BAYOU MARINGOUIN WATERSHED TMDLS FOR BIOCHEMICAL OXYGEN-DEMANDING SUBSTANCES AND NUTRIENTS

SUBSEGMENT 120111

SURVEYED 8/27 – 29/2001

TMDL REPORT

By:

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Water Permits Division
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Louisiana Department of Environmental Quality

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FTN Associates, Ltd.

EXECUTIVE SUMMARY

This report presents the results of a watershed based, calibrated modeling analysis of Bayou Maringouin. The modeling was conducted to establish a TMDL for biochemical oxygen-demanding pollutants for the Bayou Maringouin watershed. The model extends from the headwaters near Valverda, LA to the confluence of Bayou Maringouin with Ramah Canal near Ramah, LA. Bayou Maringouin is located in south-central Louisiana and its watershed includes one unnamed tributary. The watershed area is 131,058,000 square meters or 50.6 square miles. Bayou Maringouin is in the Terrebonne River Basin and includes Water Quality Subsegment 120111. The area is sparsely populated and land use is dominated by agriculture.

The TMDL in this report was originally developed by LDEQ during 2004-2005 based on the DO criterion that was effective at that time (5.0 mg/L year round). The final report was dated March 24, 2005 and was approved by EPA. Since that time, the DO criterion for this subsegment has been revised to 2.3 mg/L for March through November and 5.0 mg/L for December through February. During 2010, this TMDL has been revised by FTN Associates, Ltd. to reflect the new DO criteria. This revision also incorporated changes in the inventory of point source dischargers since the 2005 report. Once the inventory of dischargers was revised, the calibrated model (unchanged from 2005) was rerun to simulate the impact from both point and nonpoint sources of oxygen demand on the level of DO under critical conditions for summer and winter. TMDLs for oxygen-demanding substances were recalculated based upon the new model results.

Input data for the calibration model was developed from data collected during the August, 2001 intensive survey; data collected by LDEQ at monitoring stations in the watershed; the LDEQ Reference Stream Study; USGS drainage area and low flow publications; and data garnered from several previous LDEQ studies on non-point source loadings. A satisfactory calibration was achieved for the main stem. For the projection models, data was taken from ambient temperature records. The Louisiana TMDL Technical Procedures manual (dated 05/26/2010) has been followed in this study.

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

Bayou Maringouin, Subsegment 120111, is on the 2002 and 2004 303(d) list. The Subsegment was found to be “not supporting” its designated uses of primary and secondary contact recreation and fish and wildlife propagation. Bayou Maringouin was subsequently scheduled for TMDL development with other listed waters in the Terrebonne River Basin. The suspected cause of impairment for fish and wildlife propagation was organic enrichment/ low DO, and the suspected source was agriculture. There are no point source dischargers to this subsegment. This TMDL addresses the organic enrichment/ low DO impairment.

This TMDL establishes load limitations for oxygen-demanding substances and goals for reduction of those pollutants. LDEQ’s position is that when oxygen-demanding loads from point and nonpoint sources are reduced in order to ensure that the dissolved oxygen criterion is supported, nutrients are also reduced. The 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 reduce the nutrient loading from those sources.

Louisiana does not have numeric nutrient criteria at the present time. LDEQ is developing numeric nutrient criteria for waterbody types based on ecoregions in accordance with LDEQ's plan "Developing Nutrient Criteria for Louisiana 2006" which can be found at:

http://www.deq.louisiana.gov/portal/Portals/0/planning/LA%20Nutrient%20Strategy%20Plan%20Final%20FOR%20WEB.pdf

Water body types for nutrient criteria development in Louisiana are 1) inland rivers and streams; 2) freshwater wetlands; 3) freshwater lakes and reservoirs; 4) big rivers and floodplains/boundary rivers and associated water bodies; and 5) estuarine and coastal waters (including up to Louisiana's three mile boundary in the Gulf of Mexico). Proposed approaches for nutrient criteria development are currently under review by LDEQ and EPA. Nutrient criteria can be implemented upon state promulgation and EPA approval as per 40 CFR 131.21.

LDEQ recommends that all facilities discharging to impaired waterbodies take a proactive approach and prepare to receive nutrient limitations in the near future. Such a proactive approach should include nutrient monitoring and documentation through facility Discharge Monitoring Reports (DMRs) in order to assess their nutrient loads and the need to modify their treatment processes for nutrient removal.

The results of projection modeling for Bayou Maringouin show that the water quality standard for dissolved oxygen of 5.0 mg/L from December through February and 2.3 mg/L from March through November will require man made nonpoint sources to be reduced by 88% in the winter projection and 98% in the summer projection. This results in a minimum DO of 5.00 mg/L for the winter projection and a minimum DO of 2.35 mg/L for the summer projection.

The designated use of Bayou Maringouin of anything other than a drainage ditch is questionable. Yet, designated uses in this subsegment are primary and secondary contact recreation and fish and wildlife propagation. These uses carry with them the most stringent water quality criteria short of drinking water sources. In its upper reaches the only reason there is any substantial volume of water during the summer critical conditions is that an artificially elevated level is maintained by the weir at Musson Lane. Though this stream at one time may have been a more substantial and constantly flowing stream, it currently serves mainly as a drainage stream. The lower sections also maintain water based on the tidal elevation of the Atchafalaya Levee Borrow Pits. This section is simply a tidal backwater when not serving as a drainage ditch for storm water or irrigation runoff, and there is an area between the section affected by tidal levels and the weir that is intermittent. The upper reaches above the area with water levels maintained by the weir also show intermittent qualities.

Table 1. Total Maximum Daily Load (Sum of UCBOD, UNBOD, and SOD)

ALLOCATION	SUMMER (Mar. – Nov.)		WINTER (Dec. – Feb.)	
	% Reduction Required	Load (lbs/day)	% Reduction Required	Load (lbs/day)
Point Source WLA	0	0	0	0
Point Source Reserve MOS	0	0	0	0
Natural Nonpoint Source LA	0	1,369	0	890
Natural Nonpoint Source Reserve MOS	0	0	0	0
Manmade Nonpoint Source LA	98	18	88	62
Manmade Nonpoint Source Reserve MOS	0	4	0	15
TMDL		1,391		967

***Note1: UCBOD as stated in this allocation is Ultimate CBOD.
UCBOD to $CBOD_5$ ratio = 2.3 for all treatment levels
Permit allocations are generally based on $CBOD_5$***

The results of the winter projection model show that the water quality criterion for dissolved oxygen of 5.0 mg/l can be maintained during the winter critical season with a 88% reduction in man-made nonpoint source pollution. The minimum dissolved oxygen is 5.00 mg/l and is located near the confluence of the tributary.

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 is continuing to implement a watershed approach to the surface water quality monitoring. In 2004 a four year sampling cycle replaces the previous five year cycle. Approximately one quarter of the states watersheds will be sampled in each year so that all of the states watersheds will be sampled within the four 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.

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1. Introduction

Bayou Maringouin, Louisiana Subsegment 120111, is on the state's 2002 and 2004 §303(d) list and is part of the ambient sampling monitoring program and is listed in the state's 2004 §305(b) report. The subsegment was found to be "not supporting" its designated uses of primary and secondary contact recreation and fish and wildlife propagation. Bayou Maringouin was subsequently scheduled for TMDL development with other listed waters in the Terrebonne Basin. The suspected cause of impairment for fish and wildlife propagation is organic enrichment/low DO. The suspected source of impairment is agriculture. This TMDL addresses the organic enrichment/low DO impairment.

The TMDL in this report was originally developed during 2004-2005 based on the DO criterion that was effective at that time (5.0 mg/L year round). The final report was dated March 24, 2005 and was approved by EPA. Since that time, the DO criterion for this subsegment has been revised to 2.3 mg/L for March through November and 5.0 mg/L for December through February. During 2010, this TMDL has been revised to reflect the new DO criteria. This revision also incorporated changes in the inventory of point source dischargers since the 2005 report. Once the inventory of dischargers was revised, the calibrated model (unchanged from 2005) was rerun to simulate the impact from both point and nonpoint sources of oxygen demand on the level of DO under critical conditions for summer and winter. TMDLs for oxygen-demanding substances were recalculated based upon the new model results.

A calibrated water quality model for the portion of the watershed in which the assessed portion of Bayou Maringouin flows was developed and includes most of the northern part of the subsegment. Projections based on the calibrated model were modeled to quantify the estimated load reductions that would be necessary in order for Bayou Maringouin to comply with its established water quality standards and criteria. This report presents the results of the modeling analysis. The modeling is consistent with the Louisiana TMDL Technical Procedures Manual (the "LTP") (LDEQ 2010a).

2. Study Area Description

2.1 General Information

The Terrebonne Basin covers an area extending approximately 120 miles from the Mississippi River on the north to the Gulf of Mexico on the south. It varies in width from 18 miles to 70 miles. This basin is bounded on the west by the Atchafalaya River Basin and on the east by the Mississippi River and Bayou Lafourche. The topography of the entire basin is lowland, and all the land is subject to flooding except the natural levees along major waterways. The coastal portion of the basin is prone to tidal flooding and consists of marshes ranging from fresh to saline. (LA DEQ, 1996)

Louisiana water quality subsegment 120111 is in the northern part of the Terrebonne Basin. The subsegment and Bayou Maringouin run in a generally North-South direction, and the subsegment area is approximately 131,058,000 square meters or 50.6 square miles. Headwaters of Bayou Maringouin are near the intersection of Louisiana Highway 77 and Louisiana Highway 977 near Valverda, Louisiana. The bayou flows through the town of Maringouin, Louisiana and toward Ramah, Louisiana. Near interstate 10, Bayou Maringouin's flow goes into the Atchafalaya Levee Borrow Pits via Ramah Canal and flows southerly toward the Intracoastal Waterway. Most of the subsegment bordering the modeled area of Bayou Maringouin's headwaters to Ramah Canals is used for agricultural purposes. The water quality model extends from Bayou Maringouin's headwaters to Ramah Canal including an unnamed tributary and a small distributary. Maps depicting this area can be found in Appendix F.

The eastern border of the subsegment runs along Bayou Grosse Tete, Louisiana Subsegment 120104. Bayou Grosse Tete is a more substantial water body than Bayou Maringouin in volume and length. Despite the close proximity, particularly near the headwaters of Bayou Maringouin, the two bayous do not exchange water in any fashion.

To the West of the subsegment are the Atchafalaya Levee Borrow Pits. The borrow pits are a continuous body of water that run from well above the subsegment in a southerly direction where they eventually become the Intracoastal Waterway. This body of water is more substantial in volume and length than Bayou Maringouin near subsegment 120111, and all of Bayou Maringouin's flow enters this water body at one of two points: Ramah Canal and the confluence of Bayou Maringouin and the borrow pits well below the modeled portion of this subsegment. The confluence of Bayou Maringouin and the borrow pits is not included in this model because the Bayou is not continuous through the subsegment and the lower section of the bayou was not assessed by LDEQ. The upper section of Bayou Maringouin (above Ramah Canal) drains entirely to the borrow pits via Ramah Canal. Below Ramah Canal the bayou displays more of an intermittent nature than above Ramah Canal, and flow is believed to flow upstream toward Ramah Canal for a distance below the Canal. The more southerly confluence of Bayou Maringouin and the Atchafalaya Levee Borrow Pits appears to serve for storm water drainage. The water level in this lower section is controlled by the borrow pit water elevation.

The modeled area of Bayou Maringouin consists of two main sections, the upper section above the weir at Musson Lane near the town of Maringouin and the lower section below the weir to the point where the flow is diverted into the borrow pits. The upper section consists of approximately 9 kilometers of the main stem of Bayou Maringouin and a 2 kilometer unnamed tributary flowing in from the East. Much of this section displayed intermittent flow qualities on various visits to the area. This area would likely be a dry stream bed or small separated pools during the critical season without the weir maintaining the water levels in the lower part of this section. This area surrounding the upper section of Bayou Maringouin is predominately used for agriculture. There are several residences along the banks of Bayou Maringouin with a concentration near the town of Maringouin. The lower section consists of approximately 9.1 kilometers of the main stem of bayou Maringouin below the weir and 2 distributary canals, including Ramah Canal, which drains Bayou Maringouin. This section appeared to have a greater volume of water on a consistent basis. Water levels and flows here are likely more influenced by water levels and tidal changes in the nearby Atchafalaya Levee Borrow Pits than any advective flow from Bayou Maringouin. Tidal flow was observed in the lower section of Bayou Maringouin. The area around the lower section, like the upper, was predominately used for agriculture. There were some residences and churches along the banks, but there was no concentration of residences as in Maringouin. The entire extent of the modeled area of the bayou is followed closely by Highway 97 from below I-10 to the bayou's headwaters near Valverda. All of Bayou Maringouin except a small section including the area where the unnamed tributary connects to the bayou is visible from the road.

The entire modeled area is dominated by agriculture. Results of a land use analysis using USGS GAP data are shown in table 2. Area overview and land use mapping can be found in Appendix F. The point source discharge map (Figure 3) shows that there are no existing point source discharges.

Table 2. Land Uses in Segment 120111

Land Type	Square Meters	Percent Land use
Agricultural/Cropland/Grassland	78443100.00	59.85
Wetland Forest Deciduous	38039400.00	29.02
Water	7322400.00	5.59
Vegetated Urban	5091300.00	3.88
Wetland Scrub/Shrub Deciduous	809100.00	0.62
Upland Forest Deciduous	570600.00	0.44
Fresh Marsh	363600.00	0.28
Upland Forest Evergreen	297000.00	0.23
Upland Scrub/Shrub Mixed	75600.00	0.06
Non-Vegetated Urban	38700.00	0.03
Upland Forest Mixed	6300.00	0.00
Upland Scrub/Shrub Evergreen	900.00	0.00

Figure 1. Vector Diagram

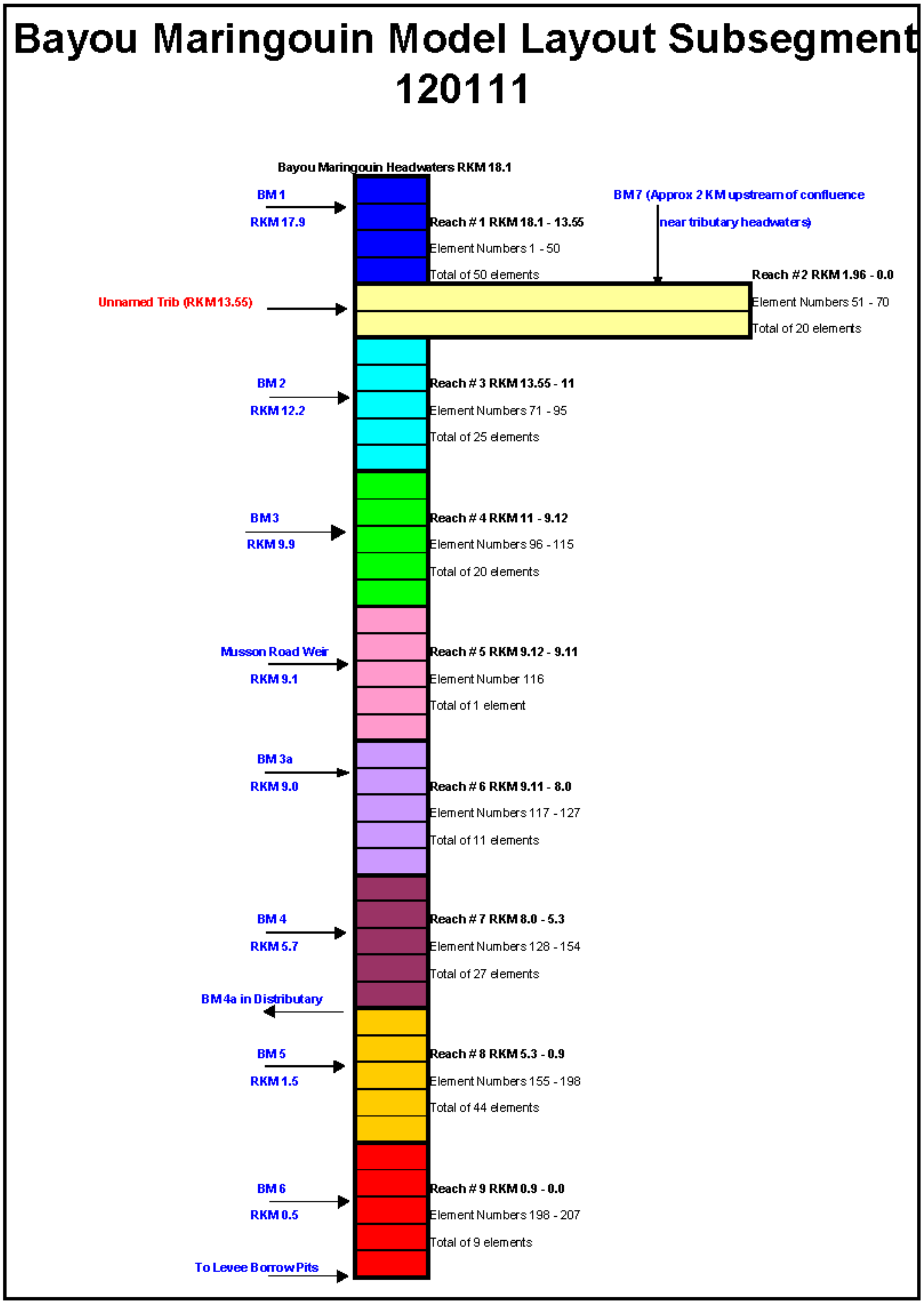


Figure 2. Map of Study Area

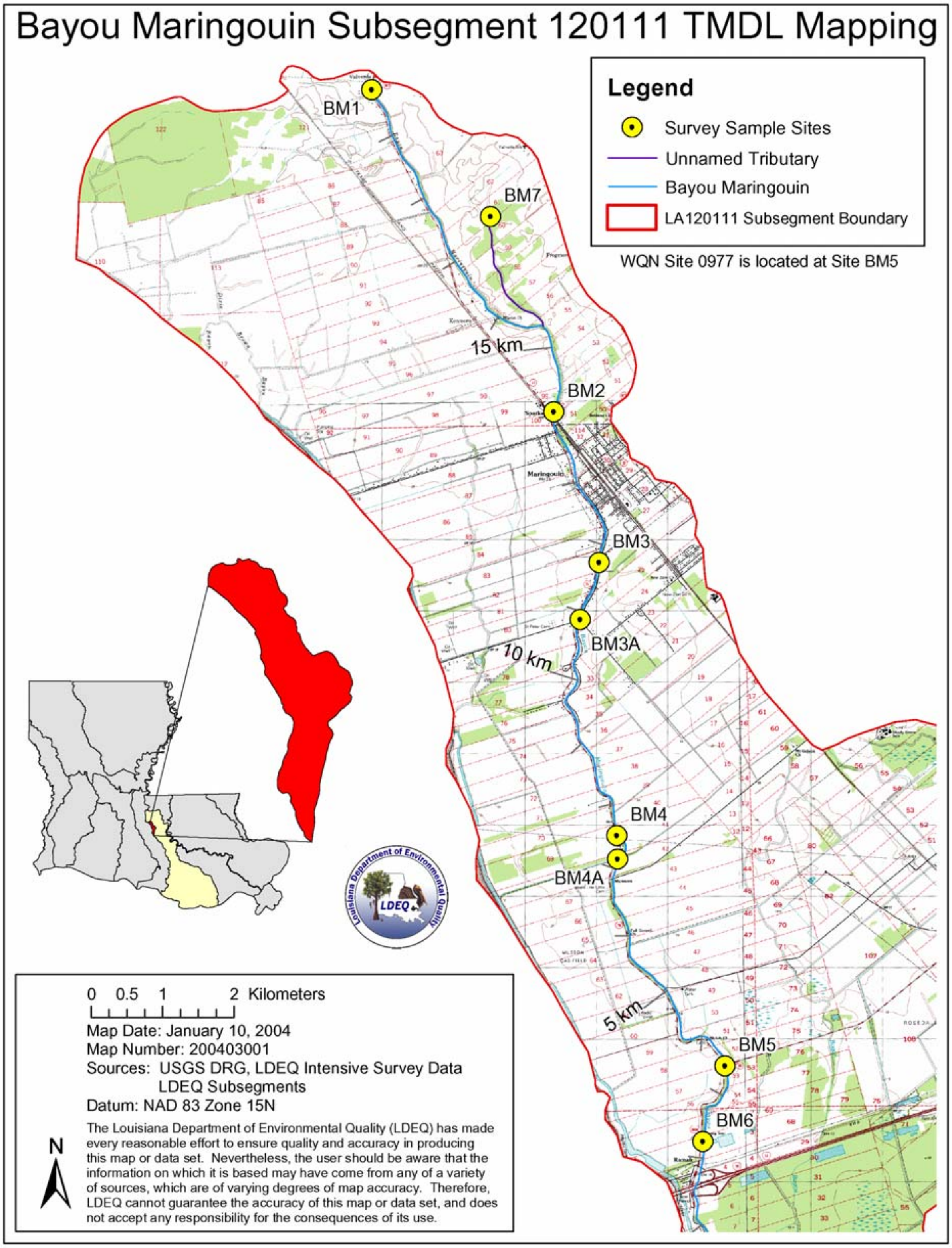
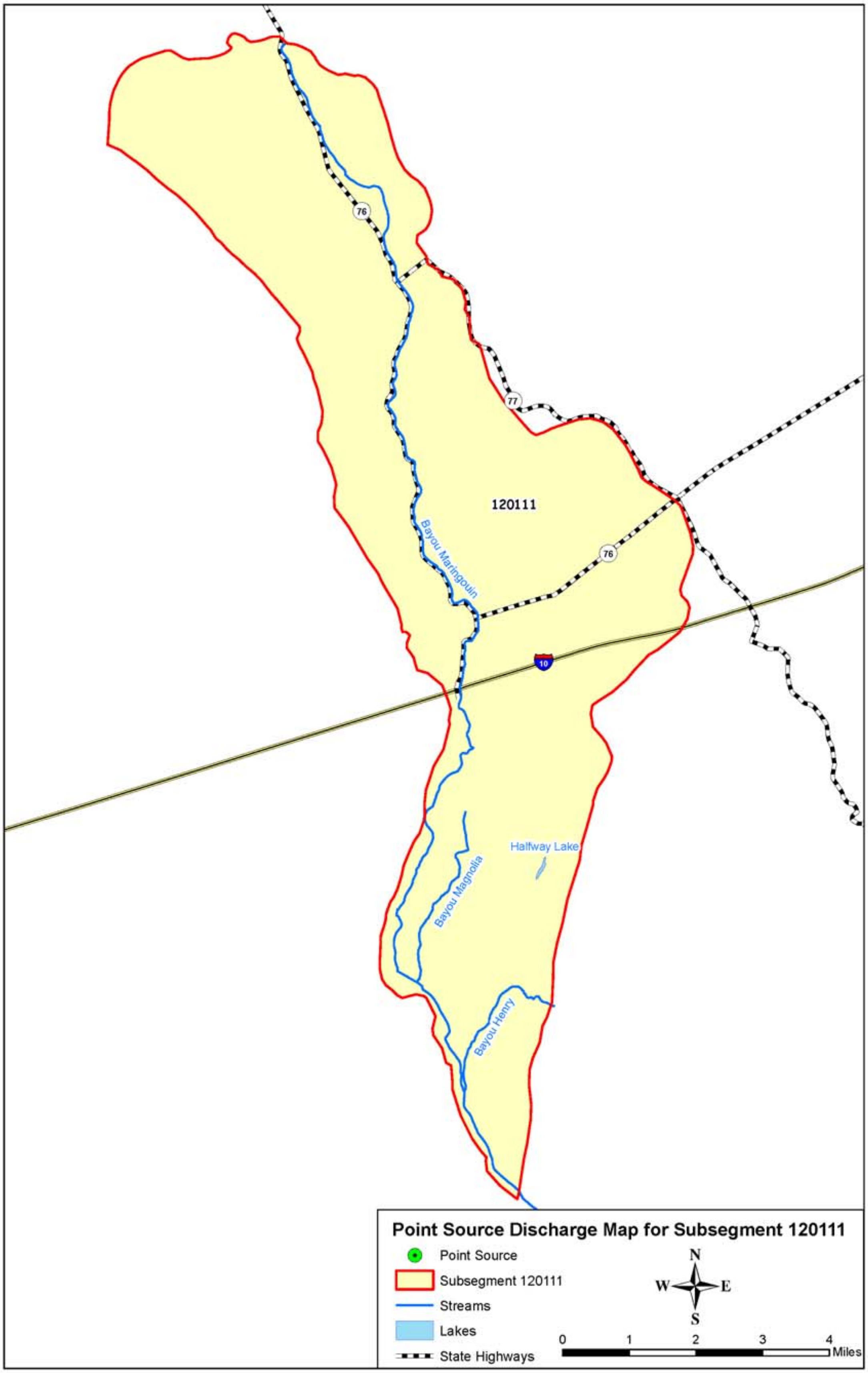


Figure 3. Point Source Discharge Map



2.2 Water Quality Standards

The Water Quality criteria and designated uses for the Bayou Maringouin Watershed are shown in Table 3. The designated use of Bayou Maringouin of anything other than a drainage ditch is questionable. Yet, designated uses in this subsegment are primary and secondary contact recreation and fish and wildlife propagation. These uses carry with them the most stringent water quality criteria short of drinking water sources. In its upper reaches the only reason there is any substantial volume of water during the summer critical conditions is that an artificially elevated level is maintained by the weir at Musson Lane. Though this stream at one time may have been a more substantial and constantly flowing stream, it currently serves mainly as a drainage stream. The lower sections also maintain water based on the tidal elevation of the Atchafalaya Levee Borrow Pits. This section is simply a tidal backwater when not serving as a drainage ditch for storm water or irrigation runoff, and there is an area between the section affected by tidal levels and the weir that is intermittent. The upper reaches above the area with water levels maintained by the weir also show intermittent qualities.

Table 3. Water Quality Numeric Criteria and Designated Uses (LDEQ 2010b).

Subsegment	120111
Stream Description	Bayou Maringouin – Headwaters to East Atchafalaya Basin Levee
Designated Uses	A, B, C
Criteria:	
Cl	25 mg/L
SO_4	25 mg/L
DO	5.0 mg/L Dec. – Feb. ; 2.3 mg/L Mar. – Nov.
pH	6.0 to 8.5 su
Bacteria	Note 1
Temp.	32°C
TDS	200 mg/L

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/100mL maximum log mean and no more than 25% of samples exceeding 400 colonies/100mL 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.

2.3 Wastewater Discharges

There were no point source wastewater discharges at the time of this project in the Bayou Maringouin Watershed.

2.4 Water Quality Conditions/Assessment

Water quality data attempting to quantify ambient conditions in Bayou Maringouin were collected by the LDEQ in the year 2000. Eleven water quality samples were collected over the period of ten months from February through November at a site on the lower section of the modeled area of Bayou

Maringouin. During the assessment period for Bayou Maringouin, Louisiana was experiencing a drought.

2.5 Prior Studies

No prior studies were done on Bayou Maringouin.

3. Documentation Calibration Model

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 for this TMDL was LA-QUAL, a steady-state one-dimensional water quality model. LA-QUAL has the mechanisms for incorporating dams and weirs in the analysis and was particularly suitable for use in modeling Bayou Maringouin. 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 a 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 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.

The development of a TMDL for dissolved oxygen 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. During Stage 1, any data available from reference or least impacated streams which can be used to gauge the relative health of the watershed is also collected.

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 which 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 which 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 which were measured. In other words, the model produces a value of dissolved oxygen, temperature, or other parameter which 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 said to be calibrated to the actual stream conditions. At this point, the model should confirm that 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 of the calibration holds for both sets of data. When this happens, the model is said to be verified.

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 NPS pollution is estimated from the difference between the calibration loads and the loads observed on reference or least impacted streams.

3.2 Input Data Documentation

Data collected during an intensive survey conducted from August 27-29, 2001, was used to establish the input for the model calibration and is presented in Appendix C.
The flow in each reach, headwater, and tributary was determined based on the survey discharge measurements, the drainage area associated with each flow, and a determination of appropriate incremental nonpoint source flow rates in terms of cms/kilometer. Best professional judgment was used to determine where similar streams concepts could be used. Flow determinations are presented in Appendix C2.

Field and laboratory water quality data were entered in a spreadsheet for ease of analysis. The Louisiana GSBOD program was applied to the BOD data in a separate spreadsheet and values were computed for each sample taken of ultimate CBOD, CBOD decay rate, CBOD Lag, ultimate NBOD, NBOD decay rate, and NBOD lag. This data was the primary source for the model input data for initial conditions; decay rates; temperature, DO, and NBOD; and headwater temperature and DO. Two other sources of data also figured prominently in developing the input data set: reference stream data and previous determinations of nonpoint source loadings for several heavily impacted streams. As shown in Figure 4, the DO during the time of the survey was below 5 mg/L throughout the surveyed area.

3.2.1 Model Schematics and Maps

A vector diagram of the modeled area is presented in Appendix A1. The vector diagram shows the locations of survey stations, the reach/element design, the locations of the modeled tributary and the locations of distributaries removing flow but not modeled as a reach. A map of the stream and subsegment showing river kilometers, survey stations, drainage area boundaries and other points of interest is also included in Appendix F. A drainage area diagram showing the incremental drainage areas contributing to each headwater and reach is also presented in Appendix F.

3.2.2 Model Options, Data Type 2 and 3

Three constituents were modeled during the calibration process. These were dissolved oxygen, carbonaceous biochemical oxygen demand, and nitrogenous biochemical oxygen demand. Chlorophyll A and temperature were not modeled but were input to the model in the initial conditions. The model interpolated the inputs between points in the initial conditions allowing the effects of temperature and chlorophyll a to reflect in the model without running a thermal or full nutrient model. The normal conservatives of chlorides, conductivity or sulfides were not calibrated to because a calibration to these parameters was not within reason. The pooling or puddling nature of the stream when not flowing or minimally flowing could lead to variances in these conservative parameters that would make calibration to these parameters difficult and meaningless.

Some changes were made to the default program constants defined in data type 3. The maximum iteration limit used in the model was increased from 100 to 200 iterations to allow for convergence of oxygen dependant rates. This change was made due to the model not converging in the default number of iterations. KL minimum, the minimum reaeration rate, was changed from a default of 0.6 m/day to 0.7 m/day. The change is to reflect the conversion of 2.3 ft/day to m/day as recommended in the LDEQ TMDL Technical Procedures Manual (known as the "LTP") (Waldon et al, 2000).

All decay rates were to be inhibited based on dissolved oxygen concentration. Therefore, the inhibition control value was set to 4, which is the model default. The nitrogen inhibition equation was changed from a default value of 2 which is a three stage monod/exponential inhibition routine to 4 which signifies straight-line inhibition from a threshold which is the same method applied by default to the CBOD constituent in this model. The ocean exchange ratio was set to 0 or no boundary exchange to prevent the model from forcing the concentrations at the end of the model to a boundary condition.

The hydraulic calculation method was set to 2 or "widths and depths." This was done because the low slopes in this water body cause a substantial amount of water to be present during critical flow conditions, making the Leopold Relationships inaccurate. This method allows the model to predict a more accurate depth and width during low flow.

Oxygen Production due to Algae was set to zero for the calibration model. Dissolved oxygen concentrations varied greatly throughout the day in Bayou Maringouin. This effect was recorded by continuous monitors deployed at sites BM1, BM3, and BM5. The largest diurnal swing in dissolved oxygen concentration was recorded at site BM5 with a swing of greater than 5 mg/L in a twenty four hour period. To accommodate this variance in a steady state model, it has been determined that when algal production results in a large diurnal variation of dissolved oxygen, the model will be calibrated to the lesser of the minimum dissolved oxygen concentration plus 1 mg/L or the average dissolved oxygen concentration, with the oxygen production due to algae set to zero. With this calibration point it is assumed the dissolved oxygen concentration reflects the conditions at which there is no net contribution to the oxygen concentration due to algal oxygen production or respiration. For sites without continuous monitors, the in-situ dissolved oxygen reading was compared to the continuous monitor readings at the time of the in-situ reading. The monitor's daily range was then adjusted by the difference in the continuous reading and the instantaneous one. This adjustment was made and calibration points set accordingly at sites BM4, BM6, and BM7.

Lastly, the Effective BOD due to algae was set to the minimum recommended value in the model user's manual. This was changed from the default of 0 because of the presence of algae denoted by the concentration of chlorophyll in the samples analyzed by the laboratory and the dissolved oxygen diurnal swings recorded by the continuous monitors throughout the bayou (Appendix C). All other constants were left at model default values.

3.2.3 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 °C and are then corrected to 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, 2003).

3.2.4 Reach Identification Data, Data Type 8

Using physical data from the survey, aerial photography and USGS quad maps, it was determined nine reaches would best represent Bayou Maringouin in LA-QUAL. Starting with the headwater and listing them as they appear in the input data set, the following paragraphs describe the reaches in the model. The average widths and depths of the reaches follow in table 4. A vector diagram of the model reaches and survey sites appears in Figure 1 and Appendix A of this report.

Reach one begins at the headwaters of Bayou Maringouin near Highway 77 and Highway 977. This reach meanders for approximately four and a half kilometers where it ends at the confluence of the unnamed tributary with Bayou Maringouin.

The second reach describes the unnamed tributary that connects with the main stem of Bayou Maringouin at the top of reach 3. The tributary is approximately two kilometers long, and though it is narrow at its headwaters, it widens as it nears its confluence at Bayou Maringouin.

Reach three follows the main stem of Bayou Maringouin from the confluence of the unnamed tributary to about two kilometers above the weir. The length of the third reach is around two and one half kilometers. The fourth reach flows for less than two kilometers and describes the wider portion of stream directly above and influenced by the weir near Musson Lane.

The above reaches constitute what is being referred to as the upper section of Bayou Maringouin in this report. The following reaches describe the lower section of the bayou.

The fifth reach is a one-element reach just below the weir. This reach was inserted to adjust parameters not being modeled, specifically temperature and chlorophyll a, and insure that no dispersion was happening across the weir. This reach is ten meters in length.

Next, the sixth reach describes the portion of Bayou Maringouin below the weir. The bayou here is narrow and faster moving before the stream widens and slows in the lower reaches. The reach is just over one kilometer long and takes the model from just below the weir to a wider area above the upper distributary.

The seventh reach extends from the beginning of the wider area to the upper distributary. It extends more than two and one half kilometers, and ends with a partial flow removal from Bayou Maringouin at the upper distributary to the Atchafalaya Levee Borrow Pits.

The eighth reach takes us from the upper distributary to about one kilometer above the lower distributary. It ends where the stream widens before losing all its flow in Ramah Canal. The ninth and final reach is a short reach, less than one kilometer, describing the end of the model. This reach ends at Ramah Canal.

3.2.5 Advective Hydraulic Coefficients, Data Type 9

Based on Stream hydrology and behavior during critical conditions, the stream widths and depths of Bayou Maringouin were assumed not to vary significantly during critical flows. Therefore, a constant width and depth were used for each reach by setting the "A" and "D" constants to zero eliminating the exponential flow relationship. The widths and depths are as described in Table 4.

Table 4. Model Reach Widths and Depths

Reach	Width (m)	Depth (m)
1	4.877	0.3322
2	3.429	0.2027
3	14.63	0.2987
4	11.58	0.6614
5	3.627	0.256
6	3.627	0.256
7	6.096	0.4968
8	7.01	0.2438
9	12.19	0.3048

3.2.6 Initial Conditions, Data Type 11

Initial conditions are used to reduce the number of iterations used by the model and set values for constituents not modeled directly. The initial dissolved oxygen for the entire model was set to a value of three to begin iterations. The modeler assumed three milligrams per liter dissolved oxygen to be a decent initial value for DO for the calibration and projection runs. The chlorophyll a and temperature were set to allow the model interpolation of the component to interpolate through measured values at the survey sites using the graphical output of LaQual as a visual verification of fit.

3.2.7 Reaeration Rates, Data Type 12

Throughout the entire model the Texas reaeration equation was chosen to best represent the reaeration potential of Bayou Maringouin.

3.2.8 Sediment Oxygen Demand, Data Type 12

The SOD values were achieved through calibration and are generally higher in the upper reaches and lower in the lower reaches. The concentrations of sediment oxygen demand are generally higher above the weir and lower on the lower section of Bayou Maringouin. Because of the wide diurnal swing recorded by the continuous monitors, the dissolved oxygen concentration that was calibrated to is the lesser of 1 milligram per liter over the minimum value or the average daily concentration calculated at sites with continuous monitor data. The SOD value for each reach is shown in Appendix A. The conversion ratio of settled CBOD and settled NBOD to SOD was considered to be one for all reaches.

3.2.9 Carbonaceous BOD Decay and Settling Rates, Data Type 12

Decay rates for carbonaceous biochemical oxygen demand were found at all sites where laboratory samples were taken. Due to the relatively short length of the bayou and homogenous land use and river properties throughout the modeled area, the decay rates calculated from laboratory data were averaged, and the average of all the rates was used in this model for every reach. For settling rates, the recommended value of 0.05 from the LTP was used for all reaches. The decay and settling rates used for each reach are shown in Appendix A.

3.2.10 Nitrogenous BOD Decay and Settling Rates, Data Type 15

Similarly to the carbonaceous biochemical oxygen demand, the nitrogenous biochemical oxygen demand decay rates calculated from laboratory data were averaged, and the average was used for the decay rate in all the reaches. Also, the same recommended settling rate from the LTP was used for nitrogenous biochemical oxygen demand settling rate. The decay and settling rates used for each reach are shown in Appendix A.

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

Due to only one non-drogue flow measurement taken during the entire survey near the weir, it was assumed that all flow above the weir was a function of drainage area and resulted in the measured flow. A drainage area was calculated using GIS software for the entire area above the weir and by reach and headwater. These areas were used to determine headwater flow for both the main stem and tributary headwaters and incremental flow in the reaches. A volume by area was calculated for each reach and entered to the model as incremental flow. The maps created in this process appear in Appendix F. The incremental flow was assumed to be from ground water, and lacking any dissolved oxygen. General indicators of groundwater inflow include low dissolved oxygen concentrations and increases in conductivity and phosphorus concentration. These conditions were present in the upper section of Bayou Maringouin where the incremental flow was introduced into the model. Incremental values for NBOD and CBOD were assumed to be similar to in stream conditions and calculated by averaging all NBODs and CBODs above the weir and rounded to one significant figure. This method allowed the simulated ground water inflow to be at a similar concentration to that of the stream and did not cause dilution of the stream concentrations of oxygen demanding substances requiring unrealistic headwater concentrations in order for reasonable results downstream to compensate for said dilution. The quantities used in the calibration model are presented in Appendix A.

3.2.12 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 are modeled as SOD, CBOD and NBOD loads. Over the years LDEQ has collected data on heavily impacted streams in Louisiana. These data were reviewed and summarized by Smythe and Waldon. LDEQ also determined these types of loadings as part of the Reference Stream work and these loads have also been used to determine some of the input data. The nonpoint source loading for a non-flowing stream is significantly greater than that for a flowing stream. The Bayou Maringouin system is not a non-flowing stream, but neither is it a free-flowing stream due to the weir and the lower levels controlled by tides in the Atchalafaya Levee Borrow Pits. These loads are determined by calibration of the

CBOD load to effective BOD, and the NBOD load to NBOD. The calibration points used for these calibrations were the UNBOD and UCBOD calculated from laboratory data. The quantities used in the calibration model are presented in Appendix A.

3.2.13 Headwaters, Data Types 20, 21, and 22

Headwater data was gleaned from data collected from the intensive survey and an estimated drainage area for the upper reaches of the model. The processes used to discern the values used in the calibration are described in the following paragraphs.

Headwater flow was estimated by calculating a drainage area for the stream above the wading discharge taken at site BM3A and calculating a drainage area for the headwater of the stream. A ratio of the areas was taken and the resulting headwater flow was used in the calibration model. This process was repeated for the headwater of the unnamed tributary modeled in reach 2.

The headwater temperatures were set equal to the temperature specified in Data Type 11, initial conditions.

Dissolved oxygen concentration value used in the calibration for the main stem headwater was equal to one milligram per liter above the minimum dissolved oxygen recorded by the continuous monitor at site BM1. This value assumes a quantity of dissolved oxygen that would be present in the absence of algae causing a daytime increase and nighttime decrease in dissolved oxygen values as discussed in §3.2.8. For the tributary, this value was adjusted by the difference between the continuous monitor data from the main stem and in-situ data taken at site BM7 near the tributary headwater at the time of the in-situ measurement.

UNBOD and UCBOD values used in the headwater inputs were direct results of analysis of the laboratory values for these parameters. Site BM1 results were used for the main stem headwater, and site BM7 was used for the tributary headwater.

3.2.14 Wasteloads, Data Types 23, 24, and 25

The only modeled waste load is the upper distributary. The waste load is modeled as an outflow therefore only a flow value is required by the model. The flow used was the one collected by the survey crew at site BM 4A. The quantities used to represent the distributary are found in Appendix A.

3.2.15 Boundary Conditions, Data Type 27

The only boundary conditions specified were the temperature and chlorophyll a. These values were specified to have the model better fit its calculation to measured data. Other boundary conditions, even though specified in the model input, are ignored due to the ocean exchange ratio being set to 0 in the model options.

3.2.16 Dam Data, Data Type 28

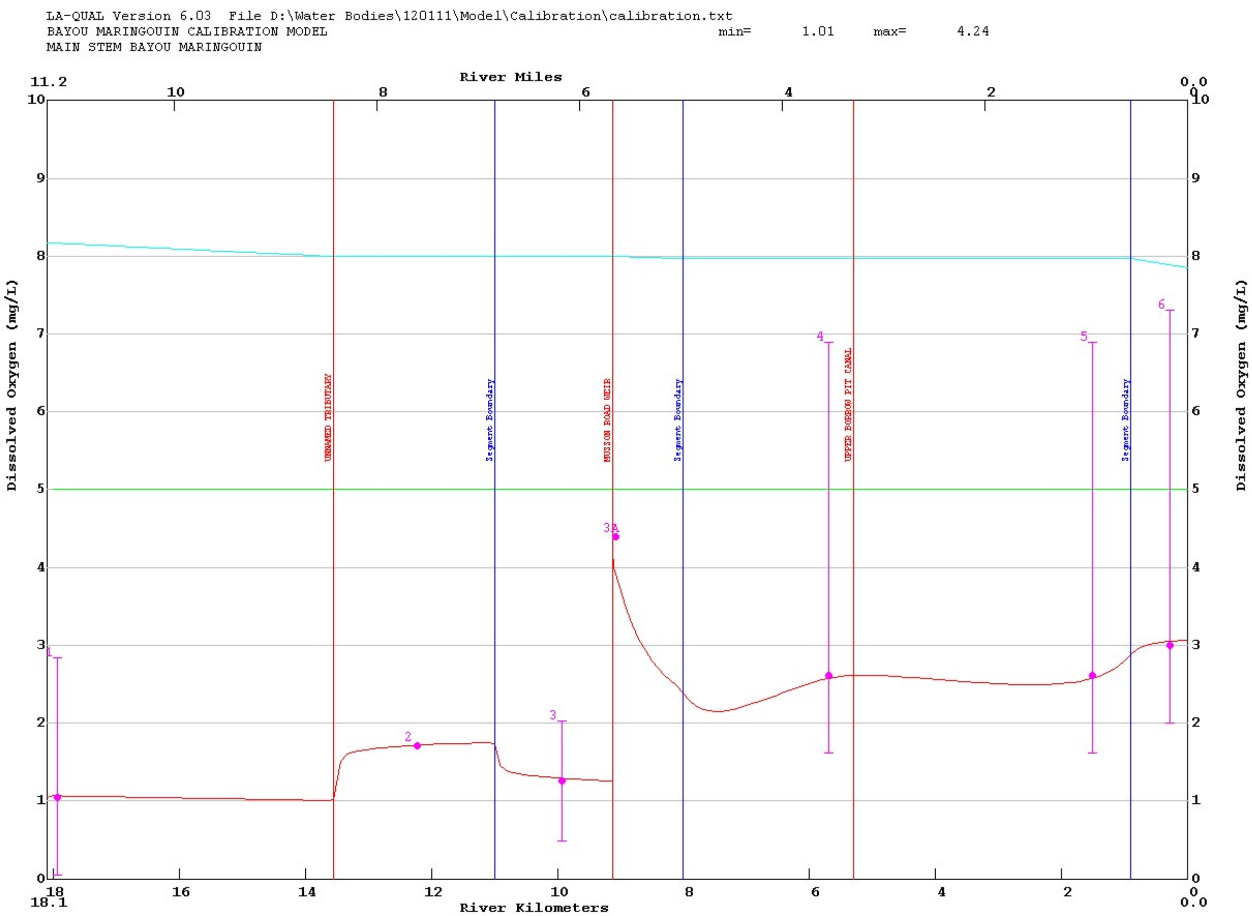
One weir was modeled in the Bayou Maringouin model. The weir was located near Musson Lane on the main stem.

3.3 Model Discussion and Results

The calibration model input and output is presented in Appendix A. 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 4.

Bayou Maringouin's modeled main stem extends from the headwater to Ramah Canal. There are no dischargers to Bayou Maringouin or its tributary. An acceptable calibration was achieved for DO, UCBOD, and UNBOD on the main stem. The calibration model shows that in the summer of 2001, the DO standard of 2.3 mg/l from March through November was not being met in portions of Bayou Maringouin. The minimum DO on the main stem was 1.01 mg/l at RK 13.55, near the confluence of the unnamed tributary.

Figure 4. Calibration Model Dissolved Oxygen versus River Kilometer



- numbered points indicate survey stations
- vertical lines indicate beginning of reach
- the horizontal line indicate the DO Criterion

- upper plotted line indicates DO saturation
- lower plotted line indicates calibration model output

4. Water Quality Projections

The traditional summer critical projection loading scenario was performed at the current DO standard of 2.3 mg/L from March through November. This scenario was based on reduced total nonpoint loads at summer season critical conditions (ie. 90th percentile seasonal temperatures and 7Q10 flows) in accordance with the LTP. A winter projection was run based on the percent reduction of total nonpoint loads used for winter critical projections.

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 Maringouin 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 Maringouin using water quality data from the bayou on the LDEQ Ambient Monitoring Network. The 90th percentile temperature for each season and the corresponding 90% of saturation DO was determined. Ambient temperature data, critical temperature and DO saturation determinations are shown in Appendix B. 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 manmade 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 Maringouin dissolved oxygen TMDL projection modeling by using the default flows from the Louisiana Technical Procedures Manual, and the 90th percentile temperature. Incremental flow was assumed to be zero; model loading was from perennial tributaries, sediment oxygen demand, and 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. For both the summer and winter projections, an explicit MOS of 20% was used for man-made nonpoint sources.

4.2 Input Data Documentation

The flow in the headwaters of the Bayou Maringouin Model was set to 0.1 cfs in the summer and 1.0 cfs for winter critical conditions in accordance with the LTP.

The calibration values were retained for the remaining parameters and used as input values in the summer and winter projections. The model adjusts the input values for SOD, CBODU decay, and NBODU decay based upon the input temperature.

4.2.1 Model Options, Data Type 2

Three constituents were modeled during the projection process. These were dissolved oxygen, carbonaceous biochemical oxygen demand, and nitrogenous biochemical oxygen demand.

4.2.2 Temperature Correction of Kinetics, Data Type 4

The temperature correction factors specified in the LTP are 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 hydraulic coefficients, exponents, and constants determined for the calibration were used in the projection model.

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 to 5 mg/l for the summer and winter projections in accordance with standard procedures.

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

The reaeration rate equations, CBOD decay and settling rates, NBOD decay and settling rates, and the fractions converting settled CBOD and settled NBOD to SOD were not changed from the calibration.

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

The incremental conditions were used in the calibration to represent nonpoint source loads associated with flows. The incremental flows were determined to be groundwater inflow, however, default headwater flows added to these flows would make the projection flows unreasonable. Therefore, the incremental flows were not included in 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 load equivalent spreadsheet. 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). Calibration values were used where they were smaller than the reference stream values. The same spreadsheet also calculated load reductions for the headwaters and wasteloads. The values and sources of the input data and the load analyses are presented in Appendix B for each of the projection runs.

LDEQ has collected and measured the CBOD and NBOD oxygen demand loading components for a number of years. These loads have been found in all streams including the non-impacted reference streams. It is LDEQ's opinion that much of this loading is attributable to run-off loads which are flushed into the stream during run-off events, and subsequently settle to the bottom in our slow moving streams. These benthic loads decay and breakdown during the year, becoming easily resuspended into the water column during the low flow/high temperature season. This season has historically been identified as the critical dissolved oxygen season.

LDEQ simulates part of the non-point source oxygen demand loading as resuspended benthic load and SOD. The calibrated non-point loads, UCBOD, UNBOD and SOD, are summed to produce the total calibrated benthic load. The total calibrated benthic load is then reduced by the total background benthic load (determined from LDEQ's reference stream research) to determine the total manmade benthic loading. The manmade portion is then reduced incrementally on a percentage basis to determine the necessary percentage reduction of manmade loading required to meet the water body's dissolved oxygen criteria. These reductions are applied uniformly to all reaches sharing similar hydrology and land uses. The headwater NBOD values did not change from the calibration model to the projection models because the calibration values were equal to background values. Therefore, reductions in man-made loads for the projections did not decrease the projection model inputs for headwater NBOD.

Following the same protocol as the point source discharges, the total reduced manmade benthic load is adjusted for the margin of safety by dividing the value by one minus the margin of safety. This adjusted load is added back to the total background benthic value to obtain the total projection model benthic load. This total projection benthic load is then broken out into its components of SOD, resuspended CBOD and resuspended NBOD by multiplying the total projection benthic load by the ratio of each calibrated component to the total calibrated benthic load.

LDEQ has found variations in the breakdown of the individual CBOD and NBOD components. While the total BOD is reliable, the carbonaceous and nitrogenous component allocation is subject to the type of test method. In the past, LDEQ used a method which suppressed the nitrogenous component to obtain the carbonaceous component value, which was then subtracted from the total measured BOD to determine the nitrogenous value. The suppressant in this method was only reliable for twenty days thus leading to the assumption that the majority of the carbonaceous loading was depleted within that period of time. The test results supported this assumption. Recently the suppressant started failing around day seven and the manufacturer of the suppressant will only guarantee it's potency for a five day period. LDEQ felt a five day test would not adequately depict the water quality of streams and began a search for a new test method. The research found a new proposed method for testing long term BODs in Standard Methods.

This proposed method is a sixty day test which measures the incremental total BOD of the sample while at the same time measuring the increase in nitrite/nitrate in the sample. This increase in nitrite/nitrate allows LDEQ to calculate the incremental nitrogenous portion by multiplying the increase by 4.57 to determine the NBOD daily readings. These NBOD daily readings are then subtracted from the daily reading for total BOD to determine the CBOD daily values. A curve fit algorithm is then applied to the daily component readings to obtain the estimated ultimate values of each component as well as the decay rate and lag times of the first order equations.

LDEQ has implemented the new test method over the past several years. The results obtained using the new method showed that a portion of the CBOD first order equation does begin to level off prior to the twentieth day, however a secondary CBOD component begins to use dissolved oxygen sometime between day ten and day twenty-five. This secondary CBOD component was not being assessed as CBOD using the previous method but was being included in the NBOD load. Thus the CBOD and NBOD component loading used in the reference stream studies is not consistent with the results using the new proposed 60 day method and the individual values should not be used to determine background values for samples processed using the new test methods. However, the sum of CBOD and NBOD should be about the same for both new and old test methods. For this reason LDEQ decided to use the sum of reference stream benthic loads as background values.

4.2.12 Boundary Conditions, Data Type 27

The lower boundary conditions were set at the 90th percentile critical season temperature and a reduced chlorophyll a value to represent an estimate of algal presence in Bayou Maringouin when closer to meeting standards.

4.2.13 Dam Data, Data Type 28

4.3 Model Discussion and Results

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

4.3.1 Summer Projection

Summer critical season projections were run for the current standard of 2.3 mg/L from March through November. In order to meet the summer DO criterion, the model required a 98% reduction of manmade nonpoint sources and no background reductions. With these percentage reductions in the benthic oxygen loads, Bayou Maringouin meets the dissolved oxygen criterion. The minimum predicted DO on the main stem is 2.35 mg/L. A graph of the dissolved oxygen concentration versus river kilometer for the summer projection is presented in Figure 5.

4.3.2 Winter Projection

The results of the model show that the water quality criterion for dissolved oxygen of 5.0 mg/l can be maintained during the winter critical season from December through February. The minimum predicted DO is 5.00 mg/l. To achieve the criterion, the model assumed a 88% reduction from all manmade nonpoint sources and no background reductions. A graph of the dissolved oxygen concentration versus river kilometer for the winter projection is presented in Figure 6.

4.4 Calculated TMDL, WLAs and Las

4.4.1 Outline of TMDL Calculations

An outline of the TMDL calculations is provided to assist in understanding the calculations in the Appendices. Slight variances may occur based on individual cases.

4.4.1.1 The natural backgrounds benthic loading was estimated from reference stream resuspension (nonpoint CBOD and NBOD), and SOD load data.

4.4.1.2 The calibration man-made benthic loading was determined as follows:

- Calibration resuspension and SOD loads were summed for each reach as gm O_2/m^2-day to get the calibration benthic loading.
- The natural background benthic loading was subtracted from the calibration benthic loading to obtain the man-made calibration benthic loading.

4.4.1.3 Projection benthic loads are determined by trial and error during the modeling process using a uniform percent reduction for resuspension and SOD. Point sources are reduced as necessary to subsequently more stringent levels of treatment consistent with the size of the treatment facility as much as possible. Point source design flows are increased to obtain an explicit MOS of 20%. Headwater and tributary concentrations of CBOD, NBOD and DO range from reference stream levels

Figure 5. Summer Projection at 98% Removal of Man-Made NPS Loads

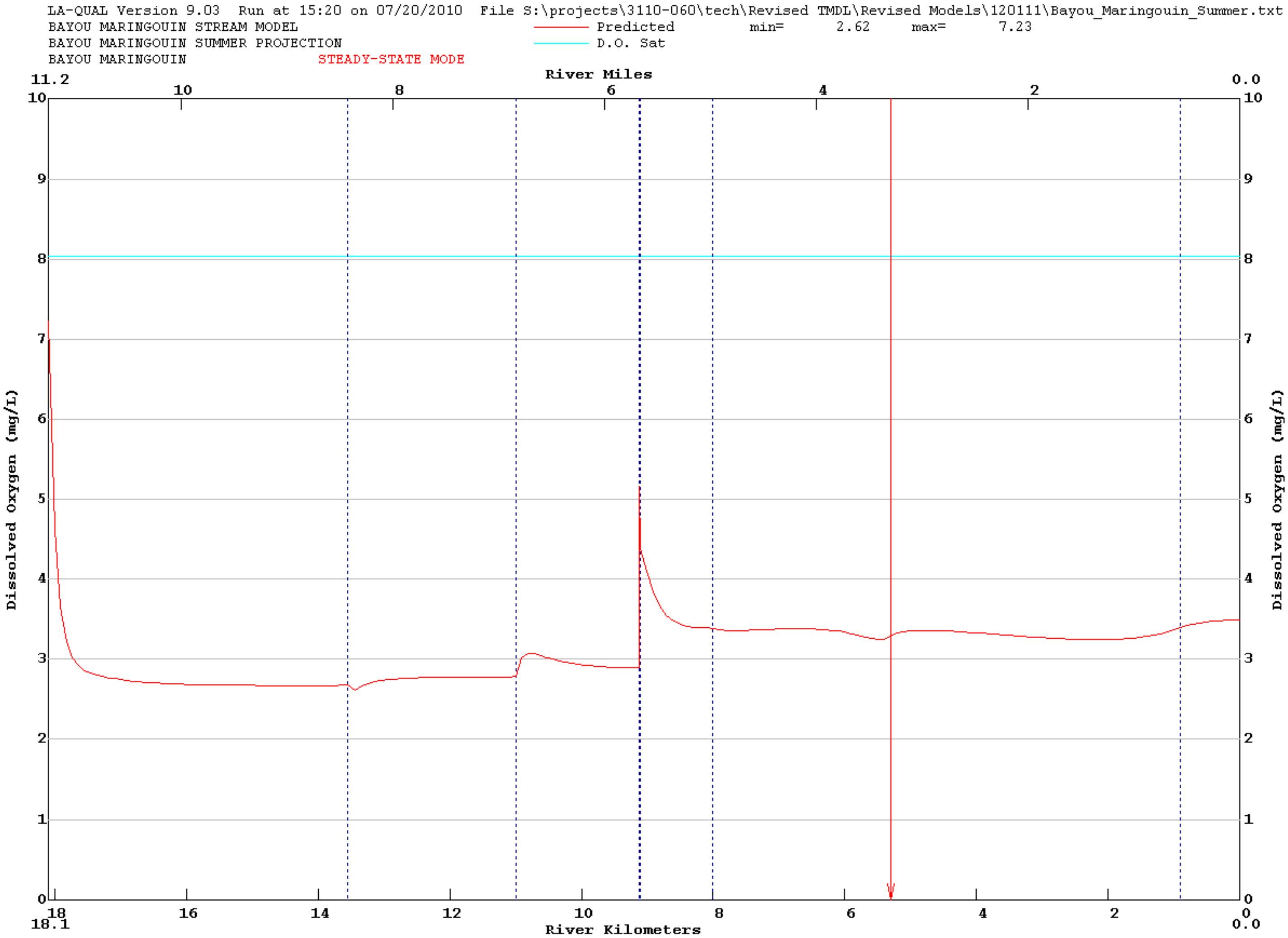


Figure 5 Continued. Summer Projection at 98% Removal of Man-Made NPS Loads

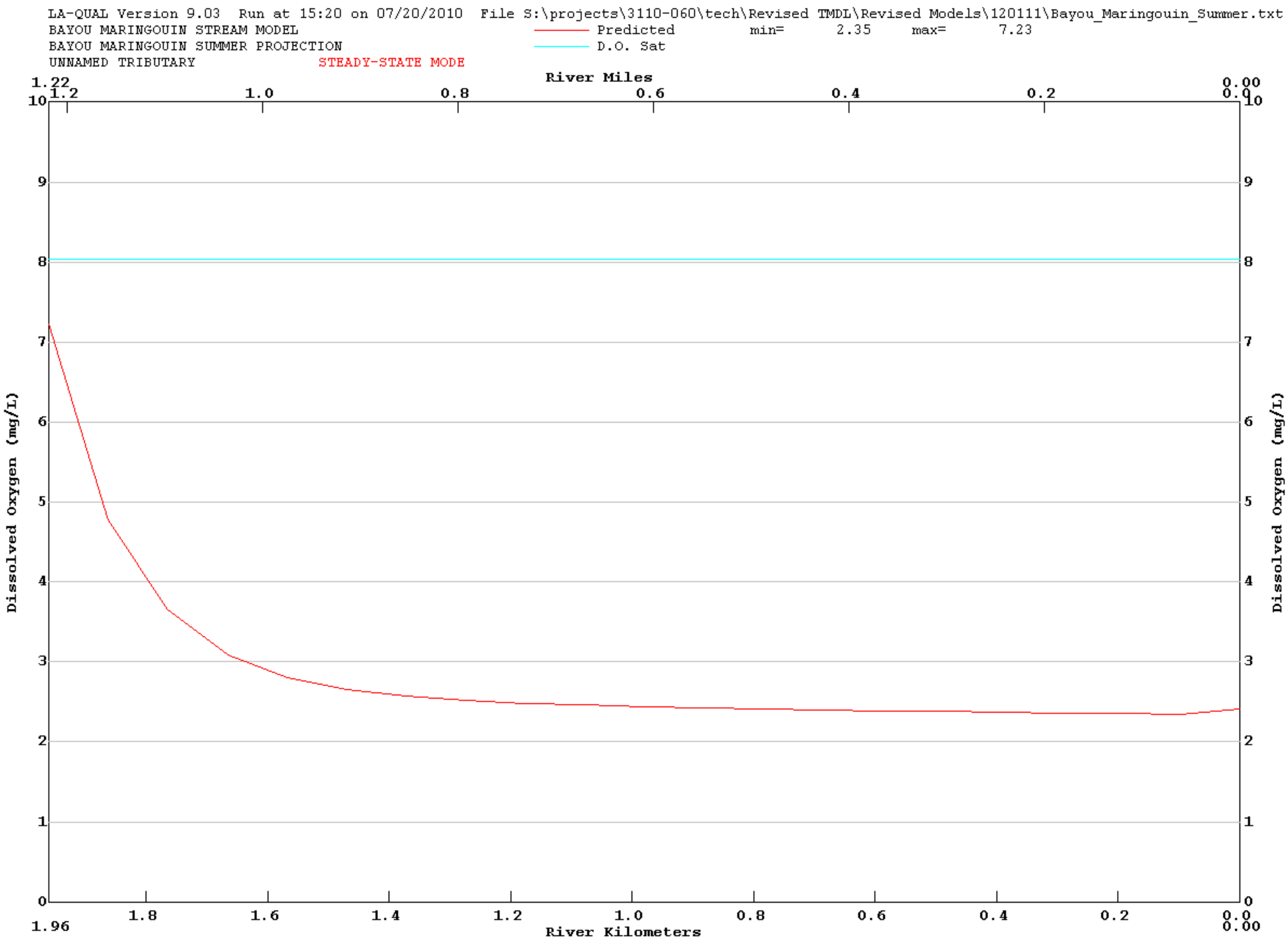


Figure 6. Winter Projection at 88% Removal of Man-Made NPS Loads

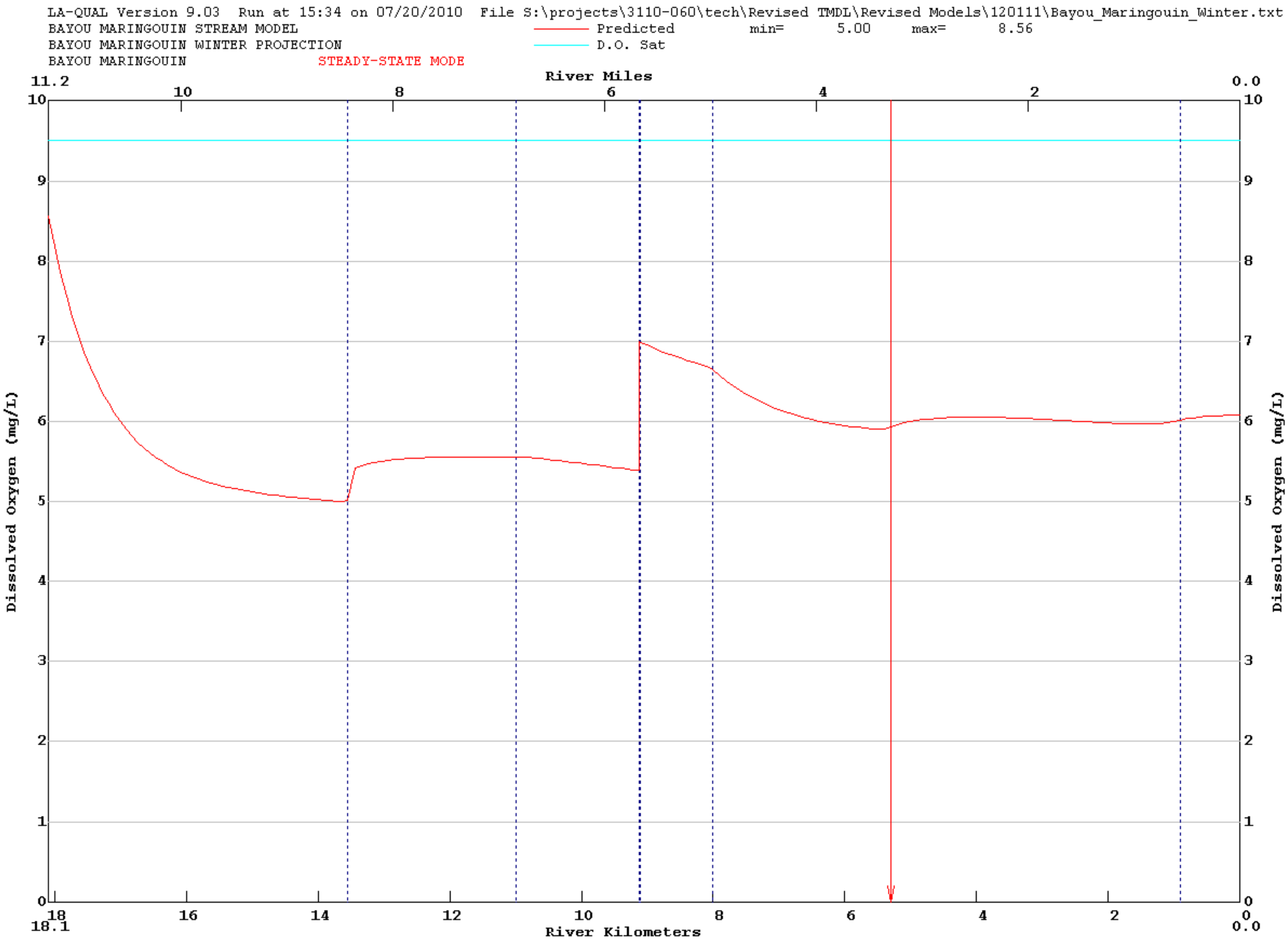
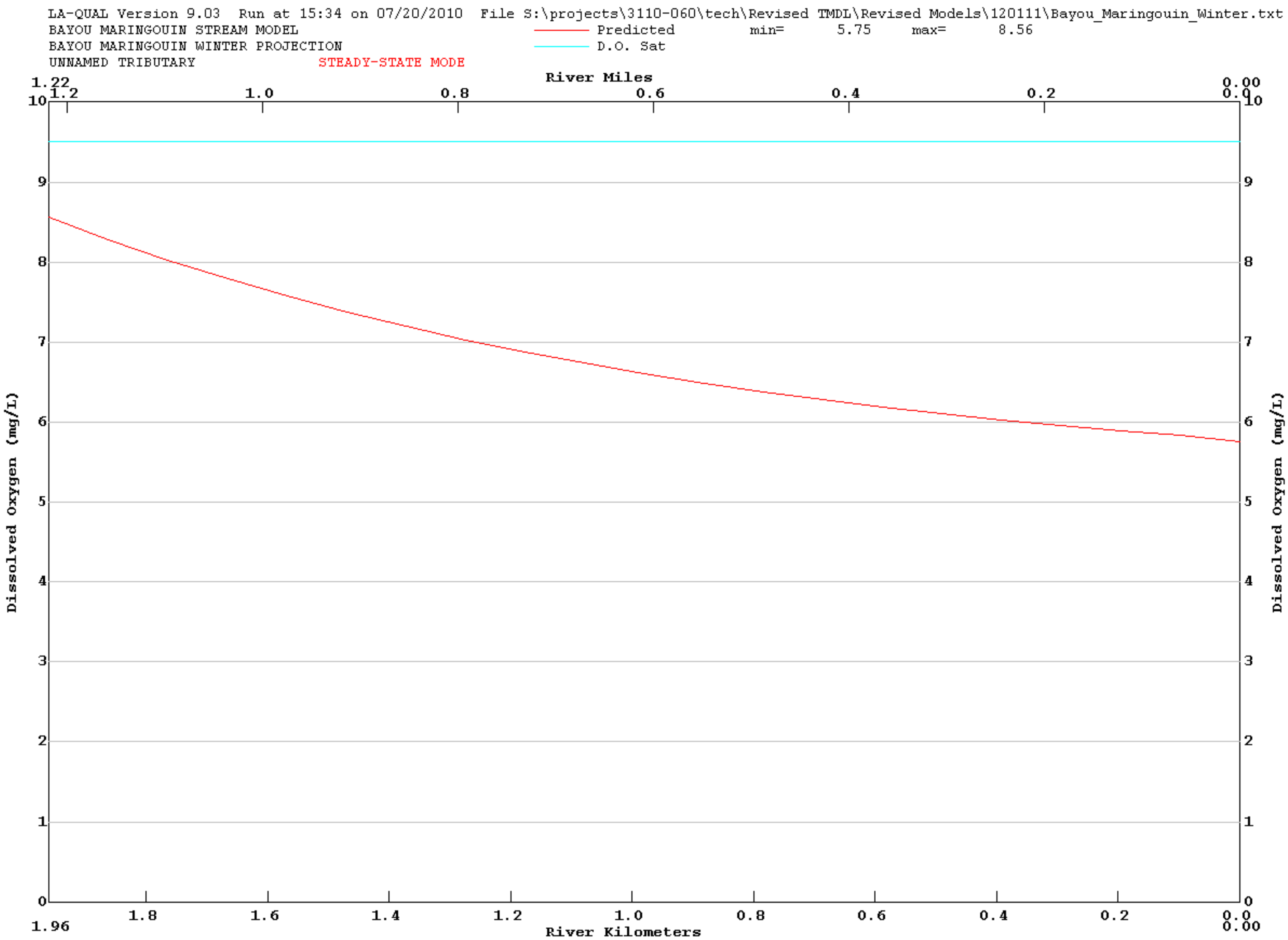


Figure 6 Continued. Winter Projection at 88% Removal of Man-Made NPS Loads



to calibration levels based on the character of the headwater. Where headwaters and tributaries exhibit man-made pollutant loads in excess of reference stream values, the loadings are reduced by the same uniform percent reduction as the benthic loads.

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

- The natural background benthic load is subtracted from the projection benthic load to obtain the man-made projection benthic load for each reach.

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

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

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 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.

- Point source CBOD and NBOD loading in lb/d and kg/d.

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

4.4.2 Bayou Maringouin TMDL

The TMDLs for the biochemical oxygen demanding constituents (CBOD, NBOD, and SOD), have been calculated for the summer and winter critical seasons. The TMDLs for the Bayou Maringouin watershed were set equal to the total stream loading capacity. The resulting TMDLs are summarized in Table 5 and Appendix E. Detailed loading calculations are presented in Appendix B.

Table 5. Total Maximum Daily Load (Sum of UCBOD, UNBOD, and SOD)

ALLOCATION	SUMMER		WINTER	
	% Reduction Required	(MAR-NOV) (lbs/day)	% Reduction Required	(DEC-FEB) (lbs/day)
Point Source WLA	0	0	0	0
Point Source Reserve MOS	0	0	0	0
Natural Nonpoint Source LA	0	1,369	0	890
Natural Nonpoint Source Reserve MOS	0	0	0	0
Manmade Nonpoint Source LA	98	18	88	62
Manmade Nonpoint Source Reserve MOS	0	4	0	15
TMDL		1,391		967

***Note1: UCBOD as stated in this allocation is Ultimate CBOD.
UCBOD to $CBOD_5$ ratio = 2.3 for all treatment levels
Permit allocations are generally based on $CBOD_5$***

5. Sensitivity Analysis

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

Values reported in Appendix A show the percentage variation of minimum DO in the main stem Bayou Maringouin. As show in Table 6, stream reaeration and benthal demand are the parameters to which DO is most sensitive. The other parameters creating major variations in the minimum DO values are initial temperature and velocity. The model is slightly to not sensitive to the remaining parameters.

Table 6. Summary of Calibration Model Sensitivity Analysis

	Positive Changes in Parameter			Negative Changes in parameter		
Parameter	% change	Minimum DO (mg/l)	Percentage Difference	% change	Minimum DO (mg/l)	Percentage Difference
Stream Reaeration	30	1.05	4.4	-30	0.73	-27.5
Benthal Demand	30	0.82	-18	-30	1.05	4.4
Initial Temperature	2	0.91	-9.6	-2	1.05	4.4
Stream Velocity	30	0.98	-2.9	-30	1.04	3.8
Incremental BOD	30	0.99	-1.1	-30	1.02	1.4
Stream Depth	30	1	-0.7	-30	1.02	1
BOD Decay Rate	30	1	-0.7	-30	1.02	0.9
Stream Baseflow	30	1	-0.2	-30	1.01	0.3
Incremental Inflow	30	1	-0.2	-30	1.01	0.3
Organic Nitrogen	30	1.01	0.1	-30	1.01	0.2
Organic Nitrogen Settling Rate	30	1.01	0.1	-30	1.01	0.1
Stream Dispersion	30	1.01	0	-30	1.01	0
BOD Anaerobic Decay	30	1.01	0	-30	1.01	0
Denitrification	30	1.01	0	-30	1.01	0
Incremental Outflow	30	1.01	0	-30	1.01	0
Incremental DO	30	1.01	0	-30	1.01	0
Incremental Organic Nitrogen	30	1.01	0	-30	1.01	0
Headwater Flow	30	1.01	0	-30	1.01	0
Headwater Temperature	30	1.01	0	-30	1.01	0
Headwater DO	30	1.01	0	-30	1.01	0
Headwater BOD	30	1.01	0	-30	1.01	0
Headwater Organic Nitrogen	30	1.01	0	-30	1.01	0
Wasteload Flow	30	1.01	0	-30	1.01	0
Lower Boundary Temperature	30	1.01	0	-30	1.01	0
Lower Boundary DO	30	1.01	0	-30	1.01	0

6. Conclusions

The TMDL requires manmade nonpoint source loads to be reduced by 98% during summer and 88% during winter, with no reduction in natural background loads. There are no point source dischargers located in this watershed.

The modeling which has been 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.

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 art 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.

This TMDL establishes load limitations for oxygen-demanding substances and goals for reduction of those pollutants. LDEQ's position is that when oxygen-demanding loads from point and nonpoint sources are reduced in order to ensure that the dissolved oxygen criterion is supported, nutrients are also reduced. The 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 reduce the nutrient loading from those sources.

Louisiana does not have numeric nutrient criteria at the present time. LDEQ is developing numeric nutrient criteria for waterbody types based on ecoregions in accordance with LDEQ's plan "Developing Nutrient Criteria for Louisiana 2006" which can be found at:

http://www.deq.louisiana.gov/portal/Portals/0/planning/LA%20Nutrient%20Strategy%20Plan%20Final%20FOR%20WEB.pdf

Water body types for nutrient criteria development in Louisiana are 1) inland rivers and streams; 2) freshwater wetlands; 3) freshwater lakes and reservoirs; 4) big rivers and floodplains/boundary rivers and associated water bodies; and 5) estuarine and coastal waters (including up to Louisiana's three mile boundary in the Gulf of Mexico). Proposed approaches for nutrient criteria development are currently under review by LDEQ and EPA. Nutrient criteria can be implemented upon state promulgation and EPA approval as per 40 CFR 131.21.

LDEQ recommends that all facilities discharging to impaired waterbodies take a proactive approach and prepare to receive nutrient limitations in the near future. Such a proactive approach should include nutrient monitoring and documentation through facility Discharge Monitoring Reports (DMRs) in order to assess their nutrient loads and the need to modify their treatment processes for nutrient removal.

The LDEQ is continuing to implement a watershed approach to surface water quality monitoring. In 2004 a four year sampling cycle replaces the previous five year cycle. Approximately one quarter of the states watersheds will be sampled each year so that all of the states watersheds will be sampled within the four year cycle. This will allow 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.

7. References

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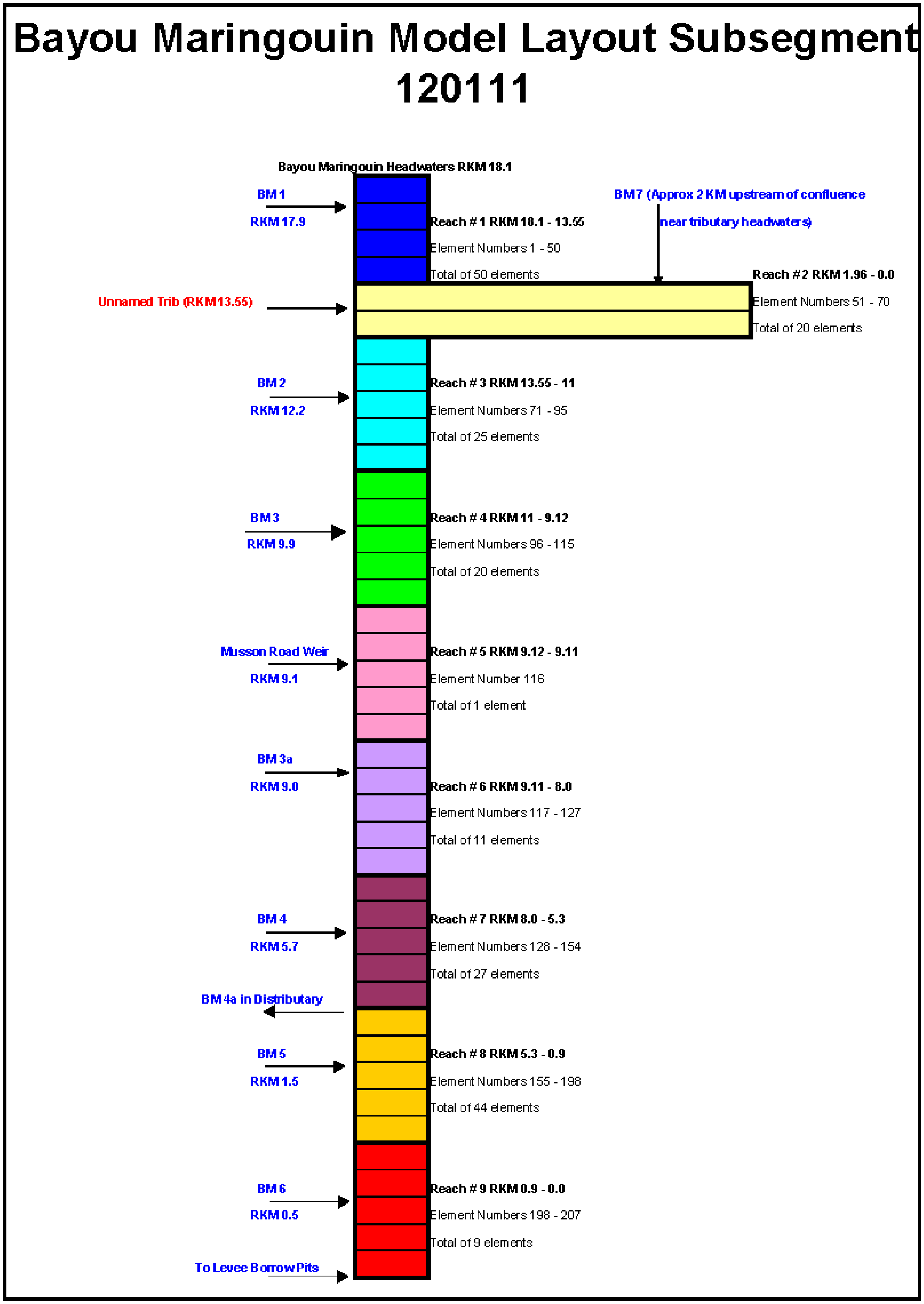
8. Appendices

Appendix A - Calibration Model Development

Appendix A1 – Vector Diagram



Appendix A2 – Reach Setup

Bayou Maringouin 120111

Reach #	Description	Headwater Yes/No	Starting modeled Kilometer	Ending modeled Kilometer	Modeled Length kilometers	Element Length kilometers	Element Count	Cumulative Elements	Begin Element #	End Element #
1	Headwater to Unnamed Trib	Yes	18.1	13.55	4.55	0.091	50	50	1	50
2	Unnamed Trib	Yes	1.96	0	1.96	0.098	20	70	51	70
3	Unnamed Trib to Above Weir	No	13.55	11	2.55	0.102	25	95	71	95
4	Above Weir to Weir	No	11	9.12	1.88	0.094	20	115	96	115
5	Below Weir Effect	No	9.12	9.11	0.01	0.010	1	116	116	116
6	Below Weir to Open Area	No	9.11	8	1.11	0.101	11	127	117	127
7	Open Area to Distributary	No	8	5.3	2.70	0.100	27	154	128	154
8	Distributary to Wide Section	No	5.3	0.9	4.40	0.100	44	198	155	198
9	Wide Section to End	No	0.9	0	0.90	0.100	9	207	199	207

