46	0.138	7.17	-30.6
06/22/2001	4:46:00	23.92	3	3.52	47	0.138	7.17	-30.6
06/22/2001	5:01:00	23.87	3	2.72	46	0.138	7.16	-30.6
06/22/2001	5:16:00	23.82	3	3.08	46	0.149	7.16	-30.4
06/22/2001	5:31:00	23.78	2.9	2.3	45	0.144	7.16	-30.3
06/22/2001	5:46:00	23.73	3	2.23	45	0.143	7.15	-30
06/22/2001	6:01:00	23.69	2.9	2.32	45	0.15	7.15	-29.8
06/22/2001	6:16:00	23.65	3	1.55	44	0.146	7.15	-29.8
06/22/2001	6:31:00	23.61	2.9	2.23	45	0.146	7.16	-30.1
06/22/2001	6:46:00	23.57	2.9	1.84	45	0.154	7.15	-29.7
06/22/2001	7:01:00	23.54	2.9	1.54	44	0.149	7.16	-30.3
06/22/2001	7:16:00	23.5	2.9	1.94	45	0.147	7.16	-30.1
06/22/2001	7:31:00	23.44	3	2.76	46	0.158	7.15	-29.8
06/22/2001	7:46:00	22.14	3.4	8.66	52	0.179	7.53	-48.5
06/22/2001	8:01:00	21.71	3.3	8.77	52	0.105	7.67	-55.1

	Temp C	SpCond uS/cm	DO Conc mg/L	DO Charge	Depth m	pH
MAXIMUM (7:01am	29.27	62	1.44	47	0.193	5.91
6/20/01-7:01 am	28.89278	58.00928	1.343505	45.9072165	0.121742	5.875258
MINIMUM	28.49	55.8	1.33	45	0.056	5.84

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Date M/D/Y	Time hh:mm:ss	Temp C	SpCond uS/cm	DO Conc mg/L	DO Charge	Depth m	pH	pHmV mV
06/19/2001	11:01:00	24.46	5	14.09	98	-0.221	5.3	77.8
06/19/2001	11:16:00	24.13	5.1	9.51	96	-0.247	5.32	76.2
06/19/2001	11:31:00	24.33	5.1	9.2	93	-0.255	5.35	74.8
06/19/2001	11:46:00	24.5	5	9.07	92	-0.319	5.36	73.9
06/19/2001	12:01:00	24.91	4.9	8.95	91	-0.427	5.38	73.1
06/19/2001	12:16:00	25.52	5	8.76	90	-0.538	5.39	72.6
06/19/2001	12:31:00	26.23	5	8.63	90	-0.607	5.4	72.2
06/19/2001	12:46:00	30.25	68.5	8.71	94	-0.258	6.09	33
06/19/2001	13:01:00	30.58	66.5	8.58	94	-0.212	6.49	9
06/19/2001	13:16:00	30.79	66.2	8.33	92	-0.206	6.66	-1
06/19/2001	13:31:00	31.01	66.4	8.05	92	-0.206	6.8	-9
06/19/2001	13:46:00	31.04	66.4	8.38	92	-0.2	6.88	-14.2
06/19/2001	14:01:00	31.13	66.9	8	91	-0.219	6.92	-16.5
06/19/2001	14:16:00	31.28	66.2	7.8	90	-0.227	6.97	-19.5
06/19/2001	14:31:00	30.78	69.2	8.26	90	-0.225	6.95	-18.1
06/19/2001	14:46:00	31.21	67.6	8.26	88	-0.228	7.03	-22.9
06/19/2001	15:01:00	31.01	69.1	7.96	88	-0.236	7.03	-22.9
06/19/2001	15:16:00	31.04	69.8	8.31	88	-0.251	7.04	-23.3
06/19/2001	15:31:00	31.19	69.6	8.66	88	-0.257	7.09	-26.4
06/19/2001	15:46:00	31.11	70.6	8.36	88	-0.252	7.07	-25.3
06/19/2001	16:01:00	30.68	71.6	8.24	88	-0.254	7.07	-25.5
06/19/2001	16:16:00	31.47	69.8	8.56	88	-0.255	7.15	-29.8
06/19/2001	16:31:00	31.3	71.3	8.17	88	-0.265	7.08	-25.7
06/19/2001	16:46:00	31.16	72.5	8.14	87	-0.258	7.09	-26.4
06/19/2001	17:01:00	30.75	75.3	8.27	87	-0.257	7.03	-22.6
06/19/2001	17:16:00	30.77	77.2	8.24	87	-0.252	7.05	-24
06/19/2001	17:31:00	30.92	75.9	8.09	86	-0.254	7.06	-24.7
06/19/2001	17:46:00	30.89	75.8	8.56	87	-0.246	7.08	-26
06/19/2001	18:01:00	30.87	77.3	8.39	86	-0.246	7.09	-26.3
06/19/2001	18:16:00	30.72	78.3	8.46	86	-0.229	7.06	-24.4
06/19/2001	18:31:00	30.72	77.8	8.16	84	-0.226	7.05	-23.9
06/19/2001	18:46:00	30.86	77.9	7.88	84	-0.217	7.06	-24.6
06/19/2001	19:01:00	30.71	82.1	8.3	84	-0.207	7.05	-23.7
06/19/2001	19:16:00	31.02	74.6	7.83	83	-0.202	7.08	-25.7
06/19/2001	19:31:00	31.09	72.4	7.62	83	-0.197	7.05	-24
06/19/2001	19:46:00	31.16	73	7.61	81	-0.192	7.03	-22.8
06/19/2001	20:01:00	31.13	71.6	7.96	83	-0.188	7.04	-23.6
06/19/2001	20:16:00	31.15	70.6	8.21	83	-0.183	7.07	-25.3
06/19/2001	20:31:00	31.23	68	8.61	84	-0.183	7.15	-29.8
06/19/2001	20:46:00	31.35	66.5	8.6	83	-0.181	7.22	-33.9
06/19/2001	21:01:00	31.3	66.3	8.29	83	-0.179	7.21	-33.7
06/19/2001	21:16:00	31.28	66.2	8.36	81	-0.176	7.2	-33
06/19/2001	21:31:00	31.22	66.3	8.23	81	-0.171	7.19	-32.2
06/19/2001	21:46:00	31.15	66.8	8.12	80	-0.166	7.16	-30.6
06/19/2001	22:01:00	31.1	66.9	7.95	80	-0.163	7.13	-28.7
06/19/2001	22:16:00	31.04	66.5	7.82	80	-0.159	7.1	-26.9
06/19/2001	22:31:00	30.97	66.6	7.87	80	-0.153	7.07	-25.4

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06/19/2001	22:46:00	30.95	66.4	7.91	80	-0.15	7.07	-25.3
06/19/2001	23:01:00	30.88	66.5	7.76	80	-0.146	7.05	-24.3
06/19/2001	23:16:00	30.86	66.2	7.65	79	-0.145	7.04	-23.6
06/19/2001	23:31:00	30.83	66.4	7.56	79	-0.142	7.03	-22.8
06/19/2001	23:46:00	30.78	66.5	7.5	79	-0.138	7.01	-21.8
06/20/2001	0:01:00	30.74	66.4	7.46	79	-0.137	6.99	-20.8
06/20/2001	0:16:00	30.69	66.3	7.37	77	-0.134	6.98	-19.9
06/20/2001	0:31:00	30.65	66.7	7.24	77	-0.134	6.96	-18.7
06/20/2001	0:46:00	30.61	66.6	7.22	77	-0.13	6.95	-18
06/20/2001	1:01:00	30.54	67.1	7.14	76	-0.128	6.94	-17.4
06/20/2001	1:16:00	30.5	67.5	7.16	76	-0.128	6.93	-17.2
06/20/2001	1:31:00	30.46	67.7	7.16	76	-0.125	6.92	-16.4
06/20/2001	1:46:00	30.41	67.7	7.06	76	-0.123	6.92	-16.1
06/20/2001	2:01:00	30.38	67.7	7.07	76	-0.122	6.9	-15.3
06/20/2001	2:16:00	30.34	68.1	7.08	76	-0.121	6.89	-14.8
06/20/2001	2:31:00	30.3	68.1	6.91	76	-0.118	6.89	-14.6
06/20/2001	2:46:00	30.24	68.6	6.83	76	-0.117	6.88	-13.9
06/20/2001	3:01:00	30.21	68.3	6.76	76	-0.115	6.87	-13.5
06/20/2001	3:16:00	30.16	68.9	6.75	74	-0.114	6.87	-13.2
06/20/2001	3:31:00	30.1	69	6.63	74	-0.112	6.85	-12.5
06/20/2001	3:46:00	30.07	68.9	6.57	74	-0.108	6.84	-11.7
06/20/2001	4:01:00	30.02	69.1	6.54	74	-0.104	6.83	-11.3
06/20/2001	4:16:00	29.97	69.3	6.54	74	-0.101	6.82	-10.4
06/20/2001	4:31:00	29.94	69.3	6.43	73	-0.096	6.82	-10.7
06/20/2001	4:46:00	29.88	69	6.58	73	-0.092	6.82	-10.4
06/20/2001	5:01:00	29.83	69.4	6.44	73	-0.09	6.81	-10.1
06/20/2001	5:16:00	29.77	69.2	6.34	73	-0.088	6.79	-8.5
06/20/2001	5:31:00	29.72	69.7	6.35	73	-0.086	6.8	-9.2
06/20/2001	5:46:00	29.68	70.2	6.2	73	-0.082	6.78	-8.1
06/20/2001	6:01:00	29.63	70	5.78	71	-0.079	6.76	-7.1
06/20/2001	6:16:00	29.6	70.1	6.01	73	-0.076	6.75	-6.3
06/20/2001	6:31:00	29.55	70.2	6.06	71	-0.071	6.75	-6.3
06/20/2001	6:46:00	29.51	70.2	5.98	71	-0.069	6.72	-4.5
06/20/2001	7:01:00	29.45	70.4	5.84	71	-0.064	6.73	-5.2
06/20/2001	7:16:00	29.44	70.3	5.89	71	-0.062	6.72	-4.5
06/20/2001	7:31:00	29.4	70.4	5.83	71	-0.062	6.71	-3.8
06/20/2001	7:46:00	29.38	70.5	5.81	71	-0.06	6.71	-4
06/20/2001	8:01:00	29.35	70.8	5.75	70	-0.059	6.7	-3.1
06/20/2001	8:16:00	29.34	70.7	5.85	70	-0.06	6.7	-3.1
06/20/2001	8:31:00	29.32	71	5.78	70	-0.059	6.69	-2.9
06/20/2001	8:46:00	29.32	70.8	5.82	70	-0.061	6.7	-3.4
06/20/2001	9:01:00	29.36	71	5.94	70	-0.062	6.71	-4.1
06/20/2001	9:16:00	29.39	70.8	5.98	70	-0.067	6.72	-4.4
06/20/2001	9:31:00	29.43	70.7	5.95	70	-0.068	6.72	-4.3
06/20/2001	9:46:00	29.48	71	5.99	71	-0.077	6.71	-4.3
06/20/2001	10:01:00	29.58	71	6.03	70	-0.082	6.72	-4.6
06/20/2001	10:16:00	29.96	69.9	6.56	73	-0.097	6.76	-6.8
06/20/2001	10:31:00	30.05	70.2	6.29	71	-0.107	6.75	-6.6
06/20/2001	10:46:00	30.05	69.2	6.46	71	-0.113	6.77	-7.5
06/20/2001	11:01:00	30.17	68.7	6.68	73	-0.117	6.79	-8.6
06/20/2001	11:16:00	30.49	68.2	6.63	73	-0.126	6.8	-9.3
06/20/2001	11:31:00	30.44	68	6.9	73	-0.135	6.81	-9.6