Appendix A3 – Calibration Input, Output, and Graphs

```
! DATA TYPE 01 -- TITLES AND CONTROL DATA
CNTROL01     BAYOU MARINGOUIN STREAM MODEL
CNTROL02     BAYOU MARINGOUIN CALIBRATION MODEL
CNTROL11 YES METRIC UNITS
ENDATA01
! DATA TYPE 02 -- Model Options
MODOPT01  NO TEMPERATURE
MODOPT02  NO SALINITY
MODOPT03  NO CONSERVATIVE MATERIAL  I
MODOPT04  NO CONSERVATIVE MATERIAL II
MODOPT05 YES DISSOLVED OXYGEN
MODOPT06 YES BOD1 BIOCHEMICAL OXYGEN DEMAND
MODOPT07  NO BOD2 BIOCHEMICAL OXYGEN DEMAND
MODOPT08 YES NBOD OXYGEN DEMAND
MODOPT09  NO PHOSPHORUS
MODOPT10  NO CHLOROPHYLL A
MODOPT11  NO MACROPHYTES
MODOPT12  NO COLIFORM
ENDATA02
! DATA TYPE 03 -- PROGRAM CONSTANTS
PROGRAM  OCEAN EXCHANGE RATIO               = 0
PROGRAM  KL MINIMUM                         = 0.7
PROGRAM  MAXIMUM ITTERATION LIMIT           = 200
PROGRAM  EFFECTIVE BOD DUE TO ALGAE         = 0.1
PROGRAM  ALGAE OXYGEN PROD                  = 0
PROGRAM  HYDRAULIC CALCULATION METHOD       = 2
ENDATA03
! DATA TYPE 04 -- TEMPERATURE CORRECTION CONSTANTS
ENDATA04
! DATA TYPE 05 -- TEMPERATURE DATA
ENDATA05
! DATA TYPE 06 -- ALGAE CONSTANTS
ENDATA06
! DATA TYPE 07 -- MACROPHYTE CONSTANTS
ENDATA07
! DATA TYPE 08 -- REACH IDENTIFICATION DATA
REACH ID    1  BM HEADWATER TO UNNAMED TRIB       18.1      13.55     0.091
REACH ID    2  BM UNNAMED TRIBUTARY               1.96      0         0.098
REACH ID    3  BM UNNAMED TRIB TO ABOVE WEIR      13.55     11        0.102
REACH ID    4  BM ABOVE WEIR TO WEIR              11        9.12      0.094
REACH ID    5  BM BELOW WEIR EFFECT               9.12      9.11      0.01
REACH ID    6  BM BELOW WEIR TO OPEN AREA         9.11      8         0.1009
REACH ID    7  BM OPEN AREA TO DISTRIBUTARY       8         5.3       0.1
REACH ID    8  BM DISTRIBUTARY TO WIDE SECTION    5.3       0.9       0.1
REACH ID    9  BM WIDE SECTION TO END             0.9       0         0.1
ENDATA08
! DATA TYPE 09 -- ADVECTIVE HYDRAULIC COEFFICIENTS
HYDR-1      1  0      0.5    4.877  0      0.5    0.3322
HYDR-1      2  0      0.5    3.429  0      0.5    0.2027
HYDR-1      3  0      0.5    14.63  0      0.5    0.2987
HYDR-1      4  0      0.5    11.58  0      0.5    0.6614
HYDR-1      5  0      0.5    3.627  0      0.5    0.256
HYDR-1      6  0      0.5    3.627  0      0.5    0.256
HYDR-1      7  0      0.5    6.096  0      0.5    0.4968
HYDR-1      8  0      0.5    7.01   0      0.5    0.2438
HYDR-1      9  0      0.5    12.19  0      0.5    0.3048
ENDATA09
! DATA TYPE 10 -- DISPERSIVE HYDRAULIC COEFFICIENTS
HYDR-2      1       0.03
```

```
HYDR-2      2       0.03
HYDR-2      3       0.03
HYDR-2      4       0.03
HYDR-2      5       0
HYDR-2      6       1
HYDR-2      7       1
HYDR-2      8       10
HYDR-2      9       10
ENDATA10
! DATA TYPE 11 --  INITIAL CONDITIONS
INITIAL     1  25.6    0       3       0       0       0       16      0
INITIAL     2  25.2    0       3       0       0       0       13      0
INITIAL     3  26.8    0       3       0       0       0       28.9    0
INITIAL     4  26.8    0       3       0       0       0       37      0
INITIAL     5  26.8    0       3       0       0       0       41      0
INITIAL     6  26.8    0       3       0       0       0       27      0
INITIAL     7  27      0       3       0       0       0       27      0
INITIAL     8  27      0       3       0       0       0       27      0
INITIAL     9  27      0       3       0       0       0       57      0
ENDATA11
! DATA TYPE 12 -- REAERATION, SEDIMENT OXYGEN DEMAND AND BOD COEFFICIENTS
COEF-1      1  11                     6      0.07   0.05   1      0
COEF-1      2  11                     5.5    0.07   0.05   1      0
COEF-1      3  11                     3.2    0.07   0.05   1      0
COEF-1      4  11                     4.2    0.07   0.05   1      0
COEF-1      5  11                     2      0.07   0.05   1      0
COEF-1      6  11                     2.2    0.07   0.05   1      0
COEF-1      7  11                     2.2    0.07   0.05   1      0
COEF-1      8  11                     2.3    0.07   0.05   1      0
COEF-1      9  11                     1.8    0.07   0.05   1      0
ENDATA12
! DATA TYPE 13 -- NITROGEN AND PHOSPHOURS COEFFICIENTS
COEF-2      1  0.1    0.05   1      0      0      0      0
COEF-2      2  0.1    0.05   1      0      0      0      0
COEF-2      3  0.1    0.05   1      0      0      0      0
COEF-2      4  0.1    0.05   1      0      0      0      0
COEF-2      5  0.1    0.05   1      0      0      0      0
COEF-2      6  0.1    0.05   1      0      0      0      0
COEF-2      7  0.1    0.05   1      0      0      0      0
COEF-2      8  0.1    0.05   1      0      0      0      0
COEF-2      9  0.1    0.05   1      0      0      0      0
ENDATA13
! DATA TYPE 14 -- ALGAE AND MACROPHYTE COEFFICIENTS
COEF-3      1  1
COEF-3      2  1
COEF-3      3  1
COEF-3      4  1
COEF-3      5  1
COEF-3      6  1
COEF-3      7  1
COEF-3      8  1
COEF-3      9  1
ENDATA14
! DATA TYPE 15 -- COLIFORM AND NONCONSERVATIVE COEFFICIENTS
ENDATA15
! DATA TYPE 16 -- INCREMENTAL DATA FOR FLOW, TEMPERATURE, SALINITY, AND CONSERVATIVES
INCR-1      1  0        0.008    0        0        0        0
INCR-1      2  0        0.0016   0        0        0        0
INCR-1      3  0        0.005    0        0        0        0
INCR-1      4  0        0.0025   0        0        0        0
ENDATA16
```

```
! DATA TYPE 17 -- INCREMENTAL DATA FOR DO, BOD, AND NITROGEN
INCR-2      1  0        20       4        0        0
INCR-2      2  0        11       3        0        0
INCR-2      3  0        20       4        0        0
INCR-2      4  0        20       4        0        0
INCR-2      5  0        0        0        0        0
INCR-2      6  0        0        0        0        0
INCR-2      7  0        0        0        0        0
INCR-2      8  0        0        0        0        0
INCR-2      9  0        0        0        0        0
ENDATA17
! DATA TYPE 18 -- Incremental Data
INCR-3      1  0        0        0        0
INCR-3      2  0        0        0        0
INCR-3      3  0        0        0        0
INCR-3      4  0        0        0        0
INCR-3      5  0        0        0        0
INCR-3      6  0        0        0        0
INCR-3      7  0        0        0        0
INCR-3      8  0        0        0        0
INCR-3      9  0        0        0        0
ENDATA18
! DATA TYPE 19 -- NONPOINT SOURCE DATA
NONPOINT    1  32       9        0        0        0
NONPOINT    2  4        1        0        0        0
NONPOINT    3  17       10       0        0        0
NONPOINT    4  40       6        0        0        0
NONPOINT    5  0        0        0        0        0
NONPOINT    6  0        0        0        0        0
NONPOINT    7  3.5      3        0        0        0
NONPOINT    8  25       9.5      0        0        0
NONPOINT    9  8        3        0        0        0
ENDATA19
! DATA TYPE 20 -- HEADWATER DATA FOR FLOW, TEMPERATURE, SAALINITY, AND CONSERVATIVES
HDWTR-1  1     BAYOU MARINGOUIN         0.00006325.6
HDWTR-1  51    UNNAMED TRIBUTARY        0.0009  25.2
ENDATA20
! DATA TYPE 21 -- HEADWATER DATA FOR DO, BOD, AND NITROGEN
HDWTR-2  1     1.05     21.27    5.75
HDWTR-2  51    1.25     10.18    2.81
ENDATA21
! DATA TYPE 22 -- HEADWATER DATA FOR PHOSPHORUS, CHLOROOPHYLL, COLIFORM, AND NCM
HDWTR-3  1              16.91
HDWTR-3  51             13.6
ENDATA22
! DATA TYPE 23 -- JUNCTION DATA
JUNCTION 71   50    UNNAMED TRIB CONFLUENCE WITH BAYOU`
ENDATA23
! DATA TYPE 24
WSTLD-1  155   UPPER DISTRIBUTARY  -0.0099
ENDATA24
! DATA TYPE 25
WSTLD-2  155
ENDATA25
! DATA TYPE 26 -- WASTELOAD DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NCM
WSTLD-3  155
ENDATA26
! DATA TYPE 27 -- Lower Boundary Conditions
LOWER BC TEMPERATURE                        = 27.8
LOWER BC SALINITY                           = 0
LOWER BC CONSERVATIVE MATERIAL  I           = 0
```

```
LOWER BC CONSERVATIVE MATERIAL II           = 0
LOWER BC DISSOLVED OXYGEN                   = 0
LOWER BC BIOCHEMICAL OXYGEN DEMAND          = 0
LOWER BC NBOD                               = 0
LOWER BC PHOSPHORUS                         = 0
LOWER BC CHLOROPHYLL A                      = 62
LOWER BC COLIFORM                           = 0
LOWER BC NONCONSERVATIVE MATERIAL           = 0
ENDATA27
! DATA TYPE 28 -- Dam Data
DAM DATA  116  MUNSEN ROAD WEIR     1  1       1.05    1
ENDATA28
! DATA TYPE 29 -- SENSITIVITY ANALYSIS DATA
ENDATA29
! DATA TYPE 30 -- Plot Control Data
NUMBER OF PLOTS = 2
NUMBER OF REACHES IN PLOT 1 =   8
PLOT RCH 1  3  4  5  6  7  8  9
NUMBER OF REACHES IN PLOT 2 =   1
PLOT RCH 2
ENDATA30
!
! DATA TYPE 31 -- Overlay Plot Data
!
! - - - -1- - - - -2- - - - -3- - - - -4- - - - -5- - - - -6- - - - -7- - - - -8
!2345678901234567890123456789012345678901234567890123456789012345678901234567890
OVERLAY 1 OVERLAY/GENERAL.OVL             :MAIN STEM BAYOU MARINGOUIN
OVERLAY 2 OVERLAY/TRIBUTARY.OVL           :TRIBUTARY
ENDATA31
```

```
LA-QUAL Version 6.03
Louisiana Department of Environmental Quality

Input file is D:\Water Bodies\120111\Model\Calibration\calibration.txt
Output produced at 13:12 on 12/20/2004

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

CARD TYPE       CONTROL TITLES

TITLE01         BAYOU MARINGOUIN STREAM MODEL
TITLE02         BAYOU MARINGOUIN CALIBRATION MODEL
CNTROL11  YES   METRIC UNITS
ENDATA01

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

CARD TYPE       MODEL OPTION

MODOPT01   NO   TEMPERATURE
MODOPT02   NO   SALINITY
MODOPT03   NO   CONSERVATIVE MATERIAL  I
MODOPT04   NO   CONSERVATIVE MATERIAL II
MODOPT05  YES   DISSOLVED OXYGEN
MODOPT06  YES   BOD1 BIOCHEMICAL OXYGEN DEMAND
MODOPT07   NO   BOD2 BIOCHEMICAL OXYGEN DEMAND
MODOPT08  YES   NBOD OXYGEN DEMAND
MODOPT09   NO   PHOSPHORUS
MODOPT10   NO   CHLOROPHYLL A
MODOPT11   NO   MACROPHYTES
MODOPT12   NO   COLIFORM
ENDATA02

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

CARD TYPE       DESCRIPTION OF CONSTANT                        VALUE

PROGRAM         OCEAN EXCHANGE RATIO               =         0.00000
PROGRAM         KL MINIMUM                         =         0.70000 meters/day
PROGRAM         MAXIMUM ITTERATION LIMIT           =       200.00000
PROGRAM         EFFECTIVE BOD DUE TO ALGAE         =         0.10000 mg/L BOD per ug/L chl a
PROGRAM         ALGAE OXYGEN PROD                  =         0.00000 mg O/ug chl a/day
PROGRAM         HYDRAULIC CALCULATION METHOD       =         2.00000 (widths and depths)
ENDATA03

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

 CARD TYPE     RATE CODE     THETA VALUE

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

$$$ DATA TYPE 8 (REACH IDENTIFICATION DATA) $$$

CARD TYPE	REACH	ID	NAME	BEGIN REACH km		END REACH km	ELEM LENGTH km	REACH LENGTH km	ELEMS PER RCH	BEGIN ELEM NUM	END ELEM NUM
REACH ID	1	BM	HEADWATER TO UNNAMED TRIB	18.10	TO	13.55	0.0910	4.55	50	1	50
REACH ID	2	BM	UNNAMED TRIBUTARY	1.96	TO	0.00	0.0980	1.96	20	51	70
REACH ID	3	BM	UNNAMED TRIB TO ABOVE WEIR	13.55	TO	11.00	0.1020	2.55	25	71	95
REACH ID	4	BM	ABOVE WEIR TO WEIR	11.00	TO	9.12	0.0940	1.88	20	96	115
REACH ID	5	BM	BELOW WEIR EFFECT	9.12	TO	9.11	0.0100	0.01	1	116	116
REACH ID	6	BM	BELOW WEIR TO OPEN AREA	9.11	TO	8.00	0.1009	1.11	11	117	127
REACH ID	7	BM	OPEN AREA TO DISTRIBUTARY	8.00	TO	5.30	0.1000	2.70	27	128	154
REACH ID	8	BM	DISTRIBUTARY TO WIDE SECTION	5.30	TO	0.90	0.1000	4.40	44	155	198
REACH ID	9	BM	WIDE SECTION TO END	0.90	TO	0.00	0.1000	0.90	9	199	207

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	BM	0.000	0.500	4.877	0.000	0.500	0.332	0.00000	0.000
HYDR-1	2	BM	0.000	0.500	3.429	0.000	0.500	0.203	0.00000	0.000
HYDR-1	3	BM	0.000	0.500	14.630	0.000	0.500	0.299	0.00000	0.000
HYDR-1	4	BM	0.000	0.500	11.580	0.000	0.500	0.661	0.00000	0.000
HYDR-1	5	BM	0.000	0.500	3.627	0.000	0.500	0.256	0.00000	0.000
HYDR-1	6	BM	0.000	0.500	3.627	0.000	0.500	0.256	0.00000	0.000
HYDR-1	7	BM	0.000	0.500	6.096	0.000	0.500	0.497	0.00000	0.000
HYDR-1	8	BM	0.000	0.500	7.010	0.000	0.500	0.244	0.00000	0.000
HYDR-1	9	BM	0.000	0.500	12.190	0.000	0.500	0.305	0.00000	0.000

ENDATA09

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

CARD TYPE	REACH	ID	TIDAL RANGE	DISPERSION "A"	DISPERSION "B"	DISPERSION "C"	DISPERSION "D"
HYDR	1	BM	0.00	0.030	0.000	0.000	0.000
HYDR	2	BM	0.00	0.030	0.000	0.000	0.000
HYDR	3	BM	0.00	0.030	0.000	0.000	0.000
HYDR	4	BM	0.00	0.030	0.000	0.000	0.000
HYDR	5	BM	0.00	0.000	0.000	0.000	0.000
HYDR	6	BM	0.00	1.000	0.000	0.000	0.000
HYDR	7	BM	0.00	1.000	0.000	0.000	0.000
HYDR	8	BM	0.00	10.000	0.000	0.000	0.000
HYDR	9	BM	0.00	10.000	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	BM	25.60	0.00	3.00	0.00	0.00	0.00	16.00	0.00

INITIAL	2	BM	25.20	0.00	3.00	0.00	0.00	0.00	13.00	0.00
INITIAL	3	BM	26.80	0.00	3.00	0.00	0.00	0.00	28.90	0.00
INITIAL	4	BM	26.80	0.00	3.00	0.00	0.00	0.00	37.00	0.00
INITIAL	5	BM	26.80	0.00	3.00	0.00	0.00	0.00	41.00	0.00
INITIAL	6	BM	26.80	0.00	3.00	0.00	0.00	0.00	27.00	0.00
INITIAL	7	BM	27.00	0.00	3.00	0.00	0.00	0.00	27.00	0.00
INITIAL	8	BM	27.00	0.00	3.00	0.00	0.00	0.00	27.00	0.00
INITIAL	9	BM	27.00	0.00	3.00	0.00	0.00	0.00	57.00	0.00

ENDATA11

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

CARD TYPE	RCH NUM	RCH ID	K2 OPT	K2 "A"	K2 "B"	K2 "C"	BKGRND SOD g/m²/d	BOD DECAY per day	BOD SETT m/d	BOD CONV TO SOD	ANAER BOD DECAY per day	BOD2 DECAY per day	BOD2 SETT m/d	BOD2 CONV TO SOD	ANAER BOD2 DECAY per day
COEF-1	1	BM	11 TEXAS	0.000	0.000	0.000	6.000	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	2	BM	11 TEXAS	0.000	0.000	0.000	5.500	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	3	BM	11 TEXAS	0.000	0.000	0.000	3.200	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	4	BM	11 TEXAS	0.000	0.000	0.000	4.200	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	5	BM	11 TEXAS	0.000	0.000	0.000	2.000	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	6	BM	11 TEXAS	0.000	0.000	0.000	2.200	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	7	BM	11 TEXAS	0.000	0.000	0.000	2.200	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	8	BM	11 TEXAS	0.000	0.000	0.000	2.300	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	9	BM	11 TEXAS	0.000	0.000	0.000	1.800	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000

ENDATA12

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

CARD TYPE	REACH	ID	NBOD DECA	NBOD SETT	ORGN CONV TO NH3 SRCE	NH3 DECA	NH3 SRCE	PHOS SRCE	DENIT RATE
COEF-2	1	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000
COEF-2	2	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000
COEF-2	3	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000
COEF-2	4	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000
COEF-2	5	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000
COEF-2	6	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000
COEF-2	7	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000
COEF-2	8	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000
COEF-2	9	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000

ENDATA13

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

CARD TYPE	REACH	ID	SECCHI DEPTH	ALGAE: CHL A	ALGAE SETT	ALG CONV TO SOD	ALGAE GROW	ALGAE RESP	MACRO GROW	MACRO RESP
COEF-3	1	BM	1.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
COEF-3	2	BM	1.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
COEF-3	3	BM	1.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
COEF-3	4	BM	1.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
COEF-3	5	BM	1.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
COEF-3	6	BM	1.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
COEF-3	7	BM	1.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
COEF-3	8	BM	1.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
COEF-3	9	BM	1.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00

ENDATA14

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

CARD TYPE	REACH	ID	COLIFORM DIE-OFF	NCM DECAY	NCM SETT	NCM CONV TO SOD
COEF-4	1	BM	0.000	0.000	0.000	0.000
COEF-4	2	BM	0.000	0.000	0.000	0.000
COEF-4	3	BM	0.000	0.000	0.000	0.000
COEF-4	4	BM	0.000	0.000	0.000	0.000
COEF-4	5	BM	0.000	0.000	0.000	0.000
COEF-4	6	BM	0.000	0.000	0.000	0.000
COEF-4	7	BM	0.000	0.000	0.000	0.000
COEF-4	8	BM	0.000	0.000	0.000	0.000
COEF-4	9	BM	0.000	0.000	0.000	0.000

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
INCR-1	1	BM	0.00000	0.00800	0.00	0.00	0.00	0.00	0.00176	0.00000
INCR-1	2	BM	0.00000	0.00160	0.00	0.00	0.00	0.00	0.00082	0.00000
INCR-1	3	BM	0.00000	0.00500	0.00	0.00	0.00	0.00	0.00196	0.00000
INCR-1	4	BM	0.00000	0.00250	0.00	0.00	0.00	0.00	0.00133	0.00000
INCR-1	5	BM	0.00000	0.00000	0.00	0.00	0.00	0.00	0.00000	0.00000
INCR-1	6	BM	0.00000	0.00000	0.00	0.00	0.00	0.00	0.00000	0.00000
INCR-1	7	BM	0.00000	0.00000	0.00	0.00	0.00	0.00	0.00000	0.00000
INCR-1	8	BM	0.00000	0.00000	0.00	0.00	0.00	0.00	0.00000	0.00000
INCR-1	9	BM	0.00000	0.00000	0.00	0.00	0.00	0.00	0.00000	0.00000

ENDATA16

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

CARD TYPE	REACH	ID	DO	BOD	NBOD			BOD#2
INCR-2	1	BM	0.00	20.00	4.00	0.00	0.00	0.00
INCR-2	2	BM	0.00	11.00	3.00	0.00	0.00	0.00
INCR-2	3	BM	0.00	20.00	4.00	0.00	0.00	0.00
INCR-2	4	BM	0.00	20.00	4.00	0.00	0.00	0.00
INCR-2	5	BM	0.00	0.00	0.00	0.00	0.00	0.00
INCR-2	6	BM	0.00	0.00	0.00	0.00	0.00	0.00
INCR-2	7	BM	0.00	0.00	0.00	0.00	0.00	0.00
INCR-2	8	BM	0.00	0.00	0.00	0.00	0.00	0.00
INCR-2	9	BM	0.00	0.00	0.00	0.00	0.00	0.00

ENDATA17

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

CARD TYPE	REACH	ID	PHOS	CHL A	COLI	NCM
INCR-3	1	BM	0.00	0.00	0.00	0.00
INCR-3	2	BM	0.00	0.00	0.00	0.00
INCR-3	3	BM	0.00	0.00	0.00	0.00
INCR-3	4	BM	0.00	0.00	0.00	0.00
INCR-3	5	BM	0.00	0.00	0.00	0.00
INCR-3	6	BM	0.00	0.00	0.00	0.00
INCR-3	7	BM	0.00	0.00	0.00	0.00
INCR-3	8	BM	0.00	0.00	0.00	0.00
INCR-3	9	BM	0.00	0.00	0.00	0.00

ENDATA18

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

CARD TYPE	REACH	ID	BOD#1	NBOD	COLI	NCM	DO	BOD#2
NONPOINT	1	BM	32.00	9.00	0.00	0.00	0.00	0.00
NONPOINT	2	BM	4.00	1.00	0.00	0.00	0.00	0.00
NONPOINT	3	BM	17.00	10.00	0.00	0.00	0.00	0.00
NONPOINT	4	BM	40.00	6.00	0.00	0.00	0.00	0.00
NONPOINT	5	BM	0.00	0.00	0.00	0.00	0.00	0.00
NONPOINT	6	BM	0.00	0.00	0.00	0.00	0.00	0.00
NONPOINT	7	BM	3.50	3.00	0.00	0.00	0.00	0.00
NONPOINT	8	BM	25.00	9.50	0.00	0.00	0.00	0.00
NONPOINT	9	BM	8.00	3.00	0.00	0.00	0.00	0.00
ENDATA19								

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

CARD TYPE	ELEMENT	NAME	UNIT	FLOW m^3/s	FLOW cfs	TEMP deg C	SALIN ppt	CM-I	CM-II
HDWTR-1	1	BAYOU MARINGOUIN	0	0.00006	0.002	25.60	0.00	0.000	0.000
HDWTR-1	51	UNNAMED TRIBUTARY	0	0.00090	0.032	25.20	0.00	0.000	0.000
ENDATA20									

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

CARD TYPE	ELEMENT	NAME	DO mg/L	BOD#1 mg/L	NBOD mg/L	mg/L	mg/L	BOD#2 mg/L
HDWTR-2	1	BAYOU MARINGOUIN	1.05	21.27	5.75	0.00	0.00	0.00
HDWTR-2	51	UNNAMED TRIBUTARY	1.25	10.18	2.81	0.00	0.00	0.00
ENDATA21								

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

CARD TYPE	ELEMENT	NAME	PHOS mg/L	CHL A mg/L	COLI mg/L	NCM mg/L
HDWTR-3	1	BAYOU MARINGOUIN	0.00	16.91	0.00	0.00
HDWTR-3	51	UNNAMED TRIBUTARY	0.00	13.60	0.00	0.00
ENDATA22						

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

CARD TYPE	JUNCTION ELEMENT	UPSTRM ELEMENT	RIVER KILOM	NAME
JUNCTION	71	50	13.55	UNNAMED TRIB CONFLUENCE WITH BAYOU`
ENDATA23				

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

CARD TYPE	ELEMENT	RKILO	NAME	FLOW m^3/s	FLOW cfs	FLOW MGD	TEMP deg C	SALIN ppt	CM-I	CM-II
WSTLD-1	155	5.30	UPPER DISTRIBUTARY	-0.00990	-0.34958	-0.226	0.00	0.00	0.000	0.000
ENDATA24										

$$$ DATA TYPE 25 (WASTELOAD DATA FOR DO, BOD, AND NITROGEN) $$$

CARD TYPE	ELEMENT	NAME	DO mg/L	BOD mg/L	% BOD RMVL	NBOD mg/L	mg/L	% NITRIF	mg/L	BOD#2 mg/L

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WSTLD-2         155     UPPER DISTRIBUTARY          0.00      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
                                                    mg/L      mg/L      mg/L      mg/L

WSTLD-3         155     UPPER DISTRIBUTARY          0.00      0.00      0.00      0.00
ENDATA26

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

CARD TYPE    CONSTITUENT                    CONCENTRATION

LOWER BC     TEMPERATURE                        =     27.800     deg C
LOWER BC     SALINITY                           =      0.000     ppt
LOWER BC     CONSERVATIVE MATERIAL  I           =      0.000
LOWER BC     CONSERVATIVE MATERIAL II           =      0.000
LOWER BC     DISSOLVED OXYGEN                   =      0.000     mg/L
LOWER BC     BIOCHEMICAL OXYGEN DEMAND          =      0.000     mg/L
LOWER BC     NBOD                               =      0.000     mg/L
LOWER BC     PHOSPHORUS                         =      0.000     mg/L
LOWER BC     CHLOROPHYLL A                      =     62.000     µg/L
LOWER BC     COLIFORM                           =      0.000     #/100 mL
LOWER BC     NONCONSERVATIVE MATERIAL           =      0.000
ENDATA27

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

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

DAM DATA        116     MUNSEN ROAD WEIR        1     1.000     1.050     1.000
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 =  2
NUMBER OF REACHES IN PLOT 1 =   8
PLOT RCH  1  3  4  5  6  7  8  9
NUMBER OF REACHES IN PLOT 2 =   1
PLOT RCH  2
ENDATA30

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


OVERLAY 1 OVERLAY/GENERAL.OVL            :MAIN STEM BAYOU MARINGOUIN
OVERLAY 2 OVERLAY/TRIBUTARY.OVL          :TRIBUTARY
ENDATA31


     .....NO ERRORS DETECTED IN INPUT DATA
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.....HYDRAULIC CALCULATIONS COMPLETED
.....TRIDIAGONAL MATRIX TERMS INITIALIZED
.....OXYGEN DEPENDENT RATES CONVERGENT IN  45 ITERATIONS
.....CONSTITUENT CALCULATIONS COMPLETED
.....GRAPHICS DATA FOR PLOT 1 WRITTEN TO UNIT 11
.....GRAPHICS DATA FOR PLOT 2 WRITTEN TO UNIT 12
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FINAL REPORT   BAYOU MARINGOUIN   BAYOU MARINGOUIN STREAM MODEL
REACH NO. 1   HEADWATER TO UNNAMED TRIB   BAYOU MARINGOUIN CALIBRATION MODEL

** REACH INPUTS **

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-I	CM-II	DO mg/L	BOD#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM
1	HDWTR	0.00006	25.60	0.00	0.00	0.00	1.05	19.67	0.00	21.27	0.00	5.75	0.00	0.00	0.00	16.00	0.00	0.00
EACH	INCR	0.00016	0.00	0.00	0.00	0.00	0.00	20.00	0.00			4.00	0.00	0.00	0.00	0.00	0.00	

** HYDRAULIC PARAMETER VALUES **

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	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
1	18.10	18.01	0.00022	0.0	0.00014	7.65	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.000
2	18.01	17.92	0.00038	0.0	0.00024	4.46	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.000
3	17.92	17.83	0.00054	0.0	0.00034	3.14	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.000
4	17.83	17.74	0.00070	0.0	0.00043	2.43	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.000
5	17.74	17.65	0.00086	0.0	0.00053	1.98	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.001
6	17.65	17.55	0.00102	0.0	0.00063	1.67	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.001
7	17.55	17.46	0.00118	0.0	0.00073	1.44	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.001
8	17.46	17.37	0.00134	0.0	0.00083	1.27	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.001
9	17.37	17.28	0.00150	0.0	0.00093	1.14	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.001
10	17.28	17.19	0.00166	0.0	0.00103	1.03	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.001
11	17.19	17.10	0.00182	0.0	0.00113	0.94	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.001
12	17.10	17.01	0.00198	0.0	0.00122	0.86	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.001
13	17.01	16.92	0.00214	0.0	0.00132	0.80	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.001
14	16.92	16.83	0.00230	0.0	0.00142	0.74	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.001
15	16.83	16.74	0.00246	0.0	0.00152	0.69	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
16	16.74	16.64	0.00262	0.0	0.00162	0.65	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
17	16.64	16.55	0.00278	0.0	0.00172	0.61	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
18	16.55	16.46	0.00294	0.0	0.00182	0.58	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
19	16.46	16.37	0.00310	0.0	0.00192	0.55	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
20	16.37	16.28	0.00326	0.0	0.00201	0.52	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
21	16.28	16.19	0.00342	0.0	0.00211	0.50	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
22	16.19	16.10	0.00358	0.0	0.00221	0.48	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
23	16.10	16.01	0.00374	0.0	0.00231	0.46	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
24	16.01	15.92	0.00390	0.0	0.00241	0.44	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
25	15.92	15.83	0.00406	0.0	0.00251	0.42	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.003
26	15.83	15.73	0.00422	0.0	0.00261	0.40	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.003
27	15.73	15.64	0.00438	0.0	0.00271	0.39	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.003
28	15.64	15.55	0.00454	0.0	0.00280	0.38	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.003
29	15.55	15.46	0.00470	0.0	0.00290	0.36	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.003
30	15.46	15.37	0.00486	0.0	0.00300	0.35	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.003
31	15.37	15.28	0.00502	0.0	0.00310	0.34	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.003
32	15.28	15.19	0.00518	0.0	0.00320	0.33	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.003
33	15.19	15.10	0.00534	0.0	0.00330	0.32	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.003
34	15.10	15.01	0.00550	0.0	0.00340	0.31	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.003

35	15.01	14.92	0.00566	0.0	0.00350	0.30	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.003
36	14.92	14.82	0.00582	0.0	0.00359	0.29	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.004
37	14.82	14.73	0.00598	0.0	0.00369	0.29	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.004
38	14.73	14.64	0.00614	0.0	0.00379	0.28	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.004
39	14.64	14.55	0.00630	0.0	0.00389	0.27	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.004
40	14.55	14.46	0.00646	0.0	0.00399	0.26	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.004
41	14.46	14.37	0.00662	0.0	0.00409	0.26	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.004
42	14.37	14.28	0.00678	0.0	0.00419	0.25	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.004
43	14.28	14.19	0.00694	0.0	0.00429	0.25	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.004
44	14.19	14.10	0.00710	0.0	0.00438	0.24	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.004
45	14.10	14.01	0.00726	0.0	0.00448	0.23	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.004
46	14.01	13.91	0.00742	0.0	0.00458	0.23	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.005
47	13.91	13.82	0.00758	0.0	0.00468	0.23	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.005
48	13.82	13.73	0.00774	0.0	0.00478	0.22	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.005
49	13.73	13.64	0.00790	0.0	0.00488	0.22	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.005
50	13.64	13.55	0.00806	0.0	0.00498	0.21	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.005
TOT						42.63			7371.63	22190.34					
AVG					0.00124		0.33	4.88			1.62				
CUM						42.63									

*** BIOLOGICAL AND PHYSICAL COEFFICIENTS ***

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#2 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 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	18.009	8.17	2.35	0.05	0.17	0.00	0.00	0.00	0.00	8.55	9.68	5.16	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	17.918	8.17	2.35	0.05	0.17	0.00	0.00	0.00	0.00	8.56	9.69	5.16	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	17.827	8.16	2.35	0.05	0.17	0.00	0.00	0.00	0.00	8.58	9.71	5.17	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	17.736	8.16	2.35	0.05	0.17	0.00	0.00	0.00	0.00	8.59	9.72	5.17	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	17.645	8.15	2.35	0.05	0.17	0.00	0.00	0.00	0.00	8.60	9.73	5.17	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	17.554	8.15	2.35	0.05	0.17	0.00	0.00	0.00	0.00	8.61	9.75	5.17	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	17.463	8.15	2.35	0.05	0.17	0.00	0.00	0.00	0.00	8.63	9.76	5.17	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	17.372	8.14	2.35	0.05	0.17	0.00	0.00	0.00	0.00	8.64	9.77	5.17	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	17.281	8.14	2.35	0.05	0.17	0.00	0.00	0.00	0.00	8.65	9.79	5.17	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	17.190	8.14	2.35	0.05	0.17	0.00	0.00	0.00	0.00	8.67	9.80	5.17	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	17.099	8.13	2.36	0.05	0.17	0.00	0.00	0.00	0.00	8.68	9.81	5.17	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	17.008	8.13	2.36	0.05	0.17	0.00	0.00	0.00	0.00	8.69	9.83	5.17	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	16.917	8.13	2.36	0.05	0.17	0.00	0.00	0.00	0.00	8.71	9.84	5.17	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	16.826	8.12	2.36	0.05	0.17	0.00	0.00	0.00	0.00	8.72	9.86	5.18	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	16.735	8.12	2.36	0.05	0.17	0.00	0.00	0.00	0.00	8.73	9.87	5.18	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	16.644	8.12	2.36	0.05	0.17	0.00	0.00	0.00	0.00	8.75	9.88	5.18	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	16.553	8.11	2.36	0.05	0.17	0.00	0.00	0.00	0.00	8.76	9.90	5.18	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	16.462	8.11	2.36	0.05	0.17	0.00	0.00	0.00	0.00	8.77	9.91	5.18	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	16.371	8.11	2.36	0.05	0.17	0.00	0.00	0.00	0.00	8.79	9.92	5.18	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	16.280	8.10	2.36	0.05	0.17	0.00	0.00	0.00	0.00	8.80	9.94	5.18	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	16.189	8.10	2.37	0.05	0.17	0.00	0.00	0.00	0.00	8.81	9.95	5.18	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	16.098	8.09	2.37	0.05	0.17	0.00	0.00	0.00	0.00	8.83	9.96	5.18	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	16.007	8.09	2.37	0.05	0.17	0.00	0.00	0.00	0.00	8.84	9.98	5.18	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	15.916	8.09	2.37	0.05	0.17	0.00	0.00	0.00	0.00	8.85	9.99	5.18	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	15.825	8.08	2.37	0.05	0.17	0.00	0.00	0.00	0.00	8.87	10.01	5.18	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	15.734	8.08	2.37	0.05	0.17	0.00	0.00	0.00	0.00	8.88	10.02	5.19	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	15.643	8.08	2.37	0.05	0.17	0.00	0.00	0.00	0.00	8.89	10.03	5.19	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	15.552	8.07	2.37	0.05	0.17	0.00	0.00	0.00	0.00	8.91	10.05	5.19	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	15.461	8.07	2.37	0.05	0.17	0.00	0.00	0.00	0.00	8.92	10.06	5.19	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	15.370	8.07	2.38	0.05	0.17	0.00	0.00	0.00	0.00	8.93	10.08	5.19	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	15.279	8.06	2.38	0.05	0.17	0.00	0.00	0.00	0.00	8.95	10.09	5.19	0.01	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32	15.188	8.06	2.38	0.05	0.18	0.00	0.00	0.00	0.00	8.96	10.10	5.19	0.01	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33	15.097	8.06	2.38	0.05	0.18	0.00	0.00	0.00	0.00	8.97	10.12	5.19	0.01	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

34	15.006	8.05	2.38	0.05	0.18	0.00	0.00	0.00	0.00	8.99	10.13	5.19	0.01	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	14.915	8.05	2.38	0.05	0.18	0.00	0.00	0.00	0.00	9.00	10.14	5.19	0.01	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36	14.824	8.05	2.38	0.05	0.18	0.00	0.00	0.00	0.00	9.01	10.16	5.19	0.01	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37	14.733	8.04	2.38	0.05	0.18	0.00	0.00	0.00	0.00	9.03	10.17	5.20	0.01	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	14.642	8.04	2.38	0.05	0.18	0.00	0.00	0.00	0.00	9.04	10.19	5.20	0.01	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39	14.551	8.03	2.38	0.05	0.18	0.00	0.00	0.00	0.00	9.06	10.20	5.20	0.01	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	14.460	8.03	2.39	0.05	0.18	0.00	0.00	0.00	0.00	9.07	10.21	5.20	0.01	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41	14.369	8.03	2.39	0.05	0.18	0.00	0.00	0.00	0.00	9.08	10.23	5.20	0.01	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	14.278	8.02	2.39	0.05	0.18	0.00	0.00	0.00	0.00	9.10	10.24	5.20	0.01	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
43	14.187	8.02	2.39	0.05	0.18	0.00	0.00	0.00	0.00	9.11	10.26	5.20	0.01	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	14.096	8.02	2.39	0.05	0.18	0.00	0.00	0.00	0.00	9.12	10.27	5.20	0.01	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	14.005	8.01	2.39	0.05	0.18	0.00	0.00	0.00	0.00	9.14	10.29	5.20	0.01	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	13.914	8.01	2.39	0.05	0.18	0.00	0.00	0.00	0.00	9.15	10.30	5.20	0.01	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	13.823	8.01	2.39	0.05	0.18	0.00	0.00	0.00	0.00	9.17	10.31	5.20	0.01	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48	13.732	8.00	2.39	0.05	0.18	0.00	0.00	0.00	0.00	9.18	10.33	5.20	0.01	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	13.641	8.00	2.39	0.05	0.18	0.00	0.00	0.00	0.00	9.19	10.34	5.21	0.01	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	13.550	8.00	2.40	0.05	0.18	0.00	0.00	0.00	0.00	9.21	10.33	5.27	0.01	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			2.11	0.07	0.15	0.00	0.00	0.00	0.00	6.00			0.10	0.15	0.00	0.00	0.00	0.00			0.00	0.00	0.00

* 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#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO g/m³	COLI #/100mL	NCM
1	18.009	25.62	0.00	0.00	0.00	1.07	19.78	0.00	21.41	0.00	5.80	0.00	0.00	0.00	0.00	16.26	0.00	0.	0.00
2	17.918	25.65	0.00	0.00	0.00	1.07	19.78	0.00	21.43	0.00	5.80	0.00	0.00	0.00	0.00	16.52	0.00	0.	0.00
3	17.827	25.67	0.00	0.00	0.00	1.06	19.78	0.00	21.46	0.00	5.80	0.00	0.00	0.00	0.00	16.77	0.00	0.	0.00
4	17.736	25.70	0.00	0.00	0.00	1.06	19.78	0.00	21.48	0.00	5.80	0.00	0.00	0.00	0.00	17.03	0.00	0.	0.00
5	17.645	25.72	0.00	0.00	0.00	1.06	19.77	0.00	21.50	0.00	5.80	0.00	0.00	0.00	0.00	17.29	0.00	0.	0.00
6	17.554	25.74	0.00	0.00	0.00	1.06	19.77	0.00	21.52	0.00	5.80	0.00	0.00	0.00	0.00	17.55	0.00	0.	0.00
7	17.463	25.77	0.00	0.00	0.00	1.06	19.76	0.00	21.54	0.00	5.79	0.00	0.00	0.00	0.00	17.81	0.00	0.	0.00
8	17.372	25.79	0.00	0.00	0.00	1.06	19.76	0.00	21.57	0.00	5.79	0.00	0.00	0.00	0.00	18.06	0.00	0.	0.00
9	17.281	25.82	0.00	0.00	0.00	1.06	19.75	0.00	21.59	0.00	5.79	0.00	0.00	0.00	0.00	18.32	0.00	0.	0.00
10	17.190	25.84	0.00	0.00	0.00	1.06	19.75	0.00	21.61	0.00	5.79	0.00	0.00	0.00	0.00	18.58	0.00	0.	0.00
11	17.099	25.86	0.00	0.00	0.00	1.05	19.75	0.00	21.63	0.00	5.79	0.00	0.00	0.00	0.00	18.84	0.00	0.	0.00
12	17.008	25.89	0.00	0.00	0.00	1.05	19.74	0.00	21.65	0.00	5.79	0.00	0.00	0.00	0.00	19.10	0.00	0.	0.00
13	16.917	25.91	0.00	0.00	0.00	1.05	19.74	0.00	21.67	0.00	5.79	0.00	0.00	0.00	0.00	19.35	0.00	0.	0.00
14	16.826	25.94	0.00	0.00	0.00	1.05	19.73	0.00	21.69	0.00	5.79	0.00	0.00	0.00	0.00	19.61	0.00	0.	0.00
15	16.735	25.96	0.00	0.00	0.00	1.05	19.73	0.00	21.71	0.00	5.79	0.00	0.00	0.00	0.00	19.87	0.00	0.	0.00
16	16.644	25.98	0.00	0.00	0.00	1.05	19.72	0.00	21.74	0.00	5.78	0.00	0.00	0.00	0.00	20.13	0.00	0.	0.00
17	16.553	26.01	0.00	0.00	0.00	1.05	19.72	0.00	21.76	0.00	5.78	0.00	0.00	0.00	0.00	20.39	0.00	0.	0.00
18	16.462	26.03	0.00	0.00	0.00	1.04	19.71	0.00	21.78	0.00	5.78	0.00	0.00	0.00	0.00	20.64	0.00	0.	0.00
19	16.371	26.06	0.00	0.00	0.00	1.04	19.71	0.00	21.80	0.00	5.78	0.00	0.00	0.00	0.00	20.90	0.00	0.	0.00
20	16.280	26.08	0.00	0.00	0.00	1.04	19.71	0.00	21.82	0.00	5.78	0.00	0.00	0.00	0.00	21.16	0.00	0.	0.00
21	16.189	26.10	0.00	0.00	0.00	1.04	19.70	0.00	21.84	0.00	5.78	0.00	0.00	0.00	0.00	21.42	0.00	0.	0.00
22	16.098	26.13	0.00	0.00	0.00	1.04	19.70	0.00	21.86	0.00	5.78	0.00	0.00	0.00	0.00	21.68	0.00	0.	0.00
23	16.007	26.15	0.00	0.00	0.00	1.04	19.69	0.00	21.89	0.00	5.78	0.00	0.00	0.00	0.00	21.93	0.00	0.	0.00
24	15.916	26.18	0.00	0.00	0.00	1.04	19.69	0.00	21.91	0.00	5.78	0.00	0.00	0.00	0.00	22.19	0.00	0.	0.00
25	15.825	26.20	0.00	0.00	0.00	1.04	19.68	0.00	21.93	0.00	5.77	0.00	0.00	0.00	0.00	22.45	0.00	0.	0.00
26	15.734	26.22	0.00	0.00	0.00	1.03	19.68	0.00	21.95	0.00	5.77	0.00	0.00	0.00	0.00	22.71	0.00	0.	0.00
27	15.643	26.25	0.00	0.00	0.00	1.03	19.67	0.00	21.97	0.00	5.77	0.00	0.00	0.00	0.00	22.97	0.00	0.	0.00
28	15.552	26.27	0.00	0.00	0.00	1.03	19.67	0.00	21.99	0.00	5.77	0.00	0.00	0.00	0.00	23.22	0.00	0.	0.00
29	15.461	26.30	0.00	0.00	0.00	1.03	19.66	0.00	22.01	0.00	5.77	0.00	0.00	0.00	0.00	23.48	0.00	0.	0.00
30	15.370	26.32	0.00	0.00	0.00	1.03	19.66	0.00	22.03	0.00	5.77	0.00	0.00	0.00	0.00	23.74	0.00	0.	0.00
31	15.279	26.34	0.00	0.00	0.00	1.03	19.66	0.00	22.06	0.00	5.77	0.00	0.00	0.00	0.00	24.00	0.00	0.	0.00
32	15.188	26.37	0.00	0.00	0.00	1.03	19.65	0.00	22.08	0.00	5.77	0.00	0.00	0.00	0.00	24.26	0.00	0.	0.00
33	15.097	26.39	0.00	0.00	0.00	1.03	19.65	0.00	22.10	0.00	5.77	0.00	0.00	0.00	0.00	24.51	0.00	0.	0.00

34	15.006	26.42	0.00	0.00	0.00	1.02	19.64	0.00	22.12	0.00	5.76	0.00	0.00	0.00	0.00	24.77	0.00	0.	0.00
35	14.915	26.44	0.00	0.00	0.00	1.02	19.64	0.00	22.14	0.00	5.76	0.00	0.00	0.00	0.00	25.03	0.00	0.	0.00
36	14.824	26.46	0.00	0.00	0.00	1.02	19.63	0.00	22.16	0.00	5.76	0.00	0.00	0.00	0.00	25.29	0.00	0.	0.00
37	14.733	26.49	0.00	0.00	0.00	1.02	19.63	0.00	22.18	0.00	5.76	0.00	0.00	0.00	0.00	25.55	0.00	0.	0.00
38	14.642	26.51	0.00	0.00	0.00	1.02	19.62	0.00	22.20	0.00	5.76	0.00	0.00	0.00	0.00	25.80	0.00	0.	0.00
39	14.551	26.54	0.00	0.00	0.00	1.02	19.62	0.00	22.23	0.00	5.76	0.00	0.00	0.00	0.00	26.06	0.00	0.	0.00
40	14.460	26.56	0.00	0.00	0.00	1.02	19.62	0.00	22.25	0.00	5.76	0.00	0.00	0.00	0.00	26.32	0.00	0.	0.00
41	14.369	26.58	0.00	0.00	0.00	1.02	19.61	0.00	22.27	0.00	5.76	0.00	0.00	0.00	0.00	26.58	0.00	0.	0.00
42	14.278	26.61	0.00	0.00	0.00	1.01	19.61	0.00	22.29	0.00	5.75	0.00	0.00	0.00	0.00	26.84	0.00	0.	0.00
43	14.187	26.63	0.00	0.00	0.00	1.01	19.60	0.00	22.31	0.00	5.75	0.00	0.00	0.00	0.00	27.09	0.00	0.	0.00
44	14.096	26.66	0.00	0.00	0.00	1.01	19.60	0.00	22.33	0.00	5.75	0.00	0.00	0.00	0.00	27.35	0.00	0.	0.00
45	14.005	26.68	0.00	0.00	0.00	1.01	19.59	0.00	22.35	0.00	5.75	0.00	0.00	0.00	0.00	27.61	0.00	0.	0.00
46	13.914	26.70	0.00	0.00	0.00	1.01	19.59	0.00	22.37	0.00	5.75	0.00	0.00	0.00	0.00	27.87	0.00	0.	0.00
47	13.823	26.73	0.00	0.00	0.00	1.01	19.58	0.00	22.40	0.00	5.75	0.00	0.00	0.00	0.00	28.13	0.00	0.	0.00
48	13.732	26.75	0.00	0.00	0.00	1.01	19.58	0.00	22.42	0.00	5.75	0.00	0.00	0.00	0.00	28.38	0.00	0.	0.00
49	13.641	26.78	0.00	0.00	0.00	1.01	19.55	0.00	22.41	0.00	5.74	0.00	0.00	0.00	0.00	28.64	0.00	0.	0.00
50	13.550	26.80	0.00	0.00	0.00	1.02	19.17	0.00	22.06	0.00	5.65	0.00	0.00	0.00	0.00	28.90	0.00	0.	0.00

FINAL REPORT   BAYOU MARINGOUIN   BAYOU MARINGOUIN STREAM MODEL
REACH NO. 3   UNNAMED TRIB TO ABOVE WEIR   BAYOU MARINGOUIN CALIBRATION MODEL

** REACH INPUTS **

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-I	CM-II	DO mg/L	BOD#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM
71	UPR RCH	0.00806	26.80	0.00	0.00	0.00	1.02	19.17	0.00	22.06	0.00	5.65	0.00	0.00	0.00	28.90	0.00	0.00
71	TRIB	0.00250	26.80	0.00	0.00	0.00	1.19	12.15	0.00	15.04	0.00	3.63	0.00	0.00	0.00	28.90	0.00	0.00
EACH	INCR	0.00020	0.00	0.00	0.00	0.00	0.00	20.00	0.00			4.00	0.00	0.00	0.00	0.00	0.00	

** HYDRAULIC PARAMETER VALUES **

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/s	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
71	13.55	13.45	0.01076	0.0	0.00246	0.48	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.002
72	13.45	13.35	0.01096	0.0	0.00251	0.47	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.003
73	13.35	13.24	0.01116	0.0	0.00255	0.46	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.003
74	13.24	13.14	0.01136	0.0	0.00260	0.45	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.003
75	13.14	13.04	0.01156	0.0	0.00265	0.45	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.003
76	13.04	12.94	0.01176	0.0	0.00269	0.44	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.003
77	12.94	12.84	0.01196	0.0	0.00274	0.43	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.003
78	12.84	12.73	0.01216	0.0	0.00278	0.42	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.003
79	12.73	12.63	0.01236	0.0	0.00283	0.42	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.003
80	12.63	12.53	0.01256	0.0	0.00287	0.41	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.003
81	12.53	12.43	0.01276	0.0	0.00292	0.40	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.003
82	12.43	12.33	0.01296	0.0	0.00297	0.40	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.003
83	12.33	12.22	0.01316	0.0	0.00301	0.39	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.003
84	12.22	12.12	0.01336	0.0	0.00306	0.39	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.003
85	12.12	12.02	0.01356	0.0	0.00310	0.38	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.003
86	12.02	11.92	0.01376	0.0	0.00315	0.37	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.003
87	11.92	11.82	0.01396	0.0	0.00320	0.37	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.003
88	11.82	11.71	0.01416	0.0	0.00324	0.36	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.003
89	11.71	11.61	0.01436	0.0	0.00329	0.36	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.003
90	11.61	11.51	0.01456	0.0	0.00333	0.35	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.003
91	11.51	11.41	0.01476	0.0	0.00338	0.35	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.003
92	11.41	11.31	0.01496	0.0	0.00342	0.34	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.003

93	11.31	11.20	0.01516	0.0	0.00347	0.34	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.003
94	11.20	11.10	0.01536	0.0	0.00352	0.34	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.004
95	11.10	11.00	0.01556	0.0	0.00356	0.33	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.004
TOT						9.92			11143.46	37306.50					
AVG					0.00298		0.30	14.63			4.37				
CUM						52.55									

** BIOLOGICAL AND PHYSICAL COEFFICIENTS **

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#2 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 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
71	13.448	8.00	2.66	0.07	0.20	0.00	0.00	0.00	0.00	4.91	5.83	4.41	0.04	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
72	13.346	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.77	4.61	0.05	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73	13.244	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.71	4.65	0.05	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	13.142	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.67	4.65	0.05	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	13.040	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.63	4.66	0.05	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
76	12.938	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.59	4.66	0.06	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
77	12.836	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.56	4.67	0.06	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
78	12.734	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.54	4.67	0.06	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
79	12.632	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.51	4.67	0.06	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	12.530	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.49	4.67	0.06	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
81	12.428	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.47	4.67	0.06	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	12.326	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.46	4.68	0.06	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
83	12.224	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.45	4.68	0.06	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	12.122	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.43	4.68	0.06	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	12.020	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.42	4.68	0.06	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
86	11.918	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.41	4.68	0.06	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87	11.816	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.40	4.68	0.06	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88	11.714	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.40	4.68	0.06	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
89	11.612	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.39	4.68	0.07	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	11.510	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.39	4.68	0.07	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
91	11.408	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.38	4.69	0.07	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92	11.306	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.38	4.69	0.07	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
93	11.204	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.37	4.69	0.07	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
94	11.102	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.37	4.69	0.07	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95	11.000	8.00	2.66	0.08	0.20	0.00	0.00	0.00	0.00	4.91	5.37	4.67	0.07	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			2.34	0.07	0.17	0.00	0.00	0.00	0.00	3.20			0.10	0.17	0.00	0.00	0.00	0.00			0.00	0.00	0.00

* 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#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO g/m³	COLI #/100mL	NCM
71	13.448	26.80	0.00	0.00	0.00	1.51	15.66	0.00	18.58	0.00	4.83	0.00	0.00	0.00	0.00	29.22	0.00	0.	0.00
72	13.346	26.80	0.00	0.00	0.00	1.60	14.60	0.00	17.55	0.00	4.69	0.00	0.00	0.00	0.00	29.55	0.00	0.	0.00
73	13.244	26.80	0.00	0.00	0.00	1.63	13.68	0.00	16.67	0.00	4.58	0.00	0.00	0.00	0.00	29.87	0.00	0.	0.00
74	13.142	26.80	0.00	0.00	0.00	1.64	12.89	0.00	15.90	0.00	4.47	0.00	0.00	0.00	0.00	30.20	0.00	0.	0.00
75	13.040	26.80	0.00	0.00	0.00	1.66	12.20	0.00	15.25	0.00	4.37	0.00	0.00	0.00	0.00	30.52	0.00	0.	0.00
76	12.938	26.80	0.00	0.00	0.00	1.67	11.60	0.00	14.69	0.00	4.29	0.00	0.00	0.00	0.00	30.84	0.00	0.	0.00
77	12.836	26.80	0.00	0.00	0.00	1.68	11.08	0.00	14.20	0.00	4.21	0.00	0.00	0.00	0.00	31.17	0.00	0.	0.00
78	12.734	26.80	0.00	0.00	0.00	1.69	10.63	0.00	13.78	0.00	4.14	0.00	0.00	0.00	0.00	31.49	0.00	0.	0.00
79	12.632	26.80	0.00	0.00	0.00	1.69	10.24	0.00	13.42	0.00	4.08	0.00	0.00	0.00	0.00	31.82	0.00	0.	0.00
80	12.530	26.80	0.00	0.00	0.00	1.70	9.90	0.00	13.11	0.00	4.02	0.00	0.00	0.00	0.00	32.14	0.00	0.	0.00

81	12.428	26.80	0.00	0.00	0.00	1.71	9.59	0.00	12.84	0.00	3.97	0.00	0.00	0.00	0.00	32.46	0.00	0.	0.00
82	12.326	26.80	0.00	0.00	0.00	1.71	9.33	0.00	12.61	0.00	3.93	0.00	0.00	0.00	0.00	32.79	0.00	0.	0.00
83	12.224	26.80	0.00	0.00	0.00	1.72	9.10	0.00	12.41	0.00	3.88	0.00	0.00	0.00	0.00	33.11	0.00	0.	0.00
84	12.122	26.80	0.00	0.00	0.00	1.72	8.89	0.00	12.24	0.00	3.85	0.00	0.00	0.00	0.00	33.44	0.00	0.	0.00
85	12.020	26.80	0.00	0.00	0.00	1.73	8.72	0.00	12.09	0.00	3.81	0.00	0.00	0.00	0.00	33.76	0.00	0.	0.00
86	11.918	26.80	0.00	0.00	0.00	1.73	8.56	0.00	11.96	0.00	3.78	0.00	0.00	0.00	0.00	34.08	0.00	0.	0.00
87	11.816	26.80	0.00	0.00	0.00	1.73	8.42	0.00	11.86	0.00	3.76	0.00	0.00	0.00	0.00	34.41	0.00	0.	0.00
88	11.714	26.80	0.00	0.00	0.00	1.74	8.29	0.00	11.77	0.00	3.73	0.00	0.00	0.00	0.00	34.73	0.00	0.	0.00
89	11.612	26.80	0.00	0.00	0.00	1.74	8.18	0.00	11.69	0.00	3.71	0.00	0.00	0.00	0.00	35.06	0.00	0.	0.00
90	11.510	26.80	0.00	0.00	0.00	1.74	8.08	0.00	11.62	0.00	3.69	0.00	0.00	0.00	0.00	35.38	0.00	0.	0.00
91	11.408	26.80	0.00	0.00	0.00	1.74	8.00	0.00	11.57	0.00	3.67	0.00	0.00	0.00	0.00	35.70	0.00	0.	0.00
92	11.306	26.80	0.00	0.00	0.00	1.74	7.92	0.00	11.52	0.00	3.65	0.00	0.00	0.00	0.00	36.03	0.00	0.	0.00
93	11.204	26.80	0.00	0.00	0.00	1.74	7.85	0.00	11.49	0.00	3.64	0.00	0.00	0.00	0.00	36.35	0.00	0.	0.00
94	11.102	26.80	0.00	0.00	0.00	1.75	7.80	0.00	11.46	0.00	3.62	0.00	0.00	0.00	0.00	36.68	0.00	0.	0.00
95	11.000	26.80	0.00	0.00	0.00	1.74	7.83	0.00	11.53	0.00	3.61	0.00	0.00	0.00	0.00	37.00	0.00	0.	0.00

FINAL REPORT   BAYOU MARINGOUIN   BAYOU MARINGOUIN STREAM MODEL
REACH NO. 4   ABOVE WEIR TO WEIR   BAYOU MARINGOUIN CALIBRATION MODEL

** REACH INPUTS **

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-I	CM-II	DO mg/L	BOD#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 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	0.01556	26.80	0.00	0.00	0.00	1.74	7.83	0.00	11.53	0.00	3.61	0.00	0.00	0.00	37.00	0.00	0.00
EACH	INCR	0.00012	0.00	0.00	0.00	0.00	0.00	20.00	0.00			4.00	0.00	0.00	0.00	0.00	0.00	

** HYDRAULIC PARAMETER VALUES **

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	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	11.00	10.91	0.01569	0.0	0.00205	0.53	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.002
97	10.91	10.81	0.01581	0.0	0.00206	0.53	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.002
98	10.81	10.72	0.01594	0.0	0.00208	0.52	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.002
99	10.72	10.62	0.01606	0.0	0.00210	0.52	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.002
100	10.62	10.53	0.01619	0.0	0.00211	0.51	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.002
101	10.53	10.44	0.01631	0.0	0.00213	0.51	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.002
102	10.44	10.34	0.01644	0.0	0.00215	0.51	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.002
103	10.34	10.25	0.01656	0.0	0.00216	0.50	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.002
104	10.25	10.15	0.01669	0.0	0.00218	0.50	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.002
105	10.15	10.06	0.01681	0.0	0.00220	0.50	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.002
106	10.06	9.97	0.01694	0.0	0.00221	0.49	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.002
107	9.97	9.87	0.01706	0.0	0.00223	0.49	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.002
108	9.87	9.78	0.01719	0.0	0.00224	0.48	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.002
109	9.78	9.68	0.01731	0.0	0.00226	0.48	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.002
110	9.68	9.59	0.01744	0.0	0.00228	0.48	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.002
111	9.59	9.50	0.01756	0.0	0.00229	0.47	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.002
112	9.50	9.40	0.01769	0.0	0.00231	0.47	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.002
113	9.40	9.31	0.01781	0.0	0.00233	0.47	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.002
114	9.31	9.21	0.01794	0.0	0.00234	0.46	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.002
115	9.21	9.12	0.01806	0.0	0.00236	0.46	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.002
TOT						9.89			14398.94	21770.39					
AVG					0.00220		0.66	11.58			7.66				
CUM						62.45									

** BIOLOGICAL AND PHYSICAL COEFFICIENTS **

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#2 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 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	10.906	8.00	1.20	0.07	0.09	0.00	0.00	0.00	0.00	6.45	6.96	5.08	0.03	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97	10.812	8.00	1.20	0.07	0.09	0.00	0.00	0.00	0.00	6.45	7.00	4.86	0.03	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
98	10.718	8.00	1.20	0.07	0.09	0.00	0.00	0.00	0.00	6.45	7.04	4.80	0.03	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
99	10.624	8.00	1.20	0.06	0.09	0.00	0.00	0.00	0.00	6.45	7.08	4.78	0.02	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	10.530	8.00	1.20	0.06	0.09	0.00	0.00	0.00	0.00	6.45	7.12	4.76	0.02	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
101	10.436	8.00	1.20	0.06	0.09	0.00	0.00	0.00	0.00	6.45	7.15	4.75	0.02	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
102	10.342	8.00	1.20	0.06	0.09	0.00	0.00	0.00	0.00	6.45	7.18	4.74	0.02	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
103	10.248	8.00	1.20	0.06	0.09	0.00	0.00	0.00	0.00	6.45	7.20	4.73	0.02	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
104	10.154	8.00	1.20	0.06	0.09	0.00	0.00	0.00	0.00	6.45	7.23	4.72	0.02	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105	10.060	8.00	1.20	0.06	0.09	0.00	0.00	0.00	0.00	6.45	7.25	4.71	0.02	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
106	9.966	8.00	1.20	0.06	0.09	0.00	0.00	0.00	0.00	6.45	7.27	4.70	0.02	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
107	9.872	8.00	1.20	0.06	0.09	0.00	0.00	0.00	0.00	6.45	7.29	4.70	0.02	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
108	9.778	8.00	1.20	0.06	0.09	0.00	0.00	0.00	0.00	6.45	7.31	4.69	0.02	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
109	9.684	8.00	1.20	0.06	0.09	0.00	0.00	0.00	0.00	6.45	7.33	4.68	0.02	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	9.590	8.00	1.20	0.06	0.09	0.00	0.00	0.00	0.00	6.45	7.34	4.68	0.02	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
111	9.496	8.00	1.20	0.06	0.09	0.00	0.00	0.00	0.00	6.45	7.36	4.67	0.02	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112	9.402	8.00	1.20	0.06	0.09	0.00	0.00	0.00	0.00	6.45	7.37	4.67	0.02	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
113	9.308	8.00	1.20	0.06	0.09	0.00	0.00	0.00	0.00	6.45	7.38	4.66	0.02	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
114	9.214	8.00	1.20	0.06	0.09	0.00	0.00	0.00	0.00	6.45	7.40	4.66	0.02	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115	9.120	8.00	1.20	0.06	0.09	0.00	0.00	0.00	0.00	6.45	7.41	4.66	0.02	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			1.06	0.07	0.08	0.00	0.00	0.00	0.00	4.20			0.10	0.08	0.00	0.00	0.00	0.00			0.00	0.00	0.00

* 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#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO g/m³	COLI #/100mL	NCM
96	10.906	26.80	0.00	0.00	0.00	1.46	8.69	0.00	12.41	0.00	3.60	0.00	0.00	0.00	0.00	37.20	0.00	0.	0.00
97	10.812	26.80	0.00	0.00	0.00	1.39	9.46	0.00	13.20	0.00	3.61	0.00	0.00	0.00	0.00	37.40	0.00	0.	0.00
98	10.718	26.80	0.00	0.00	0.00	1.36	10.17	0.00	13.93	0.00	3.61	0.00	0.00	0.00	0.00	37.60	0.00	0.	0.00
99	10.624	26.80	0.00	0.00	0.00	1.35	10.82	0.00	14.60	0.00	3.62	0.00	0.00	0.00	0.00	37.80	0.00	0.	0.00
100	10.530	26.80	0.00	0.00	0.00	1.34	11.41	0.00	15.21	0.00	3.62	0.00	0.00	0.00	0.00	38.00	0.00	0.	0.00
101	10.436	26.80	0.00	0.00	0.00	1.33	11.96	0.00	15.78	0.00	3.63	0.00	0.00	0.00	0.00	38.20	0.00	0.	0.00
102	10.342	26.80	0.00	0.00	0.00	1.32	12.46	0.00	16.30	0.00	3.64	0.00	0.00	0.00	0.00	38.40	0.00	0.	0.00
103	10.248	26.80	0.00	0.00	0.00	1.31	12.93	0.00	16.79	0.00	3.65	0.00	0.00	0.00	0.00	38.60	0.00	0.	0.00
104	10.154	26.80	0.00	0.00	0.00	1.31	13.35	0.00	17.23	0.00	3.66	0.00	0.00	0.00	0.00	38.80	0.00	0.	0.00
105	10.060	26.80	0.00	0.00	0.00	1.30	13.75	0.00	17.65	0.00	3.67	0.00	0.00	0.00	0.00	39.00	0.00	0.	0.00
106	9.966	26.80	0.00	0.00	0.00	1.29	14.11	0.00	18.03	0.00	3.67	0.00	0.00	0.00	0.00	39.20	0.00	0.	0.00
107	9.872	26.80	0.00	0.00	0.00	1.29	14.44	0.00	18.38	0.00	3.68	0.00	0.00	0.00	0.00	39.40	0.00	0.	0.00
108	9.778	26.80	0.00	0.00	0.00	1.28	14.75	0.00	18.71	0.00	3.69	0.00	0.00	0.00	0.00	39.60	0.00	0.	0.00
109	9.684	26.80	0.00	0.00	0.00	1.28	15.04	0.00	19.02	0.00	3.70	0.00	0.00	0.00	0.00	39.80	0.00	0.	0.00
110	9.590	26.80	0.00	0.00	0.00	1.27	15.31	0.00	19.31	0.00	3.71	0.00	0.00	0.00	0.00	40.00	0.00	0.	0.00
111	9.496	26.80	0.00	0.00	0.00	1.27	15.55	0.00	19.57	0.00	3.72	0.00	0.00	0.00	0.00	40.20	0.00	0.	0.00
112	9.402	26.80	0.00	0.00	0.00	1.27	15.78	0.00	19.82	0.00	3.73	0.00	0.00	0.00	0.00	40.40	0.00	0.	0.00
113	9.308	26.80	0.00	0.00	0.00	1.26	15.99	0.00	20.05	0.00	3.73	0.00	0.00	0.00	0.00	40.60	0.00	0.	0.00
114	9.214	26.80	0.00	0.00	0.00	1.26	16.18	0.00	20.26	0.00	3.74	0.00	0.00	0.00	0.00	40.80	0.00	0.	0.00
115	9.120	26.80	0.00	0.00	0.00	1.26	16.34	0.00	20.44	0.00	3.75	0.00	0.00	0.00	0.00	41.00	0.00	0.	0.00

REACH NO. 5 BELOW WEIR EFFECT BAYOU MARINGOUIN CALIBRATION MODEL

** REACH INPUTS **

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-I	CM-II	DO mg/L	BOD#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM
116	UPR RCH	0.01806	26.80	0.00	0.00	0.00	1.26	16.34	0.00	20.44	0.00	3.75	0.00	0.00	0.00	41.00	0.00	0.00

116 DAM MUNSEN ROAD WEIR ADDS 2.98 MG/L DISSOLVED OXYGEN GIVING 4.24 MG/L D.O. FOR THE UPR RCH INPUT

** HYDRAULIC PARAMETER VALUES **

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	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
116	9.12	9.11	0.01806	0.0	0.01945	0.01	0.26	3.63	9.29	36.27	0.93	0.00	0.000	0.000	0.019
TOT						0.01			9.29	36.27					
AVG					0.01945		0.26	3.63			0.93				
CUM						62.45									

** BIOLOGICAL AND PHYSICAL COEFFICIENTS **

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#2 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 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
116	9.110	8.00	3.11	0.10	0.23	0.00	0.00	0.00	0.00	3.07	4.02	4.02	0.14	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			2.73	0.07	0.20	0.00	0.00	0.00	0.00	2.00			0.10	0.20	0.00	0.00	0.00	0.00			0.00	0.00	0.00

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

** WATER QUALITY CONSTITUENT VALUES **

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I	CM-II	DO mg/L	BOD#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO g/m^3	COLI #/100mL	NCM
116	9.110	26.80	0.00	0.00	0.00	3.99	16.10	0.00	18.80	0.00	3.69	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00

FINAL REPORT BAYOU MARINGOUIN BAYOU MARINGOUIN STREAM MODEL
REACH NO. 6 BELOW WEIR TO OPEN AREA BAYOU MARINGOUIN CALIBRATION MODEL

** REACH INPUTS **

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-I	CM-II	DO mg/L	BOD#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM
117	UPR RCH	0.01806	26.80	0.00	0.00	0.00	3.99	16.10	0.00	18.80	0.00	3.69	0.00	0.00	0.00	27.00	0.00	0.00

** 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	m^3/s	EFF	VELO m/s	TIME days	m	m	m^3	AREA m^2	AREA m^2	PRISM m^3	VELO m/s	m^2/s	VELO m/s
117	9.11	9.01	0.01806	0.0	0.01945	0.06	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.019
118	9.01	8.91	0.01806	0.0	0.01945	0.06	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.019
119	8.91	8.81	0.01806	0.0	0.01945	0.06	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.019
120	8.81	8.71	0.01806	0.0	0.01945	0.06	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.019
121	8.71	8.61	0.01806	0.0	0.01945	0.06	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.019
122	8.61	8.50	0.01806	0.0	0.01945	0.06	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.019
123	8.50	8.40	0.01806	0.0	0.01945	0.06	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.019
124	8.40	8.30	0.01806	0.0	0.01945	0.06	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.019
125	8.30	8.20	0.01806	0.0	0.01945	0.06	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.019
126	8.20	8.10	0.01806	0.0	0.01945	0.06	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.019
127	8.10	8.00	0.01806	0.0	0.01945	0.06	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.019
TOT						0.66			1030.56	4025.61					
AVG					0.01946		0.26	3.63			0.93				
CUM						63.11									

** BIOLOGICAL AND PHYSICAL COEFFICIENTS **

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#2 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 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
117	9.009	7.99	3.11	0.10	0.23	0.00	0.00	0.00	0.00	3.38	4.31	4.31	0.13	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
118	8.908	7.99	3.11	0.10	0.23	0.00	0.00	0.00	0.00	3.38	4.30	4.30	0.13	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
119	8.807	7.99	3.11	0.10	0.23	0.00	0.00	0.00	0.00	3.39	4.28	4.28	0.13	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120	8.706	7.99	3.11	0.10	0.23	0.00	0.00	0.00	0.00	3.39	4.27	4.27	0.13	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
121	8.606	7.98	3.11	0.10	0.23	0.00	0.00	0.00	0.00	3.40	4.26	4.26	0.12	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
122	8.505	7.98	3.11	0.10	0.23	0.00	0.00	0.00	0.00	3.40	4.25	4.25	0.12	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
123	8.404	7.98	3.12	0.10	0.23	0.00	0.00	0.00	0.00	3.40	4.24	4.24	0.12	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
124	8.303	7.98	3.12	0.10	0.23	0.00	0.00	0.00	0.00	3.41	4.22	4.22	0.12	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125	8.202	7.97	3.12	0.10	0.23	0.00	0.00	0.00	0.00	3.41	4.21	4.21	0.12	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
126	8.101	7.97	3.12	0.10	0.23	0.00	0.00	0.00	0.00	3.41	4.19	4.19	0.12	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127	8.000	7.97	3.12	0.10	0.23	0.00	0.00	0.00	0.00	3.42	4.17	4.17	0.12	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			2.73	0.07	0.20	0.00	0.00	0.00	0.00	2.20			0.10	0.20	0.00	0.00	0.00	0.00			0.00	0.00	0.00

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

** WATER QUALITY CONSTITUENT VALUES **

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I	CM-II	DO mg/L	BOD#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO g/m^3	COLI #/100mL	NCM
117	9.009	26.82	0.00	0.00	0.00	3.74	15.85	0.00	18.55	0.00	3.62	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
118	8.908	26.84	0.00	0.00	0.00	3.48	15.55	0.00	18.25	0.00	3.55	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
119	8.807	26.85	0.00	0.00	0.00	3.26	15.25	0.00	17.95	0.00	3.47	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
120	8.706	26.87	0.00	0.00	0.00	3.08	14.96	0.00	17.66	0.00	3.40	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
121	8.606	26.89	0.00	0.00	0.00	2.93	14.68	0.00	17.38	0.00	3.33	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
122	8.505	26.91	0.00	0.00	0.00	2.80	14.40	0.00	17.10	0.00	3.26	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
123	8.404	26.93	0.00	0.00	0.00	2.70	14.12	0.00	16.82	0.00	3.20	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
124	8.303	26.95	0.00	0.00	0.00	2.62	13.84	0.00	16.54	0.00	3.13	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
125	8.202	26.96	0.00	0.00	0.00	2.55	13.55	0.00	16.25	0.00	3.06	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
126	8.101	26.98	0.00	0.00	0.00	2.48	13.19	0.00	15.89	0.00	2.99	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
127	8.000	27.00	0.00	0.00	0.00	2.39	12.66	0.00	15.36	0.00	2.90	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00

FINAL REPORT BAYOU MARINGOUIN BAYOU MARINGOUIN STREAM MODEL
REACH NO. 7 OPEN AREA TO DISTRIBUTARY BAYOU MARINGOUIN CALIBRATION MODEL

** REACH INPUTS **

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-I	CM-II	DO mg/L	BOD#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 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	0.01806	27.00	0.00	0.00	0.00	2.39	12.66	0.00	15.36	0.00	2.90	0.00	0.00	0.00	27.00	0.00	0.00

** HYDRAULIC PARAMETER VALUES **

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	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
128	8.00	7.90	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
129	7.90	7.80	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
130	7.80	7.70	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
131	7.70	7.60	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
132	7.60	7.50	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
133	7.50	7.40	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
134	7.40	7.30	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
135	7.30	7.20	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
136	7.20	7.10	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
137	7.10	7.00	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
138	7.00	6.90	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
139	6.90	6.80	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
140	6.80	6.70	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
141	6.70	6.60	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
142	6.60	6.50	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
143	6.50	6.40	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
144	6.40	6.30	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
145	6.30	6.20	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
146	6.20	6.10	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
147	6.10	6.00	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
148	6.00	5.90	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
149	5.90	5.80	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
150	5.80	5.70	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
151	5.70	5.60	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
152	5.60	5.50	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
153	5.50	5.40	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
154	5.40	5.30	0.01806	0.0	0.00596	0.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.006
TOT						5.24			8176.93	16459.20					
AVG					0.00596		0.50	6.10			3.03				
CUM						68.35									

** BIOLOGICAL AND PHYSICAL COEFFICIENTS **

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#2 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 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	7.900	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	4.14	4.14	0.11	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
129	7.800	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	4.11	4.11	0.11	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	7.700	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	4.09	4.09	0.11	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
131	7.600	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	4.07	4.07	0.11	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

132	7.500	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	4.05	4.05	0.11	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
133	7.400	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	4.03	4.03	0.11	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
134	7.300	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	4.01	4.01	0.11	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135	7.200	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	3.99	3.99	0.11	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
136	7.100	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	3.98	3.98	0.11	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
137	7.000	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	3.96	3.96	0.11	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
138	6.900	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	3.94	3.94	0.11	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
139	6.800	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	3.93	3.93	0.11	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	6.700	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	3.91	3.91	0.11	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
141	6.600	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	3.90	3.90	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
142	6.500	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	3.89	3.89	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
143	6.400	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	3.87	3.87	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
144	6.300	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	3.86	3.86	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145	6.200	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	3.85	3.85	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
146	6.100	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	3.84	3.84	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147	6.000	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	3.83	3.83	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
148	5.900	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	3.82	3.82	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
149	5.800	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	3.81	3.81	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150	5.700	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	3.80	3.80	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
151	5.600	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	3.80	3.80	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
152	5.500	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	3.80	3.80	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
153	5.400	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	3.81	3.81	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
154	5.300	7.97	1.61	0.10	0.12	0.00	0.00	0.00	0.00	3.42	3.82	3.82	0.12	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			1.41	0.07	0.10	0.00	0.00	0.00	0.00	2.20			0.10	0.10	0.00	0.00	0.00	0.00			0.00	0.00	0.00

* 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#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO g/m³	COLI #/100mL	NCM
128	7.900	27.00	0.00	0.00	0.00	2.28	12.15	0.00	14.85	0.00	2.83	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
129	7.800	27.00	0.00	0.00	0.00	2.22	11.76	0.00	14.46	0.00	2.78	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
130	7.700	27.00	0.00	0.00	0.00	2.18	11.40	0.00	14.10	0.00	2.74	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
131	7.600	27.00	0.00	0.00	0.00	2.16	11.04	0.00	13.74	0.00	2.69	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
132	7.500	27.00	0.00	0.00	0.00	2.15	10.70	0.00	13.40	0.00	2.65	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
133	7.400	27.00	0.00	0.00	0.00	2.15	10.37	0.00	13.07	0.00	2.60	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
134	7.300	27.00	0.00	0.00	0.00	2.16	10.05	0.00	12.75	0.00	2.56	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
135	7.200	27.00	0.00	0.00	0.00	2.18	9.75	0.00	12.45	0.00	2.52	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
136	7.100	27.00	0.00	0.00	0.00	2.20	9.45	0.00	12.15	0.00	2.48	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
137	7.000	27.00	0.00	0.00	0.00	2.22	9.17	0.00	11.87	0.00	2.45	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
138	6.900	27.00	0.00	0.00	0.00	2.25	8.90	0.00	11.60	0.00	2.41	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
139	6.800	27.00	0.00	0.00	0.00	2.28	8.64	0.00	11.34	0.00	2.38	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
140	6.700	27.00	0.00	0.00	0.00	2.31	8.39	0.00	11.09	0.00	2.34	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
141	6.600	27.00	0.00	0.00	0.00	2.34	8.15	0.00	10.85	0.00	2.31	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
142	6.500	27.00	0.00	0.00	0.00	2.37	7.91	0.00	10.61	0.00	2.28	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
143	6.400	27.00	0.00	0.00	0.00	2.40	7.69	0.00	10.39	0.00	2.25	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
144	6.300	27.00	0.00	0.00	0.00	2.43	7.48	0.00	10.18	0.00	2.22	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
145	6.200	27.00	0.00	0.00	0.00	2.45	7.28	0.00	9.98	0.00	2.20	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
146	6.100	27.00	0.00	0.00	0.00	2.48	7.08	0.00	9.78	0.00	2.17	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
147	6.000	27.00	0.00	0.00	0.00	2.51	6.91	0.00	9.61	0.00	2.15	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
148	5.900	27.00	0.00	0.00	0.00	2.53	6.74	0.00	9.44	0.00	2.13	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
149	5.800	27.00	0.00	0.00	0.00	2.56	6.60	0.00	9.30	0.00	2.12	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
150	5.700	27.00	0.00	0.00	0.00	2.58	6.49	0.00	9.19	0.00	2.12	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
151	5.600	27.00	0.00	0.00	0.00	2.59	6.42	0.00	9.12	0.00	2.13	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
152	5.500	27.00	0.00	0.00	0.00	2.60	6.43	0.00	9.13	0.00	2.16	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
153	5.400	27.00	0.00	0.00	0.00	2.61	6.54	0.00	9.24	0.00	2.24	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00
154	5.300	27.00	0.00	0.00	0.00	2.61	6.85	0.00	9.55	0.00	2.37	0.00	0.00	0.00	0.00	27.00	0.00	0.	0.00

FINAL REPORT BAYOU MARINGOUIN BAYOU MARINGOUIN STREAM MODEL
REACH NO. 8 DISTRIBUTARY TO WIDE SECTION BAYOU MARINGOUIN CALIBRATION MODEL

** REACH INPUTS **

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-I	CM-II	DO mg/L	BOD#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM
155	UPR RCH	0.01806	27.00	0.00	0.00	0.00	2.61	6.85	0.00	9.55	0.00	2.37	0.00	0.00	0.00	27.00	0.00	0.00
155	WSTLD	-0.00990	27.00	0.00	0.00	0.00	2.62	7.03	0.00	9.80	0.00	2.44	0.00	0.00	0.00	27.68	0.00	0.00

** HYDRAULIC PARAMETER VALUES **

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	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
155	5.30	5.20	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
156	5.20	5.10	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
157	5.10	5.00	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
158	5.00	4.90	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
159	4.90	4.80	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
160	4.80	4.70	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
161	4.70	4.60	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
162	4.60	4.50	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
163	4.50	4.40	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
164	4.40	4.30	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
165	4.30	4.20	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
166	4.20	4.10	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
167	4.10	4.00	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
168	4.00	3.90	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
169	3.90	3.80	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
170	3.80	3.70	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
171	3.70	3.60	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
172	3.60	3.50	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
173	3.50	3.40	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
174	3.40	3.30	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
175	3.30	3.20	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
176	3.20	3.10	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
177	3.10	3.00	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
178	3.00	2.90	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
179	2.90	2.80	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
180	2.80	2.70	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
181	2.70	2.60	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
182	2.60	2.50	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
183	2.50	2.40	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
184	2.40	2.30	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
185	2.30	2.20	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
186	2.20	2.10	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
187	2.10	2.00	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
188	2.00	1.90	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
189	1.90	1.80	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
190	1.80	1.70	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
191	1.70	1.60	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
192	1.60	1.50	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
193	1.50	1.40	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
194	1.40	1.30	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005

195	1.30	1.20	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
196	1.20	1.10	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
197	1.10	1.00	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
198	1.00	0.90	0.00816	0.0	0.00478	0.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.005
TOT						10.66			7519.77	30844.00					
AVG					0.00478		0.24	7.01			1.71				
CUM						79.01									

** BIOLOGICAL AND PHYSICAL COEFFICIENTS **

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#2 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 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
155	5.200	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	3.99	3.99	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
156	5.100	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.00	4.00	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157	5.000	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.00	4.00	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
158	4.900	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.01	4.01	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
159	4.800	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.01	4.01	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160	4.700	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.02	4.02	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
161	4.600	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.03	4.03	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
162	4.500	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.03	4.03	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
163	4.400	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.04	4.04	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
164	4.300	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.04	4.04	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165	4.200	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.05	4.05	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
166	4.100	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.05	4.05	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167	4.000	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.05	4.05	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
168	3.900	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.06	4.06	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
169	3.800	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.06	4.06	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	3.700	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.06	4.06	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
171	3.600	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.07	4.07	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172	3.500	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.07	4.07	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
173	3.400	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.07	4.07	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
174	3.300	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.08	4.08	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175	3.200	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.08	4.08	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
176	3.100	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.08	4.08	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
177	3.000	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.08	4.08	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
178	2.900	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.09	4.09	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
179	2.800	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.09	4.09	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	2.700	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.09	4.09	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
181	2.600	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.09	4.09	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
182	2.500	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.09	4.09	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
183	2.400	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.10	4.10	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
184	2.300	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.10	4.10	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
185	2.200	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.10	4.10	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
186	2.100	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.10	4.10	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
187	2.000	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.10	4.10	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
188	1.900	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.10	4.10	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
189	1.800	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.10	4.10	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
190	1.700	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.10	4.10	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
191	1.600	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.10	4.10	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
192	1.500	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.10	4.10	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
193	1.400	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.10	4.10	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
194	1.300	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.10	4.10	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
195	1.200	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.10	4.10	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
196	1.100	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.10	4.10	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
197	1.000	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.10	4.10	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	0.900	7.97	3.28	0.10	0.24	0.00	0.00	0.00	0.00	3.57	4.09	4.09	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

AVG 20 DEG C RATE 2.87 0.07 0.21 0.00 0.00 0.00 0.00 2.30 0.10 0.21 0.00 0.00 0.00 0.00 0.00 0.00 0.00

* 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#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO g/m³	COLI #/100mL	NCM
155	5.200	27.00	0.00	0.00	0.00	2.62	7.03	0.00	9.80	0.00	2.44	0.00	0.00	0.00	0.00	27.68	0.00	0.	0.00
156	5.100	27.00	0.00	0.00	0.00	2.62	7.14	0.00	9.98	0.00	2.49	0.00	0.00	0.00	0.00	28.36	0.00	0.	0.00
157	5.000	27.00	0.00	0.00	0.00	2.62	7.25	0.00	10.16	0.00	2.53	0.00	0.00	0.00	0.00	29.05	0.00	0.	0.00
158	4.900	27.00	0.00	0.00	0.00	2.61	7.36	0.00	10.33	0.00	2.57	0.00	0.00	0.00	0.00	29.73	0.00	0.	0.00
159	4.800	27.00	0.00	0.00	0.00	2.61	7.46	0.00	10.50	0.00	2.61	0.00	0.00	0.00	0.00	30.41	0.00	0.	0.00
160	4.700	27.00	0.00	0.00	0.00	2.60	7.56	0.00	10.66	0.00	2.65	0.00	0.00	0.00	0.00	31.09	0.00	0.	0.00
161	4.600	27.00	0.00	0.00	0.00	2.60	7.65	0.00	10.83	0.00	2.68	0.00	0.00	0.00	0.00	31.77	0.00	0.	0.00
162	4.500	27.00	0.00	0.00	0.00	2.59	7.74	0.00	10.98	0.00	2.72	0.00	0.00	0.00	0.00	32.45	0.00	0.	0.00
163	4.400	27.00	0.00	0.00	0.00	2.59	7.82	0.00	11.13	0.00	2.75	0.00	0.00	0.00	0.00	33.14	0.00	0.	0.00
164	4.300	27.00	0.00	0.00	0.00	2.58	7.90	0.00	11.28	0.00	2.78	0.00	0.00	0.00	0.00	33.82	0.00	0.	0.00
165	4.200	27.00	0.00	0.00	0.00	2.57	7.98	0.00	11.43	0.00	2.81	0.00	0.00	0.00	0.00	34.50	0.00	0.	0.00
166	4.100	27.00	0.00	0.00	0.00	2.57	8.05	0.00	11.57	0.00	2.84	0.00	0.00	0.00	0.00	35.18	0.00	0.	0.00
167	4.000	27.00	0.00	0.00	0.00	2.56	8.12	0.00	11.71	0.00	2.86	0.00	0.00	0.00	0.00	35.86	0.00	0.	0.00
168	3.900	27.00	0.00	0.00	0.00	2.55	8.19	0.00	11.84	0.00	2.89	0.00	0.00	0.00	0.00	36.55	0.00	0.	0.00
169	3.800	27.00	0.00	0.00	0.00	2.55	8.25	0.00	11.97	0.00	2.91	0.00	0.00	0.00	0.00	37.23	0.00	0.	0.00
170	3.700	27.00	0.00	0.00	0.00	2.54	8.31	0.00	12.10	0.00	2.94	0.00	0.00	0.00	0.00	37.91	0.00	0.	0.00
171	3.600	27.00	0.00	0.00	0.00	2.54	8.36	0.00	12.22	0.00	2.96	0.00	0.00	0.00	0.00	38.59	0.00	0.	0.00
172	3.500	27.00	0.00	0.00	0.00	2.53	8.42	0.00	12.35	0.00	2.98	0.00	0.00	0.00	0.00	39.27	0.00	0.	0.00
173	3.400	27.00	0.00	0.00	0.00	2.52	8.47	0.00	12.47	0.00	3.00	0.00	0.00	0.00	0.00	39.95	0.00	0.	0.00
174	3.300	27.00	0.00	0.00	0.00	2.52	8.52	0.00	12.58	0.00	3.02	0.00	0.00	0.00	0.00	40.64	0.00	0.	0.00
175	3.200	27.00	0.00	0.00	0.00	2.51	8.56	0.00	12.69	0.00	3.03	0.00	0.00	0.00	0.00	41.32	0.00	0.	0.00
176	3.100	27.00	0.00	0.00	0.00	2.51	8.61	0.00	12.81	0.00	3.05	0.00	0.00	0.00	0.00	42.00	0.00	0.	0.00
177	3.000	27.00	0.00	0.00	0.00	2.51	8.65	0.00	12.91	0.00	3.06	0.00	0.00	0.00	0.00	42.68	0.00	0.	0.00
178	2.900	27.00	0.00	0.00	0.00	2.50	8.68	0.00	13.02	0.00	3.08	0.00	0.00	0.00	0.00	43.36	0.00	0.	0.00
179	2.800	27.00	0.00	0.00	0.00	2.50	8.72	0.00	13.12	0.00	3.09	0.00	0.00	0.00	0.00	44.05	0.00	0.	0.00
180	2.700	27.00	0.00	0.00	0.00	2.50	8.75	0.00	13.22	0.00	3.10	0.00	0.00	0.00	0.00	44.73	0.00	0.	0.00
181	2.600	27.00	0.00	0.00	0.00	2.50	8.78	0.00	13.32	0.00	3.11	0.00	0.00	0.00	0.00	45.41	0.00	0.	0.00
182	2.500	27.00	0.00	0.00	0.00	2.50	8.80	0.00	13.41	0.00	3.12	0.00	0.00	0.00	0.00	46.09	0.00	0.	0.00
183	2.400	27.00	0.00	0.00	0.00	2.50	8.83	0.00	13.51	0.00	3.13	0.00	0.00	0.00	0.00	46.77	0.00	0.	0.00
184	2.300	27.00	0.00	0.00	0.00	2.50	8.85	0.00	13.59	0.00	3.13	0.00	0.00	0.00	0.00	47.45	0.00	0.	0.00
185	2.200	27.00	0.00	0.00	0.00	2.50	8.87	0.00	13.68	0.00	3.14	0.00	0.00	0.00	0.00	48.14	0.00	0.	0.00
186	2.100	27.00	0.00	0.00	0.00	2.50	8.88	0.00	13.76	0.00	3.14	0.00	0.00	0.00	0.00	48.82	0.00	0.	0.00
187	2.000	27.00	0.00	0.00	0.00	2.51	8.89	0.00	13.84	0.00	3.14	0.00	0.00	0.00	0.00	49.50	0.00	0.	0.00
188	1.900	27.00	0.00	0.00	0.00	2.52	8.90	0.00	13.92	0.00	3.15	0.00	0.00	0.00	0.00	50.18	0.00	0.	0.00
189	1.800	27.00	0.00	0.00	0.00	2.53	8.91	0.00	14.00	0.00	3.15	0.00	0.00	0.00	0.00	50.86	0.00	0.	0.00
190	1.700	27.00	0.00	0.00	0.00	2.54	8.91	0.00	14.07	0.00	3.14	0.00	0.00	0.00	0.00	51.55	0.00	0.	0.00
191	1.600	27.00	0.00	0.00	0.00	2.56	8.91	0.00	14.14	0.00	3.14	0.00	0.00	0.00	0.00	52.23	0.00	0.	0.00
192	1.500	27.00	0.00	0.00	0.00	2.58	8.91	0.00	14.20	0.00	3.14	0.00	0.00	0.00	0.00	52.91	0.00	0.	0.00
193	1.400	27.00	0.00	0.00	0.00	2.60	8.90	0.00	14.26	0.00	3.13	0.00	0.00	0.00	0.00	53.59	0.00	0.	0.00
194	1.300	27.00	0.00	0.00	0.00	2.64	8.89	0.00	14.32	0.00	3.12	0.00	0.00	0.00	0.00	54.27	0.00	0.	0.00
195	1.200	27.00	0.00	0.00	0.00	2.68	8.87	0.00	14.37	0.00	3.11	0.00	0.00	0.00	0.00	54.95	0.00	0.	0.00
196	1.100	27.00	0.00	0.00	0.00	2.73	8.85	0.00	14.42	0.00	3.10	0.00	0.00	0.00	0.00	55.64	0.00	0.	0.00
197	1.000	27.00	0.00	0.00	0.00	2.80	8.83	0.00	14.46	0.00	3.09	0.00	0.00	0.00	0.00	56.32	0.00	0.	0.00
198	0.900	27.00	0.00	0.00	0.00	2.88	8.80	0.00	14.50	0.00	3.07	0.00	0.00	0.00	0.00	57.00	0.00	0.	0.00

FINAL REPORT BAYOU MARINGOUIN BAYOU MARINGOUIN STREAM MODEL
REACH NO. 9 WIDE SECTION TO END BAYOU MARINGOUIN CALIBRATION MODEL

** REACH INPUTS **

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-I	CM-II	DO mg/L	BOD#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM
199	UPR RCH	0.00816	27.00	0.00	0.00	0.00	2.88	8.80	0.00	14.50	0.00	3.07	0.00	0.00	0.00	57.00	0.00	0.00

** HYDRAULIC PARAMETER VALUES **

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	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
199	0.90	0.80	0.00816	0.0	0.00220	0.53	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.002
200	0.80	0.70	0.00816	0.0	0.00220	0.53	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.002
201	0.70	0.60	0.00816	0.0	0.00220	0.53	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.002
202	0.60	0.50	0.00816	0.0	0.00220	0.53	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.002
203	0.50	0.40	0.00816	0.0	0.00220	0.53	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.002
204	0.40	0.30	0.00816	0.0	0.00220	0.53	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.002
205	0.30	0.20	0.00816	0.0	0.00220	0.53	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.002
206	0.20	0.10	0.00816	0.0	0.00220	0.53	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.002
207	0.10	0.00	0.00816	0.0	0.00220	0.53	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.002
TOT						4.74			3343.96	10971.00					
AVG					0.00220		0.30	12.19			3.72				
CUM						83.76									

** BIOLOGICAL AND PHYSICAL COEFFICIENTS **

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#2 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 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
199	0.800	7.96	2.62	0.10	0.19	0.00	0.00	0.00	0.00	2.81	3.33	3.33	0.13	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200	0.700	7.94	2.63	0.10	0.19	0.00	0.00	0.00	0.00	2.83	3.35	3.35	0.13	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
201	0.600	7.93	2.63	0.10	0.19	0.00	0.00	0.00	0.00	2.84	3.36	3.36	0.13	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202	0.500	7.92	2.64	0.10	0.20	0.00	0.00	0.00	0.00	2.86	3.38	3.38	0.13	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
203	0.400	7.91	2.64	0.10	0.20	0.00	0.00	0.00	0.00	2.88	3.40	3.40	0.13	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
204	0.300	7.89	2.65	0.10	0.20	0.00	0.00	0.00	0.00	2.89	3.41	3.41	0.13	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
205	0.200	7.88	2.65	0.10	0.20	0.00	0.00	0.00	0.00	2.91	3.43	3.43	0.13	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
206	0.100	7.87	2.65	0.10	0.20	0.00	0.00	0.00	0.00	2.93	3.45	3.45	0.13	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
207	0.000	7.86	2.66	0.10	0.20	0.00	0.00	0.00	0.00	2.94	3.47	3.46	0.13	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			2.30	0.07	0.16	0.00	0.00	0.00	0.00	1.80			0.10	0.16	0.00	0.00	0.00	0.00			0.00	0.00	0.00

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

*** WATER QUALITY CONSTITUENT VALUES ***

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I	CM-II	DO mg/L	BOD#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO g/m^3	COLI #/100mL	NCM
199	0.800	27.09	0.00	0.00	0.00	2.94	8.78	0.00	14.53	0.00	3.06	0.00	0.00	0.00	0.00	57.56	0.00	0.	0.00
200	0.700	27.18	0.00	0.00	0.00	2.98	8.76	0.00	14.57	0.00	3.05	0.00	0.00	0.00	0.00	58.11	0.00	0.	0.00
201	0.600	27.27	0.00	0.00	0.00	3.01	8.75	0.00	14.61	0.00	3.04	0.00	0.00	0.00	0.00	58.67	0.00	0.	0.00
202	0.500	27.36	0.00	0.00	0.00	3.03	8.74	0.00	14.66	0.00	3.04	0.00	0.00	0.00	0.00	59.22	0.00	0.	0.00
203	0.400	27.44	0.00	0.00	0.00	3.04	8.73	0.00	14.70	0.00	3.03	0.00	0.00	0.00	0.00	59.78	0.00	0.	0.00
204	0.300	27.53	0.00	0.00	0.00	3.05	8.72	0.00	14.75	0.00	3.03	0.00	0.00	0.00	0.00	60.33	0.00	0.	0.00
205	0.200	27.62	0.00	0.00	0.00	3.06	8.71	0.00	14.80	0.00	3.02	0.00	0.00	0.00	0.00	60.89	0.00	0.	0.00

206	0.100	27.71	0.00	0.00	0.00	3.06	8.71	0.00	14.85	0.00	3.02	0.00	0.00	0.00	0.00	61.44	0.00	0.	0.00
207	0.000	27.80	0.00	0.00	0.00	3.06	8.70	0.00	14.90	0.00	3.02	0.00	0.00	0.00	0.00	62.00	0.00	0.	0.00

STREAM SUMMARY
BAYOU MARINGOUIN

BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN CALIBRATION MODEL

```
 TRAVEL TIME       =          83.76 DAYS

 MAXIMUM EFFLUENT  =           0.00 PERCENT

 FLOW              =  0.00022 TO    0.01806   m³/s
 DISPERSION        =  0.0000  TO   10.0000    m²/s
 VELOCITY          =  0.00014 TO    0.01945   m/s
 DEPTH             =  0.24    TO    0.66      m
 WIDTH             =  3.63    TO   14.63      m

 BOD DECAY         =   0.05   TO    0.10      per day
 NH3 DECAY         =   0.00   TO    0.00      per day
 SOD               =   3.33   TO    5.27      g/m²/d
 NH3 SOURCE        =   0.00   TO    0.00      g/m²/d
 REAERATION        =   1.20   TO    3.28      per day
 BOD SETTLING      =   0.09   TO    0.24      per day
 NBOD DECAY        =   0.01   TO    0.14      per day
 NBOD SETTLING     =   0.09   TO    0.24      per day

 TEMPERATURE       =  25.62   TO   27.80      deg C
 DISSOLVED OXYGEN  =   1.01   TO    3.99      mg/L
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FINAL REPORT   UNNAMED TRIBUTARY
REACH NO. 2   UNNAMED TRIBUTARY

BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN CALIBRATION MODEL

** REACH INPUTS ***

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-I	CM-II	DO mg/L	BOD#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM
51	HDWTR	0.00090	25.20	0.00	0.00	0.00	1.25	8.88	0.00	10.18	0.00	2.81	0.00	0.00	0.00	13.00	0.00	0.00
EACH	INCR	0.00008	0.00	0.00	0.00	0.00	0.00	11.00	0.00			3.00	0.00	0.00	0.00	0.00	0.00	

*** HYDRAULIC PARAMETER VALUES ***

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/s	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
51	1.96	1.86	0.00098	0.0	0.00141	0.80	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.001
52	1.86	1.76	0.00106	0.0	0.00153	0.74	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.002
53	1.76	1.67	0.00114	0.0	0.00164	0.69	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.002
54	1.67	1.57	0.00122	0.0	0.00176	0.65	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.002
55	1.57	1.47	0.00130	0.0	0.00187	0.61	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.002
56	1.47	1.37	0.00138	0.0	0.00199	0.57	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.002
57	1.37	1.27	0.00146	0.0	0.00210	0.54	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.002
58	1.27	1.18	0.00154	0.0	0.00222	0.51	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.002
59	1.18	1.08	0.00162	0.0	0.00233	0.49	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.002
60	1.08	0.98	0.00170	0.0	0.00245	0.46	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.002
61	0.98	0.88	0.00178	0.0	0.00256	0.44	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.003
62	0.88	0.78	0.00186	0.0	0.00268	0.42	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.003

63	0.78	0.69	0.00194	0.0	0.00279	0.41	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.003
64	0.69	0.59	0.00202	0.0	0.00291	0.39	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.003
65	0.59	0.49	0.00210	0.0	0.00302	0.38	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.003
66	0.49	0.39	0.00218	0.0	0.00314	0.36	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.003
67	0.39	0.29	0.00226	0.0	0.00325	0.35	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.003
68	0.29	0.20	0.00234	0.0	0.00337	0.34	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.003
69	0.20	0.10	0.00242	0.0	0.00348	0.33	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.003
70	0.10	0.00	0.00250	0.0	0.00360	0.32	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.004
TOT						9.79			1362.31	6720.84					
AVG					0.00232		0.20	3.43			0.70				
CUM						9.79									

** BIOLOGICAL AND PHYSICAL COEFFICIENTS **

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD#1 DECAY 1/da	BOD#1 SETT 1/da	ABOD#1 DECAY 1/da	BOD#2 DECAY 1/da	BOD#2 SETT 1/da	ABOD#2 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
51	1.862	8.22	3.82	0.06	0.28	0.00	0.00	0.00	0.00	7.67	8.18	5.23	0.02	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52	1.764	8.21	3.82	0.06	0.28	0.00	0.00	0.00	0.00	7.71	8.22	5.24	0.02	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
53	1.666	8.20	3.83	0.06	0.28	0.00	0.00	0.00	0.00	7.75	8.26	5.24	0.02	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
54	1.568	8.18	3.84	0.06	0.28	0.00	0.00	0.00	0.00	7.79	8.31	5.24	0.02	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	1.470	8.17	3.84	0.06	0.28	0.00	0.00	0.00	0.00	7.83	8.35	5.25	0.02	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
56	1.372	8.16	3.85	0.06	0.28	0.00	0.00	0.00	0.00	7.87	8.39	5.25	0.02	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57	1.274	8.15	3.85	0.06	0.28	0.00	0.00	0.00	0.00	7.90	8.43	5.25	0.02	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
58	1.176	8.14	3.86	0.06	0.28	0.00	0.00	0.00	0.00	7.94	8.47	5.26	0.02	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
59	1.078	8.13	3.86	0.06	0.28	0.00	0.00	0.00	0.00	7.98	8.51	5.26	0.02	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	0.980	8.11	3.87	0.06	0.28	0.00	0.00	0.00	0.00	8.03	8.55	5.26	0.02	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
61	0.882	8.10	3.88	0.06	0.28	0.00	0.00	0.00	0.00	8.07	8.59	5.27	0.02	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62	0.784	8.09	3.88	0.06	0.29	0.00	0.00	0.00	0.00	8.11	8.64	5.27	0.02	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
63	0.686	8.08	3.89	0.06	0.29	0.00	0.00	0.00	0.00	8.15	8.68	5.27	0.02	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
64	0.588	8.07	3.89	0.06	0.29	0.00	0.00	0.00	0.00	8.19	8.72	5.27	0.02	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65	0.490	8.05	3.90	0.06	0.29	0.00	0.00	0.00	0.00	8.23	8.76	5.28	0.02	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
66	0.392	8.04	3.90	0.06	0.29	0.00	0.00	0.00	0.00	8.27	8.80	5.28	0.02	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67	0.294	8.03	3.91	0.06	0.29	0.00	0.00	0.00	0.00	8.31	8.85	5.28	0.02	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
68	0.196	8.02	3.92	0.06	0.29	0.00	0.00	0.00	0.00	8.36	8.89	5.29	0.02	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
69	0.098	8.01	3.92	0.06	0.29	0.00	0.00	0.00	0.00	8.40	8.94	5.29	0.01	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70	0.000	8.00	3.93	0.06	0.29	0.00	0.00	0.00	0.00	8.44	9.15	5.44	0.02	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			3.45	0.07	0.25	0.00	0.00	0.00	0.00	5.50			0.10	0.25	0.00	0.00	0.00	0.00			0.00	0.00	0.00

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

** WATER QUALITY CONSTITUENT VALUES **

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I	CM-II	DO mg/L	BOD#1 mg/L	BOD#2 mg/L	EBOD#1 mg/L	EBOD#2 mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO g/m^3	COLI #/100mL	NCM
51	1.862	25.28	0.00	0.00	0.00	1.28	8.99	0.00	10.37	0.00	2.75	0.00	0.00	0.00	0.00	13.80	0.00	0.	0.00
52	1.764	25.36	0.00	0.00	0.00	1.27	9.05	0.00	10.51	0.00	2.71	0.00	0.00	0.00	0.00	14.59	0.00	0.	0.00
53	1.666	25.44	0.00	0.00	0.00	1.27	9.10	0.00	10.63	0.00	2.69	0.00	0.00	0.00	0.00	15.39	0.00	0.	0.00
54	1.568	25.52	0.00	0.00	0.00	1.26	9.12	0.00	10.74	0.00	2.67	0.00	0.00	0.00	0.00	16.18	0.00	0.	0.00
55	1.470	25.60	0.00	0.00	0.00	1.26	9.14	0.00	10.84	0.00	2.65	0.00	0.00	0.00	0.00	16.98	0.00	0.	0.00
56	1.372	25.68	0.00	0.00	0.00	1.25	9.15	0.00	10.93	0.00	2.64	0.00	0.00	0.00	0.00	17.77	0.00	0.	0.00
57	1.274	25.76	0.00	0.00	0.00	1.25	9.16	0.00	11.02	0.00	2.63	0.00	0.00	0.00	0.00	18.57	0.00	0.	0.00
58	1.176	25.84	0.00	0.00	0.00	1.24	9.16	0.00	11.10	0.00	2.62	0.00	0.00	0.00	0.00	19.36	0.00	0.	0.00
59	1.078	25.92	0.00	0.00	0.00	1.24	9.16	0.00	11.18	0.00	2.62	0.00	0.00	0.00	0.00	20.15	0.00	0.	0.00
60	0.980	26.00	0.00	0.00	0.00	1.23	9.16	0.00	11.26	0.00	2.61	0.00	0.00	0.00	0.00	20.95	0.00	0.	0.00

61	0.882	26.08	0.00	0.00	0.00	1.23	9.16	0.00	11.33	0.00	2.61	0.00	0.00	0.00	0.00	21.74	0.00	0.	0.00
62	0.784	26.16	0.00	0.00	0.00	1.22	9.15	0.00	11.41	0.00	2.60	0.00	0.00	0.00	0.00	22.54	0.00	0.	0.00
63	0.686	26.24	0.00	0.00	0.00	1.21	9.15	0.00	11.48	0.00	2.60	0.00	0.00	0.00	0.00	23.33	0.00	0.	0.00
64	0.588	26.32	0.00	0.00	0.00	1.21	9.14	0.00	11.56	0.00	2.59	0.00	0.00	0.00	0.00	24.13	0.00	0.	0.00
65	0.490	26.40	0.00	0.00	0.00	1.20	9.14	0.00	11.63	0.00	2.59	0.00	0.00	0.00	0.00	24.92	0.00	0.	0.00
66	0.392	26.48	0.00	0.00	0.00	1.20	9.13	0.00	11.70	0.00	2.59	0.00	0.00	0.00	0.00	25.72	0.00	0.	0.00
67	0.294	26.56	0.00	0.00	0.00	1.19	9.13	0.00	11.78	0.00	2.58	0.00	0.00	0.00	0.00	26.51	0.00	0.	0.00
68	0.196	26.64	0.00	0.00	0.00	1.19	9.13	0.00	11.87	0.00	2.59	0.00	0.00	0.00	0.00	27.31	0.00	0.	0.00
69	0.098	26.72	0.00	0.00	0.00	1.18	9.33	0.00	12.14	0.00	2.66	0.00	0.00	0.00	0.00	28.10	0.00	0.	0.00
70	0.000	26.80	0.00	0.00	0.00	1.19	12.15	0.00	15.04	0.00	3.63	0.00	0.00	0.00	0.00	28.90	0.00	0.	0.00

STREAM SUMMARY
UNNAMED TRIBUTARY

BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN CALIBRATION MODEL

TRAVEL TIME = 9.79 DAYS

MAXIMUM EFFLUENT = 0.00 PERCENT

FLOW	=	0.00098	TO	0.00250	m^3/s
DISPERSION	=	0.0300	TO	0.0300	m^2/s
VELOCITY	=	0.00141	TO	0.00360	m/s
DEPTH	=	0.20	TO	0.20	m
WIDTH	=	3.43	TO	3.43	m
BOD DECAY	=	0.06	TO	0.06	per day
NH3 DECAY	=	0.00	TO	0.00	per day
SOD	=	5.23	TO	5.44	$g/m^2/d$
NH3 SOURCE	=	0.00	TO	0.00	$g/m^2/d$
REAERATION	=	3.82	TO	3.93	per day
BOD SETTLING	=	0.28	TO	0.29	per day
NBOD DECAY	=	0.01	TO	0.02	per day
NBOD SETTLING	=	0.28	TO	0.29	per day
TEMPERATURE	=	25.28	TO	26.80	deg C
DISSOLVED OXYGEN	=	1.18	TO	1.28	mg/L

.....EXECUTION COMPLETED

Overlay File – Main Stem

```
STATION 1  KILOMETER  17.94
1               25.58
5    0.05       1.05       2.84
6               21.27
13              16.5
18              5.75
31   0                     0.0154602
33              0.3322
34              4.8768
STATION 2  KILOMETER  12.23
1               24.29
5               1.71
6               12.94
13              33
18              3.96
31   0                     0.01932525
33              0.2987
34              14.6308
STATION 3  KILOMETER  9.93
1               26.83
5    0.49       1.26       2.03
6               18.57
13              39.2
18              3.59
33              0.6614
34              11.5824
STATION 3A KILOMETER  9.08
1               26.69
5               4.4
31   0.01748    0.01840    0.01932
33              0.256
34              3.6271
STATION 4  KILOMETER  5.7
1               27.03
5    1.61       2.61       6.89
6               9.22
13              26.85
18              2.19
31                         0.01932525
33              0.4968
34              6.096
STATION 5  KILOMETER  1.5
1               27.03
5    1.61       2.61       6.89
6               14.11
13              52.8
18              3.16
31   0                     0.01932525
33              0.2438
34              7.0104
STATION 6  KILOMETER  0.28
1               27.78
5    2          3          7.3
6               14.81
13              60.4
```

```
18              2.93
31   0                    0.00891975
33              0.3048
34              12.192
STD 5  5          18        0
MRK 13.55       UNNAMED TRIBUTARY
SEG 11
MRK 9.12        MUSSON ROAD WEIR
SEG 8
MRK 5.3         UPPER BORROW PIT CANAL
SEG 0.9
END
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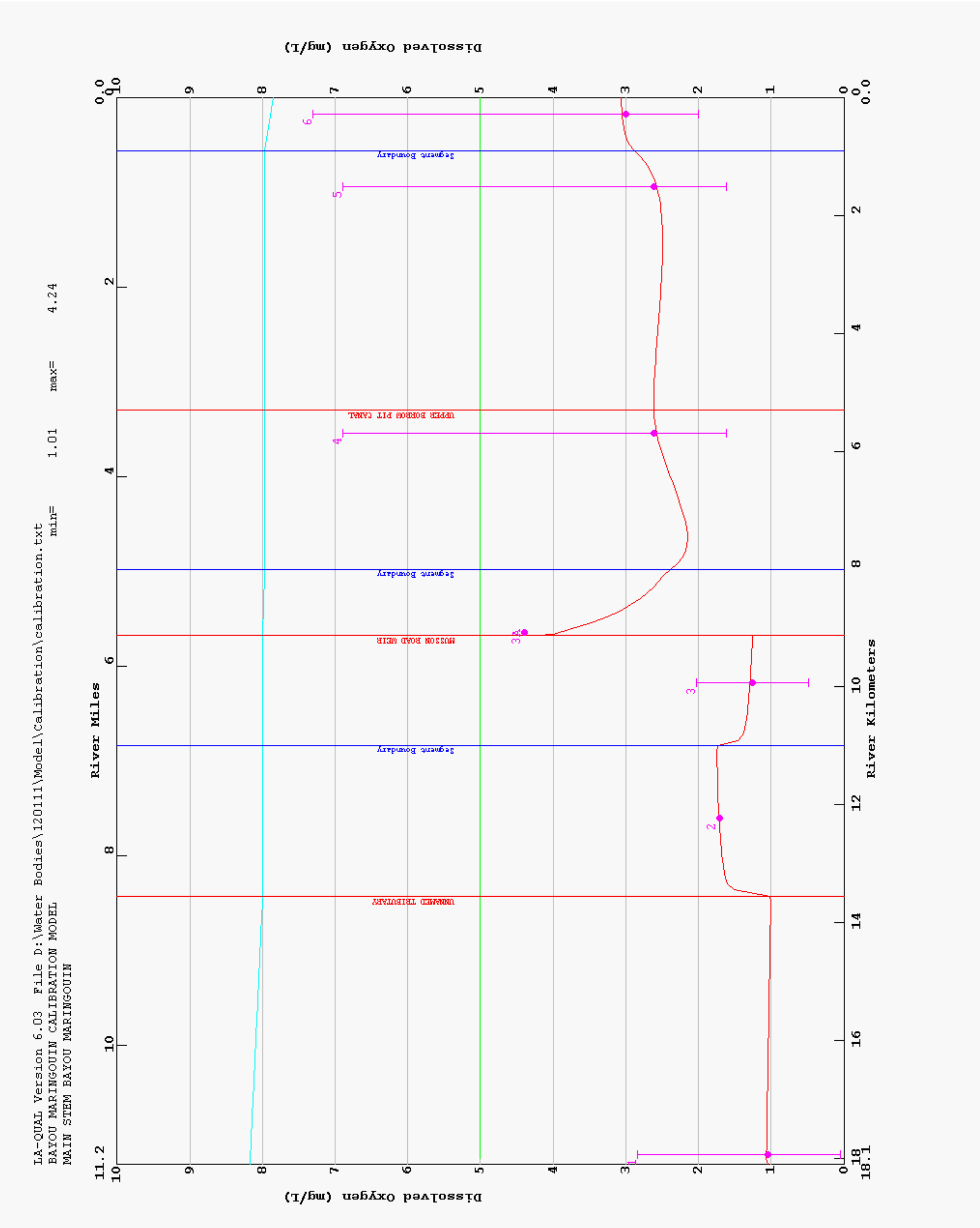
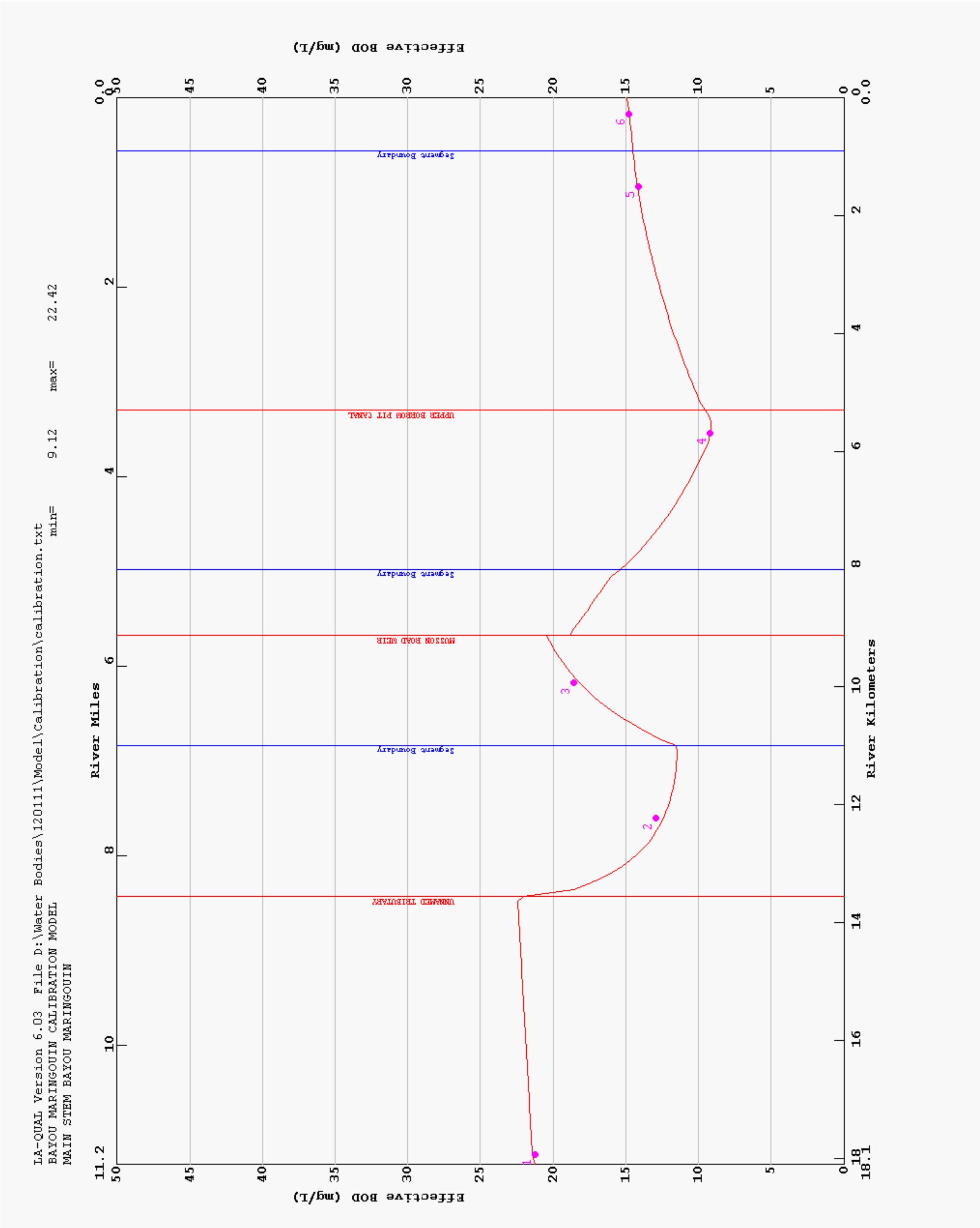
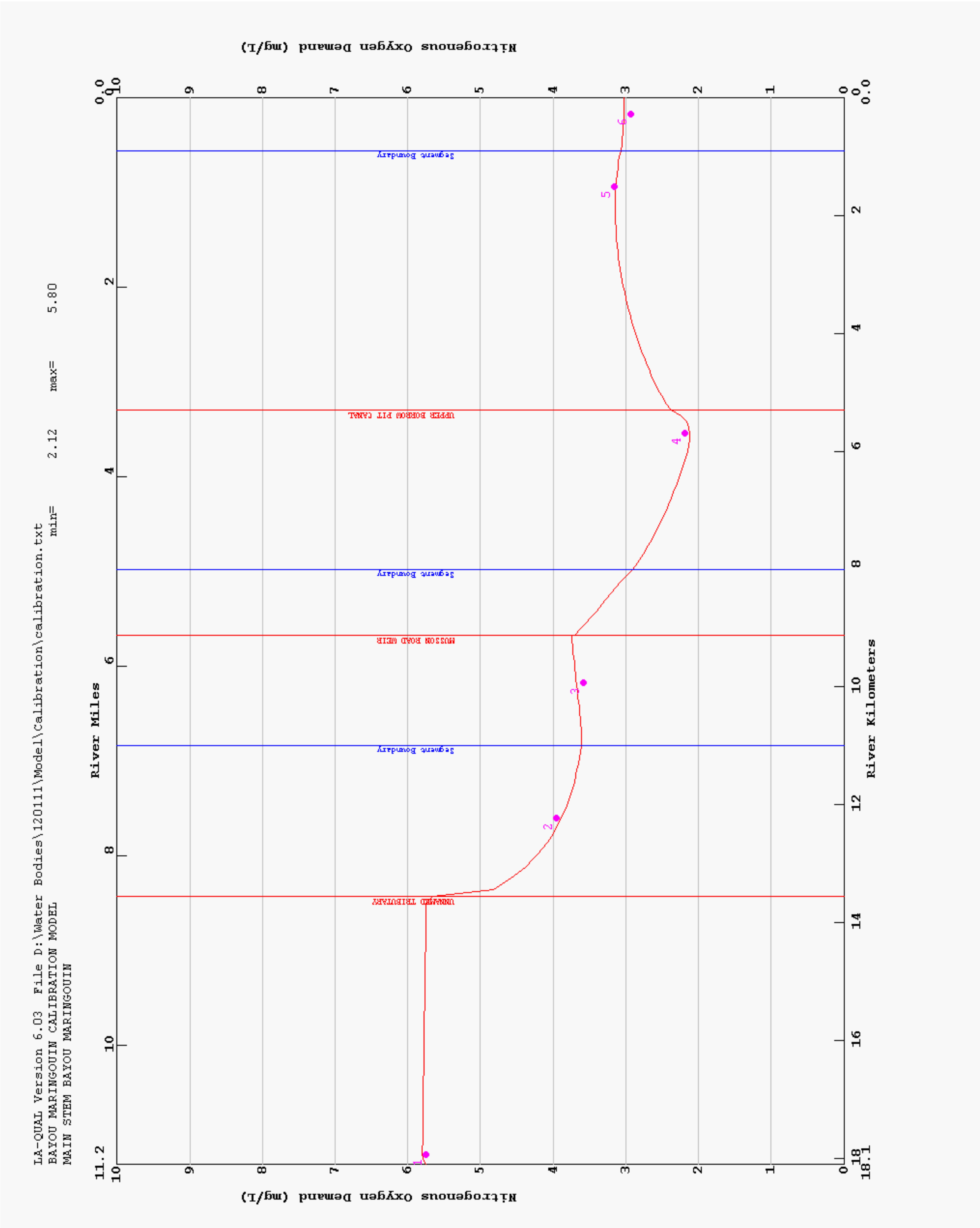
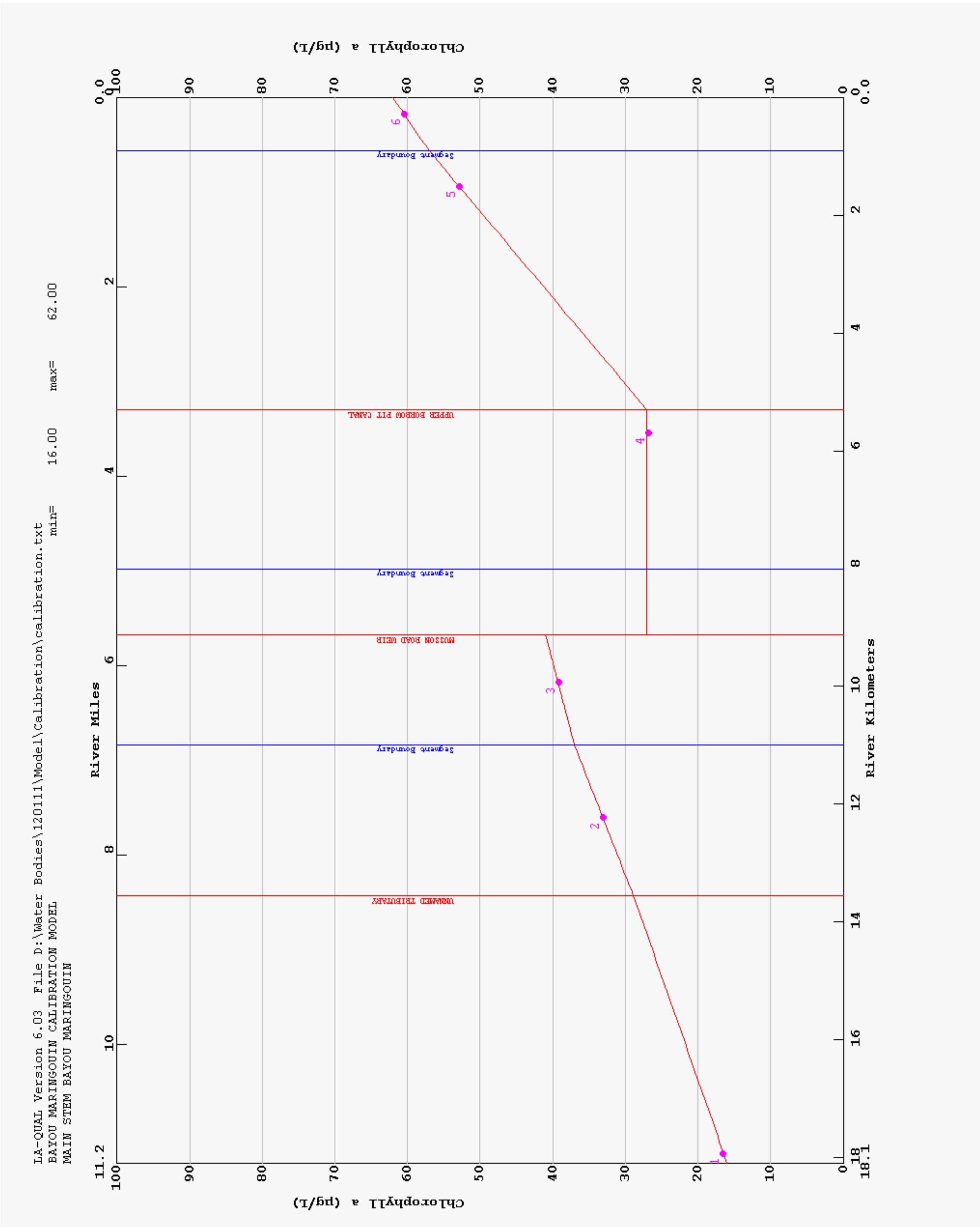
Overlay File – Tributary

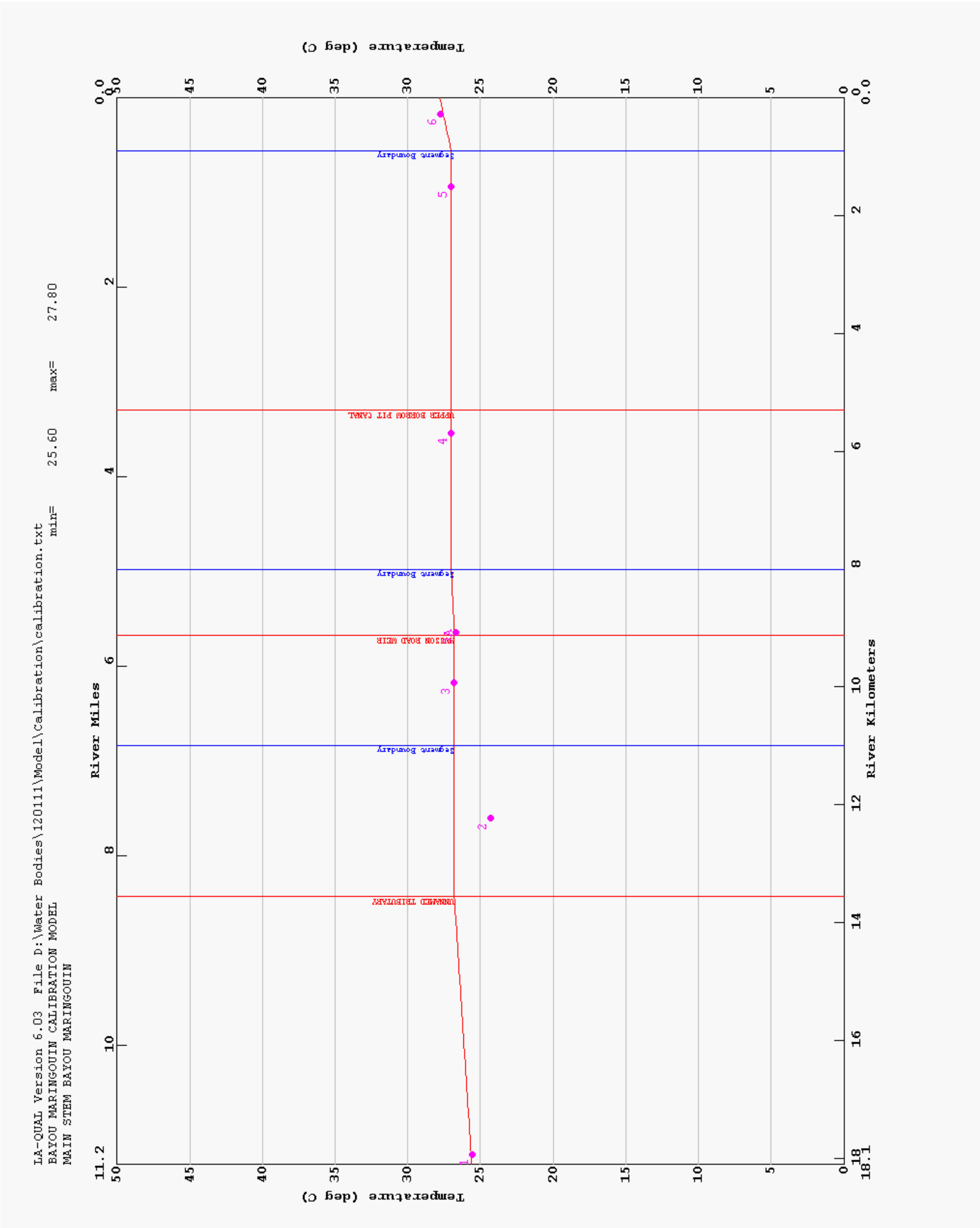
```
STATION 7  KILOMETER  1.9
1               25.58
5               0.44
6               10.18
13              13.6
18              2.81
31                        0.014724
33              0.0732
34              1.9812
END
```

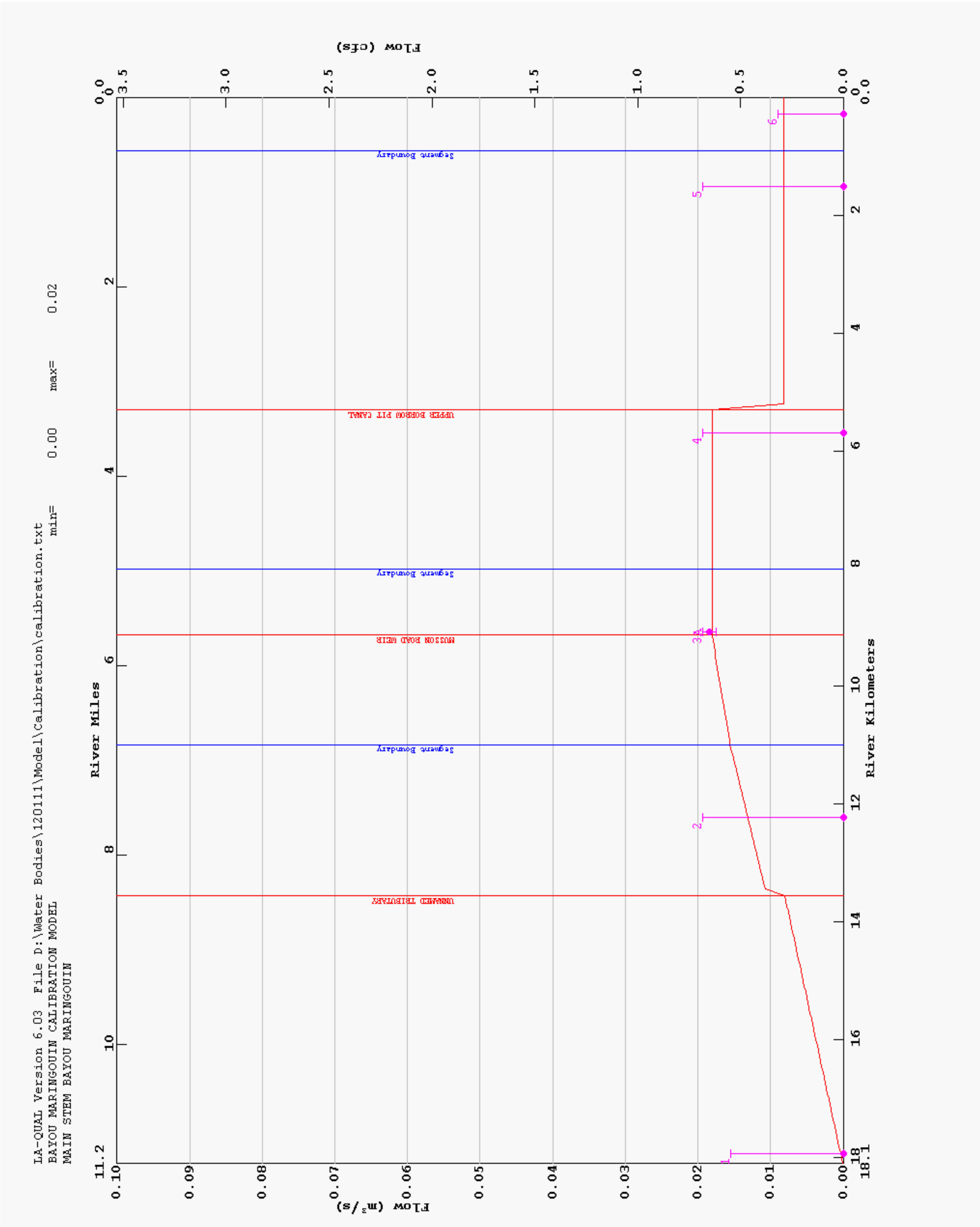

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
MAIN STEM BAYOU MARINGOUIN
min= 1.01 max= 4.24
River Miles
River Kilometers
Dissolved Oxygen (mg/L)
Segment Boundary
UPPER BORROW PIT CANAL
UNNAMED TRIBUTARY

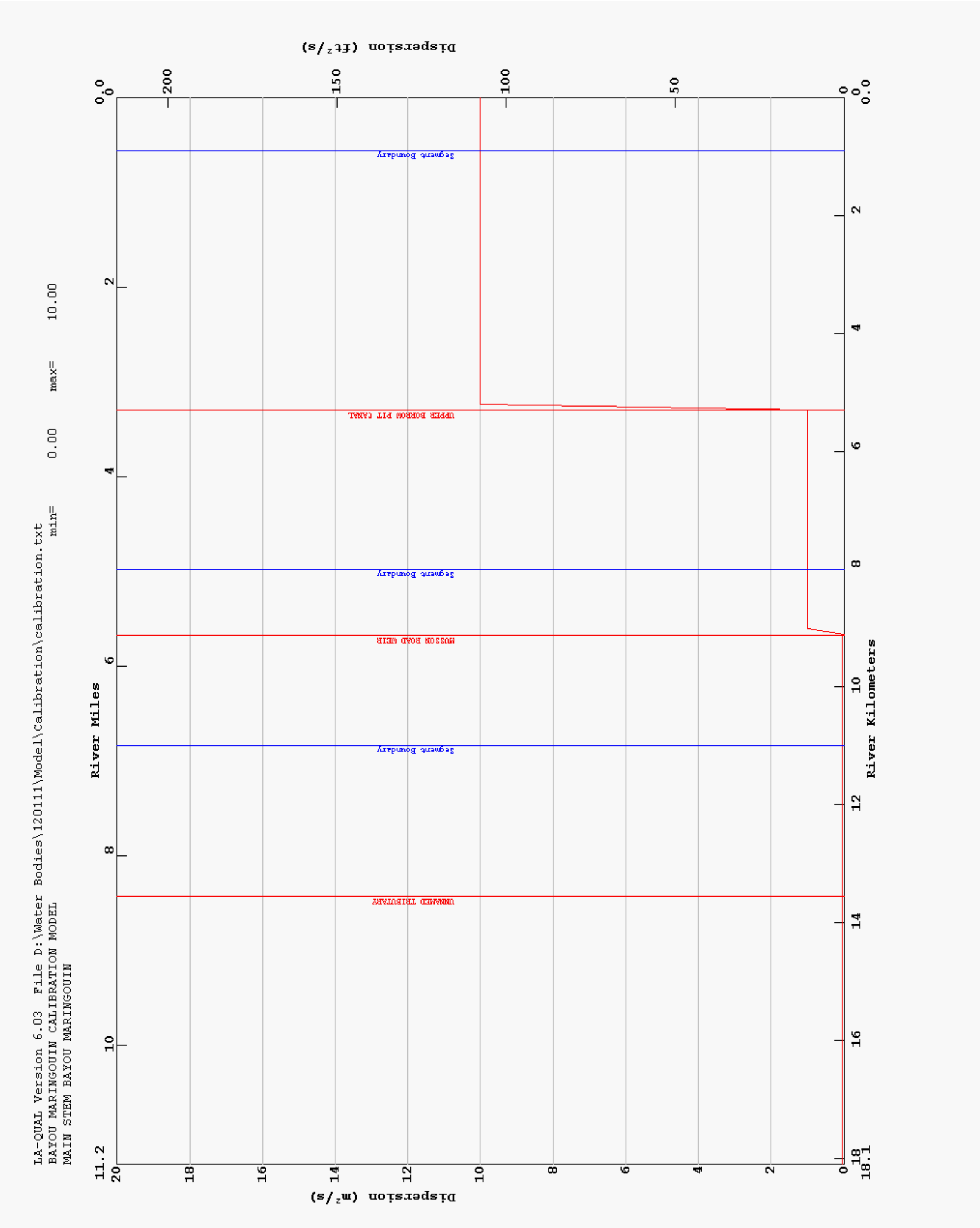

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
MAIN STEM BAYOU MARINGOUIN
min= 9.12 max= 22.42
Effective BOD (mg/L)
River Miles
River Kilometers
Segment Boundary
UPPER BORROW PIT CANAL
MUSSON ROAD WEIR
UNNAMED TRIBUTARY

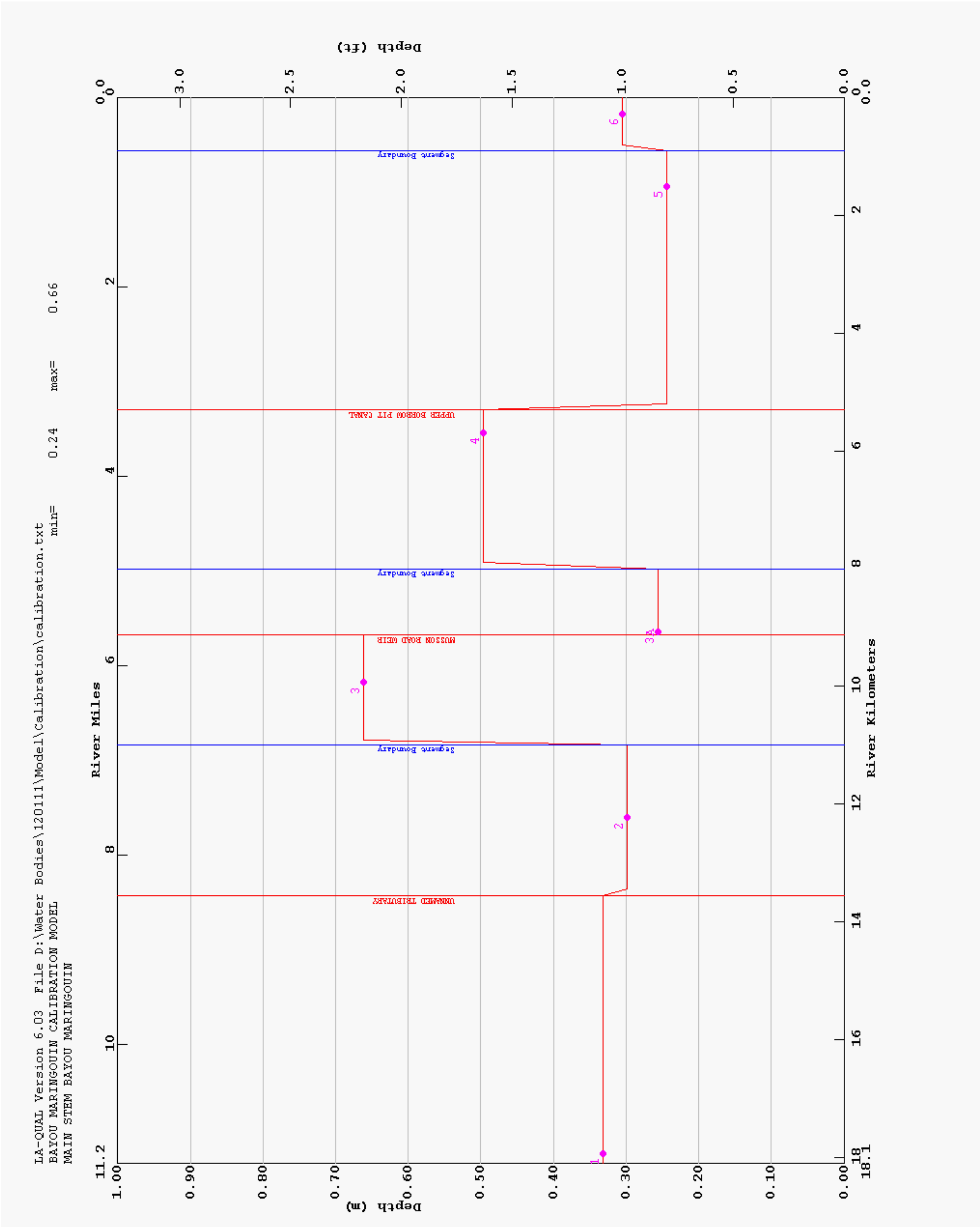

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
MAIN STEM BAYOU MARINGOUIN
min= 2.12 max= 5.80
River Miles
River Kilometers
Nitrogenous Oxygen Demand (mg/L)
Segment Boundary
UPPER BORROW PIT CANAL

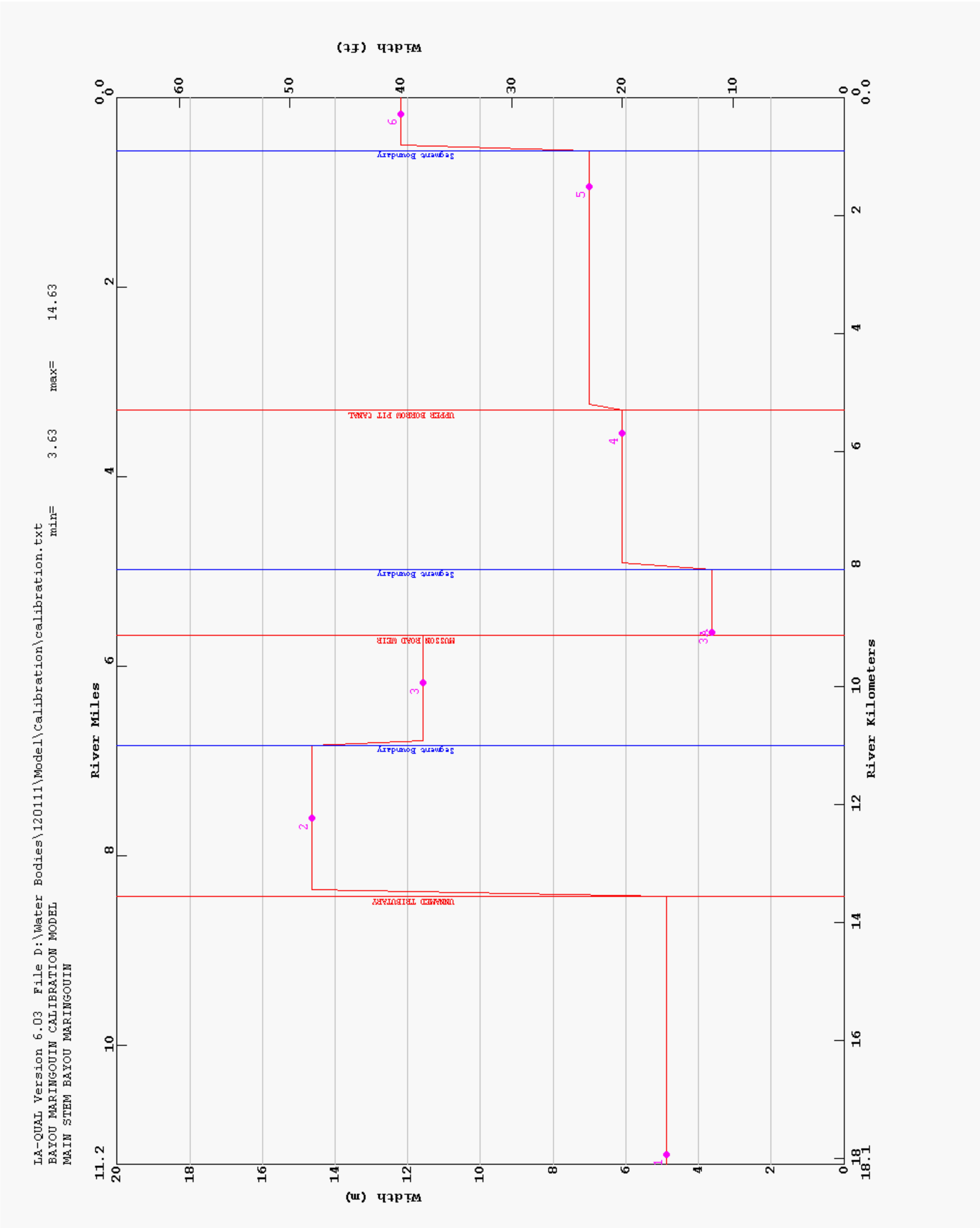

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
MAIN STEM BAYOU MARINGOUIN
min= 16.00 max= 62.00
Chlorophyll a (µg/L)
River Miles
River Kilometers
Segment Boundary
UPPER BORROW PIT CANAL
UNNAMED TRIBUTARY

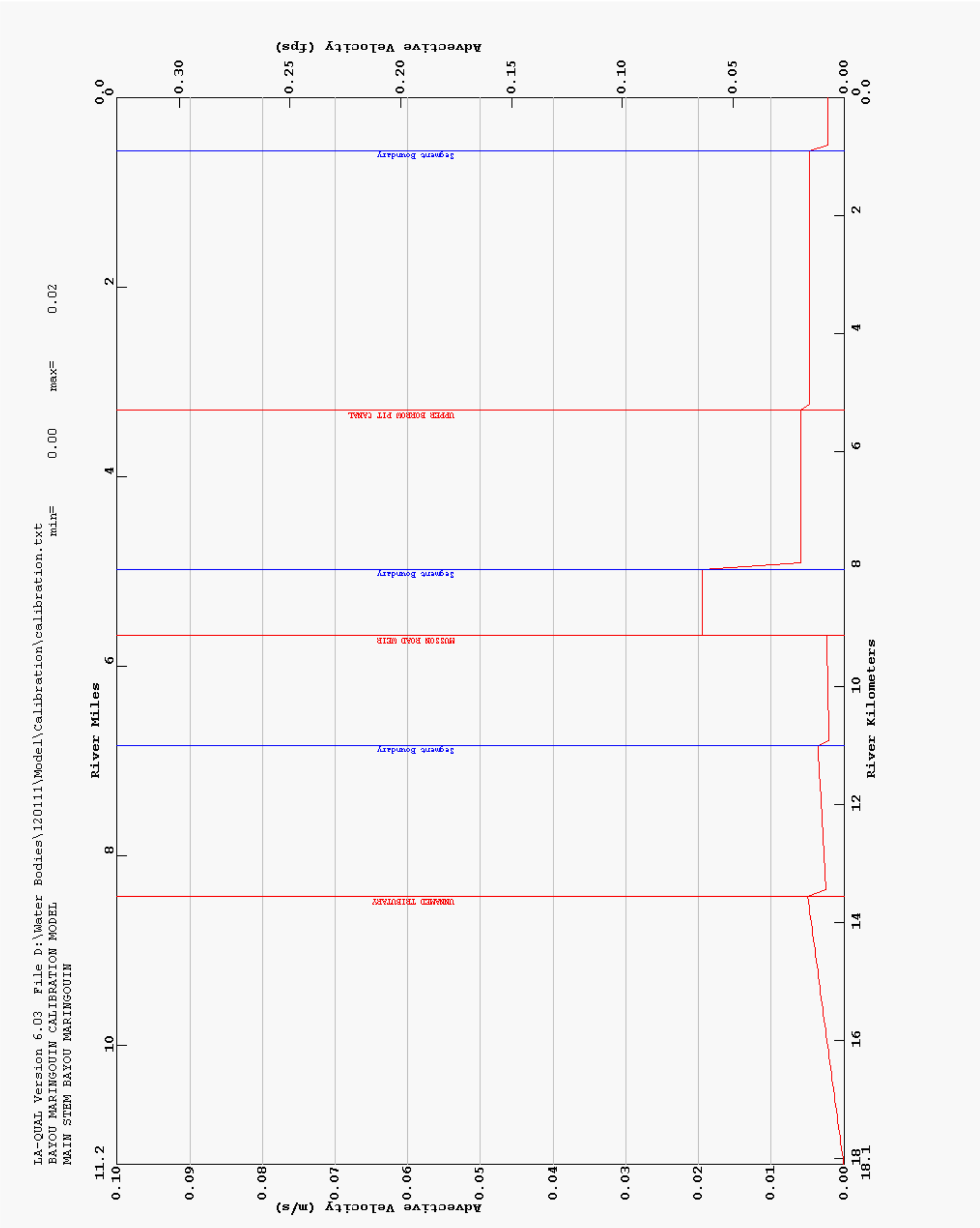

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
MAIN STEM BAYOU MARINGOUIN
min= 25.60 max= 27.80
Temperature (deg C)
River Miles
River Kilometers
UPPER BORROW PIT CANAL
UNNAMED TRIBUTARY

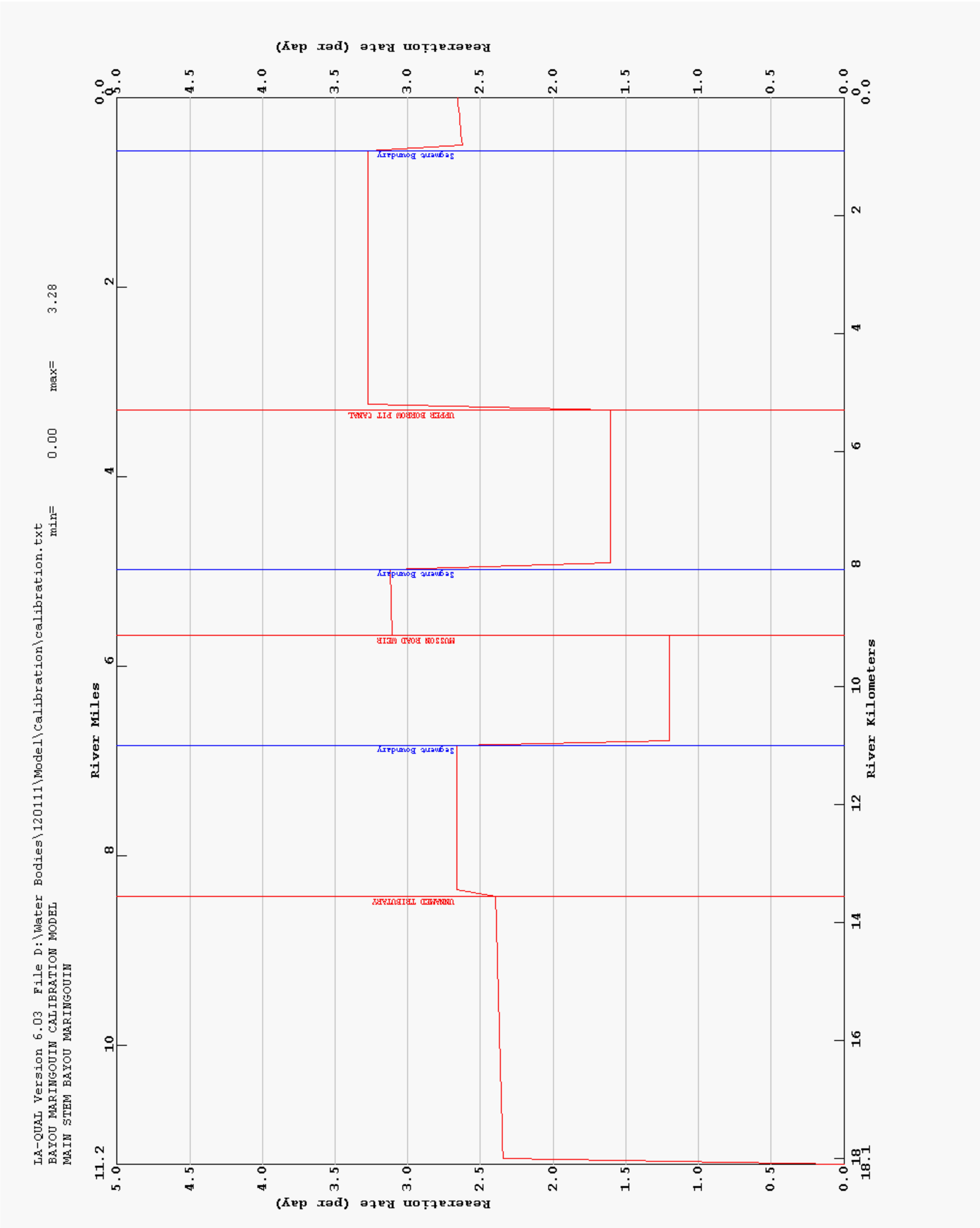

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
MAIN STEM BAYOU MARINGOUIN
min= 0.00 max= 0.02
River Miles
River Kilometers
Flow (cfs)
Flow (m³/s)
Segment Boundary
UPPER BORROW PIT CANAL
UNNAMED TRIBUTARY

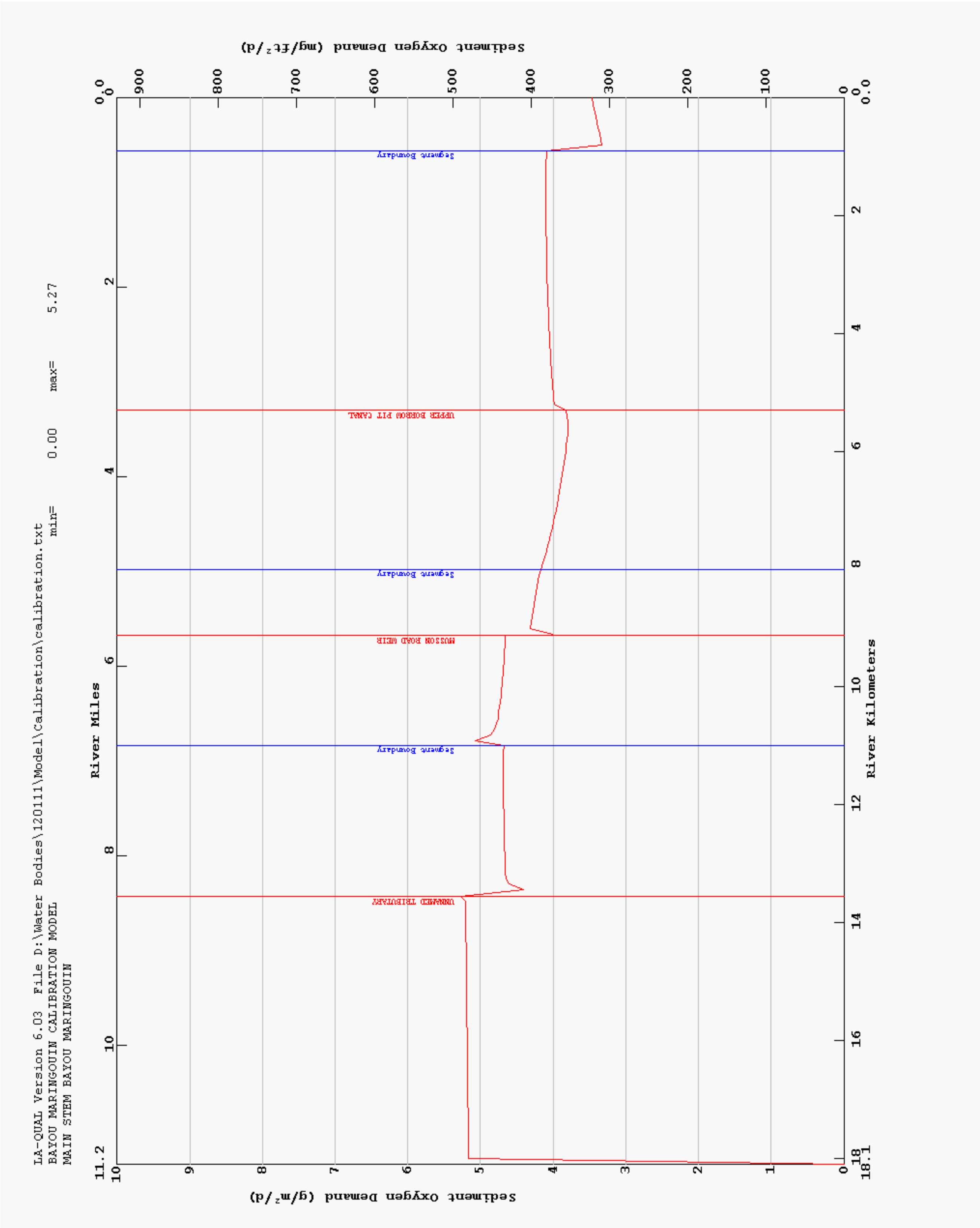

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
MAIN STEM BAYOU MARINGOUIN
min= 0.00 max= 10.00
River Miles
River Kilometers
Dispersion (m²/s)
Dispersion (ft²/s)

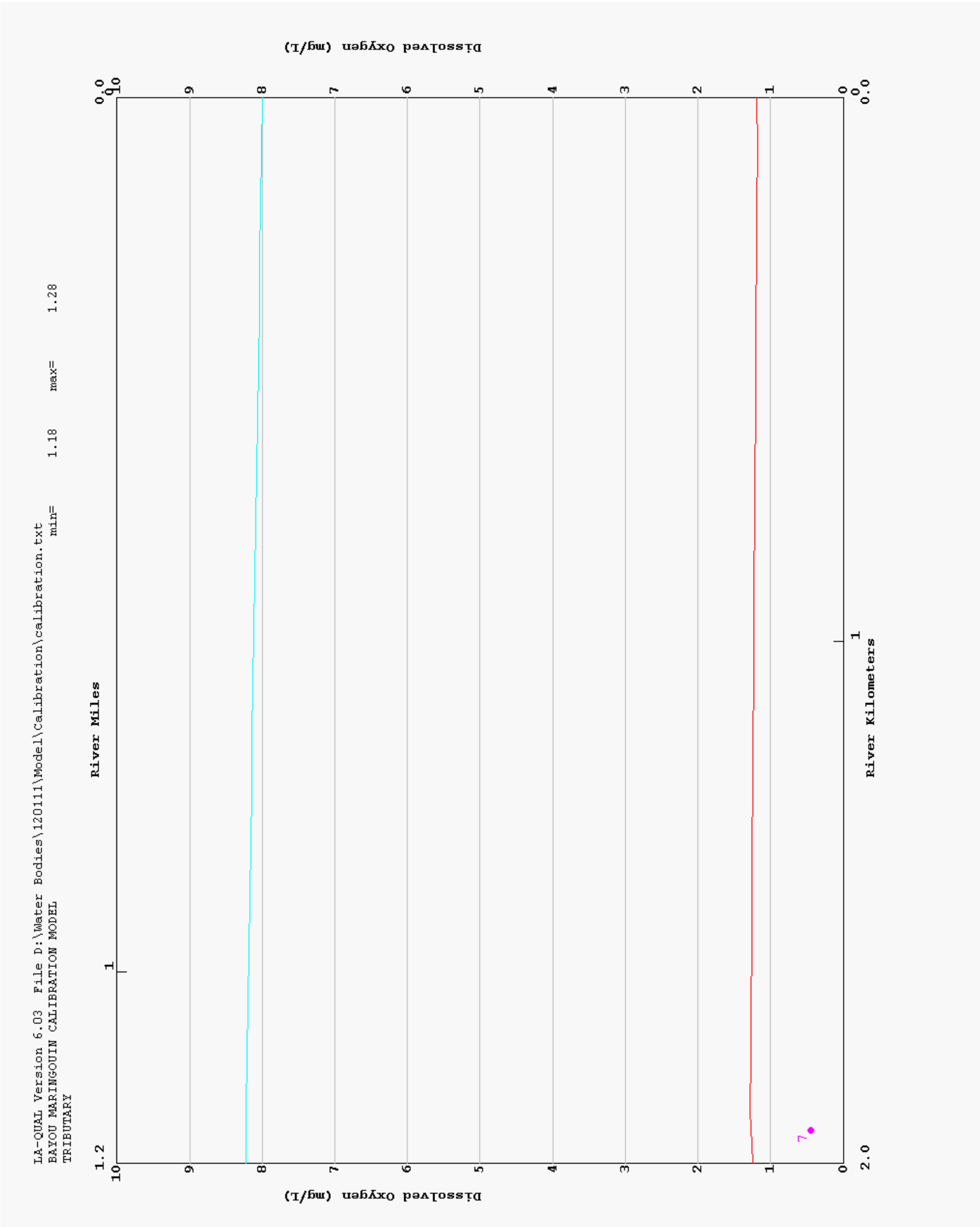

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
MAIN STEM BAYOU MARINGOUIN
min= 0.24 max= 0.66
River Miles
River Kilometers
Depth (m)
Depth (ft)
Segment Boundary
UPPER BORROW PIT CANAL
MUNSON ROAD WEIR
UNNAMED TRIBUTARY

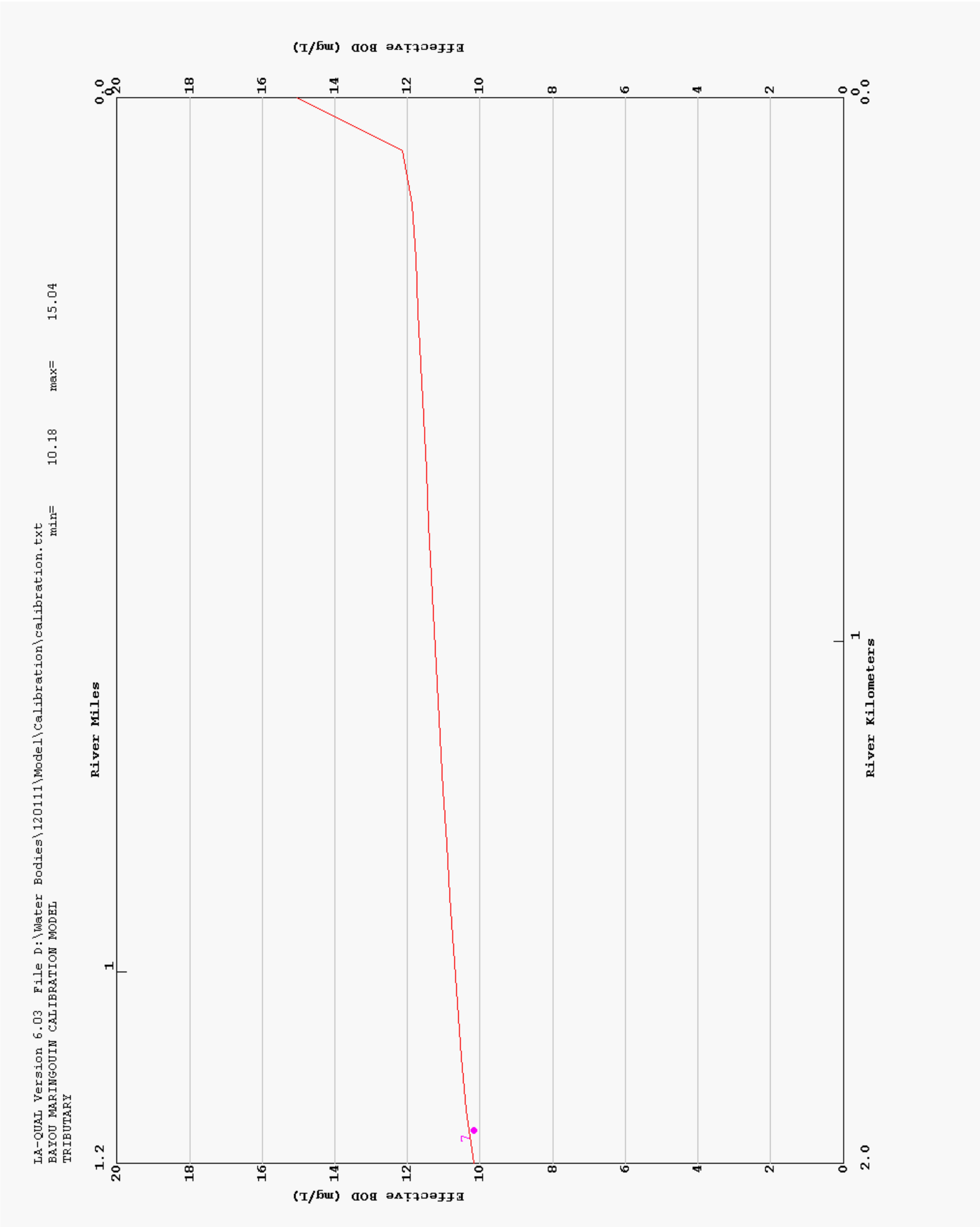

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
MAIN STEM BAYOU MARINGOUIN
min= 3.63 max= 14.63
River Miles
River Kilometers
Width (m)
Width (ft)
Segment Boundary
UPPER BORROW PIT CANAL
UNNAMED TRIBUTARY

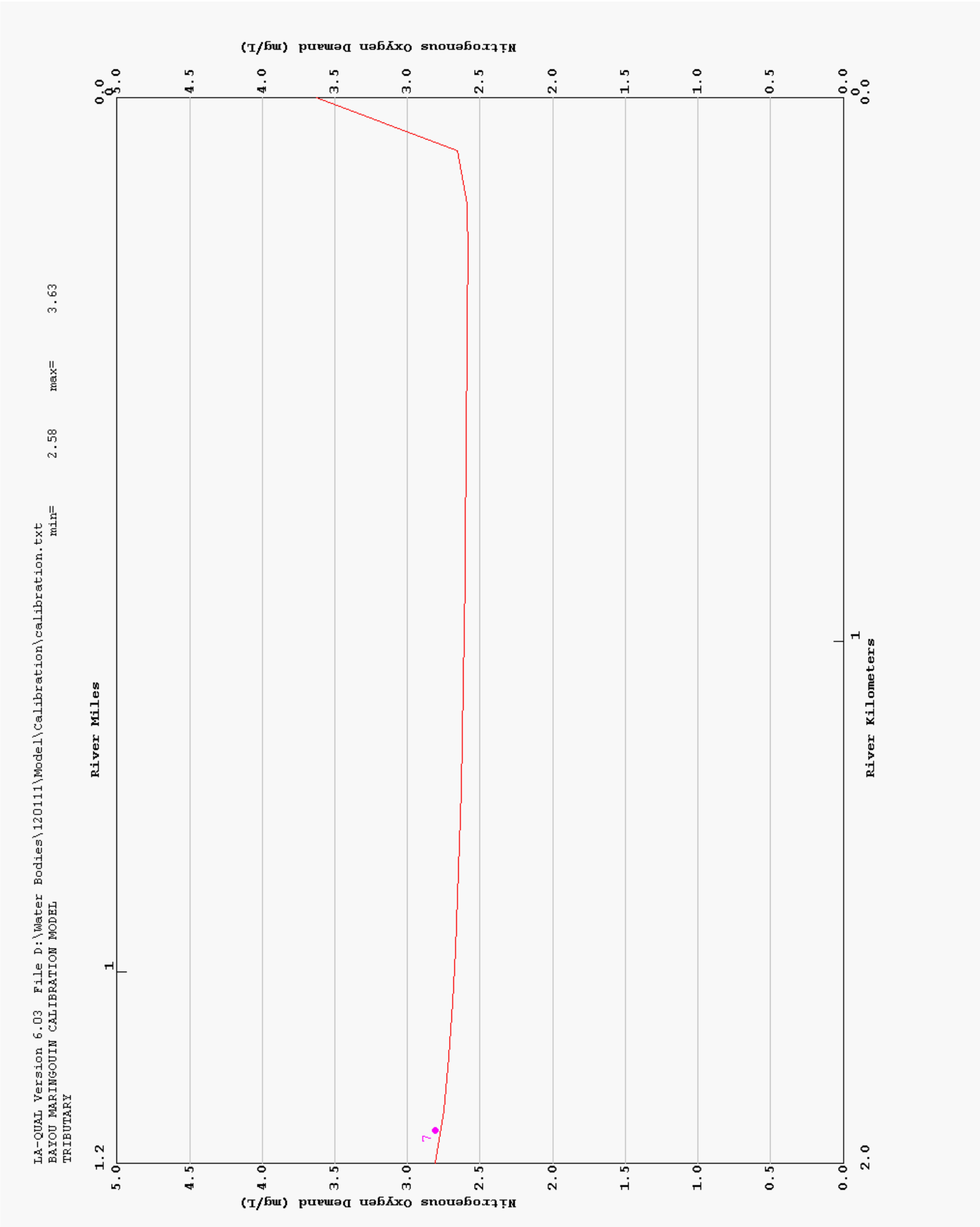

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
MAIN STEM BAYOU MARINGOUIN
min= 0.00 max= 0.02
River Miles
River Kilometers
Advective Velocity (fps)
Advective Velocity (m/s)
Segment Boundary
UPPER BORROW PIT CANAL
UNNAMED TRIBUTARY

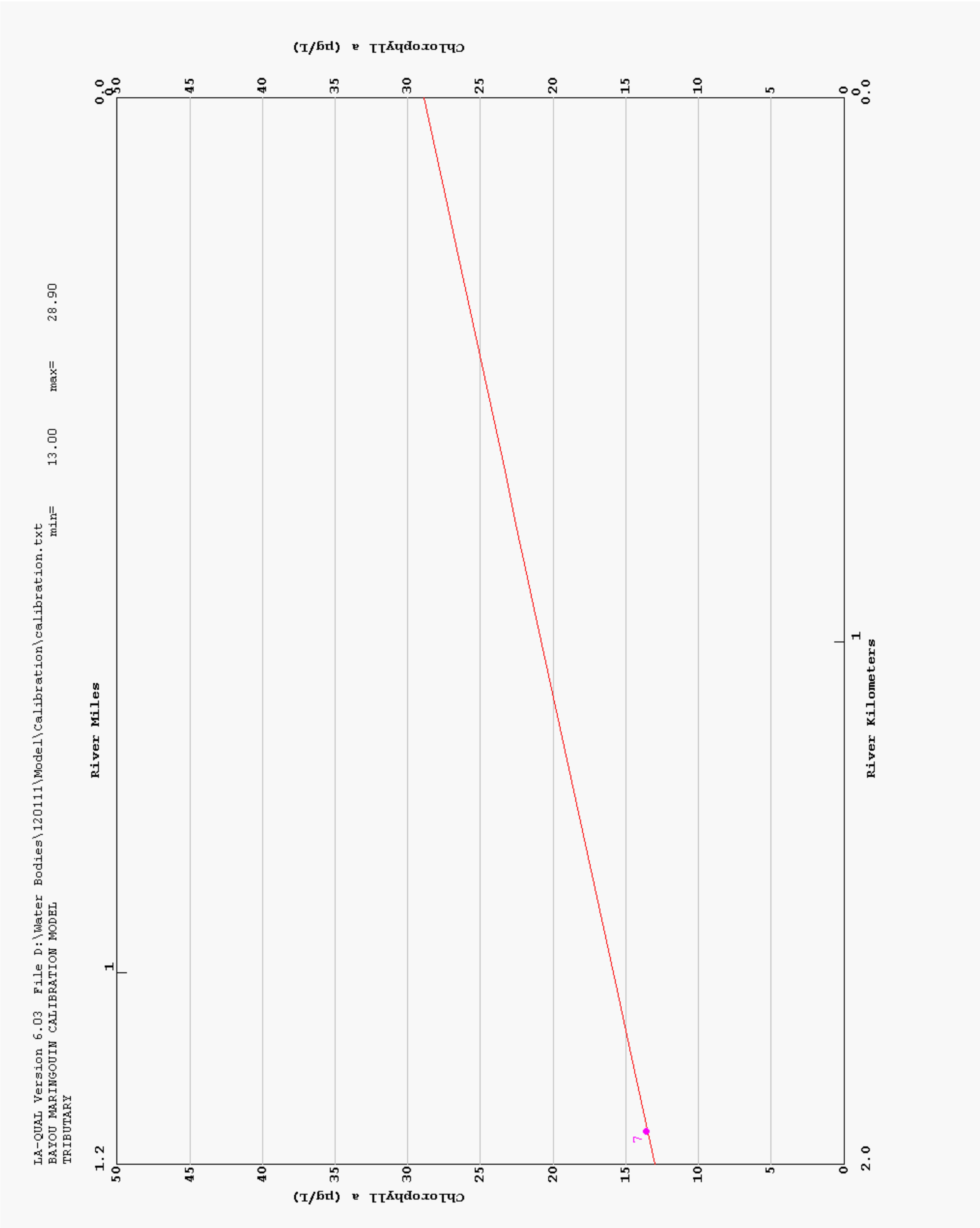

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
MAIN STEM BAYOU MARINGOUIN
min= 0.00 max= 3.28
Reaeration Rate (per day)
River Miles
River Kilometers
Segment Boundary
UPPER BORROW PIT CANAL
UNNAMED TRIBUTARY

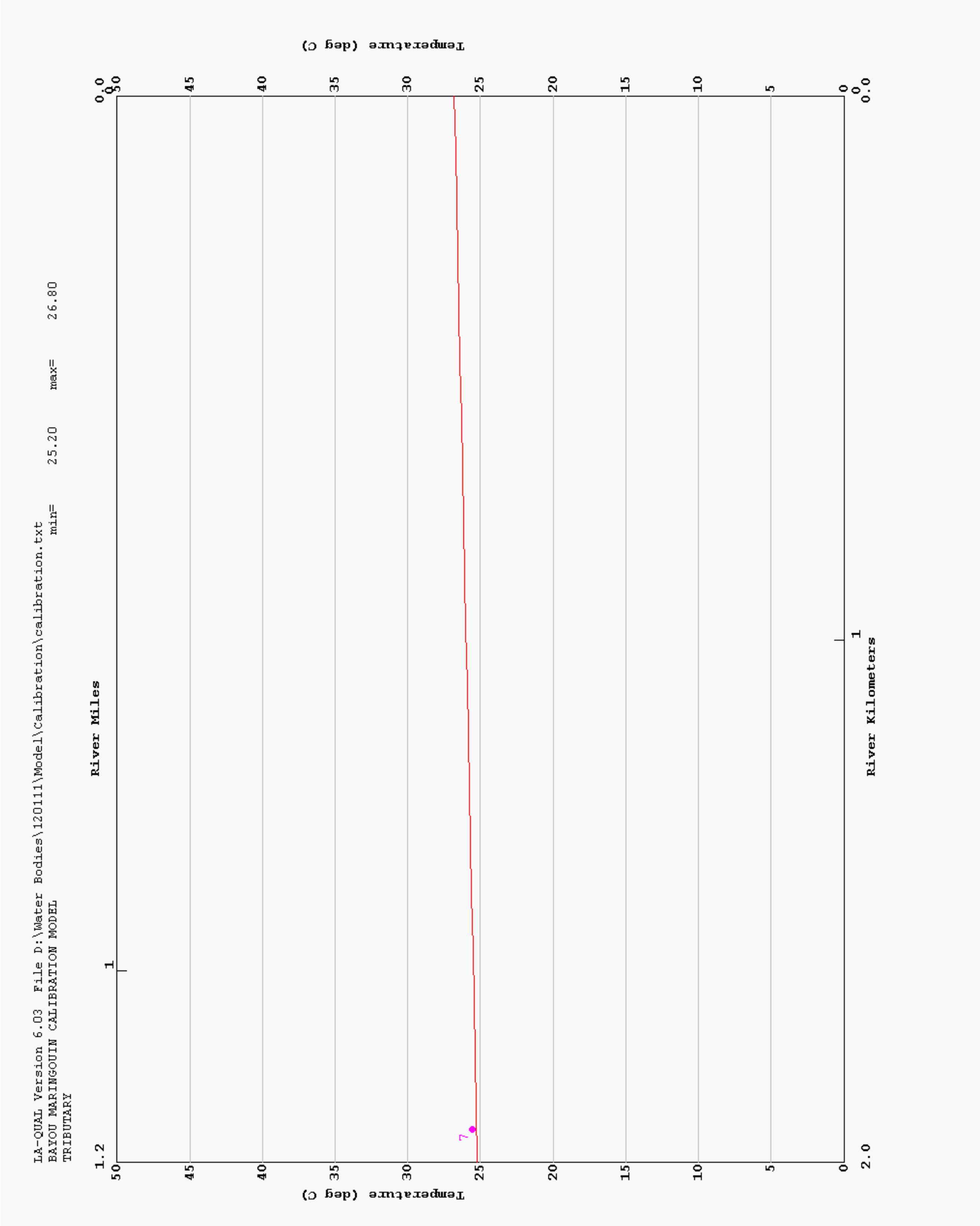

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
MAIN STEM BAYOU MARINGOUIN
min= 0.00 max= 5.27
River Miles
River Kilometers
Sediment Oxygen Demand (g/m²/d)
Sediment Oxygen Demand (mg/ft²/d)

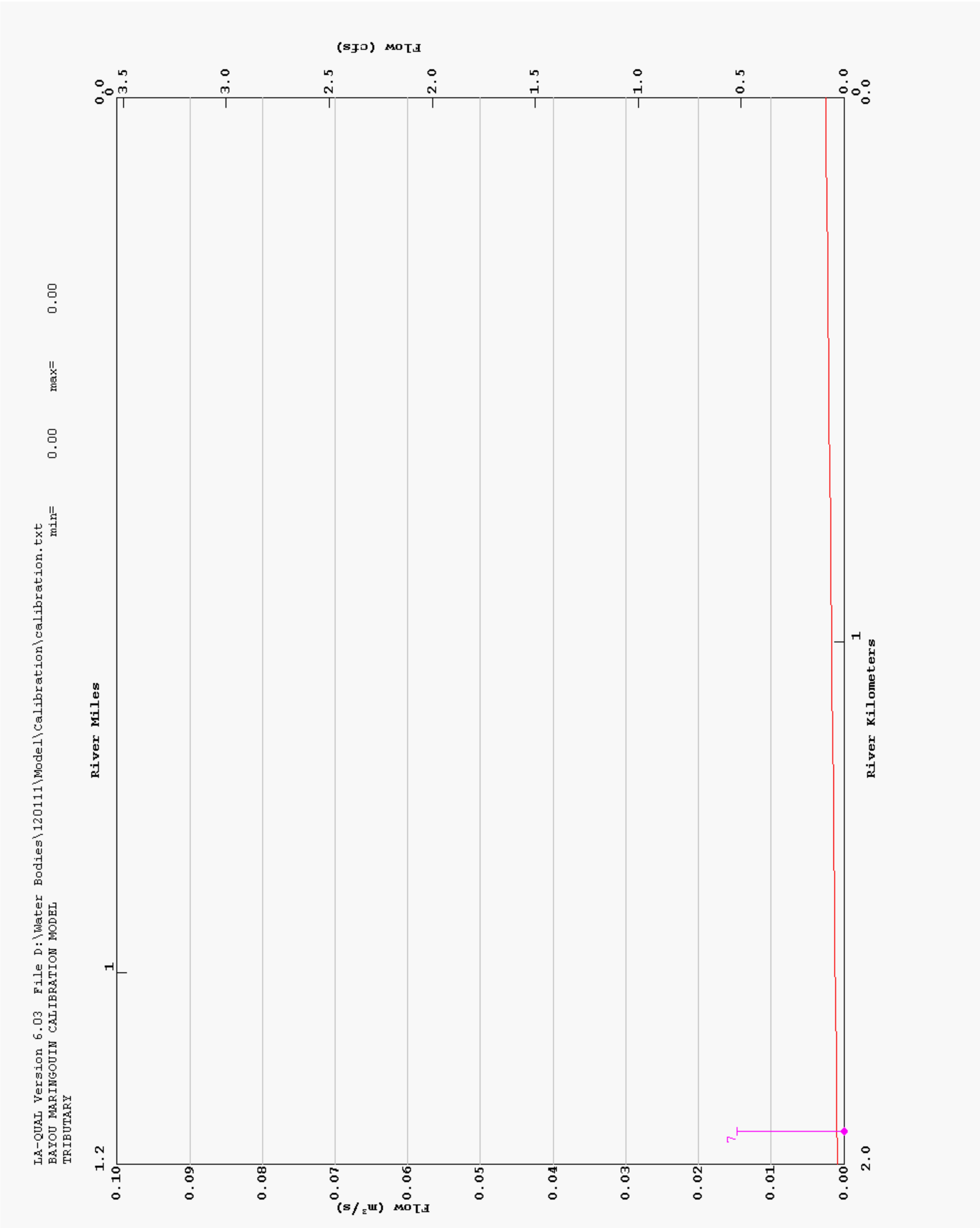

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
TRIBUTARY
min= 1.18 max= 1.28
River Miles
River Kilometers
Dissolved Oxygen (mg/L)
Dissolved Oxygen (mg/L)

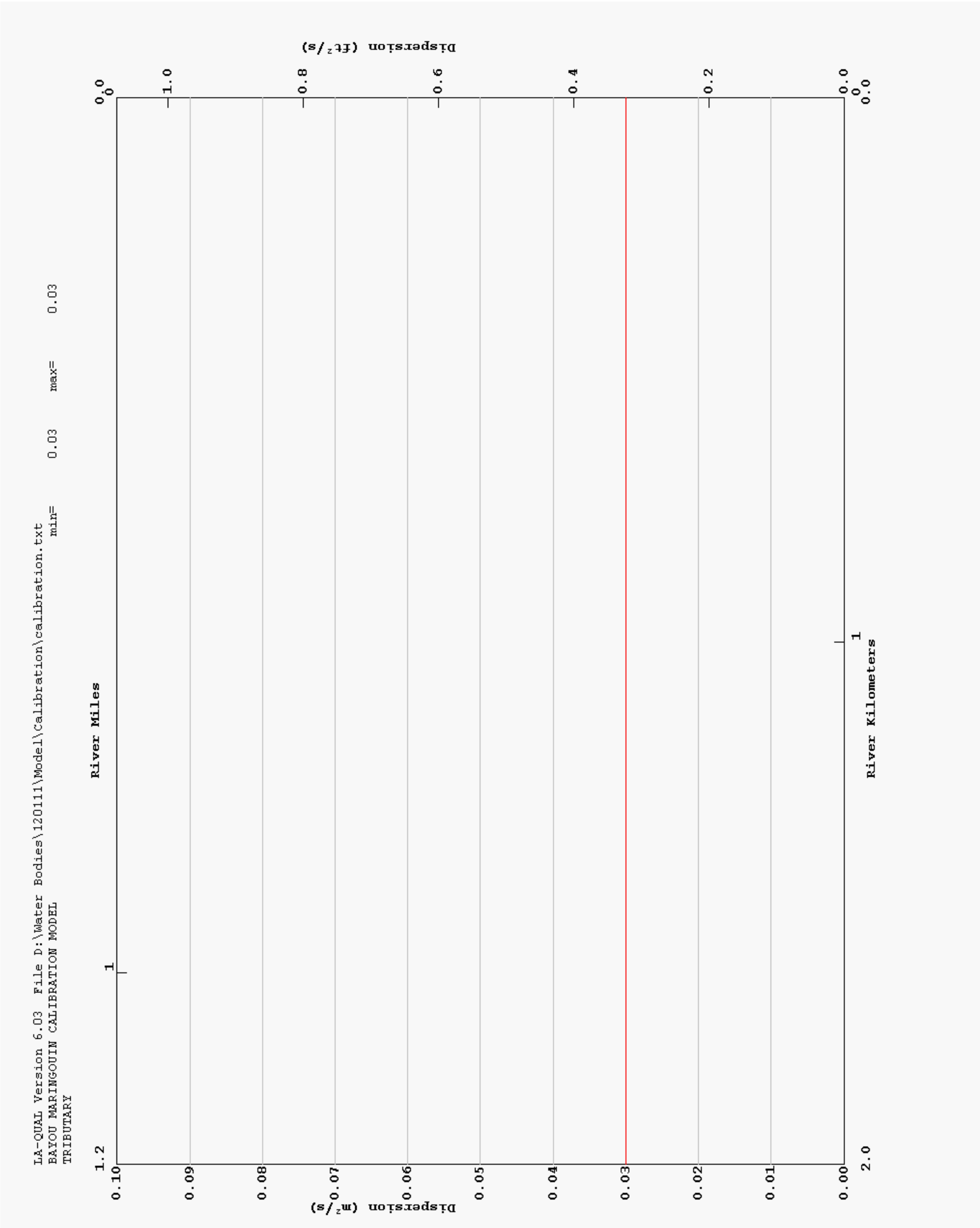

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
TRIBUTARY
min= 10.18
max= 15.04
River Miles
River Kilometers
Effective BOD (mg/L)

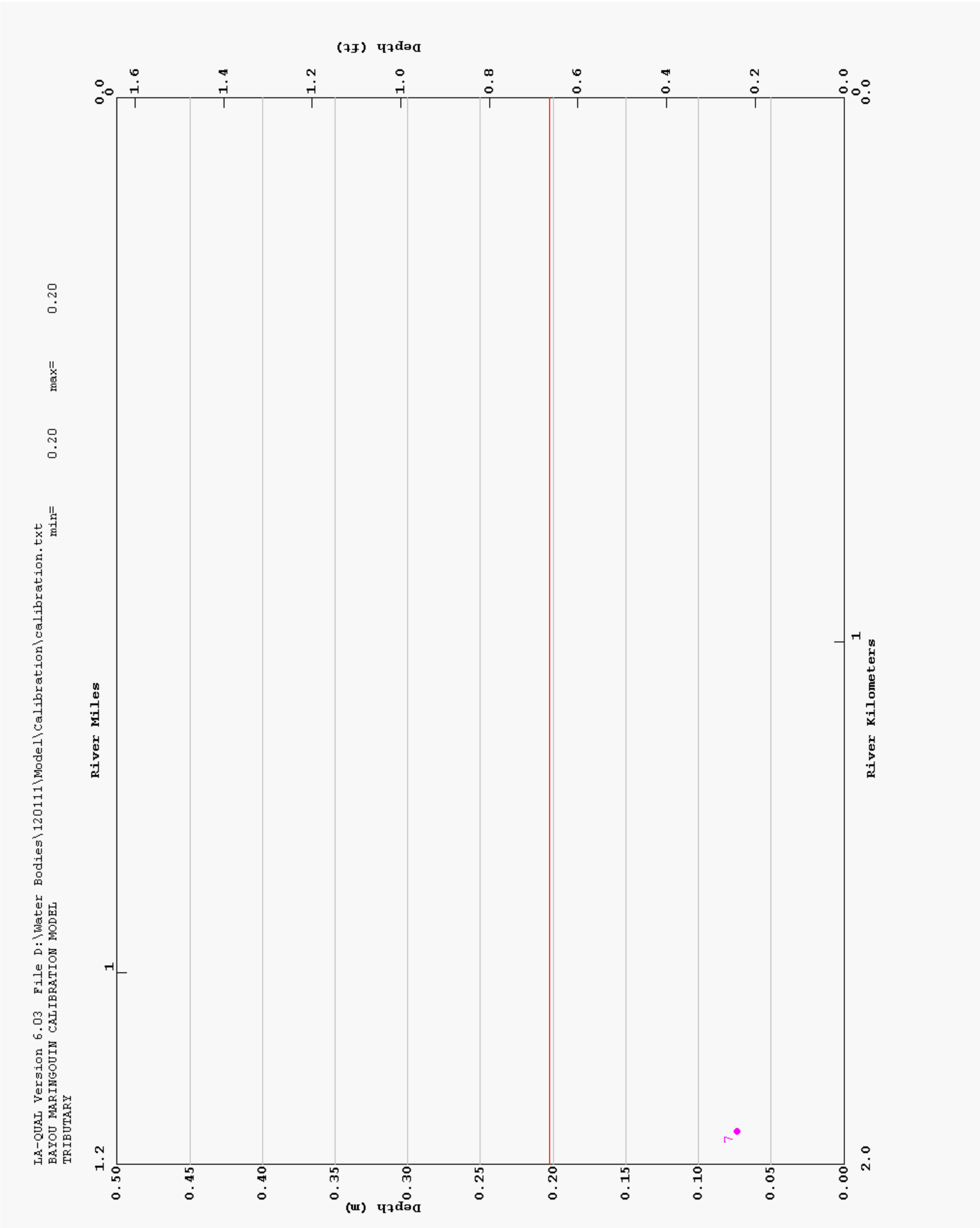

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
TRIBUTARY
min= 2.58 max= 3.63
River Miles
River Kilometers
Nitrogenous Oxygen Demand (mg/L)

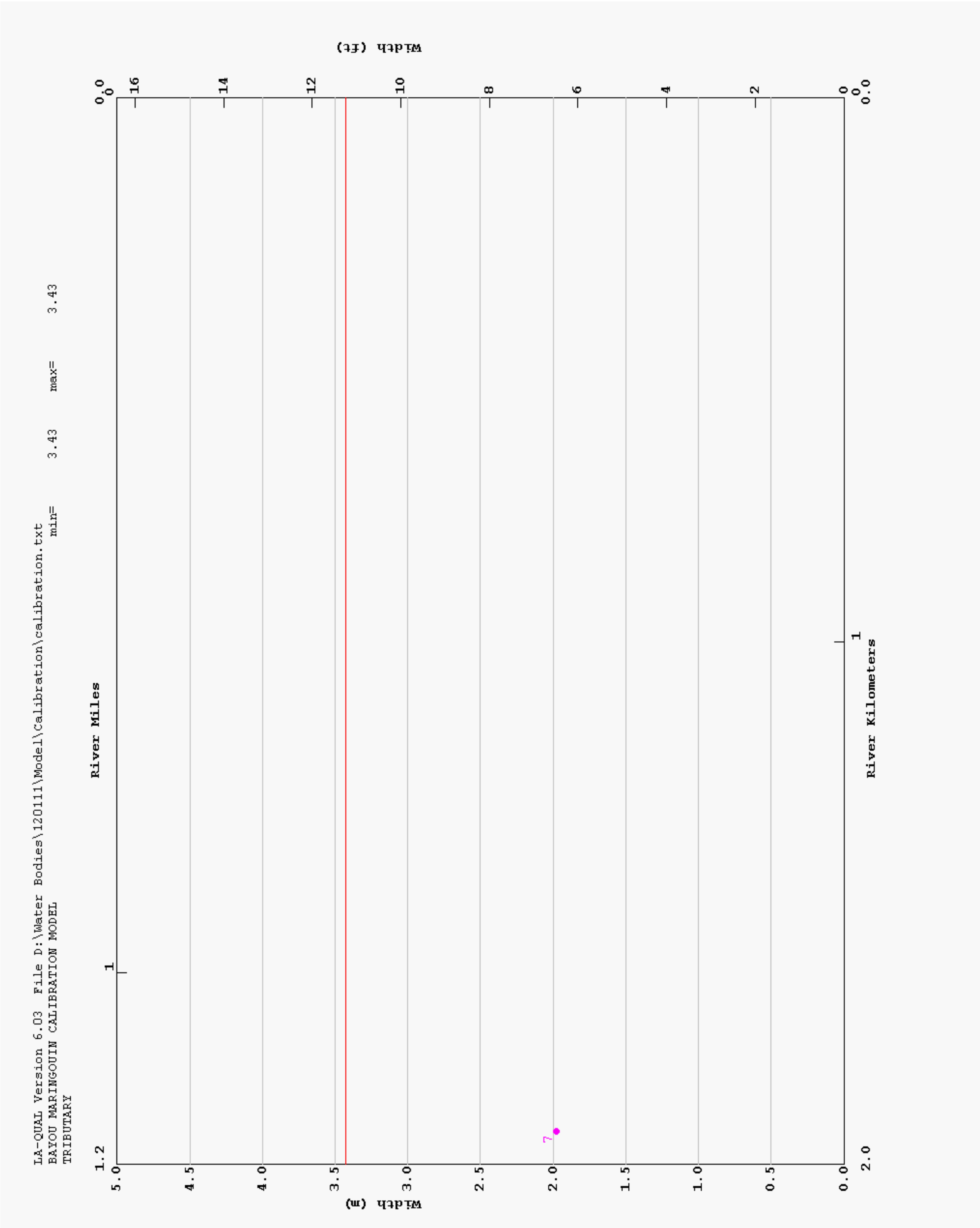

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
TRIBUTARY
min= 13.00
max= 28.90
River Miles
River Kilometers
Chlorophyll a (µg/L)

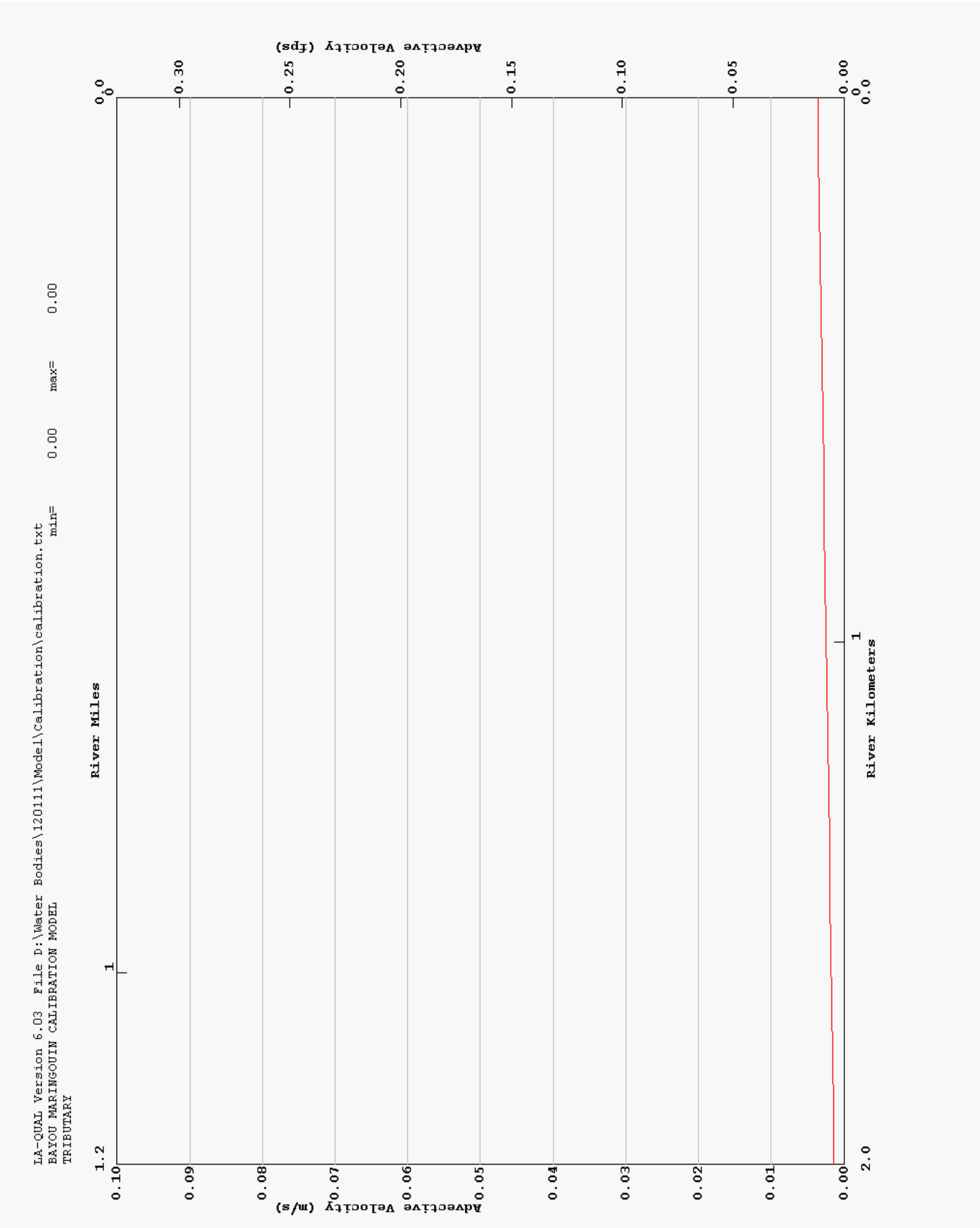

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
TRIBUTARY
min= 25.20 max= 26.80
River Miles
River Kilometers
Temperature (deg C)
1.2
1
0.0
2.0
1
0.0
50
45
40
35
30
25
20
15
10
5
0
7

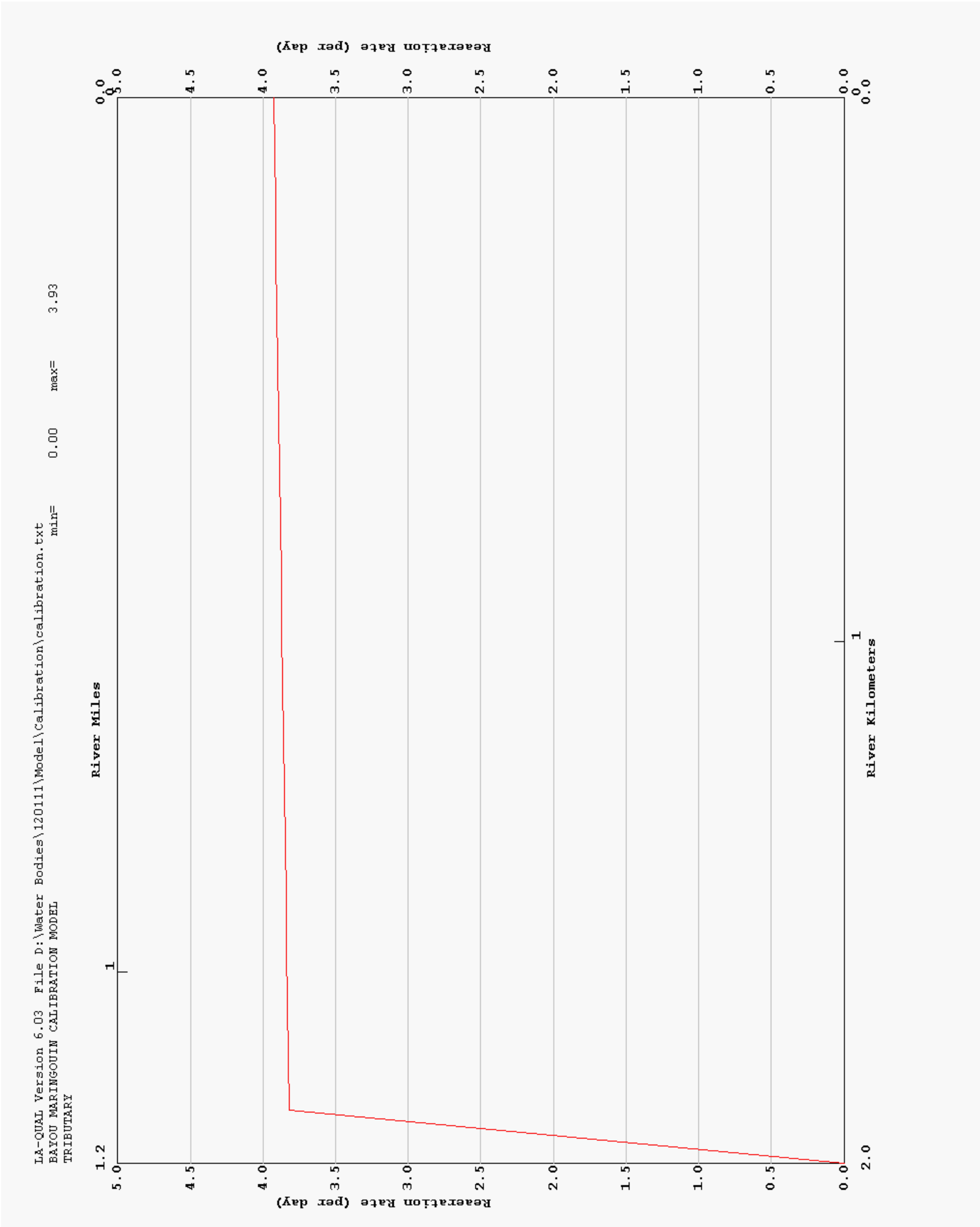

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
TRIBUTARY
min= 0.00 max= 0.00
River Miles
River Kilometers
Flow (cfs)
Flow (m³/s)

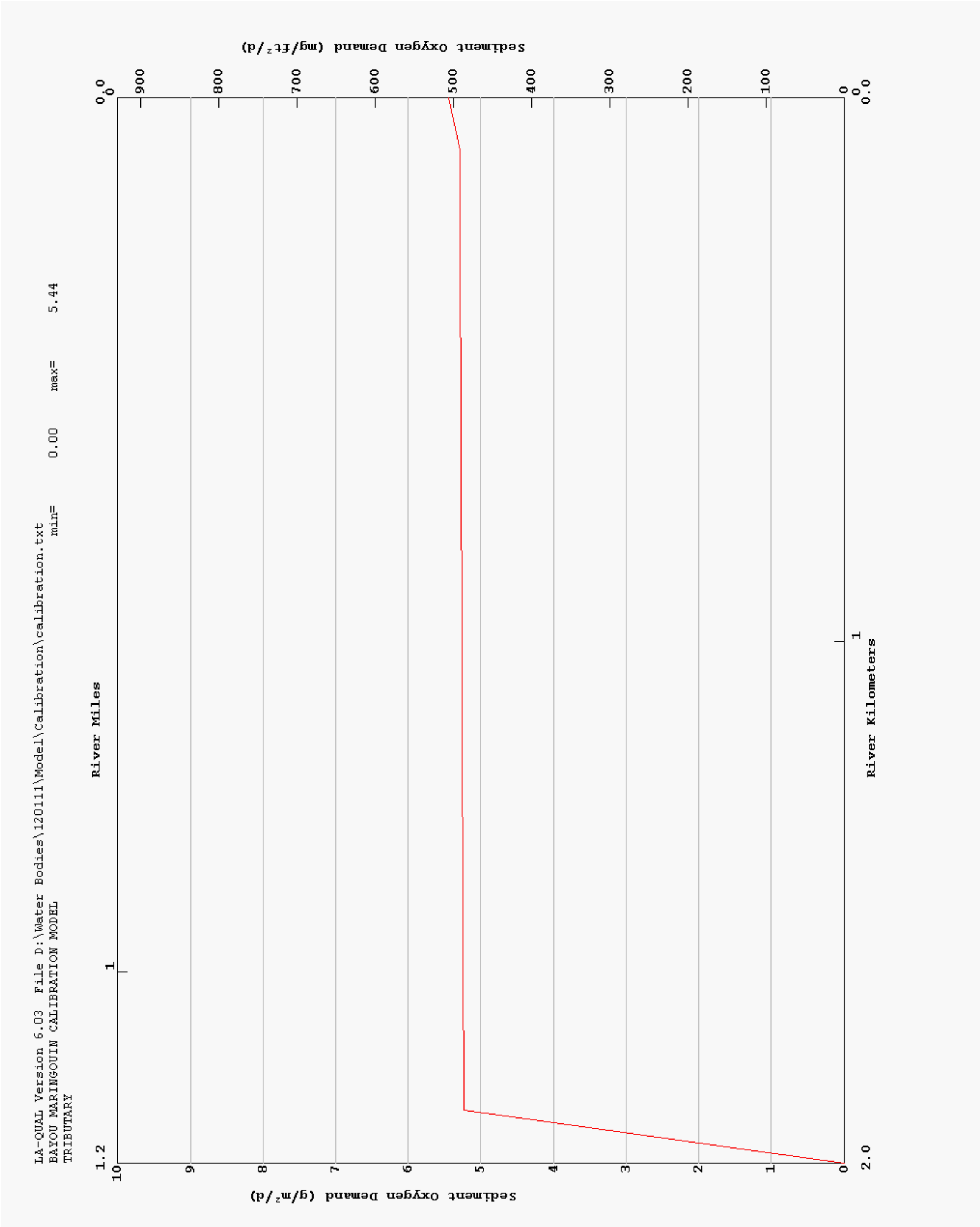

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
TRIBUTARY
min= 0.03
max= 0.03
River Miles
River Kilometers
Dispersion (m²/s)
Dispersion (ft²/s)


LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
TRIBUTARY
min= 0.20 max= 0.20
River Miles
River Kilometers
Depth (m)
Depth (ft)


LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
TRIBUTARY
min= 3.43
max= 3.43
River Miles
River Kilometers
Width (m)
Width (ft)


LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
TRIBUTARY
min= 0.00
max= 0.00
River Miles
1.2
1
0.0
River Kilometers
2.0
1
0.0
Advective Velocity (m/s)
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
Advective Velocity (fps)
0.30
0.25
0.20
0.15
0.10
0.05
0.00


LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
TRIBUTARY
min= 0.00 max= 3.93
River Miles
River Kilometers
Reaeration Rate (per day)


LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\Calibration\calibration.txt
BAYOU MARINGOUIN CALIBRATION MODEL
TRIBUTARY
min= 0.00 max= 5.44
River Miles
River Kilometers
Sediment Oxygen Demand (g/m2/d)
Sediment Oxygen Demand (mg/ft2/d)

Appendix A4 – Calibration Justification

Bayou Maringouin (120111) Water Quality Calibration Model Input Description

DATA TYPE 3, Program Constants			
Description of Constant	**Value**	**Result**	**Source/Justification**
Maximum iteration limit	200	Increases the maximum number of itterations the model will make before it quits attempting to converge.	Standard
KL Minimum	0.7	Minimum KL to be used.	The minimum KL specified in the LTP of 2.3 ft/day converted to 0.70 m/day.
Inhibition control value	4	Inhibits all decay rates for low DO.	Standard LA modeling procedure and default value therefore not visible i the calibration model input file.
Ocean exchange ratio	0	Set 0% tidal exchange at lower boundary.	This was done to not force the bottom element through the lower boundar conditions.
Hydraulic calculation method	2	Sets the hydraulic calculation method to width and depth coefficients.	The low slopes in this waterbody cause a substantial amount of water to b present during critical flow conditions, making the Leopold relationships inaccurate. This method allows the model to predict a more accurate dept and width during low flow conditions.
Effective BOD due to Algae	0.10	Sets the effect that decaying algae will have on BOD	Minimum recommended model manual's value. Used because of elevate chlorophyll a measurements in the survey.
Algae Oxygen Prod	0.0	No oxygen production due to algae	In choosing to calibrate disolved oxygen to the lesser of 1mg/l above the minimum recorded concentration or the daily average it is assumed that w are calibrating to a concentration that would exist without any algae effect on dissolved oxygen concentration. Therefore, oxygen production due to algae is set to zero for the calibration model.
All other Constants	Default	Constants left to model defaults	

Bayou Maringouin (120111) Water Quality Calibration Model Input Description

DATA TYPE 4, Temperature Correction Constants		
Description of Coefficient	**Value**	**Source/Justification**
All Coefficients	Default	No changes were made to the model default settings

Bayou Maringouin (120111) Water Quality Calibration Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Bayou Maringouin Reach 1	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	4.877	Width of representative cross section taken at site BM1 during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.3322	Average depth of representative cross section taken at site BM1 durin the intensive survey.
2	Unnamed Tributary Reach 2	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	3.429	Average of the cross section widths taken at sites BM1 and BM7 durin the intensive survey. The tributay widened and appeared to be characteristic of the upper portion of the stream on the USGS DOQQ arial photography. The Average of these two cross section widths is assumed to be characteristic for the width of the entire reach.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.2027	Average of the cross section depths taken at sites BM1 and BM7. Th tributay widened and appeared to be characteristic of the upper portio of the stream on the USGS DOQQ arial photography. The Average o these two cross section depths is assumed to be characteristic for the average depth of the entire reach.
3	Bayou Maringouin Reach 3	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	14.63	Width of representative cross section taken at site BM2 during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.2987	Average depth of representative cross section taken at site BM2 durin the intensive survey.
4	Bayou Maringouin Reach 4	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	11.58	Width of representative cross section taken at site BM3 during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.6614	Average depth of representative cross section taken at site BM3 durin the intensive survey.
5	Bayou Maringouin Reach 5	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	3.627	Width of representative cross section taken at site BM3A during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.256	Average depth of representative cross section taken at site BM3A during the intensive survey.

Bayou Maringouin (120111) Water Quality Calibration Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
6	Bayou Maringouin Reach 6	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	3.627	Width of representative cross section taken at site BM3A during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.256	Average depth of representative cross section taken at site BM3A during the intensive survey.
7	Bayou Maringouin Reach 7	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	6.096	Width of representative cross section taken at site BM4 during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.4968	Average depth of representative cross section taken at site BM4 during the intensive survey.
8	Bayou Maringouin Reach 8	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	7.010	Width of representative cross section taken at site BM5 during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.2438	Average depth of representative cross section taken at site BM5 during the intensive survey.
9	Bayou Maringouin Reach 9	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	12.19	Width of estimated cross section at site BM6 during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.3048	Estimated average depth of cross section at site BM6 during the intensive survey.

Note 1: Based on Stream hydrology and behavior during critical conditions, the stream widths and depths were assumed not to vary considerably during critical flows. Therefore, a reach constant width and depth were used by setting the "A" and "D" constants to zero eleminating the exponential flow realtionship.

Note 2: In order to avoid error messages when executing the model, the sum of the coefficients "B" and "E" cannot be greater than 1. The value of 0.5 was chosen in order to meet this requirement. The coeficients do not have any effects on the model (See note 1).

Bayou Maringouin (120111) Water Quality Calibration Model Input Description

DATA TYPE 10, Dispersive Hydraulic Coefficients					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
1-4	Reaches 1 through 4	Dispersion Coef.	m2/sec	0.3	Value recommended in the Texas Technical Procedures, November 1990
5	Reach 5	Dispersion Coef.	m2/sec	0	No Diffusion back over the weir
6-7	Reaches 6 and 7	Dispersion Coef.	m2/sec	1	Higher difussion due to increased mixing in lower reaches due to tidal effects
8-9	Reaches 8 and 9	Dispersion Coef.	m2/sec	10	Higher difussion due to increased mixing in lower reaches due to tidal effects

Bayou Maringouin (120111) Water Quality Calibration Model Input Description

DATA TYPE 11, INITIAL CONDITIONS					
Reach #	REACH DESCRIPTION	Initial Parameter	Units	Value	Source/Justification
1	Bayou Maringoiun Reach 1	Temperature	°Celcius	25.6	Adjusted value to interpolate properly through temperature data from the intensive survey at site BM1.
		Dissolved O_2	mg/l	3	BPJ -- Reasonable value to begin oxygen dependant itterations for calibration and projection purposes
		Chlorophyll a	ug/l	16	Adjusted value to interpolate properly through chlorophyll a data from the intensive survey at site BM1.
2	Unnamed Tributary Reach 2	Temperature	°Celcius	25.2	Adjusted value to interpolate properly through temperature data from the intensive survey at site BM7.
		Dissolved O_2	mg/l	3	BPJ -- Reasonable value to begin oxygen dependant itterations for calibration and projection purposes
		Chlorophyll a	ug/l	13	Adjusted value to interpolate properly through chlorophyll a data from the intensive survey at site BM7.
3	Bayou Maringoiun Reach 3	Temperature	°Celcius	26.8	Adjusted value to interpolate properly through temperature data from the intensive survey at site BM3. Data at site BM2 is ignored. Because of a thick canopy at BM2, stream temperatures were expected and found to be below th stream average temperature and not representative of the reach.
		Dissolved O_2	mg/l	3	BPJ -- Reasonable value to begin oxygen dependant itterations for calibration and projection purposes
		Chlorophyll a	ug/l	28.9	Adjusted value to interpolate properly through chlorophyll a data from the intensive survey at site BM2.
4	Bayou Maringoiun Reach 4	Temperature	°Celcius	26.8	Adjusted value to interpolate properly through temperature data from the intensive survey at site BM3.
		Dissolved O_2	mg/l	3	BPJ -- Reasonable value to begin oxygen dependant itterations for calibration and projection purposes
		Chlorophyll a	ug/l	37	Adjusted value to interpolate properly through chlorophyll a data from the intensive survey at site BM3.
5	Bayou Maringoiun Reach 5	Temperature	°Celcius	26.8	Adjusted value to interpolate properly through temperature data from the intensive survey at site BM3A.
		Dissolved O_2	mg/l	3	BPJ -- Reasonable value to begin oxygen dependant itterations for calibration and projection purposes
		Chlorophyll a	ug/l	41	Adjusted value to interpolate properly through chlorophyll a data from the intensive survey at site BM4.
6	Bayou Maringoiun Reach 6	Temperature	°Celcius	26.8	Adjusted value to interpolate properly through temperature data from the intensive survey at site BM4.
		Dissolved O_2	mg/l	3	BPJ -- Reasonable value to begin oxygen dependant itterations for calibration and projection purposes
		Chlorophyll a	ug/l	27	Adjusted value to interpolate properly through chlorophyll a data from the intensive survey at site BM4.
7	Bayou Maringoiun Reach 7	Temperature	°Celcius	27	Adjusted value to interpolate properly through temperature data from the intensive survey at site BM4.
		Dissolved O_2	mg/l	3	BPJ -- Reasonable value to begin oxygen dependant itterations for calibration and projection purposes
		Chlorophyll a	ug/l	27	Adjusted value to interpolate properly through chlorophyll a data from the intensive survey at site BM4.

Bayou Maringouin (120111) Water Quality Calibration Model Input Description

DATA TYPE 11, INITIAL CONDITIONS					
Reach #	**REACH DESCRIPTION**	**Initial Parameter**	**Units**	**Value**	**Source/Justification**
8	Bayou Maringoiun Reach 8	Temperature	°Celcius	27	Adjusted value to interpolate properly through temperature data from the intensive survey at site BM5.
		Dissolved O_2	mg/l	3	BPJ -- Reasonable value to begin oxygen dependant itterations for calibration and projection purposes
		Chlorophyll a	ug/l	27	Adjusted value to interpolate properly through chlorophyll a data from the intensive survey at site BM5.
9	Bayou Maringoiun Reach 9	Temperature	°Celcius	27	Adjusted value to interpolate properly through temperature data from the intensive survey at site BM6.
		Dissolved O_2	mg/l	3	BPJ -- Reasonable value to begin oxygen dependant itterations for calibration and projection purposes
		Chlorophyll a	ug/l	57	Adjusted value to interpolate properly through chlorophyll a data from the intensive survey at site BM6.

Bayou Maringouin (120111) Water Quality Calibration Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Bayou Maringouin Reach 1	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	6.0	BPJ. Calibrated Value
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates
2	Unnamed Tributary Reach 2	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	5.5	BPJ. Calibrated Value
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates
3	Bayou Maringouin Reach 3	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	3.2	BPJ. Calibrated Value
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates
4	Bayou Maringouin Reach 4	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	4.2	BPJ. Calibrated Value
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates
5	Bayou Maringouin Reach 5	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	2.0	BPJ. Calibrated Value
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates
6	Bayou Maringouin Reach 6	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	2.2	BPJ. Calibrated Value
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates

Bayou Maringouin (120111) Water Quality Calibration Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
7	Bayou Maringouin Reach 7	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	2.20	BPJ. Calibrated Value
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durin the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates
8	Bayou Maringouin Reach 8	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	2.30	BPJ. Calibrated Value
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durin the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates
9	Bayou Maringouin Reach 9	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	1.8	BPJ. Calibrated Value
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durin the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates

Bayou Maringouin (120111) Water Quality Calibration Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Bayou Maringoiun Reach 1	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this system durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.
2	Unnamed Tributary Reach 2	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this system durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.
3	Bayou Maringoiun Reach 3	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this system durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.
4	Bayou Maringoiun Reach 4	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this system durning the intensive survey
			1/day	0.05	Based on the LTP suggested CBOD settling rates.
5	Bayou Maringoiun Reach 5	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this system durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.
6	Bayou Maringoiun Reach 6	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this system durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.
7	Bayou Maringoiun Reach 7	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this system durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.
8	Bayou Maringoiun Reach 8	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this system durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.
9	Bayou Maringoiun Reach 9	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this system durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.

Bayou Maringouin (120111) Water Quality Calibration Model Input Description

DATA TYPE 16, Incremental Data for Flow, Temperature, Salinity, and Conservatives					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1	Bayou Maringoiun Reach 1	Incremental Inflow	m^3/s	0.008	Calculated value based on drainage area and measured flow at site BM3a
2	Unnamed Tributary Reach 2	Incremental Inflow	m^3/s	0.0016	Calculated value based on drainage area and measured flow at site BM3a
3	Bayou Maringoiun Reach 3	Incremental Inflow	m^3/s	0.005	Calculated value based on drainage area and measured flow at site BM3a
4	Bayou Maringoiun Reach 4	Incremental Inflow	m^3/s	0.0025	Calculated value based on drainage area and measured flow at site BM3a

Bayou Maringouin (120111) Water Quality Calibration Model Input Description

DATA TYPE 17, Incremental Flow Data for DO, BOD, and Nitrogen					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Bayou Maringoiun Reach 1	Dissolved Oxygen	mg/L	0	Assumed any inflow to be from groundwater and to contain little or no dissolved oxygen
		CBOD	mg/L	20	Average of the Ultimate CBOD values for sites BM1, BM2, and BM3 rounded to one significant figure. This was set to prevent the incremental inflow from diluting the in stream concentration of CBOD while still allowing it to add flow to the model.
		NBOD	mg/L	4	Average of the Ultimate NBOD values for sites BM1, BM2, and BM3 rounded to one significant figure. This was done for similar reasons to the CBOD
2	Unnamed Tributary Reach 2	Dissolved Oxygen	mg/L	0	Assumed any inflow to be from groundwater and to contain little or no dissolved oxygen
		CBOD	mg/L	11	Tthe Ultimate CBOD values for site BM7. This was set to prevent the incremental inflow from diluting the in stream concentration of CBOD while still allowing it to add flow to the model.
		NBOD	mg/L	3	The Ultimate NBOD values for sites BM7. This was done for similar reasons to the CBOD
3	Bayou Maringoiun Reach 3	Dissolved Oxygen	mg/L	0	Assumed any inflow to be from groundwater and to contain little or no dissolved oxygen
		CBOD	mg/L	20	Average of the Ultimate CBOD values for sites BM1, BM2, and BM3 rounded to one significant figure. This was set to prevent the incremental inflow from diluting the in stream concentration of CBOD while still allowing it to add flow to the model.
		NBOD	mg/L	4	Average of the Ultimate NBOD values for sites BM1, BM2, and BM3 rounded to one significant figure. This was done for similar reasons to the CBOD
4	Bayou Maringoiun Reach 4	Dissolved Oxygen	mg/L	0	Assumed any inflow to be from groundwater and to contain little or no dissolved oxygen
		CBOD	mg/L	20	Average of the Ultimate CBOD values for sites BM1, BM2, and BM3 rounded to one significant figure. This was set to prevent the incremental inflow from diluting the in stream concentration of CBOD while still allowing it to add flow to the model.
		NBOD	mg/L	4	Average of the Ultimate NBOD values for sites BM1, BM2, and BM3 rounded to one significant figure. This was done for similar reasons to the CBOD

Bayou Maringouin (120111) Water Quality Calibration Model Input Description

		DATA TYPE 19, Nonpoint Source Data			
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1	Bayou Maringouin Reach 1	BOD	kg/day	32	Determined during calibration.
		Organic Nitrogen	kg/day	9	Determined during calibration.
2	Bayou Maringouin Reach 2	BOD	kg/day	4	Determined during calibration.
		Organic Nitrogen	kg/day	1	Determined during calibration.
3	Bayou Maringouin Reach 3	BOD	kg/day	17	Determined during calibration.
		Organic Nitrogen	kg/day	10	Determined during calibration.
4	Bayou Maringouin Reach 4	BOD	kg/day	40	Determined during calibration.
		Organic Nitrogen	kg/day	6	Determined during calibration.
5	Bayou Maringouin Reach 5	BOD	kg/day	0	Determined during calibration.
		Organic Nitrogen	kg/day	0	Determined during calibration.
6	Bayou Maringouin Reach 6	BOD	kg/day	0	Determined during calibration.
		Organic Nitrogen	kg/day	0	Determined during calibration.
7	Bayou Maringouin Reach 7	BOD	kg/day	3.5	Determined during calibration.
		Organic Nitrogen	kg/day	3	Determined during calibration.
8	Bayou Maringouin Reach 8	BOD	kg/day	25	Determined during calibration.
		Organic Nitrogen	kg/day	9.5	Determined during calibration.
9	Bayou Maringouin Reach 9	BOD	kg/day	8	Determined during calibration.
		Organic Nitrogen	kg/day	3	Determined during calibration.

Bayou Maringouin (120111) Water Quality Calibration Model Input Description

DATA TYPE 20, Headwater Data for Flow, Temperature, Salinity, and Conservatives					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1	Bayou Maringoiun Reach 1	Element # of input		1	
		Headwater name		BAYOU MARINGOUIN	
		Headwater flow	cms	0.000063	Calculated value using drainage area and discharge measurement at site BM3A
		Temperature	^{o}Celcius	25.6	Value equal to the temperature specified for reach 1 in the initial conditions.
2	Unnamed Tributary Reach 2	Element # of input		51	
		Headwater name		Unnamed Tributary	
		Headwater flow	cms	0.0009	Calculated value using drainage area and discharge measurement at site BM3A
		Temperature	^{o}Celcius	25.2	Value equal to the temperature specified for reach 2 in the initial conditions.

Bayou Maringouin (120111) Water Quality Calibration Model Input Description

DATA TYPE 21, Headwater Data for DO, BOD, and Nitrogen					
Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Bayou Maringoiun Reach 1	Element # of input		1	
		Dissolved O_2	mg/l	1.05	Estimated DO at the headwater using continous monitor data from site BM1
		BOD	mg/l	21.27	Measured CBOD value from Site BM1 during the intensive survey
		Organic Nitrogen	mg/l	5.75	Measured NBOD value from Site BM1 during the intensive survey
2	Unnamed Tributary Reach 2	Element # of input		51	
		Dissolved O_2	mg/l	1.25	Estimated Headwater DO value at the headwater considering continous monitor readings from sites BM1 and BM3 and Insitu data at Site BM7, BM1, and BM3.
		BOD	mg/l	10.18	Measured CBOD value from Site BM7 during the intensive survey
		Organic Nitrogen	mg/l	2.81	Measured NBOD value from Site BM7 during the intensive survey

Bayou Maringouin (120111) Water Quality Calibration Model Input Description

DATA TYPE 22, Headwater Data for Phosphorus, Chlorophyll, Coliform, and Nonconservatives					
Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Bayou Maringoiun Reach 1	Element # of input		1	
		Chlorophyll a	ug/l	16.91	Adjusted value to interpolate properly through chlorophyll a data from the intensive survey at site BM1.
2	Unnamed Tributary Reach 2	Element # of input		51	
		Chlorophyll a	ug/l	13.6	Adjusted value to interpolate properly through chlorophyll a data from the intensive survey at site BM7.

Bayou Maringouin (120111) Water Quality Calibration Model Input Description

DATA TYPE 23, Junction Data		
Downstream Element	Upstream Element	Junction Name
71	50	Unnamed Trib Confluence with Bayou

Bayou Maringouin (120111) Water Quality Calibration Model Input Description

DATA TYPE 24, Wastewater Data for Flow, Temperature, Salinity, and Conservatives					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
8	Bayou Maringouin Reach 8	computational element		155	
		Name		UPPER DISTRIBUTARY	
		Flow	cms	-0.0099	Measured value from Site BM4A during the intensive survey.

Bayou Maringouin (120111) Water Quality Calibration Model Input Description

	DATA TYPE 25, Wastewater Data for DO, BOD, and Nitrogen				
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
6	Bayou Maringouin Reach 8				No Parameters specified for this because it is an outflow

Bayou Maringouin (120111) Water Quality Calibration Model Input Description

DATA TYPE 25, Wastewater Data for Phosphorus, Chlorophyll, Coliform, and Nonconservatives					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
8	Bayou Mairngouin Reach 8				No Parameters specified for this because it is an outflow

Bayou Maringouin (120111) Water Quality Calibration Model Input Description

DATA TYPE 27, Lower Boundary Conditions					
Reach #	NAME	Parameter	Units	Value	Source/Justification
9	Bayou Maringouin Reach 9	Temperature	°Celcius	27.8	Adjusted value to interpolate properly through temperature data from the intensive survey at site BM6.
		Salinity	ppt	0	Not required by the model because the Ocean Exchange Ratio is set to zero.
		Conservative Matl. I	mg/l	0	Not required by the model because the Ocean Exchange Ratio is set to zero.
		Conservative Matl. II	mg/l	0	Not required by the model because the Ocean Exchange Ratio is set to zero.
		Dissolved O_2	mg/l	0	Not required by the model because the Ocean Exchange Ratio is set to zero.
		BOD	mg/l	0	Not required by the model because the Ocean Exchange Ratio is set to zero.
		NBOD	mg/l	0	Not required by the model because the Ocean Exchange Ratio is set to zero.
		Chlorophyll a	ug/l	62	Adjusted value to interpolate properly through chlorophyll a data from th intensive survey at site BM6.
		NCM	mg/l	0	Not required by the model because the Ocean Exchange Ratio is set to zero.

Mermentau River Water Qualtity Calibration Model Input Description

DATA TYPE 28, Dam Data					
Reach #	NAME	Parameter	Units	Value	Source/Justification
5	Bayou Maringouin Reach 5	Name		Munsen Road Weir	
		Reareation Option	none	1	Butts and Evans (1983)
		Factor "A"	none	1	BPJ Subjective Water Quality -- Near "Moderate"
		Coefficient "B"	none	1.05	Sharp-crested straight slope face weir
		Static Head Loss	m	1	Estimated static head loss over weir from photos and visual reconnisance

Appendix A5 – Calibration Loading

Calibration Model Non-Point Load Equivalent Calculations:

Modeled stream or water body:	Bayou Maringouin -- LA120111

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: Main Stem Headwaters to Junction with Unnamed Tributary	4.55	4.877	32.0	9.0	1.442	0.406	6.00	**7.85**
REACH 2: Tributary from Headwaters to confluence with Main Stem	1.96	3.429	4.0	1.0	0.595	0.149	5.50	**6.24**
REACH 3: Main Stem from Unnamed Tributary to Poo above the Weir	2.55	14.631	17.0	10.0	0.456	0.268	3.20	**3.92**
REACH 4: Main Stem Pool above Weir	1.88	11.582	40.0	6.0	1.837	0.276	4.20	**6.31**
REACH 5: Main Stem single Cell Weir Effect Reach	0.01	3.627	0.0	0.0	0.000	0.000	2.00	**2.00**
REACH 6: Main Stem from Weir to wider section of stream	1.11	3.627	0.0	0.0	0.000	0.000	2.20	**2.20**
REACH 7: Main Stem wide section to Upper Borrow Pit Distributary	2.70	6.096	3.5	3.0	0.213	0.182	2.2	**2.59**
REACH 8: Main Stem Upper Borrow Pit Distributary to Lower Wide Section of Stream	4.40	7.010	25.0	9.5	0.811	0.308	2.3	**3.42**
REACH 9: Main Stem Lower Wide section to end of model at Ramah Canal	0.90	12.192	8.0	3.0	0.729	0.273	1.8	**2.80**

Appendix A6 – Calibration Sensitivity

SENSITIVITY ANALYSIS SUMMARY

MAIN STEM BAYOU MARINGOUIN
BAYOU MARINGOUIN CALIBRATION MODEL

Plot 1 Base Model Minimum DO = 1.01

Parameter	%Param Chg	Min D.O.	%D.O. Chg	%Param Chg	Min D.O.	%D.O. Chg
Stream Reaeration	30	1.05	4.4	-30	0.73	-27.5
Benthal Demand	30	0.82	-18	-30	1.05	4.4
Initial Temperature	2	0.91	-9.6	-2	1.05	4.4
Stream Velocity	30	0.98	-2.9	-30	1.04	3.8
Incremental BOD	30	0.99	-1.1	-30	1.02	1.4
Stream Depth	30	1	-0.7	-30	1.02	1
BOD Decay Rate	30	1	-0.7	-30	1.02	0.9
Stream Baseflow	30	1	-0.2	-30	1.01	0.3
Incremental Inflow	30	1	-0.2	-30	1.01	0.3
Organic Nitrogen	30	1.01	0.1	-30	1.01	0.2
Organic Nitrogen Settling Rate	30	1.01	0.1	-30	1.01	0.1
Stream Dispersion	30	1.01	0	-30	1.01	0
BOD Anaerobic Decay	30	1.01	0	-30	1.01	0
Denitrification	30	1.01	0	-30	1.01	0
Incremental Outflow	30	1.01	0	-30	1.01	0
Incremental DO	30	1.01	0	-30	1.01	0
Incremental Organic Nitrogen	30	1.01	0	-30	1.01	0
Headwater Flow	30	1.01	0	-30	1.01	0
Headwater Temperature	30	1.01	0	-30	1.01	0
Headwater DO	30	1.01	0	-30	1.01	0
Headwater BOD	30	1.01	0	-30	1.01	0
Headwater Organic Nitrogen	30	1.01	0	-30	1.01	0
Wasteload Flow	30	1.01	0	-30	1.01	0
Lower Boundary Temperature	30	1.01	0	-30	1.01	0
Lower Boundary DO	30	1.01	0	-30	1.01	0

Appendix B – Projection Model Development

Appendix B1 – Summer Justifications

Bayou Maringouin (120111) Water Quality Summer Projection Model Input Description

DATA TYPE 3, Program Constants			
Description of Constant	**Value**	**Result**	**Source/Justification**
Maximum iteration limit	200	Increases the maximum number of itterations the model will make before it quits attempting to converge.	Standard
KL Minimum	0.7	Minimum KL to be used.	The minimum KL specified in the LTP of 2.3 ft/day converted to 0.70 m/day.
Inhibition control value	4	Inhibits all decay rates for low DO.	Standard LA modeling procedure and default value therefore not visible in the calibration model input file.
Ocean exchange ratio	0	Set 0% tidal exchange at lower boundary.	This was done to not force the bottom element through the lower boundary conditions.
Hydraulic calculation method	2	Sets the hydraulic calculation method to width and depth coefficients.	The low slopes in this waterbody cause a substantial amount of water to be present during critical flow conditions, making the Leopold relationships inaccurate. This method allows the model to predict a more accurate depth and width during low flow conditions.
Effective BOD due to Algae	0.10	Sets the effect that decaying algae will have on BOD.	Minimum recommended model manual's value. Used because of elevated chlorophyll a measurements in the survey.
Algae Oxygen Prod	0.0	No oxygen production due to algae	In choosing to calibrate disolved oxygen to the lesser of 1mg/l above the minimum recorded concentration or the daily average it is assumed that we are calibrating to a concentration that would exist without any algae effects on dissolved oxygen concentration. Therefore, oxygen production due to algae is set to zero for the calibration model.
All other Constants	Default	Constants left to model defaults	

Bayou Maringouin (120111) Water Quality Summer Projection Model Input Description

DATA TYPE 4, Temperature Correction Constants		
Description of Coefficient	**Value**	**Source/Justification**
All Coefficients	Default	No changes were made to the model default settings

Bayou Maringouin (120111) Water Quality Summer Projection Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Bayou Maringouin Reach 1	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	4.877	Width of representative cross section taken at site BM1 during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.3322	Average depth of representative cross section taken at site BM1 during the intensive survey.
2	Unnamed Tributary Reach 2	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	3.429	Average of the cross section widths taken at sites BM1 and BM7 during the intensive survey. The tributay widened and appeared to be characteristic of the upper portion of the stream on the USGS DOQQ arial photography. The Average of these two cross section widths is assumed to be characteristic for the width of the entire reach.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.2027	Average of the cross section depths taken at sites BM1 and BM7. The tributay widened and appeared to be characteristic of the upper portion of the stream on the USGS DOQQ arial photography. The Average of these two cross section depths is assumed to be characteristic for the average depth of the entire reach.
3	Bayou Maringouin Reach 3	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	14.63	Width of representative cross section taken at site BM2 during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.2987	Average depth of representative cross section taken at site BM2 during the intensive survey.
4	Bayou Maringouin Reach 4	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	11.58	Width of representative cross section taken at site BM3 during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.6614	Average depth of representative cross section taken at site BM3 during the intensive survey.
5	Bayou Maringouin Reach 5	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	3.627	Width of representative cross section taken at site BM3A during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.256	Average depth of representative cross section taken at site BM3A during the intensive survey.

Bayou Maringouin (120111) Water Quality Summer Projection Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
6	Bayou Maringouin Reach 6	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	3.627	Width of representative cross section taken at site BM3A during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.256	Average depth of representative cross section taken at site BM3A during the intensive survey.
7	Bayou Maringouin Reach 7	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	6.096	Width of representative cross section taken at site BM4 during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.4968	Average depth of representative cross section taken at site BM4 during the intensive survey.
8	Bayou Maringouin Reach 8	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	7.010	Width of representative cross section taken at site BM5 during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.2438	Average depth of representative cross section taken at site BM5 during the intensive survey.
9	Bayou Maringouin Reach 9	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	12.19	Width of estimated cross section at site BM6 during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.3048	Estimated average depth of cross section at site BM6 during the intensive survey.

Note 1: Based on Stream hydrology and behavior during critical conditions, the stream widths and depths were assumed not to vary considerably during critical flows. Therefore, a reach constant width and depth were used by setting the "A" and "D" constants to zero eleminating the exponential flow realtionship.

Note 2: In order to avoid error messages when executing the model, the sum of the coefficients "B" and "E" cannot be greater than 1. The value of 0.5 was chosen in order to meet this requirement. The coeficients do not have any effects on the model (See note 1).

Bayou Maringouin (120111) Water Quality Summer Projection Model Input Description

DATA TYPE 10, Dispersive Hydraulic Coefficients					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
1-4	Reaches 1 through 4	Dispersion Coef.	m2/sec	0.3	Value recommended in the Texas Technical Procedures, November 1990
5	Reach 5	Dispersion Coef.	m2/sec	0	No Diffusion back over the weir
6-7	Reaches 6 and 7	Dispersion Coef.	m2/sec	1	Higher difussion due to increased mixing in lower reaches due to tidal effects
8-9	Reaches 8 and 9	Dispersion Coef.	m2/sec	10	Higher difussion due to increased mixing in lower reaches due to tidal effects

DATA TYPE 11, INITIAL CONDITIONS					
Reach #	**REACH DESCRIPTION**	**Initial Parameter**	**Units**	**Value**	**Source/Justification**
1	Bayou Maringoiun Reach 1	Temperature	^{o}Celcius	26.57	Summer season 90th percentile temperature from ambient data
		Dissolved O_2	mg/l	5	BPJ -- Reasonable value to begin oxygen dependant itterations for projection purposes
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions
2	Unnamed Tributary Reach 2	Temperature	^{o}Celcius	26.57	Summer season 90th percentile temperature from ambient data
		Dissolved O_2	mg/l	5	BPJ -- Reasonable value to begin oxygen dependant itterations for projection purposes
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions
3	Bayou Maringoiun Reach 3	Temperature	^{o}Celcius	26.57	Summer season 90th percentile temperature from ambient data
		Dissolved O_2	mg/l	5	BPJ -- Reasonable value to begin oxygen dependant itterations for projection purposes
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions
4	Bayou Maringoiun Reach 4	Temperature	^{o}Celcius	26.57	Summer season 90th percentile temperature from ambient data
		Dissolved O_2	mg/l	5	BPJ -- Reasonable value to begin oxygen dependant itterations for projection purposes
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions
5	Bayou Maringoiun Reach 5	Temperature	^{o}Celcius	26.57	Summer season 90th percentile temperature from ambient data
		Dissolved O_2	mg/l	5	BPJ -- Reasonable value to begin oxygen dependant itterations for projection purposes
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions
6	Bayou Maringoiun Reach 6	Temperature	^{o}Celcius	26.57	Summer season 90th percentile temperature from ambient data
		Dissolved O_2	mg/l	5	BPJ -- Reasonable value to begin oxygen dependant itterations for projection purposes
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions
7	Bayou Maringoiun Reach 7	Temperature	^{o}Celcius	26.57	Summer season 90th percentile temperature from ambient data
		Dissolved O_2	mg/l	5	BPJ -- Reasonable value to begin oxygen dependant itterations for projection purposes
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions
8	Bayou Maringoiun Reach 8	Temperature	^{o}Celcius	26.57	Summer season 90th percentile temperature from ambient data
		Dissolved O_2	mg/l	5	BPJ -- Reasonable value to begin oxygen dependant itterations for projection purposes
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions
9	Bayou Maringoiun Reach 9	Temperature	^{o}Celcius	26.57	Summer season 90th percentile temperature from ambient data
		Dissolved O_2	mg/l	5	BPJ -- Reasonable value to begin oxygen dependant itterations for projection purposes
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Bayou Maringouin Reach 1	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	2.386	Value calculated by the TMDL Spreadsheet for a 100% reduction of assumed man-made loading and 45% reduction of assumed background loads
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates
2	Unnamed Tributary Reach 2	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	2.714	Value calculated by the TMDL Spreadsheet for a 100% reduction of assumed man-made loading and 45% reduction of assumed background loads
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates
3	Bayou Maringouin Reach 3	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	2.466	Value calculated by the TMDL Spreadsheet for a 100% reduction of assumed man-made loading and 45% reduction of assumed background loads
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates
4	Bayou Maringouin Reach 4	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	2.051	Value calculated by the TMDL Spreadsheet for a 100% reduction of assumed man-made loading and 45% reduction of assumed background loads
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates
5	Bayou Maringouin Reach 5	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	2.000	Value calculated by the TMDL Spreadsheet for a 100% reduction of assumed man-made loading and 45% reduction of assumed background loads
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates
6	Bayou Maringouin Reach 6	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	2.200	Value calculated by the TMDL Spreadsheet for a 100% reduction of assumed man-made loading and 45% reduction of assumed background loads
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.1	Based on the LTP suggested CBOD settling rate for advance treatment discharges.

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
7	Bayou Maringouin Reach 7	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	2.200	Value calculated by the TMDL Spreadsheet for a 100% reduction of assumed man-made loading and 45% reduction of assumed background loads
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates
8	Bayou Maringouin Reach 8	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	2.025	Value calculated by the TMDL Spreadsheet for a 100% reduction of assumed man-made loading and 45% reduction of assumed background loads
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates
9	Bayou Maringouin Reach 9	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	1.800	Value calculated by the TMDL Spreadsheet for a 100% reduction of assumed man-made loading and 45% reduction of assumed background loads
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates

Bayou Maringouin (120111) Water Quality Summer Projection Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Bayou Maringoiun Reach 1	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this system durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.
2	Unnamed Tributary Reach 2	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this system durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.
3	Bayou Maringoiun Reach 3	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this system durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.
4	Bayou Maringoiun Reach 4	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this system durning the intensive survey
			1/day	0.05	Based on the LTP suggested CBOD settling rates.
5	Bayou Maringoiun Reach 5	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this system durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.
6	Bayou Maringoiun Reach 6	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this system durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.
7	Bayou Maringoiun Reach 7	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this system durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.
8	Bayou Maringoiun Reach 8	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this system durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.
9	Bayou Maringoiun Reach 9	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this system durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.

Bayou Maringouin (120111) Water Quality Summer Projection Model Input Description

DATA TYPE 16, Incremental Data for Flow, Temperature, Salinity, and Conservatives					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Bayou Maringoiun Reach 1	Incremental Inflow	m^3/s		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
2	Unnamed Tributary Reach 2	Incremental Inflow	m^3/s		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
3	Bayou Maringoiun Reach 3	Incremental Inflow	m^3/s		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
4	Bayou Maringoiun Reach 4	Incremental Inflow	m^3/s		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed

Bayou Maringouin (120111) Water Quality Summer Projection Model Input Description

DATA TYPE 17, Incremental Flow Data for DO, BOD, and Nitrogen					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Bayou Maringoiun Reach 1	Dissolved Oxygen	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
		CBOD	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
		NBOD	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
2	Unnamed Tributary Reach 2	Dissolved Oxygen	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
		CBOD	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
		NBOD	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
3	Bayou Maringoiun Reach 3	Dissolved Oxygen	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
		CBOD	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
		NBOD	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
4	Bayou Maringoiun Reach 4	Dissolved Oxygen	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
		CBOD	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
		NBOD	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed

DATA TYPE 19, Nonpoint Source Data					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Bayou Maringouin Reach 1	BOD	kg/day	12.727	Calculated by TMDL Spreadsheet for 98% removal of assumed man-made loads
		Organic Nitrogen	kg/day	3.580	Calculated by TMDL Spreadsheet for 98% removal of assumed man-made loads
2	Bayou Maringouin Reach 2	BOD	kg/day	2.807	Calculated by TMDL Spreadsheet for 98% removal of assumed man-made loads
		Organic Nitrogen	kg/day	0.702	Calculated by TMDL Spreadsheet for 98% removal of assumed man-made loads
3	Bayou Maringouin Reach 3	BOD	kg/day	13.098	Calculated by TMDL Spreadsheet for 98% removal of assumed man-made loads
		Organic Nitrogen	kg/day	7.705	Calculated by TMDL Spreadsheet for 98% removal of assumed man-made loads
4	Bayou Maringouin Reach 4	BOD	kg/day	19.534	Calculated by TMDL Spreadsheet for 98% removal of assumed man-made loads
		Organic Nitrogen	kg/day	2.930	Calculated by TMDL Spreadsheet for 98% removal of assumed man-made loads
5	Bayou Maringouin Reach 5	BOD	kg/day	0.000	Calculated by TMDL Spreadsheet for 98% removal of assumed man-made loads
		Organic Nitrogen	kg/day	0.000	Calculated by TMDL Spreadsheet for 98% removal of assumed man-made loads
6	Bayou Maringouin Reach 6	BOD	kg/day	0.000	Calculated by TMDL Spreadsheet for 98% removal of assumed man-made loads
		Organic Nitrogen	kg/day	0.000	Calculated by TMDL Spreadsheet for 98% removal of assumed man-made loads
7	Bayou Maringouin Reach 7	BOD	kg/day	3.500	Calculated by TMDL Spreadsheet for 98% removal of assumed man-made loads
		Organic Nitrogen	kg/day	3.000	Calculated by TMDL Spreadsheet for 98% removal of assumed man-made loads
8	Bayou Maringouin Reach 8	BOD	kg/day	22.016	Calculated by TMDL Spreadsheet for 98% removal of assumed man-made loads
		Organic Nitrogen	kg/day	8.366	Calculated by TMDL Spreadsheet for 98% removal of assumed man-made loads
9	Bayou Maringouin Reach 9	BOD	kg/day	8.000	Calculated by TMDL Spreadsheet for 98% removal of assumed man-made loads
		Organic Nitrogen	kg/day	3.000	Calculated by TMDL Spreadsheet for 98% removal of assumed man-made loads

DATA TYPE 20, Headwater Data for Flow, Temperature, Salinity, and Conservatives					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Bayou Maringoiun Reach 1	Element # of input		1	
		Headwater name		BAYOU MARINGOUIN	
		Headwater flow	cms	0.00283	Summer critical flow from the LTP
		Temperature	^{o}Celcius	26.57	Summer season 90th percentile temperature from ambient data
2	Unnamed Tributary Reach 2	Element # of input		51	
		Headwater name		Unnamed Tributary	
		Headwater flow	cms	0.00283	Summer critical flow from the LTP
		Temperature	^{o}Celcius	26.57	Summer season 90th percentile temperature from ambient data

DATA TYPE 21, Headwater Data for DO, BOD, and Nitrogen					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Bayou Maringoiun Reach 1	Element # of input		1	
		Dissolved O_2	mg/l	7.23	DO near 90% saturated
		BOD	mg/l	2.42	Calculated value from TMDL spreadsheet for 98% reduction of assumed man-made loads
		Organic Nitrogen	mg/l	5.75	Calculated value from TMDL spreadsheet for 98% reduction of assumed man-made loads
2	Unnamed Tributary Reach 2	Element # of input		51	
		Dissolved O_2	mg/l	7.23	DO near 90% saturated
		BOD	mg/l	2.15	Calculated value from TMDL spreadsheet for 98% reduction of assumed man-made loads
		Organic Nitrogen	mg/l	2.81	Calculated value from TMDL spreadsheet for 98% reduction of assumed man-made loads

DATA TYPE 22, Headwater Data for Phosphorus, Chlorophyll, Coliform, and Nonconservatives					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Bayou Maringoiun Reach 1	Element # of input		1	
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions
2	Unnamed Tributary Reach 2	Element # of input		51	
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions

Bayou Maringouin (120111) Water Quality Summer Projection Model Input Description

DATA TYPE 23, Junction Data		
Downstream Element	**Upstream Element**	**Junction Name**
71	50	Unnamed Trib Confluence with Bayou

Bayou Maringouin (120111) Water Quality Summer Projection Model Input Description

DATA TYPE 24, Wastewater Data for Flow, Temperature, Salinity, and Conservatives					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
8	Bayou Maringouin Reach 8	computational element		155	
		Name		UPPER DISTRIBUTARY	
		Flow	cms	-0.00283	Assumed about half of the flow leaves Bayou Maringouin at the upper distributary

Bayou Maringouin (120111) Water Quality Summer Projection Model Input Description

	DATA TYPE 25, Wastewater Data for DO, BOD, and Nitrogen				
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
6	Bayou Maringouin Reach 8				No Parameters specified for this because it is an outflow

Bayou Maringouin (120111) Water Quality Summer Projection Model Input Description

DATA TYPE 25, Wastewater Data for Phosphorus, Chlorophyll, Coliform, and Nonconservatives					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
8	Bayou Mairngouin Reach 8				No Parameters specified for this because it is an outflow

DATA TYPE 27, Lower Boundary Conditions					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
9	Bayou Maringouin Reach 9	Temperature	^{o}Celcius	26.57	Summer season 90th percentile temperature from ambient data
		Salinity	ppt	0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		Conservative Matl. I	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		Conservative Matl. II	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		Dissolved O_2	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		BOD	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		NBOD	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions
		NCM	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.

Bayou Maringouin (120111) Water Quality Summer Projection Model Input Description

DATA TYPE 28, Dam Data					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
5	Bayou Maringouin Reach 5	Name		Munsen Road Weir	
		Reareation Option	none	1	Butts and Evans (1983)
		Factor "A"	none	1	BPJ Subjective Water Quality -- Near "Moderate"
		Coefficient "B"	none	1.05	Sharp-crested straight slope face weir
		Static Head Loss	m	1	Estimated static head loss over weir from photos and visual reconnisance.

Appendix B2 – Summer Loading

Summer Projection, Non-Point Benthic Load Input and TMDL Calculations: Subsegment 120111

Modeled stream or water body:	Bayou Maringouin -- LA120111

Shaded cells are input values for calculations.

Values to be used in the projection models.

	Calibration Model Values												Projection Model Equivalents				Projected Model Loads				Margin of Safety Loads					
Reach Number and Description	Non-Point UCBOD	Non-Point UNBOD	SOD @ 20°C	Total Calb. 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)	Reduced TCBL adjusted for MOS	Non-Point UCBOD	Non-Point UNBOD	SOD @ 20°C	Non-Point UCBOD INPUTS	Non-Point UNBOD INPUTS	SOD load @ Proj. temp.	Total Projection Benthic Load **(LA+MOS)**	MOS Total Benthic Load @ 20°C	MOS SOD @ 20°C	Non-Point UCBOD MOS Loads	Non-Point UNBOD MOS Loads	Adjusted SOD MOS @ Proj. temp	Adjusted Total MOS @ Proj. temp
	gm O_2 / [(m^2)(day)	gm O_2 / [(m^2)(day)	gm O_2 / [(m^2)(day)	gm O_2 / [(m^2)(day)]	Kilo-meters	gm O_2 / [(m^2)(day)]	%	gm O_2 / [(m^2)(day)]	Meters	(degrees Celcius)	%	gm O_2 / [(m^2)(day)]	gm O_2 / [(m^2)(day)	gm O_2 / [(m^2)(day)]	gm O_2 / [(m^2)(day)]	gm O_2 / [(m^2)(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 / D)**	**M = (K)(B / D)**	**N = (K)(C / D)**	**O = (E)(G)(L)**	**P = (E)(G)(M)**	**Q,** (note 4)	**O + P + Q**	**R = (K-J)(E)(G)**	**S = (R)(C/D)**	**T= (R)(A/D)**	**U = (R)(B/D)**	**V,** (note 5)	**T + U + V**
Reach 1: Main Stem Headwaters to Junction with Unnamed Tributary	1.442	0.406	6.00	7.848	4.55	3.00	0%	3.00	4.88	26.57	98.0%	3.10	3.12	0.574	0.161	2.386	12.727	3.580	80	96.40	1	0	0	0	1	1
REACH 2: Tributary from Headwaters to confluence with Main Stem	0.595	0.149	5.50	6.244	1.96	3.00	0%	3.00	4.88	26.57	98.0%	3.06	3.08	0.294	0.073	2.714	2.807	0.702	39	42.75	0	0	0	0	0	0
REACH 3: Main Stem from Unnamed Tributary to Pool above the Weir	0.456	0.268	3.20	3.924	2.55	3.00	0%	3.00	14.63	26.57	98.0%	3.02	3.02	0.351	0.207	2.466	13.098	7.705	139	159.93	0	0	0	0	0	0
REACH 4: Main Stem Pool above Weir	1.837	0.276	4.20	6.313	1.88	3.00	0%	3.00	11.58	26.57	98.0%	3.07	3.08	0.897	0.135	2.051	19.534	2.930	68	90.01	0	0	0	0	0	0
REACH 5: Main Stem single Cell Weir Effect Reach	0.000	0.000	2.00	2.000	0.01	3.00	0%	3.00	3.63	26.57	98.0%	2.00	2.00	0.000	0.000	2.000	0.000	0.000	0	0.11	0	0	0	0	0	0
REACH 6: Main Stem from Weir to wider section of stream	0.000	0.000	2.20	2.200	1.11	3.00	0%	3.00	3.63	26.57	98.0%	2.20	2.20	0.000	0.000	2.200	0.000	0.000	13	13.40	0	0	0	0	0	0
REACH 7: Main Stem wide section to Upper Borrow Pit Distributary	0.213	0.182	2.20	2.595	2.70	3.00	0%	3.00	6.10	26.57	98.0%	2.59	2.59	0.213	0.182	2.200	3.500	3.000	55	61.27	0	0	0	0	0	0
REACH 8: Main Stem Upper Borrow Pit Distributary to Lower Wide Section of Stream	0.811	0.308	2.30	3.419	4.40	3.00	0%	3.00	7.01	26.57	98.0%	3.01	3.01	0.714	0.271	2.025	22.016	8.366	94	124.87	0	0	0	0	0	0
REACH 9: Main Stem Lower Wide section to end of model at Ramah Canal	0.729	0.273	1.80	2.802	0.90	3.00	0%	3.00	12.19	26.57	98.0%	2.80	2.80	0.729	0.273	1.800	8.000	3.000	30	40.87	0	0	0	0	0	0
Sub-Total												24.85					82	29	519	**630**	1		0	0	1	**2**

Notes: Note 1, Data was calculated in and brought from the Calibration worksheet dataset.
Note 2, $\mathbf{J} = [(1 - \mathbf{H}) \times (\mathbf{D} - \mathbf{F}) + \mathbf{F}]$
Note 3, $\mathbf{K} = [(\mathbf{J} - \mathbf{F}) / (1 - \text{MOS}) + \mathbf{F}]$
Note 4, $\mathbf{Q} = \mathbf{E} \times \mathbf{G} \times \mathbf{N} \times 1.065^{(\mathbf{I}-20)}$
Note 5, $\mathbf{V} = \mathbf{S} \times 1.065^{(\mathbf{I}-20)}$
Note 6, $\mathbf{AC} = \mathbf{E} \times \mathbf{G} \times \mathbf{Z} \times 1.065^{(\mathbf{I}-20)}$

EXPLICIT MARGINS:

MARGIN OF SAFETY (MOS) (%) = [MOG + MOU] =	**20%**

Summer Projection, Non-Point Benthic Load Input and TMDL Calculations: Subsegment 120111

Modeled stream or water body: **Bayou Maringouin -- LA120111**

Shaded cells are input values for calculations.

Values to be used in the projection models.

	Calibration Model Values											Man-made Model equivalents				Man-made Model loads				Background Model loads			
Reach Number and Description	Non-Point UCBOD	Non-Point UNBOD	SOD @ 20°C	Total Calb. 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	Manmade portion of TCBL	Non-Point UCBOD	Non-Point UNBOD	SOD @ 20°C	Non-Point UCBOD INPUTS	Non-Point UNBOD INPUTS	SOD load @ Proj. temp.	Man-made Total Projection Benthic Load	Non-Point UCBOD INPUTS	Non-Point UNBOD INPUTS	SOD load @ Proj. temp.	Man-made Total Projection Benthic Load
	gm O_2 / [(m^2)(day)	gm O_2 / [(m^2)(day)	gm O_2 / [(m^2)(day)	gm O_2 / [(m^2)(day)]	Kilo-meters	gm O_2 / [(m^2)(day)]	%	gm O_2 / [(m^2)(day)]	Meters	(degrees Celcius)	%	gm O_2 / [(m^2)(day)]	gm O_2 / [(m^2)(day)]	gm O_2 / [(m^2)(day)]	gm O_2 / [(m^2)(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	W = K - F	X = (W)(A / D)	Y = (W)(B / D)	Z = (W)(C / D)	AA = (E)(G)(X)	AB = (E)(G)(Y)	AC, (note 6)	AA + AB + AC	AD = O - AA	AE = P - AB	AF = Q - AC	AD + AE + AF
Reach 1: Main Stem Headwaters to Junction with Unnamed Tributary	1.442	0.406	6.00	7.848	4.55	3.00	0%	3.00	4.88	26.57	98.0%	0.12	0.022	0.006	0.09	0	0	3	3.74	12	3	77	92.65
REACH 2: Tributary from Headwaters to confluence with Main Stem	0.595	0.149	5.50	6.244	1.96	3.00	0%	3.00	4.88	26.57	98.0%	0.08	0.008	0.002	0.07	0	0	1	1.13	3	1	38	41.62
REACH 3: Main Stem from Unnamed Tributary to Pool above the Weir	0.456	0.268	3.20	3.924	2.55	3.00	0%	3.00	14.63	26.57	98.0%	0.02	0.003	0.002	0.02	0	0	1	1.22	13	8	138	158.71
REACH 4: Main Stem Pool above Weir	1.837	0.276	4.20	6.313	1.88	3.00	0%	3.00	11.58	26.57	98.0%	0.08	0.024	0.004	0.06	1	0	2	2.42	19	3	66	87.60
REACH 5: Main Stem single Cell Weir Effect Reach	0.000	0.000	2.00	2.000	0.01	3.00	0%	3.00	3.63	26.57	98.0%	0.00	0.000	0.000	0.00	0	0	0	0.00	0	0	0	0.11
REACH 6: Main Stem from Weir to wider section of stream	0.000	0.000	2.20	2.200	1.11	3.00	0%	3.00	3.63	26.57	98.0%	0.00	0.000	0.000	0.00	0	0	0	0.00	0	0	13	13.40
REACH 7: Main Stem wide section to Upper Borrow Pit Distributary	0.213	0.182	2.20	2.595	2.70	3.00	0%	3.00	6.10	26.57	98.0%	0.00	0.000	0.000	0.00	0	0	0	0.00	4	3	55	61.27
REACH 8: Main Stem Upper Borrow Pit Distributary to Lower Wide Section of Stream	0.811	0.308	2.30	3.419	4.40	3.00	0%	3.00	7.01	26.57	98.0%	0.01	0.002	0.001	0.01	0	0	0	0.43	22	8	94	124.44
REACH 9: Main Stem Lower Wide section to end of model at Ramah Canal	0.729	0.273	1.80	2.802	0.90	3.00	0%	3.00	12.19	26.57	98.0%	0.00	0.000	0.000	0.00	0	0	0	0.00	8	3	30	40.87
Sub-Total																1	0	7	**9**	80	29	511	**621**

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** x **G** x **N** x $1.065^{(I-20)}$

Note 5, **V** = **S** x $1.065^{(I-20)}$

Note 6, **AC** = **E** x **G** x **Z** x $1.065^{(I-20)}$

EXPLICIT MARGINS:

MARGIN OF SAFETY (MOS) (%) = [MOG + MOU] = **20%**

Summer TMDL calculations and Projection model calculations for Headwater / Tributary loads: Subsegment 120111

Bayou Maringouin -- LA120111

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
Bayou Maringouin	0.0002	21.27	5.75	0.34	0.09	1.94	5.75	0%	0.03	0.09	98%	0.04	0.09	0.04	0.09	2.42	5.75	**0.00**	**0.13**
Unnamed Tributary	0.0008	10.18	2.81	0.70	0.19	1.94	2.81	0%	0.13	0.19	98%	0.15	0.19	0.15	0.19	2.15	2.81	**0.00**	**0.34**
SUB-TOTAL TMDL LOADING				**1**	**0**				**0**	**0**		**0**	**0**	**0**	**0**			**0**	**0**

EXPLICIT MARGINS:

MARGIN OF SAFETY (MOS) (%) =	**20%**

Summer TMDL calculations and Projection model calculations for Incremental loads:

Bayou Maringouin -- LA120111

Shaded cells are input values for calculations.
Values to be used in the projection models.

Incremental Load Determinations:

Reach Description and #	Calibration Load determinations:										Percentage Reduction calculations:			Projection Model Input determinations:				Projection Model Input determinations:			
	Projection Flow (cms)	Calb. UCBOD conc. (mg/l)	Unadjusted UCBOD (kg/day)	Calb. UNBOD conc. (mg/l)	Unadjusted UNBOD (kg/day)	Background Conc. UCBOD (mg/l)	Background Conc. UNBOD (mg/l)	Background % Reduction	Background Load UCBOD (kg/day)	Background Load UNBOD (kg/day)	Actual % Reduction of Man-Made Loads	Increm. UCBOD Load Adjusted For % Reduction **(LA load)**	Increm. UNBOD Load Adjusted For % Reduction **(LA load)**	Increm. UCBOD Adjusted for MOS (kg/day) (1)	Increm. UNBOD Adjusted for MOS (kg/day) (1)	Projection UCBOD conc. (mg/l)	Projection UNBOD conc. (mg/l)	Proj. UCBOD MOS load (kg/day)	Proj. UNBOD MOS load (kg/day)	**Sub-total MOS load (kg/day)**	**Sub-total LA load (kg/day)**
	A	**B**	**C =** (86.4)**(A)(B)**	**D**	**E =** (86.4)**(A)(D)**	**F**	**G**	**H1**	**H =** (1-**H1**) (86.4)**(A)(F)**	**I =** (1-**H1**) (86.4)**(A)(G)**	**J,** Note 1	**K =** **(C-H)(1-J) + H**	**L =** **(E-I)(1-J) + I**	**M = (K-H)** / (1-**MOS**) + H	**N = (L-I)** / (1-**MOS**) + I	**M** / [(**A**)(86.4)]	**N** / [(**A**)(86.4)]	**O =** **M - K**	**P =** **N - L**	**O + P**	**K + L**
Reach 1: Main Stem Headwaters to Junction with Unnamed Tributary	0.0080	20.00	13.82	4.00	2.76	0.00	0.00	0%	0.00	0.00	98%	0.28	0.06	0	0	0.50	0.10	0	0	0	0
REACH 2: Tributary from Headwaters to confluence with Main Stem	0.0016	10.00	1.38	3.00	0.41	0.00	0.00	0%	0.00	0.00	98%	0.03	0.01	0	0	0.25	0.08	0	0	0	0
REACH 3: Main Stem from Unnamed Tributary to Pool above the Weir	0.0050	20.00	8.64	4.00	1.73	0.00	0.00	0%	0.00	0.00	98%	0.17	0.03	0	0	0.50	0.10	0	0	0	0
REACH 4: Main Stem Pool above Weir	0.0025	20.00	4.32	4.00	0.86	0.00	0.00	0%	0.00	0.00	98%	0.09	0.02	0	0	0.50	0.10	0	0	0	0
REACH 5: Main Stem single Cell Weir Effect Reach								0%			98%										
REACH 6: Main Stem from Weir to wider section of stream								0%			98%										
REACH 7: Main Stem wide section to Upper Borrow Pit Distributary								0%			98%										
REACH 8: Main Stem Upper Borrow Pit Distributary to Lower Wide Section of Stream								0%			98%										
REACH 9: Main Stem Lower Wide section to end of model at Ramah Canal								0%			98%										
Sub-Total benthic loading									**0**	**0**		**1**	**0**	**1**	**0**			**0**	**0**	**0**	**1**

Note 1: The percentage reduction values are taken from the "Non-Point Benthic Load Input and TMDL Calculations" worksheet.

EXPLICIT MARGINS:

MARGIN OF SAFETY (MOS) (%) =	**20%**

Appendix B3 – Summer Input, Output and Graphs

```
! LAQUAL INPUT TEXT FILE CREATED USING EXCEL ON 3/21/2005 3:08:29 PM
! CREATED BY USER CHRISC
! Revised BY FTN on 4-27-2010
!
! DATA TYPE 01 -- TITLES AND CONTROL DATA
CNTROL01     BAYOU MARINGOUIN STREAM MODEL
CNTROL02     BAYOU MARINGOUIN SUMMER PROJECTION
CNTROL11 YES METRIC UNITS
ENDATA01
! DATA TYPE 02 -- Model Options
MODOPT01  NO TEMPERATURE
MODOPT02  NO SALINITY
MODOPT03  NO CONSERVATIVE MATERIAL  I
MODOPT04  NO CONSERVATIVE MATERIAL II
MODOPT05 YES DISSOLVED OXYGEN
MODOPT06 YES BOD1 BIOCHEMICAL OXYGEN DEMAND
MODOPT07  NO BOD2 BIOCHEMICAL OXYGEN DEMAND
MODOPT08 YES NBOD OXYGEN DEMAND
MODOPT09  NO PHOSPHORUS
MODOPT10  NO CHLOROPHYLL A
MODOPT11  NO MACROPHYTES
MODOPT12  NO COLIFORM
ENDATA02
! DATA TYPE 03 -- PROGRAM CONSTANTS
PROGRAM  OCEAN EXCHANGE RATIO              = 0
PROGRAM  KL MINIMUM                        = 0.7
PROGRAM  MAXIMUM ITTERATION LIMIT          = 2000
PROGRAM  EFFECTIVE BOD DUE TO ALGAE        = 0.1
PROGRAM  ALGAE OXYGEN PROD                 = 0
PROGRAM  HYDRAULIC CALCULATION METHOD      = 2
ENDATA03
! DATA TYPE 04 -- TEMPERATURE CORRECTION CONSTANTS
ENDATA04
! DATA TYPE 05 -- TEMPERATURE DATA
ENDATA05
! DATA TYPE 06 -- ALGAE CONSTANTS
ENDATA06
! DATA TYPE 07 -- MACROPHYTE CONSTANTS
ENDATA07
! DATA TYPE 08 -- REACH IDENTIFICATION DATA
REACH ID    1  BM HEADWATER TO UNNAMED TRIB       18.1      13.55     0.091
REACH ID    2  BM UNNAMED TRIBUTARY               1.96      0         0.098
REACH ID    3  BM UNNAMED TRIB TO ABOVE WEIR      13.55     11        0.102
REACH ID    4  BM ABOVE WEIR TO WEIR              11        9.12      0.094
REACH ID    5  BM BELOW WEIR EFFECT               9.12      9.11      0.01
REACH ID    6  BM BELOW WEIR TO OPEN AREA         9.11      8         0.1009
REACH ID    7  BM OPEN AREA TO DISTRIBUTARY       8         5.3       0.1
REACH ID    8  BM DISTRIBUTARY TO WIDE SECTION    5.3       0.9       0.1
REACH ID    9  BM WIDE SECTION TO END             0.9       0         0.1
ENDATA08
! DATA TYPE 09 -- ADVECTIVE HYDRAULIC COEFFICIENTS
```

```
HYDR-1      1  0      0.5    4.877  0      0.5    0.3322
HYDR-1      2  0      0.5    3.429  0      0.5    0.2027
HYDR-1      3  0      0.5    14.63  0      0.5    0.2987
HYDR-1      4  0      0.5    11.58  0      0.5    0.6614
HYDR-1      5  0      0.5    3.627  0      0.5    0.256
HYDR-1      6  0      0.5    3.627  0      0.5    0.256
HYDR-1      7  0      0.5    6.096  0      0.5    0.4968
HYDR-1      8  0      0.5    7.01   0      0.5    0.2438
HYDR-1      9  0      0.5    12.19  0      0.5    0.3048
ENDATA09
! DATA TYPE 10 -- DISPERSIVE HYDRAULIC COEFFICIENTS
HYDR-2      1       0.03
HYDR-2      2       0.03
HYDR-2      3       0.03
HYDR-2      4       0.03
HYDR-2      5       0
HYDR-2      6       1
HYDR-2      7       1
HYDR-2      8       10
HYDR-2      9       10
ENDATA10
! DATA TYPE 11 --  INITIAL CONDITIONS
INITIAL     1  26.57   0       5       0       0       0       10      0
INITIAL     2  26.57   0       5       0       0       0       10      0
INITIAL     3  26.57   0       5       0       0       0       10      0
INITIAL     4  26.57   0       5       0       0       0       10      0
INITIAL     5  26.57   0       5       0       0       0       10      0
INITIAL     6  26.57   0       5       0       0       0       10      0
INITIAL     7  26.57   0       5       0       0       0       10      0
INITIAL     8  26.57   0       5       0       0       0       10      0
INITIAL     9  26.57   0       5       0       0       0       10      0
ENDATA11
! DATA TYPE 12 -- REAERATION, SEDIMENT OXYGEN DEMAND AND BOD COEFFICIENTS
!--------1---------2---------3---------4---------5---------6---------7---------8
!234567890123456789012345678901234567890123456789012345678901234567890123456789O
!         ***  ---------********---------********---------********
COEF-1     1   11   0.00  0.000 0.000 2.386  0.070  0.05   1
COEF-1     2   11   0.00  0.000 0.000 2.714  0.070  0.05   1
COEF-1     3   11   0.00  0.000 0.000 2.466  0.070  0.05   1
COEF-1     4   11   0.00  0.000 0.000 2.051  0.070  0.05   1
COEF-1     5   11   0.00  0.000 0.000 2.000  0.070  0.05   1
COEF-1     6   11   0.00  0.000 0.000 2.200  0.070  0.05   1
COEF-1     7   11   0.00  0.000 0.000 2.200  0.070  0.05   1
COEF-1     8   11   0.00  0.000 0.000 2.025  0.070  0.05   1
COEF-1     9   11   0.00  0.000 0.000 1.800  0.070  0.05   1
ENDATA12
! DATA TYPE 13 -- NITROGEN AND PHOSPHOURS COEFFICIENTS
COEF-2      1  0.1    0.05   1      0      0      0      0
COEF-2      2  0.1    0.05   1      0      0      0      0
COEF-2      3  0.1    0.05   1      0      0      0      0
COEF-2      4  0.1    0.05   1      0      0      0      0
COEF-2      5  0.1    0.05   1      0      0      0      0
COEF-2      6  0.1    0.05   1      0      0      0      0
```