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06/20/2001	11:46:00	30.78	67	7.26	73	-0.143	6.88	-14.1
06/20/2001	12:01:00	31.26	66.2	7.56	74	-0.158	6.96	-18.7
06/20/2001	12:16:00	30.87	67.3	7.18	73	-0.166	6.92	-16.5
06/20/2001	12:31:00	30.75	67.3	7.75	74	-0.172	6.95	-18.1
06/20/2001	12:46:00	30.85	67.5	6.99	73	-0.176	6.91	-16
06/20/2001	13:01:00	30.64	68.8	7.26	73	-0.188	6.87	-13.6
06/20/2001	13:16:00	30.97	68.8	7.02	73	-0.21	6.89	-14.4
06/20/2001	13:31:00	31.08	68.2	7.5	73	-0.221	6.96	-18.6
06/20/2001	13:46:00	30.92	67.9	7.89	74	-0.239	7.01	-21.8
06/20/2001	14:01:00	31.55	66.9	8.36	76	-0.232	7.07	-25
06/20/2001	14:16:00	32.06	67.3	7.84	74	-0.264	7.07	-25.4
06/20/2001	14:31:00	31.63	68.2	7.52	73	-0.264	7.03	-22.9
06/20/2001	14:46:00	31.09	69.4	7.44	73	-0.282	6.97	-19.2
06/20/2001	15:01:00	31.11	70.3	7.37	73	-0.285	6.91	-15.7
06/20/2001	15:16:00	31.28	70.9	7.34	73	-0.3	6.9	-15.1
06/20/2001	15:31:00	31.3	70.4	8.14	74	-0.312	6.99	-20.2
06/20/2001	15:46:00	31.38	72.1	7.78	74	-0.306	6.99	-20.6
06/20/2001	16:01:00	31.55	69.6	7.9	74	-0.318	7.01	-21.9
06/20/2001	16:16:00	31.15	72.4	7.78	73	-0.303	6.97	-19.5
06/20/2001	16:31:00	31.3	72.5	7.81	74	-0.311	6.98	-19.8
06/20/2001	16:46:00	30.76	76.9	7.7	73	-0.307	6.92	-16.5
06/20/2001	17:01:00	30.96	76	7.73	73	-0.295	6.97	-19.1
06/20/2001	17:16:00	30.74	77.9	7.73	73	-0.283	6.97	-19.3
06/20/2001	17:31:00	31.33	74.9	7.72	73	-0.297	7.01	-21.9
06/20/2001	17:46:00	30.8	71.3	8.74	76	-0.292	7.03	-23.1
06/20/2001	18:01:00	30.9	69.3	8.1	74	-0.269	7.04	-23.3
06/20/2001	18:16:00	30.96	77.3	8.03	73	-0.267	7.04	-23.3
06/20/2001	18:31:00	31.11	74	8.09	74	-0.263	7.06	-24.8
06/20/2001	18:46:00	31.07	75.4	7.98	73	-0.248	6.99	-20.6
06/20/2001	19:01:00	31.2	75.1	8.07	74	-0.239	7.06	-24.7
06/20/2001	19:16:00	30.95	71.8	7.72	73	-0.228	7.02	-22.4
06/20/2001	19:31:00	31.38	71	7.69	73	-0.218	7.03	-22.9
06/20/2001	19:46:00	31.4	69.9	7.68	73	-0.213	7.01	-21.9
06/20/2001	20:01:00	31.36	68.4	7.74	73	-0.207	7.03	-23
06/20/2001	20:16:00	31.36	67.9	7.74	73	-0.202	7.04	-23.3
06/20/2001	20:31:00	31.31	67.5	7.54	73	-0.198	7.02	-22.2
06/20/2001	20:46:00	31.29	67.8	7.66	73	-0.194	7	-21.2
06/20/2001	21:01:00	31.2	67.5	7.51	73	-0.189	6.99	-20.4
06/20/2001	21:16:00	31.25	66.1	7.59	73	-0.186	7.01	-21.7
06/20/2001	21:31:00	31.19	66.6	7.51	73	-0.183	7.01	-21.6
06/20/2001	21:46:00	31.11	66.7	7.35	71	-0.177	6.98	-20.1
06/20/2001	22:01:00	31.08	66.6	7.35	71	-0.171	6.98	-20.1
06/20/2001	22:16:00	31.01	67	7.32	71	-0.169	6.97	-19.5
06/20/2001	22:31:00	30.96	67	7.46	71	-0.164	6.96	-18.4
06/20/2001	22:46:00	30.91	66.7	7.17	71	-0.162	6.94	-17.8
06/20/2001	23:01:00	30.88	66.8	7.23	71	-0.156	6.95	-18
06/20/2001	23:16:00	30.81	67.2	7.04	70	-0.155	6.93	-16.7
06/20/2001	23:31:00	30.78	66.9	7.04	70	-0.154	6.93	-16.8
06/20/2001	23:46:00	30.76	67.1	7.1	70	-0.153	6.91	-16
06/21/2001	0:01:00	30.72	67.3	7.09	70	-0.15	6.9	-15
06/21/2001	0:16:00	30.69	67.4	6.98	70	-0.148	6.9	-14.9
06/21/2001	0:31:00	30.68	67.4	6.98	70	-0.148	6.89	-14.6

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06/21/2001	0:46:00	30.62	68	6.96	70	-0.15	6.88	-13.7
06/21/2001	1:01:00	30.58	68	6.91	69	-0.148	6.87	-13.4
06/21/2001	1:16:00	30.53	68	6.81	69	-0.146	6.85	-12.3
06/21/2001	1:31:00	30.51	68	6.83	69	-0.144	6.84	-11.8
06/21/2001	1:46:00	30.46	68.2	6.79	69	-0.144	6.83	-10.7
06/21/2001	2:01:00	30.44	67.8	6.79	69	-0.143	6.84	-11.8
06/21/2001	2:16:00	30.38	67.9	6.6	69	-0.141	6.82	-10.6
06/21/2001	2:31:00	30.33	68.2	6.66	69	-0.139	6.83	-10.8
06/21/2001	2:46:00	30.3	68.5	6.59	69	-0.137	6.82	-10.6
06/21/2001	3:01:00	30.26	68.7	6.48	69	-0.132	6.81	-10.1
06/21/2001	3:16:00	30.2	68.7	6.35	69	-0.131	6.8	-9
06/21/2001	3:31:00	30.15	68.9	6.36	69	-0.128	6.79	-8.9
06/21/2001	3:46:00	30.12	69.1	6.23	67	-0.127	6.79	-8.6
06/21/2001	4:01:00	30.08	68.7	6.22	67	-0.123	6.78	-8.3
06/21/2001	4:16:00	30.03	68.9	6.16	67	-0.121	6.77	-7.3
06/21/2001	4:31:00	29.99	69.2	6.1	67	-0.12	6.76	-7.1
06/21/2001	4:46:00	29.95	69.1	6.05	67	-0.119	6.76	-6.9
06/21/2001	5:01:00	29.92	69.6	6.08	67	-0.117	6.75	-6.2
06/21/2001	5:16:00	29.85	69.4	6.05	67	-0.116	6.74	-6
06/21/2001	5:31:00	29.82	69.9	6.04	66	-0.115	6.73	-5.3
06/21/2001	5:46:00	29.75	70.1	5.91	66	-0.115	6.73	-5.1
06/21/2001	6:01:00	29.71	70.2	5.95	66	-0.111	6.71	-4.2
06/21/2001	6:16:00	29.69	69.9	5.93	66	-0.11	6.73	-5.2
06/21/2001	6:31:00	29.65	70.2	5.93	66	-0.112	6.73	-5.2
06/21/2001	6:46:00	29.61	70.2	5.88	66	-0.109	6.72	-4.8
06/21/2001	7:01:00	29.56	70.6	5.87	66	-0.105	6.72	-4.3
06/21/2001	7:16:00	29.53	70.9	5.94	66	-0.105	6.71	-3.9
06/21/2001	7:31:00	29.51	71.5	5.89	66	-0.103	6.71	-3.8
06/21/2001	7:46:00	29.48	71.2	5.84	66	-0.102	6.69	-2.6
06/21/2001	8:01:00	29.45	71.6	5.76	65	-0.097	6.69	-2.7
06/21/2001	8:16:00	29.06	77.3	4.87	63	-0.097	6.51	7.9
06/21/2001	8:31:00	28.94	76.9	3.76	61	-0.089	6.4	14.5
06/21/2001	8:46:00	28.72	78.6	3.01	59	-0.083	6.34	17.6
06/21/2001	9:01:00	28.34	84.6	3.55	60	-0.075	6.31	19.4
06/21/2001	9:16:00	28	88.8	3.45	60	-0.066	6.28	21.1
06/21/2001	9:31:00	27.87	90.7	3.07	59	-0.054	6.24	23.4
06/21/2001	9:46:00	25.24	1.1	8.79	69	-0.257	6.34	17.2
06/21/2001	10:01:00	25.97	0.6	8.73	69	-0.351	6.67	-1.7
06/21/2001	10:16:00	25.93	0.6	8.84	69	-0.33	6.72	-4.6
06/21/2001	10:31:00	25.38	0.5	8.98	69	-0.321	6.69	-2.8
06/21/2001	10:46:00	26.18	0.5	8.79	69	-0.327	6.71	-3.9
06/21/2001	11:01:00	23.57	0.6	9.42	69	-0.334	6.65	-0.6
06/21/2001	11:16:00	21.61	1.1	9.97	69	-0.273	6.53	6.1
06/21/2001	11:31:00	24.69	0.7	9.07	69	-0.306	6.57	3.8
06/21/2001	11:46:00	27.44	1.5	7.73	69	-0.319	7.21	-33.3
06/21/2001	12:01:00	27.18	1.1	7.37	67	-0.292	7.44	-46.9
06/21/2001	12:16:00	27.02	0.9	7.4	67	-0.292	7.5	-50.1
06/21/2001	12:31:00	26.89	0.9	6.93	65	-0.265	7.38	-43.2
06/21/2001	12:46:00	26.4	1.1	6.91	65	-0.201	7.35	-41.3
06/21/2001	13:01:00	26.31	1.5	6.84	65	-0.188	7.35	-41.3
06/21/2001	13:16:00	26.33	0.7	6.82	65	-0.181	7.33	-40.6
06/21/2001	13:31:00	26.28	1	6.73	64	-0.182	7.32	-39.7

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06/21/2001	13:46:00	26.31	1.3	6.56	64	-0.201	7.33	-40.3
06/21/2001	14:01:00	26.55	1.1	6.48	64	-0.241	7.27	-37.1
06/21/2001	14:16:00	26.56	1.1	6.44	64	-0.24	7.26	-36.1
06/21/2001	14:31:00	26.54	1	6.41	64	-0.285	7.25	-35.6
06/21/2001	14:46:00	26.59	1.4	6.35	64	-0.23	7.23	-34.8
06/21/2001	15:01:00	26.64	0.9	6.38	64	-0.215	7.24	-34.9
06/21/2001	15:16:00	26.84	1.3	5.9	63	-0.209	7.21	-33.3
06/21/2001	15:31:00	26.87	1.3	6.15	63	-0.189	7.24	-35.1
06/21/2001	15:46:00	26.52	1.1	5.52	62	-0.181	7.37	-42.5
06/21/2001	16:01:00	26.44	0.8	5.51	62	-0.186	7.25	-35.4
06/21/2001	16:16:00	26.47	0.8	5.42	62	-0.191	7.22	-33.8
06/21/2001	16:31:00	26.42	0.8	5.05	61	-0.204	7.21	-33.2
06/21/2001	16:46:00	26.39	0.8	5.11	61	-0.21	7.17	-31.1
06/21/2001	17:01:00	26.4	0.7	4.77	60	-0.22	7.16	-30.2
06/21/2001	17:16:00	26.38	0.7	4.48	60	-0.226	7.16	-30.2
06/21/2001	17:31:00	26.34	0.7	4.18	59	-0.231	7.14	-29.2
06/21/2001	17:46:00	26.32	0.7	4.13	59	-0.237	7.12	-28.3
06/21/2001	18:01:00	26.27	0.7	3.93	59	-0.233	7.11	-27.8
06/21/2001	18:16:00	26.19	0.7	4.34	59	-0.232	7.1	-26.7
06/21/2001	18:31:00	26.16	0.7	3.84	58	-0.232	7.08	-25.6
06/21/2001	18:46:00	26.13	0.7	4.06	59	-0.232	7.07	-25
06/21/2001	19:01:00	26.07	0.7	4.14	59	-0.228	7.06	-24.4
06/21/2001	19:16:00	25.96	0.7	3.91	58	-0.218	7.04	-23.6
06/21/2001	19:31:00	25.95	0.7	3.68	58	-0.216	7.03	-23.1
06/21/2001	19:46:00	25.87	0.7	4.18	59	-0.212	7.03	-22.7
06/21/2001	20:01:00	25.82	0.7	3.81	58	-0.203	7.03	-22.5
06/21/2001	20:16:00	25.71	0.6	3.7	58	-0.195	7.01	-21.8
06/21/2001	20:31:00	25.62	0.6	3.99	58	-0.184	7	-20.9
06/21/2001	20:46:00	25.53	0.5	3.15	57	-0.178	7	-20.9
06/21/2001	21:01:00	25.45	0.5	3.39	57	-0.168	6.99	-20.6
06/21/2001	21:16:00	25.36	0.5	3.51	58	-0.16	6.98	-20.1
06/21/2001	21:31:00	25.24	0.5	3.93	58	-0.148	6.98	-20.1
06/21/2001	21:46:00	25.1	0.5	3.69	58	-0.136	6.99	-20.3
06/21/2001	22:01:00	24.99	0.5	4.2	59	-0.125	6.98	-20
06/21/2001	22:16:00	24.88	0.5	2.89	56	-0.117	6.99	-20.3
06/21/2001	22:31:00	24.73	0.5	3.19	57	-0.111	6.99	-20.6
06/21/2001	22:46:00	24.63	0.6	3.42	57	-0.102	6.99	-20.7
06/21/2001	23:01:00	24.51	0.6	3.31	57	-0.097	6.99	-20.5
06/21/2001	23:16:00	24.35	0.6	3.03	56	-0.088	6.98	-19.8
06/21/2001	23:31:00	24.24	0.6	3.54	57	-0.082	6.97	-19.2
06/21/2001	23:46:00	24.18	0.6	3.85	58	-0.079	6.96	-18.9
06/22/2001	0:01:00	24.13	0.6	3.6	57	-0.082	6.98	-19.7
06/22/2001	0:16:00	24.04	0.6	3.34	57	-0.081	6.97	-19.2
06/22/2001	0:31:00	23.95	0.6	3.45	57	-0.074	6.96	-18.9
06/22/2001	0:46:00	23.91	0.6	3.89	57	-0.077	6.97	-19.2
06/22/2001	1:01:00	23.82	0.6	3.57	57	-0.071	6.96	-18.7
06/22/2001	1:16:00	23.8	0.6	3.11	56	-0.079	6.97	-19.1
06/22/2001	1:31:00	23.7	0.6	3.72	57	-0.073	6.96	-18.9
06/22/2001	1:46:00	23.66	0.6	3.47	56	-0.073	6.98	-19.9
06/22/2001	2:01:00	23.6	0.6	3.39	56	-0.072	6.96	-18.5
06/22/2001	2:16:00	23.62	0.6	3.45	56	-0.079	6.97	-19.1
06/22/2001	2:31:00	23.51	0.6	3.29	56	-0.071	6.95	-18.1

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06/22/2001	2:46:00	23.52	0.6	3	55	-0.076	6.96	-19
06/22/2001	3:01:00	23.43	0.6	3.5	56	-0.073	6.95	-18.1
06/22/2001	3:16:00	23.42	0.6	3.5	56	-0.076	6.96	-18.7
06/22/2001	3:31:00	23.34	0.6	3.43	56	-0.079	6.95	-17.9
06/22/2001	3:46:00	23.34	0.6	2.99	55	-0.085	6.95	-18.3
06/22/2001	4:01:00	23.31	0.6	3.04	55	-0.085	6.94	-17.9
06/22/2001	4:16:00	23.27	0.6	2.98	55	-0.088	6.94	-17.7
06/22/2001	4:31:00	23.26	0.6	3.23	56	-0.085	6.94	-17.9
06/22/2001	4:46:00	23.21	0.6	3.17	56	-0.082	6.93	-17.3
06/22/2001	5:01:00	23.2	0.6	2.99	55	-0.078	6.94	-17.3
06/22/2001	5:16:00	23.19	0.6	3.13	55	-0.081	6.95	-17.9
06/22/2001	5:31:00	23.13	0.6	3.08	55	-0.077	6.94	-17.6
06/22/2001	5:46:00	23.12	0.6	3.08	55	-0.077	6.94	-17.3
06/22/2001	6:01:00	23.15	0.6	3.04	55	-0.081	6.95	-17.9
06/22/2001	6:16:00	23.06	0.6	3.14	55	-0.075	6.94	-17.6
06/22/2001	6:31:00	23.04	0.6	2.98	55	-0.074	6.94	-17.6
06/22/2001	6:46:00	23.07	0.6	3.11	55	-0.076	6.95	-18
06/22/2001	7:01:00	23	0.7	3.32	56	-0.073	6.94	-17.5
06/22/2001	7:16:00	22.97	0.7	2.94	55	-0.072	6.93	-17.3
06/22/2001	7:31:00	21.58	1.3	9.74	66	-0.06	7.16	-30.1
06/22/2001	7:46:00	19.77	1.1	10.35	66	-0.04	7.16	-30

STREAM CROSS-SECTION SPREADSHEET

Site Number: BDS 3 **Subsegment:** 080701 **Waterbody:** Lake Bartholomew

Site Description: Midpoint on Lake Bartholomew right fork

Type of Equipment: ☐ Fathometer ☑ Hydrotrac ☐ Manual

Initial Bank: ☐ RDB ☑ LDB

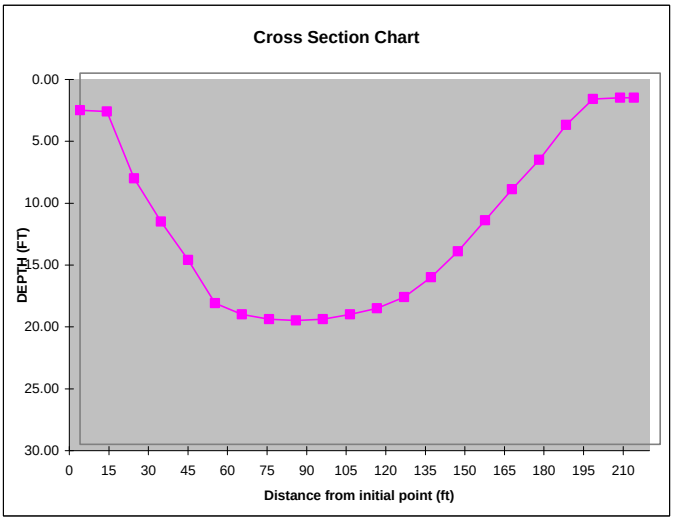
Tapedown: N/A

Guage Height: N/A

Date: 06/19/2001

WIDTH[1] (ft):	210.00
AREA[2] (ft^2):	2685.09
AVG. DEPTH[3](ft):	12.79

Subsection	Distance from initial point (ft)	Width[4] (ft)	Depth (ft)	Area[5] (sq.ft.)	Area of element as % of Total Area[6 & 7]
1	0.0	5.12	3.00	15.36	
2	10.2	10.24	3.10	31.74	1.18%
3	20.5	10.24	8.50	87.04	3.24%
4	30.7	10.24	12.00	122.88	4.58%
5	41.0	10.24	15.10	154.62	5.76%
6	51.2	10.24	18.60	190.46	7.09%
7	61.4	10.24	19.50	199.68	7.44%
8	71.7	10.24	19.90	203.78	7.59%
9	81.9	10.24	20.00	204.80	7.63%
10	92.2	10.24	19.90	203.78	7.59%
11	102.4	10.24	19.50	199.68	7.44%
12	112.6	10.24	19.00	194.56	7.25%
13	122.9	10.24	18.10	185.34	6.90%
14	133.1	10.24	16.50	168.96	6.29%
15	143.4	10.24	14.40	147.46	5.49%
16	153.6	10.24	11.90	121.86	4.54%
17	163.8	10.24	9.40	96.26	3.58%
18	174.1	10.24	7.00	71.68	2.67%
19	184.3	10.24	4.20	43.01	1.60%
20	194.6	10.24	2.10	21.50	0.80%
21	204.8	7.72	2.00	15.44	0.58%
22	210.0	2.60	2.00	5.20	0.19%
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
	Total	210.00		2685.09	99.43%



Data Collection Crew		Office Data Work	
Measurement made by:	R. Gianelloni	Data Inputed by / Date:	C. Schwartzenburg / 6-22-01
Notetaker/Recorder:	C. Schwartzenburg	Data Input Checked by / Date:	R. Gianelloni / 6-22-01
Other:	G. Lafleur		

Note 1: WIDTH (ft) = sum of the width column
Note 2: AREA (sq.ft.) = sum of the area column
Note 3: AVG. DEPTH (ft) = area/width (using the values from this table)
Note 4: Width of element
Note 5: Area=Width*Depth for element
Note 6: Percent area = element area/total area x 100%
Note 7: Percent area should be less than 10% as per USGS standard.
Note 8: Blank fields are cleared from all calculations.
Note 9: The cross sections are taken at areas representative of the stream.

STREAM CROSS-SECTION SPREADSHEET

Site Number: BDS 4 **Subsegment:** 080701 **Waterbody:** Lake Bartholomew

Site Description: Midpoint on Lake Bartholomew left fork

Type of Equipment: ☐ Fathometer ☑ Hydrotrac ☐ Manual

Initial Bank: ☐ RDB ☑ LDB

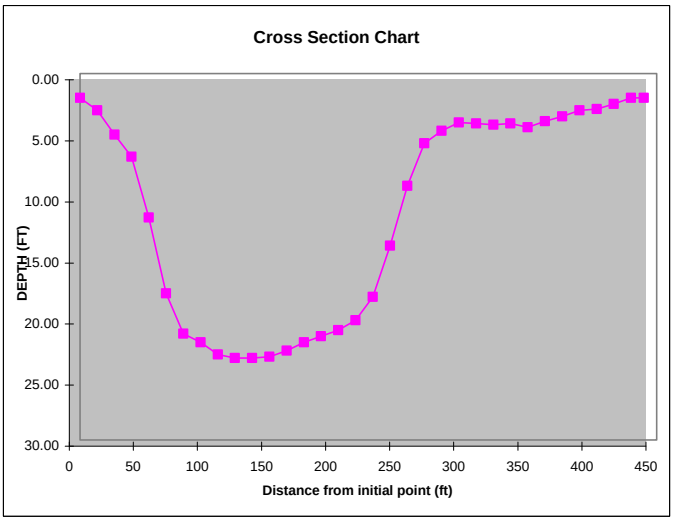
Tapedown: N/A

Guage Height: N/A

Date: 06/19/2001

WIDTH[1] (ft):	440.00
AREA[2] (ft[2]):	5109.57
AVG. DEPTH[3](ft):	11.61

Subsection	Distance from initial point (ft)	Width[4] (ft)	Depth (ft)	Area[5] (sq.ft.)	Area of element as % of Total Area[6 & 7]
1	0.0	6.72	2.00	13.44	
2	13.4	13.44	3.00	40.32	0.79%
3	26.9	13.44	5.00	67.20	1.32%
4	40.3	13.44	6.80	91.39	1.79%
5	53.8	13.44	11.80	158.59	3.10%
6	67.2	13.44	18.00	241.92	4.73%
7	80.6	13.44	21.30	286.27	5.60%
8	94.1	13.44	22.00	295.68	5.79%
9	107.5	13.44	23.00	309.12	6.05%
10	121.0	13.44	23.30	313.15	6.13%
11	134.4	13.44	23.30	313.15	6.13%
12	147.8	13.44	23.20	311.81	6.10%
13	161.3	13.44	22.70	305.09	5.97%
14	174.7	13.44	22.00	295.68	5.79%
15	188.2	13.44	21.50	288.96	5.66%
16	201.6	13.44	21.00	282.24	5.52%
17	215.0	13.44	20.20	271.49	5.31%
18	228.5	13.44	18.30	245.95	4.81%
19	241.9	13.44	14.10	189.50	3.71%
20	255.4	13.44	9.20	123.65	2.42%
21	268.8	13.44	5.70	76.61	1.50%
22	282.2	13.44	4.70	63.17	1.24%
23	295.7	13.44	4.00	53.76	1.05%
24	309.1	13.44	4.10	55.10	1.08%
25	322.6	13.44	4.20	56.45	1.10%
26	336.0	13.44	4.10	55.10	1.08%
27	349.4	13.44	4.40	59.14	1.16%
28	362.9	13.44	3.90	52.42	1.03%
29	376.3	13.44	3.50	47.04	0.92%
30	389.8	13.44	3.00	40.32	0.79%
31	403.2	13.44	2.90	38.98	0.76%
32	416.6	13.44	2.50	33.60	0.66%
33	430.1	11.68	2.00	23.36	0.46%
34	440.0	4.96	2.00	9.92	0.19%
35					
36					
37					
38					
39					
40					
	Total	440.00		5109.57	99.74%



Data Collection Crew		Office Data Work	
Measurement made by:	R. Gianelloni	Data Inputed by / Date:	C. Schwartzenburg / 6-22-01
Notetaker/Recorder:	C. Schwartzenburg	Data Input Checked by / Date:	R. Gianelloni / 6-22-01
Other:	G. Lafleur		

Note 1: WIDTH (ft) = sum of the width column
Note 2: AREA (sq.ft.) = sum of the area column
Note 3: AVG. DEPTH (ft) = area/width (using the values from this table)
Note 4: Width of element
Note 5: Area=Width*Depth for element
Note 6: Percent area = element area/total area x 100%
Note 7: Percent area should be less than 10% as per USGS standard.
Note 8: Blank fields are cleared from all calculations.
Note 9: The cross sections are taken at areas representative of the stream.

STREAM CROSS-SECTION SPREADSHEET

Site Number: BDS 5 **Subsegment:** 080701 **Waterbody:** Lake Bartholomew

Site Description: Lake Bartholomew at overflow control structure

Type of Equipment: ☐ Fathometer ☑ Hydrotrac ☐ Manual

Initial Bank: ☐ RDB ☑ LDB

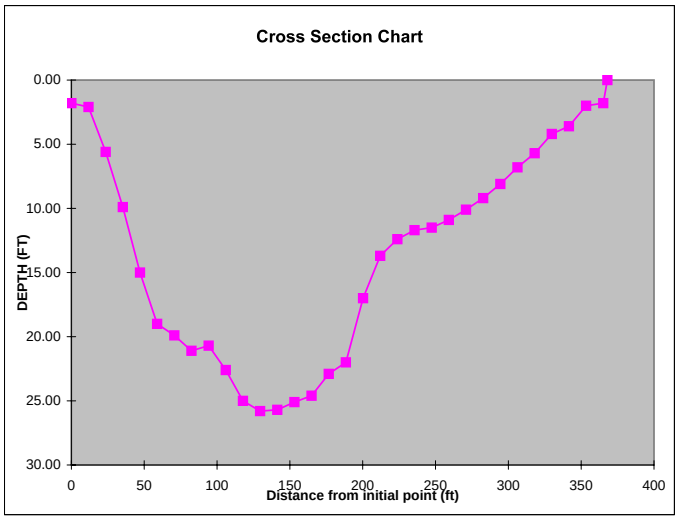
Tapedown: N/A

Guage Height: N/A

Date: 06/19/2001

WIDTH[1] (ft):	368.00
AREA[2] (ft^2):	5135.08
AVG. DEPTH[3](ft):	13.95

Subsection	Distance from initial point (ft)	Width[4] (ft)	Depth (ft)	Area[5] (sq.ft.)	Area of element as % of Total Area[6 & 7]
1	0.0	5.89	1.80	10.60	
2	11.8	11.78	2.10	24.74	0.48%
3	23.6	11.78	5.60	65.97	1.28%
4	35.3	11.78	9.90	116.62	2.27%
5	47.1	11.78	15.00	176.70	3.44%
6	58.9	11.78	19.00	223.82	4.36%
7	70.7	11.78	19.90	234.42	4.57%
8	82.5	11.78	21.10	248.56	4.84%
9	94.2	11.78	20.70	243.85	4.75%
10	106.0	11.78	22.60	266.23	5.18%
11	117.8	11.78	25.00	294.50	5.74%
12	129.6	11.78	25.80	303.92	5.92%
13	141.4	11.78	25.70	302.75	5.90%
14	153.1	11.78	25.10	295.68	5.76%
15	164.9	11.78	24.60	289.79	5.64%
16	176.7	11.78	22.90	269.76	5.25%
17	188.5	11.78	22.00	259.16	5.05%
18	200.3	11.78	17.00	200.26	3.90%
19	212.0	11.78	13.70	161.39	3.14%
20	223.8	11.78	12.40	146.07	2.84%
21	235.6	11.78	11.70	137.83	2.68%
22	247.4	11.78	11.50	135.47	2.64%
23	259.2	11.78	10.90	128.40	2.50%
24	270.9	11.78	10.10	118.98	2.32%
25	282.7	11.78	9.20	108.38	2.11%
26	294.5	11.78	8.10	95.42	1.86%
27	306.3	11.78	6.80	80.10	1.56%
28	318.1	11.78	5.70	67.15	1.31%
29	329.8	11.78	4.20	49.48	0.96%
30	341.6	11.78	3.60	42.41	0.83%
31	353.4	11.78	2.00	23.56	0.46%
32	365.2	7.30	1.80	13.14	0.26%
33	368.0	1.41	0.00	0.00	0.00%
34					
35					
36					
37					
38					
39					
40					
	Total	368.00		5135.08	99.79%



Data Collection Crew		Office Data Work	
Measurement made by:	R. Gianelloni	Data Inputed by / Date:	C. Schwartzenburg / 6-22-01
Notetaker/Recorder:	C. Schwartzenburg	Data Input Checked by / Date:	R. Gianelloni / 6-22-01
Other:	G. Lafleur		

Note 1: WIDTH (ft) = sum of the width column
Note 2: AREA (sq.ft.) = sum of the area column
Note 3: AVG. DEPTH (ft) = area/width (using the values from this table)
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Note 6: Percent area = element area/total area x 100%
Note 7: Percent area should be less than 10% as per USGS standard.
Note 8: Blank fields are cleared from all calculations.