```
COEF-2      7  0.1    0.05   1      0      0      0      0
COEF-2      8  0.1    0.05   1      0      0      0      0
COEF-2      9  0.1    0.05   1      0      0      0      0
ENDATA13
! DATA TYPE 14 -- ALGAE AND MACROPHYTE COEFFICIENTS
COEF-3      1  1       0.01
COEF-3      2  1       0.01
COEF-3      3  1       0.01
COEF-3      4  1       0.01
COEF-3      5  1       0.01
COEF-3      6  1       0.01
COEF-3      7  1       0.01
COEF-3      8  1       0.01
COEF-3      9  1       0.01
ENDATA14
! DATA TYPE 15 -- COLIFORM AND NONCONSERVATIVE COEFFICIENTS
COEF-4      1
COEF-4      2
COEF-4      3
COEF-4      4
COEF-4      5
COEF-4      6
COEF-4      7
COEF-4      8
COEF-4      9
ENDATA15
! DATA TYPE 16 -- INCREMENTAL DATA FOR FLOW, TEMPERATURE, SALINITY, AND CONSERVATIVES
ENDATA16
! DATA TYPE 17 -- INCREMENTAL DATA FOR DO, BOD, AND NITROGEN
ENDATA17
! DATA TYPE 18 -- Incremental Data
ENDATA18
! DATA TYPE 19 -- NONPOINT SOURCE DATA
!--------1---------2---------3---------4---------5---------6---------7---------8
!234567890123456789012345678901234567890123456789012345678901234567890123456789
!         ***  ---------********---------********---------********
NONPOINT    1    12.727    3.580
NONPOINT    2     2.807    0.702
NONPOINT    3    13.098    7.705
NONPOINT    4    19.534    2.930
NONPOINT    5     0.000    0.000
NONPOINT    6     0.000    0.000
NONPOINT    7     3.500    3.000
NONPOINT    8    22.016    8.366
NONPOINT    9     8.000    3.000
ENDATA19
! DATA TYPE 20 -- HEADWATER DATA FOR FLOW, TEMPERATURE, SAALINITY, AND CONSERVATIVES
HDWTR-1  1     BAYOU MARINGOUIN         0.00283 26.57
HDWTR-1  51    UNNAMED TRIBUTARY        0.00283 26.57
ENDATA20
! DATA TYPE 21 -- HEADWATER DATA FOR DO, BOD, AND NITROGEN
HDWTR-2  1     7.23      2.42     5.75
HDWTR-2  51    7.23      2.15     2.81
```

```
ENDATA21
! DATA TYPE 22 -- HEADWATER DATA FOR PHOSPHORUS, CHLOROOPHYLL, COLIFORM, AND NCM
HDWTR-3  1              10
HDWTR-3  51             10
ENDATA22
! DATA TYPE 23 -- JUNCTION DATA
JUNCTION 71   50    UNNAMED TRIB CONFLUENCE WITH BAYOU`
ENDATA23
! DATA TYPE 24
WSTLD-1  155   UPPER DISTRIBUTARY  -0.00283
ENDATA24
! DATA TYPE 25
WSTLD-2  155
ENDATA25
! DATA TYPE 26 -- WASTELOAD DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NCM
WSTLD-3  155
ENDATA26
! DATA TYPE 27 -- Lower Boundary Conditions
LOWER BC TEMPERATURE                        = 26.57
LOWER BC SALINITY                           = 0
LOWER BC CONSERVATIVE MATERIAL  I           = 0
LOWER BC CONSERVATIVE MATERIAL II           = 0
LOWER BC DISSOLVED OXYGEN                   = 0
LOWER BC BIOCHEMICAL OXYGEN DEMAND          = 0
LOWER BC NBOD                               = 0
LOWER BC PHOSPHORUS                         = 0
LOWER BC CHLOROPHYLL A                      = 10
LOWER BC COLIFORM                           = 0
LOWER BC NONCONSERVATIVE MATERIAL           = 0
ENDATA27
! DATA TYPE 28 -- Dam Data
DAM DATA  116  MUNSEN ROAD WEIR     1  1       1.05    1
ENDATA28
! DATA TYPE 29 -- SENSITIVITY ANALYSIS DATA
ENDATA29
! DATA TYPE 30 -- Plot Control Data
NUMBER OF PLOTS = 2
NUMBER OF REACHES IN PLOT 1 =   8
PLOT RCH 1  3  4  5  6  7  8  9
NUMBER OF REACHES IN PLOT 2 =   1
PLOT RCH 2
ENDATA30
!
! DATA TYPE 31 -- Overlay Plot Data
!
! - - - -1- - - - -2- - - - -3- - - - -4- - - - -5- - - - -6- - - - -7- - - - -8
!2345678901234567890123456789012345678901234567890123456789012345678901234567890
! OVERLAY 1 OVERLAY/GENERAL.OVL             :MAIN STEM BAYOU MARINGOUIN
ENDATA31
```

```
LA-QUAL Version 9.03
Louisiana Department of Environmental Quality

Input file is S:\projects\3110-060\tech\Revised TMDL\Revised Models\120111\Bayou_Maringouin_Summer.txt
Running in steady-state mode using LA defaults
Output produced at 14:29 on 06/15/2010

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

CARD TYPE       CONTROL TITLES

TITLE01         BAYOU MARINGOUIN STREAM MODEL
TITLE02         BAYOU MARINGOUIN SUMMER PROJECTION
CNTROL11  YES   METRIC UNITS
ENDATA01

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

CARD TYPE       MODEL OPTION

MODOPT01   NO   TEMPERATURE
MODOPT02   NO   SALINITY
MODOPT03   NO   CONSERVATIVE MATERIAL  I
MODOPT04   NO   CONSERVATIVE MATERIAL II
MODOPT05  YES   DISSOLVED OXYGEN
MODOPT06  YES   BOD1 BIOCHEMICAL OXYGEN DEMAND
MODOPT07   NO   BOD2 BIOCHEMICAL OXYGEN DEMAND
MODOPT08  YES   NBOD OXYGEN DEMAND
MODOPT09   NO   PHOSPHORUS
MODOPT10   NO   CHLOROPHYLL A
MODOPT11   NO   MACROPHYTES
MODOPT12   NO   COLIFORM
ENDATA02

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

CARD TYPE       DESCRIPTION OF CONSTANT                         VALUE

PROGRAM         OCEAN EXCHANGE RATIO              =         0.00000
PROGRAM         KL MINIMUM                        =         0.70000 meters/day
PROGRAM         MAXIMUM ITTERATION LIMIT          =      2000.00000
PROGRAM         EFFECTIVE BOD DUE TO ALGAE        =         0.10000 mg/L BOD1 per ug/L chl a
PROGRAM         ALGAE OXYGEN PROD                 =         0.00000 mg O/ug chl a/day
PROGRAM         HYDRAULIC CALCULATION METHOD      =         2.00000 (widths and depths)
ENDATA03

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

 CARD TYPE     RATE CODE     THETA VALUE

ENDATA04

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

CARD TYPE       DESCRIPTION OF CONSTANT                         VALUE

ENDATA05

$$$ DATA TYPE 6 (PHYTOPLANKTON CONSTANTS) $$$
```

CARD TYPE	DESCRIPTION OF CONSTANT	VALUE

ENDATA06

$$$ DATA TYPE 7 (PERIPHYTON CONSTANTS) $$$

CARD TYPE	DESCRIPTION OF CONSTANT	VALUE

ENDATA07

$$$ DATA TYPE 8 (REACH IDENTIFICATION DATA) $$$

CARD TYPE	REACH	ID	NAME	BEGIN REACH km		END REACH km	ELEM LENGTH km	REACH LENGTH km	ELEMS PER RCH	BEGIN ELEM NUM	END ELEM NUM
REACH ID	1	BM	HEADWATER TO UNNAMED TRIB	18.10	TO	13.55	0.0910	4.55	50	1	50
REACH ID	2	BM	UNNAMED TRIBUTARY	1.96	TO	0.00	0.0980	1.96	20	51	70
REACH ID	3	BM	UNNAMED TRIB TO ABOVE WEIR	13.55	TO	11.00	0.1020	2.55	25	71	95
REACH ID	4	BM	ABOVE WEIR TO WEIR	11.00	TO	9.12	0.0940	1.88	20	96	115
REACH ID	5	BM	BELOW WEIR EFFECT	9.12	TO	9.11	0.0100	0.01	1	116	116
REACH ID	6	BM	BELOW WEIR TO OPEN AREA	9.11	TO	8.00	0.1009	1.11	11	117	127
REACH ID	7	BM	OPEN AREA TO DISTRIBUTARY	8.00	TO	5.30	0.1000	2.70	27	128	154
REACH ID	8	BM	DISTRIBUTARY TO WIDE SECTION	5.30	TO	0.90	0.1000	4.40	44	155	198
REACH ID	9	BM	WIDE SECTION TO END	0.90	TO	0.00	0.1000	0.90	9	199	207

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	BM	0.000	0.500	4.877	0.000	0.500	0.332	0.00000	0.000
HYDR-1	2	BM	0.000	0.500	3.429	0.000	0.500	0.203	0.00000	0.000
HYDR-1	3	BM	0.000	0.500	14.630	0.000	0.500	0.299	0.00000	0.000
HYDR-1	4	BM	0.000	0.500	11.580	0.000	0.500	0.661	0.00000	0.000
HYDR-1	5	BM	0.000	0.500	3.627	0.000	0.500	0.256	0.00000	0.000
HYDR-1	6	BM	0.000	0.500	3.627	0.000	0.500	0.256	0.00000	0.000
HYDR-1	7	BM	0.000	0.500	6.096	0.000	0.500	0.497	0.00000	0.000
HYDR-1	8	BM	0.000	0.500	7.010	0.000	0.500	0.244	0.00000	0.000
HYDR-1	9	BM	0.000	0.500	12.190	0.000	0.500	0.305	0.00000	0.000

ENDATA09

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

CARD TYPE	REACH	ID	TIDAL RANGE	DISPERSION "A"	DISPERSION "B"	DISPERSION "C"	DISPERSION "D"
HYDR	1	BM	0.00	0.030	0.000	0.000	0.000
HYDR	2	BM	0.00	0.030	0.000	0.000	0.000
HYDR	3	BM	0.00	0.030	0.000	0.000	0.000
HYDR	4	BM	0.00	0.030	0.000	0.000	0.000
HYDR	5	BM	0.00	0.000	0.000	0.000	0.000
HYDR	6	BM	0.00	1.000	0.000	0.000	0.000
HYDR	7	BM	0.00	1.000	0.000	0.000	0.000
HYDR	8	BM	0.00	10.000	0.000	0.000	0.000
HYDR	9	BM	0.00	10.000	0.000	0.000	0.000

ENDATA10

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

CARD TYPE	REACH	ID	TEMP deg C	SALIN ppt	DO mg/L	NH3-N mg/L	NO3-N mg/L	PO4-P mg/L	CHL A µg/L	PERIP g/m^2	BOD1 mg/L	BOD2 mg/L	ORG-N mg/L	ORG-P mg/L	COLI #/100mL	NCM	CM-1	CM-2
INITIAL	1	BM	26.57	0.00	5.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INITIAL	2	BM	26.57	0.00	5.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INITIAL	3	BM	26.57	0.00	5.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INITIAL	4	BM	26.57	0.00	5.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INITIAL	5	BM	26.57	0.00	5.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INITIAL	6	BM	26.57	0.00	5.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INITIAL	7	BM	26.57	0.00	5.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INITIAL	8	BM	26.57	0.00	5.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INITIAL	9	BM	26.57	0.00	5.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ENDATA11

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

CARD TYPE	RCH NUM	RCH ID	K2 OPT	K2 "A"	K2 "B"	K2 "C"	BKGRND SOD $g/m^2/d$	AEROB BOD DECAY per day	BOD SETT m/d	SETTLD SOD AVAIL frac	ANAER BOD DECAY per day	AEROB BOD2 DECAY per day	BOD2 SETT m/d	ANAER BOD2 DECAY per day	BOD2 HYDR TO BOD1 per day
COEF-1	1	BM	11 TEXAS	0.000	0.000	0.000	2.386	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	2	BM	11 TEXAS	0.000	0.000	0.000	2.714	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	3	BM	11 TEXAS	0.000	0.000	0.000	2.466	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	4	BM	11 TEXAS	0.000	0.000	0.000	2.051	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	5	BM	11 TEXAS	0.000	0.000	0.000	2.000	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	6	BM	11 TEXAS	0.000	0.000	0.000	2.200	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	7	BM	11 TEXAS	0.000	0.000	0.000	2.200	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	8	BM	11 TEXAS	0.000	0.000	0.000	2.025	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	9	BM	11 TEXAS	0.000	0.000	0.000	1.800	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000

ENDATA12

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

CARD TYPE	REACH	ID	NBOD DECA per day	NBOD SETT m/d	SETTLD ORGN AVAIL frac	NH3 DECA per day	BKGRND NH3 SRCE $g/m^2/d$	BKGRND PO4 SRCE $g/m^2/d$	DENIT RATE per day	ORGP DECA per day	ORGP SETT m/d	SETTLD ORGP AVAIL frac
COEF-2	1	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-2	2	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-2	3	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-2	4	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-2	5	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-2	6	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-2	7	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-2	8	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-2	9	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

ENDATA13

$$$ DATA TYPE 14 (ALGAE PHYTOPLANKTON AND PERIPHYTON COEFFICIENTS) $$$

CARD TYPE	REACH	ID	SECCHI DEPTH m	CHL A: ALGAE frac	PHYTO SETT m/d	PHYTO DEATH per day	MAX PHYTO GROW per day	PHYTO RESP per day	PERIP DEATH per day	MAX PERIP GROW per day	PERIP RESP per day	BANK SHADING frac
COEF-3	1	BM	1.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-3	2	BM	1.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-3	3	BM	1.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-3	4	BM	1.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-3	5	BM	1.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-3	6	BM	1.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

COEF-3	7	BM	1.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-3	8	BM	1.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-3	9	BM	1.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000

ENDATA14

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

CARD TYPE	REACH	ID	COLIFORM DIE-OFF per day	NCM DECAY per day	NCM SETT m/d
COEF-4	1	BM	0.000	0.000	0.000
COEF-4	2	BM	0.000	0.000	0.000
COEF-4	3	BM	0.000	0.000	0.000
COEF-4	4	BM	0.000	0.000	0.000
COEF-4	5	BM	0.000	0.000	0.000
COEF-4	6	BM	0.000	0.000	0.000
COEF-4	7	BM	0.000	0.000	0.000
COEF-4	8	BM	0.000	0.000	0.000
COEF-4	9	BM	0.000	0.000	0.000

ENDATA15

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

CARD TYPE	REACH	ID	OUTFLOW m^3/s	INFLOW m^3/s	TEMP deg C	SALIN ppt	CM-1	CM-2	IN/DIST	OUT/DIST

ENDATA16

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

CARD TYPE	REACH	ID	DO mg/L	BOD1 mg/L	NBOD mg/L	mg/L	mg/L	BOD2 mg/L

ENDATA17

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

CARD TYPE	REACH	ID	PO4 mg/L	PHYTO CHL A µg/L	COLI #/100mL	NCM	ORGP mg/L

ENDATA18

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

CARD TYPE	REACH	ID	BOD1 kg/d	NBOD kg/d	COLI #/day	NCM	DO kg/d	BOD2 kg/d	ORG-P kg/d
NONPOINT	1	BM	12.73	3.58	0.00	0.00	0.00	0.00	0.00
NONPOINT	2	BM	2.81	0.70	0.00	0.00	0.00	0.00	0.00
NONPOINT	3	BM	13.10	7.70	0.00	0.00	0.00	0.00	0.00
NONPOINT	4	BM	19.53	2.93	0.00	0.00	0.00	0.00	0.00
NONPOINT	5	BM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NONPOINT	6	BM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NONPOINT	7	BM	3.50	3.00	0.00	0.00	0.00	0.00	0.00
NONPOINT	8	BM	22.02	8.37	0.00	0.00	0.00	0.00	0.00
NONPOINT	9	BM	8.00	3.00	0.00	0.00	0.00	0.00	0.00

ENDATA19

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

CARD TYPE	ELEMENT	NAME	UNIT	FLOW m³/s	FLOW cfs	TEMP deg C	SALIN ppt	CM-1	CM-2	HDW DISP EXCHG frac
HDWTR-1	1	BAYOU MARINGOUIN	0	0.00283	0.09993	26.57	0.00	0.000	0.000	0.000
HDWTR-1	51	UNNAMED TRIBUTARY	0	0.00283	0.09993	26.57	0.00	0.000	0.000	0.000
ENDATA20										

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

CARD TYPE	ELEMENT	NAME	DO mg/L	BOD#1 mg/L	NBOD mg/L	mg/L	mg/L	BOD2 mg/L
HDWTR-2	1	BAYOU MARINGOUIN	7.23	2.42	5.75	0.00	0.00	0.00
HDWTR-2	51	UNNAMED TRIBUTARY	7.23	2.15	2.81	0.00	0.00	0.00
ENDATA21								

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

CARD TYPE	ELEMENT	NAME	PO4-P mg/L	PHYTO CHL A µg/L	COLI #/100mL	NCM	ORG-P mg/L
HDWTR-3	1	BAYOU MARINGOUIN	0.00	10.00	0.00	0.00	0.00
HDWTR-3	51	UNNAMED TRIBUTARY	0.00	10.00	0.00	0.00	0.00
ENDATA22							

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

CARD TYPE	JUNCTION ELEMENT	UPSTRM ELEMENT	RIVER KILOM	NAME
JUNCTION	71	50	13.55	UNNAMED TRIB CONFLUENCE WITH BAYOU`
ENDATA23				

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

CARD TYPE	ELEMENT	RKILO	NAME	FLOW m³/s	FLOW cfs	FLOW MGD	TEMP deg C	SALIN ppt	CM-1	CM-2
WSTLD-1	155	5.30	UPPER DISTRIBUTARY	-0.00283	-0.09993	-0.065	0.00	0.00	0.000	0.000
ENDATA24										

$$$ DATA TYPE 25 (WASTELOAD DATA FOR DO, BOD, AND NITROGEN) $$$

CARD TYPE	ELEMENT	NAME	DO mg/L	BOD mg/L	% BOD RMVL	NBOD mg/L	mg/L	% NITRIF	mg/L	BOD2 mg/L
WSTLD-2	155	UPPER DISTRIBUTARY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ENDATA25										

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

CARD TYPE	ELEMENT	NAME	PO4-P mg/L	PHYTO CHL A µg/L	COLI #/100mL	NCM	ORG-P mg/L
WSTLD-3	155	UPPER DISTRIBUTARY	0.00	0.00	0.00	0.00	0.00
ENDATA26							

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

```
CARD TYPE    CONSTITUENT                    CONCENTRATION

LOWER BC     TEMPERATURE                       =     26.570     deg C
LOWER BC     SALINITY                          =      0.000     ppt
LOWER BC     CONSERVATIVE MATERIAL  I          =      0.000
LOWER BC     CONSERVATIVE MATERIAL II          =      0.000
LOWER BC     DISSOLVED OXYGEN                  =      0.000     mg/L
LOWER BC     BIOCHEMICAL OXYGEN DEMAND         =      0.000     mg/L
LOWER BC     NBOD                              =      0.000     mg/L
LOWER BC     PHOSPHORUS                        =      0.000     mg/L
LOWER BC     CHLOROPHYLL A                     =     10.000     µg/L
LOWER BC     COLIFORM                          =      0.000     #/100 mL
LOWER BC     NONCONSERVATIVE MATERIAL          =      0.000
ENDATA27

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

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

DAM DATA        116     MUNSEN ROAD WEIR       1     1.000     1.050     1.000
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 =  2
NUMBER OF REACHES IN PLOT 1 =   8
PLOT RCH  1  3  4  5  6  7  8  9
NUMBER OF REACHES IN PLOT 2 =   1
PLOT RCH  2
ENDATA30

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


ENDATA31
 ***** WARNING:  NEGATIVE CONCENTRATIONS OF BOD1 SET TO ZERO IN LOWER BOUNDARY CONDITION



     .....NO ERRORS DETECTED IN INPUT DATA
     .....HYDRAULIC CALCULATIONS COMPLETED
     .....TRIDIAGONAL MATRIX TERMS INITIALIZED
     .....OXYGEN DEPENDENT RATES CONVERGENT IN  186 ITERATIONS
     .....CONSTITUENT CALCULATIONS COMPLETED
     .....GRAPHICS DATA FOR PLOT 1 WRITTEN TO UNIT 11
     .....GRAPHICS DATA FOR PLOT 2 WRITTEN TO UNIT 12


FINAL REPORT    BAYOU MARINGOUIN                              BAYOU MARINGOUIN STREAM MODEL
REACH NO.  1    HEADWATER TO UNNAMED TRIB                     BAYOU MARINGOUIN SUMMER PROJECTION

 ****************************************************************************************** REACH INPUTS ******************************************************************************************
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ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	PO4-P mg/L	CHL A µg/L	COLI #/100mL	NCM
1	HDWTR	0.00283	26.57	0.00	0.00	0.00	7.23	1.42	0.00	2.42	0.00	5.75	0.00	0.00	0.00	10.00	0.00	0.00

** HYDRAULIC PARAMETER VALUES **

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	CUM 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
1	18.10	18.01	0.00283	0.0	0.00175	0.60	0.60	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
2	18.01	17.92	0.00283	0.0	0.00175	0.60	1.21	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
3	17.92	17.83	0.00283	0.0	0.00175	0.60	1.81	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
4	17.83	17.74	0.00283	0.0	0.00175	0.60	2.41	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
5	17.74	17.65	0.00283	0.0	0.00175	0.60	3.01	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
6	17.65	17.55	0.00283	0.0	0.00175	0.60	3.62	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
7	17.55	17.46	0.00283	0.0	0.00175	0.60	4.22	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
8	17.46	17.37	0.00283	0.0	0.00175	0.60	4.82	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
9	17.37	17.28	0.00283	0.0	0.00175	0.60	5.43	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
10	17.28	17.19	0.00283	0.0	0.00175	0.60	6.03	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
11	17.19	17.10	0.00283	0.0	0.00175	0.60	6.63	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
12	17.10	17.01	0.00283	0.0	0.00175	0.60	7.24	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
13	17.01	16.92	0.00283	0.0	0.00175	0.60	7.84	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
14	16.92	16.83	0.00283	0.0	0.00175	0.60	8.44	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
15	16.83	16.74	0.00283	0.0	0.00175	0.60	9.04	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
16	16.74	16.64	0.00283	0.0	0.00175	0.60	9.65	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
17	16.64	16.55	0.00283	0.0	0.00175	0.60	10.25	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
18	16.55	16.46	0.00283	0.0	0.00175	0.60	10.85	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
19	16.46	16.37	0.00283	0.0	0.00175	0.60	11.46	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
20	16.37	16.28	0.00283	0.0	0.00175	0.60	12.06	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
21	16.28	16.19	0.00283	0.0	0.00175	0.60	12.66	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
22	16.19	16.10	0.00283	0.0	0.00175	0.60	13.27	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
23	16.10	16.01	0.00283	0.0	0.00175	0.60	13.87	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
24	16.01	15.92	0.00283	0.0	0.00175	0.60	14.47	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
25	15.92	15.83	0.00283	0.0	0.00175	0.60	15.07	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
26	15.83	15.73	0.00283	0.0	0.00175	0.60	15.68	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
27	15.73	15.64	0.00283	0.0	0.00175	0.60	16.28	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
28	15.64	15.55	0.00283	0.0	0.00175	0.60	16.88	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
29	15.55	15.46	0.00283	0.0	0.00175	0.60	17.49	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
30	15.46	15.37	0.00283	0.0	0.00175	0.60	18.09	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
31	15.37	15.28	0.00283	0.0	0.00175	0.60	18.69	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
32	15.28	15.19	0.00283	0.0	0.00175	0.60	19.29	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
33	15.19	15.10	0.00283	0.0	0.00175	0.60	19.90	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
34	15.10	15.01	0.00283	0.0	0.00175	0.60	20.50	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
35	15.01	14.92	0.00283	0.0	0.00175	0.60	21.10	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
36	14.92	14.82	0.00283	0.0	0.00175	0.60	21.71	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
37	14.82	14.73	0.00283	0.0	0.00175	0.60	22.31	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
38	14.73	14.64	0.00283	0.0	0.00175	0.60	22.91	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
39	14.64	14.55	0.00283	0.0	0.00175	0.60	23.52	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
40	14.55	14.46	0.00283	0.0	0.00175	0.60	24.12	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
41	14.46	14.37	0.00283	0.0	0.00175	0.60	24.72	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
42	14.37	14.28	0.00283	0.0	0.00175	0.60	25.32	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
43	14.28	14.19	0.00283	0.0	0.00175	0.60	25.93	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
44	14.19	14.10	0.00283	0.0	0.00175	0.60	26.53	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
45	14.10	14.01	0.00283	0.0	0.00175	0.60	27.13	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
46	14.01	13.91	0.00283	0.0	0.00175	0.60	27.74	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
47	13.91	13.82	0.00283	0.0	0.00175	0.60	28.34	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
48	13.82	13.73	0.00283	0.0	0.00175	0.60	28.94	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002

49	13.73	13.64	0.00283	0.0	0.00175	0.60	29.55	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
50	13.64	13.55	0.00283	0.0	0.00175	0.60	30.15	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.002
TOT						30.15				7371.63	22190.34					
AVG					0.0017			0.33	4.88			1.62				

** BIOLOGICAL AND PHYSICAL COEFFICIENTS **

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD1 DECAY 1/da	BOD1 SETT 1/da	ABOD1 DECAY 1/da	BOD1 HYDR 1/da	BOD2 DECAY 1/da	BOD2 SETT 1/da	ABOD2 DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORG-N HYDR 1/da	ORG-N SETT 1/da	NH3-N DECAY 1/da	NH3-N SRCE *	DENIT RATE 1/da	ORG-P HYDR 1/da	ORG-P SETT 1/da	PO4 SRCE *	PHYTO PROD **	PERIP PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
1	18.009	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.74	3.74	0.14	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	17.918	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.77	3.77	0.13	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	17.827	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.80	3.80	0.13	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	17.736	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.83	3.83	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	17.645	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.85	3.85	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	17.554	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.87	3.87	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	17.463	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.88	3.88	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	17.372	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.89	3.89	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	17.281	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.91	3.91	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	17.190	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.92	3.92	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	17.099	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.93	3.93	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	17.008	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.93	3.93	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	16.917	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.94	3.94	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	16.826	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.95	3.95	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	16.735	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.95	3.95	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	16.644	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.95	3.95	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	16.553	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.96	3.96	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	16.462	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.96	3.96	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	16.371	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.96	3.96	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	16.280	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.97	3.97	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	16.189	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.97	3.97	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	16.098	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.97	3.97	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	16.007	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.97	3.97	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	15.916	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.97	3.97	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	15.825	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.97	3.97	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	15.734	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	15.643	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	15.552	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	15.461	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	15.370	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	15.279	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32	15.188	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33	15.097	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34	15.006	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	14.915	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36	14.824	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37	14.733	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	14.642	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39	14.551	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	14.460	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41	14.369	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	14.278	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
43	14.187	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	14.096	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	14.005	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	13.914	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	13.823	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

48	13.732	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	13.641	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.98	3.98	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	13.550	8.03	2.39	0.09	0.18	0.00	0.00	0.00	0.00	0.00	3.61	3.97	3.97	0.12	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			2.11	0.07	0.00	0.00	0.00	0.00	0.00	0.00	2.39			0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/d ** mg/L/day

** WATER QUALITY CONSTITUENT VALUES **

ELEM NO.	ENDING DIST	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	TOT-N mg/L	EORG-N mg/L	ETOT-N mg/L	ORG-P mg/L	PO4-P mg/L	TOT-P mg/L	EORG-P mg/L	ETOT-P mg/L	CHL A µg/L	PERIP g/m²	COLI #/100mL	NCM
1	18.009	26.57	0.00	1.00	0.00	4.62	2.21	0.00	3.21	0.00	4.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
2	17.918	26.57	0.00	1.00	0.00	3.66	2.78	0.00	3.78	0.00	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
3	17.827	26.57	0.00	1.00	0.00	3.22	3.28	0.00	4.28	0.00	4.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
4	17.736	26.57	0.00	1.00	0.00	3.02	3.70	0.00	4.70	0.00	3.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
5	17.645	26.57	0.00	1.00	0.00	2.92	4.07	0.00	5.07	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
6	17.554	26.57	0.00	1.00	0.00	2.86	4.39	0.00	5.39	0.00	3.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
7	17.463	26.57	0.00	1.00	0.00	2.83	4.66	0.00	5.66	0.00	2.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
8	17.372	26.57	0.00	1.00	0.00	2.80	4.90	0.00	5.90	0.00	2.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
9	17.281	26.57	0.00	1.00	0.00	2.78	5.10	0.00	6.10	0.00	2.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
10	17.190	26.57	0.00	1.00	0.00	2.77	5.28	0.00	6.28	0.00	2.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
11	17.099	26.57	0.00	1.00	0.00	2.76	5.43	0.00	6.43	0.00	2.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
12	17.008	26.57	0.00	1.00	0.00	2.74	5.56	0.00	6.56	0.00	2.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
13	16.917	26.57	0.00	1.00	0.00	2.73	5.67	0.00	6.67	0.00	2.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
14	16.826	26.57	0.00	1.00	0.00	2.73	5.77	0.00	6.77	0.00	2.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
15	16.735	26.57	0.00	1.00	0.00	2.72	5.85	0.00	6.85	0.00	1.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
16	16.644	26.57	0.00	1.00	0.00	2.71	5.93	0.00	6.93	0.00	1.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
17	16.553	26.57	0.00	1.00	0.00	2.71	5.99	0.00	6.99	0.00	1.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
18	16.462	26.57	0.00	1.00	0.00	2.70	6.04	0.00	7.04	0.00	1.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
19	16.371	26.57	0.00	1.00	0.00	2.70	6.09	0.00	7.09	0.00	1.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
20	16.280	26.57	0.00	1.00	0.00	2.69	6.13	0.00	7.13	0.00	1.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
21	16.189	26.57	0.00	1.00	0.00	2.69	6.16	0.00	7.16	0.00	1.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
22	16.098	26.57	0.00	1.00	0.00	2.69	6.19	0.00	7.19	0.00	1.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
23	16.007	26.57	0.00	1.00	0.00	2.69	6.22	0.00	7.22	0.00	1.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
24	15.916	26.57	0.00	1.00	0.00	2.68	6.24	0.00	7.24	0.00	1.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
25	15.825	26.57	0.00	1.00	0.00	2.68	6.26	0.00	7.26	0.00	1.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
26	15.734	26.57	0.00	1.00	0.00	2.68	6.28	0.00	7.28	0.00	1.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
27	15.643	26.57	0.00	1.00	0.00	2.68	6.29	0.00	7.29	0.00	1.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
28	15.552	26.57	0.00	1.00	0.00	2.68	6.30	0.00	7.30	0.00	1.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
29	15.461	26.57	0.00	1.00	0.00	2.68	6.31	0.00	7.31	0.00	1.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
30	15.370	26.57	0.00	1.00	0.00	2.68	6.32	0.00	7.32	0.00	1.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
31	15.279	26.57	0.00	1.00	0.00	2.68	6.33	0.00	7.33	0.00	1.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
32	15.188	26.57	0.00	1.00	0.00	2.68	6.34	0.00	7.34	0.00	1.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
33	15.097	26.57	0.00	1.00	0.00	2.68	6.34	0.00	7.34	0.00	1.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
34	15.006	26.57	0.00	1.00	0.00	2.67	6.35	0.00	7.35	0.00	1.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
35	14.915	26.57	0.00	1.00	0.00	2.67	6.35	0.00	7.35	0.00	1.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
36	14.824	26.57	0.00	1.00	0.00	2.67	6.36	0.00	7.36	0.00	1.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
37	14.733	26.57	0.00	1.00	0.00	2.67	6.36	0.00	7.36	0.00	1.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
38	14.642	26.57	0.00	1.00	0.00	2.67	6.36	0.00	7.36	0.00	1.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
39	14.551	26.57	0.00	1.00	0.00	2.67	6.37	0.00	7.37	0.00	1.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
40	14.460	26.57	0.00	1.00	0.00	2.67	6.37	0.00	7.37	0.00	1.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
41	14.369	26.57	0.00	1.00	0.00	2.67	6.37	0.00	7.37	0.00	1.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
42	14.278	26.57	0.00	1.00	0.00	2.67	6.37	0.00	7.37	0.00	1.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
43	14.187	26.57	0.00	1.00	0.00	2.67	6.37	0.00	7.37	0.00	1.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
44	14.096	26.57	0.00	1.00	0.00	2.67	6.37	0.00	7.37	0.00	1.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
45	14.005	26.57	0.00	1.00	0.00	2.67	6.38	0.00	7.38	0.00	1.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
46	13.914	26.57	0.00	1.00	0.00	2.67	6.38	0.00	7.38	0.00	1.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

47	13.823	26.57	0.00	1.00	0.00	2.67	6.38	0.00	7.38	0.00	1.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
48	13.732	26.57	0.00	1.00	0.00	2.67	6.37	0.00	7.37	0.00	1.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
49	13.641	26.57	0.00	1.00	0.00	2.67	6.34	0.00	7.34	0.00	1.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
50	13.550	26.57	0.00	1.00	0.00	2.68	6.13	0.00	7.13	0.00	1.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

** PHYTOPLANKTON AND PERIPHYTON DATA **

ELEM NO.	ENDING DIST	BANK SHADE frac	SECCHI DEPTH m	PHYT N PREF	PHYT LIT LIM	PHYT N LIM	PHYT P LIM	PHYT N&P LIM	PHYT TOT LIM	PHYT GROW 1/da	PHYT RESP 1/da	PHYT DEATH 1/da	PHYT SETT 1/da	PHYT P/R RATIO	PHYTO µg/L	PERI N PREF	PERI LIT LIM	PERI N LIM	PERI P LIM	PERI N&P LIM	PERI SPC LIM	PERI TOT LIM	PERI GROW 1/da	PERI RESP 1/da	PERI DEATH 1/da	PERI P/R RATIO	PERIP g/m²
1	18.009	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
2	17.918	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
3	17.827	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
4	17.736	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
5	17.645	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
6	17.554	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
7	17.463	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
8	17.372	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
9	17.281	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
10	17.190	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
11	17.099	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
12	17.008	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
13	16.917	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
14	16.826	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
15	16.735	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
16	16.644	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
17	16.553	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
18	16.462	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
19	16.371	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
20	16.280	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
21	16.189	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
22	16.098	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
23	16.007	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
24	15.916	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
25	15.825	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
26	15.734	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
27	15.643	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
28	15.552	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
29	15.461	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
30	15.370	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
31	15.279	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
32	15.188	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
33	15.097	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
34	15.006	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
35	14.915	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
36	14.824	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
37	14.733	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
38	14.642	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
39	14.551	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
40	14.460	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
41	14.369	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
42	14.278	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
43	14.187	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
44	14.096	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
45	14.005	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
46	13.914	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
47	13.823	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
48	13.732	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0

49	13.641	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
50	13.550	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
20 DEG C RATE										0.000	0.000	0.000	0.000										0.000	0.000	0.000		

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

FINAL REPORT BAYOU MARINGOUIN BAYOU MARINGOUIN STREAM MODEL
REACH NO. 3 UNNAMED TRIB TO ABOVE WEIR BAYOU MARINGOUIN SUMMER PROJECTION

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

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	PO4-P mg/L	CHL A µg/L	COLI #/100mL	NCM
71	UPR RCH	0.00283	26.57	0.00	1.00	0.00	2.68	6.13	0.00	7.13	0.00	1.67	0.00	0.00	0.00	10.00	0.00	0.00
71	TRIB	0.00283	26.57	0.00	1.00	0.00	2.41	5.00	0.00	6.00	0.00	1.57	0.00	0.00	0.00	10.00	0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	CUM 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
71	13.55	13.45	0.00566	0.0	0.00130	0.91	31.06	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
72	13.45	13.35	0.00566	0.0	0.00130	0.91	31.97	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
73	13.35	13.24	0.00566	0.0	0.00130	0.91	32.88	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
74	13.24	13.14	0.00566	0.0	0.00130	0.91	33.79	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
75	13.14	13.04	0.00566	0.0	0.00130	0.91	34.71	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
76	13.04	12.94	0.00566	0.0	0.00130	0.91	35.62	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
77	12.94	12.84	0.00566	0.0	0.00130	0.91	36.53	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
78	12.84	12.73	0.00566	0.0	0.00130	0.91	37.44	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
79	12.73	12.63	0.00566	0.0	0.00130	0.91	38.35	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
80	12.63	12.53	0.00566	0.0	0.00130	0.91	39.26	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
81	12.53	12.43	0.00566	0.0	0.00130	0.91	40.17	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
82	12.43	12.33	0.00566	0.0	0.00130	0.91	41.09	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
83	12.33	12.22	0.00566	0.0	0.00130	0.91	42.00	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
84	12.22	12.12	0.00566	0.0	0.00130	0.91	42.91	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
85	12.12	12.02	0.00566	0.0	0.00130	0.91	43.82	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
86	12.02	11.92	0.00566	0.0	0.00130	0.91	44.73	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
87	11.92	11.82	0.00566	0.0	0.00130	0.91	45.64	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
88	11.82	11.71	0.00566	0.0	0.00130	0.91	46.56	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
89	11.71	11.61	0.00566	0.0	0.00130	0.91	47.47	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
90	11.61	11.51	0.00566	0.0	0.00130	0.91	48.38	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
91	11.51	11.41	0.00566	0.0	0.00130	0.91	49.29	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
92	11.41	11.31	0.00566	0.0	0.00130	0.91	50.20	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
93	11.31	11.20	0.00566	0.0	0.00130	0.91	51.11	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
94	11.20	11.10	0.00566	0.0	0.00130	0.91	52.02	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
95	11.10	11.00	0.00566	0.0	0.00130	0.91	52.94	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.001
TOT						22.79				11143.46	37306.50					
AVG					0.0013			0.30	14.63			4.37				

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

ELEM ENDING SAT REAER BOD1 BOD1 ABOD1 BOD1 BOD2 BOD2 ABOD2 BKGD FULL CORR ORG-N ORG-N NH3-N NH3-N DENIT ORG-P ORG-P PO4 PHYTO PERIP COLI NCM NCM

NO.	DIST	D.O. mg/L	RATE 1/da	DECAY 1/da	SETT 1/da	DECAY 1/da	HYDR 1/da	DECAY 1/da	SETT 1/da	DECAY 1/da	SOD *	SOD *	SOD *	HYDR 1/da	SETT 1/da	DECAY 1/da	SRCE *	RATE 1/da	HYDR 1/da	SETT 1/da	SRCE *	PROD **	PROD **	DECAY 1/da	DECAY 1/da	SETT 1/da
71	13.448	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	4.04	4.04	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
72	13.346	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	4.02	4.02	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73	13.244	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	4.01	4.01	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	13.142	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	4.00	4.00	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	13.040	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	3.99	3.99	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
76	12.938	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	3.99	3.99	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
77	12.836	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	3.98	3.98	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
78	12.734	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	3.98	3.98	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
79	12.632	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	3.98	3.98	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	12.530	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	3.98	3.98	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
81	12.428	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	3.97	3.97	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	12.326	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	3.97	3.97	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
83	12.224	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	3.97	3.97	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	12.122	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	3.97	3.97	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	12.020	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	3.97	3.97	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
86	11.918	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	3.97	3.97	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87	11.816	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	3.97	3.97	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88	11.714	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	3.97	3.97	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
89	11.612	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	3.97	3.97	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	11.510	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	3.97	3.97	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
91	11.408	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	3.97	3.97	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92	11.306	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	3.97	3.97	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
93	11.204	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	3.97	3.97	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
94	11.102	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	3.97	3.97	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95	11.000	8.03	2.65	0.09	0.20	0.00	0.00	0.00	0.00	0.00	3.73	3.98	3.98	0.12	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			2.34	0.07	0.01	0.00	0.00	0.00	0.00	0.00	2.47			0.10	0.01	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/d ** mg/L/day

*** WATER QUALITY CONSTITUENT VALUES ***

ELEM NO.	ENDING DIST	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	TOT-N mg/L	EORG-N mg/L	ETOT-N mg/L	ORG-P mg/L	PO4-P mg/L	TOT-P mg/L	EORG-P mg/L	ETOT-P mg/L	CHL A µg/L	PERIP g/m²	COLI #/100mL	NCM
71	13.448	26.57	0.00	1.00	0.00	2.62	5.24	0.00	6.24	0.00	1.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
72	13.346	26.57	0.00	1.00	0.00	2.67	5.00	0.00	6.00	0.00	1.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
73	13.244	26.57	0.00	1.00	0.00	2.70	4.81	0.00	5.81	0.00	1.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
74	13.142	26.57	0.00	1.00	0.00	2.72	4.65	0.00	5.65	0.00	1.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
75	13.040	26.57	0.00	1.00	0.00	2.73	4.53	0.00	5.53	0.00	2.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
76	12.938	26.57	0.00	1.00	0.00	2.74	4.44	0.00	5.44	0.00	2.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
77	12.836	26.57	0.00	1.00	0.00	2.75	4.36	0.00	5.36	0.00	2.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
78	12.734	26.57	0.00	1.00	0.00	2.76	4.30	0.00	5.30	0.00	2.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
79	12.632	26.57	0.00	1.00	0.00	2.76	4.25	0.00	5.25	0.00	2.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
80	12.530	26.57	0.00	1.00	0.00	2.77	4.21	0.00	5.21	0.00	2.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
81	12.428	26.57	0.00	1.00	0.00	2.77	4.17	0.00	5.17	0.00	2.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
82	12.326	26.57	0.00	1.00	0.00	2.77	4.15	0.00	5.15	0.00	2.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
83	12.224	26.57	0.00	1.00	0.00	2.77	4.13	0.00	5.13	0.00	2.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
84	12.122	26.57	0.00	1.00	0.00	2.78	4.11	0.00	5.11	0.00	2.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
85	12.020	26.57	0.00	1.00	0.00	2.78	4.10	0.00	5.10	0.00	2.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
86	11.918	26.57	0.00	1.00	0.00	2.78	4.09	0.00	5.09	0.00	2.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
87	11.816	26.57	0.00	1.00	0.00	2.78	4.08	0.00	5.08	0.00	2.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
88	11.714	26.57	0.00	1.00	0.00	2.78	4.08	0.00	5.08	0.00	2.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
89	11.612	26.57	0.00	1.00	0.00	2.78	4.07	0.00	5.07	0.00	2.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
90	11.510	26.57	0.00	1.00	0.00	2.78	4.07	0.00	5.07	0.00	2.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
91	11.408	26.57	0.00	1.00	0.00	2.78	4.06	0.00	5.06	0.00	2.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

92	11.306	26.57	0.00	1.00	0.00	2.78	4.06	0.00	5.06	0.00	2.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
93	11.204	26.57	0.00	1.00	0.00	2.78	4.06	0.00	5.06	0.00	2.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
94	11.102	26.57	0.00	1.00	0.00	2.78	4.08	0.00	5.08	0.00	2.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
95	11.000	26.57	0.00	1.00	0.00	2.79	4.22	0.00	5.22	0.00	2.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

** PHYTOPLANKTON AND PERIPHYTON DATA **

ELEM NO.	ENDING DIST	BANK SHADE frac	SECCHI DEPTH m	PHYT N PREF	PHYT LIT LIM	PHYT N LIM	PHYT P LIM	PHYT N&P LIM	PHYT TOT LIM	PHYT GROW 1/da	PHYT RESP 1/da	PHYT DEATH 1/da	PHYT SETT 1/da	PHYT P/R RATIO	PHYTO µg/L	PERI N PREF	PERI LIT LIM	PERI N LIM	PERI P LIM	PERI N&P LIM	PERI SPC LIM	PERI TOT LIM	PERI GROW 1/da	PERI RESP 1/da	PERI DEATH 1/da	PERI P/R RATIO	PERIP g/m²
71	13.448	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
72	13.346	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
73	13.244	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
74	13.142	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
75	13.040	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
76	12.938	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
77	12.836	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
78	12.734	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
79	12.632	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
80	12.530	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
81	12.428	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
82	12.326	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
83	12.224	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
84	12.122	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
85	12.020	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
86	11.918	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
87	11.816	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
88	11.714	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
89	11.612	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
90	11.510	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
91	11.408	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
92	11.306	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
93	11.204	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
94	11.102	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
95	11.000	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
20 DEG C RATE										0.000	0.000	0.000	0.000										0.000	0.000	0.000		

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

FINAL REPORT BAYOU MARINGOUIN
REACH NO. 4 ABOVE WEIR TO WEIR

BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN SUMMER PROJECTION

** REACH INPUTS **

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	PO4-P mg/L	CHL A µg/L	COLI #/100mL	NCM
96	UPR RCH	0.00566	26.57	0.00	1.00	0.00	2.79	4.22	0.00	5.22	0.00	2.12	0.00	0.00	0.00	10.00	0.00	0.00

** HYDRAULIC PARAMETER VALUES **

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	CUM 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	11.00	10.91	0.00566	0.0	0.00074	1.47	54.41	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.001
97	10.91	10.81	0.00566	0.0	0.00074	1.47	55.88	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.001
98	10.81	10.72	0.00566	0.0	0.00074	1.47	57.35	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.001
99	10.72	10.62	0.00566	0.0	0.00074	1.47	58.82	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.001
100	10.62	10.53	0.00566	0.0	0.00074	1.47	60.30	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.001
101	10.53	10.44	0.00566	0.0	0.00074	1.47	61.77	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.001
102	10.44	10.34	0.00566	0.0	0.00074	1.47	63.24	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.001
103	10.34	10.25	0.00566	0.0	0.00074	1.47	64.71	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.001
104	10.25	10.15	0.00566	0.0	0.00074	1.47	66.19	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.001
105	10.15	10.06	0.00566	0.0	0.00074	1.47	67.66	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.001
106	10.06	9.97	0.00566	0.0	0.00074	1.47	69.13	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.001
107	9.97	9.87	0.00566	0.0	0.00074	1.47	70.60	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.001
108	9.87	9.78	0.00566	0.0	0.00074	1.47	72.07	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.001
109	9.78	9.68	0.00566	0.0	0.00074	1.47	73.55	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.001
110	9.68	9.59	0.00566	0.0	0.00074	1.47	75.02	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.001
111	9.59	9.50	0.00566	0.0	0.00074	1.47	76.49	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.001
112	9.50	9.40	0.00566	0.0	0.00074	1.47	77.96	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.001
113	9.40	9.31	0.00566	0.0	0.00074	1.47	79.44	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.001
114	9.31	9.21	0.00566	0.0	0.00074	1.47	80.91	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.001
115	9.21	9.12	0.00566	0.0	0.00074	1.47	82.38	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.001
TOT						29.44				14398.94	21770.39					
AVG					0.0007			0.66	11.58			7.66				

** BIOLOGICAL AND PHYSICAL COEFFICIENTS **

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD1 DECAY 1/da	BOD1 SETT 1/da	ABOD1 DECAY 1/da	BOD1 HYDR 1/da	BOD2 DECAY 1/da	BOD2 SETT 1/da	ABOD2 DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORG-N HYDR 1/da	ORG-N SETT 1/da	NH3-N DECAY 1/da	NH3-N SRCE *	DENIT RATE 1/da	ORG-P HYDR 1/da	ORG-P SETT 1/da	PO4 SRCE *	PHYTO PROD **	PERIP PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
96	10.906	8.03	1.20	0.09	0.09	0.00	0.00	0.00	0.00	0.00	3.10	3.39	3.39	0.12	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97	10.812	8.03	1.20	0.09	0.09	0.00	0.00	0.00	0.00	0.00	3.10	3.42	3.42	0.12	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
98	10.718	8.03	1.20	0.09	0.09	0.00	0.00	0.00	0.00	0.00	3.10	3.44	3.44	0.12	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
99	10.624	8.03	1.20	0.09	0.09	0.00	0.00	0.00	0.00	0.00	3.10	3.46	3.46	0.12	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	10.530	8.03	1.20	0.09	0.09	0.00	0.00	0.00	0.00	0.00	3.10	3.47	3.47	0.12	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
101	10.436	8.03	1.20	0.09	0.09	0.00	0.00	0.00	0.00	0.00	3.10	3.49	3.49	0.12	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
102	10.342	8.03	1.20	0.09	0.09	0.00	0.00	0.00	0.00	0.00	3.10	3.50	3.50	0.12	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
103	10.248	8.03	1.20	0.09	0.09	0.00	0.00	0.00	0.00	0.00	3.10	3.50	3.50	0.12	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
104	10.154	8.03	1.20	0.09	0.09	0.00	0.00	0.00	0.00	0.00	3.10	3.51	3.51	0.12	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105	10.060	8.03	1.20	0.09	0.09	0.00	0.00	0.00	0.00	0.00	3.10	3.52	3.52	0.12	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
106	9.966	8.03	1.20	0.09	0.09	0.00	0.00	0.00	0.00	0.00	3.10	3.52	3.52	0.12	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
107	9.872	8.03	1.20	0.09	0.09	0.00	0.00	0.00	0.00	0.00	3.10	3.52	3.52	0.12	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
108	9.778	8.03	1.20	0.09	0.09	0.00	0.00	0.00	0.00	0.00	3.10	3.52	3.52	0.12	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
109	9.684	8.03	1.20	0.09	0.09	0.00	0.00	0.00	0.00	0.00	3.10	3.53	3.53	0.12	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	9.590	8.03	1.20	0.09	0.09	0.00	0.00	0.00	0.00	0.00	3.10	3.53	3.53	0.12	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
111	9.496	8.03	1.20	0.09	0.09	0.00	0.00	0.00	0.00	0.00	3.10	3.53	3.53	0.12	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112	9.402	8.03	1.20	0.09	0.09	0.00	0.00	0.00	0.00	0.00	3.10	3.53	3.53	0.12	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
113	9.308	8.03	1.20	0.09	0.09	0.00	0.00	0.00	0.00	0.00	3.10	3.53	3.53	0.12	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
114	9.214	8.03	1.20	0.09	0.09	0.00	0.00	0.00	0.00	0.00	3.10	3.53	3.53	0.12	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115	9.120	8.03	1.20	0.09	0.09	0.00	0.00	0.00	0.00	0.00	3.10	3.53	3.53	0.12	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			1.06	0.07	0.00	0.00	0.00	0.00	0.00	0.00	2.05			0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00

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

** WATER QUALITY CONSTITUENT VALUES **

ELEM NO.	ENDING DIST	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	TOT-N mg/L	EORG-N mg/L	ETOT-N mg/L	ORG-P mg/L	PO4-P mg/L	TOT-P mg/L	EORG-P mg/L	ETOT-P mg/L	CHL A µg/L	PERIP g/m²	COLI #/100mL	NCM
96	10.906	26.57	0.00	1.00	0.00	3.02	4.90	0.00	5.90	0.00	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
97	10.812	26.57	0.00	1.00	0.00	3.08	5.40	0.00	6.40	0.00	1.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
98	10.718	26.57	0.00	1.00	0.00	3.07	5.80	0.00	6.80	0.00	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
99	10.624	26.57	0.00	1.00	0.00	3.05	6.12	0.00	7.12	0.00	1.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
100	10.530	26.57	0.00	1.00	0.00	3.02	6.38	0.00	7.38	0.00	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
101	10.436	26.57	0.00	1.00	0.00	3.00	6.58	0.00	7.58	0.00	1.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
102	10.342	26.57	0.00	1.00	0.00	2.98	6.75	0.00	7.75	0.00	1.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
103	10.248	26.57	0.00	1.00	0.00	2.96	6.88	0.00	7.88	0.00	1.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
104	10.154	26.57	0.00	1.00	0.00	2.95	6.99	0.00	7.99	0.00	1.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
105	10.060	26.57	0.00	1.00	0.00	2.94	7.07	0.00	8.07	0.00	1.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
106	9.966	26.57	0.00	1.00	0.00	2.93	7.14	0.00	8.14	0.00	1.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
107	9.872	26.57	0.00	1.00	0.00	2.92	7.19	0.00	8.19	0.00	1.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
108	9.778	26.57	0.00	1.00	0.00	2.91	7.24	0.00	8.24	0.00	1.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
109	9.684	26.57	0.00	1.00	0.00	2.91	7.27	0.00	8.27	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
110	9.590	26.57	0.00	1.00	0.00	2.90	7.30	0.00	8.30	0.00	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
111	9.496	26.57	0.00	1.00	0.00	2.90	7.32	0.00	8.32	0.00	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
112	9.402	26.57	0.00	1.00	0.00	2.90	7.34	0.00	8.34	0.00	0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
113	9.308	26.57	0.00	1.00	0.00	2.89	7.35	0.00	8.35	0.00	0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
114	9.214	26.57	0.00	1.00	0.00	2.89	7.37	0.00	8.37	0.00	0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
115	9.120	26.57	0.00	1.00	0.00	2.89	7.37	0.00	8.37	0.00	0.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

** PHYTOPLANKTON AND PERIPHYTON DATA **

ELEM NO.	ENDING DIST	BANK SHADE frac	SECCHI DEPTH m	PHYT N PREF	PHYT LIT LIM	PHYT N LIM	PHYT P LIM	PHYT N&P LIM	PHYT TOT LIM	PHYT GROW 1/da	PHYT RESP 1/da	PHYT DEATH 1/da	PHYT SETT 1/da	PHYT P/R RATIO	PHYTO µg/L	PERI N PREF	PERI LIT LIM	PERI N LIM	PERI P LIM	PERI N&P LIM	PERI SPC LIM	PERI TOT LIM	PERI GROW 1/da	PERI RESP 1/da	PERI DEATH 1/da	PERI P/R RATIO	PERIP g/m²
96	10.906	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
97	10.812	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
98	10.718	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
99	10.624	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
100	10.530	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
101	10.436	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
102	10.342	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
103	10.248	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
104	10.154	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
105	10.060	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
106	9.966	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
107	9.872	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
108	9.778	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
109	9.684	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
110	9.590	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
111	9.496	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
112	9.402	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
113	9.308	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
114	9.214	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
115	9.120	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
20 DEG C RATE										0.000	0.000	0.000	0.000										0.000	0.000	0.000		

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

FINAL REPORT BAYOU MARINGOUIN
REACH NO. 5 BELOW WEIR EFFECT

BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN SUMMER PROJECTION

** REACH INPUTS **

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	PO4-P mg/L	CHL A µg/L	COLI #/100mL	NCM
116	UPR RCH	0.00566	26.57	0.00	1.00	0.00	2.89	7.37	0.00	8.37	0.00	0.98	0.00	0.00	0.00	10.00	0.00	0.00

116 DAM MUNSEN ROAD WEIR ADDS 2.27 MG/L DISSOLVED OXYGEN GIVING 5.16 MG/L D.O. FOR THE UPR RCH INPUT

** HYDRAULIC PARAMETER VALUES **

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	CUM 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
116	9.12	9.11	0.00566	0.0	0.00610	0.02	82.40	0.26	3.63	9.29	36.27	0.93	0.00	0.000	0.000	0.006
TOT						0.02				9.29	36.27					
AVG					0.0061			0.26	3.63			0.93				

*** BIOLOGICAL AND PHYSICAL COEFFICIENTS ***

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD1 DECAY 1/da	BOD1 SETT 1/da	ABOD1 DECAY 1/da	BOD1 HYDR 1/da	BOD2 DECAY 1/da	BOD2 SETT 1/da	ABOD2 DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORG-N HYDR 1/da	ORG-N SETT 1/da	NH3-N DECAY 1/da	NH3-N SRCE *	DENIT RATE 1/da	ORG-P HYDR 1/da	ORG-P SETT 1/da	PO4 SRCE *	PHYTO PROD **	PERIP PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
116	9.110	8.03	3.10	0.09	0.23	0.00	0.00	0.00	0.00	0.00	3.02	3.41	3.41	0.14	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			2.73	0.07	0.20	0.00	0.00	0.00	0.00	0.00	2.00			0.10	0.20	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00

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

*** WATER QUALITY CONSTITUENT VALUES ***

ELEM NO.	ENDING DIST	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	TOT-N mg/L	EORG-N mg/L	ETOT-N mg/L	ORG-P mg/L	PO4-P mg/L	TOT-P mg/L	EORG-P mg/L	ETOT-P mg/L	CHL A µg/L	PERIP g/m^2	COLI #/100mL	NCM
116	9.110	26.57	0.00	1.00	0.00	4.38	6.64	0.00	7.64	0.00	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

*** PHYTOPLANKTON AND PERIPHYTON DATA ***

ELEM NO.	ENDING DIST	BANK SHADE frac	SECCHI DEPTH m	PHYT N PREF	PHYT LIT LIM	PHYT N LIM	PHYT P LIM	PHYT N&P LIM	PHYT TOT LIM	PHYT GROW 1/da	PHYT RESP 1/da	PHYT DEATH 1/da	PHYT SETT 1/da	PHYT P/R RATIO	PHYTO µg/L	PERI N PREF	PERI LIT LIM	PERI N LIM	PERI P LIM	PERI N&P LIM	PERI SPC LIM	PERI TOT LIM	PERI GROW 1/da	PERI RESP 1/da	PERI DEATH 1/da	PERI P/R RATIO	PERIP g/m^2
116	9.110	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
20 DEG C RATE										0.000	0.000	0.000	0.000										0.000	0.000	0.000		

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

FINAL REPORT BAYOU MARINGOUIN BAYOU MARINGOUIN STREAM MODEL
REACH NO. 6 BELOW WEIR TO OPEN AREA BAYOU MARINGOUIN SUMMER PROJECTION

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

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	PO4-P mg/L	CHL A µg/L	COLI #/100mL	NCM
117	UPR RCH	0.00566	26.57	0.00	1.00	0.00	4.38	6.64	0.00	7.64	0.00	0.87	0.00	0.00	0.00	10.00	0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	CUM 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
117	9.11	9.01	0.00566	0.0	0.00610	0.19	82.59	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.006
118	9.01	8.91	0.00566	0.0	0.00610	0.19	82.78	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.006
119	8.91	8.81	0.00566	0.0	0.00610	0.19	82.97	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.006
120	8.81	8.71	0.00566	0.0	0.00610	0.19	83.17	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.006
121	8.71	8.61	0.00566	0.0	0.00610	0.19	83.36	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.006
122	8.61	8.50	0.00566	0.0	0.00610	0.19	83.55	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.006
123	8.50	8.40	0.00566	0.0	0.00610	0.19	83.74	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.006
124	8.40	8.30	0.00566	0.0	0.00610	0.19	83.93	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.006
125	8.30	8.20	0.00566	0.0	0.00610	0.19	84.12	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.006
126	8.20	8.10	0.00566	0.0	0.00610	0.19	84.31	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.006
127	8.10	8.00	0.00566	0.0	0.00610	0.19	84.51	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.006
TOT						2.11				1030.56	4025.61					
AVG					0.0061			0.26	3.63			0.93				

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD1 DECAY 1/da	BOD1 SETT 1/da	ABOD1 DECAY 1/da	BOD1 HYDR 1/da	BOD2 DECAY 1/da	BOD2 SETT 1/da	ABOD2 DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORG-N HYDR 1/da	ORG-N SETT 1/da	NH3-N DECAY 1/da	NH3-N SRCE *	DENIT RATE 1/da	ORG-P HYDR 1/da	ORG-P SETT 1/da	PO4 SRCE *	PHYTO PROD **	PERIP PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
117	9.009	8.03	3.10	0.09	0.23	0.00	0.00	0.00	0.00	0.00	3.33	3.70	3.70	0.14	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
118	8.908	8.03	3.10	0.09	0.23	0.00	0.00	0.00	0.00	0.00	3.33	3.68	3.68	0.13	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
119	8.807	8.03	3.10	0.09	0.23	0.00	0.00	0.00	0.00	0.00	3.33	3.66	3.66	0.13	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120	8.706	8.03	3.10	0.09	0.23	0.00	0.00	0.00	0.00	0.00	3.33	3.64	3.64	0.13	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
121	8.606	8.03	3.10	0.09	0.23	0.00	0.00	0.00	0.00	0.00	3.33	3.63	3.63	0.13	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
122	8.505	8.03	3.10	0.09	0.23	0.00	0.00	0.00	0.00	0.00	3.33	3.61	3.61	0.13	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
123	8.404	8.03	3.10	0.09	0.23	0.00	0.00	0.00	0.00	0.00	3.33	3.59	3.59	0.13	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
124	8.303	8.03	3.10	0.09	0.23	0.00	0.00	0.00	0.00	0.00	3.33	3.58	3.58	0.13	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125	8.202	8.03	3.10	0.09	0.23	0.00	0.00	0.00	0.00	0.00	3.33	3.56	3.56	0.13	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
126	8.101	8.03	3.10	0.09	0.23	0.00	0.00	0.00	0.00	0.00	3.33	3.55	3.55	0.13	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127	8.000	8.03	3.10	0.09	0.23	0.00	0.00	0.00	0.00	0.00	3.33	3.53	3.53	0.13	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			2.73	0.07	0.02	0.00	0.00	0.00	0.00	0.00	2.20			0.10	0.02	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00

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

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

ELEM NO.	ENDING DIST	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	TOT-N mg/L	EORG-N mg/L	ETOT-N mg/L	ORG-P mg/L	PO4-P mg/L	TOT-P mg/L	EORG-P mg/L	ETOT-P mg/L	CHL A µg/L	PERIP g/m^2	COLI #/100mL	NCM
117	9.009	26.57	0.00	1.00	0.00	4.10	6.38	0.00	7.38	0.00	0.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
118	8.908	26.57	0.00	1.00	0.00	3.84	6.03	0.00	7.03	0.00	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

119	8.807	26.57	0.00	1.00	0.00	3.67	5.71	0.00	6.71	0.00	0.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
120	8.706	26.57	0.00	1.00	0.00	3.55	5.40	0.00	6.40	0.00	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
121	8.606	26.57	0.00	1.00	0.00	3.48	5.10	0.00	6.10	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
122	8.505	26.57	0.00	1.00	0.00	3.43	4.82	0.00	5.82	0.00	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
123	8.404	26.57	0.00	1.00	0.00	3.41	4.55	0.00	5.55	0.00	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
124	8.303	26.57	0.00	1.00	0.00	3.40	4.29	0.00	5.29	0.00	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
125	8.202	26.57	0.00	1.00	0.00	3.40	4.03	0.00	5.03	0.00	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
126	8.101	26.57	0.00	1.00	0.00	3.39	3.75	0.00	4.75	0.00	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
127	8.000	26.57	0.00	1.00	0.00	3.38	3.46	0.00	4.46	0.00	0.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

******************** PHYTOPLANKTON AND PERIPHYTON DATA ********************

ELEM NO.	ENDING DIST	BANK SHADE frac	SECCHI DEPTH m	PHYT N PREF	PHYT LIT LIM	PHYT N LIM	PHYT P LIM	PHYT N&P LIM	PHYT TOT LIM	PHYT GROW 1/da	PHYT RESP 1/da	PHYT DEATH 1/da	PHYT SETT 1/da	PHYT P/R RATIO	PHYTO µg/L	PERI N PREF	PERI LIT LIM	PERI N LIM	PERI P LIM	PERI N&P LIM	PERI SPC LIM	PERI TOT LIM	PERI GROW 1/da	PERI RESP 1/da	PERI DEATH 1/da	PERI P/R RATIO	PERIP g/m²
117	9.009	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
118	8.908	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
119	8.807	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
120	8.706	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
121	8.606	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
122	8.505	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
123	8.404	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
124	8.303	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
125	8.202	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
126	8.101	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
127	8.000	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
20 DEG C RATE										0.000	0.000	0.000	0.000										0.000	0.000	0.000		

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

FINAL REPORT BAYOU MARINGOUIN BAYOU MARINGOUIN STREAM MODEL
REACH NO. 7 OPEN AREA TO DISTRIBUTARY BAYOU MARINGOUIN SUMMER PROJECTION

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

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	PO4-P mg/L	CHL A µg/L	COLI #/100mL	NCM
128	UPR RCH	0.00566	26.57	0.00	1.00	0.00	3.38	3.46	0.00	4.46	0.00	0.77	0.00	0.00	0.00	10.00	0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	CUM 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	8.00	7.90	0.00566	0.0	0.00187	0.62	85.13	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
129	7.90	7.80	0.00566	0.0	0.00187	0.62	85.74	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
130	7.80	7.70	0.00566	0.0	0.00187	0.62	86.36	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
131	7.70	7.60	0.00566	0.0	0.00187	0.62	86.98	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
132	7.60	7.50	0.00566	0.0	0.00187	0.62	87.60	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
133	7.50	7.40	0.00566	0.0	0.00187	0.62	88.22	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
134	7.40	7.30	0.00566	0.0	0.00187	0.62	88.84	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
135	7.30	7.20	0.00566	0.0	0.00187	0.62	89.46	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002

136	7.20	7.10	0.00566	0.0	0.00187	0.62	90.08	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
137	7.10	7.00	0.00566	0.0	0.00187	0.62	90.70	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
138	7.00	6.90	0.00566	0.0	0.00187	0.62	91.32	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
139	6.90	6.80	0.00566	0.0	0.00187	0.62	91.94	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
140	6.80	6.70	0.00566	0.0	0.00187	0.62	92.56	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
141	6.70	6.60	0.00566	0.0	0.00187	0.62	93.18	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
142	6.60	6.50	0.00566	0.0	0.00187	0.62	93.80	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
143	6.50	6.40	0.00566	0.0	0.00187	0.62	94.41	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
144	6.40	6.30	0.00566	0.0	0.00187	0.62	95.03	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
145	6.30	6.20	0.00566	0.0	0.00187	0.62	95.65	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
146	6.20	6.10	0.00566	0.0	0.00187	0.62	96.27	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
147	6.10	6.00	0.00566	0.0	0.00187	0.62	96.89	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
148	6.00	5.90	0.00566	0.0	0.00187	0.62	97.51	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
149	5.90	5.80	0.00566	0.0	0.00187	0.62	98.13	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
150	5.80	5.70	0.00566	0.0	0.00187	0.62	98.75	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
151	5.70	5.60	0.00566	0.0	0.00187	0.62	99.37	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
152	5.60	5.50	0.00566	0.0	0.00187	0.62	99.99	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
153	5.50	5.40	0.00566	0.0	0.00187	0.62	100.61	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
154	5.40	5.30	0.00566	0.0	0.00187	0.62	101.23	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.002
TOT						16.72				8176.93	16459.20					
AVG					0.0019			0.50	6.10			3.03				

*** BIOLOGICAL AND PHYSICAL COEFFICIENTS ***

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD1 DECAY 1/da	BOD1 SETT 1/da	ABOD1 DECAY 1/da	BOD1 HYDR 1/da	BOD2 DECAY 1/da	BOD2 SETT 1/da	ABOD2 DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORG-N HYDR 1/da	ORG-N SETT 1/da	NH3-N DECAY 1/da	NH3-N SRCE *	DENIT RATE 1/da	ORG-P HYDR 1/da	ORG-P SETT 1/da	PO4 SRCE *	PHYTO PROD **	PERIP PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
128	7.900	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.52	3.52	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
129	7.800	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.51	3.51	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	7.700	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.51	3.51	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
131	7.600	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.50	3.50	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
132	7.500	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.50	3.50	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
133	7.400	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.49	3.49	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
134	7.300	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.49	3.49	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135	7.200	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.49	3.49	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
136	7.100	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.48	3.48	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
137	7.000	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.48	3.48	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
138	6.900	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.48	3.48	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
139	6.800	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.48	3.48	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	6.700	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.48	3.48	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
141	6.600	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.48	3.48	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
142	6.500	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.48	3.48	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
143	6.400	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.48	3.48	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
144	6.300	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.48	3.48	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145	6.200	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.48	3.48	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
146	6.100	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.48	3.48	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147	6.000	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.49	3.49	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
148	5.900	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.50	3.50	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
149	5.800	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.51	3.51	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150	5.700	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.52	3.52	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
151	5.600	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.54	3.54	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
152	5.500	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.57	3.57	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
153	5.400	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.60	3.60	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
154	5.300	8.03	1.60	0.09	0.12	0.00	0.00	0.00	0.00	0.00	3.33	3.64	3.64	0.13	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			1.41	0.07	0.00	0.00	0.00	0.00	0.00	0.00	2.20			0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/d ** mg/L/day

*** WATER QUALITY CONSTITUENT VALUES ***

ELEM NO.	ENDING DIST	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	TOT-N mg/L	EORG-N mg/L	ETOT-N mg/L	ORG-P mg/L	PO4-P mg/L	TOT-P mg/L	EORG-P mg/L	ETOT-P mg/L	CHL A µg/L	PERIP g/m²	COLI #/100mL	NCM
128	7.900	26.57	0.00	1.00	0.00	3.37	3.29	0.00	4.29	0.00	0.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
129	7.800	26.57	0.00	1.00	0.00	3.36	3.19	0.00	4.19	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
130	7.700	26.57	0.00	1.00	0.00	3.36	3.09	0.00	4.09	0.00	0.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
131	7.600	26.57	0.00	1.00	0.00	3.36	3.00	0.00	4.00	0.00	1.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
132	7.500	26.57	0.00	1.00	0.00	3.36	2.93	0.00	3.93	0.00	1.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
133	7.400	26.57	0.00	1.00	0.00	3.36	2.85	0.00	3.85	0.00	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
134	7.300	26.57	0.00	1.00	0.00	3.37	2.79	0.00	3.79	0.00	1.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
135	7.200	26.57	0.00	1.00	0.00	3.37	2.73	0.00	3.73	0.00	1.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
136	7.100	26.57	0.00	1.00	0.00	3.37	2.68	0.00	3.68	0.00	1.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
137	7.000	26.57	0.00	1.00	0.00	3.38	2.64	0.00	3.64	0.00	1.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
138	6.900	26.57	0.00	1.00	0.00	3.38	2.60	0.00	3.60	0.00	1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
139	6.800	26.57	0.00	1.00	0.00	3.38	2.57	0.00	3.57	0.00	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
140	6.700	26.57	0.00	1.00	0.00	3.38	2.55	0.00	3.55	0.00	1.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
141	6.600	26.57	0.00	1.00	0.00	3.38	2.54	0.00	3.54	0.00	1.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
142	6.500	26.57	0.00	1.00	0.00	3.38	2.54	0.00	3.54	0.00	1.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
143	6.400	26.57	0.00	1.00	0.00	3.37	2.55	0.00	3.55	0.00	1.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
144	6.300	26.57	0.00	1.00	0.00	3.37	2.58	0.00	3.58	0.00	1.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
145	6.200	26.57	0.00	1.00	0.00	3.36	2.62	0.00	3.62	0.00	1.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
146	6.100	26.57	0.00	1.00	0.00	3.35	2.69	0.00	3.69	0.00	1.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
147	6.000	26.57	0.00	1.00	0.00	3.34	2.79	0.00	3.79	0.00	1.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
148	5.900	26.57	0.00	1.00	0.00	3.32	2.92	0.00	3.92	0.00	1.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
149	5.800	26.57	0.00	1.00	0.00	3.30	3.10	0.00	4.10	0.00	1.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
150	5.700	26.57	0.00	1.00	0.00	3.28	3.35	0.00	4.35	0.00	1.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
151	5.600	26.57	0.00	1.00	0.00	3.26	3.67	0.00	4.67	0.00	1.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
152	5.500	26.57	0.00	1.00	0.00	3.25	4.09	0.00	5.09	0.00	1.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
153	5.400	26.57	0.00	1.00	0.00	3.25	4.64	0.00	5.64	0.00	2.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
154	5.300	26.57	0.00	1.00	0.00	3.29	5.36	0.00	6.36	0.00	2.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

*** PHYTOPLANKTON AND PERIPHYTON DATA ***

ELEM NO.	ENDING DIST	BANK SHADE frac	SECCHI DEPTH m	PHYT N PREF	PHYT LIT LIM	PHYT N LIM	PHYT P LIM	PHYT N&P LIM	PHYT TOT LIM	PHYT GROW 1/da	PHYT RESP 1/da	PHYT DEATH 1/da	PHYT SETT 1/da	PHYT P/R RATIO	PHYTO µg/L	PERI N PREF	PERI LIT LIM	PERI N LIM	PERI P LIM	PERI N&P LIM	PERI SPC LIM	PERI TOT LIM	PERI GROW 1/da	PERI RESP 1/da	PERI DEATH 1/da	PERI P/R RATIO	PERIP g/m²
128	7.900	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
129	7.800	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
130	7.700	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
131	7.600	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
132	7.500	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
133	7.400	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
134	7.300	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
135	7.200	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
136	7.100	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
137	7.000	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
138	6.900	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
139	6.800	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
140	6.700	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
141	6.600	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
142	6.500	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
143	6.400	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
144	6.300	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0

145	6.200	0.00	Inf	0.50 0.00 0.00 0.00 0.00 0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50 0.00 0.00 0.00 0.00 0.00 0.00	0.000	0.000	0.000	0.0	0.0
146	6.100	0.00	Inf	0.50 0.00 0.00 0.00 0.00 0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50 0.00 0.00 0.00 0.00 0.00 0.00	0.000	0.000	0.000	0.0	0.0
147	6.000	0.00	Inf	0.50 0.00 0.00 0.00 0.00 0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50 0.00 0.00 0.00 0.00 0.00 0.00	0.000	0.000	0.000	0.0	0.0
148	5.900	0.00	Inf	0.50 0.00 0.00 0.00 0.00 0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50 0.00 0.00 0.00 0.00 0.00 0.00	0.000	0.000	0.000	0.0	0.0
149	5.800	0.00	Inf	0.50 0.00 0.00 0.00 0.00 0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50 0.00 0.00 0.00 0.00 0.00 0.00	0.000	0.000	0.000	0.0	0.0
150	5.700	0.00	Inf	0.50 0.00 0.00 0.00 0.00 0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50 0.00 0.00 0.00 0.00 0.00 0.00	0.000	0.000	0.000	0.0	0.0
151	5.600	0.00	Inf	0.50 0.00 0.00 0.00 0.00 0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50 0.00 0.00 0.00 0.00 0.00 0.00	0.000	0.000	0.000	0.0	0.0
152	5.500	0.00	Inf	0.50 0.00 0.00 0.00 0.00 0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50 0.00 0.00 0.00 0.00 0.00 0.00	0.000	0.000	0.000	0.0	0.0
153	5.400	0.00	Inf	0.50 0.00 0.00 0.00 0.00 0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50 0.00 0.00 0.00 0.00 0.00 0.00	0.000	0.000	0.000	0.0	0.0
154	5.300	0.00	Inf	0.50 0.00 0.00 0.00 0.00 0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50 0.00 0.00 0.00 0.00 0.00 0.00	0.000	0.000	0.000	0.0	0.0
20 DEG C RATE					0.000	0.000	0.000	0.000				0.000	0.000	0.000		

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

FINAL REPORT BAYOU MARINGOUIN BAYOU MARINGOUIN STREAM MODEL
REACH NO. 8 DISTRIBUTARY TO WIDE SECTION BAYOU MARINGOUIN SUMMER PROJECTION

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

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	PO4-P mg/L	CHL A µg/L	COLI #/100mL	NCM
155	UPR RCH	0.00566	26.57	0.00	1.00	0.00	3.29	5.36	0.00	6.36	0.00	2.21	0.00	0.00	0.00	10.00	0.00	0.00
155	WSTLD	-0.00283	26.57	0.00	1.00	0.00	3.33	5.65	0.00	6.65	0.00	2.28	0.00	0.00	0.00	10.00	0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	CUM 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
155	5.30	5.20	0.00283	0.0	0.00166	0.70	101.93	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
156	5.20	5.10	0.00283	0.0	0.00166	0.70	102.62	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
157	5.10	5.00	0.00283	0.0	0.00166	0.70	103.32	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
158	5.00	4.90	0.00283	0.0	0.00166	0.70	104.02	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
159	4.90	4.80	0.00283	0.0	0.00166	0.70	104.72	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
160	4.80	4.70	0.00283	0.0	0.00166	0.70	105.42	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
161	4.70	4.60	0.00283	0.0	0.00166	0.70	106.12	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
162	4.60	4.50	0.00283	0.0	0.00166	0.70	106.82	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
163	4.50	4.40	0.00283	0.0	0.00166	0.70	107.52	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
164	4.40	4.30	0.00283	0.0	0.00166	0.70	108.22	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
165	4.30	4.20	0.00283	0.0	0.00166	0.70	108.92	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
166	4.20	4.10	0.00283	0.0	0.00166	0.70	109.61	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
167	4.10	4.00	0.00283	0.0	0.00166	0.70	110.31	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
168	4.00	3.90	0.00283	0.0	0.00166	0.70	111.01	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
169	3.90	3.80	0.00283	0.0	0.00166	0.70	111.71	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
170	3.80	3.70	0.00283	0.0	0.00166	0.70	112.41	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
171	3.70	3.60	0.00283	0.0	0.00166	0.70	113.11	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
172	3.60	3.50	0.00283	0.0	0.00166	0.70	113.81	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
173	3.50	3.40	0.00283	0.0	0.00166	0.70	114.51	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
174	3.40	3.30	0.00283	0.0	0.00166	0.70	115.21	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
175	3.30	3.20	0.00283	0.0	0.00166	0.70	115.91	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
176	3.20	3.10	0.00283	0.0	0.00166	0.70	116.60	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
177	3.10	3.00	0.00283	0.0	0.00166	0.70	117.30	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
178	3.00	2.90	0.00283	0.0	0.00166	0.70	118.00	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
179	2.90	2.80	0.00283	0.0	0.00166	0.70	118.70	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002

180	2.80	2.70	0.00283	0.0	0.00166	0.70	119.40	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
181	2.70	2.60	0.00283	0.0	0.00166	0.70	120.10	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
182	2.60	2.50	0.00283	0.0	0.00166	0.70	120.80	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
183	2.50	2.40	0.00283	0.0	0.00166	0.70	121.50	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
184	2.40	2.30	0.00283	0.0	0.00166	0.70	122.20	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
185	2.30	2.20	0.00283	0.0	0.00166	0.70	122.89	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
186	2.20	2.10	0.00283	0.0	0.00166	0.70	123.59	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
187	2.10	2.00	0.00283	0.0	0.00166	0.70	124.29	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
188	2.00	1.90	0.00283	0.0	0.00166	0.70	124.99	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
189	1.90	1.80	0.00283	0.0	0.00166	0.70	125.69	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
190	1.80	1.70	0.00283	0.0	0.00166	0.70	126.39	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
191	1.70	1.60	0.00283	0.0	0.00166	0.70	127.09	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
192	1.60	1.50	0.00283	0.0	0.00166	0.70	127.79	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
193	1.50	1.40	0.00283	0.0	0.00166	0.70	128.49	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
194	1.40	1.30	0.00283	0.0	0.00166	0.70	129.19	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
195	1.30	1.20	0.00283	0.0	0.00166	0.70	129.88	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
196	1.20	1.10	0.00283	0.0	0.00166	0.70	130.58	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
197	1.10	1.00	0.00283	0.0	0.00166	0.70	131.28	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
198	1.00	0.90	0.00283	0.0	0.00166	0.70	131.98	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.002
TOT						30.75				7519.77	30844.00					
AVG					0.0017			0.24	7.01			1.71				

** BIOLOGICAL AND PHYSICAL COEFFICIENTS **

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD1 DECAY 1/da	BOD1 SETT 1/da	ABOD1 DECAY 1/da	BOD1 HYDR 1/da	BOD2 DECAY 1/da	BOD2 SETT 1/da	ABOD2 DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORG-N HYDR 1/da	ORG-N SETT 1/da	NH3-N DECAY 1/da	NH3-N SRCE *	DENIT RATE 1/da	ORG-P HYDR 1/da	ORG-P SETT 1/da	PO4 SRCE *	PHYTO PROD **	PERIP PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
155	5.200	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.39	3.39	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
156	5.100	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.40	3.40	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157	5.000	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.41	3.41	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
158	4.900	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.42	3.42	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
159	4.800	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.43	3.43	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160	4.700	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.44	3.44	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
161	4.600	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.44	3.44	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
162	4.500	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.45	3.45	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
163	4.400	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.46	3.46	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
164	4.300	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.46	3.46	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165	4.200	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.47	3.47	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
166	4.100	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.47	3.47	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167	4.000	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.48	3.48	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
168	3.900	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.48	3.48	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
169	3.800	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.49	3.49	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	3.700	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.49	3.49	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
171	3.600	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.50	3.50	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172	3.500	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.50	3.50	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
173	3.400	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.50	3.50	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
174	3.300	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.51	3.51	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175	3.200	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.51	3.51	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
176	3.100	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.51	3.51	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
177	3.000	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.52	3.52	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
178	2.900	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.52	3.52	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
179	2.800	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.52	3.52	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	2.700	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.53	3.53	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
181	2.600	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.53	3.53	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
182	2.500	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.53	3.53	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
183	2.400	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.53	3.53	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
184	2.300	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.53	3.53	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

185	2.200	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.53	3.53	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
186	2.100	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.54	3.54	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
187	2.000	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.54	3.54	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
188	1.900	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.54	3.54	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
189	1.800	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.54	3.54	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
190	1.700	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.54	3.54	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
191	1.600	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.54	3.54	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
192	1.500	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.54	3.54	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
193	1.400	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.54	3.54	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
194	1.300	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.55	3.55	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
195	1.200	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.55	3.55	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
196	1.100	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.55	3.55	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
197	1.000	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.55	3.55	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	0.900	8.03	3.25	0.09	0.24	0.00	0.00	0.00	0.00	0.00	3.06	3.55	3.55	0.13	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			2.87	0.07	0.00	0.00	0.00	0.00	0.00	0.00	2.03			0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/d ** mg/L/day

*** WATER QUALITY CONSTITUENT VALUES ***

ELEM NO.	ENDING DIST	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	TOT-N mg/L	EORG-N mg/L	ETOT-N mg/L	ORG-P mg/L	PO4-P mg/L	TOT-P mg/L	EORG-P mg/L	ETOT-P mg/L	CHL A µg/L	PERIP g/m²	COLI #/100mL	NCM
155	5.200	26.57	0.00	1.00	0.00	3.33	5.65	0.00	6.65	0.00	2.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
156	5.100	26.57	0.00	1.00	0.00	3.34	5.81	0.00	6.81	0.00	2.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
157	5.000	26.57	0.00	1.00	0.00	3.35	5.96	0.00	6.96	0.00	2.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
158	4.900	26.57	0.00	1.00	0.00	3.36	6.11	0.00	7.11	0.00	2.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
159	4.800	26.57	0.00	1.00	0.00	3.36	6.25	0.00	7.25	0.00	2.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
160	4.700	26.57	0.00	1.00	0.00	3.36	6.38	0.00	7.38	0.00	2.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
161	4.600	26.57	0.00	1.00	0.00	3.36	6.50	0.00	7.50	0.00	2.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
162	4.500	26.57	0.00	1.00	0.00	3.36	6.62	0.00	7.62	0.00	2.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
163	4.400	26.57	0.00	1.00	0.00	3.35	6.73	0.00	7.73	0.00	2.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
164	4.300	26.57	0.00	1.00	0.00	3.35	6.84	0.00	7.84	0.00	2.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
165	4.200	26.57	0.00	1.00	0.00	3.34	6.94	0.00	7.94	0.00	2.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
166	4.100	26.57	0.00	1.00	0.00	3.33	7.03	0.00	8.03	0.00	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
167	4.000	26.57	0.00	1.00	0.00	3.33	7.12	0.00	8.12	0.00	2.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
168	3.900	26.57	0.00	1.00	0.00	3.32	7.20	0.00	8.20	0.00	2.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
169	3.800	26.57	0.00	1.00	0.00	3.32	7.28	0.00	8.28	0.00	2.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
170	3.700	26.57	0.00	1.00	0.00	3.31	7.36	0.00	8.36	0.00	2.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
171	3.600	26.57	0.00	1.00	0.00	3.30	7.43	0.00	8.43	0.00	2.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
172	3.500	26.57	0.00	1.00	0.00	3.30	7.50	0.00	8.50	0.00	2.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
173	3.400	26.57	0.00	1.00	0.00	3.29	7.56	0.00	8.56	0.00	2.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
174	3.300	26.57	0.00	1.00	0.00	3.28	7.62	0.00	8.62	0.00	2.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
175	3.200	26.57	0.00	1.00	0.00	3.28	7.68	0.00	8.68	0.00	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
176	3.100	26.57	0.00	1.00	0.00	3.27	7.73	0.00	8.73	0.00	2.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
177	3.000	26.57	0.00	1.00	0.00	3.27	7.78	0.00	8.78	0.00	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
178	2.900	26.57	0.00	1.00	0.00	3.26	7.83	0.00	8.83	0.00	2.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
179	2.800	26.57	0.00	1.00	0.00	3.26	7.87	0.00	8.87	0.00	2.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
180	2.700	26.57	0.00	1.00	0.00	3.26	7.91	0.00	8.91	0.00	2.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
181	2.600	26.57	0.00	1.00	0.00	3.25	7.95	0.00	8.95	0.00	2.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
182	2.500	26.57	0.00	1.00	0.00	3.25	7.99	0.00	8.99	0.00	2.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
183	2.400	26.57	0.00	1.00	0.00	3.25	8.02	0.00	9.02	0.00	2.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
184	2.300	26.57	0.00	1.00	0.00	3.25	8.05	0.00	9.05	0.00	2.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
185	2.200	26.57	0.00	1.00	0.00	3.25	8.08	0.00	9.08	0.00	2.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
186	2.100	26.57	0.00	1.00	0.00	3.25	8.11	0.00	9.11	0.00	2.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
187	2.000	26.57	0.00	1.00	0.00	3.25	8.13	0.00	9.13	0.00	2.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
188	1.900	26.57	0.00	1.00	0.00	3.25	8.16	0.00	9.16	0.00	2.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
189	1.800	26.57	0.00	1.00	0.00	3.25	8.18	0.00	9.18	0.00	2.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

190	1.700	26.57	0.00	1.00	0.00	3.26	8.20	0.00	9.20	0.00	2.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
191	1.600	26.57	0.00	1.00	0.00	3.26	8.22	0.00	9.22	0.00	2.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
192	1.500	26.57	0.00	1.00	0.00	3.27	8.23	0.00	9.23	0.00	2.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
193	1.400	26.57	0.00	1.00	0.00	3.28	8.25	0.00	9.25	0.00	2.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
194	1.300	26.57	0.00	1.00	0.00	3.30	8.26	0.00	9.26	0.00	2.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
195	1.200	26.57	0.00	1.00	0.00	3.31	8.27	0.00	9.27	0.00	2.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
196	1.100	26.57	0.00	1.00	0.00	3.34	8.28	0.00	9.28	0.00	2.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
197	1.000	26.57	0.00	1.00	0.00	3.36	8.28	0.00	9.28	0.00	2.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
198	0.900	26.57	0.00	1.00	0.00	3.40	8.29	0.00	9.29	0.00	2.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

*** PHYTOPLANKTON AND PERIPHYTON DATA ***

ELEM NO.	ENDING DIST	BANK SHADE frac	SECCHI DEPTH m	PHYT N PREF	PHYT LIT LIM	PHYT N LIM	PHYT P LIM	PHYT N&P LIM	PHYT TOT LIM	PHYT GROW 1/da	PHYT RESP 1/da	PHYT DEATH 1/da	PHYT SETT 1/da	PHYT P/R RATIO	PHYTO µg/L	PERI N PREF	PERI LIT LIM	PERI N LIM	PERI P LIM	PERI N&P LIM	PERI SPC LIM	PERI TOT LIM	PERI GROW 1/da	PERI RESP 1/da	PERI DEATH 1/da	PERI P/R RATIO	PERIP g/m²
155	5.200	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
156	5.100	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
157	5.000	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
158	4.900	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
159	4.800	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
160	4.700	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
161	4.600	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
162	4.500	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
163	4.400	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
164	4.300	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
165	4.200	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
166	4.100	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
167	4.000	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
168	3.900	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
169	3.800	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
170	3.700	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
171	3.600	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
172	3.500	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
173	3.400	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
174	3.300	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
175	3.200	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
176	3.100	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
177	3.000	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
178	2.900	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
179	2.800	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
180	2.700	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
181	2.600	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
182	2.500	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
183	2.400	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
184	2.300	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
185	2.200	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
186	2.100	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
187	2.000	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
188	1.900	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
189	1.800	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
190	1.700	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
191	1.600	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
192	1.500	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
193	1.400	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
194	1.300	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
195	1.200	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
196	1.100	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
197	1.000	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0

198	0.900	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
20 DEG C RATE										0.000	0.000	0.000	0.000										0.000	0.000	0.000		

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

FINAL REPORT BAYOU MARINGOUIN — BAYOU MARINGOUIN STREAM MODEL
REACH NO. 9 WIDE SECTION TO END — BAYOU MARINGOUIN SUMMER PROJECTION

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

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	PO4-P mg/L	CHL A µg/L	COLI #/100mL	NCM
199	UPR RCH	0.00283	26.57	0.00	1.00	0.00	3.40	8.29	0.00	9.29	0.00	2.87	0.00	0.00	0.00	10.00	0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	CUM 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
199	0.90	0.80	0.00283	0.0	0.00076	1.52	133.50	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.001
200	0.80	0.70	0.00283	0.0	0.00076	1.52	135.02	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.001
201	0.70	0.60	0.00283	0.0	0.00076	1.52	136.54	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.001
202	0.60	0.50	0.00283	0.0	0.00076	1.52	138.06	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.001
203	0.50	0.40	0.00283	0.0	0.00076	1.52	139.58	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.001
204	0.40	0.30	0.00283	0.0	0.00076	1.52	141.10	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.001
205	0.30	0.20	0.00283	0.0	0.00076	1.52	142.62	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.001
206	0.20	0.10	0.00283	0.0	0.00076	1.52	144.14	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.001
207	0.10	0.00	0.00283	0.0	0.00076	1.52	145.66	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.001
TOT						13.68				3343.96	10971.00					
AVG					0.0008			0.30	12.19			3.72				

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD1 DECAY 1/da	BOD1 SETT 1/da	ABOD1 DECAY 1/da	BOD1 HYDR 1/da	BOD2 DECAY 1/da	BOD2 SETT 1/da	ABOD2 DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORG-N HYDR 1/da	ORG-N SETT 1/da	NH3-N DECAY 1/da	NH3-N SRCE *	DENIT RATE 1/da	ORG-P HYDR 1/da	ORG-P SETT 1/da	PO4 SRCE *	PHYTO PROD **	PERIP PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
199	0.800	8.03	2.60	0.09	0.19	0.00	0.00	0.00	0.00	0.00	2.72	3.21	3.21	0.13	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200	0.700	8.03	2.60	0.09	0.19	0.00	0.00	0.00	0.00	0.00	2.72	3.21	3.21	0.13	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
201	0.600	8.03	2.60	0.09	0.19	0.00	0.00	0.00	0.00	0.00	2.72	3.21	3.21	0.13	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202	0.500	8.03	2.60	0.09	0.19	0.00	0.00	0.00	0.00	0.00	2.72	3.21	3.21	0.13	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
203	0.400	8.03	2.60	0.09	0.19	0.00	0.00	0.00	0.00	0.00	2.72	3.21	3.21	0.13	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
204	0.300	8.03	2.60	0.09	0.19	0.00	0.00	0.00	0.00	0.00	2.72	3.21	3.21	0.13	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
205	0.200	8.03	2.60	0.09	0.19	0.00	0.00	0.00	0.00	0.00	2.72	3.21	3.21	0.13	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
206	0.100	8.03	2.60	0.09	0.19	0.00	0.00	0.00	0.00	0.00	2.72	3.21	3.21	0.13	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
207	0.000	8.03	2.60	0.09	0.19	0.00	0.00	0.00	0.00	0.00	2.72	3.21	3.20	0.13	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			2.30	0.07	0.02	0.00	0.00	0.00	0.00	0.00	1.80			0.10	0.02	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/d ** mg/L/day

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

ELEM NO.	ENDING DIST	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	TOT-N mg/L	EORG-N mg/L	ETOT-N mg/L	ORG-P mg/L	PO4-P mg/L	TOT-P mg/L	EORG-P mg/L	ETOT-P mg/L	CHL A µg/L	PERIP g/m²	COLI #/100mL	NCM
199	0.800	26.57	0.00	1.00	0.00	3.42	8.29	0.00	9.29	0.00	2.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
200	0.700	26.57	0.00	1.00	0.00	3.44	8.29	0.00	9.29	0.00	2.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
201	0.600	26.57	0.00	1.00	0.00	3.45	8.29	0.00	9.29	0.00	2.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
202	0.500	26.57	0.00	1.00	0.00	3.46	8.30	0.00	9.30	0.00	2.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
203	0.400	26.57	0.00	1.00	0.00	3.47	8.30	0.00	9.30	0.00	2.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
204	0.300	26.57	0.00	1.00	0.00	3.48	8.30	0.00	9.30	0.00	2.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
205	0.200	26.57	0.00	1.00	0.00	3.48	8.30	0.00	9.30	0.00	2.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
206	0.100	26.57	0.00	1.00	0.00	3.49	8.30	0.00	9.30	0.00	2.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
207	0.000	26.57	0.00	1.00	0.00	3.49	8.30	0.00	9.30	0.00	2.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

****************************** PHYTOPLANKTON AND PERIPHYTON DATA ******************************

ELEM NO.	ENDING DIST	BANK SHADE frac	SECCHI DEPTH m	PHYT N PREF	PHYT LIT LIM	PHYT N LIM	PHYT P LIM	PHYT N&P LIM	PHYT TOT LIM	PHYT GROW 1/da	PHYT RESP 1/da	PHYT DEATH 1/da	PHYT SETT 1/da	PHYT P/R RATIO	PHYTO µg/L	PERI N PREF	PERI LIT LIM	PERI N LIM	PERI P LIM	PERI N&P LIM	PERI SPC LIM	PERI TOT LIM	PERI GROW 1/da	PERI RESP 1/da	PERI DEATH 1/da	PERI P/R RATIO	PERIP g/m²
199	0.800	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
200	0.700	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
201	0.600	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
202	0.500	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
203	0.400	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
204	0.300	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
205	0.200	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
206	0.100	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
207	0.000	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
20 DEG C RATE										0.000	0.000	0.000	0.000										0.000	0.000	0.000		

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

FINAL REPORT UNNAMED TRIBUTARY BAYOU MARINGOUIN STREAM MODEL
REACH NO. 2 UNNAMED TRIBUTARY BAYOU MARINGOUIN SUMMER PROJECTION

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

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	PO4-P mg/L	CHL A µg/L	COLI #/100mL	NCM
51	HDWTR	0.00283	26.57	0.00	0.00	0.00	7.23	1.15	0.00	2.15	0.00	2.81	0.00	0.00	0.00	10.00	0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	CUM 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
51	1.96	1.86	0.00283	0.0	0.00407	0.28	0.28	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.004
52	1.86	1.76	0.00283	0.0	0.00407	0.28	0.56	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.004
53	1.76	1.67	0.00283	0.0	0.00407	0.28	0.84	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.004
54	1.67	1.57	0.00283	0.0	0.00407	0.28	1.11	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.004
55	1.57	1.47	0.00283	0.0	0.00407	0.28	1.39	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.004

56	1.47	1.37	0.00283	0.0	0.00407	0.28	1.67	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.004
57	1.37	1.27	0.00283	0.0	0.00407	0.28	1.95	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.004
58	1.27	1.18	0.00283	0.0	0.00407	0.28	2.23	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.004
59	1.18	1.08	0.00283	0.0	0.00407	0.28	2.51	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.004
60	1.08	0.98	0.00283	0.0	0.00407	0.28	2.79	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.004
61	0.98	0.88	0.00283	0.0	0.00407	0.28	3.06	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.004
62	0.88	0.78	0.00283	0.0	0.00407	0.28	3.34	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.004
63	0.78	0.69	0.00283	0.0	0.00407	0.28	3.62	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.004
64	0.69	0.59	0.00283	0.0	0.00407	0.28	3.90	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.004
65	0.59	0.49	0.00283	0.0	0.00407	0.28	4.18	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.004
66	0.49	0.39	0.00283	0.0	0.00407	0.28	4.46	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.004
67	0.39	0.29	0.00283	0.0	0.00407	0.28	4.74	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.004
68	0.29	0.20	0.00283	0.0	0.00407	0.28	5.01	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.004
69	0.20	0.10	0.00283	0.0	0.00407	0.28	5.29	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.004
70	0.10	0.00	0.00283	0.0	0.00407	0.28	5.57	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.004
TOT						5.57				1362.31	6720.84					
AVG					0.0041			0.20	3.43			0.70				

*** BIOLOGICAL AND PHYSICAL COEFFICIENTS ***

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD1 DECAY 1/da	BOD1 SETT 1/da	ABOD1 DECAY 1/da	BOD1 HYDR 1/da	BOD2 DECAY 1/da	BOD2 SETT 1/da	ABOD2 DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORG-N HYDR 1/da	ORG-N SETT 1/da	NH3-N DECAY 1/da	NH3-N SRCE *	DENIT RATE 1/da	ORG-P HYDR 1/da	ORG-P SETT 1/da	PO4 SRCE *	PHYTO PROD **	PERIP PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
51	1.862	8.03	3.91	0.09	0.29	0.00	0.00	0.00	0.00	0.00	4.10	4.20	4.20	0.14	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52	1.764	8.03	3.91	0.09	0.29	0.00	0.00	0.00	0.00	0.00	4.10	4.22	4.22	0.13	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
53	1.666	8.03	3.91	0.09	0.29	0.00	0.00	0.00	0.00	0.00	4.10	4.24	4.24	0.12	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
54	1.568	8.03	3.91	0.09	0.29	0.00	0.00	0.00	0.00	0.00	4.10	4.26	4.26	0.12	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	1.470	8.03	3.91	0.09	0.29	0.00	0.00	0.00	0.00	0.00	4.10	4.27	4.27	0.12	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
56	1.372	8.03	3.91	0.09	0.29	0.00	0.00	0.00	0.00	0.00	4.10	4.29	4.29	0.12	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57	1.274	8.03	3.91	0.09	0.29	0.00	0.00	0.00	0.00	0.00	4.10	4.30	4.30	0.12	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
58	1.176	8.03	3.91	0.09	0.29	0.00	0.00	0.00	0.00	0.00	4.10	4.31	4.31	0.11	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
59	1.078	8.03	3.91	0.09	0.29	0.00	0.00	0.00	0.00	0.00	4.10	4.32	4.32	0.11	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	0.980	8.03	3.91	0.09	0.29	0.00	0.00	0.00	0.00	0.00	4.10	4.33	4.33	0.11	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
61	0.882	8.03	3.91	0.09	0.29	0.00	0.00	0.00	0.00	0.00	4.10	4.34	4.34	0.11	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62	0.784	8.03	3.91	0.09	0.29	0.00	0.00	0.00	0.00	0.00	4.10	4.35	4.35	0.11	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
63	0.686	8.03	3.91	0.09	0.29	0.00	0.00	0.00	0.00	0.00	4.10	4.35	4.35	0.11	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
64	0.588	8.03	3.91	0.09	0.29	0.00	0.00	0.00	0.00	0.00	4.10	4.36	4.36	0.11	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65	0.490	8.03	3.91	0.09	0.29	0.00	0.00	0.00	0.00	0.00	4.10	4.37	4.37	0.11	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
66	0.392	8.03	3.91	0.09	0.29	0.00	0.00	0.00	0.00	0.00	4.10	4.37	4.37	0.11	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67	0.294	8.03	3.91	0.09	0.29	0.00	0.00	0.00	0.00	0.00	4.10	4.37	4.37	0.11	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
68	0.196	8.03	3.91	0.09	0.29	0.00	0.00	0.00	0.00	0.00	4.10	4.38	4.38	0.11	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
69	0.098	8.03	3.91	0.09	0.29	0.00	0.00	0.00	0.00	0.00	4.10	4.38	4.38	0.11	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70	0.000	8.03	3.91	0.09	0.29	0.00	0.00	0.00	0.00	0.00	4.10	4.40	4.40	0.11	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			3.45	0.07	0.01	0.00	0.00	0.00	0.00	0.00	2.71			0.10	0.01	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/d ** mg/L/day

*** WATER QUALITY CONSTITUENT VALUES ***

ELEM NO.	ENDING DIST	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	TOT-N mg/L	EORG-N mg/L	ETOT-N mg/L	ORG-P mg/L	PO4-P mg/L	TOT-P mg/L	EORG-P mg/L	ETOT-P mg/L	CHL A µg/L	PERIP g/m²	COLI #/100mL	NCM
51	1.862	26.57	0.00	1.00	0.00	4.78	1.58	0.00	2.58	0.00	2.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
52	1.764	26.57	0.00	1.00	0.00	3.65	1.95	0.00	2.95	0.00	2.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
53	1.666	26.57	0.00	1.00	0.00	3.09	2.28	0.00	3.28	0.00	2.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

54	1.568	26.57	0.00	1.00	0.00	2.80	2.57	0.00	3.57	0.00	2.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
55	1.470	26.57	0.00	1.00	0.00	2.65	2.84	0.00	3.84	0.00	2.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
56	1.372	26.57	0.00	1.00	0.00	2.57	3.08	0.00	4.08	0.00	2.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
57	1.274	26.57	0.00	1.00	0.00	2.52	3.30	0.00	4.30	0.00	1.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
58	1.176	26.57	0.00	1.00	0.00	2.48	3.50	0.00	4.50	0.00	1.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
59	1.078	26.57	0.00	1.00	0.00	2.46	3.68	0.00	4.68	0.00	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
60	0.980	26.57	0.00	1.00	0.00	2.44	3.85	0.00	4.85	0.00	1.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
61	0.882	26.57	0.00	1.00	0.00	2.42	3.99	0.00	4.99	0.00	1.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
62	0.784	26.57	0.00	1.00	0.00	2.41	4.13	0.00	5.13	0.00	1.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
63	0.686	26.57	0.00	1.00	0.00	2.40	4.25	0.00	5.25	0.00	1.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
64	0.588	26.57	0.00	1.00	0.00	2.39	4.35	0.00	5.35	0.00	1.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
65	0.490	26.57	0.00	1.00	0.00	2.38	4.45	0.00	5.45	0.00	1.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
66	0.392	26.57	0.00	1.00	0.00	2.37	4.54	0.00	5.54	0.00	1.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
67	0.294	26.57	0.00	1.00	0.00	2.36	4.62	0.00	5.62	0.00	1.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
68	0.196	26.57	0.00	1.00	0.00	2.35	4.70	0.00	5.70	0.00	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
69	0.098	26.57	0.00	1.00	0.00	2.35	4.77	0.00	5.77	0.00	1.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
70	0.000	26.57	0.00	1.00	0.00	2.41	5.00	0.00	6.00	0.00	1.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

*** PHYTOPLANKTON AND PERIPHYTON DATA ***

ELEM NO.	ENDING DIST	BANK SHADE frac	SECCHI DEPTH m	PHYT N PREF	PHYT LIT LIM	PHYT N LIM	PHYT P LIM	PHYT N&P LIM	PHYT TOT LIM	PHYT GROW 1/da	PHYT RESP 1/da	PHYT DEATH 1/da	PHYT SETT 1/da	PHYT P/R RATIO	PHYTO µg/L	PERI N PREF	PERI LIT LIM	PERI N LIM	PERI P LIM	PERI N&P LIM	PERI SPC LIM	PERI TOT LIM	PERI GROW 1/da	PERI RESP 1/da	PERI DEATH 1/da	PERI P/R RATIO	PERIP g/m²
51	1.862	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
52	1.764	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
53	1.666	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
54	1.568	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
55	1.470	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
56	1.372	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
57	1.274	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
58	1.176	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
59	1.078	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
60	0.980	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
61	0.882	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
62	0.784	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
63	0.686	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
64	0.588	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
65	0.490	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
66	0.392	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
67	0.294	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
68	0.196	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
69	0.098	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
70	0.000	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
20 DEG C RATE										0.000	0.000	0.000	0.000										0.000	0.000	0.000		

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN SUMMER PROJECTION

STREAM SUMMARY REPORT: BAYOU MARINGOUIN

TRAVEL TIME = 145.66 DAYS
MAXIMUM EFFLUENT = 0.00 PERCENT

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 FLOW             =  0.00283 TO    0.00566   m³/s
 DISPERSION       =  0.0000  TO   10.0000    m²/s
 VELOCITY         =  0.00074 TO    0.00610   m/s
 DEPTH            =  0.24    TO    0.66      m
 WIDTH            =  3.63    TO   14.63      m

 BOD DECAY        =   0.09   TO    0.09      per day
 NH3 DECAY        =   0.00   TO    0.00      per day
 SOD              =   3.20   TO    4.04      g/m²/d
 NH3 SED SOURCE   =   0.00   TO    0.00      g/m²/d
 PO4 SED SOURCE   =   0.00   TO    0.00      g/m²/d
 REAERATION       =   1.20   TO    3.25      per day
 BOD SETTLING     =   0.09   TO    0.24      per day
 NBOD DECAY       =   0.12   TO    0.14      per day
 NBOD SETTLING    =   0.09   TO    0.24      per day

 TEMPERATURE      =  26.57   TO   26.57      deg C
 DISSOLVED OXYGEN =   2.62   TO    4.62      mg/L

STREAM SUMMARY REPORT: UNNAMED TRIBUTARY

 TRAVEL TIME      =          5.57 DAYS
 MAXIMUM EFFLUENT =          0.00 PERCENT

 FLOW             =  0.00283 TO    0.00283   m³/s
 DISPERSION       =  0.0300  TO    0.0300    m²/s
 VELOCITY         =  0.00407 TO    0.00407   m/s
 DEPTH            =  0.20    TO    0.20      m
 WIDTH            =  3.43    TO    3.43      m

 BOD DECAY        =   0.09   TO    0.09      per day
 NH3 DECAY        =   0.00   TO    0.00      per day
 SOD              =   4.20   TO    4.40      g/m²/d
 NH3 SED SOURCE   =   0.00   TO    0.00      g/m²/d
 PO4 SED SOURCE   =   0.00   TO    0.00      g/m²/d
 REAERATION       =   3.91   TO    3.91      per day
 BOD SETTLING     =   0.29   TO    0.29      per day
 NBOD DECAY       =   0.11   TO    0.14      per day
 NBOD SETTLING    =   0.29   TO    0.29      per day

 TEMPERATURE      =  26.57   TO   26.57      deg C
 DISSOLVED OXYGEN =   2.35   TO    4.78      mg/L
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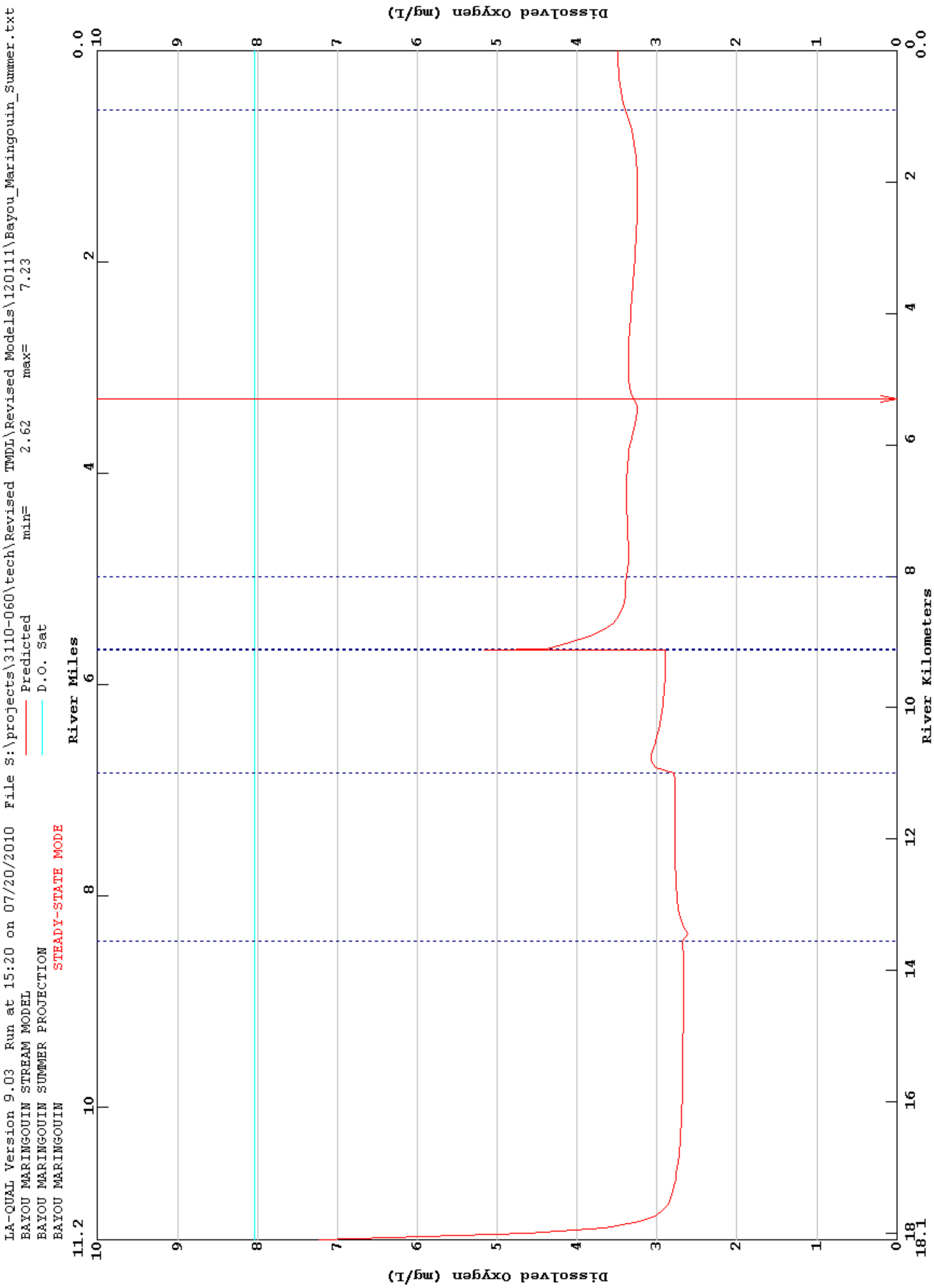
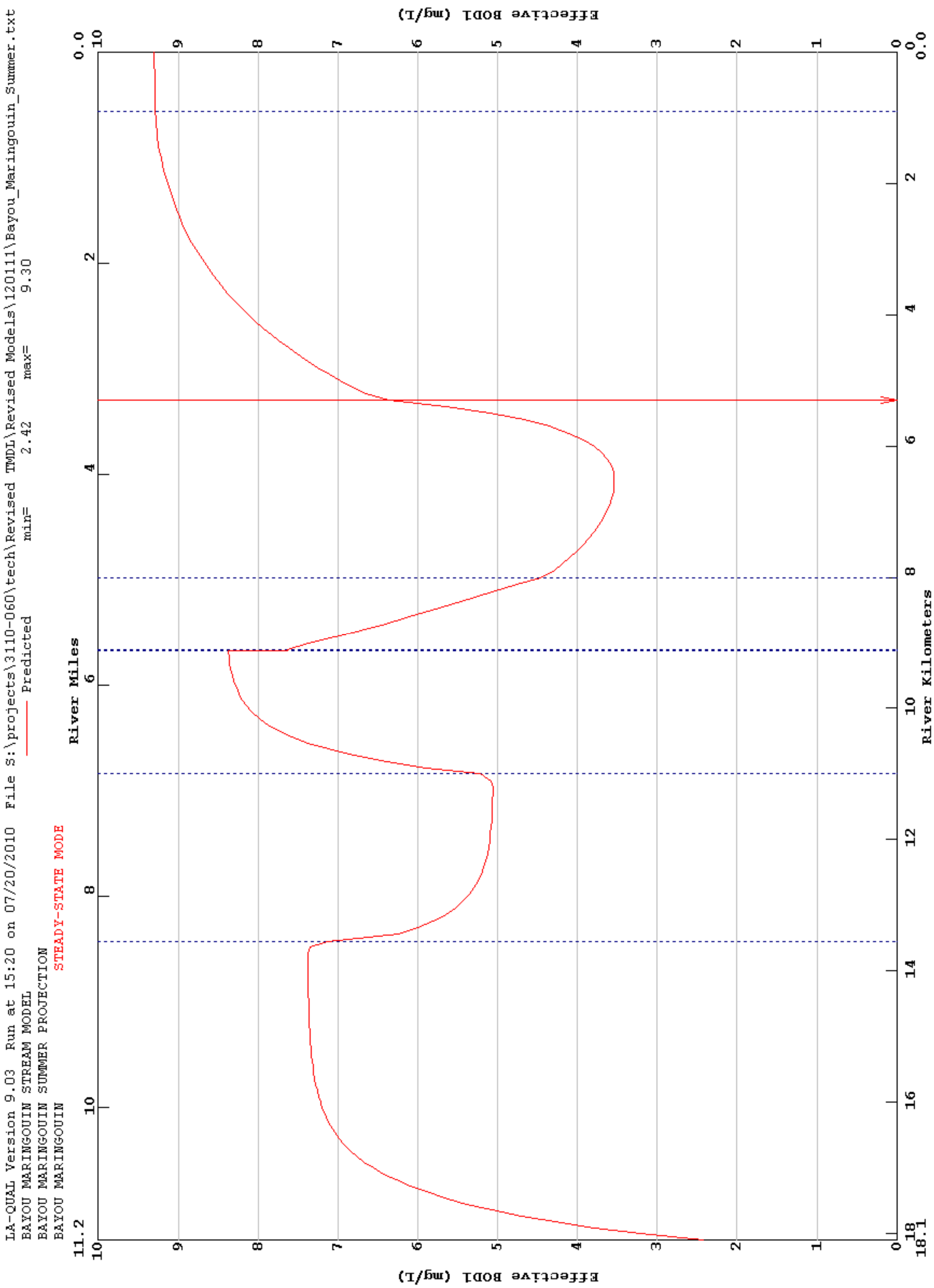
BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN SUMMER PROJECTION