STREAM CROSS-SECTION SPREADSHEET

Site Number: BDS6 **Subsegment:** 080701 **Waterbody:** Lake Bartholomew

Site Description: Lake Bartholomew at U.S. Hwy. 165

Type of Equipment: ☐ Fathometer ☑ Hydrotrac ☐ Manual

Initial Bank: ☐ RDB ☑ LDB

Tapedown: N/A

Guage Height: N/A

Date: 06/19/2001

WIDTH[1] (ft):	375.00
AREA[2] (ft[2]):	4109.00
AVG. DEPTH[3] (ft):	10.96

Subsection	Distance from initial point (ft)	Width[4] (ft)	Depth (ft)	Area[5] (sq.ft.)	Area of element as % of Total Area[6 & 7]
1	0.0	7.43	0.00	0.00	
2	14.9	14.85	3.60	53.46	1.30%
3	29.7	14.85	5.80	86.13	2.10%
4	44.6	14.85	8.70	129.20	3.14%
5	59.4	14.85	12.20	181.17	4.41%
6	74.3	14.85	14.50	215.33	5.24%
7	89.1	14.85	17.40	258.39	6.29%
8	104.0	14.85	19.60	291.06	7.08%
9	118.8	14.85	22.50	334.13	8.13%
10	133.7	14.85	23.20	344.52	8.38%
11	148.5	14.85	22.80	338.58	8.24%
12	163.4	14.85	21.90	325.22	7.91%
13	178.2	14.85	20.90	310.37	7.55%
14	193.1	14.85	18.60	276.21	6.72%
15	207.9	14.85	14.00	207.90	5.06%
16	222.8	14.85	10.30	152.96	3.72%
17	237.6	14.85	7.90	117.32	2.86%
18	252.5	14.85	6.20	92.07	2.24%
19	267.3	14.85	5.10	75.74	1.84%
20	282.2	14.85	4.30	63.86	1.55%
21	297.0	14.85	4.10	60.89	1.48%
22	311.9	14.85	4.00	59.40	1.45%
23	326.7	14.85	3.50	51.98	1.26%
24	341.6	14.85	3.10	46.04	1.12%
25	356.4	14.85	2.50	37.13	0.90%
26	371.3	9.30	0.00	0.00	0.00%
27	375.0	1.88	0.00	0.00	0.00%
28					
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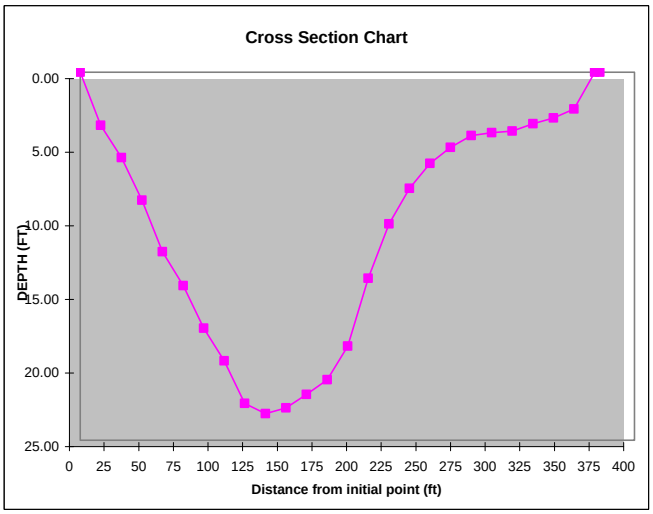
	Total	375.00		4109.00	100.00%



Data Collection Crew		Office Data Work	
Measurement made by:	Gianelloni	Data Inputed by / Date:	LaFleur 6/29/01
Notetaker/Recorder:	Schwartzenburg	Data Input Checked by / Date:	Schwartzenburg 6/29/01
Other:	LaFleur		

Note 1: WIDTH (ft) = sum of the width column
Note 2: AREA (sq.ft.) = sum of the area column
Note 3: AVG. DEPTH (ft) = area/width (using the values from this table)
Note 4: Width of element
Note 5: Area=Width*Depth for element
Note 6: Percent area = element area/total area x 100%
Note 7: Percent area should be less than 10% as per USGS standard.
Note 8: Blank fields are cleared from all calculations.
Note 9: The cross sections are taken at areas representative of the stream.

STREAM CROSS-SECTION SPREADSHEET

Site Number: BDS 7 **Subsegment:** 080701 **Waterbody:** Bayou Desiard

Site Description: 300 yds downstream of Control pipes

Type of Equipment: ☑ Fathometer ☐ Hydrotrac ☐ Manual

Initial Bank: ☐ RDB ☑ LDB

Tapedown: na

Guage Height: na

Date: 06/20/2001

WIDTH[1] (ft):	138.00
AREA[2] (ft^2):	750.97
AVG. DEPTH[3](ft):	5.44

Subsection	Distance from initial point (ft)	Width[4] (ft)	Depth (ft)	Area[5] (sq.ft.)	Area of element as % of Total Area[6 & 7]
1	0.0	4.52	3.50	15.84	
2	9.0	9.05	3.70	33.48	4.46%
3	18.1	9.05	4.40	39.82	5.30%
4	27.1	9.05	4.70	42.53	5.66%
5	36.2	9.05	5.10	46.15	6.15%
6	45.2	9.05	5.20	47.05	6.27%
7	54.3	9.05	5.30	47.96	6.39%
8	63.3	9.05	5.40	48.86	6.51%
9	72.4	9.05	5.30	47.96	6.39%
10	81.4	9.05	5.20	47.05	6.27%
11	90.5	9.05	6.30	57.01	7.59%
12	99.5	9.05	7.30	66.06	8.80%
13	108.6	9.05	8.10	73.30	9.76%
14	117.6	9.05	6.80	61.53	8.19%
15	126.7	9.05	5.10	46.15	6.15%
16	135.7	5.66	4.50	25.46	3.39%
17	138.0	1.13	4.20	4.76	0.63%
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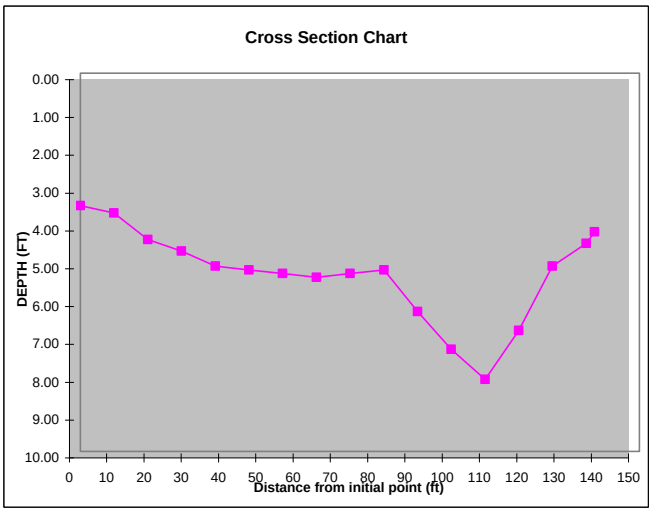
	Total	138.00		750.97	97.89%



Data Collection Crew		Office Data Work	
Measurement made by:	Cooley, Brignac, Kinard	Data Inputed by / Date:	Brignac, 6-22-01
Notetaker/Recorder:	Cooley, Brignac, Kinard	Data Input Checked by / Date:	R. Farlow 6-29-01
Other:			

Note 1: WIDTH (ft) = sum of the width column
Note 2: AREA (sq.ft.) = sum of the area column
Note 3: AVG. DEPTH (ft) = area/width (using the values from this table)
Note 4: Width of element
Note 5: Area=Width*Depth for element
Note 6: Percent area = element area/total area x 100%
Note 7: Percent area should be less than 10% as per USGS standard.
Note 8: Blank fields are cleared from all calculations.
Note 9: The cross sections are taken at areas representative of the stream.

STREAM CROSS-SECTION SPREADSHEET

Site Number: Site 8 **Subsegment:** 080701 **Waterbody:** Bayou Desiard

Site Description: 100 yards upstream of Hwy 134 bridge

Type of Equipment: ☐ Fathometer ☑ Hydrotrac ☐ Manual

Initial Bank: ☐ RDB ☑ LDB

Tapedown:

Guage Height:

Date: 06/20/2001

WIDTH[1] (ft):	69.99
AREA[2] (ft^2):	421.30
AVG. DEPTH[3](ft):	6.02

Subsection	Distance from initial point (ft)	Width[4] (ft)	Depth (ft)	Area[5] (sq.ft.)	Area of element as % of Total Area[6 & 7]
1	0.0	2.69	4.60	12.38	2.94%
2	5.4	5.38	5.00	26.92	6.39%
3	10.8	5.38	5.30	28.54	6.77%
4	16.2	5.38	6.80	36.61	8.69%
5	21.5	5.38	7.00	37.69	8.95%
6	26.9	5.38	6.80	36.61	8.69%
7	32.3	5.38	6.80	36.61	8.69%
8	37.7	5.38	6.40	34.46	8.18%
9	43.1	5.38	6.80	36.61	8.69%
10	48.5	5.38	6.80	36.61	8.69%
11	53.8	5.38	6.60	35.53	8.43%
12	59.2	5.38	5.80	31.23	7.41%
13	64.6	5.38	4.60	24.77	5.88%
14	70.0	2.69	2.50	6.73	1.60%
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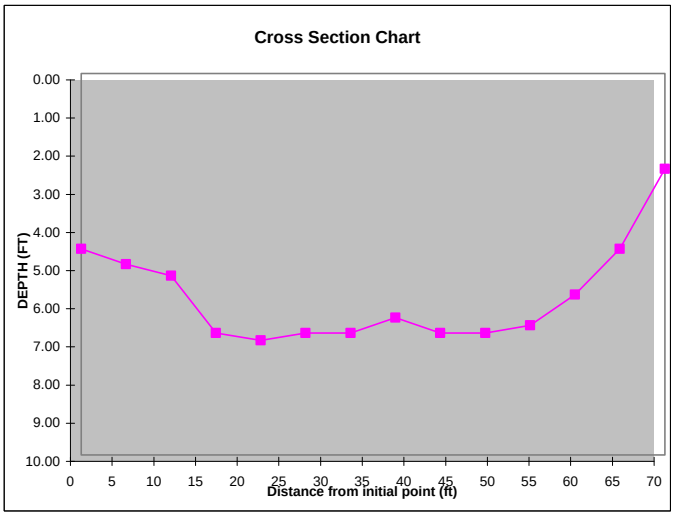
	Total	69.99		421.30	100.00%



Data Collection Crew		Office Data Work	
Measurement made by:	R. Brignac	Data Inputed by / Date:	D. Kinard / 6-28-01
Notetaker/Recorder:	D. Kinard	Data Input Checked by / Date:	R. Farlow 06/24/01
Other:	M. Cooley		

Note 1: WIDTH (ft) = sum of the width column
Note 2: AREA (sq.ft.) = sum of the area column
Note 3: AVG. DEPTH (ft) = area/width (using the values from this table)
Note 4: Width of element
Note 5: Area=Width*Depth for element
Note 6: Percent area = element area/total area x 100%
Note 7: Percent area should be less than 10% as per USGS standard.
Note 8: Blank fields are cleared from all calculations.
Note 9: The cross sections are taken at areas representative of the stream.

STREAM CROSS-SECTION SPREADSHEET

Site Number: BDS 9 **Subsegment:** 080701 **Waterbody:** Bayou Desiard

Site Description: Bayou Desiard at Richland Road

Type of Equipment: ☑ Fathometer ☐ Hydrotrac ☐ Manual

Initial Bank: ☐ RDB ☑ LDB

Tapedown: na

Guage Height: na

Date: 06/20/2001

WIDTH[1] (ft):	250.00
AREA[2] (ft^2):	1892.52
AVG. DEPTH[3](ft):	7.57

Subsection	Distance from initial point (ft)	Width[4] (ft)	Depth (ft)	Area[5] (sq.ft.)	Area of element as % of Total Area[6 & 7]
1	0.0	5.88	4.50	26.47	
2	11.8	11.77	4.00	47.06	2.49%
3	23.5	11.77	5.70	67.06	3.54%
4	35.3	11.77	7.10	83.53	4.41%
5	47.1	11.77	7.20	84.71	4.48%
6	58.8	11.77	8.30	97.65	5.16%
7	70.6	11.77	8.60	101.18	5.35%
8	82.4	11.77	8.70	102.36	5.41%
9	94.1	11.77	8.70	102.36	5.41%
10	105.9	11.77	8.60	101.18	5.35%
11	117.7	11.77	8.10	95.30	5.04%
12	129.4	11.77	8.00	94.12	4.97%
13	141.2	11.77	8.00	94.12	4.97%
14	152.9	11.77	9.00	105.89	5.59%
15	164.7	11.77	9.60	112.94	5.97%
16	176.5	11.77	9.80	115.30	6.09%
17	188.2	11.77	9.70	114.12	6.03%
18	200.0	11.77	8.70	102.36	5.41%
19	211.8	11.77	7.10	83.53	4.41%
20	223.5	11.77	5.80	68.24	3.61%
21	235.3	11.77	5.00	58.83	3.11%
22	247.1	7.35	4.00	29.40	1.55%
23	250.0	1.47	3.30	4.84	0.26%
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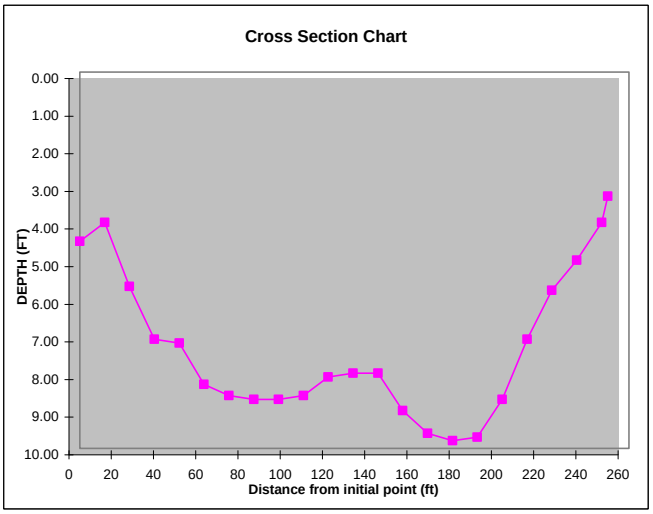
	Total	250.00		1892.52	98.60%



Data Collection Crew		Office Data Work	
Measurement made by:	Cooley, Brignac, Kinard	Data Inputed by / Date:	Brignac, 6-22-01
Notetaker/Recorder:	Cooley, Brignac, Kinard	Data Input Checked by / Date:	R. Farlow 6-29-01
Other:			

Note 1: WIDTH (ft) = sum of the width column
Note 2: AREA (sq.ft.) = sum of the area column
Note 3: AVG. DEPTH (ft) = area/width (using the values from this table)
Note 4: Width of element
Note 5: Area=Width*Depth for element
Note 6: Percent area = element area/total area x 100%
Note 7: Percent area should be less than 10% as per USGS standard.
Note 8: Blank fields are cleared from all calculations.
Note 9: The cross sections are taken at areas representative of the stream.

STREAM CROSS-SECTION SPREADSHEET

Site Number: Site 10 **Subsegment:** 080701 **Waterbody:** Bayou Desiard

Site Description: 250 yds downstream of Treasure Island Road

Type of Equipment: ☐ Fathometer ☑ Hydrotrac ☐ Manual

Initial Bank: ☐ RDB ☑ LDB

Tapedown:

Guage Height:

Date: 06/20/2001

WIDTH[1] (ft):	295.50
AREA[2] (ft[2]):	2350.80
AVG. DEPTH[3](ft):	7.96

Subsection	Distance from initial point (ft)	Width[4] (ft)	Depth (ft)	Area[5] (sq.ft.)	Area of element as % of Total Area[6 & 7]
1	0.0	7.30	6.30	45.96	1.96%
2	14.6	14.59	6.80	99.21	4.22%
3	29.2	14.59	7.20	105.05	4.47%
4	43.8	14.59	8.20	119.64	5.09%
5	58.4	14.59	9.00	131.31	5.59%
6	73.0	14.59	9.50	138.61	5.90%
7	87.5	14.59	9.60	140.06	5.96%
8	102.1	14.59	9.90	144.44	6.14%
9	116.7	14.59	9.80	142.98	6.08%
10	131.3	14.59	9.50	138.61	5.90%
11	145.9	14.59	9.20	134.23	5.71%
12	160.5	14.59	8.10	118.18	5.03%
13	175.1	14.59	7.40	107.97	4.59%
14	189.7	14.59	7.30	106.51	4.53%
15	204.3	14.59	7.20	105.05	4.47%
16	218.9	14.59	7.50	109.43	4.65%
17	233.4	14.59	8.00	116.72	4.97%
18	248.0	14.59	8.30	121.10	5.15%
19	262.6	14.59	7.40	107.97	4.59%
20	277.2	14.59	5.50	80.25	3.41%
21	291.8	9.15	3.50	32.01	1.36%
22	295.5	1.85	3.00	5.55	0.24%
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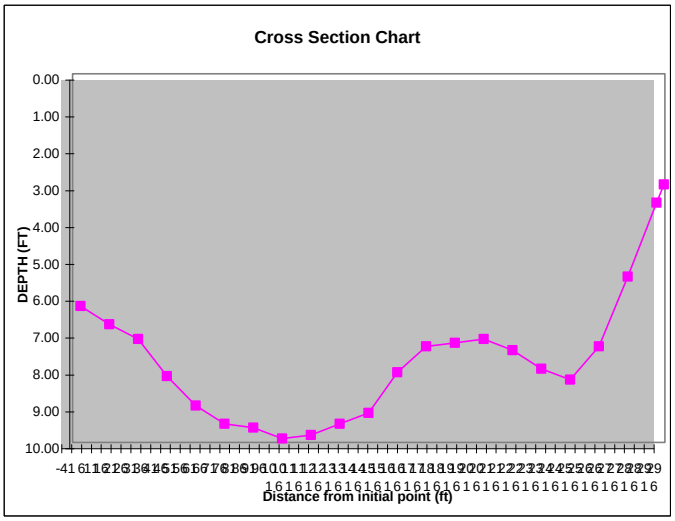
	Total	295.50		2350.80	100.00%



Data Collection Crew		Office Data Work	
Measurement made by:	D. Kinard	Data Inputed by / Date:	D. Kinard / 6-24-01
Notetaker/Recorder:	R. Brignac	Data Input Checked by / Date:	R. Farlow 06/24/01
Other:	M. Cooley		

Note 1: WIDTH (ft) = sum of the width column
Note 2: AREA (sq.ft.) = sum of the area column
Note 3: AVG. DEPTH (ft) = area/width (using the values from this table)
Note 4: Width of element
Note 5: Area=Width*Depth for element
Note 6: Percent area = element area/total area x 100%
Note 7: Percent area should be less than 10% as per USGS standard.
Note 8: Blank fields are cleared from all calculations.
Note 9: The cross sections are taken at areas representative of the stream.

STREAM CROSS-SECTION SPREADSHEET

Site Number: BDS 11 **Subsegment:** 080701 **Waterbody:** Bayou Desiard

Site Description: 300 yds upstream of Bayou Chauvin overflow

Type of Equipment: ☑ Fathometer ☐ Hydrotrac ☐ Manual

Initial Bank: ☐ RDB ☑ LDB

Tapedown: na

Guage Height: na

Date: 06/20/2001

WIDTH[1] (ft):	265.40
AREA[2] (ft[2]):	2390.48
AVG. DEPTH[3](ft):	9.01

Subsection	Distance from initial point (ft)	Width[4] (ft)	Depth (ft)	Area[5] (sq.ft.)	Area of element as % of Total Area[6 & 7]
1	0.0	6.32	4.40	27.80	
2	12.6	12.64	5.70	72.04	3.01%
3	25.3	12.64	7.60	96.05	4.02%
4	37.9	12.64	9.20	116.27	4.86%
5	50.6	12.64	9.20	116.27	4.86%
6	63.2	12.64	12.60	159.24	6.66%
7	75.8	12.64	13.10	165.56	6.93%
8	88.5	12.64	13.60	171.88	7.19%
9	101.1	12.64	14.10	178.20	7.45%
10	113.7	12.64	13.90	175.67	7.35%
11	126.4	12.64	10.50	132.70	5.55%
12	139.0	12.64	9.30	117.53	4.92%
13	151.7	12.64	8.90	112.48	4.71%
14	164.3	12.64	8.60	108.69	4.55%
15	176.9	12.64	8.30	104.90	4.39%
16	189.6	12.64	7.80	98.58	4.12%
17	202.2	12.64	7.30	92.26	3.86%
18	214.8	12.64	6.70	84.67	3.54%
19	227.5	12.64	6.20	78.36	3.28%
20	240.1	12.64	5.90	74.56	3.12%
21	252.8	12.64	5.80	73.30	3.07%
22	265.4	6.32	5.30	33.49	1.40%
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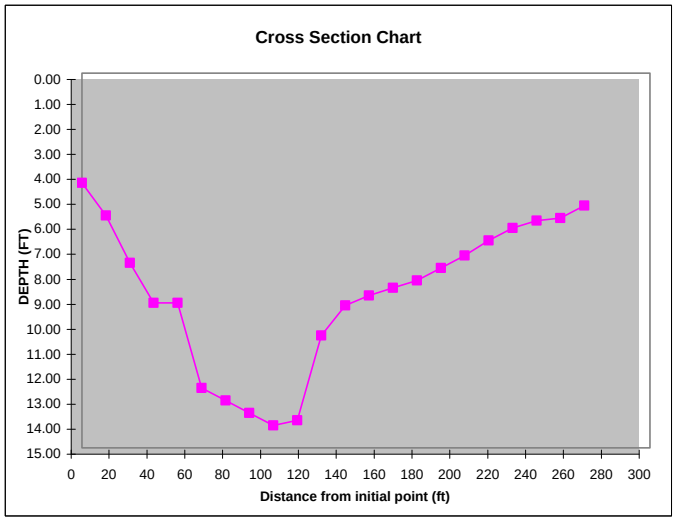
	Total	265.40		2390.48	98.84%



Data Collection Crew		Office Data Work	
Measurement made by:	Kinard, Brignac, Cooley	Data Inputed by / Date:	Brignac, 6-22-01
Notetaker/Recorder:	Kinard, Brignac, Cooley	Data Input Checked by / Date:	R. Farlow 2/29/01
Other:			

Note 1: WIDTH (ft) = sum of the width column
Note 2: AREA (sq.ft.) = sum of the area column
Note 3: AVG. DEPTH (ft) = area/width (using the values from this table)
Note 4: Width of element
Note 5: Area=Width*Depth for element
Note 6: Percent area = element area/total area x 100%
Note 7: Percent area should be less than 10% as per USGS standard.
Note 8: Blank fields are cleared from all calculations.
Note 9: The cross sections are taken at areas representative of the stream.

STREAM CROSS-SECTION SPREADSHEET

Site Number: BDS13 **Subsegment:** 080701 **Waterbody:** Bayou Desiard

Site Description: 50 yds downstream of Inabnet Rd.

Type of Equipment: ☑ Fathometer ☐ Hydrotrac ☐ Manual

Initial Bank: ☐ RDB ☑ LDB

Tapedown: na

Guage Height: na

Date: 06/20/2001

WIDTH[1] (ft):	324.95
AREA[2] (ft[2]):	2411.02
AVG. DEPTH[3] (ft):	7.42

Subsection	Distance from initial point (ft)	Width[4] (ft)	Depth (ft)	Area[5] (sq.ft.)	Area of element as % of Total Area[6 & 7]
1	0.0	6.70	3.30	22.11	
2	13.4	13.40	3.90	52.27	2.17%
3	26.8	13.40	4.60	61.65	2.56%
4	40.2	13.40	5.20	69.69	2.89%
5	53.6	13.40	5.70	76.39	3.17%
6	67.0	13.40	5.80	77.73	3.22%
7	80.4	13.40	6.10	81.75	3.39%
8	93.8	13.40	6.20	83.09	3.45%
9	107.2	13.40	6.60	88.45	3.67%
10	120.6	13.40	7.00	93.81	3.89%
11	134.0	13.40	7.10	95.15	3.95%
12	147.4	13.40	7.40	99.17	4.11%
13	160.8	13.40	7.30	97.83	4.06%
14	174.2	13.40	6.90	92.47	3.84%
15	187.6	13.40	6.40	85.77	3.56%
16	201.0	13.40	5.90	79.07	3.28%
17	214.4	13.40	6.10	81.75	3.39%
18	227.8	13.40	7.30	97.83	4.06%
19	241.2	13.40	9.60	128.66	5.34%
20	254.6	13.40	10.50	140.72	5.84%
21	268.0	13.40	10.50	140.72	5.84%
22	281.4	13.40	11.30	151.44	6.28%
23	294.8	13.40	11.60	155.46	6.45%
24	308.2	13.40	11.50	154.12	6.39%
25	321.6	8.35	10.40	86.86	3.60%
26	325.0	1.65	10.30	17.01	0.71%
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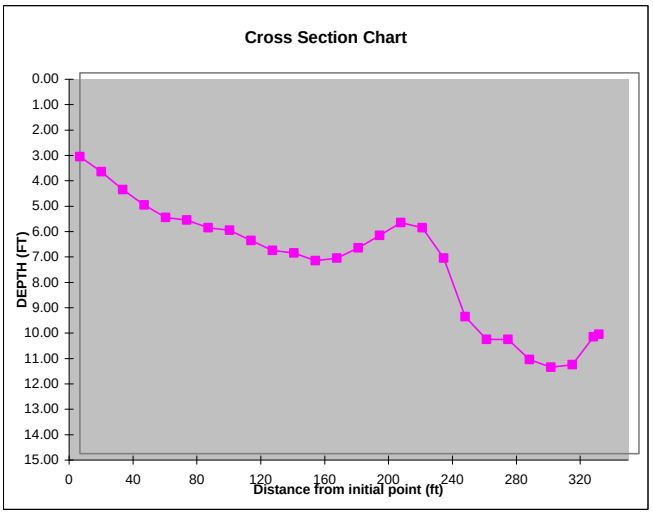
	Total	324.95		2411.02	99.08%



Data Collection Crew		Office Data Work	
Measurement made by:	Brignac, Cooley, Kinard	Data Inputed by / Date:	Brignac, 6-22-01
Notetaker/Recorder:	Brignac, Cooley, Kinard	Data Input Checked by / Date:	R. Farlow 6/29/01
Other:			

Note 1: WIDTH (ft) = sum of the width column
Note 2: AREA (sq.ft.) = sum of the area column
Note 3: AVG. DEPTH (ft) = area/width (using the values from this table)
Note 4: Width of element
Note 5: Area=Width*Depth for element
Note 6: Percent area = element area/total area x 100%
Note 7: Percent area should be less than 10% as per USGS standard.
Note 8: Blank fields are cleared from all calculations.
Note 9: The cross sections are taken at areas representative of the stream.