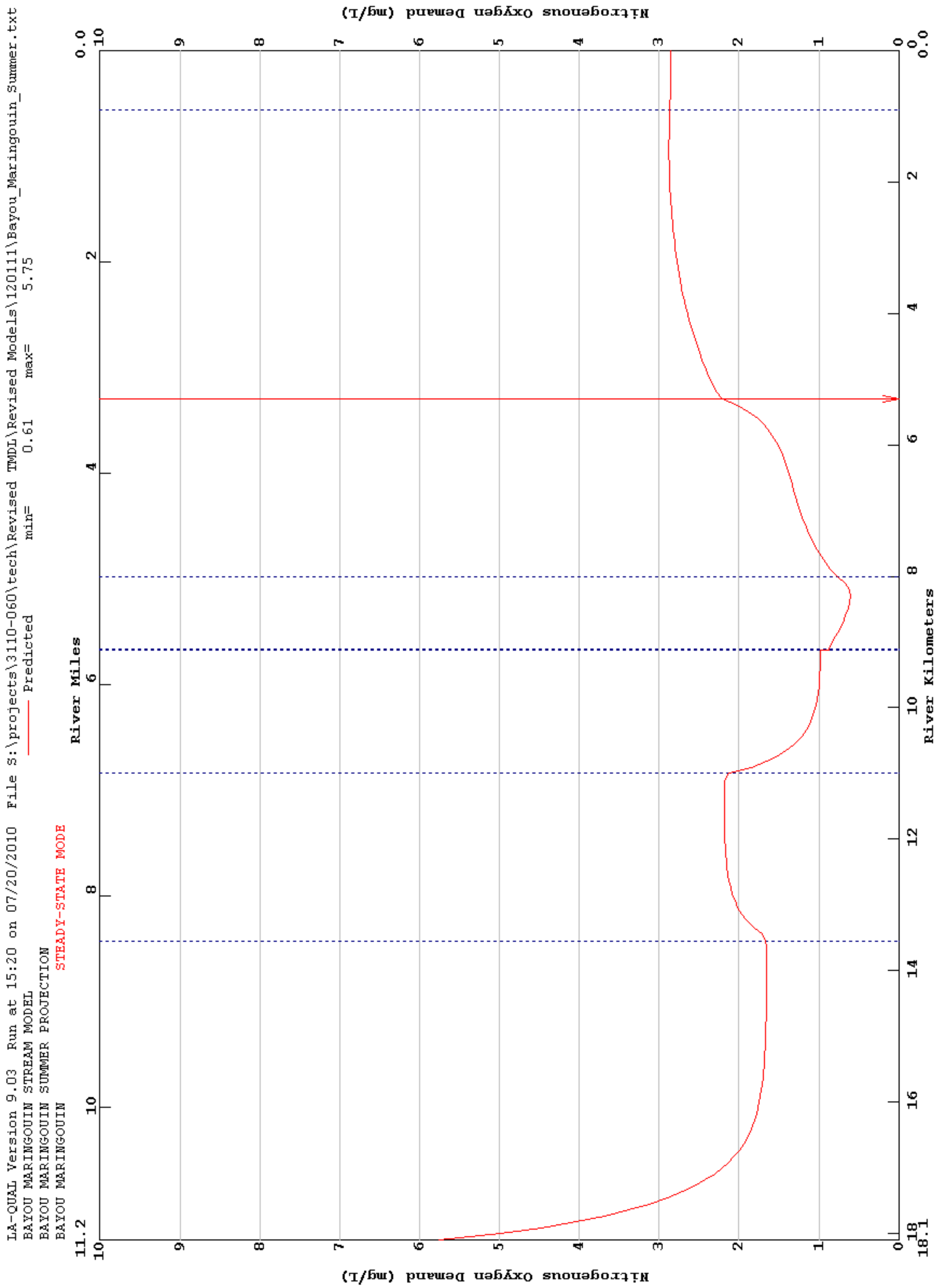
INPUT/OUTPUT LOADING SUMMARY

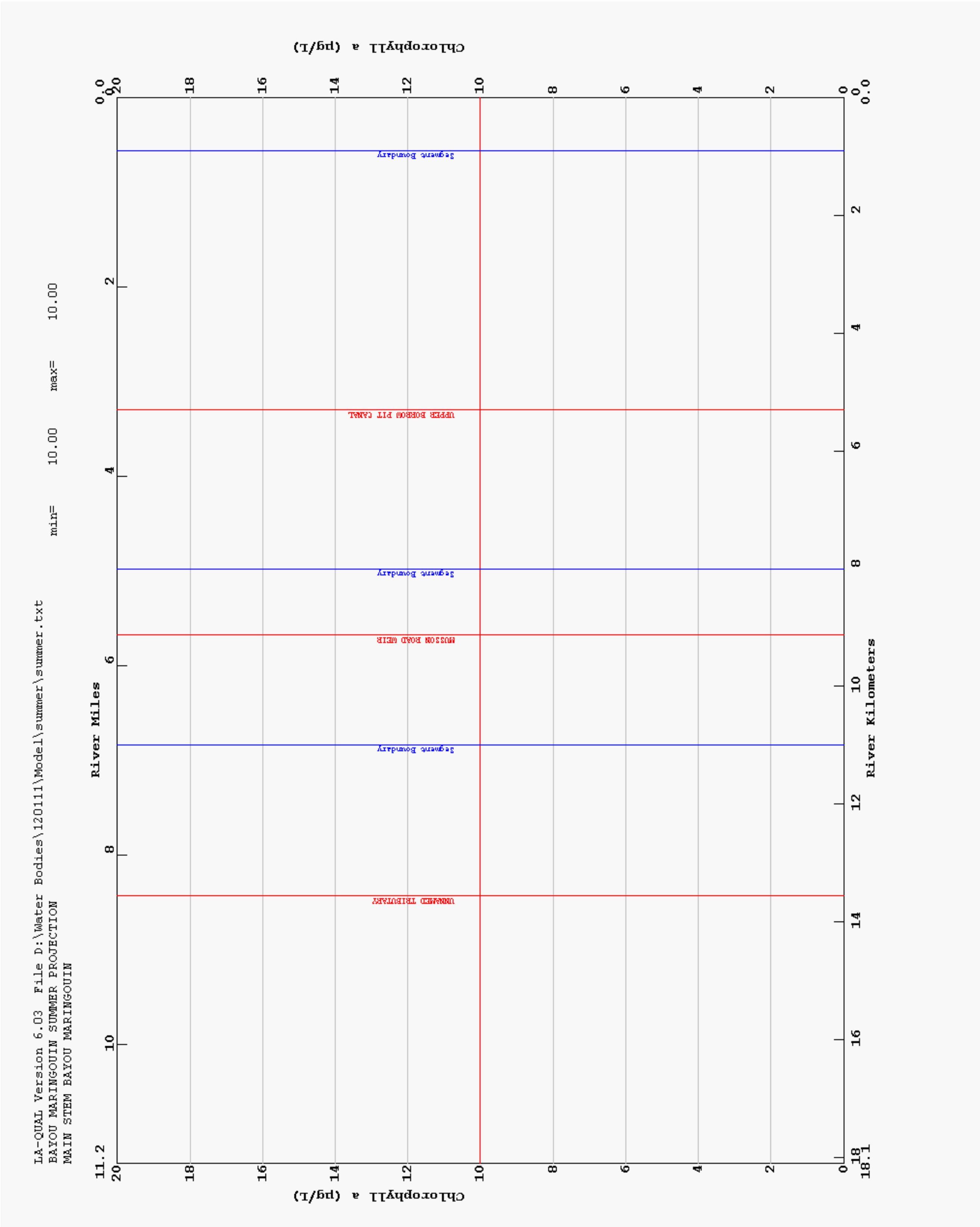
	FLOW	DO	BOD1	BOD2	NBOD			ORG-P	PO4-P	CHL A	PERIP	NCM
	m^3/s	kg/d	kg/d	kg/d	kg/d	kg/d	kg/d	kg/d	kg/d			
HEADWATER FLOW	0.00566	3.54	0.63	0.00	2.09	0.00	0.00	0.00	0.00	0.00		0.00
INCREMENTAL INFLOW	0.00000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
INCREMENTAL OUTFLOW	0.00000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
WASTELOADS	0.00000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
WITHDRAWLS	-0.00283	-0.81	-1.38	0.00	-0.56	0.00	0.00	0.00	0.00	0.00		0.00
FLOW THRU LOWER BNDRY	-0.00283	-0.85	-2.03	0.00	-0.70	0.00	0.00	0.00	0.00	0.00		0.00
DISPERSION THRU LOWER BNDRY		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
DISPERSION THRU HDWTR BNDRY		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
NON-POINT INPUT		0.00	81.68	0.00	29.28			0.00				0.00
NATURAL REAERATION		595.25										
DAM REAERATION		1.11										
SOD BACKGROUND		-506.95										
BOD1 DECAY		-29.08	-29.08									
BOD1 SETTLING		-49.82	-49.82									
ANAEROBIC BOD1 DECAY			0.00									
BOD2 DECAY		0.00		0.00								
BOD2 SETTLING		0.00		0.00								
ANAEROBIC BOD2 DECAY				0.00								
BOD2 HYDROLYSIS			0.00	0.00								
NBOD DECAY		-12.39			0.00	0.00						
NBOD SETTLING					0.00	0.00						
NH3-N DECAY (NITRIFICATION)		0.00				0.00	0.00					
NH3-N BACKGROUND SEDIMENT SOURCE						0.00						
DENITRIFICATION			0.00				0.00					
ORG-P HYDROLYSIS								0.00	0.00			
ORG-P SETTLING								0.00	0.00			
PO4-P BACKGROUND SEDIMENT SOURCE									0.00			
PHYTOPLANKTON GROWTH/PHOTOSYNTHESIS		0.00				0.00	0.00		0.00	0.00		
PHYTOPLANKTON RESPIRATION/EXCRETION		0.00				0.00			0.00	0.00		
PHYTOPLANKTON SETTLING		0.00				0.00			0.00	0.00		
PHYTOPLANKTON DEATH			0.00	0.00	0.00			0.00		0.00		
PERIPHYTON GROWTH/PHOTOSYNTHESIS		0.00				0.00	0.00		0.00		0.00	
PERIPHYTON RESPIRATION/EXCRETION		0.00				0.00			0.00		0.00	
PERIPHYTON DEATH			0.00	0.00	0.00			0.00			0.00	
NCM DECAY		0.00										0.00
NCM SETTLING		0.00										0.00
TOTAL INPUTS	0.00566	599.90	82.31	0.00	31.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL OUTPUTS	-0.00566	-599.91	-82.31	0.00	-1.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NET CONVERGENCE ERROR	0.00000	-0.01	0.00	0.00	30.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00

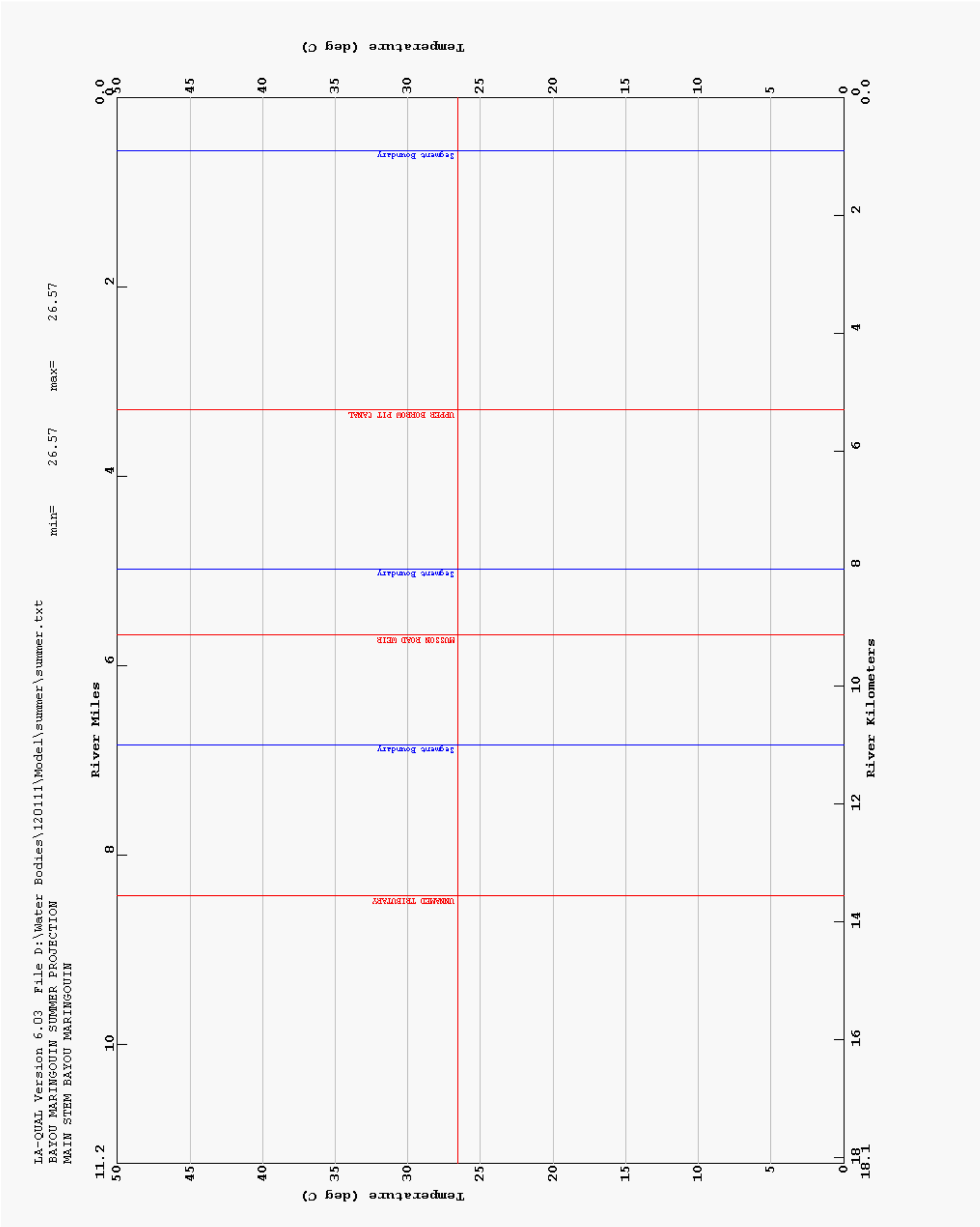
.....EXECUTION COMPLETED

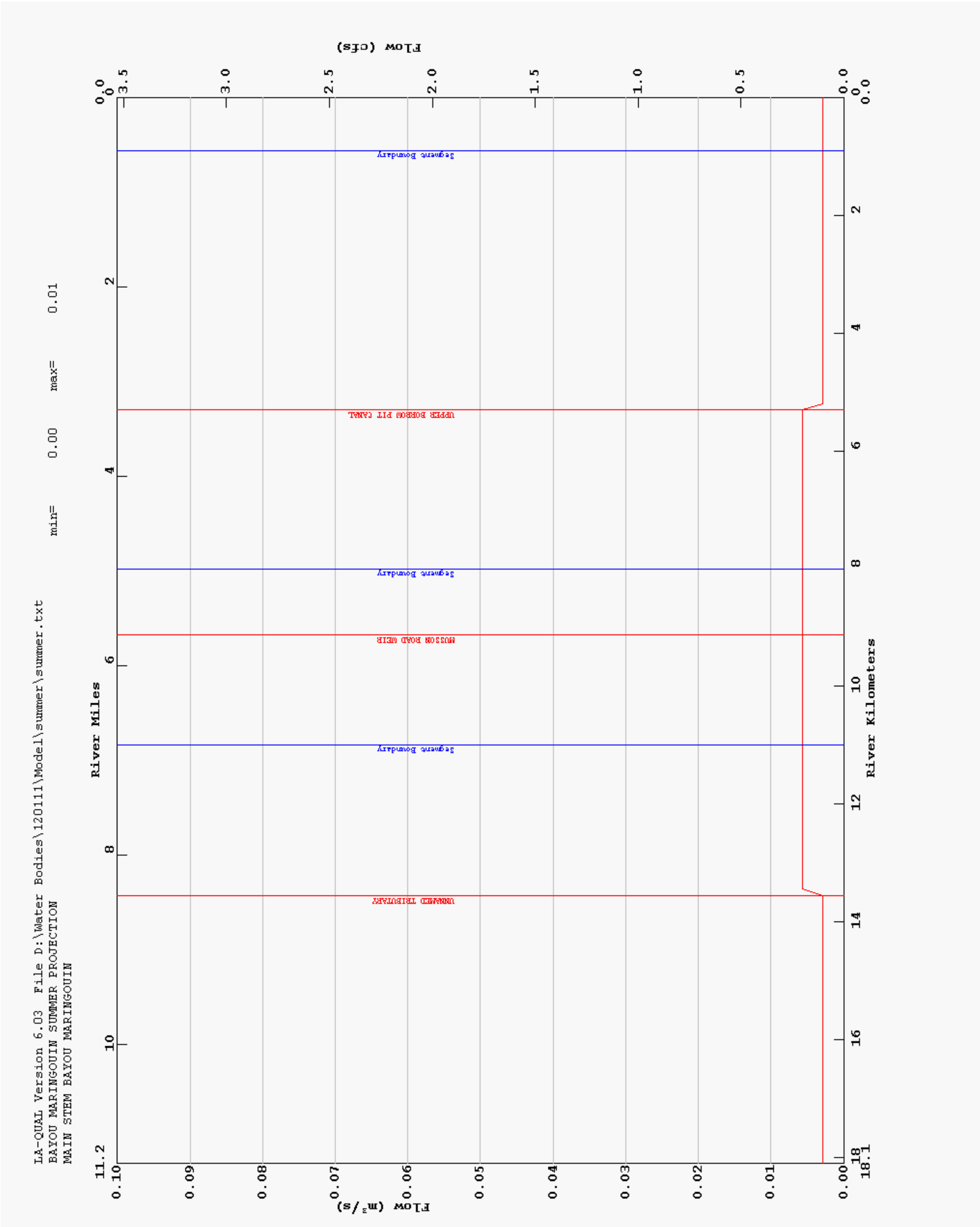

LA-QUAL Version 9.03 Run at 15:20 on 07/20/2010 File S:\projects\3110-060\tech\Revised TMDL\Revised Models\120111\Bayou_Maringouin_Summer.txt
BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN SUMMER PROJECTION
BAYOU MARINGOUIN
STEADY-STATE MODE
Predicted
D.O. Sat
min= 2.62 max= 7.23
River Miles
River Kilometers
Dissolved Oxygen (mg/L)

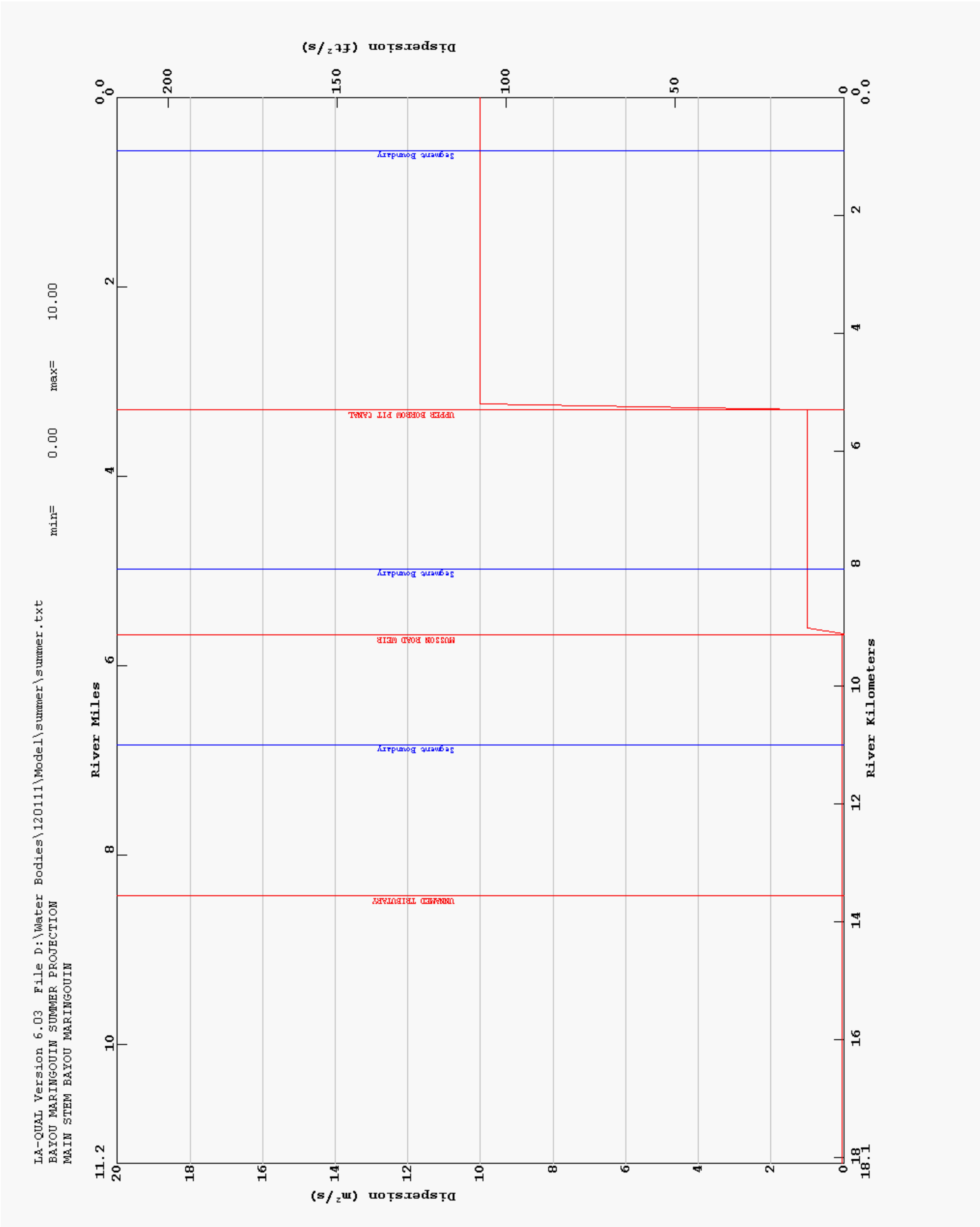

LA-QUAL Version 9.03 Run at 15:20 on 07/20/2010 File S:\projects\3110-060\tech\Revised TMDL\Revised Models\120111\Bayou_Maringouin_Summer.txt
BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN SUMMER PROJECTION
BAYOU MARINGOUIN
Predicted
min= 2.42 max= 9.30
STEADY-STATE MODE
River Miles
River Kilometers
Effective BOD1 (mg/L)
11.2
10
8
6
4
2
0.0
18.1
18
16
14
12
10
8
6
4
2
0.0
10
9
8
7
6
5
4
3
2
1
0

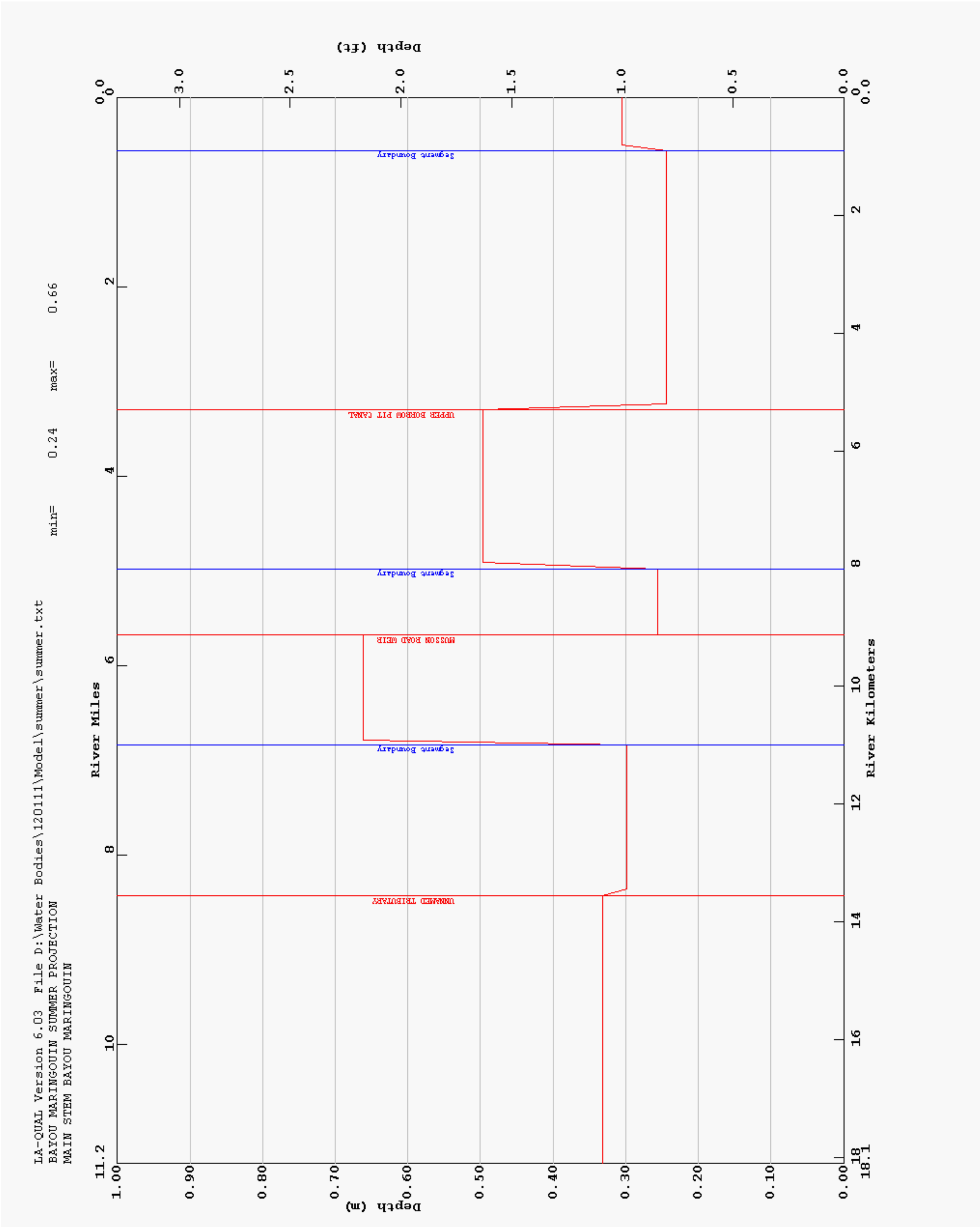

LA-QUAL Version 9.03 Run at 15:20 on 07/20/2010 File S:\projects\3110-060\tech\Revised TMDL\Revised Models\120111\Bayou_Maringouin_Summer.txt
BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN SUMMER PROJECTION
BAYOU MARINGOUIN
STEADY-STATE MODE
Predicted min= 0.61 max= 5.75
River Miles
River Kilometers
Nitrogenous Oxygen Demand (mg/L)

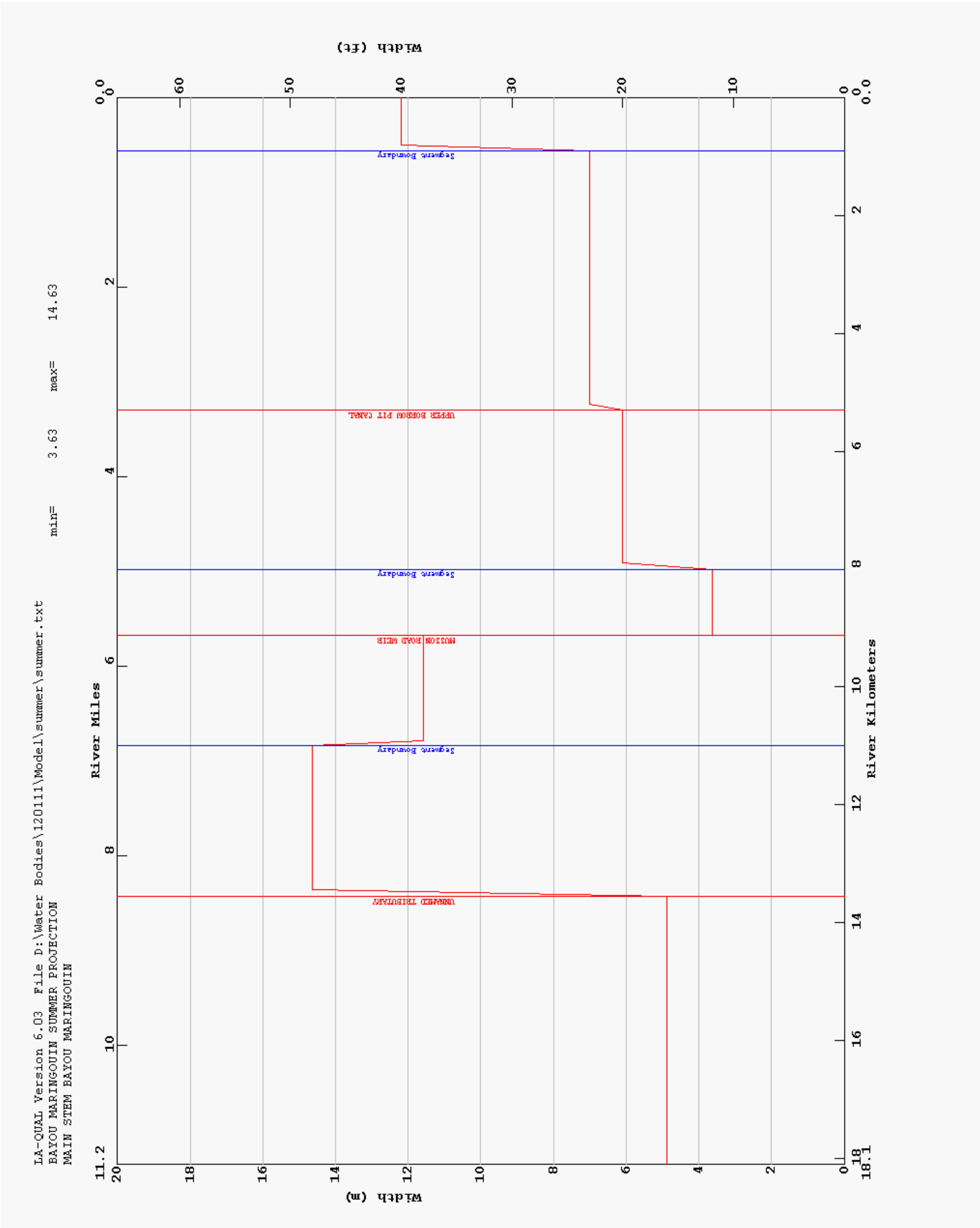

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\summer\summer.txt
BAYOU MARINGOUIN SUMMER PROJECTION
MAIN STEM BAYOU MARINGOUIN
min= 10.00 max= 10.00
River Miles
River Kilometers
Chlorophyll a (µg/L)
Segment Boundary
UPPER BORROW PIT CANAL
MUSSON ROAD WEIR
UNNAMED TRIBUTARY

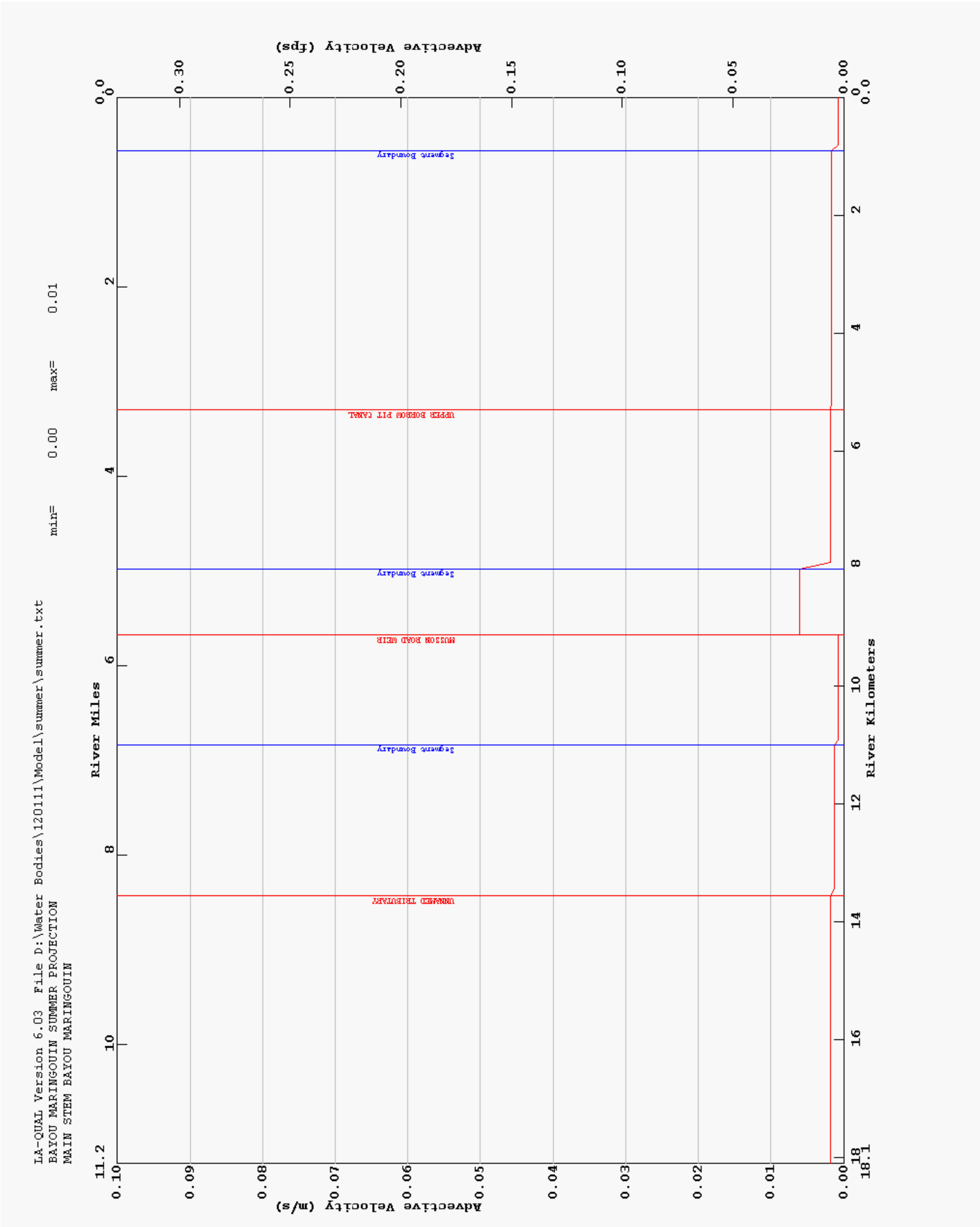

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\summer\summer.txt
BAYOU MARINGOUIN SUMMER PROJECTION
MAIN STEM BAYOU MARINGOUIN
min= 26.57 max= 26.57
Temperature (deg C)
River Miles
River Kilometers
Segment Boundary
UPPER BORROW PIT CANAL
MUSSON ROAD WEIR
UNNAMED TRIBUTARY

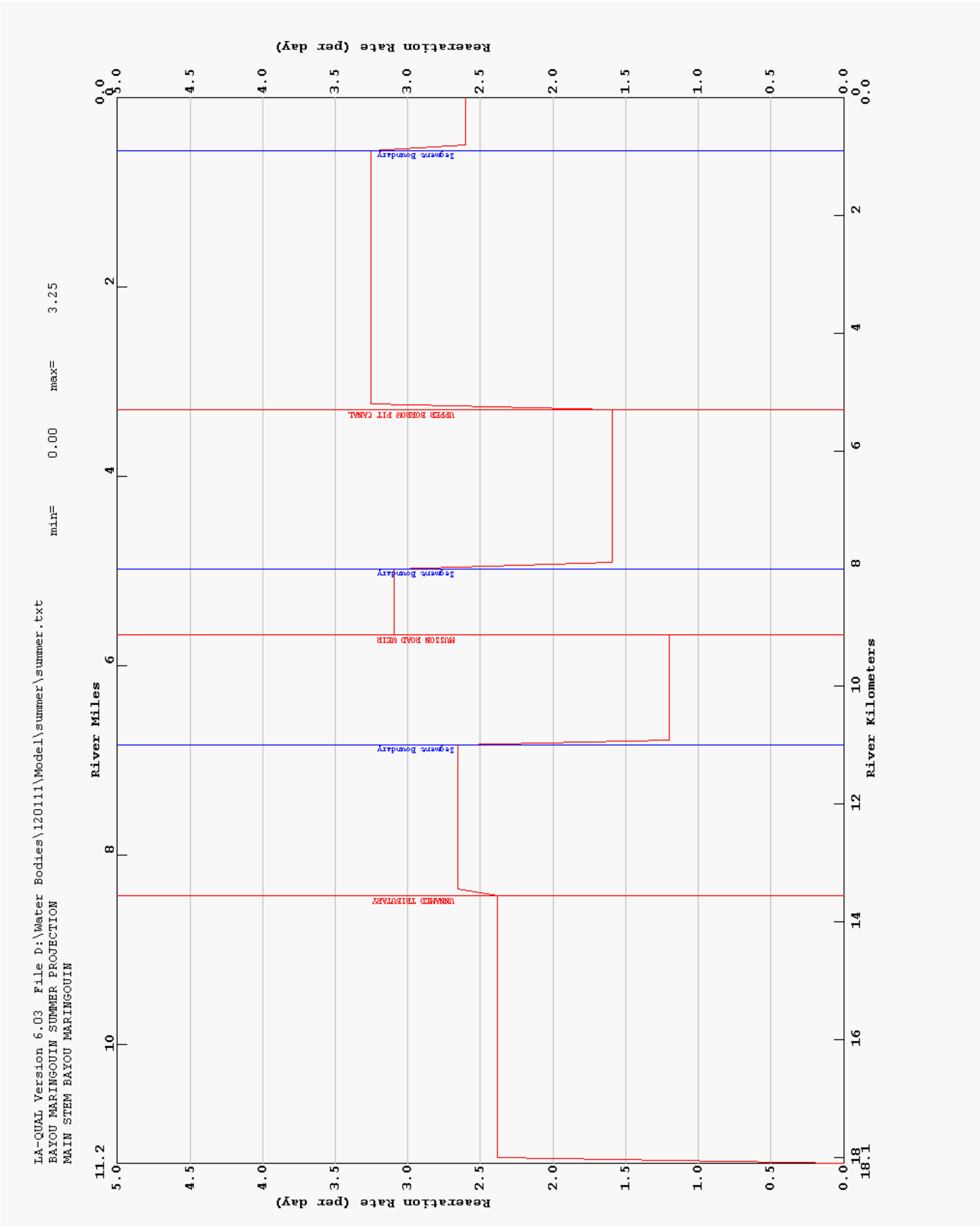

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\summer\summer.txt
BAYOU MARINGOUIN SUMMER PROJECTION
MAIN STEM BAYOU MARINGOUIN
min= 0.00 max= 0.01
River Miles
River Kilometers
Flow (cfs)
Flow (m³/s)
Segment Boundary
UPPER BORROW PIT CANAL
MUSSON ROAD WEIR
UNNAMED TRIBUTARY

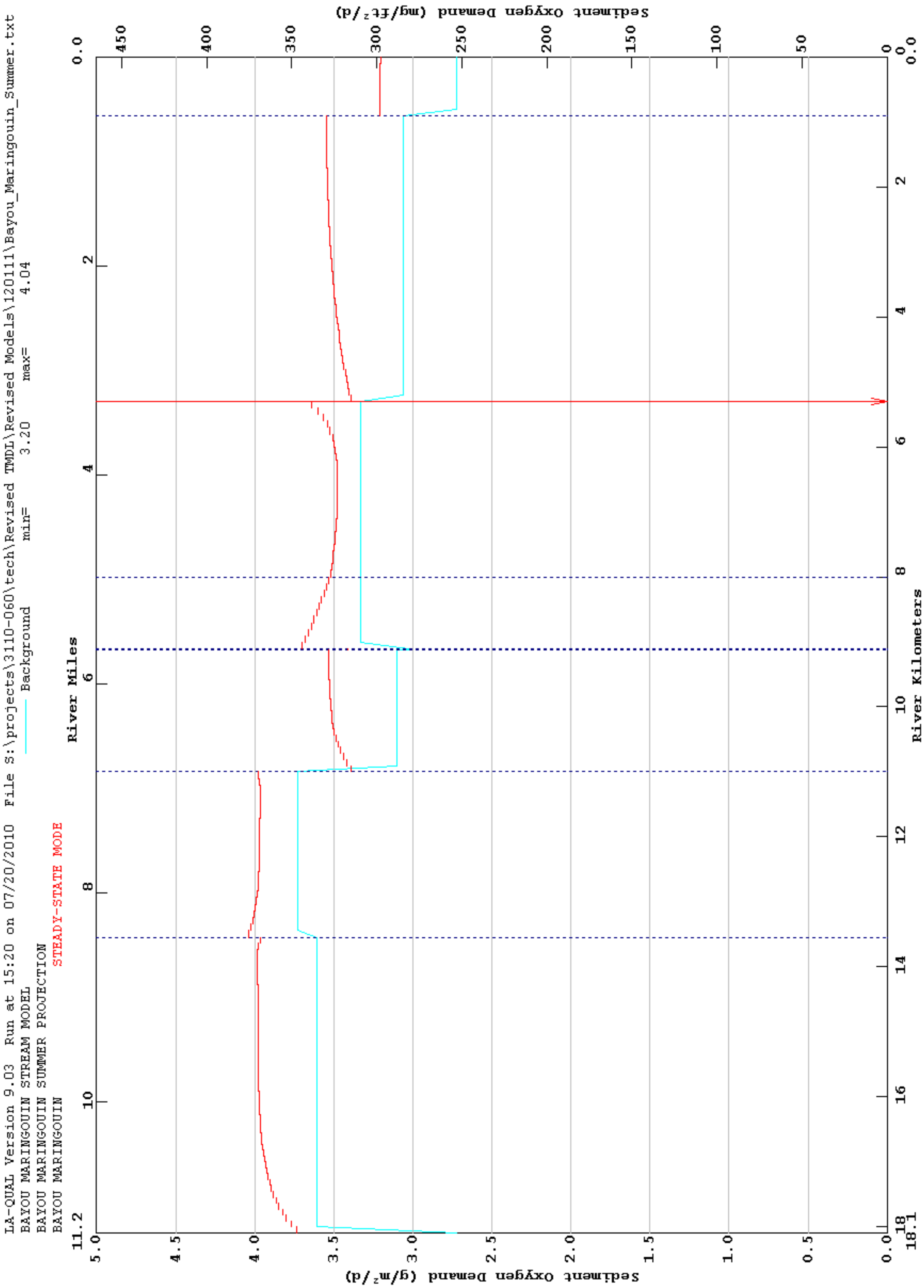

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\summer\summer.txt
BAYOU MARINGOUIN SUMMER PROJECTION
MAIN STEM BAYOU MARINGOUIN
min= 0.00 max= 10.00
River Miles
River Kilometers
Dispersion (m²/s)
Dispersion (ft²/s)
Segment Boundary
UPPER BORROW PIT CANAL
MUSSON ROAD WEIR
UNNAMED TRIBUTARY

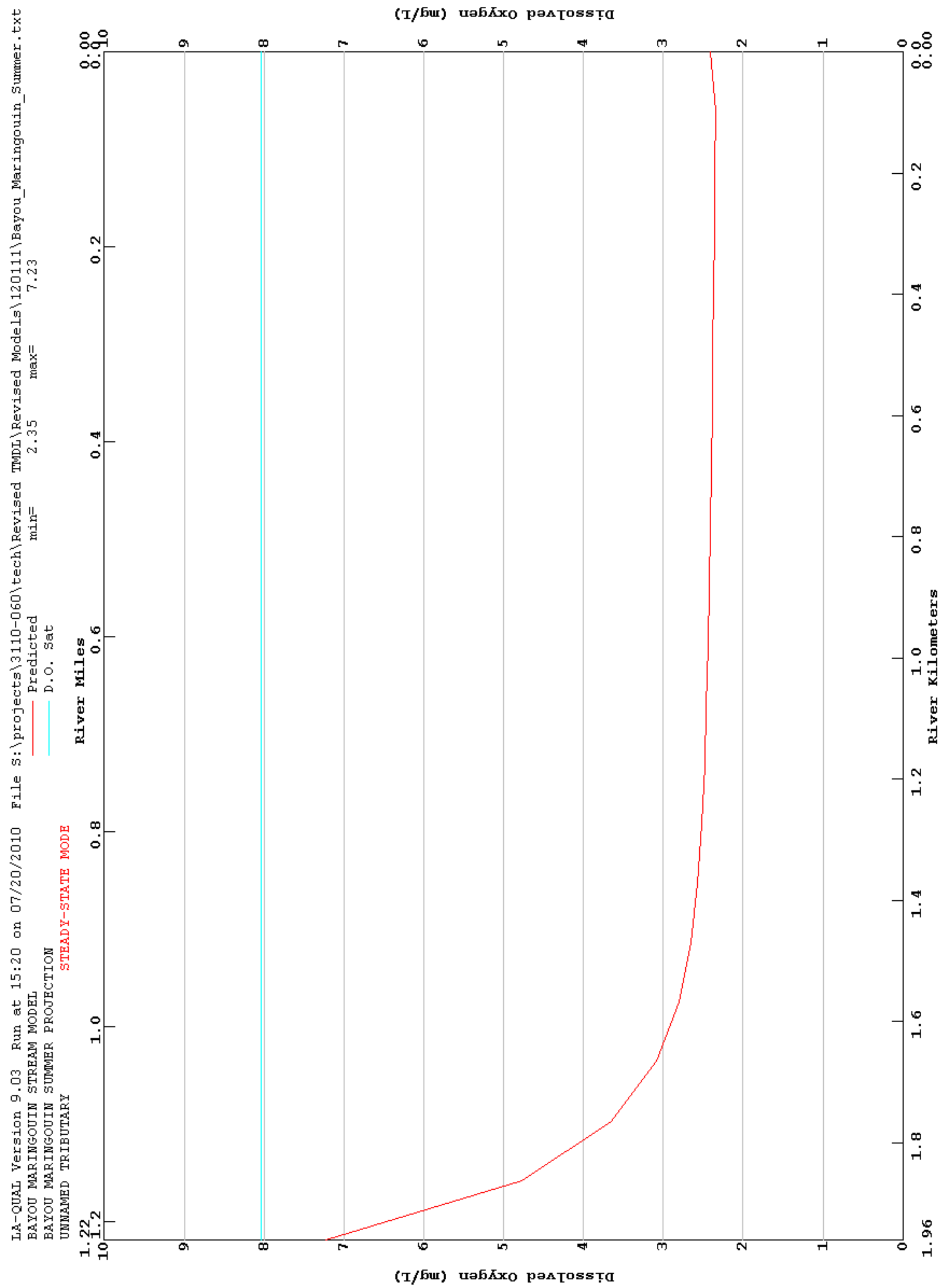

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\summer\summer.txt
BAYOU MARINGOUIN SUMMER PROJECTION
MAIN STEM BAYOU MARINGOUIN
min= 0.24 max= 0.66
River Miles
River Kilometers
Depth (ft)
Depth (m)
Segment Boundary
UPPER BORROW PIT CANAL
MUSSON ROAD WEIR
UNNAMED TRIBUTARY

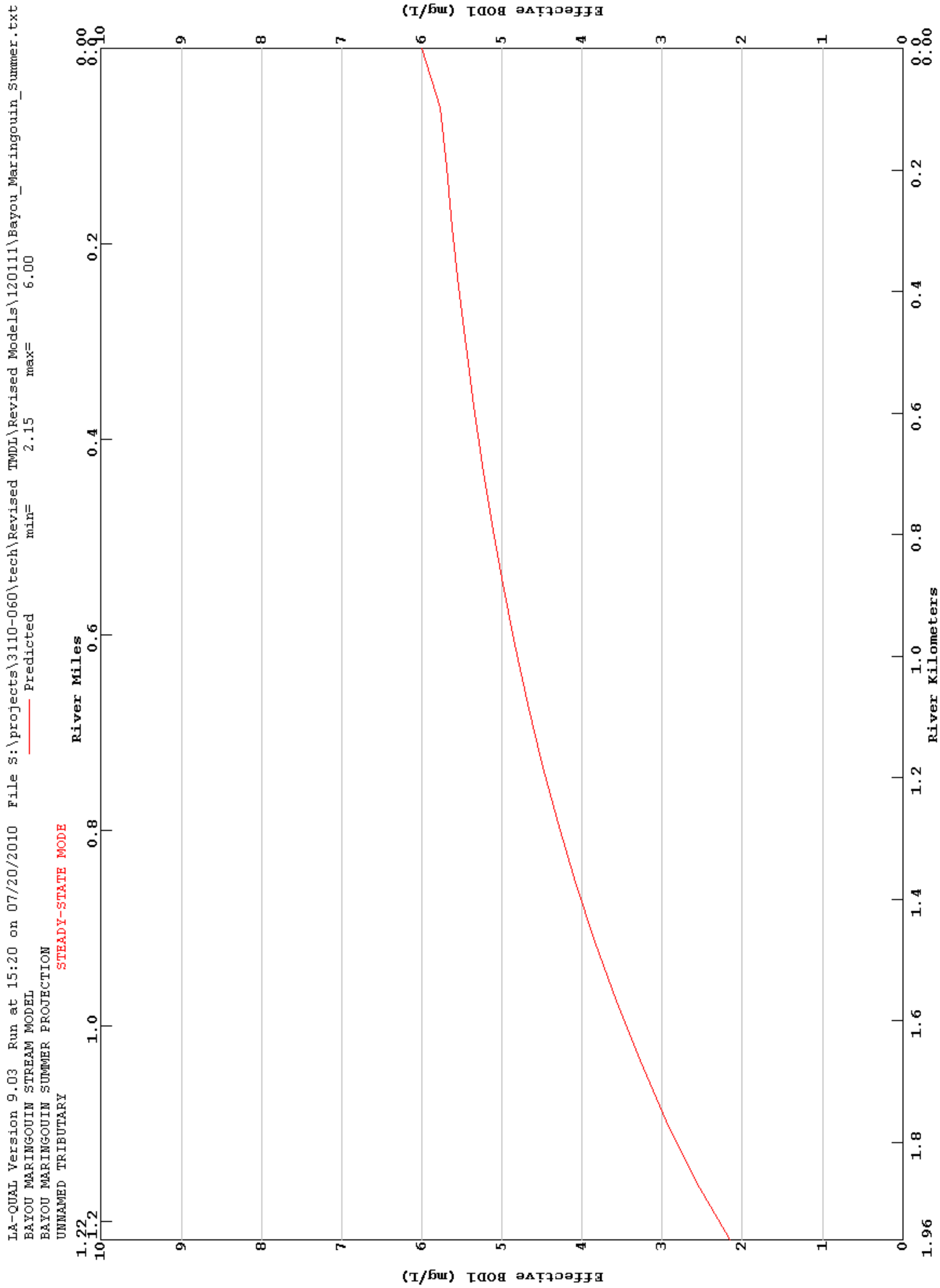

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\summer\summer.txt
BAYOU MARINGOUIN SUMMER PROJECTION
MAIN STEM BAYOU MARINGOUIN
min= 3.63 max= 14.63
Width (ft)
Width (m)
River Miles
River Kilometers
Segment Boundary
UPPER BORROW PIT CANAL
MUSSON ROAD WEIR
UNNAMED TRIBUTARY

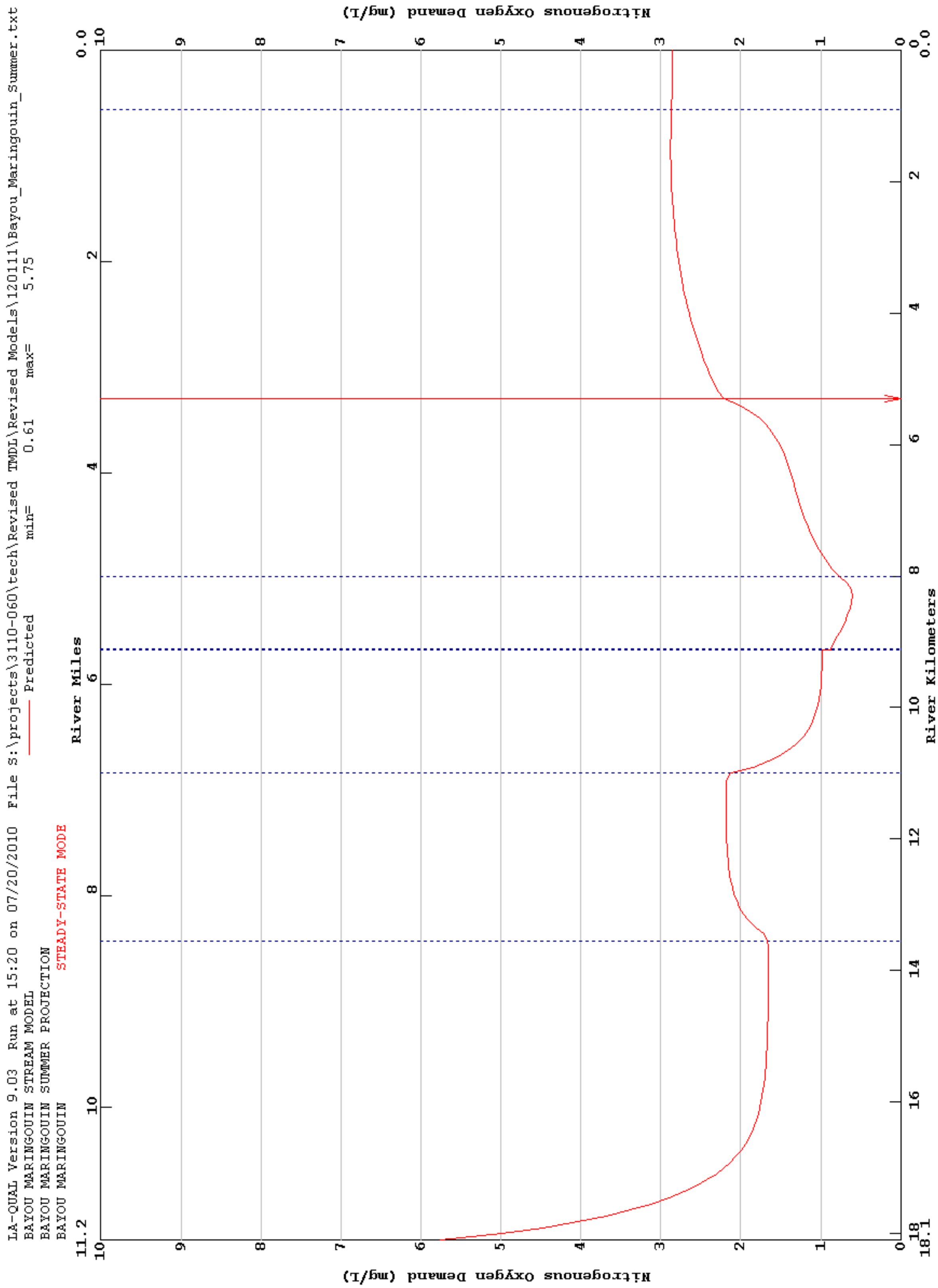

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\summer\summer.txt
BAYOU MARINGOUIN SUMMER PROJECTION
MAIN STEM BAYOU MARINGOUIN
min= 0.00 max= 0.01
River Miles
River Kilometers
Advective Velocity (fps)
Advective Velocity (m/s)
Segment Boundary
UPPER BORROW PIT CANAL
MUSSON ROAD WEIR
UNNAMED TRIBUTARY

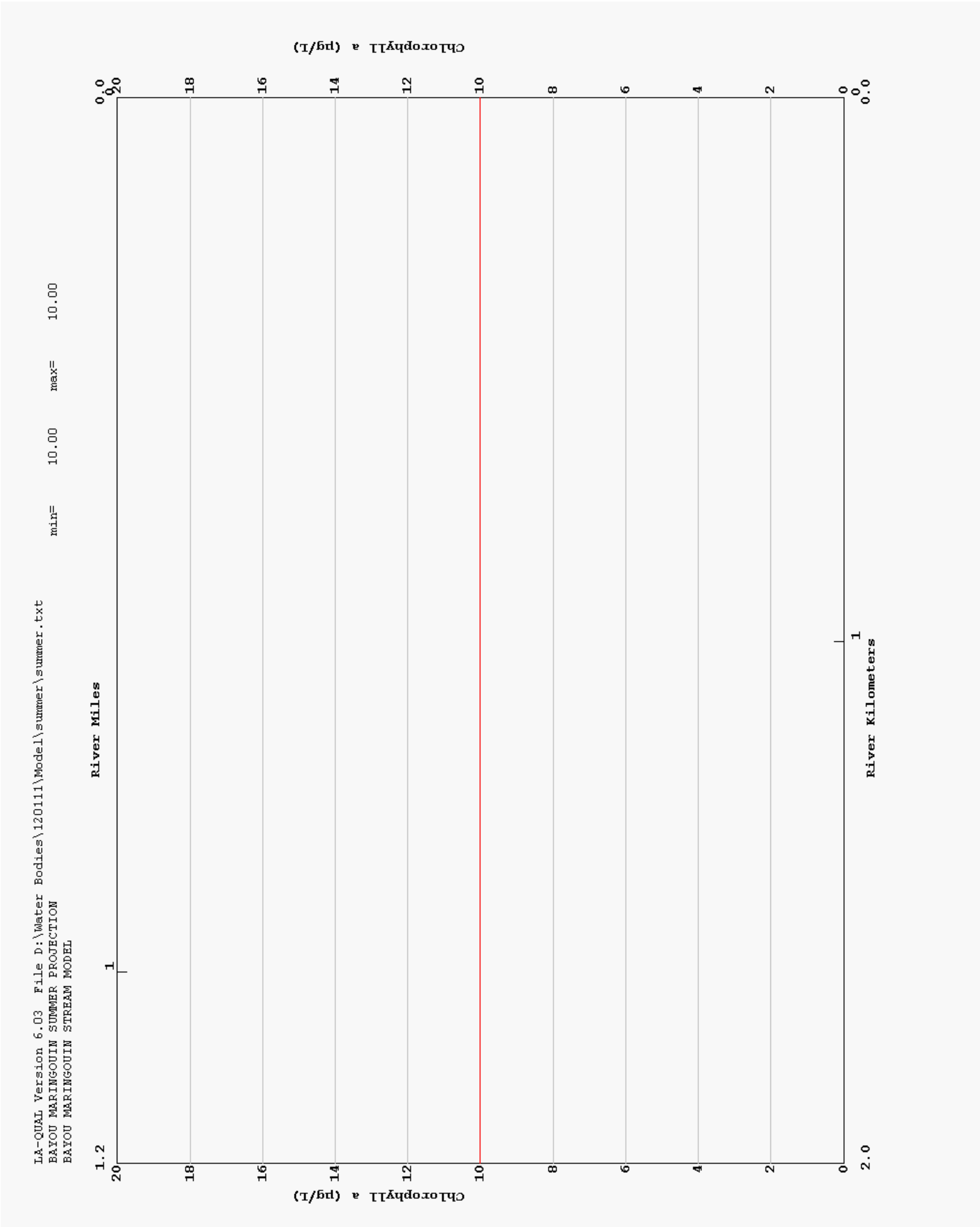

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\summer\summer.txt
BAYOU MARINGOUIN SUMMER PROJECTION
MAIN STEM BAYOU MARINGOUIN
min= 0.00 max= 3.25
River Miles
River Kilometers
Reaeration Rate (per day)
Segment Boundary
UPPER BORROW PIT CANAL
MUSSON ROAD WEIR
UNNAMED TRIBUTARY

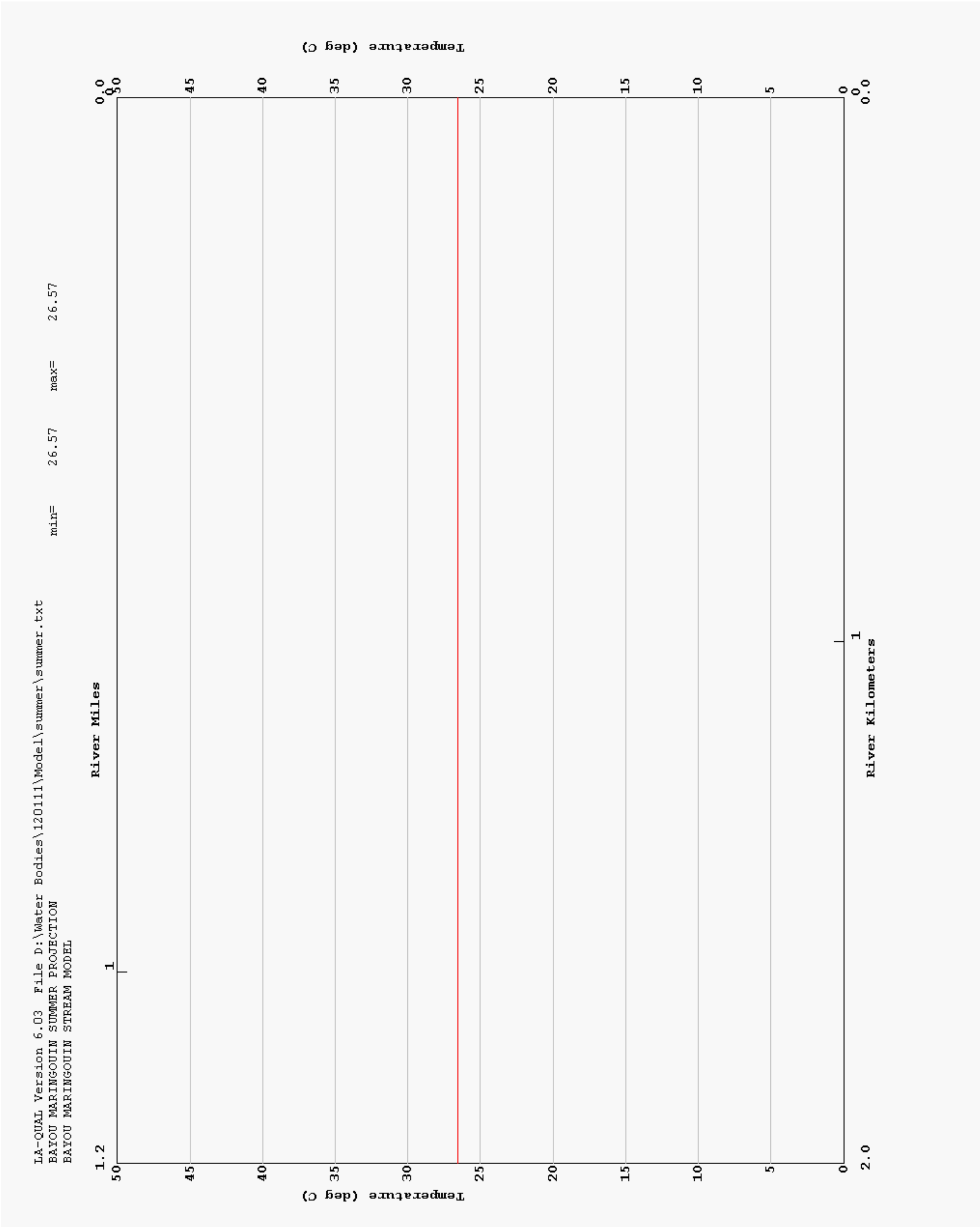

LA-QUAL Version 9.03 Run at 15:20 on 07/20/2010 File S:\projects\3110-060\tech\Revised TMDL\Revised Models\120111\Bayou_Maringouin_Summer.txt
BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN SUMMER PROJECTION
BAYOU MARINGOUIN
Background min= 3.20 max= 4.04
STEADY-STATE MODE
River Miles
River Kilometers
Sediment Oxygen Demand (g/m2/d)
Sediment Oxygen Demand (mg/ft2/d)

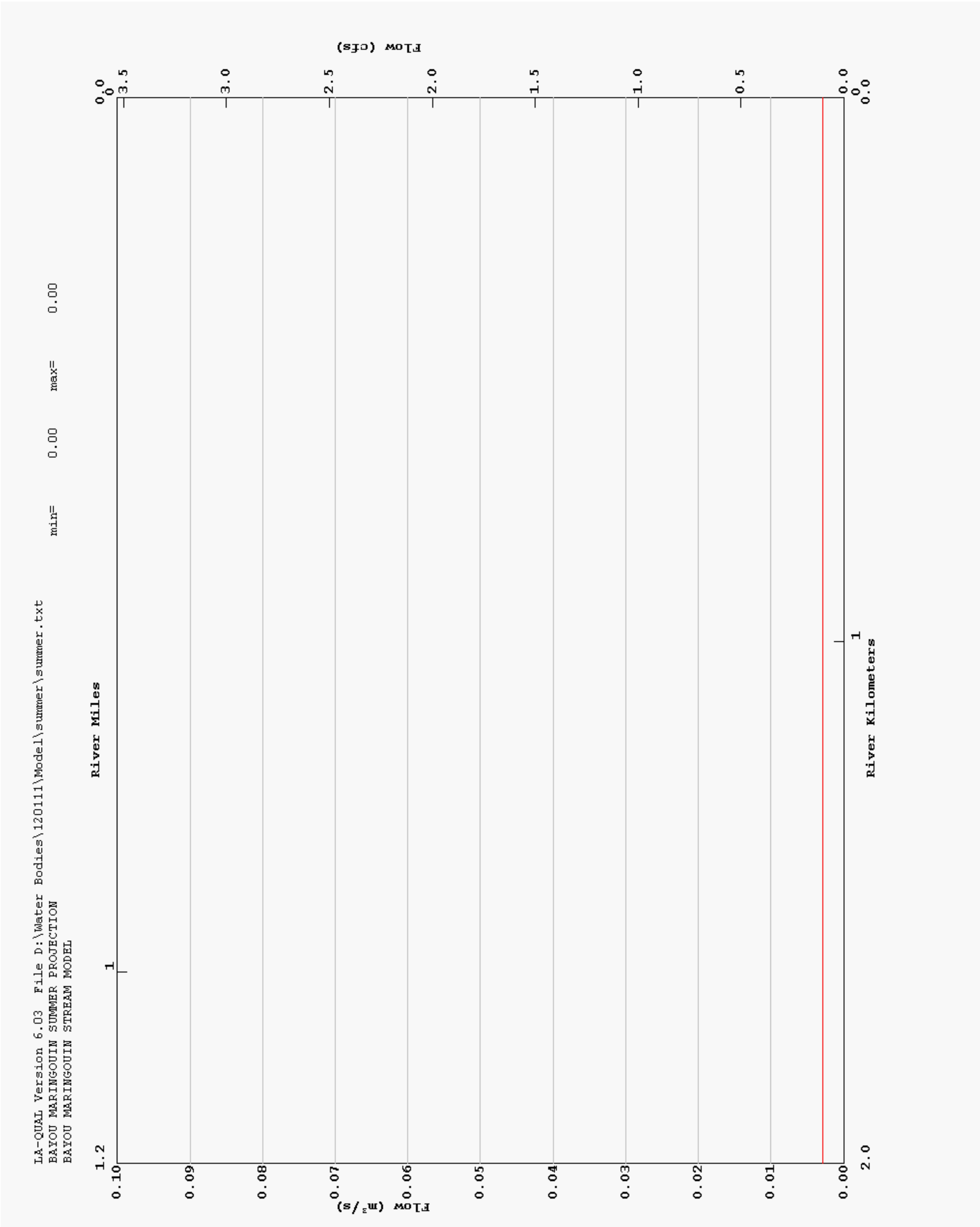

LA-QUAL Version 9.03 Run at 15:20 on 07/20/2010 File S:\projects\3110-060\tech\Revised TMDL\Revised Models\120111\Bayou_Maringouin_Summer.txt
BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN SUMMER PROJECTION
UNNAMED TRIBUTARY
STEADY-STATE MODE
min= 2.35 max= 7.23
Predicted
D.O. Sat
River Miles
River Kilometers
Dissolved Oxygen (mg/L)
Dissolved Oxygen (mg/L)
1.22
1.2
1.0
0.8
0.6
0.4
0.2
0.00
1.96
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.00
10
9
8
7
6
5
4
3
2
1
0

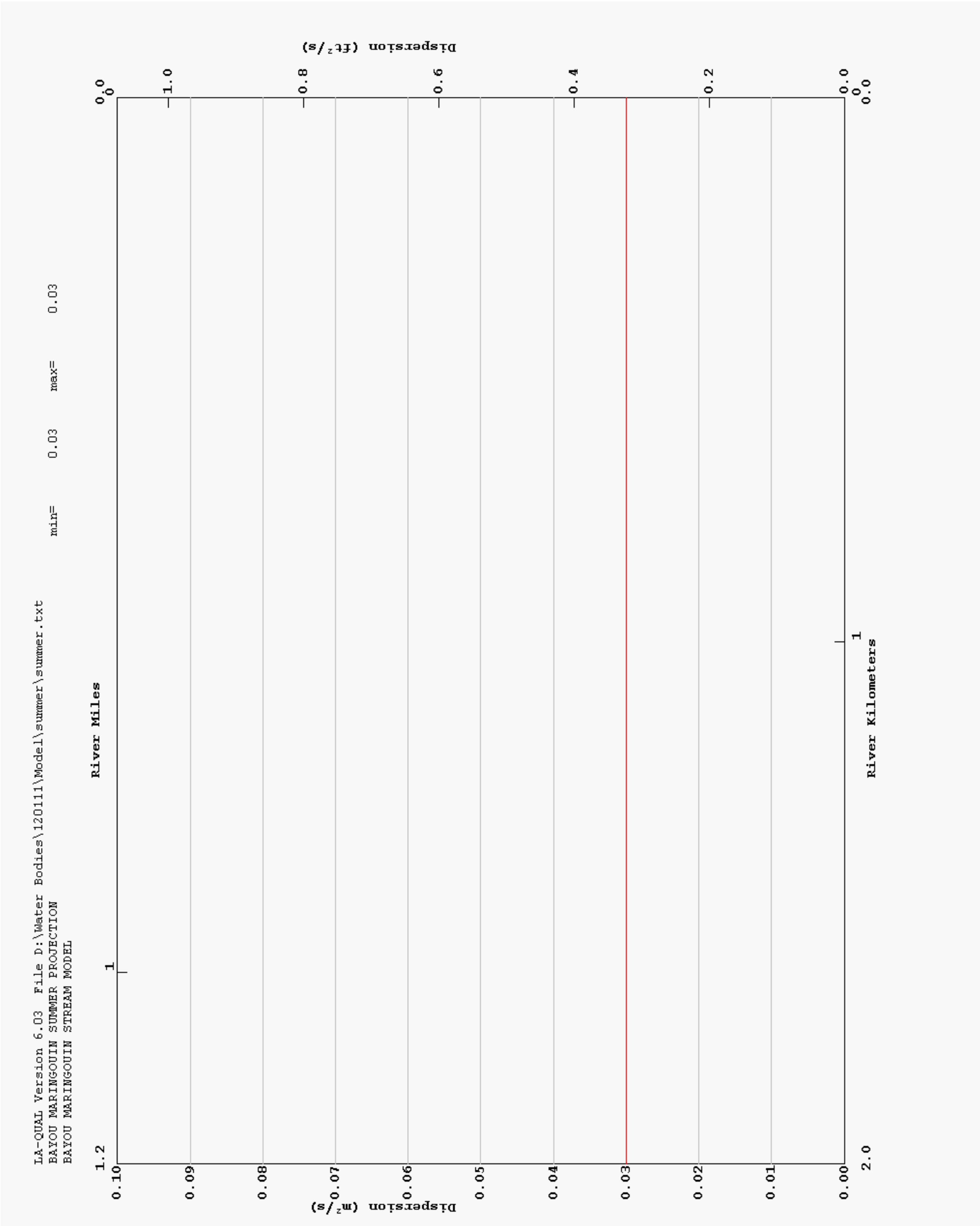

LA-QUAL Version 9.03 Run at 15:20 on 07/20/2010 File S:\projects\3110-060\tech\Revised TMDL\Revised Models\120111\Bayou_Maringouin_Summer.txt
BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN SUMMER PROJECTION
UNNAMED TRIBUTARY
Predicted
min= 2.15 max= 6.00
STEADY-STATE MODE
River Miles
River Kilometers
Effective BOD1 (mg/L)

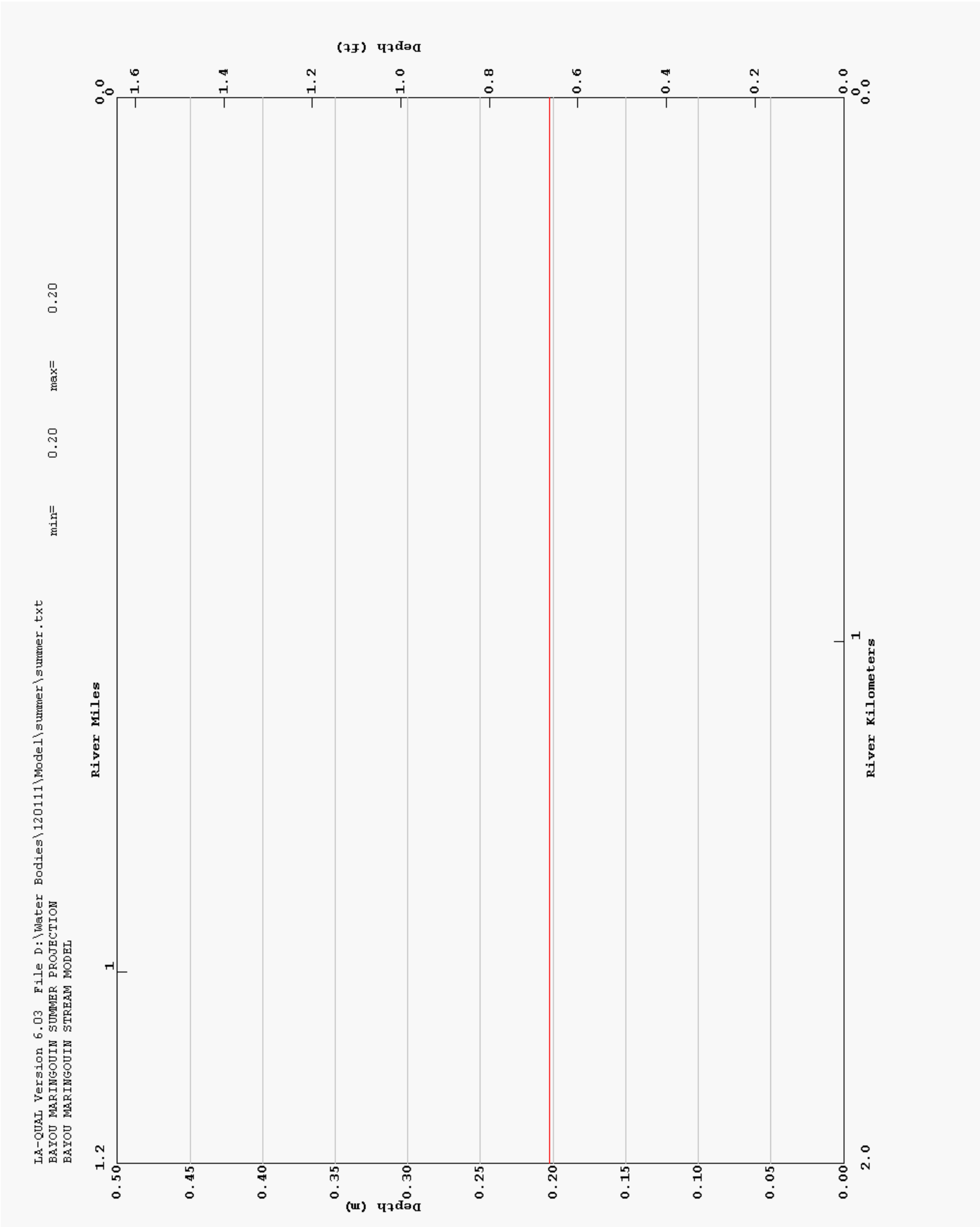

LA-QUAL Version 9.03 Run at 15:20 on 07/20/2010 File S:\projects\3110-060\tech\Revised TMDL\Revised Models\120111\Bayou_Maringouin_Summer.txt
BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN SUMMER PROJECTION
BAYOU MARINGOUIN
STEADY-STATE MODE
Predicted min= 0.61 max= 5.75
River Miles
River Kilometers
Nitrogenous Oxygen Demand (mg/L)


LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\summer\summer.txt
BAYOU MARINGOUIN SUMMER PROJECTION
BAYOU MARINGOUIN STREAM MODEL
min= 10.00 max= 10.00
River Miles
River Kilometers
Chlorophyll a (µg/L)

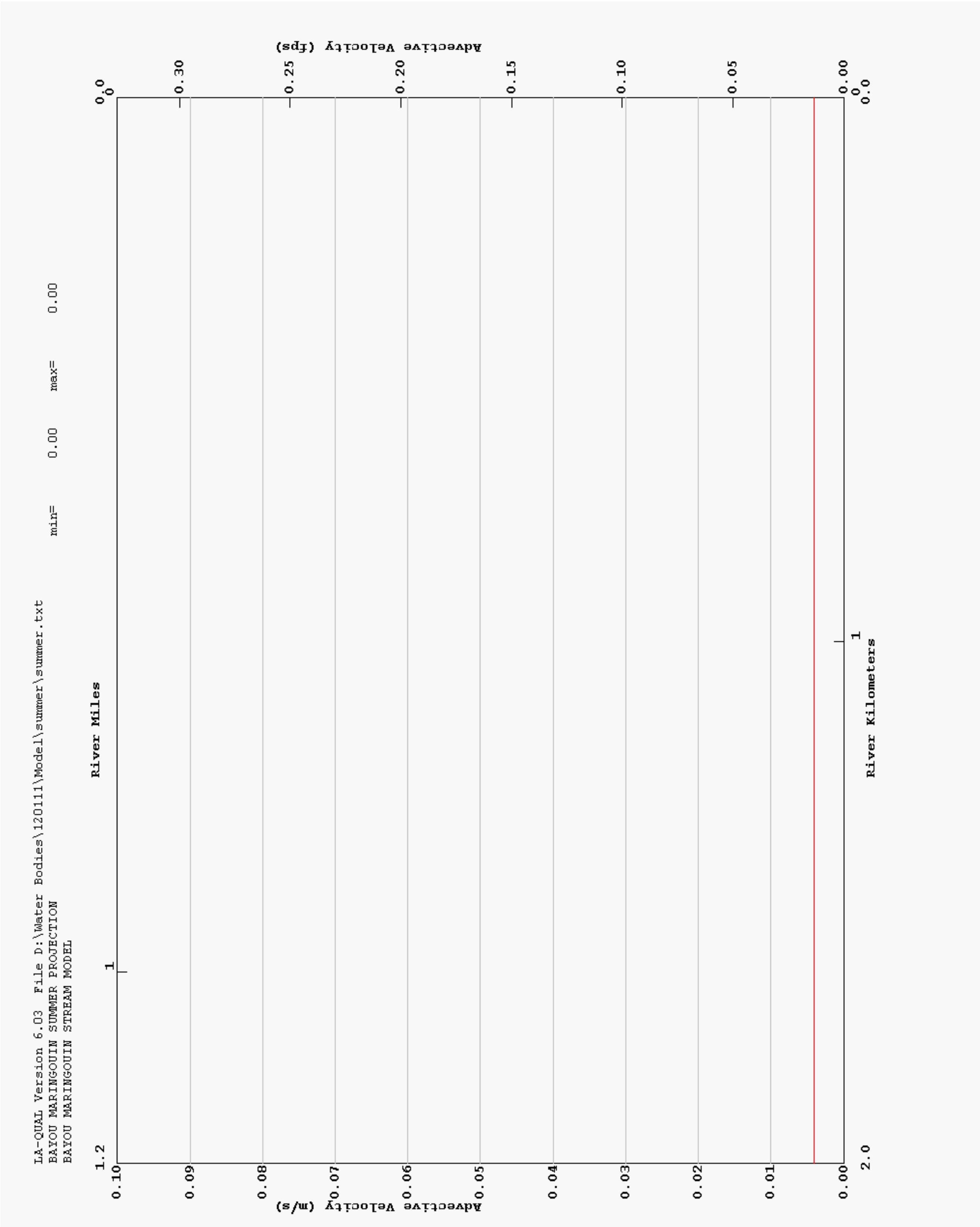

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\summer\summer.txt
BAYOU MARINGOUIN SUMMER PROJECTION
BAYOU MARINGOUIN STREAM MODEL
min= 26.57
max= 26.57
River Miles
River Kilometers
Temperature (deg C)
1.2
1
0.0
2.0
1
0.0
50
45
40
35
30
25
20
15
10
5
0

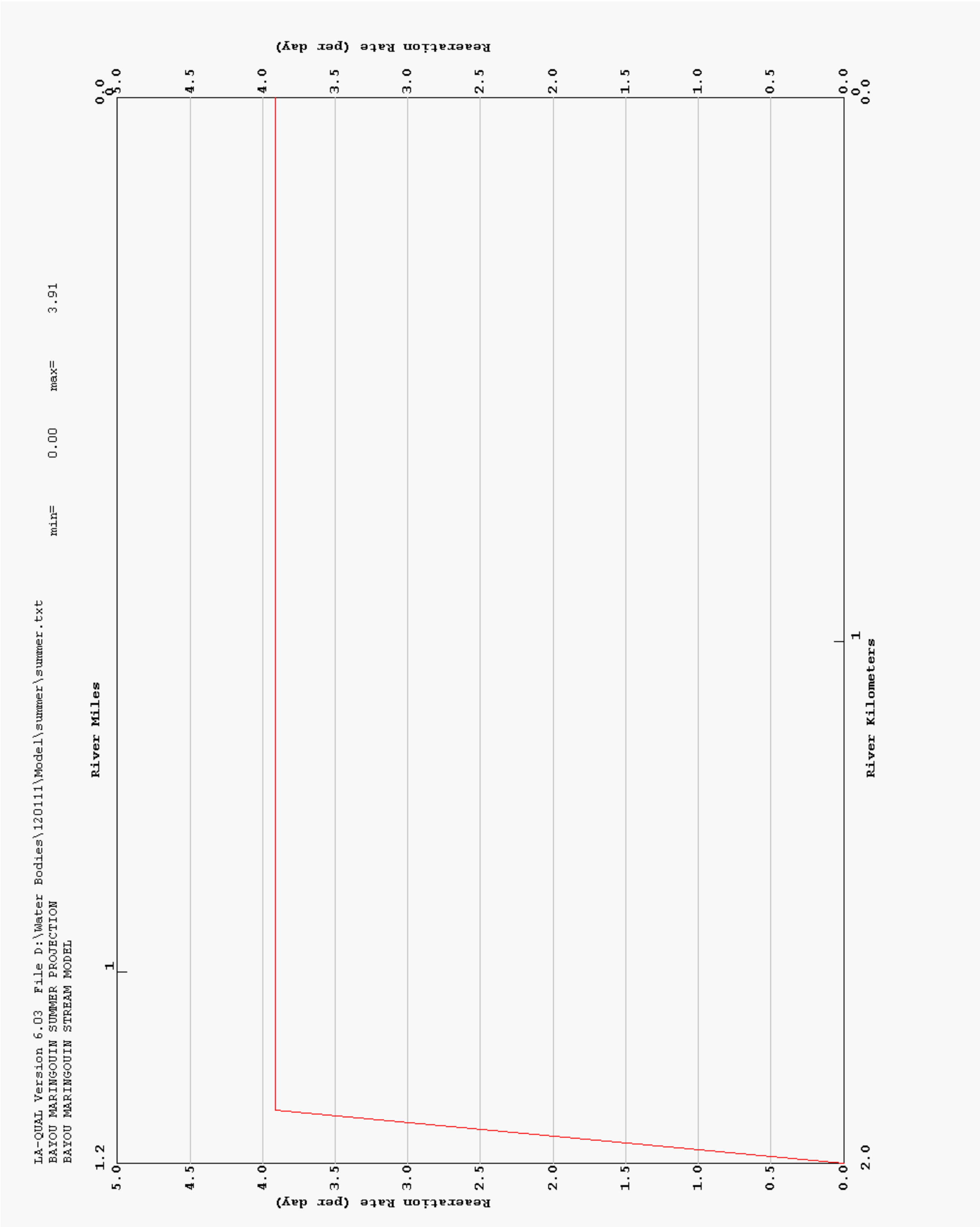

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\summer\summer.txt
BAYOU MARINGOUIN SUMMER PROJECTION
BAYOU MARINGOUIN STREAM MODEL
min= 0.00
max= 0.00
River Miles
River Kilometers
Flow (cfs)
Flow (m³/s)

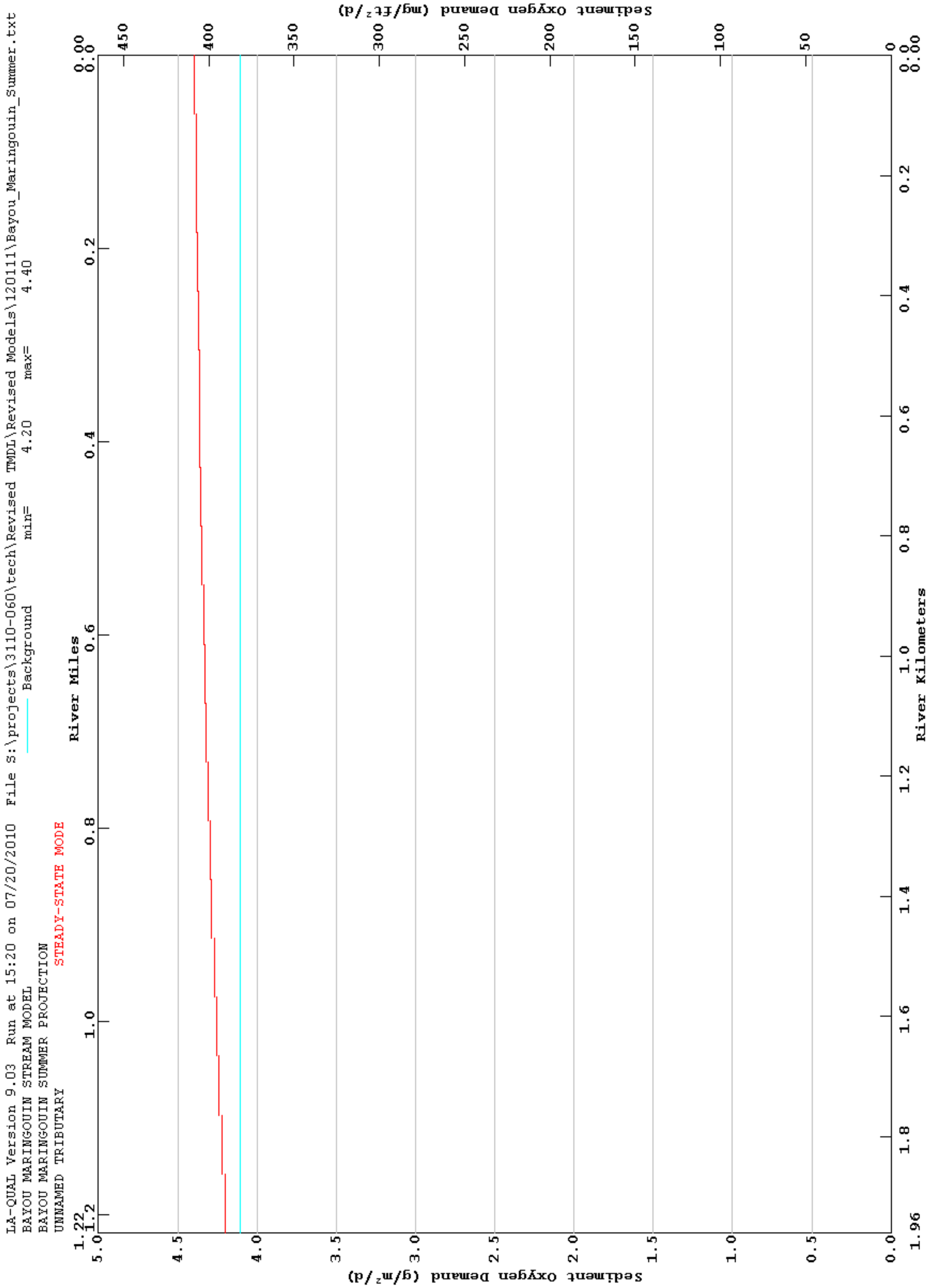

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\summer\summer.txt
BAYOU MARINGOUIN SUMMER PROJECTION
BAYOU MARINGOUIN STREAM MODEL
min= 0.03 max= 0.03
River Miles
River Kilometers
Dispersion (m²/s)
Dispersion (ft²/s)
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
1.0
0.8
0.6
0.4
0.2
0.0
1.2
1
0.0
2.0
1
0.0


LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\summer\summer.txt
BAYOU MARINGOUIN SUMMER PROJECTION
BAYOU MARINGOUIN STREAM MODEL
min= 0.20 max= 0.20
River Miles
River Kilometers
Depth (m)
Depth (ft)
1.2
1
0.0
2.0
1
0.0
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0


LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\summer\summer.txt
BAYOU MARINGOUIN SUMMER PROJECTION
BAYOU MARINGOUIN STREAM MODEL
min= 3.43 max= 3.43
River Miles
River Kilometers
Width (ft)
Width (m)


LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\summer\summer.txt
BAYOU MARINGOUIN SUMMER PROJECTION
BAYOU MARINGOUIN STREAM MODEL
min= 0.00 max= 0.00
River Miles
River Kilometers
Advective Velocity (fps)
Advective Velocity (m/s)
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
0.10
1.2
1
0.0
2.0


LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\summer\summer.txt
BAYOU MARINGOUIN SUMMER PROJECTION
BAYOU MARINGOUIN STREAM MODEL
min= 0.00 max= 3.91
River Miles
1.2
1
0.0
River Kilometers
2.0
1
0.0
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


LA-QUAL Version 9.03 Run at 15:20 on 07/20/2010 File S:\projects\3110-060\tech\Revised TMDL\Revised Models\120111\Bayou_Maringouin_Summer.txt
BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN SUMMER PROJECTION
UNNAMED TRIBUTARY
Background min= 4.20 max= 4.40
STEADY-STATE MODE
River Miles
River Kilometers
Sediment Oxygen Demand (g/m²/d)
Sediment Oxygen Demand (mg/ft²/d)
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.22
0.00
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
1.96
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0
450
400
350
300
250
200
150
100
50

Appendix B4 – Winter Justifications

Bayou Maringouin (120111) Water Quality Winter Projection Model Input Description

DATA TYPE 3, Program Constants			
Description of Constant	**Value**	**Result**	**Source/Justification**
Maximum iteration limit	200	Increases the maximum number of itterations the model will make before it quits attempting to converge.	Standard
KL Minimum	0.7	Minimum KL to be used.	The minimum KL specified in the LTP of 2.3 ft/day converted to 0.70 m/day.
Inhibition control value	4	Inhibits all decay rates for low DO.	Standard LA modeling procedure and default value therefore not visible in the calibration model input file.
Ocean exchange ratio	0	Set 0% tidal exchange at lower boundary.	This was done to not force the bottom element through the lower boundary conditions.
Hydraulic calculation method	2	Sets the hydraulic calculation method to width and depth coefficients.	The low slopes in this waterbody cause a substantial amount of water to be present during critical flow conditions, making the Leopold relationships inaccurate. This method allows the model to predict a more accurate depth and width during low flow conditions.
Effective BOD due to Algae	0.10	Sets the effect that decaying algae will have on BOD.	Minimum recommended model manual's value. Used because of elevated chlorophyll a measurements in the survey.
Algae Oxygen Prod	0.0	No oxygen production due to algae	In choosing to calibrate disolved oxygen to the lesser of 1mg/l above the minimum recorded concentration or the daily average it is assumed that we are calibrating to a concentration that would exist without any algae effects on dissolved oxygen concentration. Therefore, oxygen production due to algae is set to zero for the calibration model.
All other Constants	Default	Constants left to model defaults	

Bayou Maringouin (120111) Water Quality Winter Projection Model Input Description

DATA TYPE 4, Temperature Correction Constants		
Description of Coefficient	**Value**	**Source/Justification**
All Coefficients	Default	No changes were made to the model default settings

Bayou Maringouin (120111) Water Quality Winter Projection Model Input

DATA TYPE 9, Advective Hydraulic Coefficients					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Bayou Maringouin Reach 1	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	4.877	Width of representative cross section taken at site BM1 during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.3322	Average depth of representative cross section taken at site BM1 during the intensive survey.
2	Unnamed Tributary Reach 2	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	3.429	Average of the cross section widths taken at sites BM1 and BM7 during the intensive survey. The tributay widened and appeared to be characteristic of the upper portion of the stream on the USGS DOQQ arial photography. The Average of these two cross section widths is assumed to be characteristic for the width of the entire reach.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.2027	Average of the cross section depths taken at sites BM1 and BM7. The tributay widened and appeared to be characteristic of the upper portion of the stream on the USGS DOQQ arial photography. The Average of these two cross section depths is assumed to be characteristic for the average depth of the entire reach.
3	Bayou Maringouin Reach 3	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	14.63	Width of representative cross section taken at site BM2 during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.2987	Average depth of representative cross section taken at site BM2 during the intensive survey.
4	Bayou Maringouin Reach 4	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	11.58	Width of representative cross section taken at site BM3 during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.6614	Average depth of representative cross section taken at site BM3 during the intensive survey.
5	Bayou Maringouin Reach 5	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	3.627	Width of representative cross section taken at site BM3A during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.256	Average depth of representative cross section taken at site BM3A during the intensive survey.

DATA TYPE 9, Advective Hydraulic Coefficients					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
6	Bayou Maringouin Reach 6	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	3.627	Width of representative cross section taken at site BM3A during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.256	Average depth of representative cross section taken at site BM3A during the intensive survey.
7	Bayou Maringouin Reach 7	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	6.096	Width of representative cross section taken at site BM4 during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.4968	Average depth of representative cross section taken at site BM4 during the intensive survey.
8	Bayou Maringouin Reach 8	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	7.010	Width of representative cross section taken at site BM5 during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.2438	Average depth of representative cross section taken at site BM5 during the intensive survey.
9	Bayou Maringouin Reach 9	Width Coef "A"	Unitless	0	Note 1
		Width Exp "B"	Unitless	0.5	Note 2
		Width Const "C"	Meter	12.19	Width of estimated cross section at site BM6 during the intensive survey.
		Depth Coef "D"	Unitless	0	Note 1
		Depth Exp "E"	Unitless	0.5	Note 2
		Depth Const "F"	Meter	0.3048	Estimated average depth of cross section at site BM6 during the intensive survey.

Note 1: Based on Stream hydrology and behavior during critical conditions, the stream widths and depths were assumed not to vary considerably during critical flows. Therefore, a reach constant width and depth were used by setting the "A" and "D" constants to zero eleminating the exponential flow realtionship.

Note 2: In order to avoid error messages when executing the model, the sum of the coefficients "B" and "E" cannot be greater than 1. The value of 0.5 was chosen in order to meet this requirement. The coeficients do not have any effects on the model (See note 1).

Bayou Maringouin (120111) Water Quality Winter Projection Model Input Description

DATA TYPE 10, Dispersive Hydraulic Coefficients					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
1-4	Reaches 1 through 4	Dispersion Coef.	m2/sec	0.3	Value recommended in the Texas Technical Procedures, November 1990
5	Reach 5	Dispersion Coef.	m2/sec	0	No Diffusion back over the weir
6-7	Reaches 6 and 7	Dispersion Coef.	m2/sec	1	Higher difussion due to increased mixing in lower reaches due to tidal effects
8-9	Reaches 8 and 9	Dispersion Coef.	m2/sec	10	Higher difussion due to increased mixing in lower reaches due to tidal effects

DATA TYPE 11, INITIAL CONDITIONS					
Reach #	**REACH DESCRIPTION**	**Initial Parameter**	**Units**	**Value**	**Source/Justification**
1	Bayou Maringoiun Reach 1	Temperature	°Celcius	17.79	Winter season 90th percentile temperature from ambient data
		Dissolved O_2	mg/l	5	BPJ -- Reasonable value to begin oxygen dependant itterations for projection purposes
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions
2	Unnamed Tributary Reach 2	Temperature	°Celcius	17.79	Winter season 90th percentile temperature from ambient data
		Dissolved O_2	mg/l	5	BPJ -- Reasonable value to begin oxygen dependant itterations for projection purposes
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions
5	Bayou Maringoiun Reach 3	Temperature	°Celcius	17.79	Winter season 90th percentile temperature from ambient data
		Dissolved O_2	mg/l	5	BPJ -- Reasonable value to begin oxygen dependant itterations for projection purposes
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions
4	Bayou Maringoiun Reach 4	Temperature	°Celcius	17.79	Winter season 90th percentile temperature from ambient data
		Dissolved O_2	mg/l	5	BPJ -- Reasonable value to begin oxygen dependant itterations for projection purposes
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions
5	Bayou Maringoiun Reach 5	Temperature	°Celcius	17.79	Winter season 90th percentile temperature from ambient data
		Dissolved O_2	mg/l	5	BPJ -- Reasonable value to begin oxygen dependant itterations for projection purposes
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions
6	Bayou Maringoiun Reach 6	Temperature	°Celcius	17.79	Winter season 90th percentile temperature from ambient data
		Dissolved O_2	mg/l	5	BPJ -- Reasonable value to begin oxygen dependant itterations for projection purposes
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions
7	Bayou Maringoiun Reach 7	Temperature	°Celcius	17.79	Winter season 90th percentile temperature from ambient data
		Dissolved O_2	mg/l	5	BPJ -- Reasonable value to begin oxygen dependant itterations for projection purposes
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions
8	Bayou Maringoiun Reach 8	Temperature	°Celcius	17.79	Winter season 90th percentile temperature from ambient data
		Dissolved O_2	mg/l	5	BPJ -- Reasonable value to begin oxygen dependant itterations for projection purposes
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions
9	Bayou Maringoiun Reach 9	Temperature	°Celcius	17.79	Winter season 90th percentile temperature from ambient data
		Dissolved O_2	mg/l	5	BPJ -- Reasonable value to begin oxygen dependant itterations for projection purposes
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Bayou Maringouin Reach 1	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	2.850	Value calculated by the TMDL Spreadsheet for a 88% reduction of assumed man-made loading
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates
2	Unnamed Tributary Reach 2	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	3.071	Value calculated by the TMDL Spreadsheet for a 88% reduction of assumed man-made loading
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates
3	Bayou Maringouin Reach 3	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	2.560	Value calculated by the TMDL Spreadsheet for a 88% reduction of assumed man-made loading
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates
4	Bayou Maringouin Reach 4	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	2.327	Value calculated by the TMDL Spreadsheet for a 88% reduction of assumed man-made loading
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates
5	Bayou Maringouin Reach 5	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	2.000	Value calculated by the TMDL Spreadsheet for a 88% reduction of assumed man-made loading
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates
6	Bayou Maringouin Reach 6	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	2.200	Value calculated by the TMDL Spreadsheet for a 88% reduction of assumed man-made loading
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.1	Based on the LTP suggested CBOD settling rate for advance treatment discharges.
7	Bayou Maringouin Reach 7	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	2.200	Value calculated by the TMDL Spreadsheet for a 88% reduction of assumed man-made loading
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates
8	Bayou Maringouin Reach 8	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	2.061	Value calculated by the TMDL Spreadsheet for a 88% reduction of assumed man-made loading
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.05	
9	Bayou Maringouin Reach 9	K_2 option	Unitless	11	The Texas Reaeration Equation was chosen to best represent the reaeration potential of this stream.
		Background SOD	g/m^2-day	1.800	Value calculated by the TMDL Spreadsheet for a 88% reduction of assumed man-made loading
		Aerobic BOD decay	1/day	0.07	Average CBOD decay rates for all measurements taken on this system durning the intensive survey
		BOD Settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates

Bayou Maringouin (120111) Water Quality Winter Projection Model Input

DATA TYPE 13, Nitrogen and Phosphorus					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Bayou Maringoiun Reach 1	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this sys durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.
2	Unnamed Tributary Reach 2	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this sys durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.
3	Bayou Maringoiun Reach 3	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this sys durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.
4	Bayou Maringoiun Reach 4	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this sys durning the intensive survey
			1/day	0.05	Based on the LTP suggested CBOD settling rates.
5	Bayou Maringoiun Reach 5	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this sys durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.
6	Bayou Maringoiun Reach 6	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this sys durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.
7	Bayou Maringoiun Reach 7	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this sys durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.
8	Bayou Maringoiun Reach 8	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this sys durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.
9	Bayou Maringoiun Reach 9	NBOD decay rate	1/day	0.1	Average NBOD decay rates for all measurements taken on this sys durning the intensive survey
		NBOD settling rate	1/day	0.05	Based on the LTP suggested CBOD settling rates.

Bayou Maringouin (120111) Water Quality Winter Projection Model Input Description

DATA TYPE 16, Incremental Data for Flow, Temperature, Salinity, and Conservatives					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Bayou Maringoiun Reach 1	Incremental Inflow	m^3/s		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
2	Unnamed Tributary Reach 2	Incremental Inflow	m^3/s		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
3	Bayou Maringoiun Reach 3	Incremental Inflow	m^3/s		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
4	Bayou Maringoiun Reach 4	Incremental Inflow	m^3/s		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed

Bayou Maringouin (120111) Water Quality Winter Projection Model Input Description

DATA TYPE 17, Incremental Flow Data for DO, BOD, and Nitrogen					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Bayou Maringoiun Reach 1	Dissolved Oxygen	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
		CBOD	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
		NBOD	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
2	Unnamed Tributary Reach 2	Dissolved Oxygen	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
		CBOD	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
		NBOD	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
3	Bayou Maringoiun Reach 3	Dissolved Oxygen	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
		CBOD	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
		NBOD	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
4	Bayou Maringoiun Reach 4	Dissolved Oxygen	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
		CBOD	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed
		NBOD	mg/L		Default headwater flows are assumed to compensate for incremental inflows therefore, the incremental flows were removed

DATA TYPE 19, Nonpoint Source Data					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Bayou Maringouin Reach 1	BOD	kg/day	15.198	Calculated by TMDL Spreadsheet for 88% removal of assumed man-made loads
		Organic Nitrogen	kg/day	4.274	Calculated by TMDL Spreadsheet for 88% removal of assumed man-made loads
2	Bayou Maringouin Reach 2	BOD	kg/day	3.177	Calculated by TMDL Spreadsheet for 88% removal of assumed man-made loads
		Organic Nitrogen	kg/day	0.794	Calculated by TMDL Spreadsheet for 88% removal of assumed man-made loads
3	Bayou Maringouin Reach 3	BOD	kg/day	13.598	Calculated by TMDL Spreadsheet for 88% removal of assumed man-made loads
		Organic Nitrogen	kg/day	7.999	Calculated by TMDL Spreadsheet for 88% removal of assumed man-made loads
4	Bayou Maringouin Reach 4	BOD	kg/day	22.158	Calculated by TMDL Spreadsheet for 88% removal of assumed man-made loads
		Organic Nitrogen	kg/day	3.324	Calculated by TMDL Spreadsheet for 88% removal of assumed man-made loads
5	Bayou Maringouin Reach 5	BOD	kg/day	0.000	Calculated by TMDL Spreadsheet for 88% removal of assumed man-made loads
		Organic Nitrogen	kg/day	0.000	Calculated by TMDL Spreadsheet for 88% removal of assumed man-made loads
6	Bayou Maringouin Reach 6	BOD	kg/day	0.000	Calculated by TMDL Spreadsheet for 88% removal of assumed man-made loads
		Organic Nitrogen	kg/day	0.000	Calculated by TMDL Spreadsheet for 88% removal of assumed man-made loads
7	Bayou Maringouin Reach 7	BOD	kg/day	3.500	Calculated by TMDL Spreadsheet for 88% removal of assumed man-made loads
		Organic Nitrogen	kg/day	3.000	Calculated by TMDL Spreadsheet for 88% removal of assumed man-made loads
8	Bayou Maringouin Reach 8	BOD	kg/day	22.398	Calculated by TMDL Spreadsheet for 88% removal of assumed man-made loads
		Organic Nitrogen	kg/day	8.511	Calculated by TMDL Spreadsheet for 88% removal of assumed man-made loads
9	Bayou Maringouin Reach 9	BOD	kg/day	8.000	Calculated by TMDL Spreadsheet for 88% removal of assumed man-made loads
		Organic Nitrogen	kg/day	3.000	Calculated by TMDL Spreadsheet for 88% removal of assumed man-made loads

DATA TYPE 20, Headwater Data for Flow, Temperature, Salinity, and Conservatives					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
1	Bayou Maringoiun Reach 1	Element # of input		1	
		Headwater name		BAYOU MARINGOUIN	
		Headwater flow	cms	0.02830	Winter critical flow from the LTP
		Temperature	^{o}Celcius	17.79	Winter season 90th percentile temperature from ambient data
2	Unnamed Tributary Reach 2	Element # of input		51	
		Headwater name		Unnamed Tributary	
		Headwater flow	cms	0.02830	Winter critical flow from the LTP
		Temperature	^{o}Celcius	17.79	Winter season 90th percentile temperature from ambient data

DATA TYPE 21, Headwater Data for DO, BOD, and Nitrogen					
Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Bayou Maringoiun Reach 1	Element # of input		1	
		Dissolved O_2	mg/l	8.56	DO near 90% saturated
		BOD	mg/l	4.84	Calculated value from TMDL spreadsheet for 88% reduction of assumed man-made loads
		Organic Nitrogen	mg/l	5.75	Calculated value from TMDL spreadsheet for 88% reduction of assumed man-made loads
2	Unnamed Tributary Reach 2	Element # of input		51	
		Dissolved O_2	mg/l	8.56	DO near 90% saturated
		BOD	mg/l	3.18	Calculated value from TMDL spreadsheet for 88% reduction of assumed man-made loads
		Organic Nitrogen	mg/l	2.81	Calculated value from TMDL spreadsheet for 88% reduction of assumed man-made loads

Bayou Maringouin (120111) Water Quality Winter Projection Model Input

DATA TYPE 22, Headwater Data for Phosphorus, Chlorophyll, Coliform, and Nonconservatives					
Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Bayou Maringoiun Reach 1	Element # of input		1	
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae du reductions
2	Unnamed Tributary Reach 2	Element # of input		101	
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae du reductions

Bayou Maringouin (120111) Water Quality Winter Projection Model Input Description

DATA TYPE 23, Junction Data		
Downstream Element	Upstream Element	Junction Name
71	50	Unnamed Trib Confluence with Bayou

DATA TYPE 22, Headwater Data for Phosphorus, Chlorophyll, Coliform, and Nonconservatives					
Reach #	NAME	Parameter	Units	Value	Source/Justification
1	Bayou Maringoiun Reach 1	Element # of input		1	
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions
2	Unnamed Tributary Reach 2	Element # of input		51	
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions

Bayou Maringouin (120111) Water Quality Winter Projection Model Input Description

	DATA TYPE 25, Wastewater Data for DO, BOD, and Nitrogen				
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
6	Bayou Maringouin Reach 8				No Parameters specified for this because it is an outflow

Bayou Maringouin (120111) Water Quality Winter Projection Model Input Description

DATA TYPE 25, Wastewater Data for Phosphorus, Chlorophyll, Coliform, and Nonconservatives					
Reach #	**REACH DESCRIPTION**	**Parameter**	**Units**	**Value**	**Source/Justification**
8	Bayou Mairngouin Reach 8				No Parameters specified for this because it is an outflow

DATA TYPE 27, Lower Boundary Conditions					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
9	Bayou Maringouin Reach 9	Temperature	^{o}Celcius	17.79	Winter season 90th percentile temperature from ambient data
		Salinity	ppt	0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		Conservative Matl. I	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		Conservative Matl. II	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		Dissolved O_2	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		BOD	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		NBOD	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		Chlorophyll a	ug/l	10	Chlorophyll a Value to represent a lower concentration of algae due to reductions
		NCM	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.

Bayou Maringouin (120111) Water Quality Winter Projection Model Input

DATA TYPE 28, Dam Data					
Reach #	**NAME**	**Parameter**	**Units**	**Value**	**Source/Justification**
5	Bayou Maringouin Reach 5	Name		Munsen Road Weir	
		Reareation Option	none	1	Butts and Evans (1983)
		Factor "A"	none	1	BPJ Subjective Water Quality -- Near "Moderate"
		Coefficient "B"	none	1.05	Sharp-crested straight slope face weir
		Static Head Loss	m	1	Estimated static head loss over weir from photos and visual reconnisance.

Appendix B5 – Winter Loading

Winter Projection, Non-Point Benthic Load Input and TMDL Calculations: Subsegment 120111

Modeled stream or water body: **Bayou Maringouin -- LA120111**

Shaded cells are input values for calculations.

Values to be used in the projection models.

	Calibration Model Values												Projection Model Equivalents				Projected Model Loads				Margin of Safety Loads					
Reach Number and Description	Non-Point UCBOD	Non-Point UNBOD	SOD @ 20°C	Total Calb. 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)	Reduced TCBL adjusted for MOS	Non-Point UCBOD	Non-Point UNBOD	SOD @ 20°C	Non-Point UCBOD INPUTS	Non-Point UNBOD INPUTS	SOD load @ Proj. temp.	Total Projection Benthic Load **(LA+MOS)**	MOS Total Benthic Load @ 20°C	MOS SOD @ 20°C	Non-Point UCBOD MOS Loads	Non-Point UNBOD 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 Celcius)	%	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 / D)**	**M = (K)(B / D)**	**N = (K)(C / D)**	**O = (E)(G)(L)**	**P = (E)(G)(M)**	**Q,** (note 4)	**O + P + Q**	**R = (K-J)(E)(G)**	**S = (R)(C/D)**	**T= (R)(A/D)**	**U = (R)(B/D)**	**V,** (note 5)	**T + U + V**
Reach 1: Main Stem Headwaters to Junction with Unnamed Tributary	1.442	0.406	6.00	7.848	4.55	3.00	0%	3.00	4.88	17.79	88.0%	3.58	3.73	0.685	0.193	2.850	15.198	4.274	55	74.49	3	2	1	0	2	3
REACH 2: Tributary from Headwaters to confluence with Main Stem	0.595	0.149	5.50	6.244	1.96	3.00	0%	3.00	4.88	17.79	88.0%	3.39	3.49	0.332	0.083	3.071	3.177	0.794	26	29.51	1	1	0	0	1	1
REACH 3: Main Stem from Unnamed Tributary to Pool above the Weir	0.456	0.268	3.20	3.924	2.55	3.00	0%	3.00	14.63	17.79	88.0%	3.11	3.14	0.364	0.214	2.560	13.598	7.999	83	104.69	1	1	0	0	1	1
REACH 4: Main Stem Pool above Weir	1.837	0.276	4.20	6.313	1.88	3.00	0%	3.00	11.58	17.79	88.0%	3.40	3.50	1.018	0.153	2.327	22.158	3.324	44	69.56	2	1	1	0	1	2
REACH 5: Main Stem single Cell Weir Effect Reach	0.000	0.000	2.00	2.000	0.01	3.00	0%	3.00	3.63	17.79	88.0%	2.00	2.00	0.000	0.000	2.000	0.000	0.000	0	0.06	0	0	0	0	0	0
REACH 6: Main Stem from Weir to wider section of stream	0.000	0.000	2.20	2.200	1.11	3.00	0%	3.00	3.63	17.79	88.0%	2.20	2.20	0.000	0.000	2.200	0.000	0.000	8	7.71	0	0	0	0	0	0
REACH 7: Main Stem wide section to Upper Borrow Pit Distributary	0.213	0.182	2.20	2.595	2.70	3.00	0%	3.00	6.10	17.79	88.0%	2.59	2.59	0.213	0.182	2.200	3.500	3.000	32	38.01	0	0	0	0	0	0
REACH 8: Main Stem Upper Borrow Pit Distributary to Lower Wide Section of Stream	0.811	0.308	2.30	3.419	4.40	3.00	0%	3.00	7.01	17.79	88.0%	3.05	3.06	0.726	0.276	2.061	22.398	8.511	55	86.21	0	0	0	0	0	0
REACH 9: Main Stem Lower Wide section to end of model at Ramah Canal	0.729	0.273	1.80	2.802	0.90	3.00	0%	3.00	12.19	17.79	88.0%	2.80	2.80	0.729	0.273	1.800	8.000	3.000	17	28.18	0	0	0	0	0	0
Sub-Total												26.13					88	31	319	**438**	8		2	0	5	**7**

Notes: Note 1, Data was calculated in and brought from the Calibration worksheet dataset.
Note 2, $\mathbf{J} = [(1 - \mathbf{H}) \times (\mathbf{D} - \mathbf{F}) + \mathbf{F}]$
Note 3, $\mathbf{K} = [(\mathbf{J} - \mathbf{F}) / (1 - \mathrm{MOS}) + \mathbf{F}]$
Note 4, $\mathbf{Q} = \mathbf{E} \times \mathbf{G} \times \mathbf{N} \times 1.065^{(\mathbf{I}-20)}$
Note 5, $\mathbf{V} = \mathbf{S} \times 1.065^{(\mathrm{I}-20)}$
Note 6, $\mathbf{AC} = \mathbf{E} \times \mathbf{G} \times \mathbf{Z} \times 1.065^{(\mathbf{I}-20)}$

EXPLICIT MARGINS:

MARGIN OF SAFETY (MOS) (%) = [MOG + MOU] =	**20%**

Winter Projection, Non-Point Benthic Load Input and TMDL Calculations: Subsegment 120111

Modeled stream or water body:	Bayou Maringouin -- LA120111

Shaded cells are input values for calculations.

Values to be used in the projection models.

	Calibration Model Values											Man-made Model equivalents				Man-made Model loads				Background Model loads			
Reach Number and Description	Non-Point UCBOD	Non-Point UNBOD	SOD @ 20°C	Total Calb. 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	Manmade portion of TCBL	Non-Point UCBOD	Non-Point UNBOD	SOD @ 20°C	Non-Point UCBOD INPUTS	Non-Point UNBOD INPUTS	SOD load @ Proj. temp.	Man-made Total Projection Benthic Load	Non-Point UCBOD INPUTS	Non-Point UNBOD INPUTS	SOD load @ Proj. temp.	Man-made Total Projection Benthic Load
	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 Celcius)	%	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)
	A, (note 1)	B, (note 1)	C, (note 1)	D, (note 1)	E, (note 1)	F1	F2	F = F1*(1-F2)	G	I	H	W = K - F	X = (W)(A / D)	Y = (W)(B / D)	Z = (W)(C / D)	AA = (E)(G)(X)	AB = (E)(G)(Y)	AC, (note 6)	AA + AB + AC	AD = O - AA	AE = P - AB	AF = Q - AC	AD + AE + AF
Reach 1: Main Stem Headwaters to Junction with Unnamed Tributary	1.442	0.406	6.00	7.848	4.55	3.00	0%	3.00	4.88	17.79	88.0%	0.73	0.134	0.038	0.56	3	1	11	14.53	12	3	44	59.96
REACH 2: Tributary from Headwaters to confluence with Main Stem	0.595	0.149	5.50	6.244	1.96	3.00	0%	3.00	4.88	17.79	88.0%	0.49	0.046	0.012	0.43	0	0	4	4.12	3	1	22	25.39
REACH 3: Main Stem from Unnamed Tributary to Pool above the Weir	0.456	0.268	3.20	3.924	2.55	3.00	0%	3.00	14.63	17.79	88.0%	0.14	0.016	0.009	0.11	1	0	4	4.62	13	8	79	100.07
REACH 4: Main Stem Pool above Weir	1.837	0.276	4.20	6.313	1.88	3.00	0%	3.00	11.58	17.79	88.0%	0.50	0.145	0.022	0.33	3	0	6	9.88	19	3	38	59.68
REACH 5: Main Stem single Cell Weir Effect Reach	0.000	0.000	2.00	2.000	0.01	3.00	0%	3.00	3.63	17.79	88.0%	0.00	0.000	0.000	0.00	0	0	0	0.00	0	0	0	0.06
REACH 6: Main Stem from Weir to wider section of stream	0.000	0.000	2.20	2.200	1.11	3.00	0%	3.00	3.63	17.79	88.0%	0.00	0.000	0.000	0.00	0	0	0	0.00	0	0	8	7.71
REACH 7: Main Stem wide section to Upper Borrow Pit Distributary	0.213	0.182	2.20	2.595	2.70	3.00	0%	3.00	6.10	17.79	88.0%	0.00	0.000	0.000	0.00	0	0	0	0.00	4	3	32	38.01
REACH 8: Main Stem Upper Borrow Pit Distributary to Lower Wide Section of Stream	0.811	0.308	2.30	3.419	4.40	3.00	0%	3.00	7.01	17.79	88.0%	0.06	0.015	0.006	0.04	0	0	1	1.77	22	8	54	84.44
REACH 9: Main Stem Lower Wide section to end of model at Ramah Canal	0.729	0.273	1.80	2.802	0.90	3.00	0%	3.00	12.19	17.79	88.0%	0.00	0.000	0.000	0.00	0	0	0	0.00	8	3	17	28.18
Sub-Total																8	2	25	**35**	80	29	294	**403**

Notes: Note 1, Data was calculated in and brought from the Calibration worksheet dataset.
Note 2, $\mathbf{J} = [(1 - \mathbf{H}) \times (\mathbf{D} - \mathbf{F}) + \mathbf{F}]$
Note 3, $\mathbf{K} = [(\mathbf{J} - \mathbf{F}) / (1 - \text{MOS}) + \mathbf{F}]$
Note 4, $\mathbf{Q} = \mathbf{E} \times \mathbf{G} \times \mathbf{N} \times 1.065^{(\mathbf{I}-20)}$
Note 5, $\mathbf{V} = \mathbf{S} \times 1.065^{(\mathbf{I}-20)}$
Note 6, $\mathbf{AC} = \mathbf{E} \times \mathbf{G} \times \mathbf{Z} \times 1.065^{(\mathbf{I}-20)}$

EXPLICIT MARGINS:

MARGIN OF SAFETY (MOS) (%) = [MOG + MOU] =	**20%**

Winter TMDL calculations and Projection model calculations for Headwater / Tributary loads:

Bayou Maringouin -- LA120111

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**
Bayou Maringouin	0.0001	21.27	5.75	0.18	0.05	1.94	5.75	0%	0.02	0.05	88%	0.04	0.05	0.04	0.05	4.84	5.75	**0.01**	**0.09**
Unnamed Tributary	0.0008	10.18	2.81	0.70	0.19	1.94	2.81	0%	0.13	0.19	88%	0.20	0.19	0.22	0.19	3.18	2.81	**0.02**	**0.40**
SUB-TOTAL TMDL LOADING				**1**	**0**				**0**	**0**		**0**	**0**	**0**	**0**			**0**	**0**

EXPLICIT MARGINS:

MARGIN OF SAFETY (MOS) (%) =	**20%**

Winter TMDL calculations and Projection model calculations for Incremental loads:

Bayou Maringouin -- LA120111

Shaded cells are input values for calculations.
Values to be used in the projection models.