STREAM CROSS-SECTION SPREADSHEET

Site Number: Site 14 **Subsegment:** 080701 **Waterbody:** Bayou Desiard

Site Description: 50 yds upstream of Stadium Drive

Type of Equipment: ☐ Fathometer ☑ Hydrotrac ☐ Manual

Initial Bank: ☐ RDB ☑ LDB

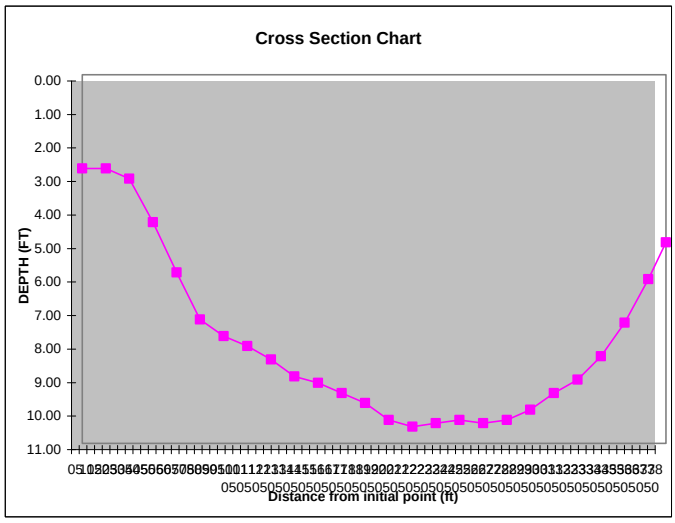
Tapedown:

Guage Height:

Date: 06/20/2001

WIDTH[1] (ft):	380.00
AREA[2] (ft^2):	3080.11
AVG. DEPTH[3](ft):	8.11

Subsection	Distance from initial point (ft)	Width[4] (ft)	Depth (ft)	Area[5] (sq.ft.)	Area of element as % of Total Area[6 & 7]
1	0.0	7.68	2.80	21.49	0.70%
2	15.4	15.35	2.80	42.99	1.40%
3	30.7	15.35	3.10	47.60	1.55%
4	46.1	15.35	4.40	67.56	2.19%
5	61.4	15.35	5.90	90.59	2.94%
6	76.8	15.35	7.30	112.08	3.64%
7	92.1	15.35	7.80	119.76	3.89%
8	107.5	15.35	8.10	124.36	4.04%
9	122.8	15.35	8.50	130.51	4.24%
10	138.2	15.35	9.00	138.18	4.49%
11	153.5	15.35	9.20	141.25	4.59%
12	168.9	15.35	9.50	145.86	4.74%
13	184.2	15.35	9.80	150.46	4.89%
14	199.6	15.35	10.30	158.14	5.13%
15	214.9	15.35	10.50	161.21	5.23%
16	230.3	15.35	10.40	159.68	5.18%
17	245.7	15.35	10.30	158.14	5.13%
18	261.0	15.35	10.40	159.68	5.18%
19	276.4	15.35	10.30	158.14	5.13%
20	291.7	15.35	10.00	153.54	4.98%
21	307.1	15.35	9.50	145.86	4.74%
22	322.4	15.35	9.10	139.72	4.54%
23	337.8	15.35	8.40	128.97	4.19%
24	353.1	15.35	7.40	113.62	3.69%
25	368.5	13.43	6.10	81.95	2.66%
26	380.0	5.76	5.00	28.79	0.93%
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
	Total	380.00		3080.11	100.00%



Data Collection Crew		Office Data Work	
Measurement made by:	R. Brignac	Data Inputed by / Date:	D. Kinard / 6- 29- 01
Notetaker/Recorder:	D. Kinard	Data Input Checked by / Date:	
Other:	M. Cooley		

Note 1: WIDTH (ft) = sum of the width column
Note 2: AREA (sq.ft.) = sum of the area column
Note 3: AVG. DEPTH (ft) = area/width (using the values from this table)
Note 4: Width of element
Note 5: Area=Width*Depth for element
Note 6: Percent area = element area/total area x 100%
Note 7: Percent area should be less than 10% as per USGS standard.
Note 8: Blank fields are cleared from all calculations.
Note 9: The cross sections are taken at areas representative of the stream.

STREAM CROSS-SECTION SPREADSHEET

Site Number: BDs 20 **Subsegment:** 080701 **Waterbody:** Hannah's Run

Site Description: Tree line to tree line measurement in Hannah' Run

Type of Equipment: ☐ Fathometer ☐ Hydrotrac ☑ Manual

Initial Bank: ☐ RDB ☑ LDB

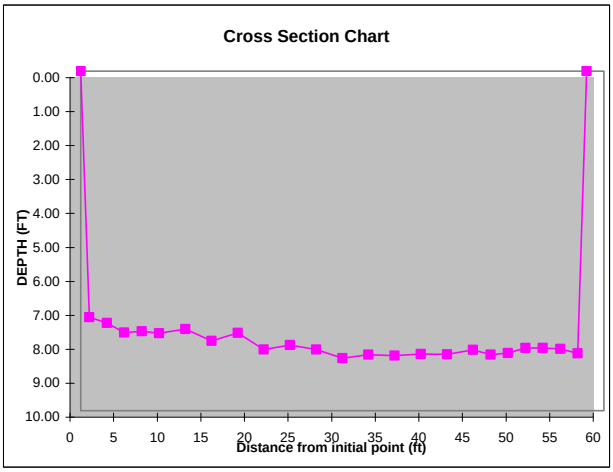
Tapedown:

Guage Height:

Date: 06/20/2001

WIDTH[1] (ft):	58.00
AREA[2] (ft^2):	459.73
AVG. DEPTH[3](ft):	7.93

Subsection	Distance from initial point (ft)	Width[4] (ft)	Depth (ft)	Area[5] (sq.ft.)	Area of element as % of Total Area[6 & 7]
1	0.0	0.50	0.00	0.00	
2	1.0	1.50	7.25	10.88	2.37%
3	3.0	2.00	7.42	14.84	3.23%
4	5.0	2.00	7.70	15.40	3.35%
5	7.0	2.00	7.66	15.32	3.33%
6	9.0	2.50	7.72	19.30	4.20%
7	12.0	3.00	7.60	22.80	4.96%
8	15.0	3.00	7.95	23.85	5.19%
9	18.0	3.00	7.71	23.13	5.03%
10	21.0	3.00	8.20	24.60	5.35%
11	24.0	3.00	8.07	24.21	5.27%
12	27.0	3.00	8.20	24.60	5.35%
13	30.0	3.00	8.45	25.35	5.51%
14	33.0	3.00	8.35	25.05	5.45%
15	36.0	3.00	8.38	25.14	5.47%
16	39.0	3.00	8.33	24.99	5.44%
17	42.0	3.00	8.34	25.02	5.44%
18	45.0	2.50	8.21	20.53	4.46%
19	47.0	2.00	8.35	16.70	3.63%
20	49.0	2.00	8.30	16.60	3.61%
21	51.0	2.00	8.15	16.30	3.55%
22	53.0	2.00	8.15	16.30	3.55%
23	55.0	2.00	8.18	16.36	3.56%
24	57.0	1.50	8.31	12.47	2.71%
25	58.0	0.50	0.00	0.00	0.00%
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
	Total	58.00		459.73	100.00%



Data Collection Crew		Office Data Work	
Measurement made by:	Farlow, R	Data Inputed by / Date:	Farlow, R
Notetaker/Recorder:	Phillippe, J	Data Input Checked by / Date:	
Other:			

Note 1: WIDTH (ft) = sum of the width column
Note 2: AREA (sq.ft.) = sum of the area column
Note 3: AVG. DEPTH (ft) = area/width (using the values from this table)
Note 4: Width of element
Note 5: Area=Width*Depth for element
Note 6: Percent area = element area/total area x 100%
Note 7: Percent area should be less than 10% as per USGS standard.
Note 8: Blank fields are cleared from all calculations.
Note 9: The cross sections are taken at areas representative of the stream.

DANGER
RESTRICTED
AREA
KEEP BACK
30 FEET

1973

DANGER

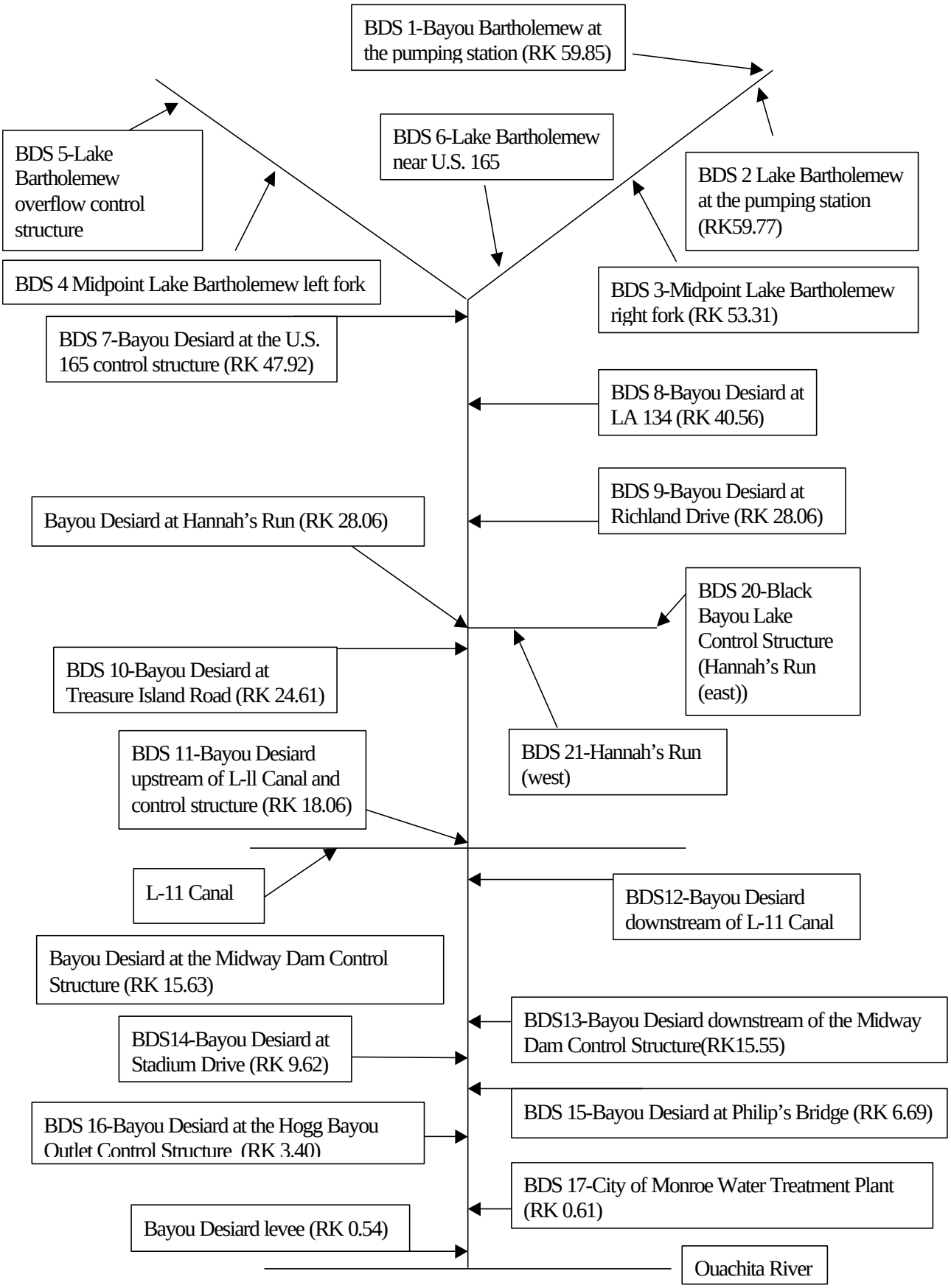
APPENDIX G - Historical and Ambient Data

Bayou Desiard at control structure in Monroe, Louisiana

This page last updated on: 02/05/2001

DATE	TIME	DEPTH	FIELD	WATER TEMP	D.O.	FIELD COND.	SECCHI DISK	SALINITY	ALKALINITY	HARDNESS	TURBIDITY	COLOR PT-CO	CHLORIDES	SULFATES	T.S.S.	T.D.S.	T.S.	NO2+NO3	T.K.N.	TOTAL	T.O.C.
		meters	PH	(C)	mg/l	umhos	inches	ppt	mg	mg	NTU	units	mg	mg	mg	mg	mg	mg/l	mg/l	mg/l	mg/l
12/14/1999	1000	1	7.1	13.8	5.1	101	.	.	32.4	25.1	3.9	25	5.9	2.2	4	83	.	0.09	0.52	0.09	9.3
11/16/1999	955	1	6.8	17.9	7.3	116	.	.	38.6	30.1	2.9	25	7.8	1.3	5	69.3	.	0.03	0.74	0.05	9.2
10/19/1999	1010	1	7.5	22	2.8	117	.	.	41.3	32.7	3.6	25	8.2	1.3	7	83	.	0.02	0.45	0.06	8
09/21/1999	1005	1	7.3	26.2	2.8	107	.	.	41.4	30.5	3.6	25	7.3	1.3	8	85	.	0.04	0.28	0.13	7
08/17/1999	1020	1	6.3	31.2	5.5	78	.	.	28	19.8	7	30	5.6	1.3	39	61	.	0.02	0.93	0.09	9.2
07/20/1999	955	1	6.2	31.7	5.6	64	.	.	21.7	15.3	3.1	20	4.5	1.5	8	50	.	0.02	0.87	0.13	1.66
06/15/1999	1200	1	7	29.8	7.4	64	.	.	22.9	16.2	3.9	20	4.9	2.2	8.7	53.9	.	0.02	0.83	0.08	7.7
05/18/1999	1055	1	6.8	27.2	8	84	.	.	27.6	22.1	7.5	40	5.1	3.5	7	54	.	0.04	1.03	0.12	7.49
04/20/1999	1045	1	7.1	20.4	8.9	97	.	.	30.8	27.9	8.5	40	5.5	6.3	23.4	146	.	0.03	1	0.14	9.1
03/16/1999	1050	1	7.1	13.5	7.9	103	.	.	33.3	26.9	4.7	30	7.2	3.4	5.5	136	.	0.08	0.53	0.11	10.8
02/16/1999	850	1	6.5	14.8	9.7	108	.	.	29.6	27	7.6	30	7.5	7.9	21	118	.	0.02	0.61	0.07	5.3
01/19/1999	945	1	6.9	10.4	11.9	119	.	.	34.7	29.7	5.7	30	9.3	3.8	8	64.1	.	0.02	0.98	0.05	6.6

APPENDIX H - Maps and Diagrams


BDS 1-Bayou Bartholemew at the pumping station (RK 59.85)
BDS 5-Lake Bartholemew overflow control structure
BDS 6-Lake Bartholemew near U.S. 165
BDS 2 Lake Bartholemew at the pumping station (RK59.77)
BDS 4 Midpoint Lake Bartholemew left fork
BDS 3-Midpoint Lake Bartholemew right fork (RK 53.31)
BDS 7-Bayou Desiard at the U.S. 165 control structure (RK 47.92)
BDS 8-Bayou Desiard at LA 134 (RK 40.56)
BDS 9-Bayou Desiard at Richland Drive (RK 28.06)
Bayou Desiard at Hannah's Run (RK 28.06)
BDS 20-Black Bayou Lake Control Structure (Hannah's Run (east))
BDS 10-Bayou Desiard at Treasure Island Road (RK 24.61)
BDS 21-Hannah's Run (west)
BDS 11-Bayou Desiard upstream of L-ll Canal and control structure (RK 18.06)
L-11 Canal
BDS12-Bayou Desiard downstream of L-11 Canal
Bayou Desiard at the Midway Dam Control Structure (RK 15.63)
BDS13-Bayou Desiard downstream of the Midway Dam Control Structure(RK15.55)
BDS14-Bayou Desiard at Stadium Drive (RK 9.62)
BDS 15-Bayou Desiard at Philip's Bridge (RK 6.69)
BDS 16-Bayou Desiard at the Hogg Bayou Outlet Control Structure (RK 3.40)
BDS 17-City of Monroe Water Treatment Plant (RK 0.61)
Bayou Desiard levee (RK 0.54)
Ouachita River

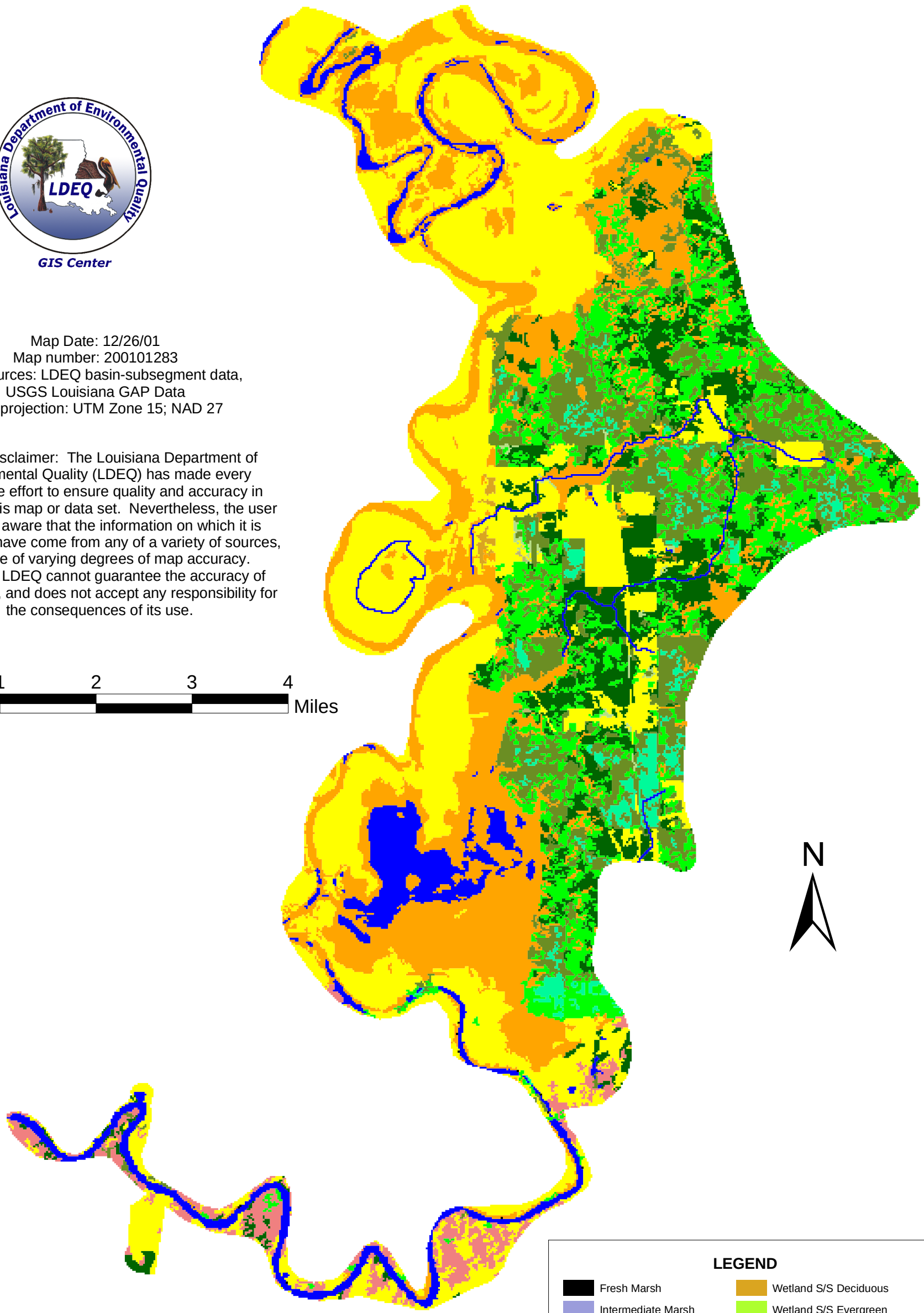
LDEQ BASIN SUBSEGMENT 080701

USGS LOUISIANA GAP LAND COVER

Louisiana Department of Environmental Quality
LDEQ
GIS Center

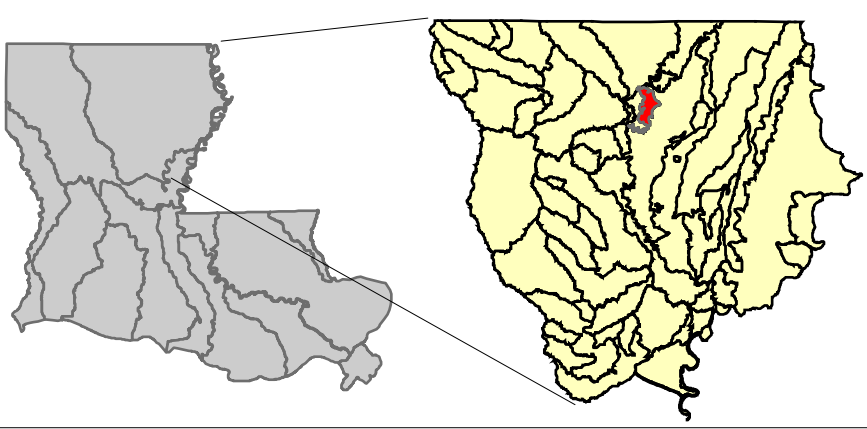
Map Date: 12/26/01
Map number: 200101283
Map sources: LDEQ basin-subsegment data,
USGS Louisiana GAP Data
Map projection: UTM Zone 15; NAD 27

LDEQ Disclaimer: The Louisiana Department of Environmental Quality (LDEQ) has made every reasonable effort to ensure quality and accuracy in producing this map or data set. Nevertheless, the user should be aware that the information on which it is based may have come from any of a variety of sources, which are of varying degrees of map accuracy. Therefore, LDEQ cannot guarantee the accuracy of this data set, and does not accept any responsibility for the consequences of its use.

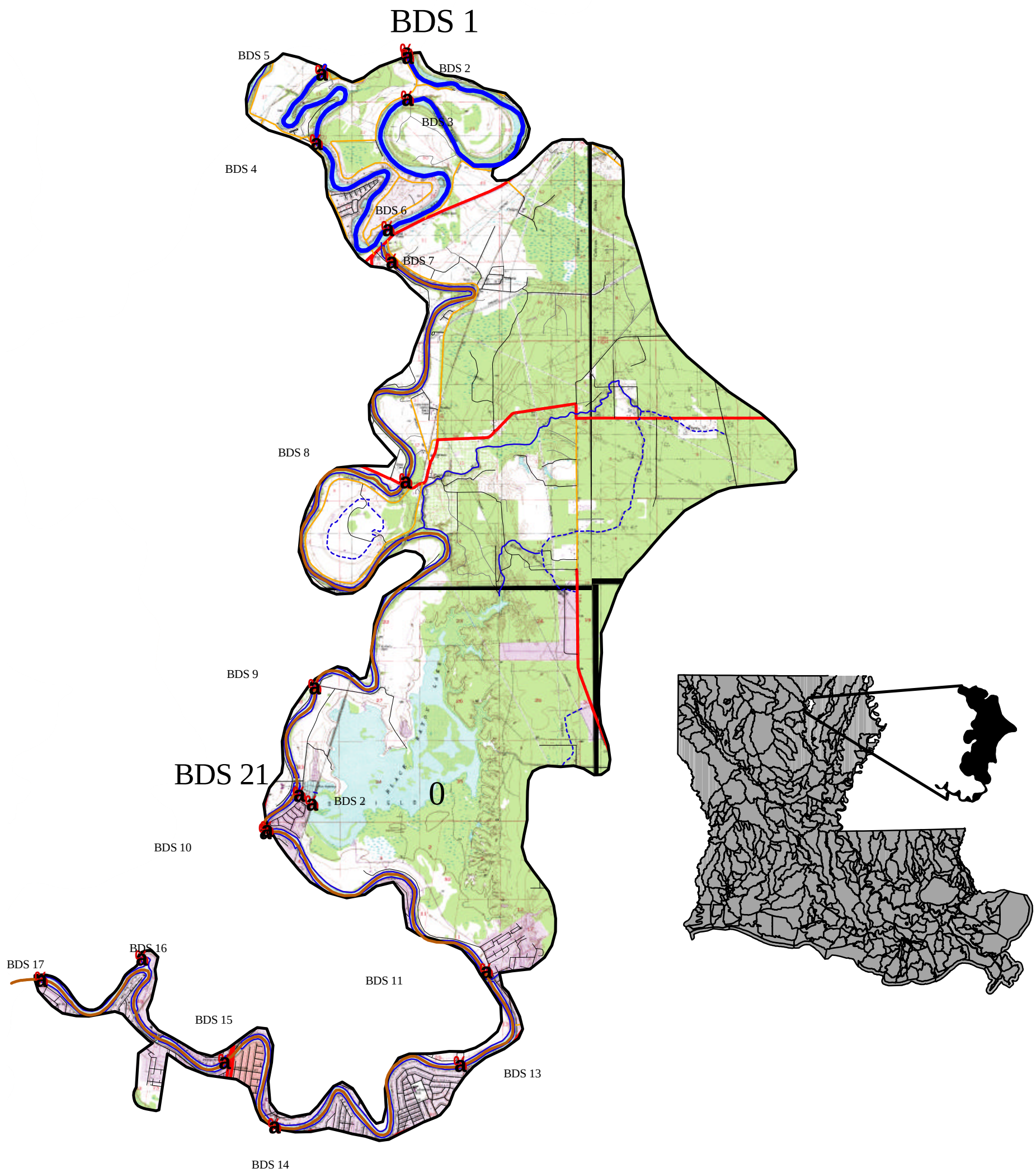


LEGEND

- Fresh Marsh
- Intermediate Marsh
- Brackish Marsh
- Saline Marsh
- Wetland Forest Deciduous
- Wetland Forest Evergreen
- Wetland Forest Mixed
- Upland Forest Deciduous
- Upland Forest Evergreen
- Upland Forest Mixed
- Dense Pine Thicket
- Wetland S/S Deciduous
- Wetland S/S Evergreen
- Wetland S/S Mixed
- Upland S/S Deciduous
- Upland S/S Evergreen
- Upland S/S Mixed
- Agriculture/Cropland/Grassland
- Vegetated Urban
- Non-Vegetated Urban
- Wetland Barren
- Upland Barren
- Water



SUBSEGMENT 080701 VICINITY MAP



N

Environmental Technology Division\Engineering Group 2
Map Number: 200103036
Map Date: 12/17/01
Map Projection: UTM, NAD 27, Zone 15
Map Source: LDEQ Survey Data, USGS, ESRI Street Map

LDEQ Disclaimer:

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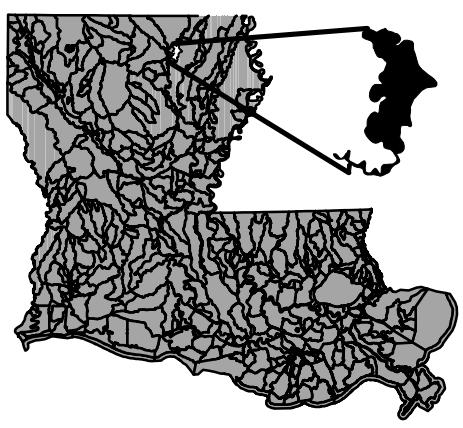
3 0 3 6 9 12 15 Kilometers

BAYOU DESIARD NEAR LAKE BARTHOLEMEW

BDS 1
20.0
BDS 2
BDS 3
15.0
BDS 4
5.0
BDS 5
BDS 6
10.0
BDS 7
45.0
BDS 8
40.0

Par Rd 1122
Par Rd 1104
Par Rd 1105
Par Rd 1103
Par Rd 1101
Par Rd 1102
Par Rd
Ouachita City
Harvey Gregg
Old Sterlington
Sterlington
Eastlake
Guthrie
Cargas
US 165
BARTHOLEMEW LANDING SUBD.
PERRYVILLE POWER STATION
GUTHRIE COMPRESSOR STATION
LA 136
Texas Gas
165
Curtis
Swartz Fairbanks
LA 134
Lee Morgan
Fairbanks School Loop
Keystone
Frenchmans Bend Rd.