Incremental Load Determinations:

	Calibration Load determinations:										Percentage Reduction calculations:			Projection Model Input determinations:				Projection Model Input determinations:			
Reach Description and #	Projection Flow (cms)	Calb. UCBOD conc. (mg/l)	Unadjusted UCBOD (kg/day)	Calb. UNBOD conc. (mg/l)	Unadjusted UNBOD (kg/day)	Background Conc. UCBOD (mg/l)	Background Conc. UNBOD (mg/l)	Background % Reduction	Background Load UCBOD (kg/day)	Background Load UNBOD (kg/day)	Actual % Reduction of Man-Made Loads	Increm. UCBOD Load Adjusted For % Reduction **(LA load)**	Increm. UNBOD Load Adjusted For % Reduction **(LA load)**	Increm. UCBOD Adjusted for MOS (kg/day) (1)	Increm. UNBOD Adjusted for MOS (kg/day) (1)	Projection UCBOD conc. (mg/l)	Projection UNBOD conc. (mg/l)	Proj. UCBOD MOS load (kg/day)	Proj. UNBOD MOS load (kg/day)	**Sub-total MOS load (kg/day)**	**Sub-total LA load (kg/day)**
	A	**B**	**C =** (86.4)**(A)**(**B**)	**D**	**E =** (86.4)**(A)**(**D**)	**F**	**G**	**H1**	**H =** (1-**H1**) (86.4)**(A)**(**F**)	**I =** (1-**H1**) (86.4)**(A)**(**G**)	**J,** Note 1	**K =** (**C-H**)(1-**J**) + **H**	**L =** (**E-I**)(1-**J**) + **I**	**M = (K-H)** / (1-**MOS**) + H	**N = (L-I)** / (1-**MOS**) + I	**M** / [(**A**)(86.4)]	**N** / [(**A**)(86.4)]	**O = M - K**	**P = N - L**	**O + P**	**K + L**
Reach 1: Main Stem Headwaters to Junction with Unnamed Tributary		20.00		4.00		1.94	7.58	0%		0.00	88%										
REACH 2: Tributary from Headwaters to confluence with Main Stem		20.00		4.00		1.94	7.58	0%		0.00	88%										
REACH 3: Main Stem from Unnamed Tributary to Pool above the Weir		20.00		4.00		1.94	7.58	0%		0.00	88%										
REACH 4: Main Stem Pool above Weir		20.00		4.00		1.94	7.58	0%		0.00	88%										
REACH 5: Main Stem single Cell Weir Effect Reach								0%			88%										
REACH 6: Main Stem from Weir to wider section of stream								0%			88%										
REACH 7: Main Stem wide section to Upper Borrow Pit Distributary								0%			88%										
REACH 8: Main Stem Upper Borrow Pit Distributary to Lower Wide Section of Stream								0%			88%										
REACH 9: Main Stem Lower Wide section to end of model at Ramah Canal								0%			88%										
Sub-Total benthic loading									0	0		0	0	0	0			0	0	0	0

Note 1: The percentage reduction values are taken from the "Non-Point Benthic Load Input and TMDL Calculations" worksheet.

EXPLICIT MARGINS:

MARGIN OF SAFETY (MOS) (%) =	**20%**

Appendix B6 – Winter Input, Output, and Graphs

```
! LAQUAL INPUT TEXT FILE CREATED USING EXCEL ON 3/23/2005 2:25:11 PM
! CREATED BY USER CHRISC
! Revised BY FTN on 4-27-2010
!
! DATA TYPE 01 -- TITLES AND CONTROL DATA
CNTROL01     BAYOU MARINGOUIN STREAM MODEL
CNTROL02     BAYOU MARINGOUIN WINTER PROJECTION
CNTROL11 YES METRIC UNITS
ENDATA01
! DATA TYPE 02 -- Model Options
MODOPT01  NO TEMPERATURE
MODOPT02  NO SALINITY
MODOPT03  NO CONSERVATIVE MATERIAL  I
MODOPT04  NO CONSERVATIVE MATERIAL II
MODOPT05 YES DISSOLVED OXYGEN
MODOPT06 YES BOD1 BIOCHEMICAL OXYGEN DEMAND
MODOPT07  NO BOD2 BIOCHEMICAL OXYGEN DEMAND
MODOPT08 YES NBOD OXYGEN DEMAND
MODOPT09  NO PHOSPHORUS
MODOPT10  NO CHLOROPHYLL A
MODOPT11  NO MACROPHYTES
MODOPT12  NO COLIFORM
ENDATA02
! DATA TYPE 03 -- PROGRAM CONSTANTS
PROGRAM  OCEAN EXCHANGE RATIO              = 0
PROGRAM  KL MINIMUM                        = 0.7
PROGRAM  MAXIMUM ITTERATION LIMIT          = 2000
PROGRAM  EFFECTIVE BOD DUE TO ALGAE        = 0.1
PROGRAM  ALGAE OXYGEN PROD                 = 0
PROGRAM  HYDRAULIC CALCULATION METHOD      = 2
ENDATA03
! DATA TYPE 04 -- TEMPERATURE CORRECTION CONSTANTS
ENDATA04
! DATA TYPE 05 -- TEMPERATURE DATA
ENDATA05
! DATA TYPE 06 -- ALGAE CONSTANTS
ENDATA06
! DATA TYPE 07 -- MACROPHYTE CONSTANTS
ENDATA07
! DATA TYPE 08 -- REACH IDENTIFICATION DATA
REACH ID    1  BM HEADWATER TO UNNAMED TRIB       18.1      13.55     0.091
REACH ID    2  BM UNNAMED TRIBUTARY               1.96      0         0.098
REACH ID    3  BM UNNAMED TRIB TO ABOVE WEIR      13.55     11        0.102
REACH ID    4  BM ABOVE WEIR TO WEIR              11        9.12      0.094
REACH ID    5  BM BELOW WEIR EFFECT               9.12      9.11      0.01
REACH ID    6  BM BELOW WEIR TO OPEN AREA         9.11      8         0.1009
REACH ID    7  BM OPEN AREA TO DISTRIBUTARY       8         5.3       0.1
REACH ID    8  BM DISTRIBUTARY TO WIDE SECTION    5.3       0.9       0.1
REACH ID    9  BM WIDE SECTION TO END             0.9       0         0.1
ENDATA08
! DATA TYPE 09 -- ADVECTIVE HYDRAULIC COEFFICIENTS
HYDR-1      1  0      0.5    4.877  0      0.5    0.3322
HYDR-1      2  0      0.5    3.429  0      0.5    0.2027
```

```
HYDR-1      3  0      0.5    14.63  0      0.5    0.2987
HYDR-1      4  0      0.5    11.58  0      0.5    0.6614
HYDR-1      5  0      0.5    3.627  0      0.5    0.256
HYDR-1      6  0      0.5    3.627  0      0.5    0.256
HYDR-1      7  0      0.5    6.096  0      0.5    0.4968
HYDR-1      8  0      0.5    7.01   0      0.5    0.2438
HYDR-1      9  0      0.5    12.19  0      0.5    0.3048
ENDATA09
! DATA TYPE 10 -- DISPERSIVE HYDRAULIC COEFFICIENTS
HYDR-2      1       0.03
HYDR-2      2       0.03
HYDR-2      3       0.03
HYDR-2      4       0.03
HYDR-2      5       0
HYDR-2      6       1
HYDR-2      7       1
HYDR-2      8       10
HYDR-2      9       10
ENDATA10
! DATA TYPE 11 --  INITIAL CONDITIONS
INITIAL     1  17.79   0       5       0       0       0       10      0
INITIAL     2  17.79   0       5       0       0       0       10      0
INITIAL     3  17.79   0       5       0       0       0       10      0
INITIAL     4  17.79   0       5       0       0       0       10      0
INITIAL     5  17.79   0       5       0       0       0       10      0
INITIAL     6  17.79   0       5       0       0       0       10      0
INITIAL     7  17.79   0       5       0       0       0       10      0
INITIAL     8  17.79   0       5       0       0       0       10      0
INITIAL     9  17.79   0       5       0       0       0       10      0
ENDATA11
! DATA TYPE 12 -- REAERATION, SEDIMENT OXYGEN DEMAND AND BOD COEFFICIENTS
COEF-1     1   11   0.00  0.000 0.000 2.850  0.070  0.05   1
COEF-1     2   11   0.00  0.000 0.000 3.071  0.070  0.05   1
COEF-1     3   11   0.00  0.000 0.000 2.560  0.070  0.05   1
COEF-1     4   11   0.00  0.000 0.000 2.327  0.070  0.05   1
COEF-1     5   11   0.00  0.000 0.000 2.000  0.070  0.05   1
COEF-1     6   11   0.00  0.000 0.000 2.200  0.070  0.05   1
COEF-1     7   11   0.00  0.000 0.000 2.200  0.070  0.05   1
COEF-1     8   11   0.00  0.000 0.000 2.061  0.070  0.05   1
COEF-1     9   11   0.00  0.000 0.000 1.800  0.070  0.05   1
ENDATA12
! DATA TYPE 13 -- NITROGEN AND PHOSPHOURS COEFFICIENTS
COEF-2      1  0.1    0.05   1      0      0      0      0
COEF-2      2  0.1    0.05   1      0      0      0      0
COEF-2      3  0.1    0.05   1      0      0      0      0
COEF-2      4  0.1    0.05   1      0      0      0      0
COEF-2      5  0.1    0.05   1      0      0      0      0
COEF-2      6  0.1    0.05   1      0      0      0      0
COEF-2      7  0.1    0.05   1      0      0      0      0
COEF-2      8  0.1    0.05   1      0      0      0      0
COEF-2      9  0.1    0.05   1      0      0      0      0
ENDATA13
! DATA TYPE 14 -- ALGAE AND MACROPHYTE COEFFICIENTS
```

```
COEF-3      1  1       0.01
COEF-3      2  1       0.01
COEF-3      3  1       0.01
COEF-3      4  1       0.01
COEF-3      5  1       0.01
COEF-3      6  1       0.01
COEF-3      7  1       0.01
COEF-3      8  1       0.01
COEF-3      9  1       0.01
ENDATA14
! DATA TYPE 15 -- COLIFORM AND NONCONSERVATIVE COEFFICIENTS
COEF-4      1
COEF-4      2
COEF-4      3
COEF-4      4
COEF-4      5
COEF-4      6
COEF-4      7
COEF-4      8
COEF-4      9
ENDATA15
! DATA TYPE 16 -- INCREMENTAL DATA FOR FLOW, TEMPERATURE, SALINITY, AND CONSERVATIVES
ENDATA16
! DATA TYPE 17 -- INCREMENTAL DATA FOR DO, BOD, AND NITROGEN
ENDATA17
! DATA TYPE 18 -- Incremental Data
ENDATA18
! DATA TYPE 19 -- NONPOINT SOURCE DATA
NONPOINT    1    15.198    4.274
NONPOINT    2     3.177    0.794
NONPOINT    3    13.598    7.999
NONPOINT    4    22.158    3.324
NONPOINT    5     0.000    0.000
NONPOINT    6     0.000    0.000
NONPOINT    7     3.500    3.000
NONPOINT    8    22.398    8.511
NONPOINT    9     8.000    3.000
ENDATA19
! DATA TYPE 20 -- HEADWATER DATA FOR FLOW, TEMPERATURE, SAALINITY, AND CONSERVATIVES
HDWTR-1  1     BAYOU MARINGOUIN         0.0283  17.79
HDWTR-1  51    UNNAMED TRIBUTARY        0.0283  17.79
ENDATA20
! DATA TYPE 21 -- HEADWATER DATA FOR DO, BOD, AND NITROGEN
HDWTR-2  1     8.56     4.84     5.75
HDWTR-2  51    8.56     3.18     2.81
ENDATA21
! DATA TYPE 22 -- HEADWATER DATA FOR PHOSPHORUS, CHLOROOPHYLL, COLIFORM, AND NCM
HDWTR-3  1              10
HDWTR-3  51             10
ENDATA22
! DATA TYPE 23 -- JUNCTION DATA
JUNCTION 71   50    UNNAMED TRIB CONFLUENCE WITH BAYOU`
ENDATA23
```

```
! DATA TYPE 24
WSTLD-1  155   UPPER DISTRIBUTARY  -0.0283
ENDATA24
! DATA TYPE 25
WSTLD-2  155
ENDATA25
! DATA TYPE 26 -- WASTELOAD DATA FOR PHOSPHORUS, CHLOROPHYLL, COLIFORM, AND NCM
WSTLD-3  155
ENDATA26
! DATA TYPE 27 -- Lower Boundary Conditions
LOWER BC TEMPERATURE                        = 17.79
LOWER BC SALINITY                           = 0
LOWER BC CONSERVATIVE MATERIAL  I           = 0
LOWER BC CONSERVATIVE MATERIAL II           = 0
LOWER BC DISSOLVED OXYGEN                   = 0
LOWER BC BIOCHEMICAL OXYGEN DEMAND          = 0
LOWER BC NBOD                               = 0
LOWER BC PHOSPHORUS                         = 0
LOWER BC CHLOROPHYLL A                      = 10
LOWER BC COLIFORM                           = 0
LOWER BC NONCONSERVATIVE MATERIAL           = 0
ENDATA27
! DATA TYPE 28 -- Dam Data
DAM DATA  116  MUNSEN ROAD WEIR     1  1       1.05    1
ENDATA28
! DATA TYPE 29 -- SENSITIVITY ANALYSIS DATA
ENDATA29
! DATA TYPE 30 -- Plot Control Data
NUMBER OF PLOTS = 2
NUMBER OF REACHES IN PLOT 1 =   8
PLOT RCH 1  3  4  5  6  7  8  9
NUMBER OF REACHES IN PLOT 2 =   1
PLOT RCH 2
ENDATA30
!
! DATA TYPE 31 -- Overlay Plot Data
!
! - - - -1- - - - -2- - - - -3- - - - -4- - - - -5- - - - -6- - - - -7- - - - -8
!2345678901234567890123456789012345678901234567890123456789012345678901234567890
! OVERLAY 1 OVERLAY/GENERAL.OVL             :MAIN STEM BAYOU MARINGOUIN
ENDATA31
```

```
LA-QUAL Version 9.03
Louisiana Department of Environmental Quality

Input file is S:\projects\3110-060\tech\Revised TMDL\Revised Models\120111\Bayou_Maringouin_Winter.txt
Running in steady-state mode using LA defaults
Output produced at 14:29 on 06/15/2010

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

CARD TYPE       CONTROL TITLES

TITLE01         BAYOU MARINGOUIN STREAM MODEL
TITLE02         BAYOU MARINGOUIN WINTER PROJECTION
CNTROL11  YES   METRIC UNITS
ENDATA01

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

CARD TYPE       MODEL OPTION

MODOPT01   NO   TEMPERATURE
MODOPT02   NO   SALINITY
MODOPT03   NO   CONSERVATIVE MATERIAL  I
MODOPT04   NO   CONSERVATIVE MATERIAL II
MODOPT05  YES   DISSOLVED OXYGEN
MODOPT06  YES   BOD1 BIOCHEMICAL OXYGEN DEMAND
MODOPT07   NO   BOD2 BIOCHEMICAL OXYGEN DEMAND
MODOPT08  YES   NBOD OXYGEN DEMAND
MODOPT09   NO   PHOSPHORUS
MODOPT10   NO   CHLOROPHYLL A
MODOPT11   NO   MACROPHYTES
MODOPT12   NO   COLIFORM
ENDATA02

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

CARD TYPE       DESCRIPTION OF CONSTANT                    VALUE

PROGRAM         OCEAN EXCHANGE RATIO            =        0.00000
PROGRAM         KL MINIMUM                      =        0.70000 meters/day
PROGRAM         MAXIMUM ITTERATION LIMIT        =     2000.00000
PROGRAM         EFFECTIVE BOD DUE TO ALGAE      =        0.10000 mg/L BOD1 per ug/L chl a
PROGRAM         ALGAE OXYGEN PROD               =        0.00000 mg O/ug chl a/day
PROGRAM         HYDRAULIC CALCULATION METHOD    =        2.00000 (widths and depths)
ENDATA03

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

 CARD TYPE     RATE CODE     THETA VALUE

ENDATA04

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

CARD TYPE       DESCRIPTION OF CONSTANT                    VALUE

ENDATA05

$$$ DATA TYPE 6 (PHYTOPLANKTON CONSTANTS) $$$
```

CARD TYPE	DESCRIPTION OF CONSTANT	VALUE

ENDATA06

$$$ DATA TYPE 7 (PERIPHYTON CONSTANTS) $$$

CARD TYPE	DESCRIPTION OF CONSTANT	VALUE

ENDATA07

$$$ DATA TYPE 8 (REACH IDENTIFICATION DATA) $$$

CARD TYPE	REACH	ID	NAME	BEGIN REACH km		END REACH km	ELEM LENGTH km	REACH LENGTH km	ELEMS PER RCH	BEGIN ELEM NUM	END ELEM NUM
REACH ID	1	BM	HEADWATER TO UNNAMED TRIB	18.10	TO	13.55	0.0910	4.55	50	1	50
REACH ID	2	BM	UNNAMED TRIBUTARY	1.96	TO	0.00	0.0980	1.96	20	51	70
REACH ID	3	BM	UNNAMED TRIB TO ABOVE WEIR	13.55	TO	11.00	0.1020	2.55	25	71	95
REACH ID	4	BM	ABOVE WEIR TO WEIR	11.00	TO	9.12	0.0940	1.88	20	96	115
REACH ID	5	BM	BELOW WEIR EFFECT	9.12	TO	9.11	0.0100	0.01	1	116	116
REACH ID	6	BM	BELOW WEIR TO OPEN AREA	9.11	TO	8.00	0.1009	1.11	11	117	127
REACH ID	7	BM	OPEN AREA TO DISTRIBUTARY	8.00	TO	5.30	0.1000	2.70	27	128	154
REACH ID	8	BM	DISTRIBUTARY TO WIDE SECTION	5.30	TO	0.90	0.1000	4.40	44	155	198
REACH ID	9	BM	WIDE SECTION TO END	0.90	TO	0.00	0.1000	0.90	9	199	207

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	BM	0.000	0.500	4.877	0.000	0.500	0.332	0.00000	0.000
HYDR-1	2	BM	0.000	0.500	3.429	0.000	0.500	0.203	0.00000	0.000
HYDR-1	3	BM	0.000	0.500	14.630	0.000	0.500	0.299	0.00000	0.000
HYDR-1	4	BM	0.000	0.500	11.580	0.000	0.500	0.661	0.00000	0.000
HYDR-1	5	BM	0.000	0.500	3.627	0.000	0.500	0.256	0.00000	0.000
HYDR-1	6	BM	0.000	0.500	3.627	0.000	0.500	0.256	0.00000	0.000
HYDR-1	7	BM	0.000	0.500	6.096	0.000	0.500	0.497	0.00000	0.000
HYDR-1	8	BM	0.000	0.500	7.010	0.000	0.500	0.244	0.00000	0.000
HYDR-1	9	BM	0.000	0.500	12.190	0.000	0.500	0.305	0.00000	0.000

ENDATA09

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

CARD TYPE	REACH	ID	TIDAL RANGE	DISPERSION "A"	DISPERSION "B"	DISPERSION "C"	DISPERSION "D"
HYDR	1	BM	0.00	0.030	0.000	0.000	0.000
HYDR	2	BM	0.00	0.030	0.000	0.000	0.000
HYDR	3	BM	0.00	0.030	0.000	0.000	0.000
HYDR	4	BM	0.00	0.030	0.000	0.000	0.000
HYDR	5	BM	0.00	0.000	0.000	0.000	0.000
HYDR	6	BM	0.00	1.000	0.000	0.000	0.000
HYDR	7	BM	0.00	1.000	0.000	0.000	0.000
HYDR	8	BM	0.00	10.000	0.000	0.000	0.000
HYDR	9	BM	0.00	10.000	0.000	0.000	0.000

ENDATA10

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

CARD TYPE	REACH	ID	TEMP deg C	SALIN ppt	DO mg/L	NH3-N mg/L	NO3-N mg/L	PO4-P mg/L	CHL A µg/L	PERIP g/m²	BOD1 mg/L	BOD2 mg/L	ORG-N mg/L	ORG-P mg/L	COLI #/100mL	NCM	CM-1	CM-2
INITIAL	1	BM	17.79	0.00	5.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INITIAL	2	BM	17.79	0.00	5.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INITIAL	3	BM	17.79	0.00	5.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INITIAL	4	BM	17.79	0.00	5.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INITIAL	5	BM	17.79	0.00	5.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INITIAL	6	BM	17.79	0.00	5.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INITIAL	7	BM	17.79	0.00	5.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INITIAL	8	BM	17.79	0.00	5.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
INITIAL	9	BM	17.79	0.00	5.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ENDATA11

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

CARD TYPE	RCH NUM	RCH ID	K2 OPT	K2 "A"	K2 "B"	K2 "C"	BKGRND SOD g/m²/d	AEROB BOD DECAY per day	BOD SETT m/d	SETTLD SOD AVAIL frac	ANAER BOD DECAY per day	AEROB BOD2 DECAY per day	BOD2 SETT m/d	ANAER BOD2 DECAY per day	BOD2 HYDR TO BOD1 per day
COEF-1	1	BM	11 TEXAS	0.000	0.000	0.000	2.850	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	2	BM	11 TEXAS	0.000	0.000	0.000	3.071	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	3	BM	11 TEXAS	0.000	0.000	0.000	2.560	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	4	BM	11 TEXAS	0.000	0.000	0.000	2.327	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	5	BM	11 TEXAS	0.000	0.000	0.000	2.000	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	6	BM	11 TEXAS	0.000	0.000	0.000	2.200	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	7	BM	11 TEXAS	0.000	0.000	0.000	2.200	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	8	BM	11 TEXAS	0.000	0.000	0.000	2.061	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000
COEF-1	9	BM	11 TEXAS	0.000	0.000	0.000	1.800	0.070	0.050	1.000	0.000	0.000	0.000	0.000	0.000

ENDATA12

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

CARD TYPE	REACH	ID	NBOD DECA per day	NBOD SETT m/d	SETTLD ORGN AVAIL frac	NH3 DECA per day	BKGRND NH3 SRCE g/m²/d	BKGRND PO4 SRCE g/m²/d	DENIT RATE per day	ORGP DECA per day	ORGP SETT m/d	SETTLD ORGP AVAIL frac
COEF-2	1	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-2	2	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-2	3	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-2	4	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-2	5	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-2	6	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-2	7	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-2	8	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-2	9	BM	0.100	0.050	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

ENDATA13

$$$ DATA TYPE 14 (ALGAE PHYTOPLANKTON AND PERIPHYTON COEFFICIENTS) $$$

CARD TYPE	REACH	ID	SECCHI DEPTH m	CHL A: ALGAE frac	PHYTO SETT m/d	PHYTO DEATH per day	MAX PHYTO GROW per day	PHYTO RESP per day	PERIP DEATH per day	MAX PERIP GROW per day	PERIP RESP per day	BANK SHADING frac
COEF-3	1	BM	1.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-3	2	BM	1.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-3	3	BM	1.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-3	4	BM	1.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-3	5	BM	1.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-3	6	BM	1.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

COEF-3	7	BM	1.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-3	8	BM	1.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
COEF-3	9	BM	1.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

ENDATA14

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

CARD TYPE	REACH	ID	COLIFORM DIE-OFF per day	NCM DECAY per day	NCM SETT m/d
COEF-4	1	BM	0.000	0.000	0.000
COEF-4	2	BM	0.000	0.000	0.000
COEF-4	3	BM	0.000	0.000	0.000
COEF-4	4	BM	0.000	0.000	0.000
COEF-4	5	BM	0.000	0.000	0.000
COEF-4	6	BM	0.000	0.000	0.000
COEF-4	7	BM	0.000	0.000	0.000
COEF-4	8	BM	0.000	0.000	0.000
COEF-4	9	BM	0.000	0.000	0.000

ENDATA15

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

CARD TYPE	REACH	ID	OUTFLOW m^3/s	INFLOW m^3/s	TEMP deg C	SALIN ppt	CM-1	CM-2	IN/DIST	OUT/DIST

ENDATA16

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

CARD TYPE	REACH	ID	DO mg/L	BOD1 mg/L	NBOD mg/L	mg/L	mg/L	BOD2 mg/L

ENDATA17

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

CARD TYPE	REACH	ID	PO4 mg/L	PHYTO CHL A µg/L	COLI #/100mL	NCM	ORGP mg/L

ENDATA18

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

CARD TYPE	REACH	ID	BOD1 kg/d	NBOD kg/d	COLI #/day	NCM	DO kg/d	BOD2 kg/d	ORG-P kg/d
NONPOINT	1	BM	15.20	4.27	0.00	0.00	0.00	0.00	0.00
NONPOINT	2	BM	3.18	0.79	0.00	0.00	0.00	0.00	0.00
NONPOINT	3	BM	13.60	8.00	0.00	0.00	0.00	0.00	0.00
NONPOINT	4	BM	22.16	3.32	0.00	0.00	0.00	0.00	0.00
NONPOINT	5	BM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NONPOINT	6	BM	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NONPOINT	7	BM	3.50	3.00	0.00	0.00	0.00	0.00	0.00
NONPOINT	8	BM	22.40	8.51	0.00	0.00	0.00	0.00	0.00
NONPOINT	9	BM	8.00	3.00	0.00	0.00	0.00	0.00	0.00

ENDATA19

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

CARD TYPE	ELEMENT	NAME	UNIT	FLOW m³/s	FLOW cfs	TEMP deg C	SALIN ppt	CM-1	CM-2	HDW DISP EXCHG frac
HDWTR-1	1	BAYOU MARINGOUIN	0	0.02830	0.99929	17.79	0.00	0.000	0.000	0.000
HDWTR-1	51	UNNAMED TRIBUTARY	0	0.02830	0.99929	17.79	0.00	0.000	0.000	0.000
ENDATA20										

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

CARD TYPE	ELEMENT	NAME	DO mg/L	BOD#1 mg/L	NBOD mg/L	mg/L	mg/L	BOD2 mg/L
HDWTR-2	1	BAYOU MARINGOUIN	8.56	4.84	5.75	0.00	0.00	0.00
HDWTR-2	51	UNNAMED TRIBUTARY	8.56	3.18	2.81	0.00	0.00	0.00
ENDATA21								

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

CARD TYPE	ELEMENT	NAME	PO4-P mg/L	PHYTO CHL A µg/L	COLI #/100mL	NCM	ORG-P mg/L
HDWTR-3	1	BAYOU MARINGOUIN	0.00	10.00	0.00	0.00	0.00
HDWTR-3	51	UNNAMED TRIBUTARY	0.00	10.00	0.00	0.00	0.00
ENDATA22							

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

CARD TYPE	JUNCTION ELEMENT	UPSTRM ELEMENT	RIVER KILOM	NAME
JUNCTION	71	50	13.55	UNNAMED TRIB CONFLUENCE WITH BAYOU`
ENDATA23				

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

CARD TYPE	ELEMENT	RKILO	NAME	FLOW m³/s	FLOW cfs	FLOW MGD	TEMP deg C	SALIN ppt	CM-1	CM-2
WSTLD-1	155	5.30	UPPER DISTRIBUTARY	-0.02830	-0.99929	-0.646	0.00	0.00	0.000	0.000
ENDATA24										

$$$ DATA TYPE 25 (WASTELOAD DATA FOR DO, BOD, AND NITROGEN) $$$

CARD TYPE	ELEMENT	NAME	DO mg/L	BOD mg/L	% BOD RMVL	NBOD mg/L	mg/L	% NITRIF	mg/L	BOD2 mg/L
WSTLD-2	155	UPPER DISTRIBUTARY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ENDATA25										

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

CARD TYPE	ELEMENT	NAME	PO4-P mg/L	PHYTO CHL A µg/L	COLI #/100mL	NCM	ORG-P mg/L
WSTLD-3	155	UPPER DISTRIBUTARY	0.00	0.00	0.00	0.00	0.00
ENDATA26							

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

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CARD TYPE    CONSTITUENT                     CONCENTRATION

LOWER BC     TEMPERATURE                         =     17.790     deg C
LOWER BC     SALINITY                            =      0.000     ppt
LOWER BC     CONSERVATIVE MATERIAL  I            =      0.000
LOWER BC     CONSERVATIVE MATERIAL II            =      0.000
LOWER BC     DISSOLVED OXYGEN                    =      0.000     mg/L
LOWER BC     BIOCHEMICAL OXYGEN DEMAND           =      0.000     mg/L
LOWER BC     NBOD                                =      0.000     mg/L
LOWER BC     PHOSPHORUS                          =      0.000     mg/L
LOWER BC     CHLOROPHYLL A                       =     10.000     µg/L
LOWER BC     COLIFORM                            =      0.000     #/100 mL
LOWER BC     NONCONSERVATIVE MATERIAL            =      0.000
ENDATA27

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

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

DAM DATA        116     MUNSEN ROAD WEIR       1     1.000     1.050     1.000
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 =  2
NUMBER OF REACHES IN PLOT 1 =   8
PLOT RCH  1  3  4  5  6  7  8  9
NUMBER OF REACHES IN PLOT 2 =   1
PLOT RCH  2
ENDATA30

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


ENDATA31
 ***** WARNING:  NEGATIVE CONCENTRATIONS OF BOD1 SET TO ZERO IN LOWER BOUNDARY CONDITION



     .....NO ERRORS DETECTED IN INPUT DATA
     .....HYDRAULIC CALCULATIONS COMPLETED
     .....TRIDIAGONAL MATRIX TERMS INITIALIZED
     .....OXYGEN DEPENDENT RATES CONVERGENT IN  247 ITERATIONS
     .....CONSTITUENT CALCULATIONS COMPLETED
     .....GRAPHICS DATA FOR PLOT 1 WRITTEN TO UNIT 11
     .....GRAPHICS DATA FOR PLOT 2 WRITTEN TO UNIT 12


FINAL REPORT    BAYOU MARINGOUIN                                 BAYOU MARINGOUIN STREAM MODEL
REACH NO.  1    HEADWATER TO UNNAMED TRIB                        BAYOU MARINGOUIN WINTER PROJECTION

 ***************************************************************************************** REACH INPUTS *****************************************************************************************
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ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	PO4-P mg/L	CHL A µg/L	COLI #/100mL	NCM
1	HDWTR	0.02830	17.79	0.00	0.00	0.00	8.56	3.84	0.00	4.84	0.00	5.75	0.00	0.00	0.00	10.00	0.00	0.00

** HYDRAULIC PARAMETER VALUES **

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	CUM 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
1	18.10	18.01	0.02830	0.0	0.01747	0.06	0.06	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
2	18.01	17.92	0.02830	0.0	0.01747	0.06	0.12	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
3	17.92	17.83	0.02830	0.0	0.01747	0.06	0.18	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
4	17.83	17.74	0.02830	0.0	0.01747	0.06	0.24	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
5	17.74	17.65	0.02830	0.0	0.01747	0.06	0.30	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
6	17.65	17.55	0.02830	0.0	0.01747	0.06	0.36	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
7	17.55	17.46	0.02830	0.0	0.01747	0.06	0.42	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
8	17.46	17.37	0.02830	0.0	0.01747	0.06	0.48	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
9	17.37	17.28	0.02830	0.0	0.01747	0.06	0.54	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
10	17.28	17.19	0.02830	0.0	0.01747	0.06	0.60	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
11	17.19	17.10	0.02830	0.0	0.01747	0.06	0.66	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
12	17.10	17.01	0.02830	0.0	0.01747	0.06	0.72	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
13	17.01	16.92	0.02830	0.0	0.01747	0.06	0.78	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
14	16.92	16.83	0.02830	0.0	0.01747	0.06	0.84	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
15	16.83	16.74	0.02830	0.0	0.01747	0.06	0.90	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
16	16.74	16.64	0.02830	0.0	0.01747	0.06	0.96	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
17	16.64	16.55	0.02830	0.0	0.01747	0.06	1.03	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
18	16.55	16.46	0.02830	0.0	0.01747	0.06	1.09	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
19	16.46	16.37	0.02830	0.0	0.01747	0.06	1.15	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
20	16.37	16.28	0.02830	0.0	0.01747	0.06	1.21	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
21	16.28	16.19	0.02830	0.0	0.01747	0.06	1.27	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
22	16.19	16.10	0.02830	0.0	0.01747	0.06	1.33	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
23	16.10	16.01	0.02830	0.0	0.01747	0.06	1.39	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
24	16.01	15.92	0.02830	0.0	0.01747	0.06	1.45	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
25	15.92	15.83	0.02830	0.0	0.01747	0.06	1.51	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
26	15.83	15.73	0.02830	0.0	0.01747	0.06	1.57	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
27	15.73	15.64	0.02830	0.0	0.01747	0.06	1.63	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
28	15.64	15.55	0.02830	0.0	0.01747	0.06	1.69	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
29	15.55	15.46	0.02830	0.0	0.01747	0.06	1.75	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
30	15.46	15.37	0.02830	0.0	0.01747	0.06	1.81	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
31	15.37	15.28	0.02830	0.0	0.01747	0.06	1.87	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
32	15.28	15.19	0.02830	0.0	0.01747	0.06	1.93	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
33	15.19	15.10	0.02830	0.0	0.01747	0.06	1.99	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
34	15.10	15.01	0.02830	0.0	0.01747	0.06	2.05	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
35	15.01	14.92	0.02830	0.0	0.01747	0.06	2.11	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
36	14.92	14.82	0.02830	0.0	0.01747	0.06	2.17	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
37	14.82	14.73	0.02830	0.0	0.01747	0.06	2.23	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
38	14.73	14.64	0.02830	0.0	0.01747	0.06	2.29	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
39	14.64	14.55	0.02830	0.0	0.01747	0.06	2.35	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
40	14.55	14.46	0.02830	0.0	0.01747	0.06	2.41	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
41	14.46	14.37	0.02830	0.0	0.01747	0.06	2.47	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
42	14.37	14.28	0.02830	0.0	0.01747	0.06	2.53	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
43	14.28	14.19	0.02830	0.0	0.01747	0.06	2.59	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
44	14.19	14.10	0.02830	0.0	0.01747	0.06	2.65	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
45	14.10	14.01	0.02830	0.0	0.01747	0.06	2.71	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
46	14.01	13.91	0.02830	0.0	0.01747	0.06	2.77	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
47	13.91	13.82	0.02830	0.0	0.01747	0.06	2.83	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
48	13.82	13.73	0.02830	0.0	0.01747	0.06	2.89	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017

49	13.73	13.64	0.02830	0.0	0.01747	0.06	2.95	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
50	13.64	13.55	0.02830	0.0	0.01747	0.06	3.01	0.33	4.88	147.43	443.81	1.62	0.00	0.000	0.030	0.017
TOT						3.01				7371.63	22190.34					
AVG					0.0175			0.33	4.88			1.62				

*** BIOLOGICAL AND PHYSICAL COEFFICIENTS ***

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD1 DECAY 1/da	BOD1 SETT 1/da	ABOD1 DECAY 1/da	BOD1 HYDR 1/da	BOD2 DECAY 1/da	BOD2 SETT 1/da	ABOD2 DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORG-N HYDR 1/da	ORG-N SETT 1/da	NH3-N DECAY 1/da	NH3-N SRCE *	DENIT RATE 1/da	ORG-P HYDR 1/da	ORG-P SETT 1/da	PO4 SRCE *	PHYTO PROD **	PERIP PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
1	18.009	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.67	2.67	0.09	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	17.918	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.67	2.67	0.09	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	17.827	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.67	2.67	0.09	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	17.736	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.68	2.68	0.09	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	17.645	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.68	2.68	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	17.554	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.68	2.68	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	17.463	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.69	2.69	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	17.372	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.69	2.69	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	17.281	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.69	2.69	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	17.190	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.70	2.70	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	17.099	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.70	2.70	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	17.008	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.70	2.70	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	16.917	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.71	2.71	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	16.826	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.71	2.71	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	16.735	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.71	2.71	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	16.644	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.71	2.71	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	16.553	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.72	2.72	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	16.462	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.72	2.72	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	16.371	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.72	2.72	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	16.280	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.73	2.73	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	16.189	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.73	2.73	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	16.098	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.73	2.73	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	16.007	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.73	2.73	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	15.916	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.74	2.74	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	15.825	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.74	2.74	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	15.734	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.74	2.74	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	15.643	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.74	2.74	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	15.552	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.75	2.75	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	15.461	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.75	2.75	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	15.370	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.75	2.75	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	15.279	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.75	2.75	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32	15.188	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.76	2.76	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33	15.097	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.76	2.76	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34	15.006	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.76	2.76	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35	14.915	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.76	2.76	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36	14.824	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.77	2.77	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37	14.733	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.77	2.77	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38	14.642	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.77	2.77	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39	14.551	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.77	2.77	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40	14.460	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.78	2.78	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41	14.369	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.78	2.78	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42	14.278	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.78	2.78	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
43	14.187	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.78	2.78	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44	14.096	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.78	2.78	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45	14.005	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.79	2.79	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46	13.914	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.79	2.79	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47	13.823	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.79	2.79	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

48	13.732	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.79	2.79	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
49	13.641	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.79	2.79	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50	13.550	9.51	2.02	0.06	0.14	0.00	0.00	0.00	0.00	0.00	2.48	2.79	2.79	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			2.11	0.07	0.00	0.00	0.00	0.00	0.00	0.00	2.85			0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/d ** mg/L/day

** WATER QUALITY CONSTITUENT VALUES **

ELEM NO.	ENDING DIST	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	TOT-N mg/L	EORG-N mg/L	ETOT-N mg/L	ORG-P mg/L	PO4-P mg/L	TOT-P mg/L	EORG-P mg/L	ETOT-P mg/L	CHL A µg/L	PERIP g/m²	COLI #/100mL	NCM
1	18.009	17.79	0.00	1.00	0.00	8.19	3.92	0.00	4.92	0.00	5.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
2	17.918	17.79	0.00	1.00	0.00	7.86	3.99	0.00	4.99	0.00	5.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
3	17.827	17.79	0.00	1.00	0.00	7.56	4.07	0.00	5.07	0.00	5.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
4	17.736	17.79	0.00	1.00	0.00	7.30	4.14	0.00	5.14	0.00	5.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
5	17.645	17.79	0.00	1.00	0.00	7.07	4.21	0.00	5.21	0.00	5.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
6	17.554	17.79	0.00	1.00	0.00	6.86	4.28	0.00	5.28	0.00	5.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
7	17.463	17.79	0.00	1.00	0.00	6.67	4.35	0.00	5.35	0.00	5.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
8	17.372	17.79	0.00	1.00	0.00	6.51	4.42	0.00	5.42	0.00	5.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
9	17.281	17.79	0.00	1.00	0.00	6.36	4.49	0.00	5.49	0.00	5.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
10	17.190	17.79	0.00	1.00	0.00	6.22	4.56	0.00	5.56	0.00	5.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
11	17.099	17.79	0.00	1.00	0.00	6.10	4.62	0.00	5.62	0.00	5.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
12	17.008	17.79	0.00	1.00	0.00	6.00	4.69	0.00	5.69	0.00	5.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
13	16.917	17.79	0.00	1.00	0.00	5.90	4.76	0.00	5.76	0.00	5.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
14	16.826	17.79	0.00	1.00	0.00	5.81	4.82	0.00	5.82	0.00	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
15	16.735	17.79	0.00	1.00	0.00	5.73	4.88	0.00	5.88	0.00	5.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
16	16.644	17.79	0.00	1.00	0.00	5.67	4.95	0.00	5.95	0.00	5.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
17	16.553	17.79	0.00	1.00	0.00	5.60	5.01	0.00	6.01	0.00	5.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
18	16.462	17.79	0.00	1.00	0.00	5.55	5.07	0.00	6.07	0.00	5.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
19	16.371	17.79	0.00	1.00	0.00	5.50	5.13	0.00	6.13	0.00	5.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
20	16.280	17.79	0.00	1.00	0.00	5.45	5.19	0.00	6.19	0.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
21	16.189	17.79	0.00	1.00	0.00	5.41	5.25	0.00	6.25	0.00	4.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
22	16.098	17.79	0.00	1.00	0.00	5.37	5.31	0.00	6.31	0.00	4.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
23	16.007	17.79	0.00	1.00	0.00	5.34	5.37	0.00	6.37	0.00	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
24	15.916	17.79	0.00	1.00	0.00	5.31	5.42	0.00	6.42	0.00	4.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
25	15.825	17.79	0.00	1.00	0.00	5.28	5.48	0.00	6.48	0.00	4.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
26	15.734	17.79	0.00	1.00	0.00	5.25	5.53	0.00	6.53	0.00	4.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
27	15.643	17.79	0.00	1.00	0.00	5.23	5.59	0.00	6.59	0.00	4.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
28	15.552	17.79	0.00	1.00	0.00	5.21	5.64	0.00	6.64	0.00	4.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
29	15.461	17.79	0.00	1.00	0.00	5.19	5.70	0.00	6.70	0.00	4.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
30	15.370	17.79	0.00	1.00	0.00	5.17	5.75	0.00	6.75	0.00	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
31	15.279	17.79	0.00	1.00	0.00	5.16	5.80	0.00	6.80	0.00	4.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
32	15.188	17.79	0.00	1.00	0.00	5.14	5.85	0.00	6.85	0.00	4.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
33	15.097	17.79	0.00	1.00	0.00	5.13	5.90	0.00	6.90	0.00	4.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
34	15.006	17.79	0.00	1.00	0.00	5.12	5.95	0.00	6.95	0.00	4.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
35	14.915	17.79	0.00	1.00	0.00	5.11	6.00	0.00	7.00	0.00	4.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
36	14.824	17.79	0.00	1.00	0.00	5.09	6.05	0.00	7.05	0.00	4.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
37	14.733	17.79	0.00	1.00	0.00	5.08	6.10	0.00	7.10	0.00	4.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
38	14.642	17.79	0.00	1.00	0.00	5.08	6.15	0.00	7.15	0.00	4.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
39	14.551	17.79	0.00	1.00	0.00	5.07	6.20	0.00	7.20	0.00	4.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
40	14.460	17.79	0.00	1.00	0.00	5.06	6.24	0.00	7.24	0.00	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
41	14.369	17.79	0.00	1.00	0.00	5.05	6.29	0.00	7.29	0.00	4.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
42	14.278	17.79	0.00	1.00	0.00	5.04	6.34	0.00	7.34	0.00	4.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
43	14.187	17.79	0.00	1.00	0.00	5.04	6.38	0.00	7.38	0.00	4.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
44	14.096	17.79	0.00	1.00	0.00	5.03	6.42	0.00	7.42	0.00	4.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
45	14.005	17.79	0.00	1.00	0.00	5.02	6.47	0.00	7.47	0.00	4.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
46	13.914	17.79	0.00	1.00	0.00	5.02	6.51	0.00	7.51	0.00	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

47	13.823	17.79	0.00	1.00	0.00	5.01	6.55	0.00	7.55	0.00	4.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
48	13.732	17.79	0.00	1.00	0.00	5.01	6.60	0.00	7.60	0.00	4.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
49	13.641	17.79	0.00	1.00	0.00	5.00	6.64	0.00	7.64	0.00	4.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
50	13.550	17.79	0.00	1.00	0.00	5.01	6.62	0.00	7.62	0.00	4.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

** PHYTOPLANKTON AND PERIPHYTON DATA **

ELEM NO.	ENDING DIST	BANK SHADE frac	SECCHI DEPTH m	PHYT N PREF	PHYT LIT LIM	PHYT N LIM	PHYT P LIM	PHYT N&P LIM	PHYT TOT LIM	PHYT GROW 1/da	PHYT RESP 1/da	PHYT DEATH 1/da	PHYT SETT 1/da	PHYT P/R RATIO	PHYTO µg/L	PERI N PREF	PERI LIT LIM	PERI N LIM	PERI P LIM	PERI N&P LIM	PERI SPC LIM	PERI TOT LIM	PERI GROW 1/da	PERI RESP 1/da	PERI DEATH 1/da	PERI P/R RATIO	PERIP g/m²
1	18.009	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
2	17.918	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
3	17.827	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
4	17.736	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
5	17.645	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
6	17.554	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
7	17.463	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
8	17.372	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
9	17.281	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
10	17.190	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
11	17.099	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
12	17.008	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
13	16.917	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
14	16.826	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
15	16.735	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
16	16.644	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
17	16.553	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
18	16.462	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
19	16.371	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
20	16.280	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
21	16.189	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
22	16.098	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
23	16.007	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
24	15.916	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
25	15.825	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
26	15.734	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
27	15.643	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
28	15.552	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
29	15.461	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
30	15.370	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
31	15.279	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
32	15.188	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
33	15.097	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
34	15.006	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
35	14.915	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
36	14.824	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
37	14.733	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
38	14.642	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
39	14.551	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
40	14.460	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
41	14.369	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
42	14.278	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
43	14.187	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
44	14.096	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
45	14.005	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
46	13.914	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
47	13.823	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
48	13.732	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0

49	13.641	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
50	13.550	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
20 DEG C RATE										0.000	0.000	0.000	0.000										0.000	0.000	0.000		

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

FINAL REPORT BAYOU MARINGOUIN BAYOU MARINGOUIN STREAM MODEL
REACH NO. 3 UNNAMED TRIB TO ABOVE WEIR BAYOU MARINGOUIN WINTER PROJECTION

** REACH INPUTS **

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	PO4-P mg/L	CHL A µg/L	COLI #/100mL	NCM
71	UPR RCH	0.02830	17.79	0.00	1.00	0.00	5.01	6.62	0.00	7.62	0.00	4.19	0.00	0.00	0.00	10.00	0.00	0.00
71	TRIB	0.02830	17.79	0.00	1.00	0.00	5.75	3.19	0.00	4.19	0.00	2.71	0.00	0.00	0.00	10.00	0.00	0.00

** HYDRAULIC PARAMETER VALUES **

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	CUM 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
71	13.55	13.45	0.05660	0.0	0.01295	0.09	3.11	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
72	13.45	13.35	0.05660	0.0	0.01295	0.09	3.20	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
73	13.35	13.24	0.05660	0.0	0.01295	0.09	3.29	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
74	13.24	13.14	0.05660	0.0	0.01295	0.09	3.38	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
75	13.14	13.04	0.05660	0.0	0.01295	0.09	3.47	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
76	13.04	12.94	0.05660	0.0	0.01295	0.09	3.56	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
77	12.94	12.84	0.05660	0.0	0.01295	0.09	3.65	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
78	12.84	12.73	0.05660	0.0	0.01295	0.09	3.74	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
79	12.73	12.63	0.05660	0.0	0.01295	0.09	3.84	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
80	12.63	12.53	0.05660	0.0	0.01295	0.09	3.93	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
81	12.53	12.43	0.05660	0.0	0.01295	0.09	4.02	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
82	12.43	12.33	0.05660	0.0	0.01295	0.09	4.11	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
83	12.33	12.22	0.05660	0.0	0.01295	0.09	4.20	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
84	12.22	12.12	0.05660	0.0	0.01295	0.09	4.29	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
85	12.12	12.02	0.05660	0.0	0.01295	0.09	4.38	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
86	12.02	11.92	0.05660	0.0	0.01295	0.09	4.47	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
87	11.92	11.82	0.05660	0.0	0.01295	0.09	4.56	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
88	11.82	11.71	0.05660	0.0	0.01295	0.09	4.66	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
89	11.71	11.61	0.05660	0.0	0.01295	0.09	4.75	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
90	11.61	11.51	0.05660	0.0	0.01295	0.09	4.84	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
91	11.51	11.41	0.05660	0.0	0.01295	0.09	4.93	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
92	11.41	11.31	0.05660	0.0	0.01295	0.09	5.02	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
93	11.31	11.20	0.05660	0.0	0.01295	0.09	5.11	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
94	11.20	11.10	0.05660	0.0	0.01295	0.09	5.20	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
95	11.10	11.00	0.05660	0.0	0.01295	0.09	5.29	0.30	14.63	445.74	1492.26	4.37	0.00	0.000	0.030	0.013
TOT						2.28				11143.46	37306.50					
AVG					0.0130			0.30	14.63			4.37				

** BIOLOGICAL AND PHYSICAL COEFFICIENTS **

ELEM ENDING SAT REAER BOD1 BOD1 ABOD1 BOD1 BOD2 BOD2 ABOD2 BKGD FULL CORR ORG-N ORG-N NH3-N NH3-N DENIT ORG-P ORG-P PO4 PHYTO PERIP COLI NCM NCM

NO.	DIST	D.O. mg/L	RATE 1/da	DECAY 1/da	SETT 1/da	DECAY 1/da	HYDR 1/da	DECAY 1/da	SETT 1/da	DECAY 1/da	SOD *	SOD *	SOD *	HYDR 1/da	SETT 1/da	DECAY 1/da	SRCE *	RATE 1/da	HYDR 1/da	SETT 1/da	SRCE *	PROD **	PROD **	DECAY 1/da	DECAY 1/da	SETT 1/da
71	13.448	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.46	2.46	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
72	13.346	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.46	2.46	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
73	13.244	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.46	2.46	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
74	13.142	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.46	2.46	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75	13.040	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.46	2.46	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
76	12.938	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.46	2.46	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
77	12.836	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.46	2.46	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
78	12.734	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.46	2.46	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
79	12.632	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.46	2.46	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80	12.530	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.46	2.46	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
81	12.428	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.46	2.46	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82	12.326	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.46	2.46	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
83	12.224	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.46	2.46	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
84	12.122	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.47	2.47	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85	12.020	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.47	2.47	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
86	11.918	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.47	2.47	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87	11.816	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.47	2.47	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
88	11.714	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.47	2.47	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
89	11.612	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.47	2.47	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90	11.510	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.47	2.47	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
91	11.408	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.47	2.47	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92	11.306	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.47	2.47	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
93	11.204	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.47	2.47	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
94	11.102	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.47	2.47	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95	11.000	9.51	2.24	0.06	0.16	0.00	0.00	0.00	0.00	0.00	2.23	2.47	2.47	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			2.34	0.07	0.01	0.00	0.00	0.00	0.00	0.00	2.56			0.10	0.01	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/d ** mg/L/day

** WATER QUALITY CONSTITUENT VALUES **

ELEM NO.	ENDING DIST	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	TOT-N mg/L	EORG-N mg/L	ETOT-N mg/L	ORG-P mg/L	PO4-P mg/L	TOT-P mg/L	EORG-P mg/L	ETOT-P mg/L	CHL A µg/L	PERIP g/m²	COLI #/100mL	NCM
71	13.448	17.79	0.00	1.00	0.00	5.42	4.87	0.00	5.87	0.00	3.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
72	13.346	17.79	0.00	1.00	0.00	5.45	4.89	0.00	5.89	0.00	3.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
73	13.244	17.79	0.00	1.00	0.00	5.47	4.90	0.00	5.90	0.00	3.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
74	13.142	17.79	0.00	1.00	0.00	5.48	4.91	0.00	5.91	0.00	3.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
75	13.040	17.79	0.00	1.00	0.00	5.50	4.92	0.00	5.92	0.00	3.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
76	12.938	17.79	0.00	1.00	0.00	5.51	4.93	0.00	5.93	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
77	12.836	17.79	0.00	1.00	0.00	5.52	4.94	0.00	5.94	0.00	3.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
78	12.734	17.79	0.00	1.00	0.00	5.53	4.95	0.00	5.95	0.00	3.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
79	12.632	17.79	0.00	1.00	0.00	5.54	4.97	0.00	5.97	0.00	3.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
80	12.530	17.79	0.00	1.00	0.00	5.54	4.98	0.00	5.98	0.00	3.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
81	12.428	17.79	0.00	1.00	0.00	5.54	4.99	0.00	5.99	0.00	3.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
82	12.326	17.79	0.00	1.00	0.00	5.55	5.00	0.00	6.00	0.00	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
83	12.224	17.79	0.00	1.00	0.00	5.55	5.01	0.00	6.01	0.00	3.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
84	12.122	17.79	0.00	1.00	0.00	5.55	5.02	0.00	6.02	0.00	3.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
85	12.020	17.79	0.00	1.00	0.00	5.55	5.03	0.00	6.03	0.00	3.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
86	11.918	17.79	0.00	1.00	0.00	5.56	5.03	0.00	6.03	0.00	3.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
87	11.816	17.79	0.00	1.00	0.00	5.56	5.04	0.00	6.04	0.00	3.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
88	11.714	17.79	0.00	1.00	0.00	5.56	5.05	0.00	6.05	0.00	3.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
89	11.612	17.79	0.00	1.00	0.00	5.56	5.06	0.00	6.06	0.00	3.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
90	11.510	17.79	0.00	1.00	0.00	5.56	5.07	0.00	6.07	0.00	3.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
91	11.408	17.79	0.00	1.00	0.00	5.56	5.08	0.00	6.08	0.00	3.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

92	11.306	17.79	0.00	1.00	0.00	5.56	5.09	0.00	6.09	0.00	3.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
93	11.204	17.79	0.00	1.00	0.00	5.56	5.09	0.00	6.09	0.00	3.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
94	11.102	17.79	0.00	1.00	0.00	5.56	5.10	0.00	6.10	0.00	3.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
95	11.000	17.79	0.00	1.00	0.00	5.56	5.11	0.00	6.11	0.00	3.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

*** PHYTOPLANKTON AND PERIPHYTON DATA ***

ELEM NO.	ENDING DIST	BANK SHADE frac	SECCHI DEPTH m	PHYT N PREF	PHYT LIT LIM	PHYT N LIM	PHYT P LIM	PHYT N&P LIM	PHYT TOT LIM	PHYT GROW 1/da	PHYT RESP 1/da	PHYT DEATH 1/da	PHYT SETT 1/da	PHYT P/R RATIO	PHYTO µg/L	PERI N PREF	PERI LIT LIM	PERI N LIM	PERI P LIM	PERI N&P LIM	PERI SPC LIM	PERI TOT LIM	PERI GROW 1/da	PERI RESP 1/da	PERI DEATH 1/da	PERI P/R RATIO	PERIP g/m²
71	13.448	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
72	13.346	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
73	13.244	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
74	13.142	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
75	13.040	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
76	12.938	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
77	12.836	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
78	12.734	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
79	12.632	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
80	12.530	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
81	12.428	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
82	12.326	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
83	12.224	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
84	12.122	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
85	12.020	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
86	11.918	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
87	11.816	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
88	11.714	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
89	11.612	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
90	11.510	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
91	11.408	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
92	11.306	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
93	11.204	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
94	11.102	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
95	11.000	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
20 DEG C RATE										0.000	0.000	0.000	0.000										0.000	0.000	0.000		

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

FINAL REPORT BAYOU MARINGOUIN — BAYOU MARINGOUIN STREAM MODEL
REACH NO. 4 ABOVE WEIR TO WEIR — BAYOU MARINGOUIN WINTER PROJECTION

*** REACH INPUTS ***

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	PO4-P mg/L	CHL A µg/L	COLI #/100mL	NCM
96	UPR RCH	0.05660	17.79	0.00	1.00	0.00	5.56	5.11	0.00	6.11	0.00	3.25	0.00	0.00	0.00	10.00	0.00	0.00

*** HYDRAULIC PARAMETER VALUES ***

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	CUM 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	11.00	10.91	0.05660	0.0	0.00739	0.15	5.44	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.007
97	10.91	10.81	0.05660	0.0	0.00739	0.15	5.59	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.007
98	10.81	10.72	0.05660	0.0	0.00739	0.15	5.74	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.007
99	10.72	10.62	0.05660	0.0	0.00739	0.15	5.88	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.007
100	10.62	10.53	0.05660	0.0	0.00739	0.15	6.03	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.007
101	10.53	10.44	0.05660	0.0	0.00739	0.15	6.18	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.007
102	10.44	10.34	0.05660	0.0	0.00739	0.15	6.32	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.007
103	10.34	10.25	0.05660	0.0	0.00739	0.15	6.47	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.007
104	10.25	10.15	0.05660	0.0	0.00739	0.15	6.62	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.007
105	10.15	10.06	0.05660	0.0	0.00739	0.15	6.77	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.007
106	10.06	9.97	0.05660	0.0	0.00739	0.15	6.91	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.007
107	9.97	9.87	0.05660	0.0	0.00739	0.15	7.06	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.007
108	9.87	9.78	0.05660	0.0	0.00739	0.15	7.21	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.007
109	9.78	9.68	0.05660	0.0	0.00739	0.15	7.35	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.007
110	9.68	9.59	0.05660	0.0	0.00739	0.15	7.50	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.007
111	9.59	9.50	0.05660	0.0	0.00739	0.15	7.65	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.007
112	9.50	9.40	0.05660	0.0	0.00739	0.15	7.80	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.007
113	9.40	9.31	0.05660	0.0	0.00739	0.15	7.94	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.007
114	9.31	9.21	0.05660	0.0	0.00739	0.15	8.09	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.007
115	9.21	9.12	0.05660	0.0	0.00739	0.15	8.24	0.66	11.58	719.95	1088.52	7.66	0.00	0.000	0.030	0.007
TOT						2.94				14398.94	21770.39					
AVG					0.0074			0.66	11.58			7.66				

*** BIOLOGICAL AND PHYSICAL COEFFICIENTS ***

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD1 DECAY 1/da	BOD1 SETT 1/da	ABOD1 DECAY 1/da	BOD1 HYDR 1/da	BOD2 DECAY 1/da	BOD2 SETT 1/da	ABOD2 DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORG-N HYDR 1/da	ORG-N SETT 1/da	NH3-N DECAY 1/da	NH3-N SRCE *	DENIT RATE 1/da	ORG-P HYDR 1/da	ORG-P SETT 1/da	PO4 SRCE *	PHYTO PROD **	PERIP PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
96	10.906	9.51	1.01	0.06	0.07	0.00	0.00	0.00	0.00	0.00	2.02	2.27	2.27	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97	10.812	9.51	1.01	0.06	0.07	0.00	0.00	0.00	0.00	0.00	2.02	2.28	2.28	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
98	10.718	9.51	1.01	0.06	0.07	0.00	0.00	0.00	0.00	0.00	2.02	2.28	2.28	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
99	10.624	9.51	1.01	0.06	0.07	0.00	0.00	0.00	0.00	0.00	2.02	2.29	2.29	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100	10.530	9.51	1.01	0.06	0.07	0.00	0.00	0.00	0.00	0.00	2.02	2.30	2.30	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
101	10.436	9.51	1.01	0.06	0.07	0.00	0.00	0.00	0.00	0.00	2.02	2.30	2.30	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
102	10.342	9.51	1.01	0.06	0.07	0.00	0.00	0.00	0.00	0.00	2.02	2.31	2.31	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
103	10.248	9.51	1.01	0.06	0.07	0.00	0.00	0.00	0.00	0.00	2.02	2.31	2.31	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
104	10.154	9.51	1.01	0.06	0.07	0.00	0.00	0.00	0.00	0.00	2.02	2.32	2.32	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105	10.060	9.51	1.01	0.06	0.07	0.00	0.00	0.00	0.00	0.00	2.02	2.32	2.32	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
106	9.966	9.51	1.01	0.06	0.07	0.00	0.00	0.00	0.00	0.00	2.02	2.33	2.33	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
107	9.872	9.51	1.01	0.06	0.07	0.00	0.00	0.00	0.00	0.00	2.02	2.33	2.33	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
108	9.778	9.51	1.01	0.06	0.07	0.00	0.00	0.00	0.00	0.00	2.02	2.33	2.33	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
109	9.684	9.51	1.01	0.06	0.07	0.00	0.00	0.00	0.00	0.00	2.02	2.34	2.34	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110	9.590	9.51	1.01	0.06	0.07	0.00	0.00	0.00	0.00	0.00	2.02	2.34	2.34	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
111	9.496	9.51	1.01	0.06	0.07	0.00	0.00	0.00	0.00	0.00	2.02	2.35	2.35	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112	9.402	9.51	1.01	0.06	0.07	0.00	0.00	0.00	0.00	0.00	2.02	2.35	2.35	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
113	9.308	9.51	1.01	0.06	0.07	0.00	0.00	0.00	0.00	0.00	2.02	2.36	2.36	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
114	9.214	9.51	1.01	0.06	0.07	0.00	0.00	0.00	0.00	0.00	2.02	2.36	2.36	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115	9.120	9.51	1.01	0.06	0.07	0.00	0.00	0.00	0.00	0.00	2.02	2.36	2.36	0.08	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			1.06	0.07	0.00	0.00	0.00	0.00	0.00	0.00	2.33			0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/d ** mg/L/day

*** WATER QUALITY CONSTITUENT VALUES ***

ELEM NO.	ENDING DIST	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	TOT-N mg/L	EORG-N mg/L	ETOT-N mg/L	ORG-P mg/L	PO4-P mg/L	TOT-P mg/L	EORG-P mg/L	ETOT-P mg/L	CHL A µg/L	PERIP g/m²	COLI #/100mL	NCM
96	10.906	17.79	0.00	1.00	0.00	5.55	5.24	0.00	6.24	0.00	3.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
97	10.812	17.79	0.00	1.00	0.00	5.55	5.36	0.00	6.36	0.00	3.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
98	10.718	17.79	0.00	1.00	0.00	5.54	5.48	0.00	6.48	0.00	3.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
99	10.624	17.79	0.00	1.00	0.00	5.54	5.59	0.00	6.59	0.00	3.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
100	10.530	17.79	0.00	1.00	0.00	5.53	5.70	0.00	6.70	0.00	3.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
101	10.436	17.79	0.00	1.00	0.00	5.52	5.81	0.00	6.81	0.00	3.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
102	10.342	17.79	0.00	1.00	0.00	5.51	5.92	0.00	6.92	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
103	10.248	17.79	0.00	1.00	0.00	5.50	6.03	0.00	7.03	0.00	2.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
104	10.154	17.79	0.00	1.00	0.00	5.49	6.13	0.00	7.13	0.00	2.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
105	10.060	17.79	0.00	1.00	0.00	5.48	6.24	0.00	7.24	0.00	2.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
106	9.966	17.79	0.00	1.00	0.00	5.47	6.34	0.00	7.34	0.00	2.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
107	9.872	17.79	0.00	1.00	0.00	5.46	6.44	0.00	7.44	0.00	2.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
108	9.778	17.79	0.00	1.00	0.00	5.45	6.53	0.00	7.53	0.00	2.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
109	9.684	17.79	0.00	1.00	0.00	5.44	6.63	0.00	7.63	0.00	2.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
110	9.590	17.79	0.00	1.00	0.00	5.43	6.72	0.00	7.72	0.00	2.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
111	9.496	17.79	0.00	1.00	0.00	5.42	6.81	0.00	7.81	0.00	2.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
112	9.402	17.79	0.00	1.00	0.00	5.41	6.90	0.00	7.90	0.00	2.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
113	9.308	17.79	0.00	1.00	0.00	5.40	6.99	0.00	7.99	0.00	2.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
114	9.214	17.79	0.00	1.00	0.00	5.40	7.07	0.00	8.07	0.00	2.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
115	9.120	17.79	0.00	1.00	0.00	5.39	7.16	0.00	8.16	0.00	2.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

** PHYTOPLANKTON AND PERIPHYTON DATA **

ELEM NO.	ENDING DIST	BANK SHADE frac	SECCHI DEPTH m	PHYT N PREF	PHYT LIT LIM	PHYT N LIM	PHYT P LIM	PHYT N&P LIM	PHYT TOT LIM	PHYT GROW 1/da	PHYT RESP 1/da	PHYT DEATH 1/da	PHYT SETT 1/da	PHYT P/R RATIO	PHYTO µg/L	PERI N PREF	PERI LIT LIM	PERI N LIM	PERI P LIM	PERI N&P LIM	PERI SPC LIM	PERI TOT LIM	PERI GROW 1/da	PERI RESP 1/da	PERI DEATH 1/da	PERI P/R RATIO	PERIP g/m²
96	10.906	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
97	10.812	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
98	10.718	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
99	10.624	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
100	10.530	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
101	10.436	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
102	10.342	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
103	10.248	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
104	10.154	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
105	10.060	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
106	9.966	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
107	9.872	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
108	9.778	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
109	9.684	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
110	9.590	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
111	9.496	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
112	9.402	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
113	9.308	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
114	9.214	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
115	9.120	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
20 DEG C RATE										0.000	0.000	0.000	0.000										0.000	0.000	0.000		

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

FINAL REPORT BAYOU MARINGOUIN
REACH NO. 5 BELOW WEIR EFFECT

BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN WINTER PROJECTION

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

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	PO4-P mg/L	CHL A µg/L	COLI #/100mL	NCM
116	UPR RCH	0.05660	17.79	0.00	1.00	0.00	5.39	7.16	0.00	8.16	0.00	2.63	0.00	0.00	0.00	10.00	0.00	0.00

116 DAM MUNSEN ROAD WEIR ADDS 1.62 MG/L DISSOLVED OXYGEN GIVING 7.00 MG/L D.O. FOR THE UPR RCH INPUT

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	CUM 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
116	9.12	9.11	0.05660	0.0	0.06096	0.00	8.24	0.26	3.63	9.29	36.27	0.93	0.00	0.000	0.000	0.061
TOT						0.00				9.29	36.27					
AVG					0.0610			0.26	3.63			0.93				

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD1 DECAY 1/da	BOD1 SETT 1/da	ABOD1 DECAY 1/da	BOD1 HYDR 1/da	BOD2 DECAY 1/da	BOD2 SETT 1/da	ABOD2 DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORG-N HYDR 1/da	ORG-N SETT 1/da	NH3-N DECAY 1/da	NH3-N SRCE *	DENIT RATE 1/da	ORG-P HYDR 1/da	ORG-P SETT 1/da	PO4 SRCE *	PHYTO PROD **	PERIP PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
116	9.110	9.51	2.90	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.74	2.08	2.08	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			3.03	0.07	0.20	0.00	0.00	0.00	0.00	0.00	2.00			0.10	0.20	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/d ** mg/L/day

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

ELEM NO.	ENDING DIST	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	TOT-N mg/L	EORG-N mg/L	ETOT-N mg/L	ORG-P mg/L	PO4-P mg/L	TOT-P mg/L	EORG-P mg/L	ETOT-P mg/L	CHL A µg/L	PERIP g/m²	COLI #/100mL	NCM
116	9.110	17.79	0.00	1.00	0.00	6.99	7.14	0.00	8.14	0.00	2.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

****** PHYTOPLANKTON AND PERIPHYTON DATA ******

ELEM NO.	ENDING DIST	BANK SHADE frac	SECCHI DEPTH m	PHYT N PREF	PHYT LIT LIM	PHYT N LIM	PHYT P LIM	PHYT N&P LIM	PHYT TOT LIM	PHYT GROW 1/da	PHYT RESP 1/da	PHYT DEATH 1/da	PHYT SETT 1/da	PHYT P/R RATIO	PHYTO µg/L	PERI N PREF	PERI LIT LIM	PERI N LIM	PERI P LIM	PERI N&P LIM	PERI SPC LIM	PERI TOT LIM	PERI GROW 1/da	PERI RESP 1/da	PERI DEATH 1/da	PERI P/R RATIO	PERIP g/m²
116	9.110	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
20 DEG C RATE										0.000	0.000	0.000	0.000										0.000	0.000	0.000		

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

FINAL REPORT BAYOU MARINGOUIN BAYOU MARINGOUIN STREAM MODEL
REACH NO. 6 BELOW WEIR TO OPEN AREA BAYOU MARINGOUIN WINTER PROJECTION

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

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	PO4-P mg/L	CHL A µg/L	COLI #/100mL	NCM
117	UPR RCH	0.05660	17.79	0.00	1.00	0.00	6.99	7.14	0.00	8.14	0.00	2.63	0.00	0.00	0.00	10.00	0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	CUM 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
117	9.11	9.01	0.05660	0.0	0.06096	0.02	8.26	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.061
118	9.01	8.91	0.05660	0.0	0.06096	0.02	8.28	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.061
119	8.91	8.81	0.05660	0.0	0.06096	0.02	8.30	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.061
120	8.81	8.71	0.05660	0.0	0.06096	0.02	8.32	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.061
121	8.71	8.61	0.05660	0.0	0.06096	0.02	8.34	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.061
122	8.61	8.50	0.05660	0.0	0.06096	0.02	8.35	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.061
123	8.50	8.40	0.05660	0.0	0.06096	0.02	8.37	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.061
124	8.40	8.30	0.05660	0.0	0.06096	0.02	8.39	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.061
125	8.30	8.20	0.05660	0.0	0.06096	0.02	8.41	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.061
126	8.20	8.10	0.05660	0.0	0.06096	0.02	8.43	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.061
127	8.10	8.00	0.05660	0.0	0.06096	0.02	8.45	0.26	3.63	93.69	365.96	0.93	0.00	0.000	1.000	0.061
TOT						0.21				1030.56	4025.61					
AVG					0.0610			0.26	3.63			0.93				

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD1 DECAY 1/da	BOD1 SETT 1/da	ABOD1 DECAY 1/da	BOD1 HYDR 1/da	BOD2 DECAY 1/da	BOD2 SETT 1/da	ABOD2 DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORG-N HYDR 1/da	ORG-N SETT 1/da	NH3-N DECAY 1/da	NH3-N SRCE *	DENIT RATE 1/da	ORG-P HYDR 1/da	ORG-P SETT 1/da	PO4 SRCE *	PHYTO PROD **	PERIP PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
117	9.009	9.51	2.90	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.91	2.25	2.25	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
118	8.908	9.51	2.90	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.91	2.25	2.25	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
119	8.807	9.51	2.90	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.91	2.25	2.25	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120	8.706	9.51	2.90	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.91	2.25	2.25	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
121	8.606	9.51	2.90	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.91	2.25	2.25	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
122	8.505	9.51	2.90	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.91	2.24	2.24	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
123	8.404	9.51	2.90	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.91	2.24	2.24	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
124	8.303	9.51	2.90	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.91	2.24	2.24	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125	8.202	9.51	2.90	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.91	2.24	2.24	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
126	8.101	9.51	2.90	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.91	2.24	2.24	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127	8.000	9.51	2.90	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.91	2.24	2.24	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			3.03	0.07	0.02	0.00	0.00	0.00	0.00	0.00	2.20			0.10	0.02	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/d ** mg/L/day

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

ELEM NO.	ENDING DIST	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	TOT-N mg/L	EORG-N mg/L	ETOT-N mg/L	ORG-P mg/L	PO4-P mg/L	TOT-P mg/L	EORG-P mg/L	ETOT-P mg/L	CHL A µg/L	PERIP g/m²	COLI #/100mL	NCM
117	9.009	17.79	0.00	1.00	0.00	6.95	7.11	0.00	8.11	0.00	2.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
118	8.908	17.79	0.00	1.00	0.00	6.92	7.08	0.00	8.08	0.00	2.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

119	8.807	17.79	0.00	1.00	0.00	6.88	7.05	0.00	8.05	0.00	2.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
120	8.706	17.79	0.00	1.00	0.00	6.85	7.01	0.00	8.01	0.00	2.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
121	8.606	17.79	0.00	1.00	0.00	6.82	6.98	0.00	7.98	0.00	2.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
122	8.505	17.79	0.00	1.00	0.00	6.79	6.95	0.00	7.95	0.00	2.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
123	8.404	17.79	0.00	1.00	0.00	6.76	6.91	0.00	7.91	0.00	2.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
124	8.303	17.79	0.00	1.00	0.00	6.74	6.88	0.00	7.88	0.00	2.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
125	8.202	17.79	0.00	1.00	0.00	6.71	6.85	0.00	7.85	0.00	2.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
126	8.101	17.79	0.00	1.00	0.00	6.69	6.81	0.00	7.81	0.00	2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
127	8.000	17.79	0.00	1.00	0.00	6.64	6.77	0.00	7.77	0.00	2.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

******************************** PHYTOPLANKTON AND PERIPHYTON DATA ********************************

ELEM NO.	ENDING DIST	BANK SHADE frac	SECCHI DEPTH m	PHYT N PREF	PHYT LIT LIM	PHYT N LIM	PHYT P LIM	PHYT N&P LIM	PHYT TOT LIM	PHYT GROW 1/da	PHYT RESP 1/da	PHYT DEATH 1/da	PHYT SETT 1/da	PHYT P/R RATIO	PHYTO µg/L	PERI N PREF	PERI LIT LIM	PERI N LIM	PERI P LIM	PERI N&P LIM	PERI SPC LIM	PERI TOT LIM	PERI GROW 1/da	PERI RESP 1/da	PERI DEATH 1/da	PERI P/R RATIO	PERIP g/m²
117	9.009	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
118	8.908	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
119	8.807	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
120	8.706	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
121	8.606	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
122	8.505	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
123	8.404	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
124	8.303	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
125	8.202	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
126	8.101	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
127	8.000	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
20 DEG C RATE										0.000	0.000	0.000	0.000										0.000	0.000	0.000		

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

FINAL REPORT BAYOU MARINGOUIN BAYOU MARINGOUIN STREAM MODEL
REACH NO. 7 OPEN AREA TO DISTRIBUTARY BAYOU MARINGOUIN WINTER PROJECTION

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

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	PO4-P mg/L	CHL A µg/L	COLI #/100mL	NCM
128	UPR RCH	0.05660	17.79	0.00	1.00	0.00	6.64	6.77	0.00	7.77	0.00	2.48	0.00	0.00	0.00	10.00	0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	CUM 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	8.00	7.90	0.05660	0.0	0.01869	0.06	8.51	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
129	7.90	7.80	0.05660	0.0	0.01869	0.06	8.57	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
130	7.80	7.70	0.05660	0.0	0.01869	0.06	8.64	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
131	7.70	7.60	0.05660	0.0	0.01869	0.06	8.70	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
132	7.60	7.50	0.05660	0.0	0.01869	0.06	8.76	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
133	7.50	7.40	0.05660	0.0	0.01869	0.06	8.82	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
134	7.40	7.30	0.05660	0.0	0.01869	0.06	8.88	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
135	7.30	7.20	0.05660	0.0	0.01869	0.06	8.95	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019

136	7.20	7.10	0.05660	0.0	0.01869	0.06	9.01	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
137	7.10	7.00	0.05660	0.0	0.01869	0.06	9.07	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
138	7.00	6.90	0.05660	0.0	0.01869	0.06	9.13	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
139	6.90	6.80	0.05660	0.0	0.01869	0.06	9.19	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
140	6.80	6.70	0.05660	0.0	0.01869	0.06	9.26	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
141	6.70	6.60	0.05660	0.0	0.01869	0.06	9.32	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
142	6.60	6.50	0.05660	0.0	0.01869	0.06	9.38	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
143	6.50	6.40	0.05660	0.0	0.01869	0.06	9.44	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
144	6.40	6.30	0.05660	0.0	0.01869	0.06	9.50	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
145	6.30	6.20	0.05660	0.0	0.01869	0.06	9.57	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
146	6.20	6.10	0.05660	0.0	0.01869	0.06	9.63	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
147	6.10	6.00	0.05660	0.0	0.01869	0.06	9.69	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
148	6.00	5.90	0.05660	0.0	0.01869	0.06	9.75	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
149	5.90	5.80	0.05660	0.0	0.01869	0.06	9.81	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
150	5.80	5.70	0.05660	0.0	0.01869	0.06	9.87	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
151	5.70	5.60	0.05660	0.0	0.01869	0.06	9.94	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
152	5.60	5.50	0.05660	0.0	0.01869	0.06	10.00	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
153	5.50	5.40	0.05660	0.0	0.01869	0.06	10.06	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
154	5.40	5.30	0.05660	0.0	0.01869	0.06	10.12	0.50	6.10	302.85	609.60	3.03	0.00	0.000	1.000	0.019
TOT						1.67				8176.93	16459.20					
AVG					0.0187			0.50	6.10			3.03				

** BIOLOGICAL AND PHYSICAL COEFFICIENTS **

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD1 DECAY 1/da	BOD1 SETT 1/da	ABOD1 DECAY 1/da	BOD1 HYDR 1/da	BOD2 DECAY 1/da	BOD2 SETT 1/da	ABOD2 DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORG-N HYDR 1/da	ORG-N SETT 1/da	NH3-N DECAY 1/da	NH3-N SRCE *	DENIT RATE 1/da	ORG-P HYDR 1/da	ORG-P SETT 1/da	PO4 SRCE *	PHYTO PROD **	PERIP PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
128	7.900	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.23	2.23	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
129	7.800	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.23	2.23	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130	7.700	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.23	2.23	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
131	7.600	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.23	2.23	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
132	7.500	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.23	2.23	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
133	7.400	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.22	2.22	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
134	7.300	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.22	2.22	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135	7.200	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.22	2.22	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
136	7.100	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.22	2.22	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
137	7.000	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.22	2.22	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
138	6.900	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.22	2.22	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
139	6.800	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.21	2.21	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140	6.700	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.21	2.21	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
141	6.600	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.21	2.21	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
142	6.500	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.21	2.21	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
143	6.400	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.21	2.21	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
144	6.300	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.21	2.21	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145	6.200	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.20	2.20	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
146	6.100	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.20	2.20	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147	6.000	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.20	2.20	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
148	5.900	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.20	2.20	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
149	5.800	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.20	2.20	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150	5.700	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.20	2.20	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
151	5.600	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.20	2.20	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
152	5.500	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.19	2.19	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
153	5.400	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.20	2.20	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
154	5.300	9.51	1.35	0.06	0.10	0.00	0.00	0.00	0.00	0.00	1.91	2.20	2.20	0.08	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			1.41	0.07	0.00	0.00	0.00	0.00	0.00	0.00	2.20			0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/d ** mg/L/day

** WATER QUALITY CONSTITUENT VALUES **

ELEM NO.	ENDING DIST	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	TOT-N mg/L	EORG-N mg/L	ETOT-N mg/L	ORG-P mg/L	PO4-P mg/L	TOT-P mg/L	EORG-P mg/L	ETOT-P mg/L	CHL A µg/L	PERIP g/m²	COLI #/100mL	NCM
128	7.900	17.79	0.00	1.00	0.00	6.57	6.73	0.00	7.73	0.00	2.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
129	7.800	17.79	0.00	1.00	0.00	6.50	6.69	0.00	7.69	0.00	2.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
130	7.700	17.79	0.00	1.00	0.00	6.44	6.65	0.00	7.65	0.00	2.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
131	7.600	17.79	0.00	1.00	0.00	6.39	6.61	0.00	7.61	0.00	2.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
132	7.500	17.79	0.00	1.00	0.00	6.34	6.57	0.00	7.57	0.00	2.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
133	7.400	17.79	0.00	1.00	0.00	6.29	6.54	0.00	7.54	0.00	2.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
134	7.300	17.79	0.00	1.00	0.00	6.25	6.50	0.00	7.50	0.00	2.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
135	7.200	17.79	0.00	1.00	0.00	6.21	6.46	0.00	7.46	0.00	2.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
136	7.100	17.79	0.00	1.00	0.00	6.18	6.43	0.00	7.43	0.00	2.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
137	7.000	17.79	0.00	1.00	0.00	6.15	6.39	0.00	7.39	0.00	2.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
138	6.900	17.79	0.00	1.00	0.00	6.12	6.35	0.00	7.35	0.00	2.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
139	6.800	17.79	0.00	1.00	0.00	6.09	6.32	0.00	7.32	0.00	2.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
140	6.700	17.79	0.00	1.00	0.00	6.07	6.28	0.00	7.28	0.00	2.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
141	6.600	17.79	0.00	1.00	0.00	6.04	6.25	0.00	7.25	0.00	2.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
142	6.500	17.79	0.00	1.00	0.00	6.02	6.21	0.00	7.21	0.00	2.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
143	6.400	17.79	0.00	1.00	0.00	6.01	6.18	0.00	7.18	0.00	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
144	6.300	17.79	0.00	1.00	0.00	5.99	6.15	0.00	7.15	0.00	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
145	6.200	17.79	0.00	1.00	0.00	5.97	6.11	0.00	7.11	0.00	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
146	6.100	17.79	0.00	1.00	0.00	5.96	6.08	0.00	7.08	0.00	2.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
147	6.000	17.79	0.00	1.00	0.00	5.95	6.05	0.00	7.05	0.00	2.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
148	5.900	17.79	0.00	1.00	0.00	5.94	6.01	0.00	7.01	0.00	2.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
149	5.800	17.79	0.00	1.00	0.00	5.93	5.98	0.00	6.98	0.00	2.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
150	5.700	17.79	0.00	1.00	0.00	5.92	5.95	0.00	6.95	0.00	2.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
151	5.600	17.79	0.00	1.00	0.00	5.91	5.93	0.00	6.93	0.00	2.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
152	5.500	17.79	0.00	1.00	0.00	5.91	5.91	0.00	6.91	0.00	2.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
153	5.400	17.79	0.00	1.00	0.00	5.91	5.93	0.00	6.93	0.00	2.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
154	5.300	17.79	0.00	1.00	0.00	5.93	6.04	0.00	7.04	0.00	2.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

** PHYTOPLANKTON AND PERIPHYTON DATA **

ELEM NO.	ENDING DIST	BANK SHADE frac	SECCHI DEPTH m	PHYT N PREF	PHYT LIT LIM	PHYT N LIM	PHYT P LIM	PHYT N&P LIM	PHYT TOT LIM	PHYT GROW 1/da	PHYT RESP 1/da	PHYT DEATH 1/da	PHYT SETT 1/da	PHYT P/R RATIO	PHYTO µg/L	PERI N PREF	PERI LIT LIM	PERI N LIM	PERI P LIM	PERI N&P LIM	PERI SPC LIM	PERI TOT LIM	PERI GROW 1/da	PERI RESP 1/da	PERI DEATH 1/da	PERI P/R RATIO	PERIP g/m²
128	7.900	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
129	7.800	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
130	7.700	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
131	7.600	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
132	7.500	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
133	7.400	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
134	7.300	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
135	7.200	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
136	7.100	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
137	7.000	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
138	6.900	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
139	6.800	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
140	6.700	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
141	6.600	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
142	6.500	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
143	6.400	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
144	6.300	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0

145	6.200	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
146	6.100	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
147	6.000	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
148	5.900	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
149	5.800	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
150	5.700	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
151	5.600	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
152	5.500	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
153	5.400	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
154	5.300	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
20 DEG C RATE										0.000	0.000	0.000	0.000										0.000	0.000	0.000		

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

FINAL REPORT BAYOU MARINGOUIN BAYOU MARINGOUIN STREAM MODEL
REACH NO. 8 DISTRIBUTARY TO WIDE SECTION BAYOU MARINGOUIN WINTER PROJECTION

** REACH INPUTS **

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	PO4-P mg/L	CHL A µg/L	COLI #/100mL	NCM
155	UPR RCH	0.05660	17.79	0.00	1.00	0.00	5.93	6.04	0.00	7.04	0.00	2.44	0.00	0.00	0.00	10.00	0.00	0.00
155	WSTLD	-0.02830	17.79	0.00	1.00	0.00	5.96	6.15	0.00	7.15	0.00	2.48	0.00	0.00	0.00	10.00	0.00	0.00

** HYDRAULIC PARAMETER VALUES **

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m^3/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	CUM 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
155	5.30	5.20	0.02830	0.0	0.01656	0.07	10.19	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
156	5.20	5.10	0.02830	0.0	0.01656	0.07	10.26	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
157	5.10	5.00	0.02830	0.0	0.01656	0.07	10.33	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
158	5.00	4.90	0.02830	0.0	0.01656	0.07	10.40	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
159	4.90	4.80	0.02830	0.0	0.01656	0.07	10.47	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
160	4.80	4.70	0.02830	0.0	0.01656	0.07	10.54	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
161	4.70	4.60	0.02830	0.0	0.01656	0.07	10.61	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
162	4.60	4.50	0.02830	0.0	0.01656	0.07	10.68	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
163	4.50	4.40	0.02830	0.0	0.01656	0.07	10.75	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
164	4.40	4.30	0.02830	0.0	0.01656	0.07	10.82	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
165	4.30	4.20	0.02830	0.0	0.01656	0.07	10.89	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
166	4.20	4.10	0.02830	0.0	0.01656	0.07	10.96	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
167	4.10	4.00	0.02830	0.0	0.01656	0.07	11.03	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
168	4.00	3.90	0.02830	0.0	0.01656	0.07	11.10	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
169	3.90	3.80	0.02830	0.0	0.01656	0.07	11.17	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
170	3.80	3.70	0.02830	0.0	0.01656	0.07	11.24	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
171	3.70	3.60	0.02830	0.0	0.01656	0.07	11.31	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
172	3.60	3.50	0.02830	0.0	0.01656	0.07	11.38	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
173	3.50	3.40	0.02830	0.0	0.01656	0.07	11.45	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
174	3.40	3.30	0.02830	0.0	0.01656	0.07	11.52	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
175	3.30	3.20	0.02830	0.0	0.01656	0.07	11.59	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
176	3.20	3.10	0.02830	0.0	0.01656	0.07	11.66	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
177	3.10	3.00	0.02830	0.0	0.01656	0.07	11.73	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
178	3.00	2.90	0.02830	0.0	0.01656	0.07	11.80	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
179	2.90	2.80	0.02830	0.0	0.01656	0.07	11.87	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017

180	2.80	2.70	0.02830	0.0	0.01656	0.07	11.94	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
181	2.70	2.60	0.02830	0.0	0.01656	0.07	12.01	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
182	2.60	2.50	0.02830	0.0	0.01656	0.07	12.08	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
183	2.50	2.40	0.02830	0.0	0.01656	0.07	12.15	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
184	2.40	2.30	0.02830	0.0	0.01656	0.07	12.22	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
185	2.30	2.20	0.02830	0.0	0.01656	0.07	12.29	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
186	2.20	2.10	0.02830	0.0	0.01656	0.07	12.36	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
187	2.10	2.00	0.02830	0.0	0.01656	0.07	12.43	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
188	2.00	1.90	0.02830	0.0	0.01656	0.07	12.50	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
189	1.90	1.80	0.02830	0.0	0.01656	0.07	12.57	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
190	1.80	1.70	0.02830	0.0	0.01656	0.07	12.64	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
191	1.70	1.60	0.02830	0.0	0.01656	0.07	12.71	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
192	1.60	1.50	0.02830	0.0	0.01656	0.07	12.78	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
193	1.50	1.40	0.02830	0.0	0.01656	0.07	12.85	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
194	1.40	1.30	0.02830	0.0	0.01656	0.07	12.92	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
195	1.30	1.20	0.02830	0.0	0.01656	0.07	12.99	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
196	1.20	1.10	0.02830	0.0	0.01656	0.07	13.06	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
197	1.10	1.00	0.02830	0.0	0.01656	0.07	13.13	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
198	1.00	0.90	0.02830	0.0	0.01656	0.07	13.20	0.24	7.01	170.90	701.00	1.71	0.00	0.000	10.000	0.017
TOT						3.08				7519.77	30844.00					
AVG					0.0166			0.24	7.01			1.71				

** BIOLOGICAL AND PHYSICAL COEFFICIENTS **

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD1 DECAY 1/da	BOD1 SETT 1/da	ABOD1 DECAY 1/da	BOD1 HYDR 1/da	BOD2 DECAY 1/da	BOD2 SETT 1/da	ABOD2 DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORG-N HYDR 1/da	ORG-N SETT 1/da	NH3-N DECAY 1/da	NH3-N SRCE *	DENIT RATE 1/da	ORG-P HYDR 1/da	ORG-P SETT 1/da	PO4 SRCE *	PHYTO PROD **	PERIP PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
155	5.200	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.09	2.09	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
156	5.100	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.09	2.09	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157	5.000	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.09	2.09	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
158	4.900	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.10	2.10	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
159	4.800	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.10	2.10	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160	4.700	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.11	2.11	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
161	4.600	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.11	2.11	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
162	4.500	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.11	2.11	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
163	4.400	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.12	2.12	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
164	4.300	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.12	2.12	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165	4.200	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.12	2.12	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
166	4.100	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.13	2.13	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167	4.000	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.13	2.13	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
168	3.900	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.13	2.13	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
169	3.800	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.14	2.14	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170	3.700	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.14	2.14	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
171	3.600	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.14	2.14	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172	3.500	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.15	2.15	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
173	3.400	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.15	2.15	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
174	3.300	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.15	2.15	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175	3.200	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.16	2.16	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
176	3.100	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.16	2.16	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
177	3.000	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.16	2.16	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
178	2.900	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.17	2.17	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
179	2.800	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.17	2.17	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	2.700	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.17	2.17	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
181	2.600	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.17	2.17	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
182	2.500	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.18	2.18	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
183	2.400	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.18	2.18	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
184	2.300	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.18	2.18	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

185	2.200	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.18	2.18	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
186	2.100	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.19	2.19	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
187	2.000	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.19	2.19	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
188	1.900	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.19	2.19	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
189	1.800	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.20	2.20	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
190	1.700	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.20	2.20	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
191	1.600	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.20	2.20	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
192	1.500	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.20	2.20	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
193	1.400	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.21	2.21	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
194	1.300	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.21	2.21	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
195	1.200	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.21	2.21	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
196	1.100	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.21	2.21	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
197	1.000	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.22	2.22	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
198	0.900	9.51	2.75	0.06	0.19	0.00	0.00	0.00	0.00	0.00	1.79	2.22	2.22	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			2.87	0.07	0.00	0.00	0.00	0.00	0.00	0.00	2.06			0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/d ** mg/L/day

** WATER QUALITY CONSTITUENT VALUES **

ELEM NO.	ENDING DIST	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	TOT-N mg/L	EORG-N mg/L	ETOT-N mg/L	ORG-P mg/L	PO4-P mg/L	TOT-P mg/L	EORG-P mg/L	ETOT-P mg/L	CHL A µg/L	PERIP g/m²	COLI #/100mL	NCM
155	5.200	17.79	0.00	1.00	0.00	5.96	6.15	0.00	7.15	0.00	2.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
156	5.100	17.79	0.00	1.00	0.00	5.98	6.24	0.00	7.24	0.00	2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
157	5.000	17.79	0.00	1.00	0.00	6.00	6.32	0.00	7.32	0.00	2.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
158	4.900	17.79	0.00	1.00	0.00	6.01	6.41	0.00	7.41	0.00	2.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
159	4.800	17.79	0.00	1.00	0.00	6.02	6.49	0.00	7.49	0.00	2.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
160	4.700	17.79	0.00	1.00	0.00	6.03	6.57	0.00	7.57	0.00	2.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
161	4.600	17.79	0.00	1.00	0.00	6.04	6.65	0.00	7.65	0.00	2.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
162	4.500	17.79	0.00	1.00	0.00	6.04	6.73	0.00	7.73	0.00	2.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
163	4.400	17.79	0.00	1.00	0.00	6.05	6.81	0.00	7.81	0.00	2.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
164	4.300	17.79	0.00	1.00	0.00	6.05	6.89	0.00	7.89	0.00	2.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
165	4.200	17.79	0.00	1.00	0.00	6.05	6.96	0.00	7.96	0.00	2.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
166	4.100	17.79	0.00	1.00	0.00	6.05	7.04	0.00	8.04	0.00	2.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
167	4.000	17.79	0.00	1.00	0.00	6.05	7.11	0.00	8.11	0.00	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
168	3.900	17.79	0.00	1.00	0.00	6.05	7.18	0.00	8.18	0.00	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
169	3.800	17.79	0.00	1.00	0.00	6.05	7.25	0.00	8.25	0.00	2.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
170	3.700	17.79	0.00	1.00	0.00	6.05	7.32	0.00	8.32	0.00	2.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
171	3.600	17.79	0.00	1.00	0.00	6.05	7.39	0.00	8.39	0.00	2.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
172	3.500	17.79	0.00	1.00	0.00	6.04	7.46	0.00	8.46	0.00	2.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
173	3.400	17.79	0.00	1.00	0.00	6.04	7.53	0.00	8.53	0.00	2.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
174	3.300	17.79	0.00	1.00	0.00	6.04	7.59	0.00	8.59	0.00	2.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
175	3.200	17.79	0.00	1.00	0.00	6.03	7.65	0.00	8.65	0.00	2.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
176	3.100	17.79	0.00	1.00	0.00	6.03	7.72	0.00	8.72	0.00	2.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
177	3.000	17.79	0.00	1.00	0.00	6.03	7.78	0.00	8.78	0.00	2.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
178	2.900	17.79	0.00	1.00	0.00	6.02	7.84	0.00	8.84	0.00	3.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
179	2.800	17.79	0.00	1.00	0.00	6.02	7.90	0.00	8.90	0.00	3.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
180	2.700	17.79	0.00	1.00	0.00	6.01	7.96	0.00	8.96	0.00	3.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
181	2.600	17.79	0.00	1.00	0.00	6.01	8.02	0.00	9.02	0.00	3.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
182	2.500	17.79	0.00	1.00	0.00	6.00	8.08	0.00	9.08	0.00	3.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
183	2.400	17.79	0.00	1.00	0.00	6.00	8.14	0.00	9.14	0.00	3.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
184	2.300	17.79	0.00	1.00	0.00	5.99	8.19	0.00	9.19	0.00	3.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
185	2.200	17.79	0.00	1.00	0.00	5.99	8.25	0.00	9.25	0.00	3.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
186	2.100	17.79	0.00	1.00	0.00	5.99	8.31	0.00	9.31	0.00	3.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
187	2.000	17.79	0.00	1.00	0.00	5.98	8.36	0.00	9.36	0.00	3.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
188	1.900	17.79	0.00	1.00	0.00	5.98	8.42	0.00	9.42	0.00	3.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
189	1.800	17.79	0.00	1.00	0.00	5.97	8.47	0.00	9.47	0.00	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

190	1.700	17.79	0.00	1.00	0.00	5.97	8.52	0.00	9.52	0.00	3.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
191	1.600	17.79	0.00	1.00	0.00	5.97	8.58	0.00	9.58	0.00	3.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
192	1.500	17.79	0.00	1.00	0.00	5.97	8.63	0.00	9.63	0.00	3.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
193	1.400	17.79	0.00	1.00	0.00	5.97	8.69	0.00	9.69	0.00	3.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
194	1.300	17.79	0.00	1.00	0.00	5.97	8.74	0.00	9.74	0.00	3.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
195	1.200	17.79	0.00	1.00	0.00	5.98	8.80	0.00	9.80	0.00	3.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
196	1.100	17.79	0.00	1.00	0.00	5.99	8.86	0.00	9.86	0.00	3.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
197	1.000	17.79	0.00	1.00	0.00	6.00	8.92	0.00	9.92	0.00	3.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
198	0.900	17.79	0.00	1.00	0.00	6.02	8.98	0.00	9.98	0.00	3.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

** PHYTOPLANKTON AND PERIPHYTON DATA **

ELEM NO.	ENDING DIST	BANK SHADE frac	SECCHI DEPTH m	PHYT N PREF	PHYT LIT LIM	PHYT N LIM	PHYT P LIM	PHYT N&P LIM	PHYT TOT LIM	PHYT GROW 1/da	PHYT RESP 1/da	PHYT DEATH 1/da	PHYT SETT 1/da	PHYT P/R RATIO	PHYTO µg/L	PERI N PREF	PERI LIT LIM	PERI N LIM	PERI P LIM	PERI N&P LIM	PERI SPC LIM	PERI TOT LIM	PERI GROW 1/da	PERI RESP 1/da	PERI DEATH 1/da	PERI P/R RATIO	PERIP g/m²
155	5.200	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
156	5.100	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
157	5.000	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
158	4.900	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
159	4.800	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
160	4.700	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
161	4.600	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
162	4.500	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
163	4.400	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
164	4.300	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
165	4.200	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
166	4.100	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
167	4.000	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
168	3.900	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
169	3.800	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
170	3.700	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
171	3.600	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
172	3.500	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
173	3.400	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
174	3.300	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
175	3.200	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
176	3.100	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
177	3.000	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
178	2.900	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
179	2.800	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
180	2.700	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
181	2.600	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
182	2.500	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
183	2.400	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
184	2.300	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
185	2.200	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
186	2.100	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
187	2.000	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
188	1.900	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
189	1.800	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
190	1.700	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
191	1.600	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
192	1.500	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
193	1.400	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
194	1.300	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
195	1.200	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
196	1.100	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
197	1.000	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0

198	0.900	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
20 DEG C RATE										0.000	0.000	0.000	0.000										0.000	0.000	0.000		

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

FINAL REPORT BAYOU MARINGOUIN — BAYOU MARINGOUIN STREAM MODEL
REACH NO. 9 WIDE SECTION TO END — BAYOU MARINGOUIN WINTER PROJECTION

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

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	PO4-P mg/L	CHL A µg/L	COLI #/100mL	NCM
199	UPR RCH	0.02830	17.79	0.00	1.00	0.00	6.02	8.98	0.00	9.98	0.00	3.34	0.00	0.00	0.00	10.00	0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	CUM 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
199	0.90	0.80	0.02830	0.0	0.00762	0.15	13.35	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.008
200	0.80	0.70	0.02830	0.0	0.00762	0.15	13.50	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.008
201	0.70	0.60	0.02830	0.0	0.00762	0.15	13.65	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.008
202	0.60	0.50	0.02830	0.0	0.00762	0.15	13.81	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.008
203	0.50	0.40	0.02830	0.0	0.00762	0.15	13.96	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.008
204	0.40	0.30	0.02830	0.0	0.00762	0.15	14.11	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.008
205	0.30	0.20	0.02830	0.0	0.00762	0.15	14.26	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.008
206	0.20	0.10	0.02830	0.0	0.00762	0.15	14.41	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.008
207	0.10	0.00	0.02830	0.0	0.00762	0.15	14.57	0.30	12.19	371.55	1219.00	3.72	0.00	0.000	10.000	0.008
TOT						1.37				3343.96	10971.00					
AVG					0.0076			0.30	12.19			3.72				

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD1 DECAY 1/da	BOD1 SETT 1/da	ABOD1 DECAY 1/da	BOD1 HYDR 1/da	BOD2 DECAY 1/da	BOD2 SETT 1/da	ABOD2 DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORG-N HYDR 1/da	ORG-N SETT 1/da	NH3-N DECAY 1/da	NH3-N SRCE *	DENIT RATE 1/da	ORG-P HYDR 1/da	ORG-P SETT 1/da	PO4 SRCE *	PHYTO PROD **	PERIP PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
199	0.800	9.51	2.20	0.06	0.16	0.00	0.00	0.00	0.00	0.00	1.57	1.99	1.99	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200	0.700	9.51	2.20	0.06	0.16	0.00	0.00	0.00	0.00	0.00	1.57	2.00	2.00	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
201	0.600	9.51	2.20	0.06	0.16	0.00	0.00	0.00	0.00	0.00	1.57	2.00	2.00	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202	0.500	9.51	2.20	0.06	0.16	0.00	0.00	0.00	0.00	0.00	1.57	2.00	2.00	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
203	0.400	9.51	2.20	0.06	0.16	0.00	0.00	0.00	0.00	0.00	1.57	2.00	2.00	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
204	0.300	9.51	2.20	0.06	0.16	0.00	0.00	0.00	0.00	0.00	1.57	2.00	2.00	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
205	0.200	9.51	2.20	0.06	0.16	0.00	0.00	0.00	0.00	0.00	1.57	2.00	2.00	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
206	0.100	9.51	2.20	0.06	0.16	0.00	0.00	0.00	0.00	0.00	1.57	2.00	2.00	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
207	0.000	9.51	2.20	0.06	0.16	0.00	0.00	0.00	0.00	0.00	1.57	2.00	2.00	0.08	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			2.30	0.07	0.02	0.00	0.00	0.00	0.00	0.00	1.80			0.10	0.02	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/d ** mg/L/day

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

ELEM NO.	ENDING DIST	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	TOT-N mg/L	EORG-N mg/L	ETOT-N mg/L	ORG-P mg/L	PO4-P mg/L	TOT-P mg/L	EORG-P mg/L	ETOT-P mg/L	CHL A µg/L	PERIP g/m²	COLI #/100mL	NCM
199	0.800	17.79	0.00	1.00	0.00	6.04	9.02	0.00	10.02	0.00	3.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
200	0.700	17.79	0.00	1.00	0.00	6.05	9.04	0.00	10.04	0.00	3.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
201	0.600	17.79	0.00	1.00	0.00	6.05	9.07	0.00	10.07	0.00	3.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
202	0.500	17.79	0.00	1.00	0.00	6.06	9.09	0.00	10.09	0.00	3.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
203	0.400	17.79	0.00	1.00	0.00	6.07	9.11	0.00	10.11	0.00	3.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
204	0.300	17.79	0.00	1.00	0.00	6.07	9.12	0.00	10.12	0.00	3.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
205	0.200	17.79	0.00	1.00	0.00	6.08	9.13	0.00	10.13	0.00	3.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
206	0.100	17.79	0.00	1.00	0.00	6.08	9.14	0.00	10.14	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
207	0.000	17.79	0.00	1.00	0.00	6.08	9.15	0.00	10.15	0.00	3.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

******** PHYTOPLANKTON AND PERIPHYTON DATA ********

ELEM NO.	ENDING DIST	BANK SHADE frac	SECCHI DEPTH m	PHYT N PREF	PHYT LIT LIM	PHYT N LIM	PHYT P LIM	PHYT N&P LIM	PHYT TOT LIM	PHYT GROW 1/da	PHYT RESP 1/da	PHYT DEATH 1/da	PHYT SETT 1/da	PHYT P/R RATIO	PHYTO µg/L	PERI N PREF	PERI LIT LIM	PERI N LIM	PERI P LIM	PERI N&P LIM	PERI SFC LIM	PERI TOT LIM	PERI GROW 1/da	PERI RESP 1/da	PERI DEATH 1/da	PERI P/R RATIO	PERIP g/m²
199	0.800	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
200	0.700	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
201	0.600	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
202	0.500	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
203	0.400	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
204	0.300	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
205	0.200	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
206	0.100	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
207	0.000	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
20 DEG C RATE										0.000	0.000	0.000	0.000										0.000	0.000	0.000		

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

FINAL REPORT UNNAMED TRIBUTARY BAYOU MARINGOUIN STREAM MODEL
REACH NO. 2 UNNAMED TRIBUTARY BAYOU MARINGOUIN WINTER PROJECTION

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

ELEM NO.	TYPE	FLOW	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	PO4-P mg/L	CHL A µg/L	COLI #/100mL	NCM
51	HDWTR	0.02830	17.79	0.00	0.00	0.00	8.56	2.18	0.00	3.18	0.00	2.81	0.00	0.00	0.00	10.00	0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW m³/s	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	CUM 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
51	1.96	1.86	0.02830	0.0	0.04072	0.03	0.03	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.041
52	1.86	1.76	0.02830	0.0	0.04072	0.03	0.06	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.041
53	1.76	1.67	0.02830	0.0	0.04072	0.03	0.08	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.041
54	1.67	1.57	0.02830	0.0	0.04072	0.03	0.11	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.041
55	1.57	1.47	0.02830	0.0	0.04072	0.03	0.14	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.041

56	1.47	1.37	0.02830	0.0	0.04072	0.03	0.17	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.041
57	1.37	1.27	0.02830	0.0	0.04072	0.03	0.20	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.041
58	1.27	1.18	0.02830	0.0	0.04072	0.03	0.22	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.041
59	1.18	1.08	0.02830	0.0	0.04072	0.03	0.25	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.041
60	1.08	0.98	0.02830	0.0	0.04072	0.03	0.28	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.041
61	0.98	0.88	0.02830	0.0	0.04072	0.03	0.31	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.041
62	0.88	0.78	0.02830	0.0	0.04072	0.03	0.33	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.041
63	0.78	0.69	0.02830	0.0	0.04072	0.03	0.36	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.041
64	0.69	0.59	0.02830	0.0	0.04072	0.03	0.39	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.041
65	0.59	0.49	0.02830	0.0	0.04072	0.03	0.42	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.041
66	0.49	0.39	0.02830	0.0	0.04072	0.03	0.45	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.041
67	0.39	0.29	0.02830	0.0	0.04072	0.03	0.47	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.041
68	0.29	0.20	0.02830	0.0	0.04072	0.03	0.50	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.041
69	0.20	0.10	0.02830	0.0	0.04072	0.03	0.53	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.041
70	0.10	0.00	0.02830	0.0	0.04072	0.03	0.56	0.20	3.43	68.12	336.04	0.70	0.00	0.000	0.030	0.041
TOT						0.56				1362.31	6720.84					
AVG					0.0407			0.20	3.43			0.70				

** BIOLOGICAL AND PHYSICAL COEFFICIENTS **

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	BOD1 DECAY 1/da	BOD1 SETT 1/da	ABOD1 DECAY 1/da	BOD1 HYDR 1/da	BOD2 DECAY 1/da	BOD2 SETT 1/da	ABOD2 DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORG-N HYDR 1/da	ORG-N SETT 1/da	NH3-N DECAY 1/da	NH3-N SRCE *	DENIT RATE 1/da	ORG-P HYDR 1/da	ORG-P SETT 1/da	PO4 SRCE *	PHYTO PROD **	PERIP PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
51	1.862	9.51	3.30	0.06	0.23	0.00	0.00	0.00	0.00	0.00	2.67	2.78	2.78	0.09	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52	1.764	9.51	3.30	0.06	0.23	0.00	0.00	0.00	0.00	0.00	2.67	2.78	2.78	0.09	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
53	1.666	9.51	3.30	0.06	0.23	0.00	0.00	0.00	0.00	0.00	2.67	2.78	2.78	0.09	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
54	1.568	9.51	3.30	0.06	0.23	0.00	0.00	0.00	0.00	0.00	2.67	2.78	2.78	0.09	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55	1.470	9.51	3.30	0.06	0.23	0.00	0.00	0.00	0.00	0.00	2.67	2.79	2.79	0.09	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
56	1.372	9.51	3.30	0.06	0.23	0.00	0.00	0.00	0.00	0.00	2.67	2.79	2.79	0.08	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57	1.274	9.51	3.30	0.06	0.23	0.00	0.00	0.00	0.00	0.00	2.67	2.79	2.79	0.08	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
58	1.176	9.51	3.30	0.06	0.23	0.00	0.00	0.00	0.00	0.00	2.67	2.79	2.79	0.08	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
59	1.078	9.51	3.30	0.06	0.23	0.00	0.00	0.00	0.00	0.00	2.67	2.79	2.79	0.08	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	0.980	9.51	3.30	0.06	0.23	0.00	0.00	0.00	0.00	0.00	2.67	2.80	2.80	0.08	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
61	0.882	9.51	3.30	0.06	0.23	0.00	0.00	0.00	0.00	0.00	2.67	2.80	2.80	0.08	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62	0.784	9.51	3.30	0.06	0.23	0.00	0.00	0.00	0.00	0.00	2.67	2.80	2.80	0.08	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
63	0.686	9.51	3.30	0.06	0.23	0.00	0.00	0.00	0.00	0.00	2.67	2.80	2.80	0.08	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
64	0.588	9.51	3.30	0.06	0.23	0.00	0.00	0.00	0.00	0.00	2.67	2.80	2.80	0.08	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65	0.490	9.51	3.30	0.06	0.23	0.00	0.00	0.00	0.00	0.00	2.67	2.81	2.81	0.08	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
66	0.392	9.51	3.30	0.06	0.23	0.00	0.00	0.00	0.00	0.00	2.67	2.81	2.81	0.08	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67	0.294	9.51	3.30	0.06	0.23	0.00	0.00	0.00	0.00	0.00	2.67	2.81	2.81	0.08	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
68	0.196	9.51	3.30	0.06	0.23	0.00	0.00	0.00	0.00	0.00	2.67	2.81	2.81	0.08	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
69	0.098	9.51	3.30	0.06	0.23	0.00	0.00	0.00	0.00	0.00	2.67	2.81	2.81	0.08	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70	0.000	9.51	3.30	0.06	0.23	0.00	0.00	0.00	0.00	0.00	2.67	2.82	2.82	0.08	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AVG 20 DEG C RATE			3.45	0.07	0.01	0.00	0.00	0.00	0.00	0.00	3.07			0.10	0.01	0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00

* g/m²/d ** mg/L/day

** WATER QUALITY CONSTITUENT VALUES **

ELEM NO.	ENDING DIST	TEMP deg C	SALN ppt	CM-1	CM-2	DO mg/L	BOD1 mg/L	BOD2 mg/L	EBOD1 mg/L	EBOD2 mg/L	ORG-N mg/L	NH3-N mg/L	NO3-N mg/L	TOT-N mg/L	EORG-N mg/L	ETOT-N mg/L	ORG-P mg/L	PO4-P mg/L	TOT-P mg/L	EORG-P mg/L	ETOT-P mg/L	CHL A µg/L	PERIP g/m²	COLI #/100mL	NCM
51	1.862	17.79	0.00	1.00	0.00	8.28	2.23	0.00	3.23	0.00	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
52	1.764	17.79	0.00	1.00	0.00	8.02	2.27	0.00	3.27	0.00	2.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
53	1.666	17.79	0.00	1.00	0.00	7.79	2.32	0.00	3.32	0.00	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

54	1.568	17.79	0.00	1.00	0.00	7.57	2.36	0.00	3.36	0.00	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
55	1.470	17.79	0.00	1.00	0.00	7.38	2.41	0.00	3.41	0.00	2.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
56	1.372	17.79	0.00	1.00	0.00	7.19	2.45	0.00	3.45	0.00	2.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
57	1.274	17.79	0.00	1.00	0.00	7.03	2.50	0.00	3.50	0.00	2.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
58	1.176	17.79	0.00	1.00	0.00	6.88	2.54	0.00	3.54	0.00	2.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
59	1.078	17.79	0.00	1.00	0.00	6.74	2.59	0.00	3.59	0.00	2.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
60	0.980	17.79	0.00	1.00	0.00	6.61	2.63	0.00	3.63	0.00	2.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
61	0.882	17.79	0.00	1.00	0.00	6.49	2.67	0.00	3.67	0.00	2.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
62	0.784	17.79	0.00	1.00	0.00	6.38	2.71	0.00	3.71	0.00	2.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
63	0.686	17.79	0.00	1.00	0.00	6.28	2.76	0.00	3.76	0.00	2.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
64	0.588	17.79	0.00	1.00	0.00	6.19	2.80	0.00	3.80	0.00	2.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
65	0.490	17.79	0.00	1.00	0.00	6.11	2.84	0.00	3.84	0.00	2.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
66	0.392	17.79	0.00	1.00	0.00	6.03	2.88	0.00	3.88	0.00	2.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
67	0.294	17.79	0.00	1.00	0.00	5.96	2.92	0.00	3.92	0.00	2.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
68	0.196	17.79	0.00	1.00	0.00	5.89	2.96	0.00	3.96	0.00	2.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
69	0.098	17.79	0.00	1.00	0.00	5.83	3.00	0.00	4.00	0.00	2.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00
70	0.000	17.79	0.00	1.00	0.00	5.75	3.19	0.00	4.19	0.00	2.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.0	0.0	0.	0.00

** PHYTOPLANKTON AND PERIPHYTON DATA **

ELEM NO.	ENDING DIST	BANK SHADE frac	SECCHI DEPTH m	PHYT N PREF	PHYT LIT LIM	PHYT N LIM	PHYT P LIM	PHYT N&P LIM	PHYT TOT LIM	PHYT GROW 1/da	PHYT RESP 1/da	PHYT DEATH 1/da	PHYT SETT 1/da	PHYT P/R RATIO	PHYTO µg/L	PERI N PREF	PERI LIT LIM	PERI N LIM	PERI P LIM	PERI N&P LIM	PERI SPC LIM	PERI TOT LIM	PERI GROW 1/da	PERI RESP 1/da	PERI DEATH 1/da	PERI P/R RATIO	PERIP g/m²
51	1.862	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
52	1.764	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
53	1.666	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
54	1.568	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
55	1.470	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
56	1.372	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
57	1.274	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
58	1.176	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
59	1.078	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
60	0.980	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
61	0.882	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
62	0.784	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
63	0.686	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
64	0.588	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
65	0.490	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
66	0.392	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
67	0.294	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
68	0.196	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
69	0.098	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
70	0.000	0.00	Inf	0.50	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.0	10.0	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.0	0.0
20 DEG C RATE										0.000	0.000	0.000	0.000										0.000	0.000	0.000		

NOTE ON NITR PREF: 1.0=NO3 ; 0.0=NH3

BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN WINTER PROJECTION

STREAM SUMMARY REPORT: BAYOU MARINGOUIN

TRAVEL TIME = 14.57 DAYS
MAXIMUM EFFLUENT = 0.00 PERCENT

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 FLOW              =  0.02830 TO   0.05660   m³/s
 DISPERSION        =  0.0000  TO  10.0000    m²/s
 VELOCITY          =  0.00739 TO   0.06096   m/s
 DEPTH             =  0.24    TO   0.66      m
 WIDTH             =  3.63    TO  14.63      m

 BOD DECAY         =   0.06   TO   0.06      per day
 NH3 DECAY         =   0.00   TO   0.00      per day
 SOD               =   1.99   TO   2.79      g/m²/d
 NH3 SED SOURCE    =   0.00   TO   0.00      g/m²/d
 PO4 SED SOURCE    =   0.00   TO   0.00      g/m²/d
 REAERATION        =   1.01   TO   2.90      per day
 BOD SETTLING      =   0.07   TO   0.19      per day
 NBOD DECAY        =   0.08   TO   0.09      per day
 NBOD SETTLING     =   0.07   TO   0.19      per day

 TEMPERATURE       =  17.79   TO  17.79      deg C
 DISSOLVED OXYGEN  =   5.00   TO   8.19      mg/L

STREAM SUMMARY REPORT: UNNAMED TRIBUTARY

 TRAVEL TIME       =          0.56 DAYS
 MAXIMUM EFFLUENT  =          0.00 PERCENT

 FLOW              =  0.02830 TO   0.02830   m³/s
 DISPERSION        =  0.0300  TO   0.0300    m²/s
 VELOCITY          =  0.04072 TO   0.04072   m/s
 DEPTH             =  0.20    TO   0.20      m
 WIDTH             =  3.43    TO   3.43      m