N

Environmental Technology Division\Engineering Group 2
Map Number: 200103037
Map Date: 12/17/01
Map Projection: UTM, NAD 27, Zone 15
Map Source: LDEQ Survey Data, USGS, ESRI Street Map

LDEQ Disclaimer:

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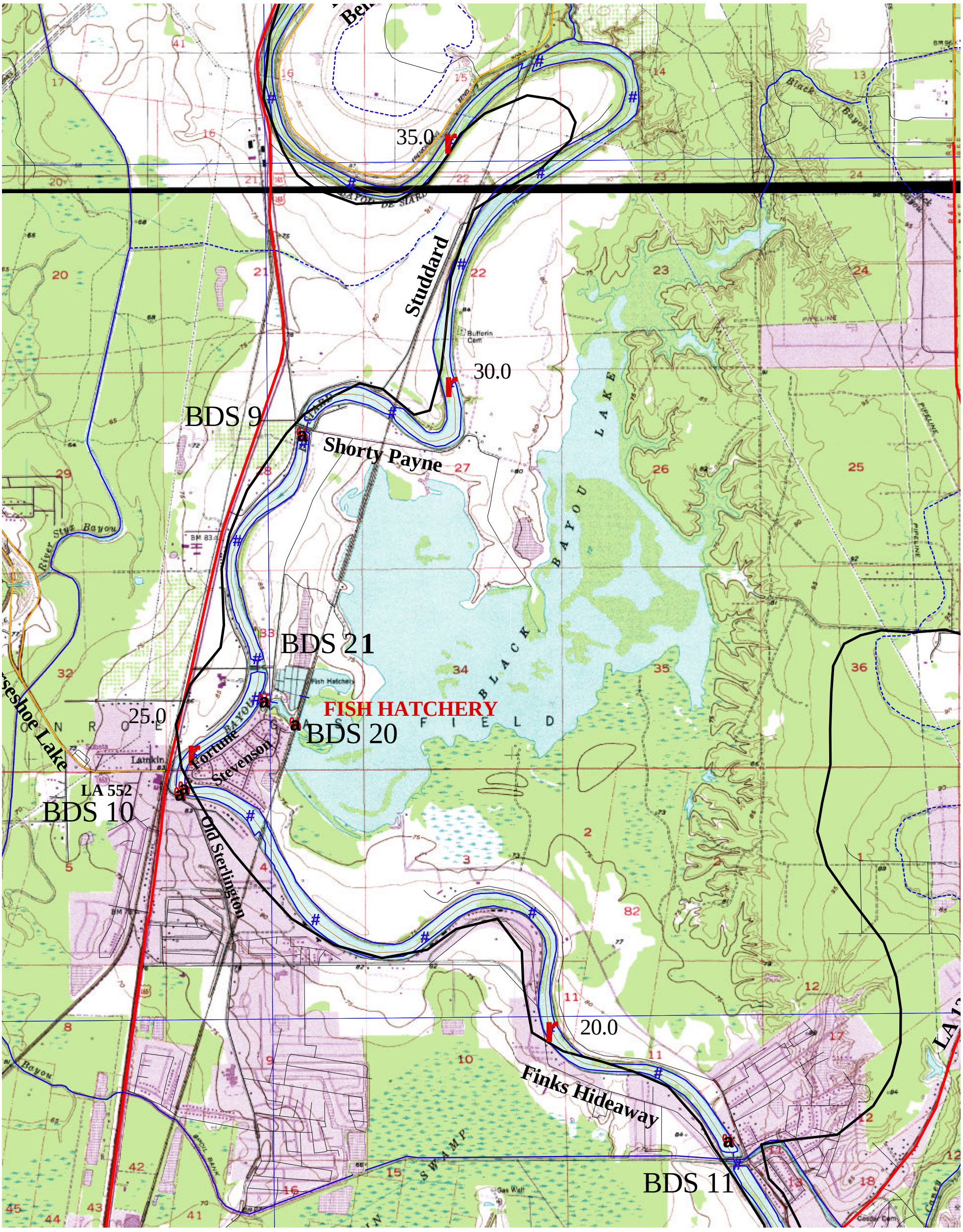
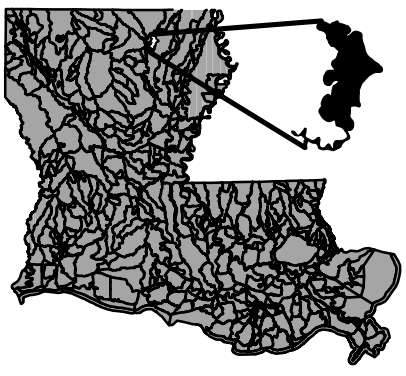
0.6 0 0.6 1.2 1.8 2.4 3 3.6 Miles

BAYOU DESIARD NEAR BLACK BAYOU LAKE



Environmental Technology Division\Engineering Group 2
Map Number: 200103038
Map Date: 10/09/01
Map Projection: UTM, NAD 27, Zone 15
Map Source: LDEQ Survey Data, USGS, ESRI Street Map



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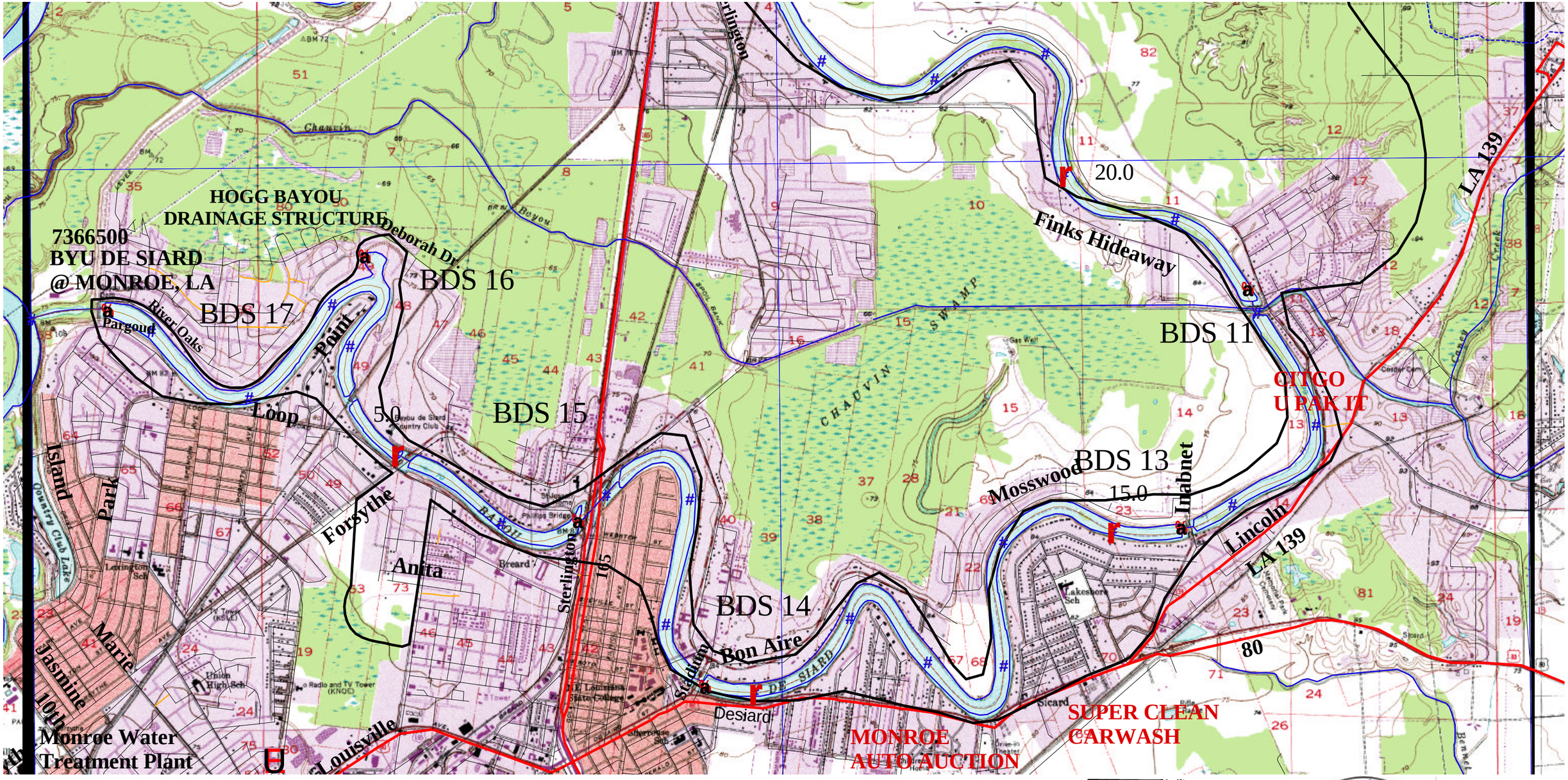
0.5 0 0.5 1 Miles

BAYOU DESIARD NEAR MONROE, LOUISIANA



LDEQ Disclaimer:

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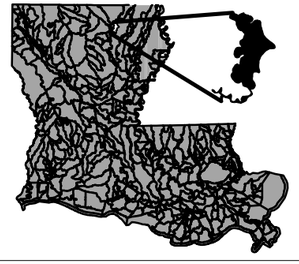
Environmental Technology Division\Engineering Group 2
Map Number: 200103039
Map Date: 12/17/01
Map Projection: UTM, NAD 27, Zone 15
Map Source: LDEQ Survey Data, USGS, ESRI Street Map

1 0 1 Miles



N
W E
S

APPENDIX I - Sensitivity Analysis

BAYOU DESIARD SENSITIVITY ANALYSIS RESULTS

Developed from the Bayou Desiard watershed calibration model.

Input data into shaded cells.

Minimum D. O. values are based upon the entire watershed model.

A = Calibration Model Minimum D.O. = 1.97 mg/L at RKM 34.25

Parameter	+ 30 % Parameter Change			- 30 % Parameter Change		
	min D.O. (mg/L)	RKM Location (km)	% Min D.O. Change	min D.O. (mg/L)	RKM Location (km)	% Min D.O. Change
	B	C	D=(B-A)/Ax100	E	F	G=(E-A)/A x 100
Reaeration	2.89	47.92	46.70	0.95	34.25	-51.78
Velocity	0.66	34.7	-66.50	2.46	26.6	24.87
Depth	2.48	26.63	25.89	0.50	47.9	-74.62
Initial Chlorophyll a	2.57	26.63	30.46	0.88	47.92	-55.33
Benthal	1.16	27.10-26.63	-41.12	2.06	34.74	4.57
Initial Temperature	1.61	26.63	-18.27	1.76	34.74	-10.66
Baseflow	1.96	26.63	-0.51	1.64	47.92	-16.75
Headwater Flow	1.96	26.63	-0.51	1.64	47.92	-16.75
Aerobic BOD Decay	1.80	26.63	-8.63	2.03	34.25	3.05
BOD Settling	1.94	34.74-34.25	-1.52	1.88	26.63	-4.57
Macrophytes	2.01	26.63	2.03	1.63	34.74	-17.26
Headwater BOD	1.83	26.63	-7.11	1.97	34.25	0.00
NCM Decay	1.93	26.63	-2.03	2.03	34.25	3.05
Nonconservative Material (NCM) Settling	1.99	34.25	1.02	1.95	26.63	-1.02
Wasteload Flow	1.97	34.25	0.00	1.97	34.25	0.00
Wasteload D.O.	1.97	34.25	0.00	1.97	34.25	0.00
Wasteload BOD	1.97	34.25	0.00	1.97	34.25	0.00
Wasteload NCM	1.97	34.25	0.00	1.97	34.25	0.00
Wasteload Organic Nitrogen	1.97	34.25	0.00	1.97	34.25	0.00
Wasteload Ammonia Nitrogen	1.97	34.25	0.00	1.97	34.25	0.00
Wasteload Nitrate Nitrogen	1.97	34.25	0.00	1.97	34.25	0.00
Wasteload Temperature	1.97	34.25	0.00	1.97	34.25	0.00
Headwater D.O.	1.97	34.25	0.00	1.97	34.25	0.00
Headwater NCM	1.97	34.25	0.00	1.97	34.25	0.00
Headwater Organic Nitrogen	1.97	34.25	0.00	1.97	34.25	0.00
Headwater Ammonia	1.97	34.25	0.00	1.97	34.25	0.00
Headwater Nitrate Nitrogen	1.97	34.25	0.00	1.97	34.25	0.00
Headwater Temperature	1.97	34.25	0.00	1.97	34.25	0.00
Headwater Chlorophyll a	1.97	34.25	0.00	1.97	34.25	0.00