 BOD DECAY         =   0.06   TO   0.06      per day
 NH3 DECAY         =   0.00   TO   0.00      per day
 SOD               =   2.78   TO   2.82      g/m²/d
 NH3 SED SOURCE    =   0.00   TO   0.00      g/m²/d
 PO4 SED SOURCE    =   0.00   TO   0.00      g/m²/d
 REAERATION        =   3.30   TO   3.30      per day
 BOD SETTLING      =   0.23   TO   0.23      per day
 NBOD DECAY        =   0.08   TO   0.09      per day
 NBOD SETTLING     =   0.23   TO   0.23      per day

 TEMPERATURE       =  17.79   TO  17.79      deg C
 DISSOLVED OXYGEN  =   5.75   TO   8.28      mg/L
```
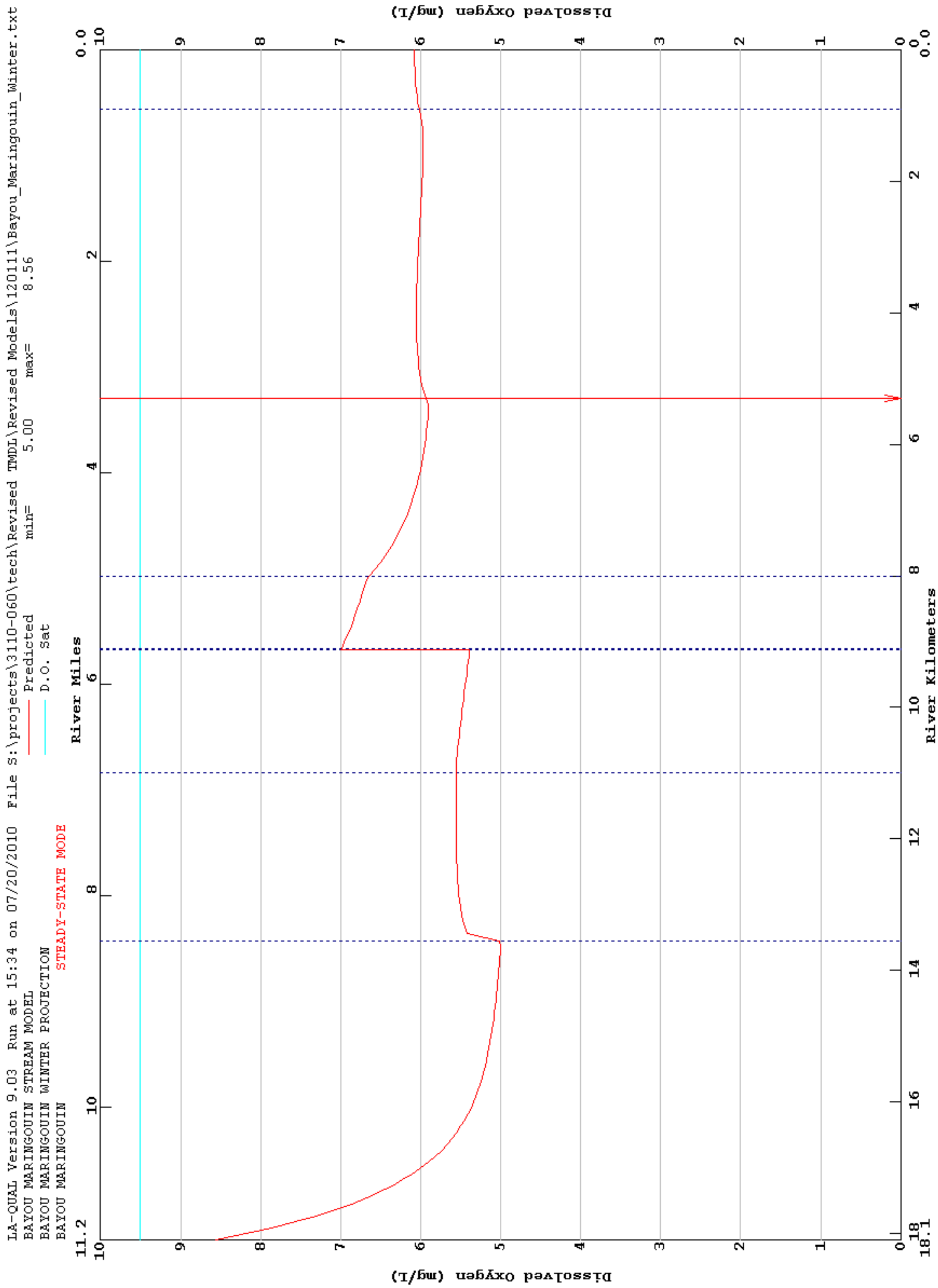

BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN WINTER PROJECTION

INPUT/OUTPUT LOADING SUMMARY

	FLOW m^3/s	DO kg/d	BOD1 kg/d	BOD2 kg/d	NBOD kg/d	kg/d	kg/d	ORG-P kg/d	PO4-P kg/d	CHL A	PERIP	NCM
HEADWATER FLOW	0.05660	41.86	14.72	0.00	20.93	0.00	0.00	0.00	0.00	0.00		0.00
INCREMENTAL INFLOW	0.00000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
INCREMENTAL OUTFLOW	0.00000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
WASTELOADS	0.00000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
WITHDRAWLS	-0.02830	-14.58	-15.04	0.00	-6.05	0.00	0.00	0.00	0.00	0.00		0.00
FLOW THRU LOWER BNDRY	-0.02830	-14.87	-22.36	0.00	-8.26	0.00	0.00	0.00	0.00	0.00		0.00
DISPERSION THRU LOWER BNDRY		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
DISPERSION THRU HDWTR BNDRY		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
NON-POINT INPUT		0.00	88.03	0.00	30.90			0.00				0.00
NATURAL REAERATION		371.11										
DAM REAERATION		7.91										
SOD BACKGROUND		-311.92										
BOD1 DECAY		-21.26	-21.26									
BOD1 SETTLING		-44.09	-44.09									
ANAEROBIC BOD1 DECAY			0.00									
BOD2 DECAY		0.00		0.00								
BOD2 SETTLING		0.00		0.00								
ANAEROBIC BOD2 DECAY				0.00								
BOD2 HYDROLYSIS			0.00	0.00								
NBOD DECAY		-14.17			0.00	0.00						
NBOD SETTLING					0.00	0.00						
NH3-N DECAY (NITRIFICATION)		0.00				0.00	0.00					
NH3-N BACKGROUND SEDIMENT SOURCE						0.00						
DENITRIFICATION			0.00				0.00					
ORG-P HYDROLYSIS								0.00	0.00			
ORG-P SETTLING								0.00	0.00			
PO4-P BACKGROUND SEDIMENT SOURCE									0.00			
PHYTOPLANKTON GROWTH/PHOTOSYNTHESIS		0.00				0.00	0.00		0.00	0.00		
PHYTOPLANKTON RESPIRATION/EXCRETION		0.00				0.00			0.00	0.00		
PHYTOPLANKTON SETTLING		0.00				0.00			0.00	0.00		
PHYTOPLANKTON DEATH			0.00	0.00	0.00			0.00		0.00		
PERIPHYTON GROWTH/PHOTOSYNTHESIS		0.00				0.00	0.00		0.00		0.00	
PERIPHYTON RESPIRATION/EXCRETION		0.00				0.00			0.00		0.00	
PERIPHYTON DEATH			0.00	0.00	0.00			0.00			0.00	
NCM DECAY		0.00										0.00
NCM SETTLING		0.00										0.00
TOTAL INPUTS	0.05660	420.87	102.75	0.00	51.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL OUTPUTS	-0.05660	-420.88	-102.75	0.00	-14.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NET CONVERGENCE ERROR	0.00000	-0.01	0.00	0.00	37.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00

.....EXECUTION COMPLETED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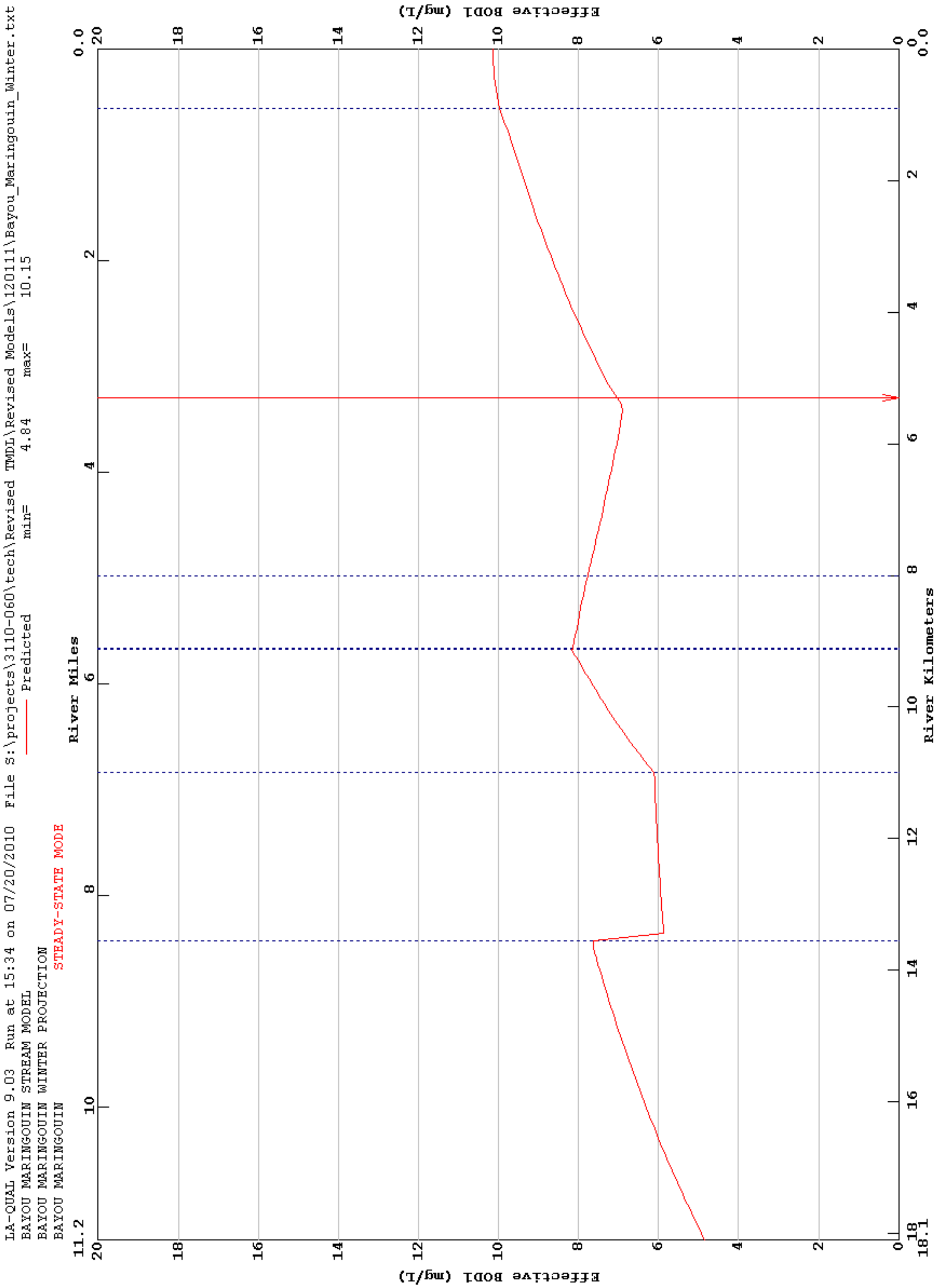
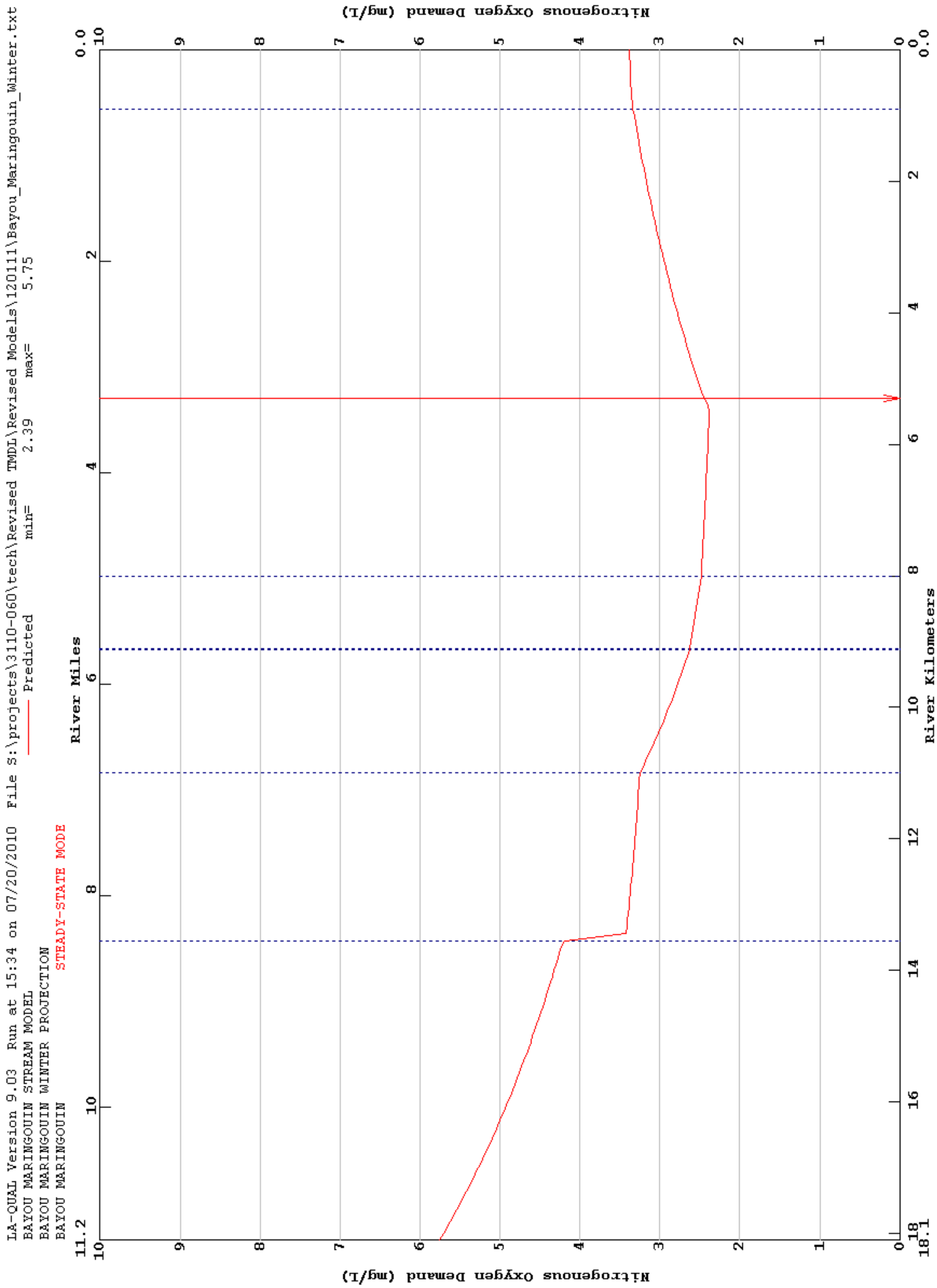
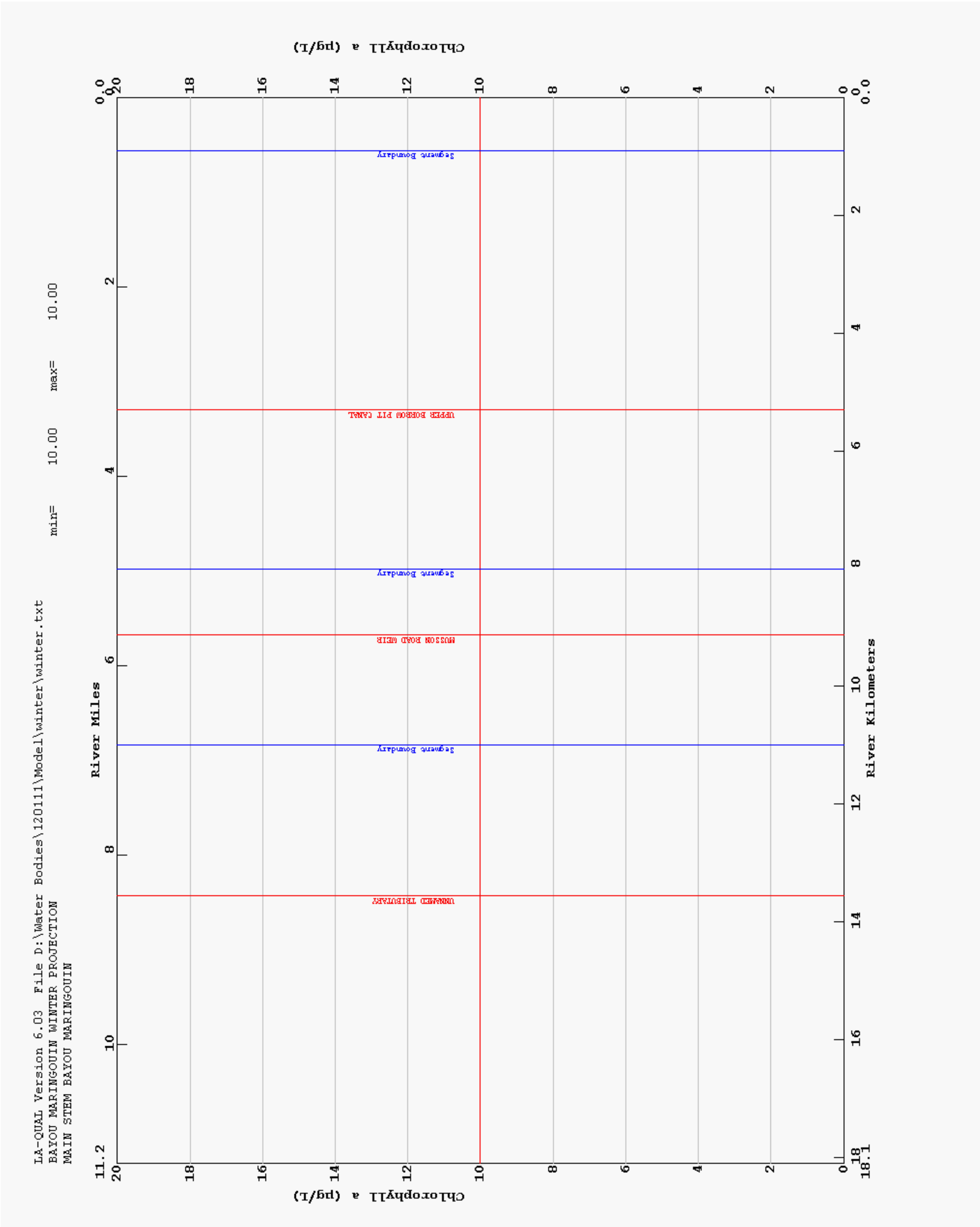
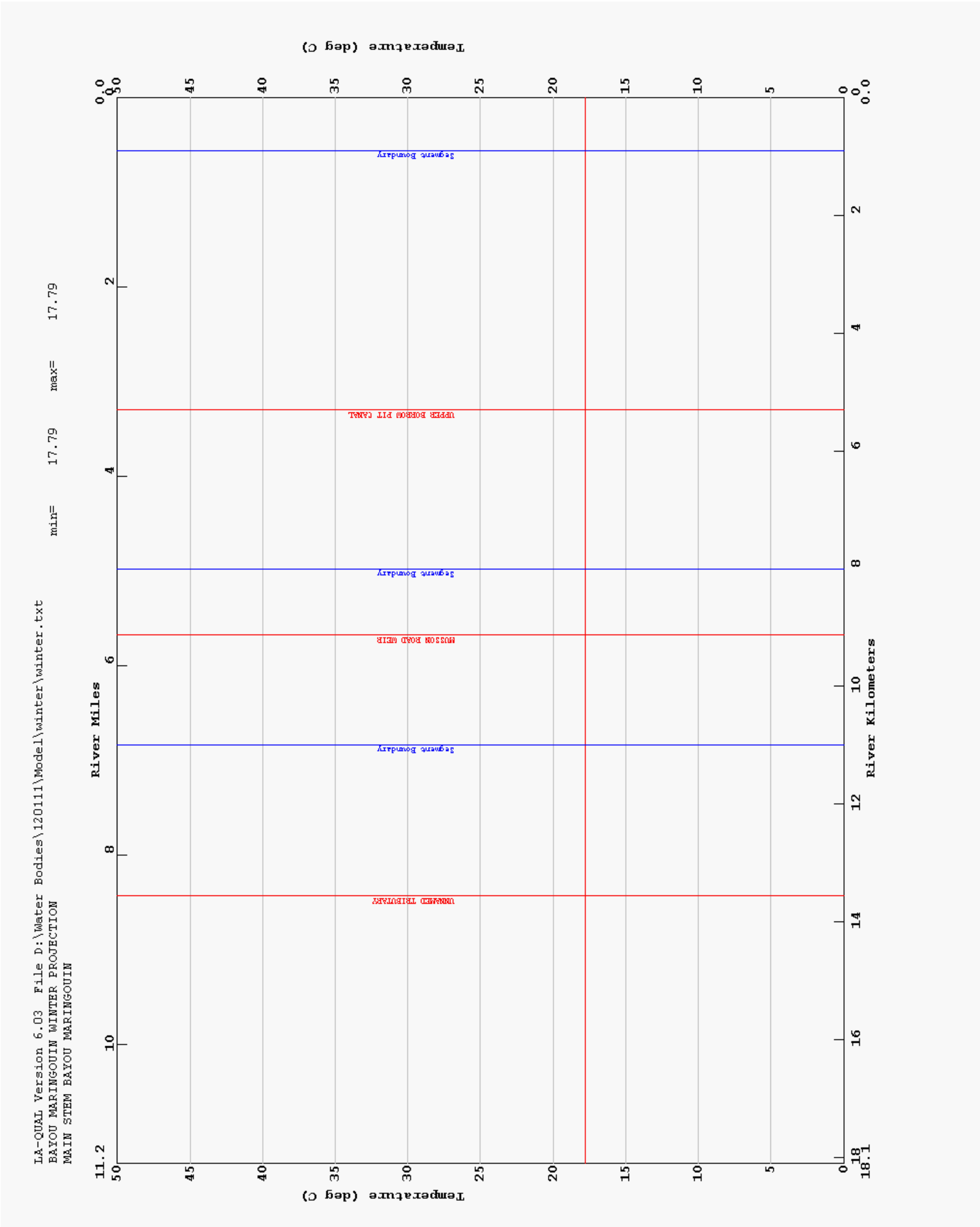
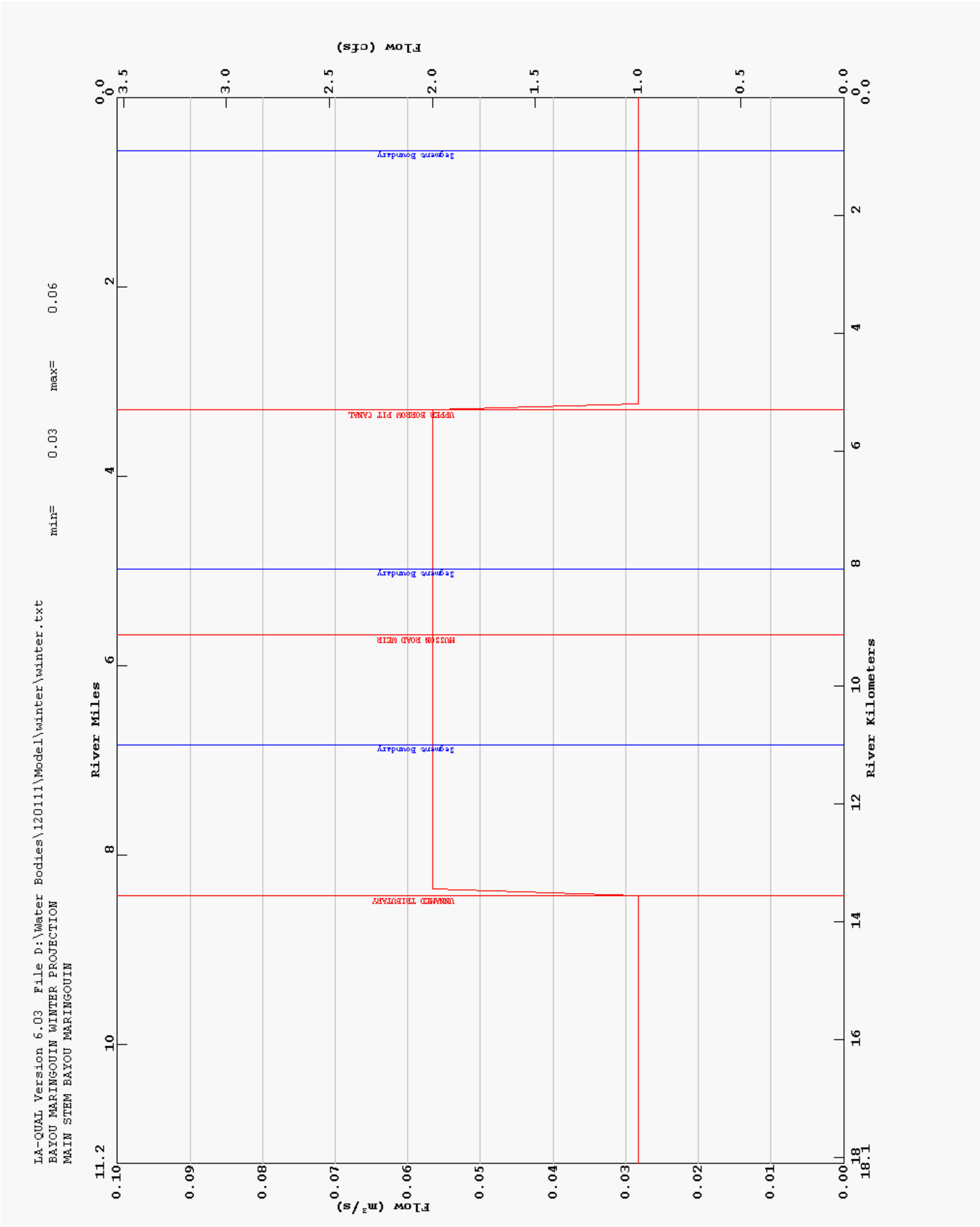
BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN WINTER PROJECTION
BAYOU MARINGOUIN
min= 5.00 max= 8.56
Predicted
D.O. Sat
STEADY-STATE MODE
River Miles
River Kilometers
Dissolved Oxygen (mg/L)

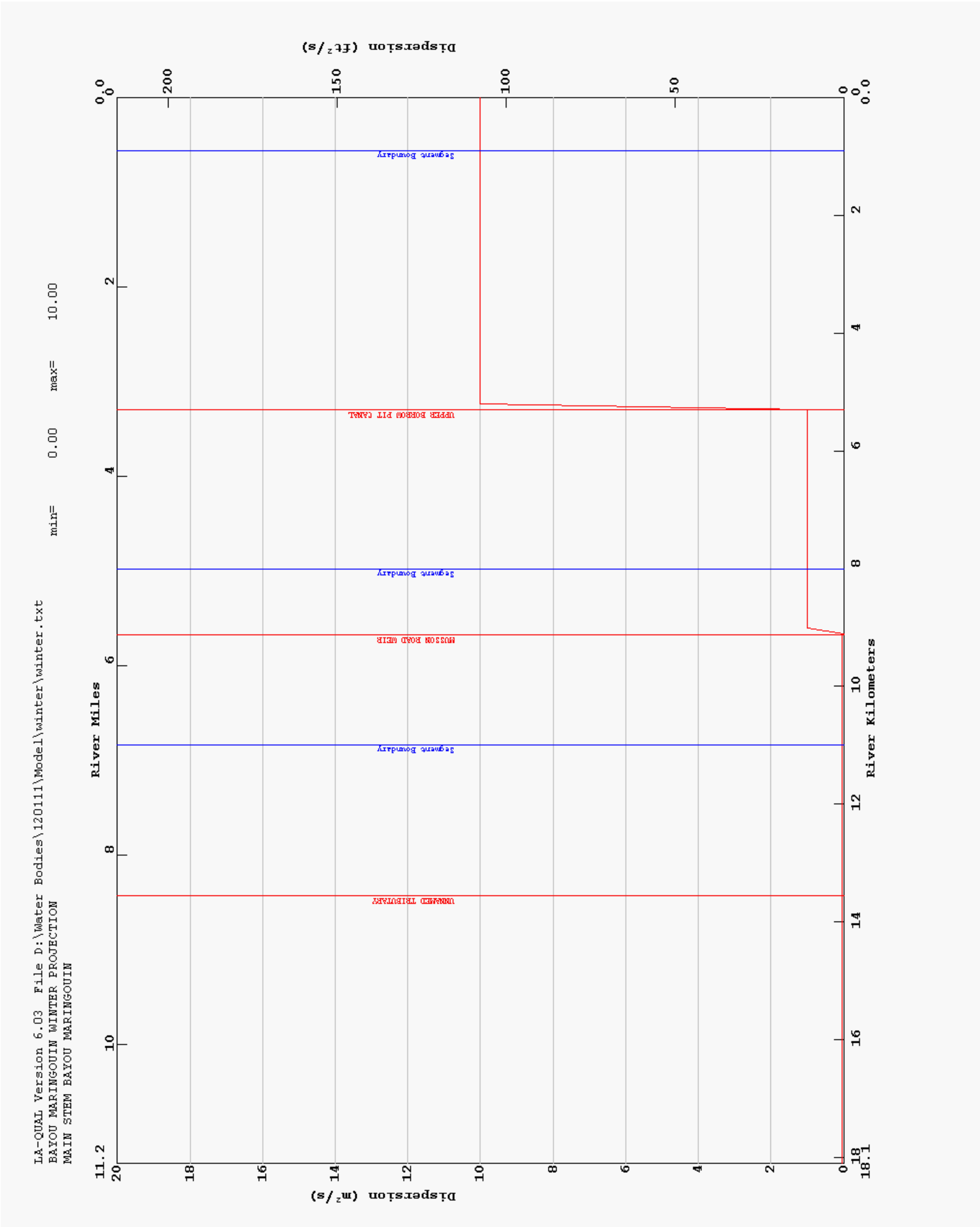

LA-QUAL Version 9.03 Run at 15:34 on 07/20/2010 File S:\projects\3110-060\tech\Revised TMDL\Revised Models\120111\Bayou_Maringouin_Winter.txt
BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN WINTER PROJECTION
BAYOU MARINGOUIN
Predicted
min= 4.84 max= 10.15
STEADY-STATE MODE
River Miles
River Kilometers
Effective BOD1 (mg/L)

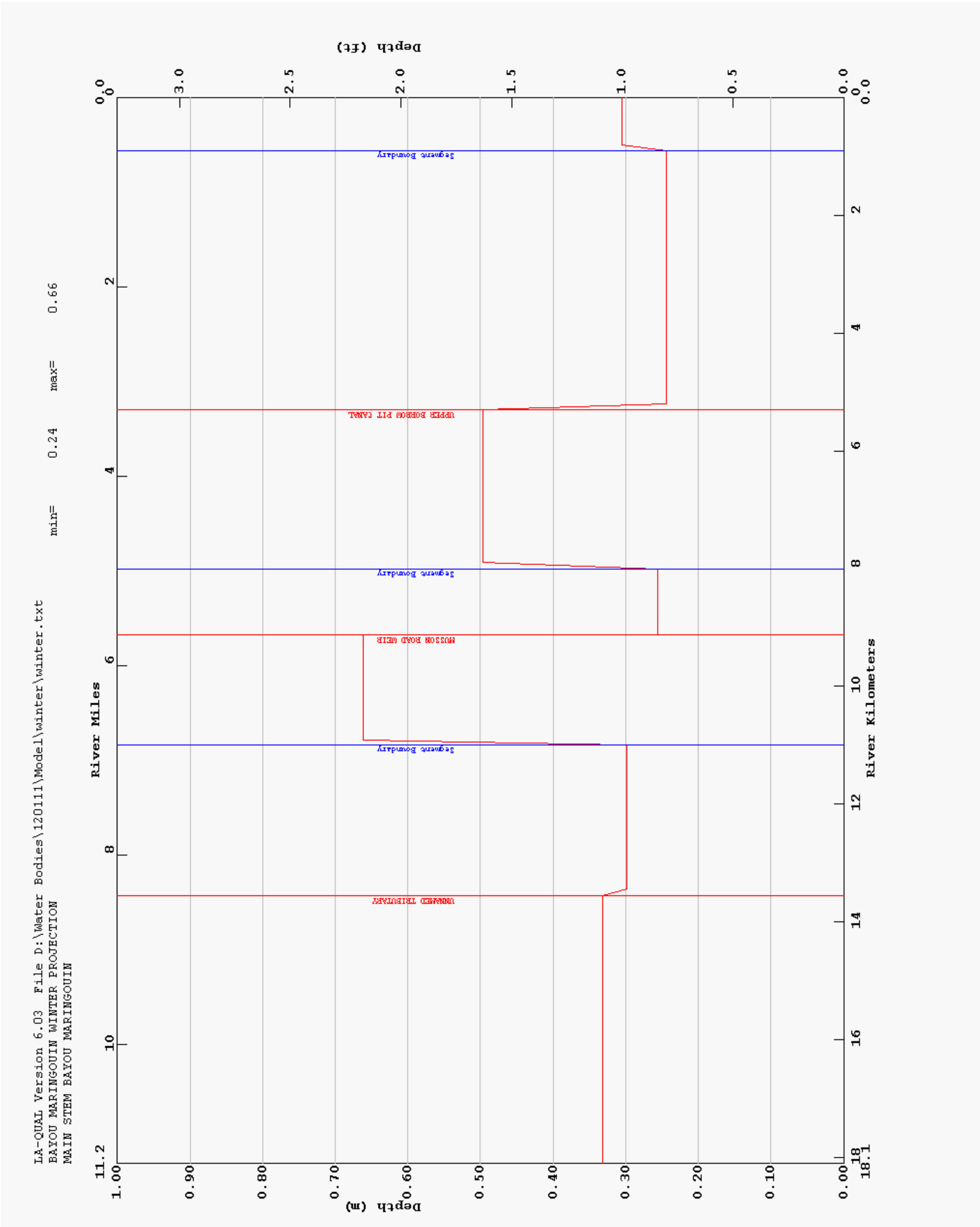

LA-QUAL Version 9.03 Run at 15:34 on 07/20/2010 File S:\projects\3110-060\tech\Revised TMDL\Revised Models\120111\Bayou_Maringouin_Winter.txt
BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN WINTER PROJECTION
BAYOU MARINGOUIN
Predicted
min= 2.39 max= 5.75
STEADY-STATE MODE
River Miles
River Kilometers
Nitrogenous Oxygen Demand (mg/L)

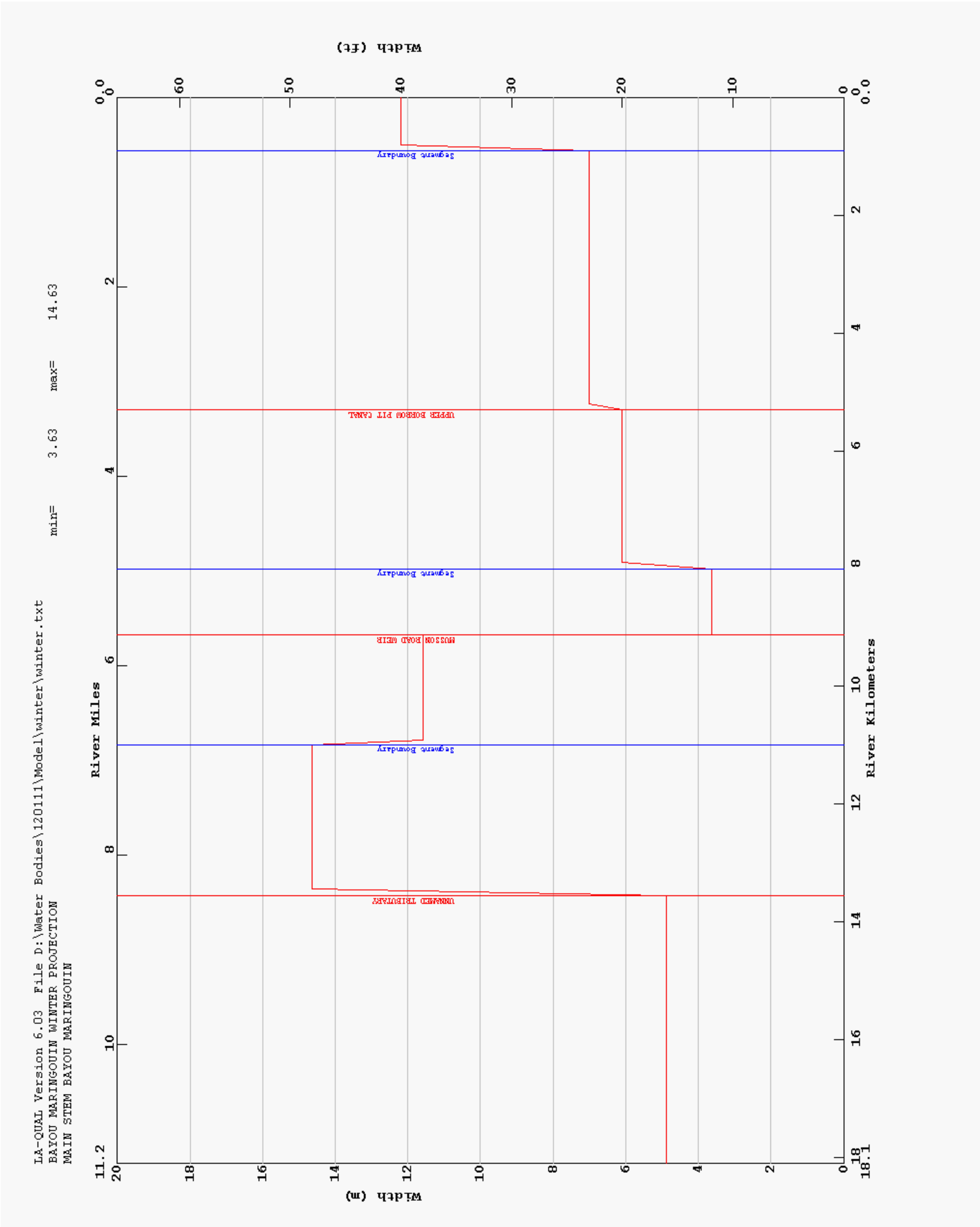

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\winter\winter.txt
BAYOU MARINGOUIN WINTER PROJECTION
MAIN STEM BAYOU MARINGOUIN
min= 10.00 max= 10.00
Chlorophyll a (µg/L)
River Miles
River Kilometers
Segment Boundary
UPPER BORROW PIT CANAL
MUSSON ROAD WEIR
UNNAMED TRIBUTARY

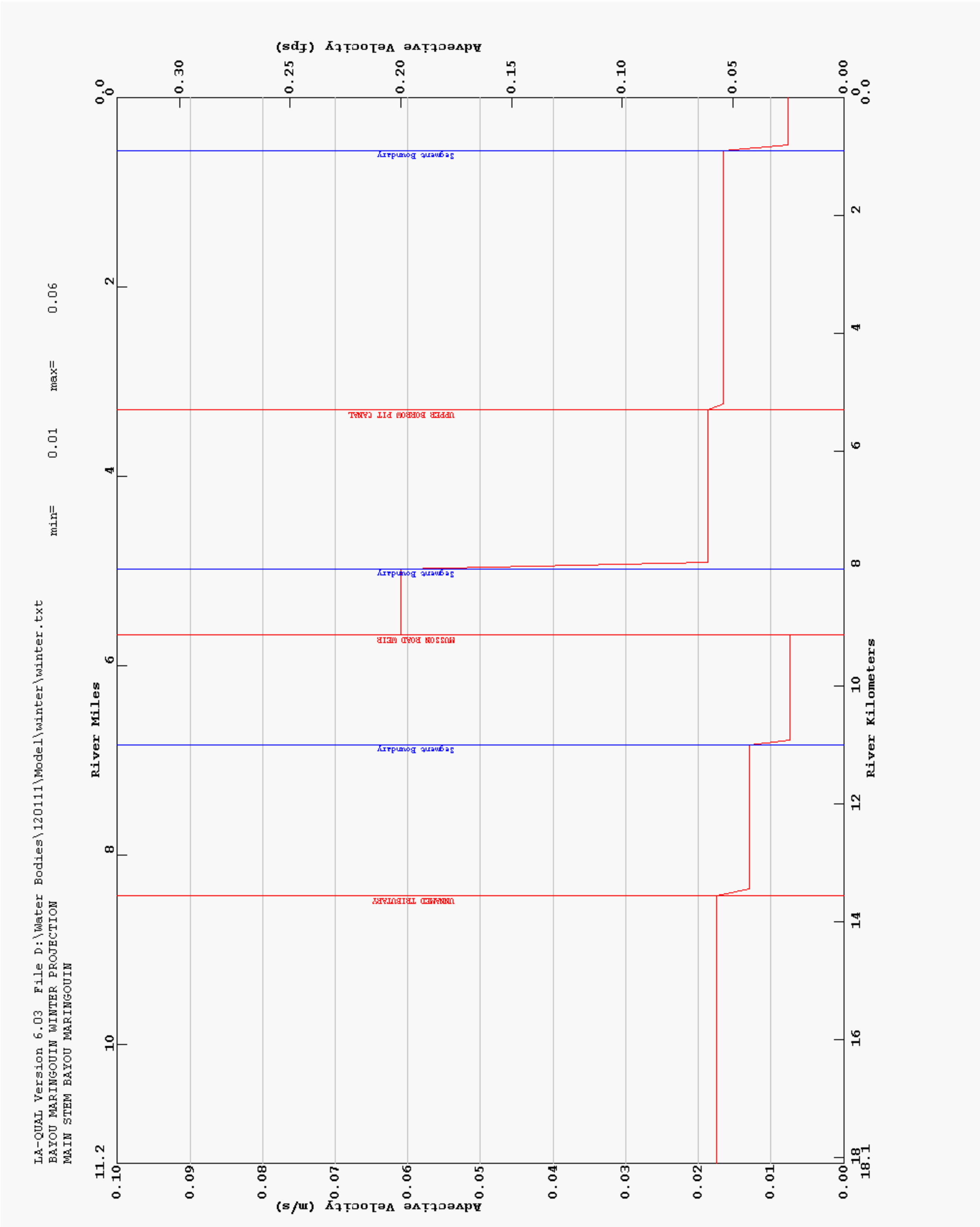

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\winter\winter.txt
BAYOU MARINGOUIN WINTER PROJECTION
MAIN STEM BAYOU MARINGOUIN
min= 17.79
max= 17.79
Temperature (deg C)
River Miles
River Kilometers
Segment Boundary
UPPER BORROW PIT CANAL
MUSSON ROAD WEIR
UNNAMED TRIBUTARY
0.0
11.2
18.1

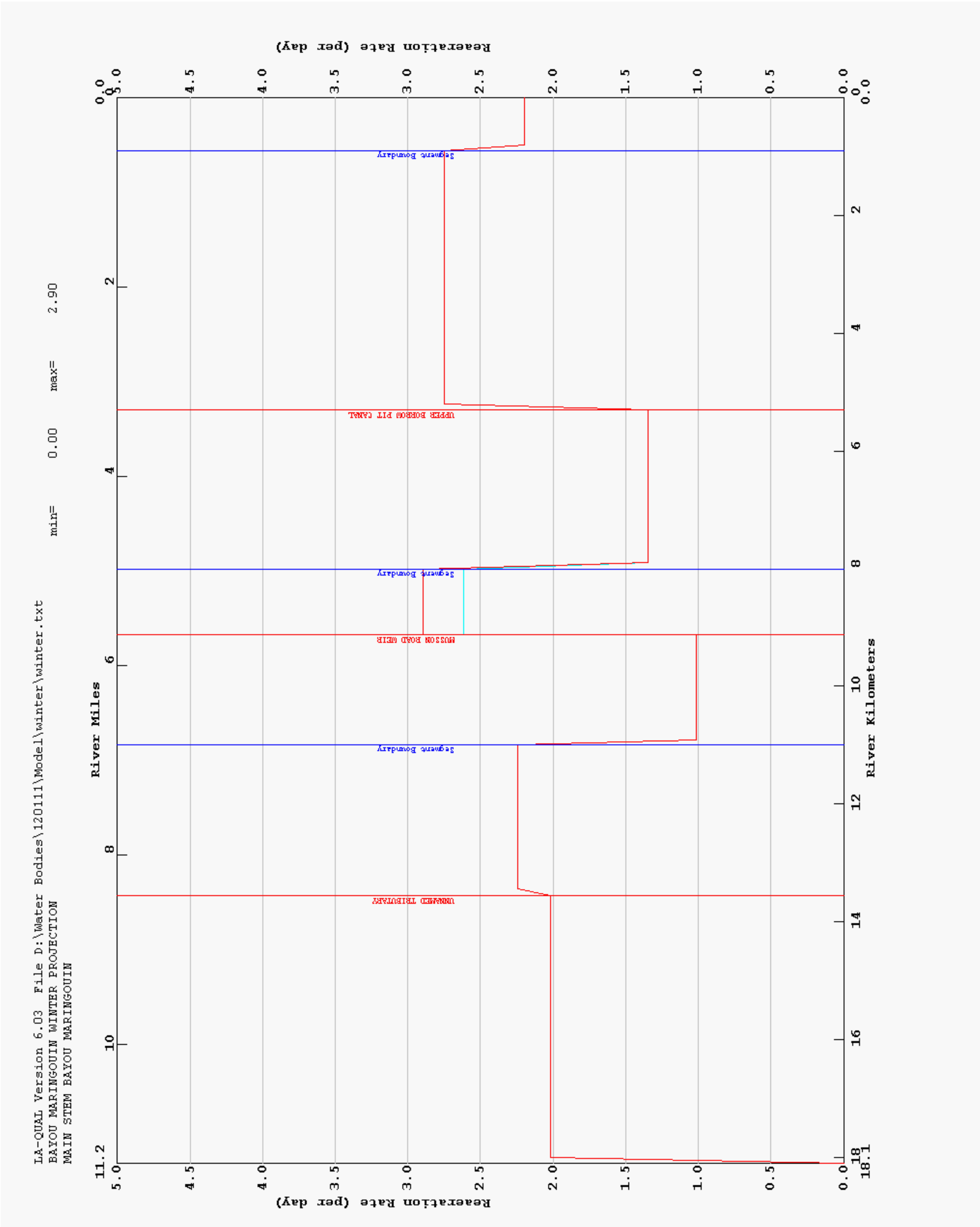

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\winter\winter.txt
BAYOU MARINGOUIN WINTER PROJECTION
MAIN STEM BAYOU MARINGOUIN
min= 0.03 max= 0.06
Flow (cfs)
Flow (m³/s)
River Miles
River Kilometers
Segment Boundary
UPPER BORROW PIT CANAL
MUSSON ROAD WEIR
UNNAMED TRIBUTARY

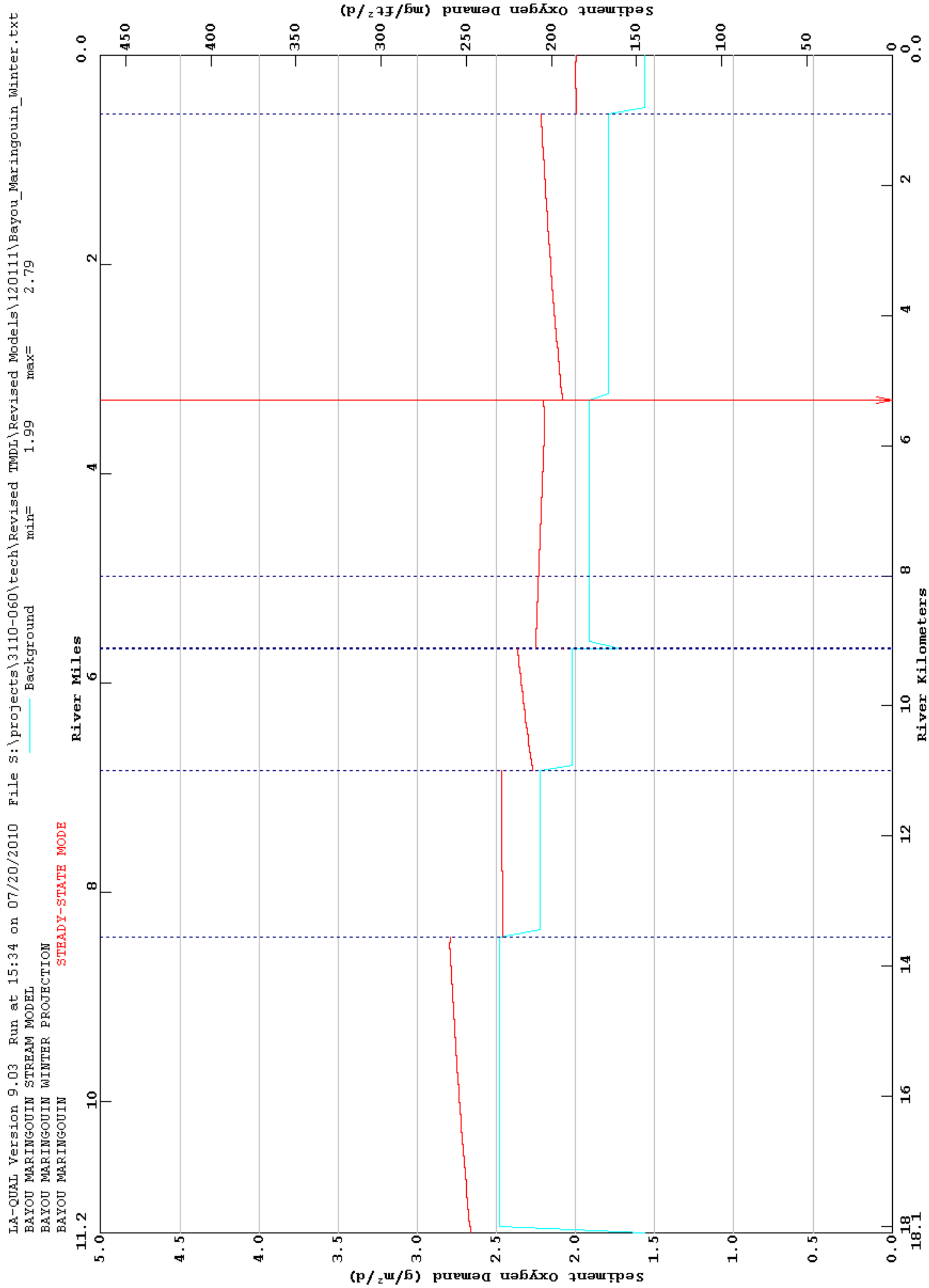

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\winter\winter.txt
BAYOU MARINGOUIN WINTER PROJECTION
MAIN STEM BAYOU MARINGOUIN
min= 0.00 max= 10.00
River Miles
River Kilometers
Dispersion (ft^2/s)
Dispersion (m^2/s)
Segment Boundary
UPPER BORROW PIT CANAL
MUSSON ROAD WEIR
UNNAMED TRIBUTARY

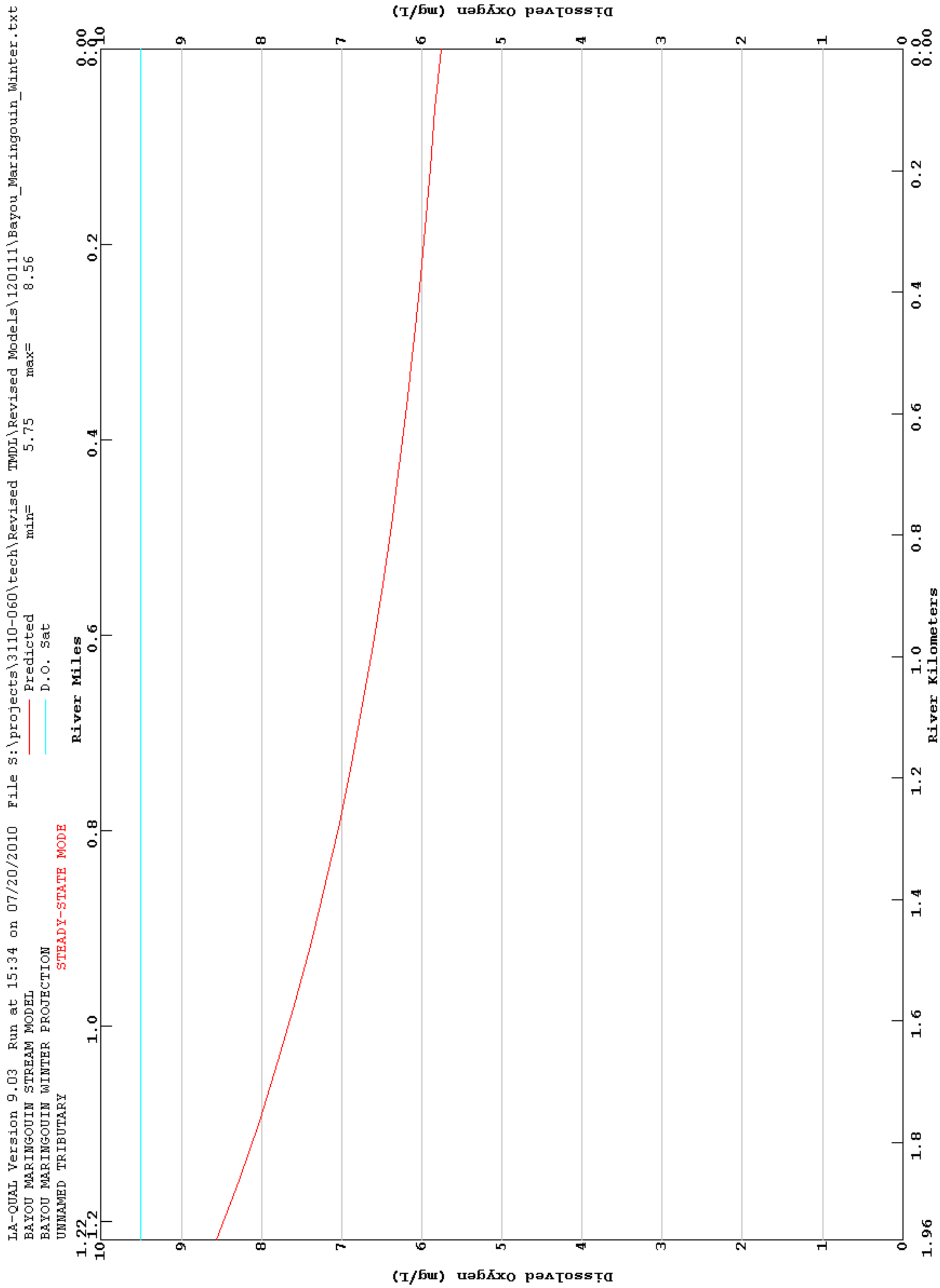

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\winter\winter.txt
BAYOU MARINGOUIN WINTER PROJECTION
MAIN STEM BAYOU MARINGOUIN
min= 0.24
max= 0.66
Depth (ft)
Depth (m)
River Miles
River Kilometers
Segment Boundary
UPPER BORROW PIT CANAL
MUSSON ROAD WEIR
UNNAMED TRIBUTARY

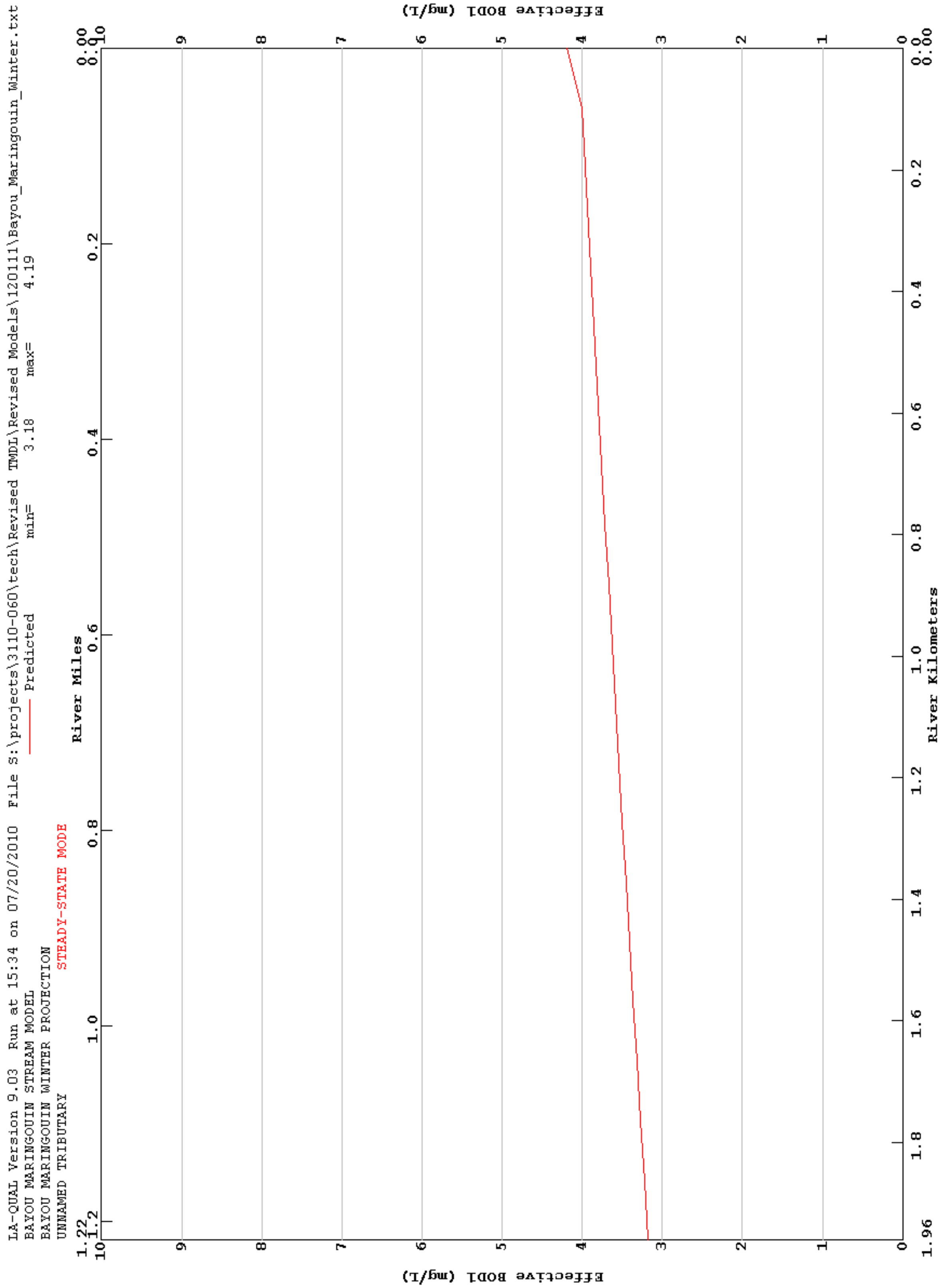

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\winter\winter.txt
BAYOU MARINGOUIN WINTER PROJECTION
MAIN STEM BAYOU MARINGOUIN
min= 3.63 max= 14.63
Width (ft)
Width (m)
River Miles
River Kilometers
Segment Boundary
UPPER BORROW PIT CANAL
MUSSON ROAD WEIR
UNNAMED TRIBUTARY

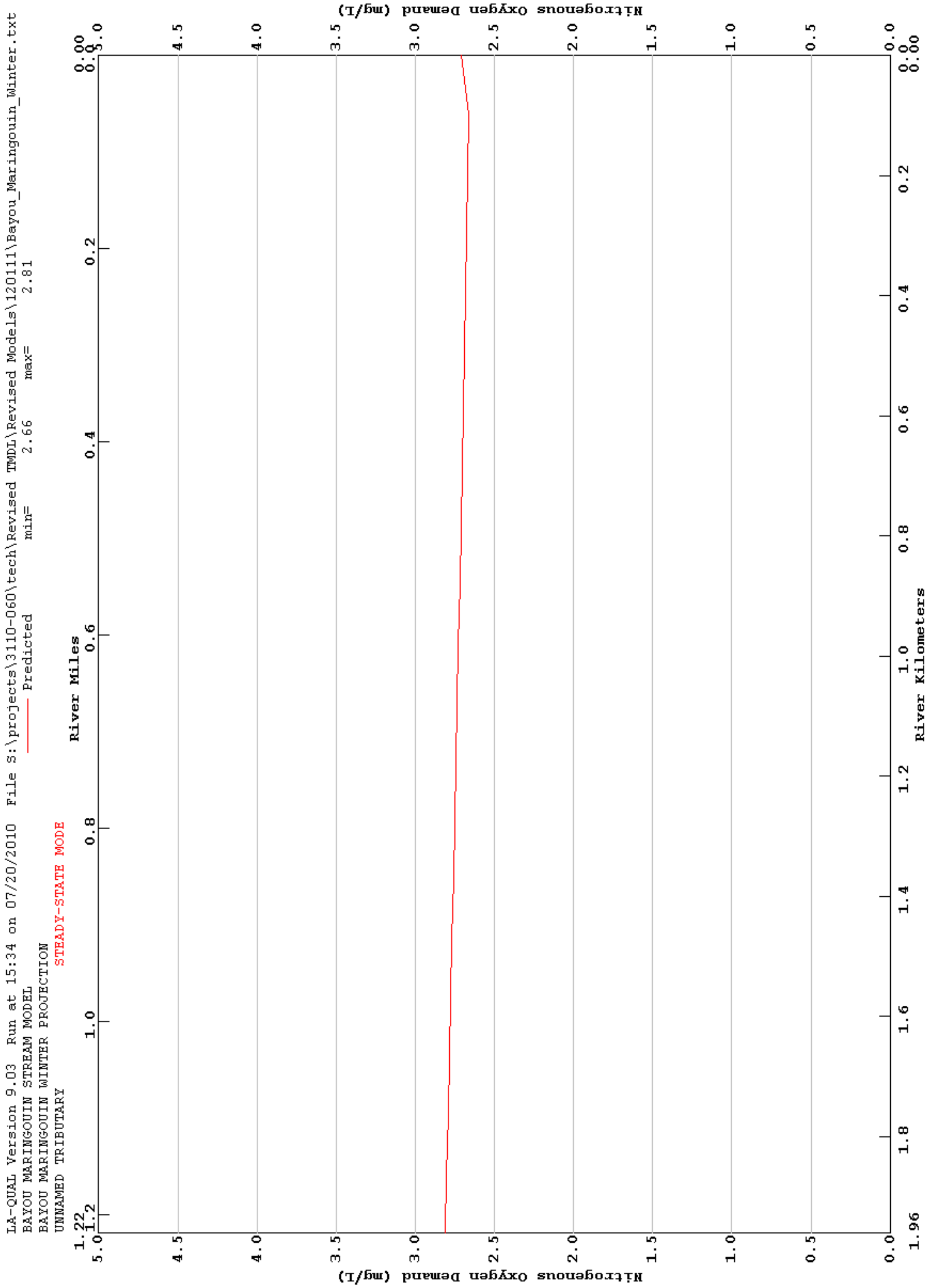

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\winter\winter.txt
BAYOU MARINGOUIN WINTER PROJECTION
MAIN STEM BAYOU MARINGOUIN
min= 0.01 max= 0.06
River Miles
River Kilometers
Advective Velocity (fps)
Advective Velocity (m/s)
Segment Boundary
UPPER BORROW PIT CANAL
MUSSON ROAD WEIR
UNNAMED TRIBUTARY

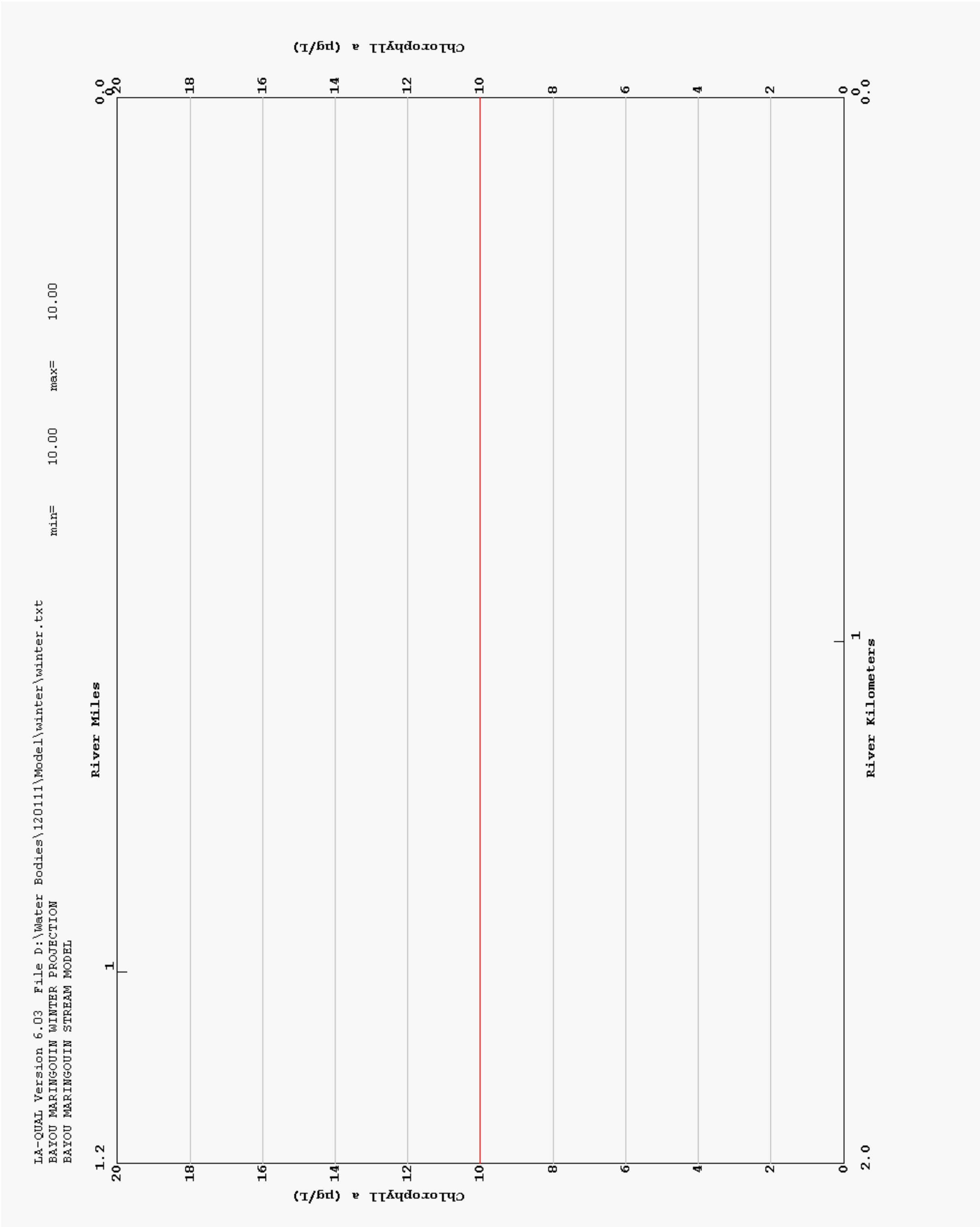

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\winter\winter.txt
BAYOU MARINGOUIN WINTER PROJECTION
MAIN STEM BAYOU MARINGOUIN
min= 0.00 max= 2.90
Reaeration Rate (per day)
River Miles
River Kilometers
Segment Boundary
UPPER BORROW PIT CANAL
MUSSON ROAD WEIR
UNNAMED TRIBUTARY

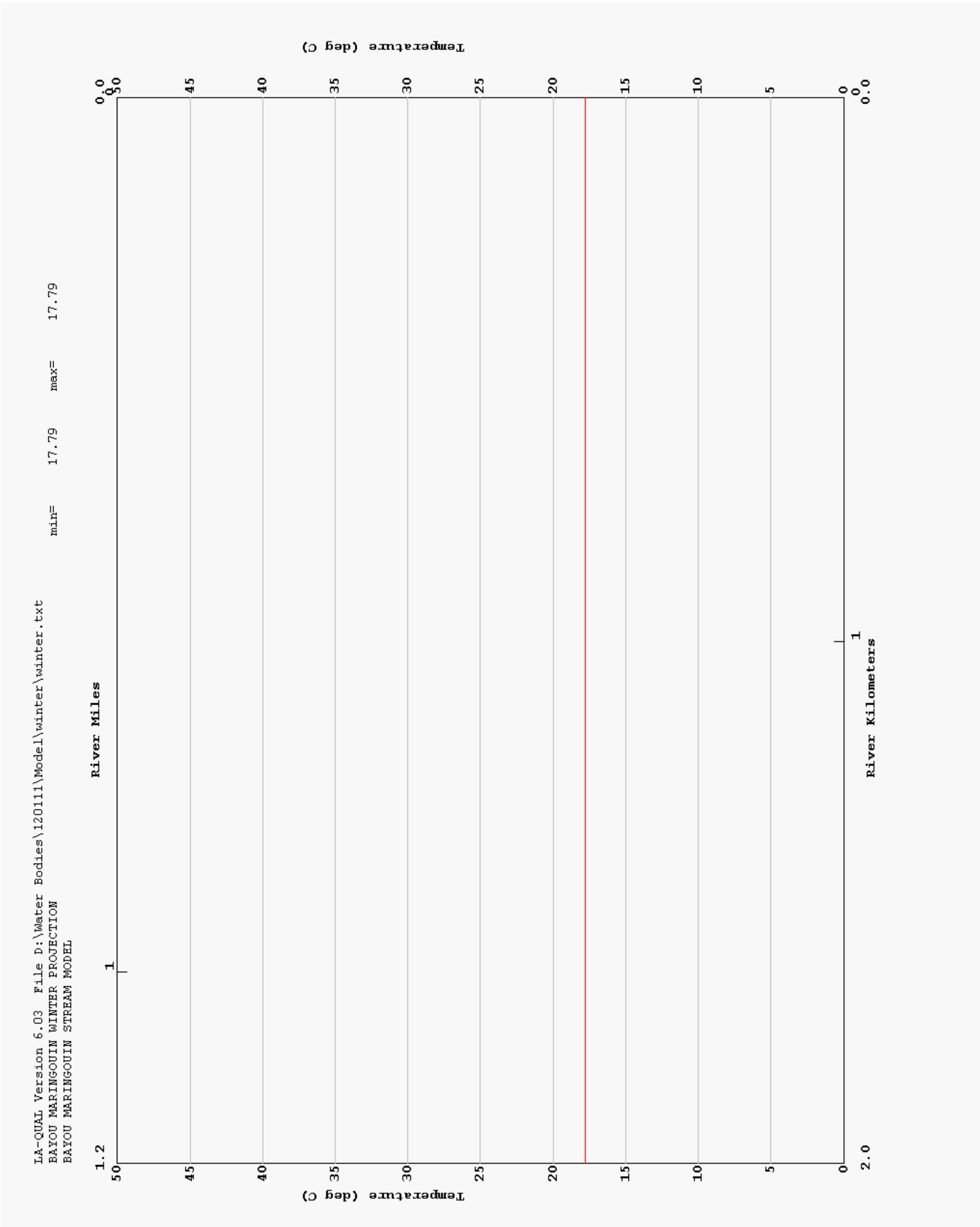

LA-QUAL Version 9.03 Run at 15:34 on 07/20/2010 File S:\projects\3110-060\tech\Revised TMDL\Revised Models\120111\Bayou_Maringouin_Winter.txt
BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN WINTER PROJECTION
BAYOU MARINGOUIN
STEADY-STATE MODE
Background min= 1.99 max= 2.79
River Miles
River Kilometers
Sediment Oxygen Demand (g/m²/d)
Sediment Oxygen Demand (mg/ft²/d)

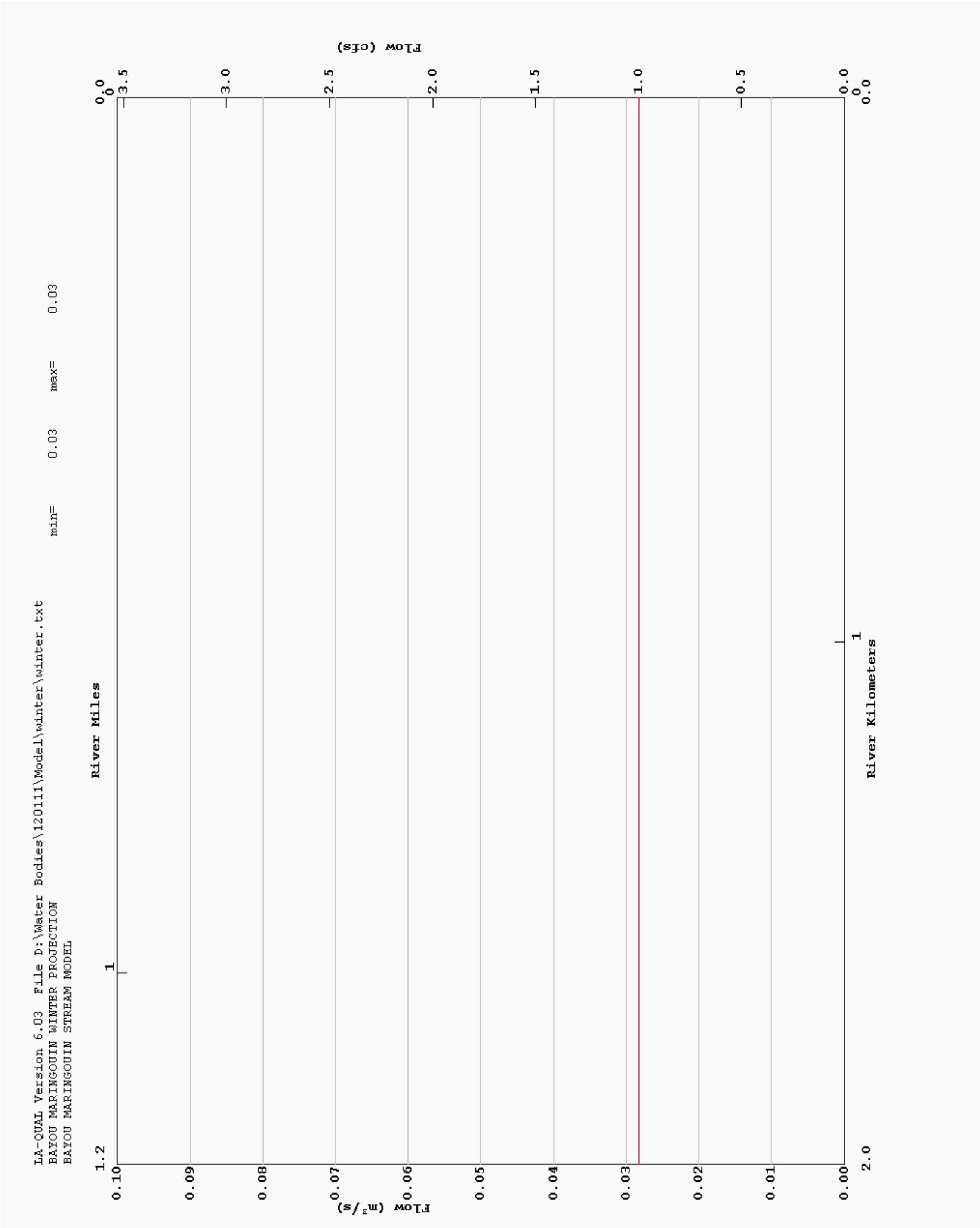

LA-QUAL Version 9.03 Run at 15:34 on 07/20/2010 File S:\projects\3110-060\tech\Revised TMDL\Revised Models\120111\Bayou_Maringouin_Winter.txt
BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN WINTER PROJECTION
UNNAMED TRIBUTARY
min= 5.75 max= 8.56
Predicted
D.O. Sat
STEADY-STATE MODE
River Miles
River Kilometers
Dissolved Oxygen (mg/L)

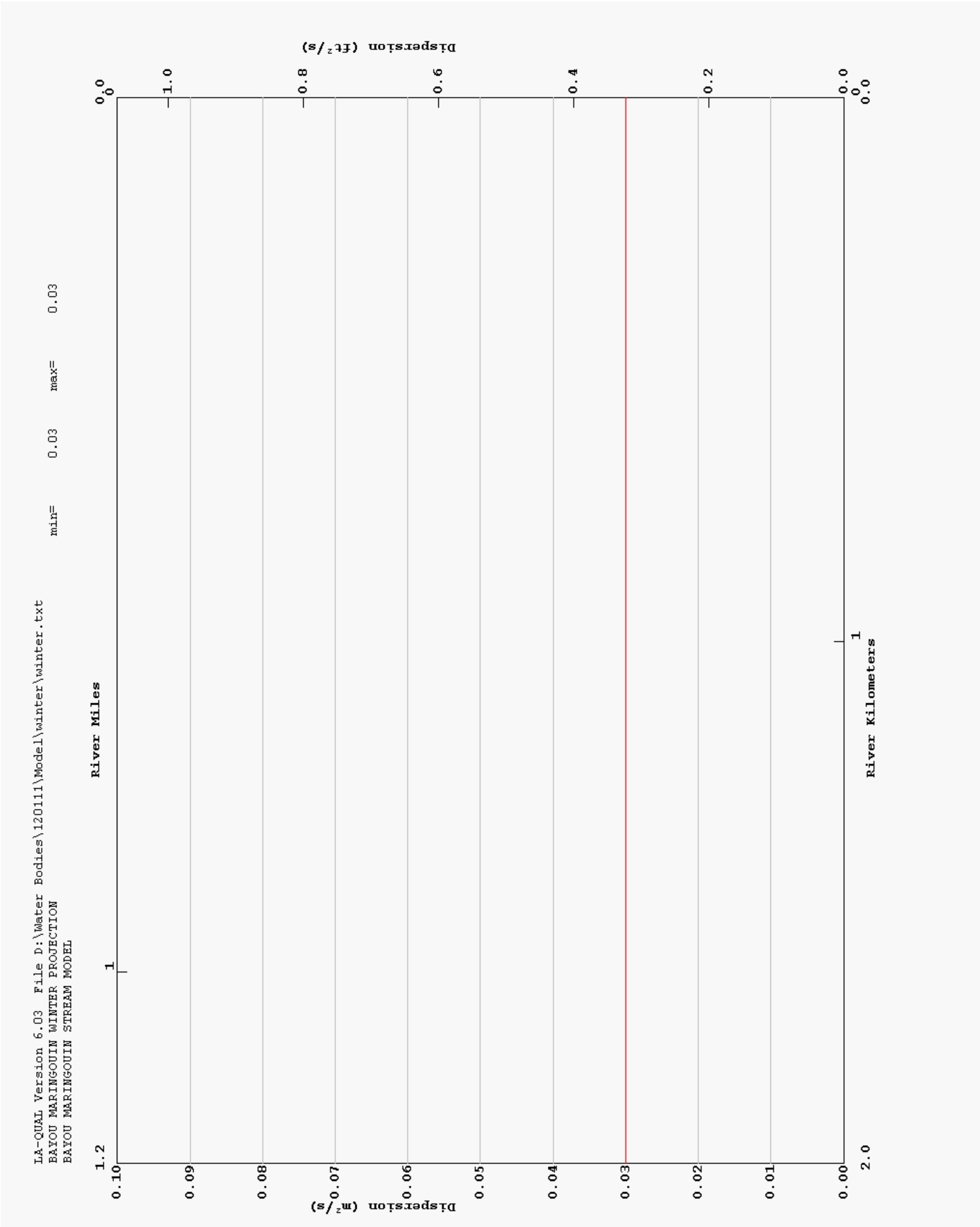

LA-QUAL Version 9.03 Run at 15:34 on 07/20/2010 File S:\projects\3110-060\tech\Revised TMDL\Revised Models\120111\Bayou_Maringouin_Winter.txt
BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN WINTER PROJECTION
UNNAMED TRIBUTARY
STEADY-STATE MODE
Predicted
min= 3.18 max= 4.19
River Miles
River Kilometers
Effective BOD1 (mg/L)
Effective BOD1 (mg/L)

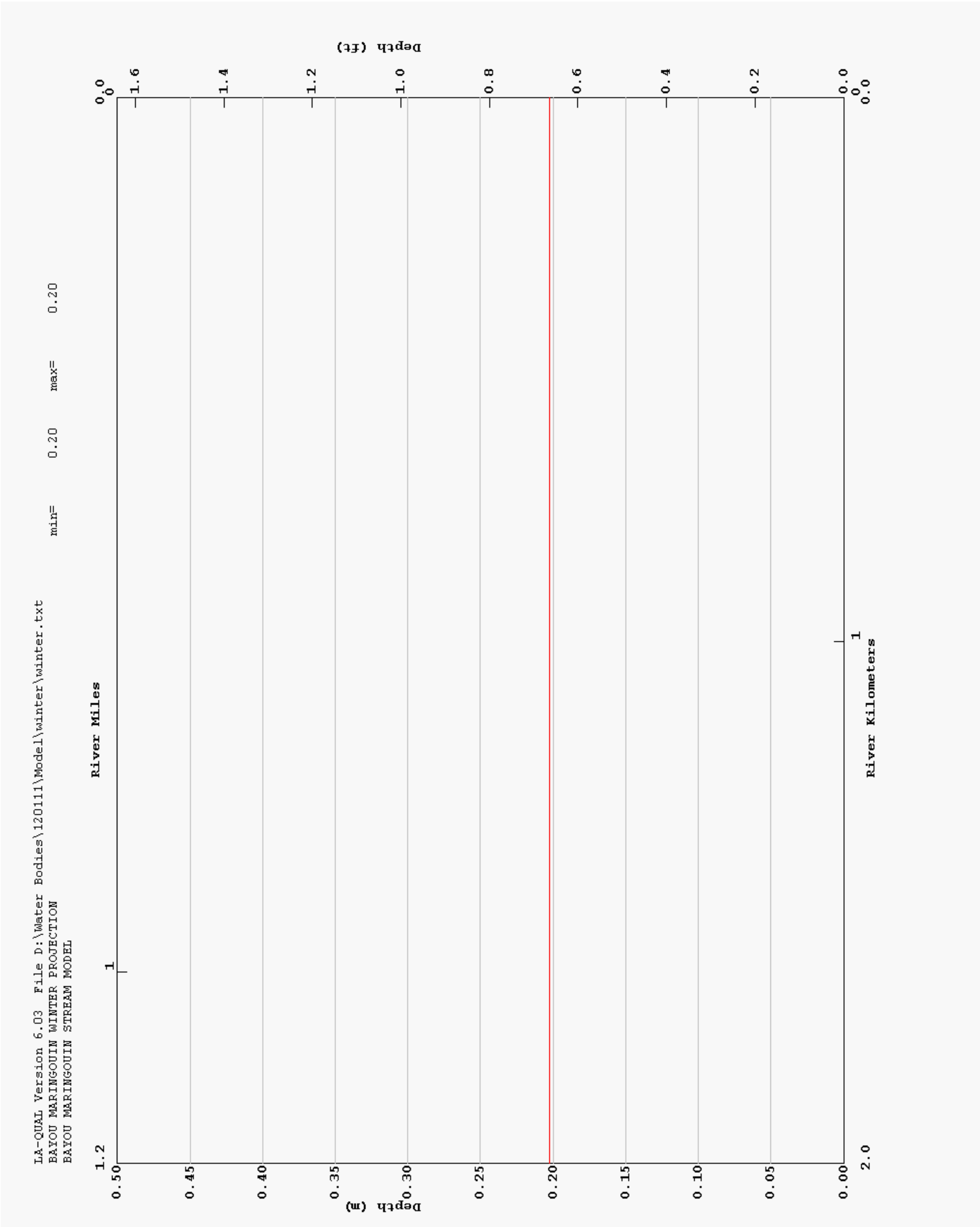

LA-QUAL Version 9.03 Run at 15:34 on 07/20/2010 File S:\projects\3110-060\tech\Revised TMDL\Revised Models\120111\Bayou_Maringouin_Winter.txt
BAYOU MARINGOUIN STREAM MODEL
Predicted
min= 2.66 max= 2.81
BAYOU MARINGOUIN WINTER PROJECTION
UNNAMED TRIBUTARY
STEADY-STATE MODE
River Miles
River Kilometers
Nitrogenous Oxygen Demand (mg/L)


LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\winter\winter.txt
BAYOU MARINGOUIN WINTER PROJECTION
BAYOU MARINGOUIN STREAM MODEL
min= 10.00 max= 10.00
River Miles
River Kilometers
Chlorophyll a (µg/L)
Chlorophyll a (µg/L)

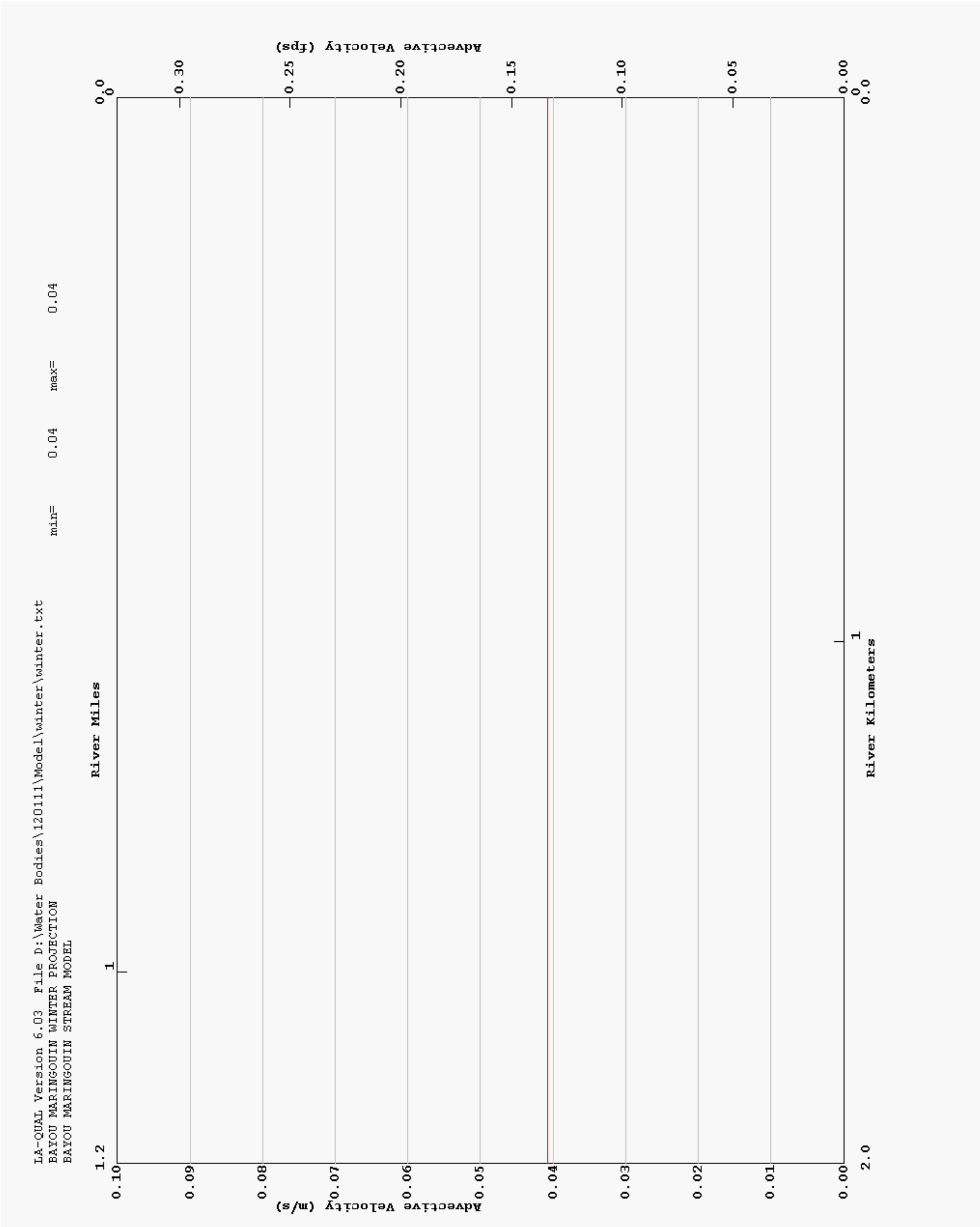

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\winter\winter.txt
BAYOU MARINGOUIN WINTER PROJECTION
BAYOU MARINGOUIN STREAM MODEL
min= 17.79 max= 17.79
River Miles
River Kilometers
Temperature (deg C)
1.2
1
0.0
2.0
0.0
50
45
40
35
30
25
20
15
10
5
0

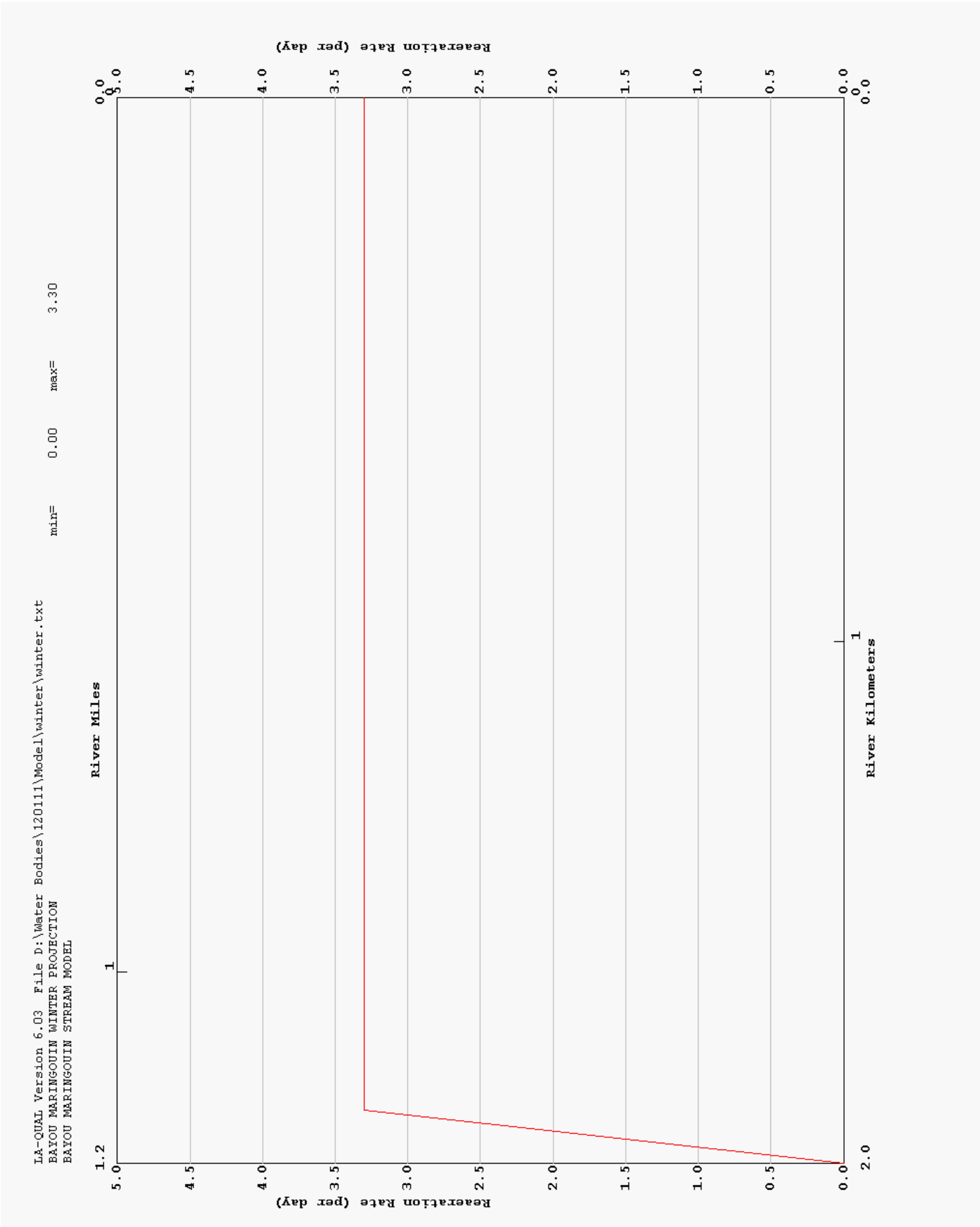

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\winter\winter.txt
BAYOU MARINGOUIN WINTER PROJECTION
BAYOU MARINGOUIN STREAM MODEL
min= 0.03 max= 0.03
River Miles
River Kilometers
Flow (cfs)
Flow (m³/s)

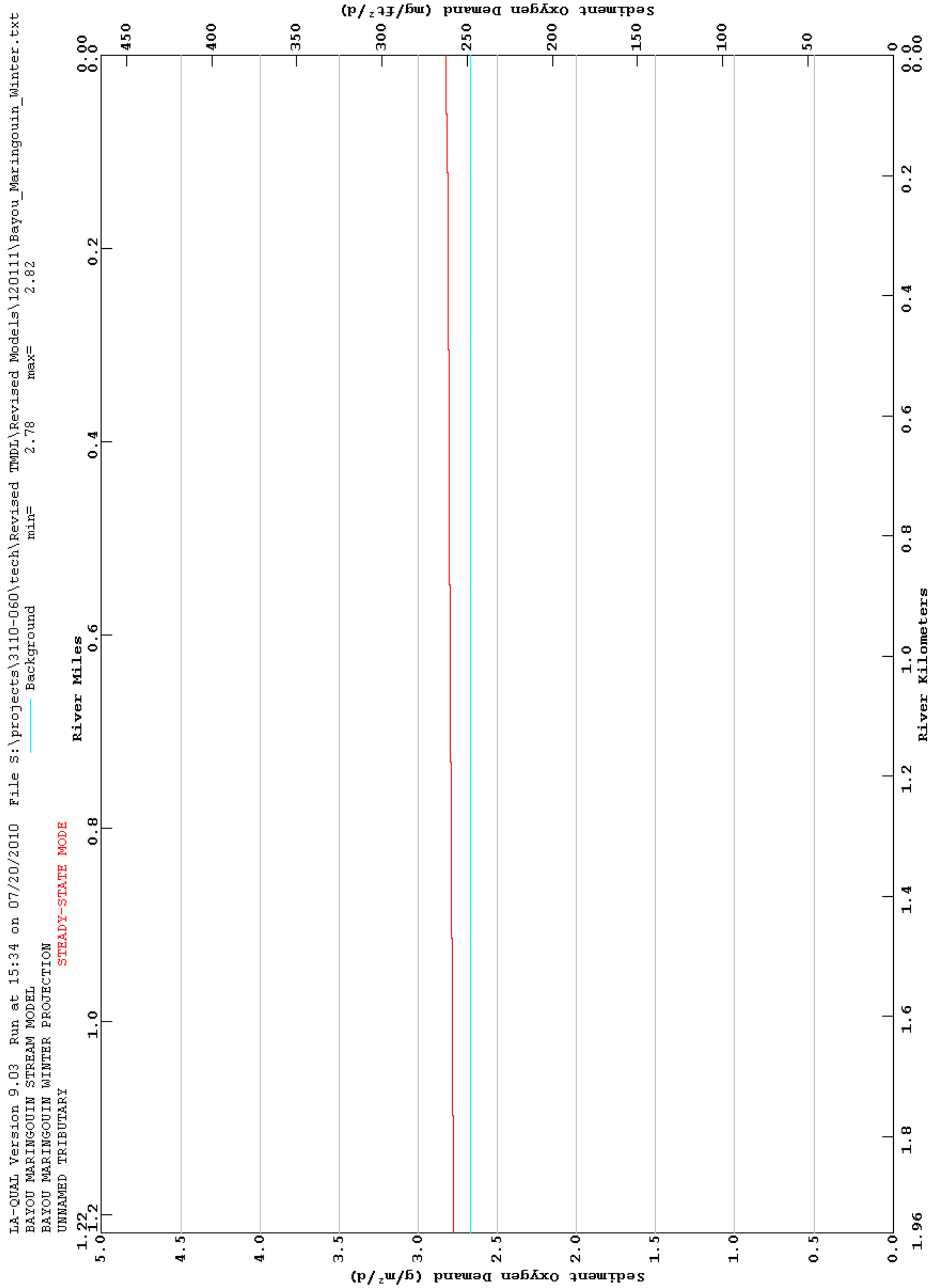

LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\winter\winter.txt
BAYOU MARINGOUIN WINTER PROJECTION
BAYOU MARINGOUIN STREAM MODEL
min= 0.03 max= 0.03
River Miles
River Kilometers
Dispersion (m²/s)
Dispersion (ft²/s)
0.00
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
0.10
0.0
0.2
0.4
0.6
0.8
1.0
1.2
2.0
1
0.0


LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\winter\winter.txt
BAYOU MARINGOUIN WINTER PROJECTION
BAYOU MARINGOUIN STREAM MODEL
min= 0.20 max= 0.20
River Miles
River Kilometers
Depth (m)
Depth (ft)


LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\winter\winter.txt
BAYOU MARINGOUIN WINTER PROJECTION
BAYOU MARINGOUIN STREAM MODEL
min= 3.43 max= 3.43
River Miles
River Kilometers
Width (m)
Width (ft)


LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\winter\winter.txt
BAYOU MARINGOUIN WINTER PROJECTION
BAYOU MARINGOUIN STREAM MODEL
min= 0.04
max= 0.04
River Miles
River Kilometers
Advective Velocity (m/s)
Advective Velocity (fps)
1.2
1
0.0
2.0
0.00
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
0.10
0.05
0.10
0.15
0.20
0.25
0.30


LA-QUAL Version 6.03 File D:\Water Bodies\120111\Model\winter\winter.txt
BAYOU MARINGOUIN WINTER PROJECTION
BAYOU MARINGOUIN STREAM MODEL
min= 0.00 max= 3.30
River Miles
River Kilometers
Reaeration Rate (per day)


LA-QUAL Version 9.03 Run at 15:34 on 07/20/2010 File S:\projects\3110-060\tech\Revised TMDL\Revised Models\120111\Bayou_Maringouin_Winter.txt
BAYOU MARINGOUIN STREAM MODEL
BAYOU MARINGOUIN WINTER PROJECTION
UNNAMED TRIBUTARY
Background min= 2.78 max= 2.82
STEADY-STATE MODE
River Miles
River Kilometers
Sediment Oxygen Demand (g/m²/d)
Sediment Oxygen Demand (mg/ft²/d)
0.00
0.2
0.4
0.6
0.8
1.0
1.22
1.96
0.0
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
450
400
350
300
250
200
150
100
50
0

Appendix B10 – Critical Temp DO Saturation Calculations

Critical Temperature and DO Determinations:

SITE NUMBER: 977

SITE DESCRIPTION: Bayou Maringouin, Louisiana

	Summer Season	***Winter Season***
90th Percentile Temperature(°C):	26.57	17.79
90 % DO Sat (mg/L):	7.23	8.56
Months:	May To Oct	Nov To Apr

Date	***Water Temp. (°C)***	***DO (mg/L)***
11/16/2004	17.71	7.88
10/5/2004	23.47	3.12
8/24/2004	28.24	1.55
7/27/2004	26.63	3.37
6/29/2004	25.27	4.67
6/2/2004	26.33	3.35
5/4/2004	18.12	4.59
4/13/2004	15.58	4.02
3/9/2004	18.13	6.46
2/3/2004	10.38	6.24
1/6/2004	9.24	5.18
11/28/2000	11.80	5.30
10/24/2000	19.32	4.35
9/26/2000	20.11	0.83
8/29/2000	25.75	5.02
8/1/2000	25.78	0.61
6/6/2000	24.43	1.02
5/30/2000	24.44	5.51
5/2/2000	21.05	2.24
4/4/2000	17.63	5.27
2/29/2000	15.10	5.34
2/1/2000	7.30	11.12

Appendix C – Survey Data Measurements and Analysis Results

Appendix C1 – Water Quality Data

Site Number	Lab ID	Analysis Name	Result	Units	Reference Method	Analysis Set Up	Analysis Read	Dates Nitrates Sampled	Comments
BM1	AD20302	TSS	ND	ppm	160.2	8/29/2001	8/30/2001		
BM1	AD20302	TDS	ND	ppm	160.1	8/29/2001	8/31/2001		
BM1	AD20302	Alkalinity	ND	ppm	310.1	8/29/2001	8/29/2001		
BM1	AD20302	Turbidity	ND	NTU	180.1	8/29/2001	8/29/2001		
BM1	AD20302	Specific Conductance	ND	umhos/cm	120.1	8/29/2001	8/29/2001		
BM1	AD20302	True Color	ND	PCU	110.2	8/29/2001	8/29/2001		
BM1	AD20302	Chloride, Ion Chromatograph	ND	ppm	300.0	9/4/2001	9/4/2001		
BM1	AD20302	Sulfate	ND	ppm	300.0	9/4/2001	9/4/2001		
BM1	AD20303	Sodium	ND	ppm	200.7	10/25/2001	10/25/2001		
BM1	AD20304	Hardness	ND	ppm	130.2	8/30/2001	8/30/2001		
BM1	AD20304	Nitrate+Nitrite Nitrogen	ND	ppm	353.2	8/31/2001	8/31/2001		
BM1	AD20304	TP	0.06	ppm	365.4	9/11/2001	9/11/2001		
BM1	AD20304	TKN	ND	ppm	351.2	9/11/2001	9/11/2001		
BM1	AD20304	Ammonia-Nitrogen	ND	ppm	350.3	8/29/2001	8/29/2001		
BM1	AD20305	TOC	ND	ppm	415.1	9/5/2001	9/6/2001		
BM1	AD20306	pH, Ultimate BOD survey	5.57	pH units	150.1	10/29/2001	10/29/2001		
BM1	AD20306	TOC (60 Day BOD)	ND	ppm	415.1	11/7/2001	11/7/2001		
BM1	AD20306	TKN (60 Day BOD)	ND	ppm	351.2	11/7/2001	11/7/2001		
BM1	AD20306	NO2NO3 - Initial Reading	ND	ppm	353.2	9/6/2001	9/6/2001	8/29/2001	
BM1	AD20306	NO2NO3 - Reading 1	ND	ppm	353.2	9/6/2001	9/6/2001	8/31/2001	
BM1	AD20306	NO2NO3 - Reading 2	ND	ppm	353.2	9/6/2001	9/6/2001	9/4/2001	
BM1	AD20306	NO2NO3 - Reading 3	ND	ppm	353.2	9/13/2001	9/13/2001	9/7/2001	
BM1	AD20306	NO2NO3 - Reading 4	ND	ppm	353.2	9/13/2001	9/13/2001	9/10/2001	
BM1	AD20306	NO2NO3 - Reading 5	ND	ppm	353.2	9/21/2001	9/21/2001	9/13/2001	
BM1	AD20306	NO2NO3 - Reading 6	ND	ppm	353.2	9/21/2001	9/21/2001	9/18/2001	
BM1	AD20306	NO2NO3 - Reading 7	ND	ppm	353.2	10/25/2001	10/25/2001	9/28/2001	
BM1	AD20306	NO2NO3 - Reading 8	ND	ppm	353.2	10/12/2001	10/12/2001	10/8/2001	
BM1	AD20306	NO2NO3 - Reading 9	ND	ppm	353.2	10/24/2001	10/24/2001	10/18/2001	
BM1	AD20306	NO2NO3 - Final	ND	ppm	353.2	11/8/2001	11/8/2001	10/29/2001	
BM1	AD20306	Non-Filtered BOD 60 - Reading 1	0.0	ppm	5210B	8/29/2001	8/31/2001		
BM1	AD20306	Non-Filtered BOD 60 - Reading 2	0.0	ppm	5210B	8/29/2001	9/4/2001		
BM1	AD20306	Non-Filtered BOD 60 - Reading 3	0.1	ppm	5210B	8/29/2001	9/7/2001		
BM1	AD20306	Non-Filtered BOD 60 - Reading 4	0.0	ppm	5210B	8/29/2001	9/10/2001		
BM1	AD20306	Non-Filtered BOD 60 - Reading 5	0.0	ppm	5210B	8/29/2001	9/13/2001		
BM1	AD20306	Non-Filtered BOD 60 - Reading 6	0.1	ppm	5210B	8/29/2001	9/18/2001		
BM1	AD20306	Non-Filtered BOD 60 - Reading 7	0.1	ppm	5210B	8/29/2001	9/28/2001		
BM1	AD20306	Non-Filtered BOD 60 - Reading 8	0.2	ppm	5210B	8/29/2001	10/8/2001		
BM1	AD20306	Non-Filtered BOD 60 - Reading 9	0.2	ppm	5210B	8/29/2001	10/18/2001		
BM1	AD20306	Non-Filtered BOD 60 - Final	0.2	ppm	5210B	8/29/2001	10/29/2001		
BM1	AD20307	TSS	660	ppm	160.2	8/29/2001	8/30/2001		
BM1	AD20307	TDS	168	ppm	160.1	8/29/2001	8/31/2001		

BM1	AD20307	Alkalinity	123	ppm	310.1	8/29/2001	8/29/2001		
BM1	AD20307	Turbidity	340	NTU	180.1	8/29/2001	8/29/2001		
BM1	AD20307	Specific Conductance	245	umhos/cm	120.1	8/29/2001	8/29/2001		
BM1	AD20307	True Color	160	PCU	110.2	8/29/2001	8/29/2001		
BM1	AD20307	Chloride, Ion Chromatograph	6.4	ppm	300.0	9/4/2001	9/4/2001		
BM1	AD20307	Sulfate	5.4	ppm	300.0	9/4/2001	9/4/2001		
BM1	AD20308	Sodium	10.0	ppm	200.7	10/25/2001	10/25/2001		
BM1	AD20309	Hardness	133	ppm	130.2	10/4/2001	10/4/2001		Hardness result is reported as estimated, J, because due to interferences, the
BM1	AD20309	Nitrate+Nitrite Nitrogen	0.05	ppm	353.2	8/31/2001	8/31/2001		
BM1	AD20309	TP	1.36	ppm	365.4	9/19/2001	9/19/2001		
BM1	AD20309	TKN	4.29	ppm	351.2	9/28/2001	9/28/2001		
BM1	AD20309	Ammonia-Nitrogen	0.28	ppm	350.3	8/29/2001	8/29/2001		
BM1	AD20310	TOC	11.1	ppm	415.1	9/5/2001	9/6/2001		
BM1	AD20311	pH, Ultimate BOD survey	7.16	pH units	150.1	10/29/2001	10/29/2001		
BM1	AD20311	TOC (60 Day BOD)	6.4	ppm	415.1	11/7/2001	11/7/2001		
BM1	AD20311	TKN (60 Day BOD)	1.78	ppm	351.2	11/7/2001	11/7/2001		
BM1	AD20311	NO2NO3 - Initial Reading	ND	ppm	353.2	9/6/2001	9/6/2001	8/29/2001	
BM1	AD20311	NO2NO3 - Reading 1	ND	ppm	353.2	9/6/2001	9/6/2001	8/31/2001	
BM1	AD20311	NO2NO3 - Reading 2	ND	ppm	353.2	9/6/2001	9/6/2001	9/4/2001	
BM1	AD20311	NO2NO3 - Reading 3	0.18	ppm	353.2	9/13/2001	9/13/2001	9/7/2001	
BM1	AD20311	NO2NO3 - Reading 4	0.20	ppm	353.2	9/13/2001	9/13/2001	9/10/2001	
BM1	AD20311	NO2NO3 - Reading 5	0.45	ppm	353.2	9/21/2001	9/21/2001	9/13/2001	
BM1	AD20311	NO2NO3 - Reading 6	0.55	ppm	353.2	9/21/2001	9/21/2001	9/18/2001	
BM1	AD20311	NO2NO3 - Reading 7	0.80	ppm	353.2	10/3/2001	10/3/2001	9/28/2001	
BM1	AD20311	NO2NO3 - Reading 8	0.90	ppm	353.2	10/12/2001	10/12/2001	10/8/2001	
BM1	AD20311	NO2NO3 - Reading 9	1.06	ppm	353.2	10/24/2001	10/24/2001	10/18/2001	
BM1	AD20311	NO2NO3 - Final	1.13	ppm	353.2	11/8/2001	11/8/2001	10/29/2001	
BM1	AD20311	Non-Filtered BOD 60 - Reading 1	3.2	ppm	5210B	8/29/2001	8/31/2001		
BM1	AD20311	Non-Filtered BOD 60 - Reading 2	8.9	ppm	5210B	8/29/2001	9/4/2001		
BM1	AD20311	Non-Filtered BOD 60 - Reading 3	12.3	ppm	5210B	8/29/2001	9/7/2001		
BM1	AD20311	Non-Filtered BOD 60 - Reading 4	14.2	ppm	5210B	8/29/2001	9/10/2001		
BM1	AD20311	Non-Filtered BOD 60 - Reading 5	15.9	ppm	5210B	8/29/2001	9/13/2001		
BM1	AD20311	Non-Filtered BOD 60 - Reading 6	18.2	ppm	5210B	8/29/2001	9/18/2001		
BM1	AD20311	Non-Filtered BOD 60 - Reading 7	21.4	ppm	5210B	8/29/2001	9/28/2001		
BM1	AD20311	Non-Filtered BOD 60 - Reading 8	24.0	ppm	5210B	8/29/2001	10/8/2001		
BM1	AD20311	Non-Filtered BOD 60 - Reading 9	25.8	ppm	5210B	8/29/2001	10/18/2001		
BM1	AD20311	Non-Filtered BOD 60 - Final	27.7	ppm	5210B	8/29/2001	10/29/2001		
BM2	AD20312	TSS	59.0	ppm	160.2	8/29/2001	8/30/2001		
BM2	AD20312	TDS	182	ppm	160.1	8/29/2001	8/31/2001		
BM2	AD20312	Alkalinity	143	ppm	310.1	8/29/2001	8/29/2001		
BM2	AD20312	Turbidity	36	NTU	180.1	8/29/2001	8/29/2001		
BM2	AD20312	Specific Conductance	292	umhos/cm	120.1	8/29/2001	8/29/2001		
BM2	AD20312	True Color	55	PCU	110.2	8/29/2001	8/29/2001		

BM2	AD20312	Chloride, Ion Chromatograph	7.1	ppm	300.0	9/4/2001	9/4/2001	
BM2	AD20312	Sulfate	3.5	ppm	300.0	9/4/2001	9/4/2001	
BM2	AD20313	Sodium	18.6	ppm	200.7	10/25/2001	10/25/2001	
BM2	AD20314	Hardness	139	ppm	130.2	8/30/2001	8/30/2001	
BM2	AD20314	Nitrate+Nitrite Nitrogen	0.08	ppm	353.2	8/31/2001	8/31/2001	
BM2	AD20314	TP	0.91	ppm	365.4	9/11/2001	9/11/2001	
BM2	AD20314	TKN	1.41	ppm	351.2	9/11/2001	9/11/2001	
BM2	AD20314	Ammonia-Nitrogen	0.47	ppm	350.3	8/29/2001	8/29/2001	
BM2	AD20315	TOC	13.7	ppm	415.1	9/5/2001	9/6/2001	
BM2	AD20316	pH, Ultimate BOD survey	7.58	pH units	150.1	10/29/2001	10/29/2001	
BM2	AD20316	TOC (60 Day BOD)	8.6	ppm	415.1	11/7/2001	11/7/2001	
BM2	AD20316	TKN (60 Day BOD)	0.77	ppm	351.2	11/7/2001	11/7/2001	
BM2	AD20316	NO2NO3 - Initial Reading	ND	ppm	353.2	9/6/2001	9/6/2001	8/29/2001
BM2	AD20316	NO2NO3 - Reading 1	ND	ppm	353.2	9/6/2001	9/6/2001	8/31/2001
BM2	AD20316	NO2NO3 - Reading 2	0.06	ppm	353.2	9/6/2001	9/6/2001	9/4/2001
BM2	AD20316	NO2NO3 - Reading 3	0.28	ppm	353.2	9/13/2001	9/13/2001	9/7/2001
BM2	AD20316	NO2NO3 - Reading 4	0.68	ppm	353.2	9/13/2001	9/13/2001	9/10/2001
BM2	AD20316	NO2NO3 - Reading 5	0.67	ppm	353.2	9/21/2001	9/21/2001	9/13/2001
BM2	AD20316	NO2NO3 - Reading 6	0.69	ppm	353.2	9/21/2001	9/21/2001	9/18/2001
BM2	AD20316	NO2NO3 - Reading 7	0.85	ppm	353.2	10/3/2001	10/3/2001	9/28/2001
BM2	AD20316	NO2NO3 - Reading 8	0.84	ppm	353.2	10/12/2001	10/12/2001	10/8/2001
BM2	AD20316	NO2NO3 - Reading 9	0.90	ppm	353.2	10/24/2001	10/24/2001	10/18/2001
BM2	AD20316	NO2NO3 - Final	0.94	ppm	353.2	11/8/2001	11/8/2001	10/29/2001
BM2	AD20316	Non-Filtered BOD 60 - Reading 1	1.9	ppm	5210B	8/29/2001	8/31/2001	
BM2	AD20316	Non-Filtered BOD 60 - Reading 2	4.5	ppm	5210B	8/29/2001	9/4/2001	
BM2	AD20316	Non-Filtered BOD 60 - Reading 3	7.1	ppm	5210B	8/29/2001	9/7/2001	
BM2	AD20316	Non-Filtered BOD 60 - Reading 4	9.2	ppm	5210B	8/29/2001	9/10/2001	
BM2	AD20316	Non-Filtered BOD 60 - Reading 5	10.2	ppm	5210B	8/29/2001	9/13/2001	
BM2	AD20316	Non-Filtered BOD 60 - Reading 6	11.5	ppm	5210B	8/29/2001	9/18/2001	
BM2	AD20316	Non-Filtered BOD 60 - Reading 7	13.4	ppm	5210B	8/29/2001	9/28/2001	
BM2	AD20316	Non-Filtered BOD 60 - Reading 8	15.0	ppm	5210B	8/29/2001	10/8/2001	
BM2	AD20316	Non-Filtered BOD 60 - Reading 9	16.1	ppm	5210B	8/29/2001	10/18/2001	
BM2	AD20316	Non-Filtered BOD 60 - Final	17.2	ppm	5210B	8/29/2001	10/29/2001	
BM3	AD20317	TSS	13.0	ppm	160.2	8/29/2001	8/30/2001	
BM3	AD20317	TDS	306	ppm	160.1	8/29/2001	8/31/2001	
BM3	AD20317	Alkalinity	153	ppm	310.1	8/29/2001	8/29/2001	
BM3	AD20317	Turbidity	8.7	NTU	180.1	8/29/2001	8/29/2001	
BM3	AD20317	Specific Conductance	324	umhos/cm	120.1	8/29/2001	8/29/2001	
BM3	AD20317	True Color	80	PCU	110.2	8/29/2001	8/29/2001	
BM3	AD20317	Chloride, Ion Chromatograph	7.9	ppm	300.0	9/4/2001	9/4/2001	
BM3	AD20317	Sulfate	7.5	ppm	300.0	9/4/2001	9/4/2001	
BM3	AD20318	Sodium	7.1	ppm	200.7	10/25/2001	10/25/2001	
BM3	AD20319	Hardness	129	ppm	130.2	8/30/2001	8/30/2001	
BM3	AD20319	Nitrate+Nitrite Nitrogen	ND	ppm	353.2	8/31/2001	8/31/2001	

BM3	AD20319	TP	0.83	ppm	365.4	9/19/2001	9/19/2001	
BM3	AD20319	TKN	1.31	ppm	351.2	9/11/2001	9/11/2001	
BM3	AD20319	Ammonia-Nitrogen	ND	ppm	350.3	8/29/2001	8/29/2001	
BM3	AD20320	TOC	13.7	ppm	415.1	9/5/2001	9/6/2001	
BM3	AD20321	pH, Ultimate BOD survey	7.79	pH units	150.1	10/29/2001	10/29/2001	
BM3	AD20321	TOC (60 Day BOD)	8.7	ppm	415.1	11/7/2001	11/7/2001	
BM3	AD20321	TKN (60 Day BOD)	0.43	ppm	351.2	11/7/2001	11/7/2001	
BM3	AD20321	NO2NO3 - Initial Reading	ND	ppm	353.2	9/6/2001	9/6/2001	8/29/2001
BM3	AD20321	NO2NO3 - Reading 1	ND	ppm	353.2	9/6/2001	9/6/2001	8/31/2001
BM3	AD20321	NO2NO3 - Reading 2	ND	ppm	353.2	9/6/2001	9/6/2001	9/4/2001
BM3	AD20321	NO2NO3 - Reading 3	ND	ppm	353.2	9/13/2001	9/13/2001	9/7/2001
BM3	AD20321	NO2NO3 - Reading 4	0.07	ppm	353.2	9/13/2001	9/13/2001	9/10/2001
BM3	AD20321	NO2NO3 - Reading 5	0.28	ppm	353.2	9/21/2001	9/21/2001	9/13/2001
BM3	AD20321	NO2NO3 - Reading 6	0.46	ppm	353.2	9/21/2001	9/21/2001	9/18/2001
BM3	AD20321	NO2NO3 - Reading 7	0.63	ppm	353.2	10/3/2001	10/3/2001	9/28/2001
BM3	AD20321	NO2NO3 - Reading 8	0.67	ppm	353.2	10/12/2001	10/12/2001	10/8/2001
BM3	AD20321	NO2NO3 - Reading 9	0.75	ppm	353.2	10/24/2001	10/24/2001	10/18/2001
BM3	AD20321	NO2NO3 - Final	0.82	ppm	353.2	11/8/2001	11/8/2001	10/29/2001
BM3	AD20321	Non-Filtered BOD 60 - Reading 1	3.7	ppm	5210B	8/29/2001	8/31/2001	
BM3	AD20321	Non-Filtered BOD 60 - Reading 2	8.0	ppm	5210B	8/29/2001	9/4/2001	
BM3	AD20321	Non-Filtered BOD 60 - Reading 3	10.1	ppm	5210B	8/29/2001	9/7/2001	
BM3	AD20321	Non-Filtered BOD 60 - Reading 4	12.4	ppm	5210B	8/29/2001	9/10/2001	
BM3	AD20321	Non-Filtered BOD 60 - Reading 5	14.3	ppm	5210B	8/29/2001	9/13/2001	
BM3	AD20321	Non-Filtered BOD 60 - Reading 6	16.5	ppm	5210B	8/29/2001	9/18/2001	
BM3	AD20321	Non-Filtered BOD 60 - Reading 7	19.0	ppm	5210B	8/29/2001	9/28/2001	
BM3	AD20321	Non-Filtered BOD 60 - Reading 8	20.7	ppm	5210B	8/29/2001	10/8/2001	
BM3	AD20321	Non-Filtered BOD 60 - Reading 9	22.0	ppm	5210B	8/29/2001	10/18/2001	
BM3	AD20321	Non-Filtered BOD 60 - Final	23.2	ppm	5210B	8/29/2001	10/29/2001	
BM4	AD20322	TSS	ND	ppm	160.2	8/29/2001	8/30/2001	
BM4	AD20322	TDS	ND	ppm	160.1	8/29/2001	8/31/2001	
BM4	AD20322	Alkalinity	ND	ppm	310.1	8/29/2001	8/29/2001	
BM4	AD20322	Turbidity	ND	NTU	180.1	8/29/2001	8/29/2001	
BM4	AD20322	Specific Conductance	ND	umhos/cm	120.1	8/29/2001	8/29/2001	
BM4	AD20322	True Color	ND	PCU	110.2	8/29/2001	8/29/2001	
BM4	AD20322	Chloride, Ion Chromatograph	ND	ppm	300.0	9/4/2001	9/4/2001	
BM4	AD20322	Sulfate	ND	ppm	300.0	9/4/2001	9/4/2001	
BM4	AD20323	Sodium	ND	ppm	200.7	10/25/2001	10/25/2001	
BM4	AD20324	Hardness	ND	ppm	130.2	8/30/2001	8/30/2001	
BM4	AD20324	Nitrate+Nitrite Nitrogen	ND	ppm	353.2	8/31/2001	8/31/2001	
BM4	AD20324	TP	0.07	ppm	365.4	9/11/2001	9/11/2001	
BM4	AD20324	TKN	ND	ppm	351.2	9/11/2001	9/11/2001	
BM4	AD20324	Ammonia-Nitrogen	ND	ppm	350.3	8/29/2001	8/29/2001	
BM4	AD20325	TOC	ND	ppm	415.1	9/5/2001	9/6/2001	
BM4	AD20326	pH, Ultimate BOD survey	5.84	pH units	150.1	10/29/2001	10/29/2001	

BM4	AD20326	TOC (60 Day BOD)	ND	ppm	415.1	11/7/2001	11/7/2001	
BM4	AD20326	TKN (60 Day BOD)	ND	ppm	351.2	11/7/2001	11/7/2001	
BM4	AD20326	NO2NO3 - Initial Reading	ND	ppm	353.2	9/6/2001	9/6/2001	8/29/2001
BM4	AD20326	NO2NO3 - Reading 1	ND	ppm	353.2	9/6/2001	9/6/2001	8/31/2001
BM4	AD20326	NO2NO3 - Reading 2	ND	ppm	353.2	9/6/2001	9/6/2001	9/4/2001
BM4	AD20326	NO2NO3 - Reading 3	ND	ppm	353.2	9/13/2001	9/13/2001	9/7/2001
BM4	AD20326	NO2NO3 - Reading 4	ND	ppm	353.2	9/13/2001	9/13/2001	9/10/2001
BM4	AD20326	NO2NO3 - Reading 5	ND	ppm	353.2	9/21/2001	9/21/2001	9/13/2001
BM4	AD20326	NO2NO3 - Reading 6	ND	ppm	353.2	9/21/2001	9/21/2001	9/18/2001
BM4	AD20326	NO2NO3 - Reading 7	ND	ppm	353.2	10/3/2001	10/3/2001	9/28/2001
BM4	AD20326	NO2NO3 - Reading 8	ND	ppm	353.2	10/12/2001	10/12/2001	10/8/2001
BM4	AD20326	NO2NO3 - Reading 9	ND	ppm	353.2	10/25/2001	10/25/2001	10/18/2001
BM4	AD20326	NO2NO3 - Final	ND	ppm	353.2	11/8/2001	11/8/2001	10/29/2001
BM4	AD20326	Non-Filtered BOD 60 - Reading 1	0.0	ppm	5210B	8/29/2001	8/31/2001	
BM4	AD20326	Non-Filtered BOD 60 - Reading 2	0.2	ppm	5210B	8/29/2001	9/4/2001	
BM4	AD20326	Non-Filtered BOD 60 - Reading 3	0.3	ppm	5210B	8/29/2001	9/7/2001	
BM4	AD20326	Non-Filtered BOD 60 - Reading 4	0.2	ppm	5210B	8/29/2001	9/10/2001	
BM4	AD20326	Non-Filtered BOD 60 - Reading 5	0.2	ppm	5210B	8/29/2001	9/13/2001	
BM4	AD20326	Non-Filtered BOD 60 - Reading 6	0.3	ppm	5210B	8/29/2001	9/18/2001	
BM4	AD20326	Non-Filtered BOD 60 - Reading 7	0.3	ppm	5210B	8/29/2001	9/28/2001	
BM4	AD20326	Non-Filtered BOD 60 - Reading 8	0.4	ppm	5210B	8/29/2001	10/8/2001	
BM4	AD20326	Non-Filtered BOD 60 - Reading 9	0.4	ppm	5210B	8/29/2001	10/18/2001	
BM4	AD20326	Non-Filtered BOD 60 - Final	0.4	ppm	5210B	8/29/2001	10/29/2001	
BM4	AD20327	TSS	15.3	ppm	160.2	8/29/2001	8/30/2001	
BM4	AD20327	TDS	172	ppm	160.1	8/29/2001	8/31/2001	
BM4	AD20327	Alkalinity	126	ppm	310.1	8/29/2001	8/29/2001	
BM4	AD20327	Turbidity	15	NTU	180.1	8/29/2001	8/29/2001	
BM4	AD20327	Specific Conductance	265	umhos/cm	120.1	8/29/2001	8/29/2001	
BM4	AD20327	True Color	55	PCU	110.2	8/29/2001	8/29/2001	
BM4	AD20327	Chloride, Ion Chromatograph	6.1	ppm	300.0	9/4/2001	9/4/2001	
BM4	AD20327	Sulfate	6.9	ppm	300.0	9/4/2001	9/4/2001	
BM4	AD20328	Sodium	11.4	ppm	200.7	10/25/2001	10/25/2001	
BM4	AD20329	Hardness	113	ppm	130.2	8/30/2001	8/30/2001	
BM4	AD20329	Nitrate+Nitrite Nitrogen	0.09	ppm	353.2	8/31/2001	8/31/2001	
BM4	AD20329	TP	0.53	ppm	365.4	9/11/2001	9/11/2001	
BM4	AD20329	TKN	0.94	ppm	351.2	9/11/2001	9/11/2001	
BM4	AD20329	Ammonia-Nitrogen	ND	ppm	350.3	8/29/2001	8/29/2001	
BM4	AD20330	TOC	11.6	ppm	415.1	9/5/2001	9/6/2001	
BM4	AD20331	pH, Ultimate BOD survey	7.58	pH units	150.1	10/29/2001	10/29/2001	
BM4	AD20331	TOC (60 Day BOD)	6.4	ppm	415.1	11/7/2001	11/7/2001	
BM4	AD20331	TKN (60 Day BOD)	0.21	ppm	351.2	11/7/2001	11/7/2001	
BM4	AD20331	NO2NO3 - Initial Reading	0.07	ppm	353.2	9/6/2001	9/6/2001	8/29/2001
BM4	AD20331	NO2NO3 - Reading 1	ND	ppm	353.2	9/6/2001	9/6/2001	8/31/2001
BM4	AD20331	NO2NO3 - Reading 2	0.06	ppm	353.2	9/6/2001	9/6/2001	9/4/2001

BM4	AD20331	NO2NO3 - Reading 3	0.14	ppm	353.2	9/13/2001	9/13/2001	9/7/2001
BM4	AD20331	NO2NO3 - Reading 4	0.35	ppm	353.2	9/13/2001	9/13/2001	9/10/2001
BM4	AD20331	NO2NO3 - Reading 5	0.36	ppm	353.2	9/21/2001	9/21/2001	9/13/2001
BM4	AD20331	NO2NO3 - Reading 6	0.40	ppm	353.2	9/21/2001	9/21/2001	9/18/2001
BM4	AD20331	NO2NO3 - Reading 7	0.51	ppm	353.2	10/3/2001	10/3/2001	9/28/2001
BM4	AD20331	NO2NO3 - Reading 8	0.53	ppm	353.2	10/12/2001	10/12/2001	10/8/2001
BM4	AD20331	NO2NO3 - Reading 9	0.56	ppm	353.2	10/25/2001	10/25/2001	10/18/2001
BM4	AD20331	NO2NO3 - Final	0.61	ppm	353.2	11/8/2001	11/8/2001	10/29/2001
BM4	AD20331	Non-Filtered BOD 60 - Reading 1	1.6	ppm	5210B	8/29/2001	8/31/2001	
BM4	AD20331	Non-Filtered BOD 60 - Reading 2	3.9	ppm	5210B	8/29/2001	9/4/2001	
BM4	AD20331	Non-Filtered BOD 60 - Reading 3	5.3	ppm	5210B	8/29/2001	9/7/2001	
BM4	AD20331	Non-Filtered BOD 60 - Reading 4	6.4	ppm	5210B	8/29/2001	9/10/2001	
BM4	AD20331	Non-Filtered BOD 60 - Reading 5	7.8	ppm	5210B	8/29/2001	9/13/2001	
BM4	AD20331	Non-Filtered BOD 60 - Reading 6	8.7	ppm	5210B	8/29/2001	9/18/2001	
BM4	AD20331	Non-Filtered BOD 60 - Reading 7	10.1	ppm	5210B	8/29/2001	9/28/2001	
BM4	AD20331	Non-Filtered BOD 60 - Reading 8	11.2	ppm	5210B	8/29/2001	10/8/2001	
BM4	AD20331	Non-Filtered BOD 60 - Reading 9	12.1	ppm	5210B	8/29/2001	10/18/2001	
BM4	AD20331	Non-Filtered BOD 60 - Final	13.0	ppm	5210B	8/29/2001	10/29/2001	
BM4	AD20332	TSS	17.0	ppm	160.2	8/29/2001	8/30/2001	
BM4	AD20332	TDS	172	ppm	160.1	8/29/2001	8/31/2001	
BM4	AD20332	Alkalinity	126	ppm	310.1	8/29/2001	8/29/2001	
BM4	AD20332	Turbidity	15	NTU	180.1	8/29/2001	8/29/2001	
BM4	AD20332	Specific Conductance	265	umhos/cm	120.1	8/29/2001	8/29/2001	
BM4	AD20332	True Color	55	PCU	110.2	8/29/2001	8/29/2001	
BM4	AD20332	Chloride, Ion Chromatograph	6.4	ppm	300.0	9/4/2001	9/4/2001	
BM4	AD20332	Sulfate	6.7	ppm	300.0	9/4/2001	9/4/2001	
BM4	AD20333	Sodium	11.4	ppm	200.7	10/25/2001	10/25/2001	
BM4	AD20334	Hardness	114	ppm	130.2	8/30/2001	8/30/2001	
BM4	AD20334	Nitrate+Nitrite Nitrogen	0.09	ppm	353.2	8/31/2001	8/31/2001	
BM4	AD20334	TP	0.56	ppm	365.4	9/11/2001	9/11/2001	
BM4	AD20334	TKN	0.94	ppm	351.2	9/11/2001	9/11/2001	
BM4	AD20334	Ammonia-Nitrogen	ND	ppm	350.3	8/29/2001	8/29/2001	
BM4	AD20335	TOC	8.0	ppm	415.1	9/5/2001	9/6/2001	
BM4	AD20336	pH, Ultimate BOD survey	7.64	pH units	150.1	10/29/2001	10/29/2001	
BM4	AD20336	TOC (60 Day BOD)	6.8	ppm	415.1	11/7/2001	11/7/2001	
BM4	AD20336	TKN (60 Day BOD)	0.36	ppm	351.2	11/7/2001	11/7/2001	
BM4	AD20336	NO2NO3 - Initial Reading	0.06	ppm	353.2	9/6/2001	9/6/2001	8/29/2001
BM4	AD20336	NO2NO3 - Reading 1	0.07	ppm	353.2	9/6/2001	9/6/2001	8/31/2001
BM4	AD20336	NO2NO3 - Reading 2	0.07	ppm	353.2	9/6/2001	9/6/2001	9/4/2001
BM4	AD20336	NO2NO3 - Reading 3	0.11	ppm	353.2	9/13/2001	9/13/2001	9/7/2001
BM4	AD20336	NO2NO3 - Reading 4	0.34	ppm	353.2	9/13/2001	9/13/2001	9/10/2001
BM4	AD20336	NO2NO3 - Reading 5	0.35	ppm	353.2	9/21/2001	9/21/2001	9/13/2001
BM4	AD20336	NO2NO3 - Reading 6	0.40	ppm	353.2	9/21/2001	9/21/2001	9/18/2001
BM4	AD20336	NO2NO3 - Reading 7	0.48	ppm	353.2	10/3/2001	10/3/2001	9/28/2001

BM4	AD20336	NO2NO3 - Reading 8	0.51	ppm	353.2	10/12/2001	10/12/2001	10/8/2001
BM4	AD20336	NO2NO3 - Reading 9	0.55	ppm	353.2	10/24/2001	10/24/2001	10/18/2001
BM4	AD20336	NO2NO3 - Final	0.57	ppm	353.2	11/8/2001	11/8/2001	10/29/2001
BM4	AD20336	Non-Filtered BOD 60 - Reading 1	1.6	ppm	5210B	8/29/2001	8/31/2001	
BM4	AD20336	Non-Filtered BOD 60 - Reading 2	3.8	ppm	5210B	8/29/2001	9/4/2001	
BM4	AD20336	Non-Filtered BOD 60 - Reading 3	5.1	ppm	5210B	8/29/2001	9/7/2001	
BM4	AD20336	Non-Filtered BOD 60 - Reading 4	6.3	ppm	5210B	8/29/2001	9/10/2001	
BM4	AD20336	Non-Filtered BOD 60 - Reading 5	7.2	ppm	5210B	8/29/2001	9/13/2001	
BM4	AD20336	Non-Filtered BOD 60 - Reading 6	8.1	ppm	5210B	8/29/2001	9/18/2001	
BM4	AD20336	Non-Filtered BOD 60 - Reading 7	9.3	ppm	5210B	8/29/2001	9/28/2001	
BM4	AD20336	Non-Filtered BOD 60 - Reading 8	10.5	ppm	5210B	8/29/2001	10/8/2001	
BM4	AD20336	Non-Filtered BOD 60 - Reading 9	11.3	ppm	5210B	8/29/2001	10/18/2001	
BM4	AD20336	Non-Filtered BOD 60 - Final	12.0	ppm	5210B	8/29/2001	10/29/2001	
BM5	AD20337	TSS	77.0	ppm	160.2	8/29/2001	8/30/2001	
BM5	AD20337	TDS	158	ppm	160.1	8/29/2001	8/31/2001	
BM5	AD20337	Alkalinity	117	ppm	310.1	8/29/2001	8/29/2001	
BM5	AD20337	Turbidity	50	NTU	180.1	8/29/2001	8/29/2001	
BM5	AD20337	Specific Conductance	250	umhos/cm	120.1	8/29/2001	8/29/2001	
BM5	AD20337	True Color	50	PCU	110.2	8/29/2001	8/29/2001	
BM5	AD20337	Chloride, Ion Chromatograph	6.1	ppm	300.0	9/5/2001	9/5/2001	
BM5	AD20337	Sulfate	10.0	ppm	300.0	9/5/2001	9/5/2001	
BM5	AD20338	Sodium	8.6	ppm	200.7	10/25/2001	10/25/2001	
BM5	AD20339	Hardness	116	ppm	130.2	8/30/2001	8/30/2001	
BM5	AD20339	Nitrate+Nitrite Nitrogen	ND	ppm	353.2	8/31/2001	8/31/2001	
BM5	AD20339	TP	0.34	ppm	365.4	9/11/2001	9/11/2001	
BM5	AD20339	TKN	1.25	ppm	351.2	9/11/2001	9/11/2001	
BM5	AD20339	Ammonia-Nitrogen	ND	ppm	350.3	8/29/2001	8/29/2001	
BM5	AD20340	TOC	6.9	ppm	415.1	9/5/2001	9/6/2001	
BM5	AD20341	pH, Ultimate BOD survey	7.63	pH units	150.1	10/29/2001	10/29/2001	
BM5	AD20341	TOC (60 Day BOD)	4.8	ppm	415.1	11/7/2001	11/7/2001	
BM5	AD20341	TKN (60 Day BOD)	0.63	ppm	351.2	11/7/2001	11/7/2001	
BM5	AD20341	NO2NO3 - Initial Reading	ND	ppm	353.2	9/6/2001	9/6/2001	8/29/2001
BM5	AD20341	NO2NO3 - Reading 1	ND	ppm	353.2	9/6/2001	9/6/2001	8/31/2001
BM5	AD20341	NO2NO3 - Reading 2	ND	ppm	353.2	9/6/2001	9/6/2001	9/4/2001
BM5	AD20341	NO2NO3 - Reading 3	0.16	ppm	353.2	9/13/2001	9/13/2001	9/7/2001
BM5	AD20341	NO2NO3 - Reading 4	0.39	ppm	353.2	9/13/2001	9/13/2001	9/10/2001
BM5	AD20341	NO2NO3 - Reading 5	0.41	ppm	353.2	9/21/2001	9/21/2001	9/13/2001
BM5	AD20341	NO2NO3 - Reading 6	0.51	ppm	353.2	9/21/2001	9/21/2001	9/18/2001
BM5	AD20341	NO2NO3 - Reading 7	0.63	ppm	353.2	10/3/2001	10/3/2001	9/28/2001
BM5	AD20341	NO2NO3 - Reading 8	0.64	ppm	353.2	10/12/2001	10/12/2001	10/8/2001
BM5	AD20341	NO2NO3 - Reading 9	0.67	ppm	353.2	10/24/2001	10/24/2001	10/18/2001
BM5	AD20341	NO2NO3 - Final	0.74	ppm	353.2	11/8/2001	11/8/2001	10/29/2001
BM5	AD20341	Non-Filtered BOD 60 - Reading 1	2.6	ppm	5210B	8/29/2001	8/31/2001	
BM5	AD20341	Non-Filtered BOD 60 - Reading 2	6.1	ppm	5210B	8/29/2001	9/4/2001	

BM5	AD20341	Non-Filtered BOD 60 - Reading 3	8.4	ppm	5210B	8/29/2001	9/7/2001	
BM5	AD20341	Non-Filtered BOD 60 - Reading 4	10.0	ppm	5210B	8/29/2001	9/10/2001	
BM5	AD20341	Non-Filtered BOD 60 - Reading 5	11.2	ppm	5210B	8/29/2001	9/13/2001	
BM5	AD20341	Non-Filtered BOD 60 - Reading 6	12.6	ppm	5210B	8/29/2001	9/18/2001	
BM5	AD20341	Non-Filtered BOD 60 - Reading 7	14.8	ppm	5210B	8/29/2001	9/28/2001	
BM5	AD20341	Non-Filtered BOD 60 - Reading 8	16.2	ppm	5210B	8/29/2001	10/8/2001	
BM5	AD20341	Non-Filtered BOD 60 - Reading 9	17.2	ppm	5210B	8/29/2001	10/18/2001	
BM5	AD20341	Non-Filtered BOD 60 - Final	18.0	ppm	5210B	8/29/2001	10/29/2001	
BM6	AD20342	TSS	52.0	ppm	160.2	8/29/2001	8/30/2001	
BM6	AD20342	TDS	134	ppm	160.1	8/29/2001	8/31/2001	
BM6	AD20342	Alkalinity	95.5	ppm	310.1	8/29/2001	8/29/2001	
BM6	AD20342	Turbidity	26	NTU	180.1	8/29/2001	8/29/2001	
BM6	AD20342	Specific Conductance	211	umhos/cm	120.1	8/29/2001	8/29/2001	
BM6	AD20342	True Color	55	PCU	110.2	8/29/2001	8/29/2001	
BM6	AD20342	Chloride, Ion Chromatograph	5.9	ppm	300.0	9/5/2001	9/5/2001	
BM6	AD20342	Sulfate	6.0	ppm	300.0	9/5/2001	9/5/2001	
BM6	AD20343	Sodium	7.0	ppm	200.7	10/25/2001	10/25/2001	
BM6	AD20344	Hardness	90.8	ppm	130.2	8/30/2001	8/30/2001	
BM6	AD20344	Nitrate+Nitrite Nitrogen	ND	ppm	353.2	9/14/2001	9/14/2001	
BM6	AD20344	TP	0.42	ppm	365.4	9/11/2001	9/11/2001	
BM6	AD20344	TKN	1.12	ppm	351.2	9/11/2001	9/11/2001	
BM6	AD20344	Ammonia-Nitrogen	ND	ppm	350.3	8/29/2001	8/29/2001	
BM6	AD20345	TOC	6.1	ppm	415.1	9/5/2001	9/6/2001	
BM6	AD20346	pH, Ultimate BOD survey	7.54	pH units	150.1	10/29/2001	10/29/2001	
BM6	AD20346	TOC (60 Day BOD)	4.7	ppm	415.1	11/7/2001	11/7/2001	
BM6	AD20346	TKN (60 Day BOD)	0.63	ppm	351.2	11/7/2001	11/7/2001	
BM6	AD20346	NO2NO3 - Initial Reading	ND	ppm	353.2	9/6/2001	9/6/2001	8/29/2001
BM6	AD20346	NO2NO3 - Reading 1	ND	ppm	353.2	9/6/2001	9/6/2001	8/31/2001
BM6	AD20346	NO2NO3 - Reading 2	ND	ppm	353.2	9/6/2001	9/6/2001	9/4/2001
BM6	AD20346	NO2NO3 - Reading 3	0.07	ppm	353.2	9/13/2001	9/13/2001	9/7/2001
BM6	AD20346	NO2NO3 - Reading 4	0.35	ppm	353.2	9/13/2001	9/13/2001	9/10/2001
BM6	AD20346	NO2NO3 - Reading 5	0.39	ppm	353.2	9/21/2001	9/21/2001	9/13/2001
BM6	AD20346	NO2NO3 - Reading 6	0.45	ppm	353.2	9/21/2001	9/21/2001	9/18/2001
BM6	AD20346	NO2NO3 - Reading 7	0.59	ppm	353.2	10/3/2001	10/3/2001	9/28/2001
BM6	AD20346	NO2NO3 - Reading 8	0.61	ppm	353.2	10/12/2001	10/12/2001	10/8/2001
BM6	AD20346	NO2NO3 - Reading 9	0.63	ppm	353.2	10/24/2001	10/24/2001	10/18/2001
BM6	AD20346	NO2NO3 - Final	0.69	ppm	353.2	11/8/2001	11/8/2001	10/29/2001
BM6	AD20346	Non-Filtered BOD 60 - Reading 1	2.7	ppm	5210B	8/29/2001	8/31/2001	
BM6	AD20346	Non-Filtered BOD 60 - Reading 2	6.5	ppm	5210B	8/29/2001	9/4/2001	
BM6	AD20346	Non-Filtered BOD 60 - Reading 3	8.9	ppm	5210B	8/29/2001	9/7/2001	
BM6	AD20346	Non-Filtered BOD 60 - Reading 4	10.7	ppm	5210B	8/29/2001	9/10/2001	
BM6	AD20346	Non-Filtered BOD 60 - Reading 5	12.0	ppm	5210B	8/29/2001	9/13/2001	
BM6	AD20346	Non-Filtered BOD 60 - Reading 6	13.4	ppm	5210B	8/29/2001	9/18/2001	
BM6	AD20346	Non-Filtered BOD 60 - Reading 7	15.5	ppm	5210B	8/29/2001	9/28/2001	

BM6	AD20346	Non-Filtered BOD 60 - Reading 8	16.9	ppm	5210B	8/29/2001	10/8/2001	
BM6	AD20346	Non-Filtered BOD 60 - Reading 9	17.8	ppm	5210B	8/29/2001	10/18/2001	
BM6	AD20346	Non-Filtered BOD 60 - Final	18.5	ppm	5210B	8/29/2001	10/29/2001	
BM7	AD20347	TSS	75.0	ppm	160.2	8/29/2001	8/30/2001	
BM7	AD20347	TDS	344	ppm	160.1	8/29/2001	8/31/2001	
BM7	AD20347	Alkalinity	278	ppm	310.1	8/29/2001	8/29/2001	
BM7	AD20347	Turbidity	40	NTU	180.1	8/29/2001	8/29/2001	
BM7	AD20347	Specific Conductance	547	umhos/cm	120.1	8/29/2001	8/29/2001	
BM7	AD20347	True Color	42	PCU	110.2	8/29/2001	8/29/2001	
BM7	AD20347	Chloride, Ion Chromatograph	13.9	ppm	300.0	9/5/2001	9/5/2001	
BM7	AD20347	Sulfate	10.3	ppm	300.0	9/5/2001	9/5/2001	
BM7	AD20348	Sodium	26.8	ppm	200.7	10/25/2001	10/25/2001	
BM7	AD20349	Hardness	248	ppm	130.2	8/30/2001	8/30/2001	
BM7	AD20349	Nitrate+Nitrite Nitrogen	0.06	ppm	353.2	9/14/2001	9/14/2001	
BM7	AD20349	TP	0.59	ppm	365.4	9/11/2001	9/11/2001	
BM7	AD20349	TKN	1.14	ppm	351.2	9/11/2001	9/11/2001	
BM7	AD20349	Ammonia-Nitrogen	0.33	ppm	350.3	8/29/2001	8/29/2001	
BM7	AD20350	TOC	8.5	ppm	415.1	9/5/2001	9/6/2001	
BM7	AD20351	pH, Ultimate BOD survey	7.87	pH units	150.1	10/29/2001	10/29/2001	
BM7	AD20351	TOC (60 Day BOD)	4.9	ppm	415.1	11/7/2001	11/7/2001	
BM7	AD20351	TKN (60 Day BOD)	0.47	ppm	351.2	11/7/2001	11/7/2001	
BM7	AD20351	NO2NO3 - Initial Reading	0.13	ppm	353.2	9/6/2001	9/6/2001	8/29/2001
BM7	AD20351	NO2NO3 - Reading 1	0.14	ppm	353.2	9/6/2001	9/6/2001	8/31/2001
BM7	AD20351	NO2NO3 - Reading 2	0.17	ppm	353.2	9/6/2001	9/6/2001	9/4/2001
BM7	AD20351	NO2NO3 - Reading 3	0.41	ppm	353.2	9/13/2001	9/13/2001	9/7/2001
BM7	AD20351	NO2NO3 - Reading 4	0.63	ppm	353.2	9/13/2001	9/13/2001	9/10/2001
BM7	AD20351	NO2NO3 - Reading 5	0.57	ppm	353.2	9/21/2001	9/21/2001	9/13/2001
BM7	AD20351	NO2NO3 - Reading 6	0.61	ppm	353.2	9/21/2001	9/21/2001	9/18/2001
BM7	AD20351	NO2NO3 - Reading 7	0.74	ppm	353.2	10/3/2001	10/3/2001	9/28/2001
BM7	AD20351	NO2NO3 - Reading 8	0.74	ppm	353.2	10/12/2001	10/12/2001	10/8/2001
BM7	AD20351	NO2NO3 - Reading 9	0.72	ppm	353.2	10/24/2001	10/24/2001	10/18/2001
BM7	AD20351	NO2NO3 - Final	0.81	ppm	353.2	11/8/2001	11/8/2001	10/29/2001
BM7	AD20351	Non-Filtered BOD 60 - Reading 1	1.4	ppm	5210B	8/29/2001	8/31/2001	
BM7	AD20351	Non-Filtered BOD 60 - Reading 2	3.8	ppm	5210B	8/29/2001	9/4/2001	
BM7	AD20351	Non-Filtered BOD 60 - Reading 3	6.1	ppm	5210B	8/29/2001	9/7/2001	
BM7	AD20351	Non-Filtered BOD 60 - Reading 4	7.4	ppm	5210B	8/29/2001	9/10/2001	
BM7	AD20351	Non-Filtered BOD 60 - Reading 5	8.3	ppm	5210B	8/29/2001	9/13/2001	
BM7	AD20351	Non-Filtered BOD 60 - Reading 6	9.5	ppm	5210B	8/29/2001	9/18/2001	
BM7	AD20351	Non-Filtered BOD 60 - Reading 7	10.9	ppm	5210B	8/29/2001	9/28/2001	
BM7	AD20351	Non-Filtered BOD 60 - Reading 8	11.9	ppm	5210B	8/29/2001	10/8/2001	
BM7	AD20351	Non-Filtered BOD 60 - Reading 9	12.6	ppm	5210B	8/29/2001	10/18/2001	
BM7	AD20351	Non-Filtered BOD 60 - Final	13.3	ppm	5210B	8/29/2001	10/29/2001	
BM1	AD20786	Volume of sample, Chlorophyll A (raw)	50	ml	445 (modifie	9/13/2001	9/14/2001	
BM1	AD20786	Chlorophyll A (raw)	82.3	ug/L	445 (modifie	9/13/2001	9/14/2001	

BM1	AD20786	Chlorophyll A (calculated)	16.5	ug/L	445 (modifie	9/13/2001	9/14/2001
BM2	AD20787	Chlorophyll A (calculated)	33.0	ug/L	445 (modifie	9/13/2001	9/14/2001
BM2	AD20787	Chlorophyll A (raw)	165	ug/L	445 (modifie	9/13/2001	9/14/2001
BM2	AD20787	Volume of sample, Chlorophyll A (raw)	50	ml	445 (modifie	9/13/2001	9/14/2001
BM3	AD20788	Volume of sample, Chlorophyll A (raw)	100	ml	445 (modifie	9/13/2001	9/14/2001
BM3	AD20788	Chlorophyll A (calculated)	39.2	ug/L	445 (modifie	9/13/2001	9/14/2001
BM3	AD20788	Chlorophyll A (raw)	392	ug/L	445 (modifie	9/13/2001	9/14/2001
BM4	AD20789	Chlorophyll A (calculated)	27.1	ug/L	445 (modifie	9/13/2001	9/14/2001
BM4	AD20789	Chlorophyll A (raw)	542	ug/L	445 (modifie	9/13/2001	9/14/2001
BM4	AD20789	Volume of sample, Chlorophyll A (raw)	200	ml	445 (modifie	9/13/2001	9/14/2001
BM4	AD20790	Volume of sample, Chlorophyll A (raw)	200	ml	445 (modifie	9/13/2001	9/14/2001
BM4	AD20790	Chlorophyll A (calculated)	26.6	ug/L	445 (modifie	9/13/2001	9/14/2001
BM4	AD20790	Chlorophyll A (raw)	532	ug/L	445 (modifie	9/13/2001	9/14/2001
BM5	AD20791	Volume of sample, Chlorophyll A (raw)	100	ml	445 (modifie	9/13/2001	9/14/2001
BM5	AD20791	Chlorophyll A (calculated)	52.8	ug/L	445 (modifie	9/13/2001	9/14/2001
BM5	AD20791	Chlorophyll A (raw)	528	ug/L	445 (modifie	9/13/2001	9/14/2001
BM6	AD20792	Chlorophyll A (calculated)	60.4	ug/L	445 (modifie	9/13/2001	9/14/2001
BM6	AD20792	Chlorophyll A (raw)	604	ug/L	445 (modifie	9/13/2001	9/14/2001
BM6	AD20792	Volume of sample, Chlorophyll A (raw)	100	ml	445 (modifie	9/13/2001	9/14/2001
BM7	AD20793	Volume of sample, Chlorophyll A (raw)	200	ml	445 (modifie	9/13/2001	9/14/2001
BM7	AD20793	Chlorophyll A (calculated)	13.6	ug/L	445 (modifie	9/13/2001	9/14/2001
BM7	AD20793	Chlorophyll A (raw)	272	ug/L	445 (modifie	9/13/2001	9/14/2001

In-Situ Data

SITE#	Batt	Temp	DO %	DO	SpC	pH	
BM1	7.5	25.58	5.4	0.44	256.8	7.25	8/28/2001 8:20
BM2	7.5	24.29	20.5	1.71	270	6.88	8/28/2001 10:10
BM3	7.5	26.83	3.7	0.29	317.9	7.3	8/28/2001 10:50
BM3A	8.1	26.69	53.3	4.4	260.5	7.53	8/28/2001 9:10***
BM4	8.1	27.03	33.8	2.65	262.1	7.33	8/28/2001 10:28
BM4A	8	27.05	30.9	2.46	281.5	7.36	8/28/2001 9:30
BM5	8.1	27.03	41.5	3.37	250.4	7.39	8/28/2001 11:10
BM6	8	27.78	53.9	4.11	204.3	7.4	8/28/2001 11:25
BM7	7.5	25.19	52.1	4.13	570	7.66	8/28/2001 9:10

***Guess

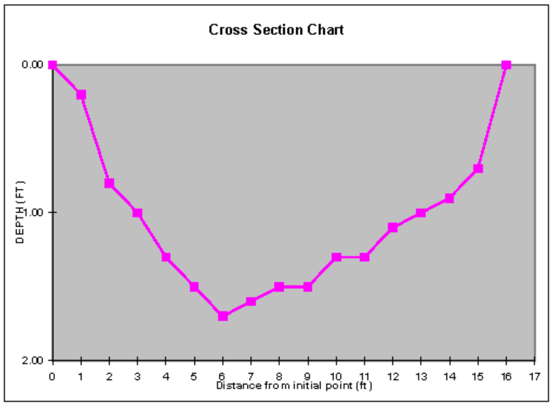
Appendix C2 – Cross Sections and Discharge Measurements

STREAM CROSS-SECTION SPREADSHEET

Site Number: BM1 **Subsegment:** 120111 **Waterbody:** Bayou Maringouin
Site Description: Head waters south of Hwy 977 branch with Hwy 77
Type of Equipment: ☐ Fathometer ☐ Hydrotrac ☑ Manual
Initial Bank: ☐ RDB ☑ LDB
Tapedown:
Guage Height:
Date: 8/28/2001

WIDTH[1] (ft):	16.00
AREA[2] (ft[2]):	17.40
AVG. DEPTH[3] (ft):	1.09

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	1.00	0.20	0.20	1.15%
3	2.0	1.00	0.80	0.80	4.60%
4	3.0	1.00	1.00	1.00	5.75%
5	4.0	1.00	1.30	1.30	7.47%
6	5.0	1.00	1.50	1.50	8.62%
7	6.0	1.00	1.70	1.70	9.77%
8	7.0	1.00	1.60	1.60	9.20%
9	8.0	1.00	1.50	1.50	8.62%
10	9.0	1.00	1.50	1.50	8.62%
11	10.0	1.00	1.30	1.30	7.47%
12	11.0	1.00	1.30	1.30	7.47%
13	12.0	1.00	1.10	1.10	6.32%
14	13.0	1.00	1.00	1.00	5.75%
15	14.0	1.00	0.90	0.90	5.17%
16	15.0	1.00	0.70	0.70	4.02%
17	16.0	0.50	0.00	0.00	0.00%
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
	Total	16.00		17.40	100.00%



Data Collection Crew		Office Data Work	
Measurement made by:	Farlow	Data Imputed by / Date:	Farlow 8/28/01
Notetaker/Recorder:	LaFleur	Data Input Checked by / Date:	Boffy 8/28/01
Other:	Blanchard		

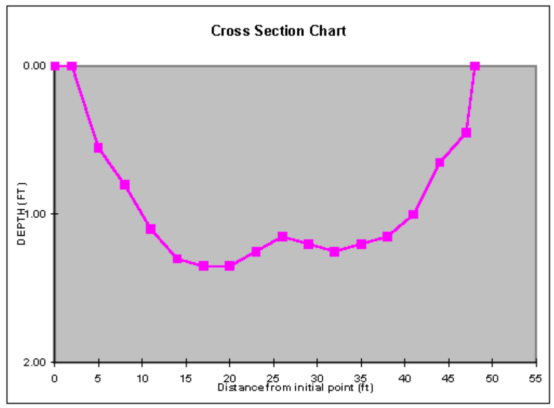
Note 1: WIDTH (ft) = sum of the width column
Note 2: AREA (sq.ft.) = sum of the area column
Note 3: AVG. DEPTH (ft) = area/width (using the values from this table)
Note 4: Width of element
Note 5: Area=Width*Depth for element
Note 6: Percent area = element area/total area x 100%
Note 7: Percent area 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: BM2 **Subsegment:** 120111 **Waterbody:** Bayou Maringouin
Site Description: Overton Lane bridge off Hwy 77
Type of Equipment: ☐ Fathometer ☐ Hydrotrac ☑ Manual
Initial Bank: ☑ RDB ☐ LDB
Tapedown: 12.35
Guage Height:
Date: 8/28/2001

WIDTH[1] (ft):	48.00
AREA[2] (ft^2):	46.80
AVG. DEPTH[3] (ft):	0.98

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	1.00	0.00	0.00	
2	2.0	2.50	0.00	0.00	0.00%
3	5.0	3.00	0.55	1.65	3.53%
4	8.0	3.00	0.80	2.40	5.13%
5	11.0	3.00	1.10	3.30	7.05%
6	14.0	3.00	1.30	3.90	8.33%
7	17.0	3.00	1.35	4.05	8.65%
8	20.0	3.00	1.35	4.05	8.65%
9	23.0	3.00	1.25	3.75	8.01%
10	26.0	3.00	1.15	3.45	7.37%
11	29.0	3.00	1.20	3.60	7.69%
12	32.0	3.00	1.25	3.75	8.01%
13	35.0	3.00	1.20	3.60	7.69%
14	38.0	3.00	1.15	3.45	7.37%
15	41.0	3.00	1.00	3.00	6.41%
16	44.0	3.00	0.65	1.95	4.17%
17	47.0	2.00	0.45	0.90	1.92%
18	48.0	0.50	0.00	0.00	0.00%
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
	Total	48.00		46.80	100.00%



Data Collection Crew		Office Data Work
Measurement made by:	K. Blanchard	Data Inputed by / Date: K. Blanchard 08/29/01
Notetaker/Recorder:	G. LaFleur	Data Input Checked by / D: R. Farlow 8/30/01
Other:	R. Farlow	

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: BM3 **Subsegment:** 120111 **Waterbody:** Bayou Maringouin
Site Description: Musson Lane Bridge (upstream of Dam/ Weir)
Type of Equipment: ☐ Fathometer ☐ Hydrotrac ☑ Manual
Initial Bank: ☑ RDB ☐ LDB
Tapedown: 10.90
Guage Height:
Date: 8/28/2001

WIDTH[1] (ft):	38.00
AREA[2] (ft^2):	82.45
AVG. DEPTH[3] (ft):	2.17

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	1.25	0.00	0.00	
2	2.5	2.00	0.50	1.00	1.21%
3	4.0	1.75	1.80	3.15	3.82%
4	6.0	2.00	1.90	3.80	4.61%
5	8.0	2.00	1.50	3.00	3.64%
6	10.0	2.00	1.45	2.90	3.52%
7	12.0	2.00	1.65	3.30	4.00%
8	14.0	2.00	2.30	4.60	5.58%
9	16.0	2.00	3.15	6.30	7.64%
10	18.0	2.00	3.90	7.80	9.46%
11	20.0	2.00	3.70	7.40	8.98%
12	22.0	2.00	3.40	6.80	8.25%
13	24.0	2.00	3.25	6.50	7.88%
14	26.0	2.00	2.80	5.60	6.79%
15	28.0	2.00	2.80	5.60	6.79%
16	30.0	2.00	2.45	4.90	5.94%
17	32.0	2.00	2.00	4.00	4.85%
18	34.0	2.00	1.80	3.60	4.37%
19	36.0	2.00	1.10	2.20	2.67%
20	38.0	1.00	0.00	0.00	0.00%
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
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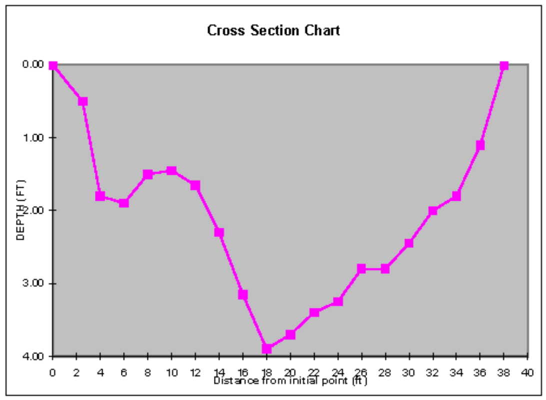
34					
35					
36					
37					
38					
39					
40					
	Total	38.00		82.45	100.00%



Data Collection Crew		Office Data Work	
Measurement made by:	C. Schwartzenburg	Data Inputed by / Date:	R, Farlow 8/29/01
Notetaker/Recorder:	R, Farlow	Data Input Checked by / Date:	K, Blanchard 8/29/01
Other:	G, LaFleur K, Blanchard		

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: BM 3A **Subsegment:** 120111 **Waterbody:** Bayou Maringouin
Site Description: Musson Rd. Bridge
Type of Equipment: ☐ Fathometer ☐ Hydrotrac ☑ Manual
Initial Bank: ☑ RDB ☐ LDB
Tapedown:
Guage Height:
Date: 8/28/2001

WIDTH[1] (ft):	11.90
AREA[2] (ft²):	9.94
AVG. DEPTH[3] (ft):	0.84

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	0.10	0.00	0.00	
2	0.2	0.35	0.00	0.00	0.00%
3	0.7	0.50	0.35	0.18	1.76%
4	1.2	0.50	0.40	0.20	2.01%
5	1.7	0.50	0.70	0.35	3.52%
6	2.2	0.50	0.85	0.43	4.28%
7	2.7	0.50	0.90	0.45	4.53%
8	3.2	0.65	1.35	0.88	8.83%
9	4.0	0.90	1.10	0.99	9.96%
10	5.0	1.00	1.10	1.10	11.07%
11	6.0	1.00	1.40	1.40	14.09%
12	7.0	1.00	1.20	1.20	12.08%
13	8.0	1.00	1.10	1.10	11.07%
14	9.0	1.00	0.80	0.80	8.05%
15	10.0	1.45	0.60	0.87	8.75%
16	11.9	0.95	0.00	0.00	0.00%
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
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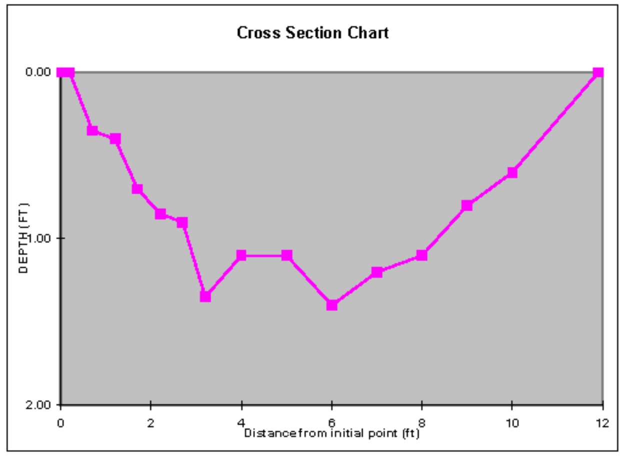
37					
38					
39					
40					
	Total	11.90		9.94	100.00%



Data Collection Crew		Office Data Work	
Measurement made by:	Brignac	**Data Inputed by / Date:**	Champagne/08/28/01
Notetaker/Recorder:	Boffy	**Data Input Checked by / Date:**	
Other:	Champagne		

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 DISCHARGE SPREADSHEET

Site Number: BM 3A **Subsegment:** 120111 **Waterbody** Bayou Maringouin
Site Description: Musson Rd. Bridge
Type of Meter: ☐ Price A:A 1:1 ☑ Pygmy ☐ Price A:A 5:1 **Standard:** ☐ Standard 1 ☑ Standard 2
Type of Equipment: ☑ Wading ☐ Bridge Board ☐ Boat Board
Initial Bank: ☑ RDB ☐ LDB
Tapedown:
Guage Height:
Date: 8/28/2001
Start Time: 8:15 **End Time:** 8:50

WIDTH[1] (ft):	9.30
AREA[2] (ft^2):	3.71
AVG. DEPTH[3] (ft):	0.40
DISCHARGE[4] (cfs):	0.65
AVG. VELOCITY[5] (fps):	0.18

Subsection	Distance from initial point (ft)	Width of element[6] (ft)	Depth of element (ft)	Area of element[7] (ft^2)	Velocity of element (fps) .2D	.6D	.8D	Average[8]	Adjusted Angle[9]	Discharge through element[10] (cfs)	Element discharge at % of total discharge[11]
1	0.2	0.25	0.00	0.00		0.00		0.00		0.00	0.00%
2	0.7	0.50	0.40	0.20		0.00		0.00		0.00	0.00%
3	1.2	0.50	0.45	0.23		0.00		0.00		0.00	0.00%
4	1.7	0.50	0.40	0.20		0.00		0.00		0.00	0.00%
5	2.2	0.50	0.35	0.18		0.00		0.00		0.00	0.00%
6	2.7	0.50	0.30	0.15		0.00		0.00		0.00	0.00%
7	3.2	0.65	0.40	0.26		0.00		0.00		0.00	0.00%
8	4.0	0.55	0.35	0.19		0.17		0.17		0.03	4.92%
9	4.3	0.30	0.40	0.12		0.19		0.19		0.02	3.40%
10	4.6	0.30	0.40	0.12		0.29		0.29		0.03	5.33%
11	4.9	0.30	0.40	0.12		0.38		0.38		0.05	6.92%
12	5.2	0.30	0.40	0.12		0.17		0.17		0.02	3.14%
13	5.5	0.30	0.40	0.12		0.10		0.10		0.01	1.80%
14	5.8	0.30	0.40	0.12		0.48		0.48		0.06	8.76%
15	6.1	0.30	0.50	0.15		0.37		0.37		0.05	8.38%
16	6.4	0.30	0.45	0.14		0.46		0.46		0.06	9.55%
17	6.7	0.30	0.50	0.15		0.40		0.40		0.06	9.25%
18	7.0	0.30	0.50	0.15		0.39		0.39		0.06	9.02%
19	7.3	0.30	0.50	0.15		0.34		0.34		0.05	7.85%
20	7.6	0.30	0.50	0.15		0.29		0.29		0.04	6.73%
21	7.9	0.30	0.50	0.15		0.29		0.29		0.04	6.61%
22	8.2	0.30	0.45	0.14		0.26		0.26		0.03	5.29%
23	8.5	0.30	0.40	0.12		0.17		0.17		0.02	3.05%
24	8.8	0.30	0.40	0.12		0.00		0.00		0.00	0.00%
25	9.1	0.30	0.40	0.12		0.00		0.00		0.00	0.00%
26	9.4	0.20	0.30	0.06		0.00		0.00		0.00	0.00%
27	9.5	0.05	0.00	0.00		0.00		0.00		0.00	0.00%
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
45											
	Total	9.30		3.71						0.65	100.00%

STREAM DISCHARGE SPREADSHEET

Site Number: BM 4A **Subsegment:** 120111 **Waterbody** Unnamed Trib off of Bayou Maringouin

Site Description: 30ft. Downstream of bridge

Type of Meter: ☐ Price A:A 1:1 ☑ Pygmy ☐ Price A:A 5:1

Standard: ☐ Standard 1 ☑ Standard 2

Type of Equipment: ☑ Wading ☐ Bridge Board ☐ Boat Board

Initial Bank: ☑ RDB ☐ LDB

Tapedown:

Guage Height:

Date: 8/28/2001

Start Time: 9:20 **End Time:** 10:40

WIDTH[1] (ft):	7.60
AREA[2] (ft^2):	2.91
AVG. DEPTH[3] (ft):	0.38
DISCHARGE[4] (cfs):	0.35
AVG. VELOCITY[5] (fps):	0.12

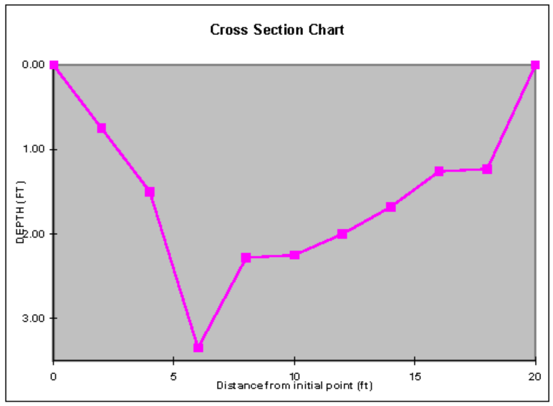
Subsection	Distance from initial point (ft)	Width of element[6] (ft)	Depth of element (ft)	Area of element[7] (ft^2)	Velocity of element (fps) .2D	.6D	.8D	Average[8]	Adjusted Angle[9]	Discharge through element[10] (cfs)	Element discharge at % of total discharge[11]
1	0.0	0.35	0.00	0.00		0.00		0.00			
2	0.7	0.50	0.50	0.25		0.00		0.00		0.00	0.00%
3	1.0	0.30	0.60	0.18		0.00		0.00		0.00	0.00%
4	1.3	0.30	0.60	0.18		0.00		0.00		0.00	0.00%
5	1.6	0.30	0.20	0.06		0.25		0.25		0.02	4.36%
6	1.9	0.30	0.20	0.06		0.11		0.11		0.01	1.91%
7	2.2	0.30	0.25	0.08		0.00		0.00		0.00	0.00%
8	2.5	0.30	0.50	0.15		0.00		0.00		0.00	0.00%
9	2.8	0.30	0.60	0.18		0.14		0.14		0.03	7.51%
10	3.1	0.30	0.60	0.18		0.16		0.16		0.03	8.45%
11	3.4	0.30	0.55	0.17		0.20		0.20		0.03	9.47%
12	3.7	0.30	0.50	0.15		0.00		0.00		0.00	0.00%
13	4.0	0.30	0.50	0.15		0.19		0.19		0.03	8.04%
14	4.3	0.30	0.50	0.15		0.28		0.28		0.04	12.30%
15	4.6	0.30	0.50	0.15		0.23		0.23		0.03	9.83%
16	4.9	0.30	0.40	0.12		0.64		0.64		0.08	22.22%
17	5.2	0.30	0.40	0.12		0.46		0.46		0.05	15.89%
18	5.5	0.40	0.40	0.16		0.00		0.00		0.00	0.00%
19	6.0	0.75	0.30	0.23		0.00		0.00		0.00	0.00%
20	7.0	0.80	0.25	0.20		0.00		0.00		0.00	0.00%
21	7.6	0.30	0.00	0.00		0.00		0.00		0.00	0.00%
22											
23											
24											
25											
26											
27											
28											
29	Measurement is only an estimate. Site too narrow and shallow to obtain accurate flow.										
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
45											
	Total	7.60		2.91						0.35	100.00%

STREAM CROSS-SECTION SPREADSHEET

Site Number: BM 4 **Subsegment:** 120111 **Waterbody:**
Site Description:
Type of Equipment: ☐ Fathometer ☐ Hydrotrac ☑ Manual
Initial Bank: ☑ RDB ☐ LDB
Tapedown:
Guage Height:
Date: 8/20/2001

WIDTH[1] (ft):	20.00
AREA[2] (ft[2]):	32.60
AVG. DEPTH[3] (ft):	1.63

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	1.00	0.00	0.00	
2	2.0	2.00	0.75	1.50	4.60%
3	4.0	2.00	1.50	3.00	9.20%
4	6.0	2.00	3.35	6.70	20.55%
5	8.0	2.00	2.28	4.56	13.99%
6	10.0	2.00	2.25	4.50	13.80%
7	12.0	2.00	2.00	4.00	12.27%
8	14.0	2.00	1.68	3.36	10.31%
9	16.0	2.00	1.26	2.52	7.73%
10	18.0	2.00	1.23	2.46	7.55%
11	20.0	1.00	0.00	0.00	0.00%
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
	Total	20.00		32.60	100.00%



Data Collection Crew		Office Data Work	
Measurement made by:		Data Inputed by / Date:	
Notetaker/Recorder:		Data Input Checked by / Date:	
Other:			

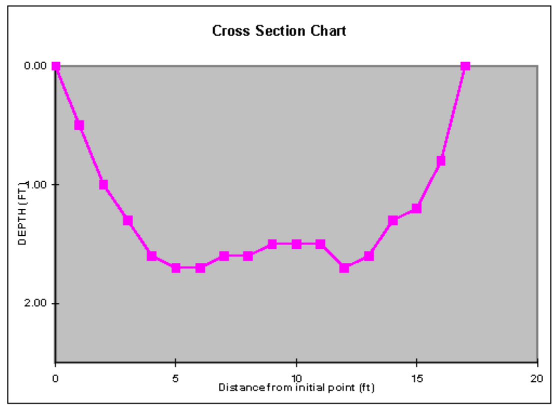
Note 1: WIDTH (ft) = sum of the width column
Note 2: AREA (sq.ft.) = sum of the area column
Note 3: AVG. DEPTH (ft) = area/width (using the values from this table)
Note 4: Width of element
Note 5: Area=Width*Depth for element
Note 6: Percent area = element area/total area x 100%
Note 7: Percent area 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.

STREAM CROSS-SECTION SPREADSHEET

Site Number: BM 4A **Subsegment:** 120111 **Waterbody:** Unnamed Trib off of Bayou Maringouin
Site Description: 50ft. Downstream of Bridge
Type of Equipment: ☐ Fathometer ☐ Hydrotrac ☑ Manual
Initial Bank: ☑ RDB ☐ LDB
Tapedown:
Guage Height:
Date: 8/20/2001

WIDTH[1] (ft):	17.00
AREA[2] (ft^2):	22.10
AVG. DEPTH[3] (ft):	1.30

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	1.00	0.50	0.50	2.26%
3	2.0	1.00	1.00	1.00	4.52%
4	3.0	1.00	1.30	1.30	5.88%
5	4.0	1.00	1.60	1.60	7.24%
6	5.0	1.00	1.70	1.70	7.69%
7	6.0	1.00	1.70	1.70	7.69%
8	7.0	1.00	1.60	1.60	7.24%
9	8.0	1.00	1.60	1.60	7.24%
10	9.0	1.00	1.50	1.50	6.79%
11	10.0	1.00	1.50	1.50	6.79%
12	11.0	1.00	1.50	1.50	6.79%
13	12.0	1.00	1.70	1.70	7.69%
14	13.0	1.00	1.60	1.60	7.24%
15	14.0	1.00	1.30	1.30	5.88%
16	15.0	1.00	1.20	1.20	5.43%
17	16.0	1.00	0.80	0.80	3.62%
18	17.0	0.50	0.00	0.00	0.00%
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
	Total	17.00		22.10	100.00%



Data Collection Crew		Office Data Work	
Measurement made by:	Beffy	Data Inputed by / Date:	Champagne/08/28/01
Notetaker/Recorder:	Champagne	Data Input Checked by / Date:	
Other:	Brignac		

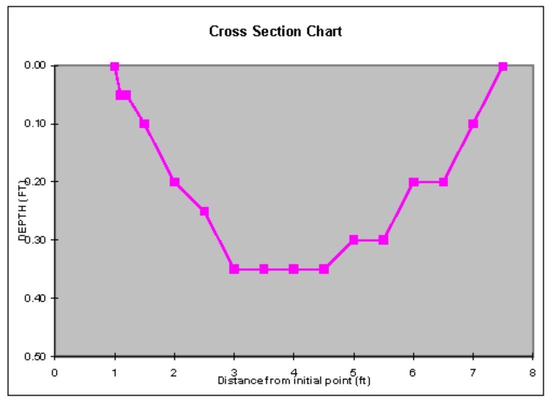
Note 1: WIDTH (ft) = sum of the width column
Note 2: AREA (sq.ft.) = sum of the area column
Note 3: AVG. DEPTH (ft) = area/width (using the values from this table)
Note 4: Width of element
Note 5: Area=Width*Depth for element
Note 6: Percent area = element area/total area x 100%
Note 7: Percent area 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: BM7 **Subsegment:** 120111 **Waterbody:** Bayou Maringouin
Site Description: Unnamed trib south of Valuerda School
Type of Equipment: ☐ Fathometer ☐ Hydrotrac ☑ Manual
Initial Bank: ☑ RDB ☐ LDB
Tapedown:
Guage Height:
Date: 8/28/2001

WIDTH[1] (ft):	6.50
AREA[2] (ft²):	1.53
AVG. DEPTH[3] (ft):	0.24

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	1.0	0.05	0.00	0.00	0.00%
2	1.1	0.10	0.05	0.01	0.33%
3	1.2	0.20	0.05	0.01	0.65%
4	1.5	0.40	0.10	0.04	2.61%
5	2.0	0.50	0.20	0.10	6.54%
6	2.5	0.50	0.25	0.13	8.17%
7	3.0	0.50	0.35	0.18	11.44%
8	3.5	0.50	0.35	0.18	11.44%
9	4.0	0.50	0.35	0.18	11.44%
10	4.5	0.50	0.35	0.18	11.44%
11	5.0	0.50	0.30	0.15	9.80%
12	5.5	0.50	0.30	0.15	9.80%
13	6.0	0.50	0.20	0.10	6.54%
14	6.5	0.50	0.20	0.10	6.54%
15	7.0	0.50	0.10	0.05	3.27%
16	7.5	0.25	0.00	0.00	0.00%
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
	Total	6.50		1.53	100.00%



Data Collection Crew		Office Data Work	
Measurement made by:	Lafleur	**Data Inputed by / Date:**	Farlow 8/28/01
Notetaker/Recorder:	Blanchard	**Data Input Checked by / Date:**	Boffy 8/28/01
Other:	Farlow		

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.

Site BM5's cross section data can be found in the field notes. Also, the estimate for the cross section at site BM6 is located in the field notes.

Site	Cross Sectional Area	Minimum Measurable Velocity	Minimum Measurable Flow	
	ft^2	ft/s	ft^3/s	m^3/s
BM1	17.40	0.1	1.74	0.0493
BM2	46.80	0.1	4.68	0.1325
BM3	82.45	0.1	8.245	0.2335
BM3A	9.94	0.1	0.994	0.0281
BM4	32.60	0.1	3.26	0.0923
BM4A	22.10	0.1	2.21	0.0626
BM5	18.30	0.1	1.83	0.0518
BM6*	80.00	0.1	8	0.2265
BM7	1.53	0.1	0.153	0.0043

* Site BM6's width and depth was estimated by the survey crew

Appendix C3 – Field Notes

Bayou Maringouin Survey
Subsegment #120111

8-27-01
Crew-Brignac, Boffy, Champagne

Lot #'s-
Sulfuric Acid- 02704
Hydrochloric Acid- 02684
Nitric Acid- 02694

Chlorophyll A and C Bottle- 060101-4LPW-032503C99
TOC Bottle- 00070779
UBOD Bottle- 051501-4LPC128500C99
A Bottle- 051501-2LPY032100C99
DI Water Bottle- 060101-4LPC320600C99
B Bottle- 051501-2LPY008100C99

8-28-01
Crew-Brignac, Boffy, Champagne

Site # BM 3A
-Took discharge measurement with pygmy meter
- In-situ water quality parameters
- Batt- 8.1V Temp.- 26.69 DO%- 53.3
- DO- 4.40 SpC- 260.5 pH- 7.53

- Weather- warm, sunny/partly cloudy
  - Tapedown- 18.41 ft.
  - Meter- hydrolab minisonde 37761

Site # BM4A
-Discharge taken with pygmy at 0930
- In-situ water quality parameters taken at 0930
- Batt- 8.0 v Temp.- 27.05 DO%- 30.9
- DO- 2.46 SpC- 281.5 pH- 7.36

- Weather- Hot Partly Cloudy
- Meter- hydrolab minisonde 37761

Site # BM 4
-No flow observed with drogue
- In-situ water quality taken at 1020 hrs, 100 yards upstream of BM4A
- Batt- 8.1 Temp.- 27.03 DO%- 33.8
- DO- 2.65 SpC- 262.1 pH- 7.33

- Secchi Disc- 3.35 Bottom

X-section-
0-0
2-0.75ft
4- 1.5 ft
6- 3.35 ft
8- 2.28 ft
10- 2.25 ft
12- 2.0 ft
14- 1.68 ft
16- 1.26 ft
18- 1.23 ft
20- 0.0 ft

Site # BM5- Hwy. 76 Bridge
-No flow observed with drogue
-Tapedown- 17.0 ft.
-Water quality and x-section done at 11:10
- Insitu water quality taken with hydrolab minisonde
- Batt- 8.1 V Temp- 27.03 DO%- 41.5
- DO- 3.37 SpC- 250.4 pH-7.39

-Secchi Disc- 1.4 ft. (bottom)

Representative x-section
0-.0 ft
2-.6 ft
4-1.4 ft
6- 1.4 ft
8-1.3 ft
10-1.4 ft
12-.8 ft
14-.5 ft
16-.6 ft
18-.6 ft
20-.4 ft
22-.2 ft
23-0 ft

Site #BM6

- No flow observed with drogue
- Insitu parameters and water quality taken at 1145
- Water quality parameters
- Batt- 8.0 Temp- 27.78 DO%- 53.9
- DO- 4.11 SpC- 204.3 pH- 7.4
- Secchi Disc= 1.0 ft
- Not accessible for representative x-section: it was estimated to be 40 ft wide and a max depth of 2 ft. with the bottom of the stream being symmetric.

Bayou Maringouin Survey
(Subsegment # 120111)

Blanchard/Nolan **8/27/01**

Deployed BM1 @ 1100 hrs. Headwaters
Deployed BM3 @ 1120 hrs. Wooden Bridge
Deployed BM5 @ 1150 hrs. Hwy 76 bridge

Blanchard, LaFleur, Farlow **8/28/01**

Lot #'s
A bottle: 051501-2LPY032100C99
B bottle: 051501-2LPY008100C99
C bottle: 060101-4LPW032503C99
Chlor A: 060101-4LPW032503C99
TOC : 00070779
UBOD : 051501-4LPC128500C99
DI bottle: 060101-4LPC320600C99

ACID LOT #'s
Nitric: 02694
Hydrochloric: 02684
Sulfuric: 02704

SITE BM1 0820 hrs.

-Cross Section; no flow
-In situ
-Water Quality
Insitu parameters using Minisonde 4A Serial#38734
Ph 7.25 DO 0.44
Temp. 25.58 Cond. 256.8
Batt. 7.5 % DO 5.4
Secchi Disc 0.5'

SITE BM7 0910 hrs.

-Cross Section and drogue
-In situ
-Water Quality
-GPS collected on 8/27/01
-Unsuccessful measuring with pygmy so decided to use drogue
-Drogue moved 30 ft. in 4 min. 2 sec. Or 242 sec
30/242 = 0.123 ft/sec
Insitu parameters using Minisonde 4A

Ph 7.66	DO 4.13
Temp. 25.19	Cond. 570
Batt. 7.5	% DO 52.1

Secchi Disc bottom

SITE BM2 1010 hrs.

-Cross Section using tapedown
-no flow
-In situ
-Water Quality

Insitu parameters using Minisonde 4A

Ph 6.88	DO 1.71
Temp. 24.29	Cond. 270
Batt. 7.5	% DO 20.5

Secchi Disc 0.5’

SITE BM3 1050 hrs.

-Cross Section using tapedown
-no flow
-In situ
-Water Quality

Insitu parameters using Minisonde 4A

Ph 7.3	DO 0.29
Temp. 26.83	Cond. 317.9
Batt. 7.5	% DO 3.7

Secchi Disc bottom

SITE BM4 1130 hrs.

-GPS collected

SITE BM6 1145 hrs.

-GPS collected

Blanchard, LaFleur, Boffy **08/29/01**

-Dropped samples off @ lab 0830 hrs.
-Retrieved Continuous monitors:
Site BM5 @ 0925 hrs
Site BM3 @ 0940 hrs
Site BM1 @ 0950 hrs

-GPS collected at BM7 1010 hrs.

Appendix C4 – Continuous Monitor

DataSonde 4a 37751
Log File Name : Bayou Maringouin Site 1
Setup Date (MMDDYY) : 082701
Setup Time (HHMMSS) : 075028
Starting Date (MMDDYY) : 082701
Starting Time (HHMMSS) : 080000
Stopping Date (MMDDYY) : 083001
Stopping Time (HHMMSS) : 080000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000200

Average	1.047966	Survey Period	
Max	2.84	Average	0.151538
Min	0.05	Min	0.05
		Max	0.44

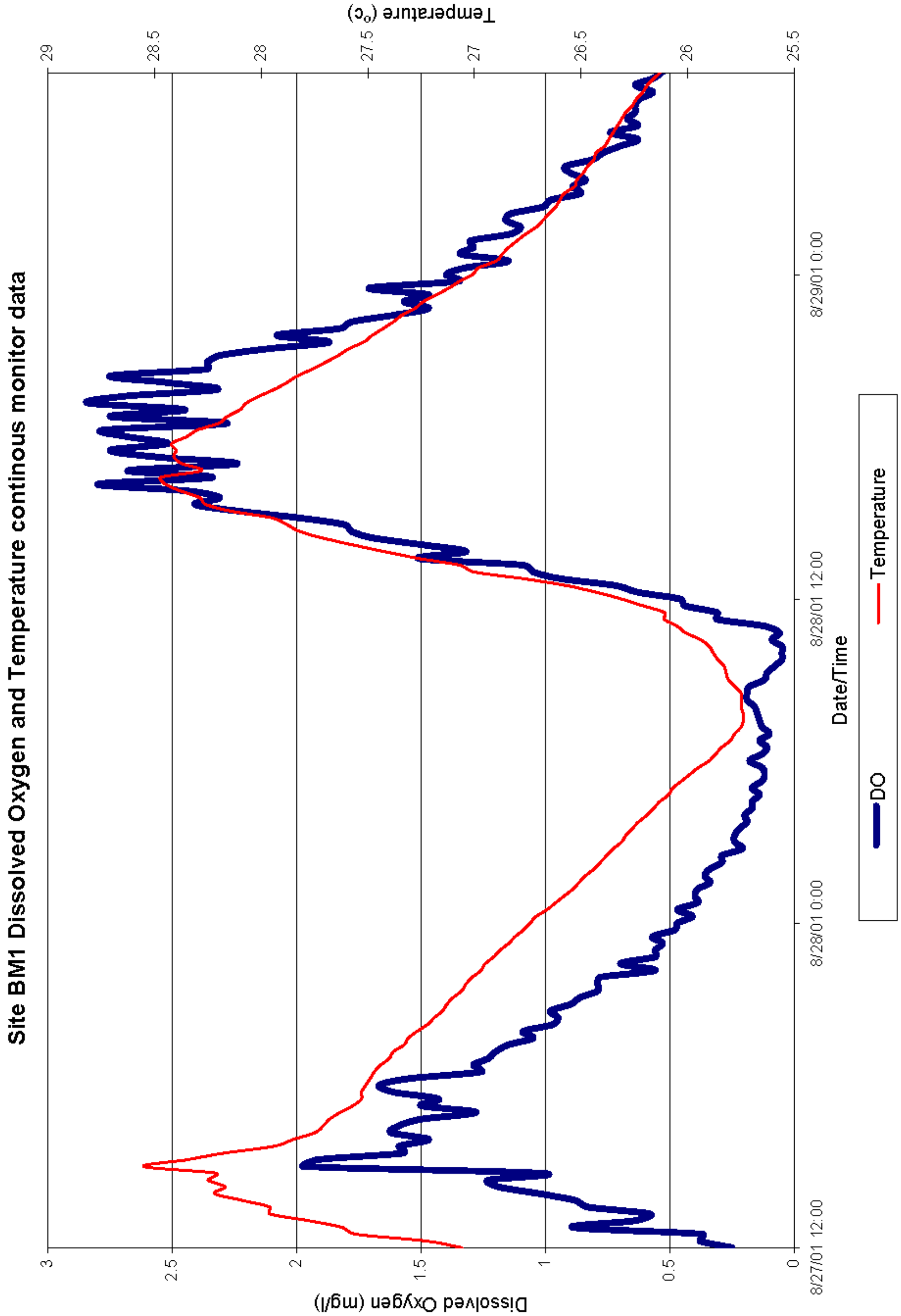
24 Hour	
Average	1.047525773
Max	2.84
Min	0.05
Min + 1	1.05

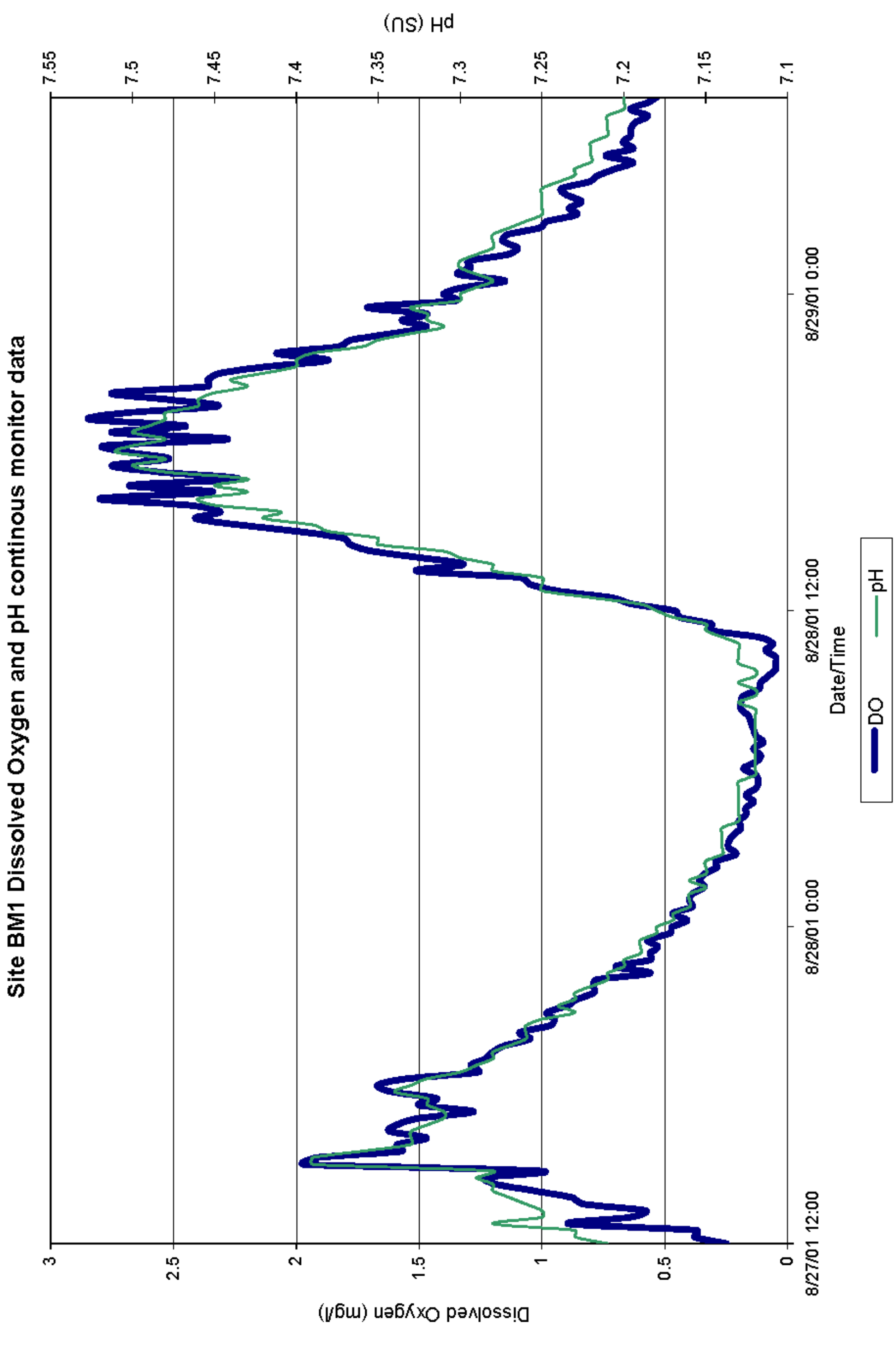
Date MMDDYY	Time HHMMSS	Temp øC	DO% Sat	pH Units	DO mg/l	SpCond æS/cm	IBatt Volts	
8/27/2001	120000	27.06	3.1	7.21	0.25	230	11.7	8/27/01 12:00
8/27/2001	121500	27.23	4.8	7.23	0.38	232	11.8	8/27/01 12:15
8/27/2001	123000	27.56	4.7	7.23	0.37	229	11.7	8/27/01 12:30
8/27/2001	124500	27.62	11.3	7.28	0.89	232	11.7	8/27/01 12:45
8/27/2001	130000	27.78	8.1	7.25	0.64	232	11.7	8/27/01 13:00
8/27/2001	131500	27.96	7.4	7.25	0.58	231	11.7	8/27/01 13:15
8/27/2001	133000	27.96	10.5	7.26	0.83	230	11.7	8/27/01 13:30
8/27/2001	134500	28.09	11.2	7.27	0.88	232	11.7	8/27/01 13:45
8/27/2001	140000	28.22	13.3	7.28	1.03	232	11.7	8/27/01 14:00
8/27/2001	141500	28.17	15.3	7.28	1.19	233	11.8	8/27/01 14:15
8/27/2001	143000	28.25	15.8	7.29	1.23	234	11.7	8/27/01 14:30
8/27/2001	144500	28.21	13	7.28	1.01	235	11.7	8/27/01 14:45
8/27/2001	150000	28.55	25.4	7.39	1.97	233	11.7	8/27/01 15:00
8/27/2001	151500	28.35	24.7	7.39	1.92	233	11.7	8/27/01 15:15
8/27/2001	153000	28.17	20.1	7.36	1.57	233	11.7	8/27/01 15:30
8/27/2001	154500	27.94	20.3	7.33	1.59	234	11.7	8/27/01 15:45
8/27/2001	160000	27.85	18.8	7.33	1.47	235	11.6	8/27/01 16:00
8/27/2001	161500	27.75	20.7	7.33	1.62	233	11.7	8/27/01 16:15
8/27/2001	163000	27.71	20.2	7.32	1.59	235	11.6	8/27/01 16:30
8/27/2001	164500	27.68	19.1	7.31	1.5	235	11.8	8/27/01 16:45
8/27/2001	170000	27.63	16.3	7.31	1.28	235	11.6	8/27/01 17:00
8/27/2001	171500	27.57	19.1	7.32	1.5	235	11.7	8/27/01 17:15
8/27/2001	173000	27.53	18.1	7.32	1.43	235	11.7	8/27/01 17:30
8/27/2001	174500	27.53	20.4	7.34	1.61	235	11.7	8/27/01 17:45
8/27/2001	180000	27.51	21.2	7.33	1.67	236	11.7	8/27/01 18:00
8/27/2001	181500	27.49	19.7	7.32	1.55	237	11.7	8/27/01 18:15
8/27/2001	183000	27.47	16	7.3	1.26	237	11.7	8/27/01 18:30
8/27/2001	184500	27.44	16.4	7.29	1.29	239	11.7	8/27/01 18:45
8/27/2001	190000	27.4	15.5	7.28	1.23	240	11.7	8/27/01 19:00
8/27/2001	191500	27.38	15.2	7.28	1.2	241	11.6	8/27/01 19:15
8/27/2001	193000	27.33	14.5	7.27	1.15	242	11.7	8/27/01 19:30
8/27/2001	194500	27.31	13.2	7.26	1.05	243	11.7	8/27/01 19:45
8/27/2001	200000	27.27	13.7	7.26	1.09	243	11.7	8/27/01 20:00

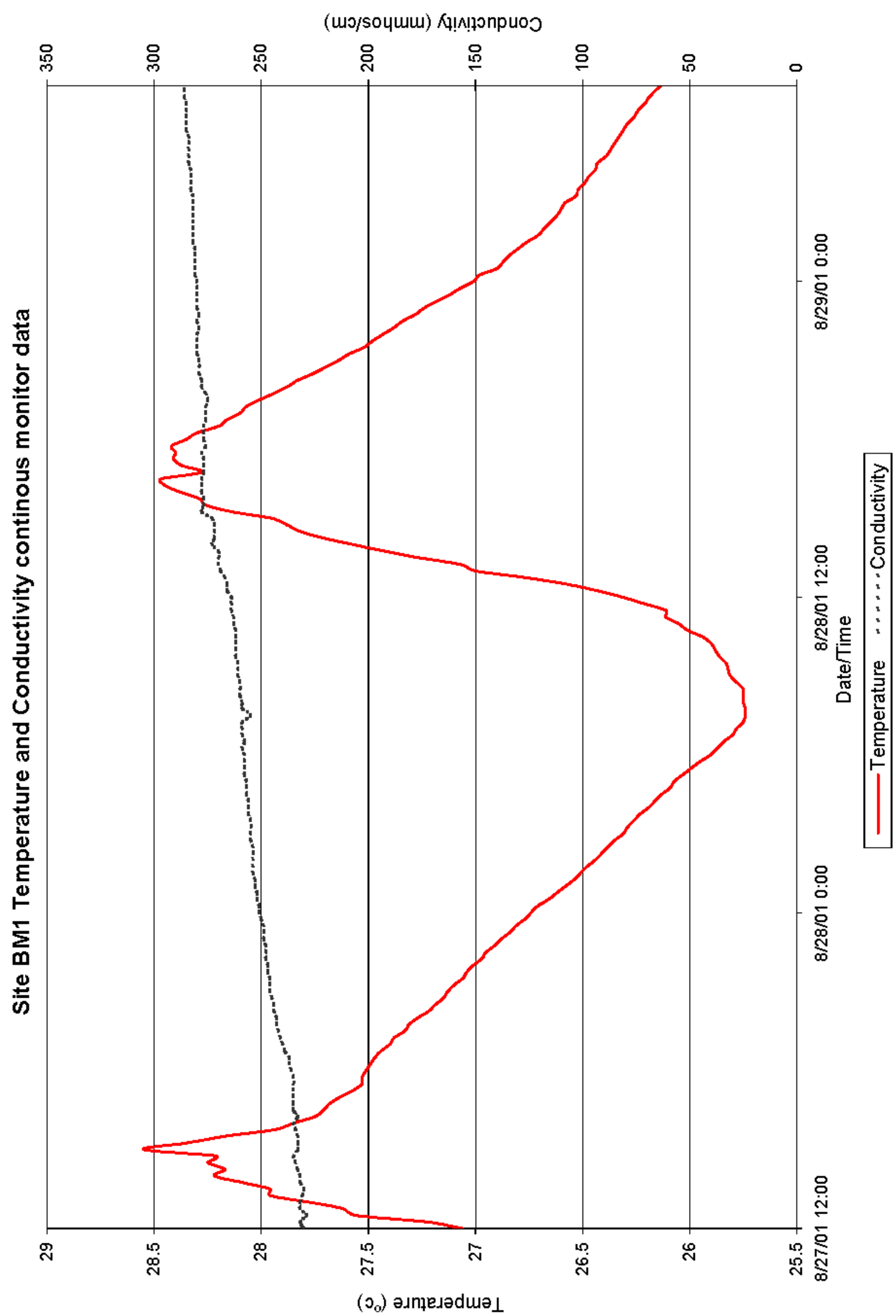
8/27/2001	201500	27.22	12.3	7.26	0.97	244	11.6	8/27/01 20:15
8/27/2001	203000	27.19	11.9	7.25	0.95	244	11.7	8/27/01 20:30
8/27/2001	204500	27.15	12.3	7.23	0.98	245	11.6	8/27/01 20:45
8/27/2001	210000	27.13	11.3	7.24	0.9	246	11.7	8/27/01 21:00
8/27/2001	211500	27.1	10.9	7.23	0.86	246	11.6	8/27/01 21:15
8/27/2001	213000	27.06	10	7.23	0.79	246	11.7	8/27/01 21:30
8/27/2001	214500	27.04	10	7.22	0.79	247	11.6	8/27/01 21:45
8/27/2001	220000	27.01	9.8	7.21	0.78	247	11.6	8/27/01 22:00
8/27/2001	221500	26.97	7	7.21	0.56	248	11.7	8/27/01 22:15
8/27/2001	223000	26.95	8.7	7.2	0.7	248	11.7	8/27/01 22:30
8/27/2001	224500	26.91	7	7.2	0.56	248	11.6	8/27/01 22:45
8/27/2001	230000	26.88	7.1	7.19	0.56	249	11.7	8/27/01 23:00
8/27/2001	231500	26.84	6.7	7.19	0.53	249	11.6	8/27/01 23:15
8/27/2001	233000	26.81	7.2	7.19	0.57	249	11.6	8/27/01 23:30
8/27/2001	234500	26.77	6	7.18	0.48	250	11.7	8/27/01 23:45
8/28/2001	0	26.74	5.9	7.18	0.47	251	11.6	8/28/01 0:00
8/28/2001	1500	26.71	5.1	7.17	0.41	251	11.7	8/28/01 0:15
8/28/2001	3000	26.66	5.8	7.17	0.47	252	11.7	8/28/01 0:30
8/28/2001	4500	26.62	4.8	7.16	0.39	252	11.6	8/28/01 0:45
8/28/2001	10000	26.58	5	7.16	0.4	253	11.6	8/28/01 1:00
8/28/2001	11500	26.54	4.9	7.16	0.39	253	11.7	8/28/01 1:15
8/28/2001	13000	26.51	4.3	7.15	0.34	254	11.7	8/28/01 1:30
8/28/2001	14500	26.48	4.5	7.16	0.36	254	11.7	8/28/01 1:45
8/28/2001	20000	26.44	4.2	7.15	0.34	254	11.6	8/28/01 2:00
8/28/2001	21500	26.41	3.6	7.15	0.29	254	11.6	8/28/01 2:15
8/28/2001	23000	26.38	3.6	7.15	0.29	254	11.7	8/28/01 2:30
8/28/2001	24500	26.35	2.6	7.14	0.21	255	11.6	8/28/01 2:45
8/28/2001	30000	26.31	3	7.14	0.24	255	11.7	8/28/01 3:00
8/28/2001	31500	26.29	2.9	7.14	0.24	255	11.6	8/28/01 3:15
8/28/2001	33000	26.26	2.7	7.14	0.22	255	11.6	8/28/01 3:30
8/28/2001	34500	26.23	2.4	7.14	0.19	256	11.6	8/28/01 3:45
8/28/2001	40000	26.19	2.5	7.13	0.2	256	11.7	8/28/01 4:00
8/28/2001	41500	26.16	2.2	7.13	0.17	256	11.6	8/28/01 4:15
8/28/2001	43000	26.13	2.1	7.13	0.17	257	11.5	8/28/01 4:30
8/28/2001	44500	26.09	1.7	7.13	0.14	257	11.6	8/28/01 4:45
8/28/2001	50000	26.07	2.1	7.13	0.17	257	11.6	8/28/01 5:00
8/28/2001	51500	26.03	1.6	7.13	0.13	258	11.6	8/28/01 5:15
8/28/2001	53000	25.99	1.5	7.13	0.12	258	11.6	8/28/01 5:30
8/28/2001	54500	25.95	1.6	7.12	0.13	258	11.7	8/28/01 5:45
8/28/2001	60000	25.9	2.2	7.12	0.18	258	11.6	8/28/01 6:00
8/28/2001	61500	25.87	1.6	7.12	0.13	259	11.6	8/28/01 6:15
8/28/2001	63000	25.84	1.3	7.12	0.11	258	11.7	8/28/01 6:30
8/28/2001	64500	25.8	1.7	7.12	0.14	259	11.6	8/28/01 6:45
8/28/2001	70000	25.78	1.3	7.12	0.1	259	11.7	8/28/01 7:00
8/28/2001	71500	25.75	1.6	7.12	0.13	259	11.6	8/28/01 7:15
8/28/2001	73000	25.74	1.8	7.12	0.14	255	11.6	8/28/01 7:30
8/28/2001	74500	25.74	1.9	7.12	0.15	259	11.6	8/28/01 7:45
8/28/2001	80000	25.75	2	7.12	0.16	259	11.6	8/28/01 8:00
8/28/2001	81500	25.75	2.3	7.12	0.19	260	11.6	8/28/01 8:15
8/28/2001	83000	25.75	2.3	7.13	0.19	260	11.5	8/28/01 8:30
8/28/2001	84500	25.78	2.2	7.12	0.18	260	11.7	8/28/01 8:45

8/28/2001	90000	25.81	1.5	7.12	0.12	261	11.5	8/28/01 9:00
8/28/2001	91500	25.82	1.3	7.13	0.11	261	11.6	8/28/01 9:15
8/28/2001	93000	25.83	1	7.12	0.08	261	11.7	8/28/01 9:30
8/28/2001	94500	25.86	0.6	7.12	0.05	262	11.6	8/28/01 9:45
8/28/2001	100000	25.88	0.6	7.13	0.05	262	11.6	8/28/01 10:00
8/28/2001	101500	25.9	0.6	7.13	0.05	262	11.5	8/28/01 10:15
8/28/2001	103000	25.94	1.1	7.13	0.09	262	11.6	8/28/01 10:30
8/28/2001	104500	26.01	0.8	7.13	0.06	262	11.6	8/28/01 10:45
8/28/2001	110000	26.05	1.5	7.14	0.12	263	11.6	8/28/01 11:00
8/28/2001	111500	26.11	3.8	7.15	0.31	263	11.6	8/28/01 11:15
8/28/2001	113000	26.11	3.9	7.15	0.31	264	11.5	8/28/01 11:30
8/28/2001	114500	26.21	5.5	7.17	0.44	264	11.6	8/28/01 11:45
8/28/2001	120000	26.31	5.6	7.18	0.46	264	11.5	8/28/01 12:00
8/28/2001	121500	26.43	7.9	7.19	0.63	266	11.6	8/28/01 12:15
8/28/2001	123000	26.57	9	7.22	0.72	266	11.6	8/28/01 12:30
8/28/2001	124500	26.77	11.8	7.25	0.94	267	11.6	8/28/01 12:45
8/28/2001	130000	27	13.2	7.25	1.05	269	11.6	8/28/01 13:00
8/28/2001	131500	27.07	13.7	7.25	1.09	270	11.6	8/28/01 13:15
8/28/2001	133000	27.26	19.1	7.28	1.51	270	11.6	8/28/01 13:30
8/28/2001	134500	27.42	16.8	7.28	1.32	270	11.5	8/28/01 13:45
8/28/2001	140000	27.57	18.9	7.3	1.49	273	11.6	8/28/01 14:00
8/28/2001	141500	27.71	21.5	7.31	1.69	272	11.6	8/28/01 14:15
8/28/2001	143000	27.82	22.7	7.35	1.78	272	11.6	8/28/01 14:30
8/28/2001	144500	27.88	23.1	7.35	1.81	272	11.6	8/28/01 14:45
8/28/2001	150000	27.95	25.5	7.38	1.99	273	11.6	8/28/01 15:00
8/28/2001	151500	28.14	28.6	7.39	2.23	278	11.6	8/28/01 15:15
8/28/2001	153000	28.26	31	7.42	2.41	277	11.6	8/28/01 15:30
8/28/2001	154500	28.29	29.7	7.41	2.31	277	11.6	8/28/01 15:45
8/28/2001	160000	28.38	31.4	7.45	2.44	278	11.5	8/28/01 16:00
8/28/2001	161500	28.45	36.1	7.46	2.8	278	11.6	8/28/01 16:15
8/28/2001	163000	28.47	30.2	7.43	2.34	278	11.6	8/28/01 16:30
8/28/2001	164500	28.28	34.4	7.45	2.68	277	11.5	8/28/01 16:45
8/28/2001	170000	28.37	28.9	7.43	2.24	277	11.6	8/28/01 17:00
8/28/2001	171500	28.41	33	7.48	2.56	277	11.6	8/28/01 17:15
8/28/2001	173000	28.4	35.4	7.5	2.75	278	11.6	8/28/01 17:30
8/28/2001	174500	28.42	32.5	7.48	2.52	276	11.6	8/28/01 17:45
8/28/2001	180000	28.35	34.5	7.51	2.68	277	11.6	8/28/01 18:00
8/28/2001	181500	28.3	35.8	7.5	2.78	277	11.5	8/28/01 18:15
8/28/2001	183000	28.2	29.2	7.48	2.28	277	11.6	8/28/01 18:30
8/28/2001	184500	28.16	35.3	7.5	2.75	276	11.6	8/28/01 18:45
8/28/2001	190000	28.1	31.4	7.49	2.45	276	11.6	8/28/01 19:00
8/28/2001	191500	28.07	36.4	7.48	2.84	276	11.6	8/28/01 19:15
8/28/2001	193000	28.01	34.4	7.48	2.69	275	11.6	8/28/01 19:30
8/28/2001	194500	27.94	29.6	7.46	2.32	276	11.5	8/28/01 19:45
8/28/2001	200000	27.88	32.2	7.46	2.52	278	11.6	8/28/01 20:00
8/28/2001	201500	27.83	35.1	7.45	2.75	278	11.6	8/28/01 20:15
8/28/2001	203000	27.76	30.1	7.43	2.36	279	11.6	8/28/01 20:30
8/28/2001	204500	27.7	30.1	7.44	2.36	279	11.5	8/28/01 20:45
8/28/2001	210000	27.64	29.3	7.42	2.31	279	11.6	8/28/01 21:00
8/28/2001	211500	27.59	27	7.4	2.12	280	11.6	8/28/01 21:15
8/28/2001	213000	27.52	23.8	7.4	1.87	280	11.5	8/28/01 21:30

8/28/2001	214500	27.48	26.3	7.39	2.08	280	11.6	8/28/01 21:45
8/28/2001	220000	27.43	23.2	7.36	1.83	280	11.6	8/28/01 22:00
8/28/2001	221500	27.38	22.5	7.35	1.78	279	11.6	8/28/01 22:15
8/28/2001	223000	27.34	20.4	7.33	1.61	280	11.6	8/28/01 22:30
8/28/2001	224500	27.28	18.5	7.31	1.47	279	11.6	8/28/01 22:45
8/28/2001	230000	27.24	19.7	7.32	1.57	280	11.6	8/28/01 23:00
8/28/2001	231500	27.18	18.6	7.32	1.47	280	11.6	8/28/01 23:15
8/28/2001	233000	27.12	21.5	7.33	1.71	280	11.6	8/28/01 23:30
8/28/2001	234500	27.07	16.9	7.3	1.35	280	11.6	8/28/01 23:45
8/29/2001	0	27.01	17.6	7.3	1.4	280	11.5	8/29/01 0:00
8/29/2001	1500	26.98	16.6	7.29	1.32	281	11.6	8/29/01 0:15
8/29/2001	3000	26.9	14.4	7.28	1.15	281	11.5	8/29/01 0:30
8/29/2001	4500	26.87	16.9	7.29	1.34	281	11.6	8/29/01 0:45
8/29/2001	10000	26.84	16.1	7.3	1.29	281	11.6	8/29/01 1:00
8/29/2001	11500	26.8	16.3	7.3	1.3	281	11.5	8/29/01 1:15
8/29/2001	13000	26.76	14.2	7.29	1.14	282	11.6	8/29/01 1:30
8/29/2001	14500	26.71	13.8	7.28	1.1	282	11.5	8/29/01 1:45
8/29/2001	20000	26.68	14.4	7.28	1.16	282	11.6	8/29/01 2:00
8/29/2001	21500	26.65	14.2	7.28	1.14	282	11.6	8/29/01 2:15
8/29/2001	23000	26.62	12.6	7.27	1.01	282	11.6	8/29/01 2:30
8/29/2001	24500	26.6	12.3	7.26	0.98	282	11.6	8/29/01 2:45
8/29/2001	30000	26.58	10.8	7.25	0.86	282	11.6	8/29/01 3:00
8/29/2001	31500	26.53	11.1	7.25	0.89	282	11.6	8/29/01 3:15
8/29/2001	33000	26.52	10.5	7.25	0.84	283	11.6	8/29/01 3:30
8/29/2001	34500	26.49	11.2	7.25	0.9	283	11.6	8/29/01 3:45
8/29/2001	40000	26.47	11.5	7.25	0.92	283	11.5	8/29/01 4:00
8/29/2001	41500	26.44	10.1	7.24	0.81	283	11.6	8/29/01 4:15
8/29/2001	43000	26.43	9.5	7.23	0.77	284	11.5	8/29/01 4:30
8/29/2001	44500	26.39	8.7	7.23	0.7	284	11.5	8/29/01 4:45
8/29/2001	50000	26.37	7.8	7.22	0.63	284	11.6	8/29/01 5:00
8/29/2001	51500	26.35	9.2	7.22	0.74	284	11.6	8/29/01 5:15
8/29/2001	53000	26.33	7.8	7.22	0.63	284	11.6	8/29/01 5:30
8/29/2001	54500	26.31	8.3	7.22	0.67	285	11.6	8/29/01 5:45
8/29/2001	60000	26.29	7.9	7.21	0.64	285	11.5	8/29/01 6:00
8/29/2001	61500	26.26	7.9	7.21	0.64	285	11.5	8/29/01 6:15
8/29/2001	63000	26.24	7.7	7.21	0.62	285	11.6	8/29/01 6:30
8/29/2001	64500	26.21	7.1	7.21	0.57	285	11.5	8/29/01 6:45
8/29/2001	70000	26.19	8	7.2	0.64	286	11.5	8/29/01 7:00
8/29/2001	71500	26.16	7.1	7.2	0.57	286	11.6	8/29/01 7:15
8/29/2001	73000	26.13	6.5	7.2	0.53	286	11.6	8/29/01 7:30
8/29/2001	74500	26.16	6.3	7.2	0.51	286	11.5	8/29/01 7:45
8/29/2001	80000	26.13	6.1	7.2	0.5	287	11.6	8/29/01 8:00


Site BM1 Dissolved Oxygen and Temperature continous monitor data
Dissolved Oxygen (mg/l)
0
0.5
1
1.5
2
2.5
3
Temperature (°c)
25.5
26
26.5
27
27.5
28
28.5
29
Date/Time
8/27/01 12:00
8/28/01 0:00
8/28/01 12:00
8/29/01 0:00
DO
Temperature


Site BM1 Dissolved Oxygen and pH continous monitor data
Dissolved Oxygen (mg/l)
pH (SU)
Date/Time
8/27/01 12:00
8/28/01 0:00
8/28/01 12:00
8/29/01 0:00
DO
pH


Site BM1 Temperature and Conductivity continous monitor data
Temperature (°c)
29
28.5
28
27.5
27
26.5
26
25.5
Conductivity (mmhos/cm)
350
300
250
200
150
100
50
0
8/27/01 12:00
8/28/01 0:00
8/28/01 12:00
8/29/01 0:00
Date/Time
Temperature
Conductivity

DataSonde 4a 37756			24 Hour	
Log File Name : Bayou Maringouin Site 3	Average	1.321525	Average	1.062164948
Setup Date (MMDDYY) : 082701	min	0.36	min	0.49
Setup Time (HHMMSS) : 075745	max	3.18	max	2.03
Starting Date (MMDDYY) : 082701			Min + 1	1.049
Starting Time (HHMMSS) : 080000	Survey Period			
Stopping Date (MMDDYY) : 083001	Average	0.540769		
Stopping Time (HHMMSS) : 080000	Min	0.49		
Interval (HHMMSS) : 001500	Max	0.79		
Sensor warmup (HHMMSS) : 000200				
Circltr warmup (HHMMSS) : 000200				
		0.36		

Date MMDDYY	Time HHMMSS	Temp øC	DO% Sat	DO mg/l	SpCond æS/cm	pH Units	IBatt Volts	
8/27/2001	120000	28.18	32.2	2.51	375	7.34	11.4	8/27/01 12:00
8/27/2001	121500	28.17	29.3	2.29	374	7.32	11.4	8/27/01 12:15
8/27/2001	123000	28.2	29.3	2.28	373	7.32	11.4	8/27/01 12:30
8/27/2001	124500	28.27	28.9	2.25	372	7.32	11.4	8/27/01 12:45
8/27/2001	130000	28.4	29.7	2.31	370	7.31	11.4	8/27/01 13:00
8/27/2001	131500	28.64	29	2.24	369	7.33	11.4	8/27/01 13:15
8/27/2001	133000	28.65	33.2	2.56	367	7.32	11.4	8/27/01 13:30
8/27/2001	134500	28.87	36.6	2.81	369	7.35	11.4	8/27/01 13:45
8/27/2001	140000	29.06	41.4	3.18	367	7.36	11.4	8/27/01 14:00
8/27/2001	141500	29.06	37.4	2.87	367	7.34	11.4	8/27/01 14:15
8/27/2001	143000	29.26	38.5	2.95	366	7.35	11.4	8/27/01 14:30
8/27/2001	144500	29.57	31.7	2.41	362	7.33	11.4	8/27/01 14:45
8/27/2001	150000	29.09	30.8	2.36	362	7.31	11.4	8/27/01 15:00
8/27/2001	151500	29.38	30.9	2.36	359	7.37	11.4	8/27/01 15:15
8/27/2001	153000	29.03	37.1	2.85	361	7.35	11.4	8/27/01 15:30
8/27/2001	154500	29.07	28.4	2.18	360	7.31	11.4	8/27/01 15:45
8/27/2001	160000	28.84	34.3	2.64	361	7.33	11.3	8/27/01 16:00
8/27/2001	161500	28.88	39.9	3.07	360	7.37	11.4	8/27/01 16:15
8/27/2001	163000	28.81	39.7	3.06	361	7.38	11.4	8/27/01 16:30
8/27/2001	164500	28.71	39.1	3.02	360	7.36	11.4	8/27/01 16:45
8/27/2001	170000	28.66	35.5	2.75	360	7.36	11.4	8/27/01 17:00
8/27/2001	171500	28.58	34.6	2.68	360	7.35	11.4	8/27/01 17:15
8/27/2001	173000	28.5	32.4	2.51	358	7.34	11.3	8/27/01 17:30
8/27/2001	174500	28.43	33.9	2.63	358	7.34	11.4	8/27/01 17:45
8/27/2001	180000	28.39	32.1	2.49	356	7.35	11.4	8/27/01 18:00
8/27/2001	181500	28.36	31.7	2.46	356	7.33	11.4	8/27/01 18:15
8/27/2001	183000	28.33	31.7	2.47	355	7.33	11.4	8/27/01 18:30
8/27/2001	184500	28.27	27.4	2.13	355	7.31	11.4	8/27/01 18:45
8/27/2001	190000	28.24	28.4	2.21	354	7.31	11.4	8/27/01 19:00
8/27/2001	191500	28.22	27.9	2.17	354	7.3	11.4	8/27/01 19:15
8/27/2001	193000	28.16	24.4	1.9	353	7.29	11.3	8/27/01 19:30
8/27/2001	194500	28.13	26.4	2.06	351	7.29	11.3	8/27/01 19:45
8/27/2001	200000	28.09	25.7	2.01	351	7.28	11.4	8/27/01 20:00

8/27/2001	201500	28.07	23.3	1.82	349	7.27	11.4	8/27/01 20:15
8/27/2001	203000	28.02	20.7	1.62	348	7.26	11.3	8/27/01 20:30
8/27/2001	204500	28	21	1.64	348	7.25	11.4	8/27/01 20:45
8/27/2001	210000	27.96	19.9	1.55	349	7.25	11.4	8/27/01 21:00
8/27/2001	211500	27.93	18.1	1.42	349	7.24	11.3	8/27/01 21:15
8/27/2001	213000	27.9	19	1.49	349	7.24	11.4	8/27/01 21:30
8/27/2001	214500	27.88	18.8	1.47	348	7.24	11.4	8/27/01 21:45
8/27/2001	220000	27.84	15.7	1.23	347	7.23	11.4	8/27/01 22:00
8/27/2001	221500	27.8	16.3	1.28	347	7.23	11.3	8/27/01 22:15
8/27/2001	223000	27.77	15	1.18	346	7.22	11.3	8/27/01 22:30
8/27/2001	224500	27.74	13.5	1.06	346	7.21	11.4	8/27/01 22:45
8/27/2001	230000	27.71	14	1.1	346	7.21	11.4	8/27/01 23:00
8/27/2001	231500	27.67	16.3	1.28	347	7.22	11.4	8/27/01 23:15
8/27/2001	233000	27.65	14.8	1.17	347	7.22	11.4	8/27/01 23:30
8/27/2001	234500	27.63	14	1.1	346	7.22	11.3	8/27/01 23:45
8/28/2001	0	27.61	11.7	0.92	346	7.2	11.4	8/28/01 0:00
8/28/2001	1500	27.56	12.1	0.95	346	7.2	11.3	8/28/01 0:15
8/28/2001	3000	27.55	10.2	0.8	346	7.2	11.3	8/28/01 0:30
8/28/2001	4500	27.53	10.3	0.81	345	7.19	11.3	8/28/01 0:45
8/28/2001	10000	27.5	9.4	0.74	344	7.19	11.4	8/28/01 1:00
8/28/2001	11500	27.47	9	0.71	343	7.19	11.3	8/28/01 1:15
8/28/2001	13000	27.45	8.1	0.64	342	7.18	11.3	8/28/01 1:30
8/28/2001	14500	27.44	7.3	0.57	342	7.18	11.4	8/28/01 1:45
8/28/2001	20000	27.42	6.9	0.54	342	7.18	11.3	8/28/01 2:00
8/28/2001	21500	27.4	6.5	0.52	341	7.18	11.3	8/28/01 2:15
8/28/2001	23000	27.38	6.4	0.5	340	7.18	11.3	8/28/01 2:30
8/28/2001	24500	27.35	6.2	0.49	340	7.18	11.3	8/28/01 2:45
8/28/2001	30000	27.33	6.2	0.49	340	7.18	11.3	8/28/01 3:00
8/28/2001	31500	27.32	6.2	0.49	338	7.18	11.4	8/28/01 3:15
8/28/2001	33000	27.3	6.2	0.49	338	7.18	11.4	8/28/01 3:30
8/28/2001	34500	27.27	6.3	0.5	337	7.18	11.3	8/28/01 3:45
8/28/2001	40000	27.25	6.3	0.5	337	7.17	11.3	8/28/01 4:00
8/28/2001	41500	27.22	6.4	0.51	336	7.17	11.3	8/28/01 4:15
8/28/2001	43000	27.2	6.5	0.51	335	7.17	11.3	8/28/01 4:30
8/28/2001	44500	27.18	6.5	0.52	335	7.17	11.4	8/28/01 4:45
8/28/2001	50000	27.16	6.5	0.52	334	7.17	11.4	8/28/01 5:00
8/28/2001	51500	27.15	6.6	0.52	333	7.16	11.3	8/28/01 5:15
8/28/2001	53000	27.13	6.6	0.52	332	7.16	11.3	8/28/01 5:30
8/28/2001	54500	27.09	6.5	0.52	332	7.16	11.3	8/28/01 5:45
8/28/2001	60000	27.06	6.5	0.52	331	7.16	11.3	8/28/01 6:00
8/28/2001	61500	27.03	6.5	0.52	331	7.17	11.3	8/28/01 6:15
8/28/2001	63000	27	6.5	0.51	330	7.16	11.3	8/28/01 6:30
8/28/2001	64500	26.98	6.5	0.51	330	7.17	11.4	8/28/01 6:45
8/28/2001	70000	26.96	6.4	0.51	330	7.17	11.3	8/28/01 7:00
8/28/2001	71500	26.94	6.5	0.52	330	7.17	11.3	8/28/01 7:15
8/28/2001	73000	26.91	6.5	0.52	330	7.16	11.3	8/28/01 7:30
8/28/2001	74500	26.91	6.5	0.52	330	7.16	11.4	8/28/01 7:45
8/28/2001	80000	26.91	6.5	0.52	330	7.16	11.4	8/28/01 8:00
8/28/2001	81500	26.89	6.4	0.51	330	7.16	11.3	8/28/01 8:15
8/28/2001	83000	26.89	6.4	0.51	329	7.16	11.3	8/28/01 8:30
8/28/2001	84500	26.89	6.4	0.51	329	7.16	11.3	8/28/01 8:45

8/28/2001	90000	26.9	6.3	0.5	329	7.16	11.2	8/28/01 9:00
8/28/2001	91500	26.9	6.3	0.5	329	7.16	11.3	8/28/01 9:15
8/28/2001	93000	26.91	6.2	0.49	328	7.16	11.3	8/28/01 9:30
8/28/2001	94500	26.91	6.4	0.51	327	7.16	11.4	8/28/01 9:45
8/28/2001	100000	26.93	6.1	0.49	327	7.16	11.3	8/28/01 10:00
8/28/2001	101500	26.94	6.4	0.51	326	7.16	11.3	8/28/01 10:15
8/28/2001	103000	26.96	6.3	0.5	326	7.16	11.3	8/28/01 10:30
8/28/2001	104500	26.99	6.6	0.52	325	7.16	11.3	8/28/01 10:45
8/28/2001	110000	27.03	6.9	0.55	325	7.16	11.3	8/28/01 11:00
8/28/2001	111500	27.06	7	0.56	324	7.16	11.3	8/28/01 11:15
8/28/2001	113000	27.13	7.5	0.6	325	7.16	11.4	8/28/01 11:30
8/28/2001	114500	27.29	10	0.79	325	7.18	11.3	8/28/01 11:45
8/28/2001	120000	27.3	11	0.87	324	7.18	11.3	8/28/01 12:00
8/28/2001	121500	27.38	11.7	0.92	323	7.19	11.3	8/28/01 12:15
8/28/2001	123000	27.49	15.6	1.23	324	7.21	11.3	8/28/01 12:30
8/28/2001	124500	27.55	15.2	1.2	323	7.2	11.3	8/28/01 12:45
8/28/2001	130000	27.64	13.2	1.04	321	7.19	11.3	8/28/01 13:00
8/28/2001	131500	27.67	13.8	1.08	321	7.19	11.3	8/28/01 13:15
8/28/2001	133000	27.7	15.4	1.21	321	7.2	11.3	8/28/01 13:30
8/28/2001	134500	27.86	17.4	1.37	320	7.21	11.3	8/28/01 13:45
8/28/2001	140000	27.93	21	1.64	319	7.23	11.3	8/28/01 14:00
8/28/2001	141500	27.99	20.4	1.6	320	7.23	11.3	8/28/01 14:15
8/28/2001	143000	28.07	22	1.71	319	7.23	11.2	8/28/01 14:30
8/28/2001	144500	28.22	22.5	1.75	319	7.25	11.2	8/28/01 14:45
8/28/2001	150000	28.14	20.7	1.62	319	7.23	11.3	8/28/01 15:00
8/28/2001	151500	28.19	20.8	1.62	320	7.23	11.3	8/28/01 15:15
8/28/2001	153000	28.32	22.4	1.74	320	7.24	11.3	8/28/01 15:30
8/28/2001	154500	28.34	21.7	1.69	320	7.23	11.3	8/28/01 15:45
8/28/2001	160000	28.4	23.8	1.85	320	7.24	11.3	8/28/01 16:00
8/28/2001	161500	28.42	23.9	1.85	320	7.24	11.2	8/28/01 16:15
8/28/2001	163000	28.4	23.8	1.85	320	7.25	11.3	8/28/01 16:30
8/28/2001	164500	28.43	21.9	1.7	320	7.23	11.3	8/28/01 16:45
8/28/2001	170000	28.4	20.8	1.62	320	7.23	11.3	8/28/01 17:00
8/28/2001	171500	28.38	20.8	1.62	320	7.23	11.3	8/28/01 17:15
8/28/2001	173000	28.36	19.6	1.52	320	7.22	11.3	8/28/01 17:30
8/28/2001	174500	28.37	22.1	1.72	320	7.23	11.3	8/28/01 17:45
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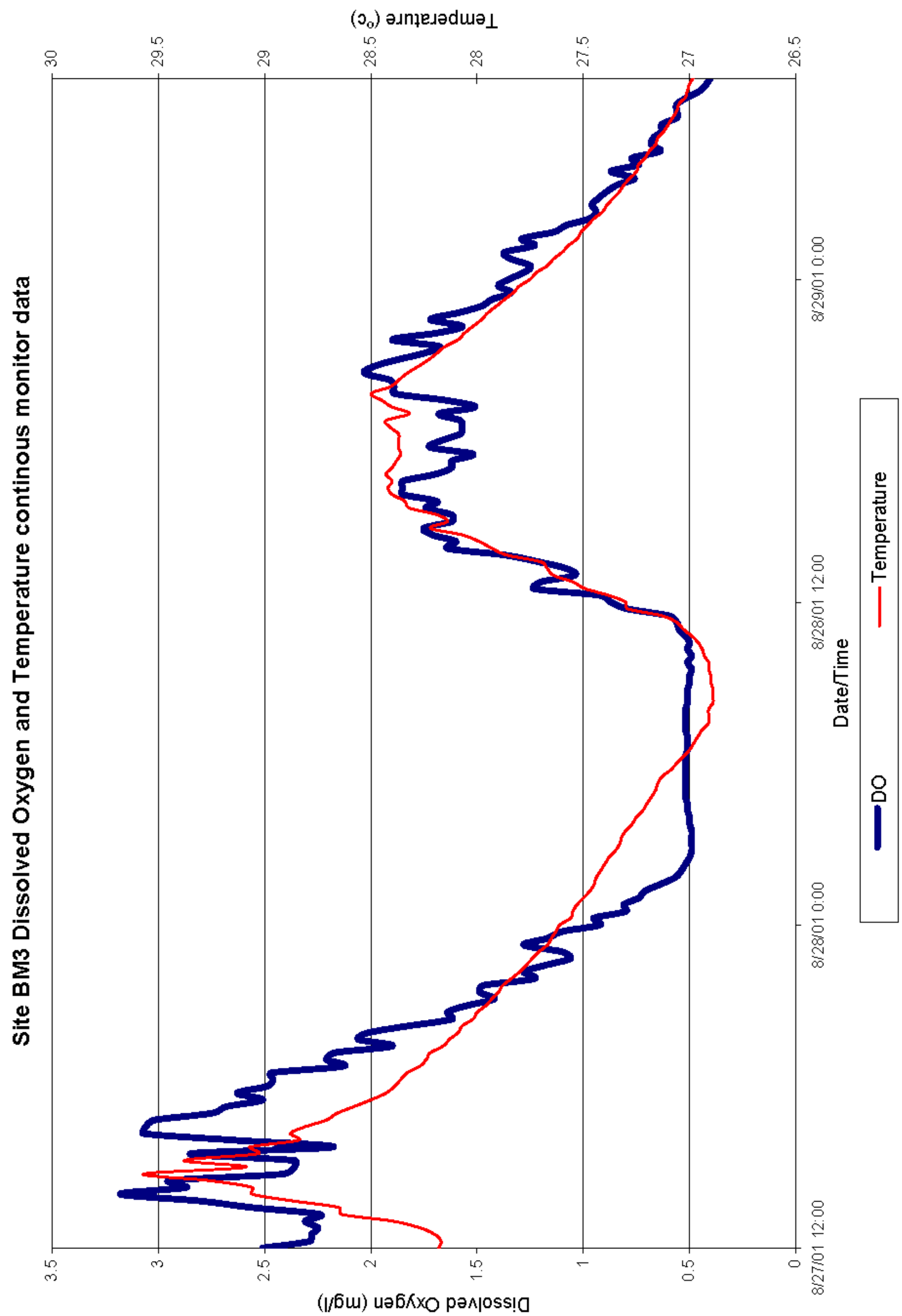
8/28/2001	181500	28.37	20.3	1.58	320	7.22	11.3	8/28/01 18:15
8/28/2001	183000	28.41	20.2	1.57	320	7.22	11.3	8/28/01 18:30
8/28/2001	184500	28.43	20.4	1.58	320	7.22	11.3	8/28/01 18:45
8/28/2001	190000	28.32	21.7	1.68	321	7.22	11.3	8/28/01 19:00
8/28/2001	191500	28.4	19.5	1.51	320	7.22	11.3	8/28/01 19:15
8/28/2001	193000	28.45	21.3	1.65	319	7.22	11.3	8/28/01 19:30
8/28/2001	194500	28.5	24.4	1.89	316	7.24	11.3	8/28/01 19:45
8/28/2001	200000	28.41	24.4	1.89	317	7.26	11.2	8/28/01 20:00
8/28/2001	201500	28.37	24.6	1.91	317	7.25	11.3	8/28/01 20:15
8/28/2001	203000	28.33	26.2	2.03	317	7.26	11.3	8/28/01 20:30
8/28/2001	204500	28.28	25.6	1.99	317	7.26	11.3	8/28/01 20:45
8/28/2001	210000	28.23	24.1	1.88	317	7.25	11.2	8/28/01 21:00
8/28/2001	211500	28.19	22.4	1.75	317	7.24	11.3	8/28/01 21:15
8/28/2001	213000	28.15	21.5	1.68	317	7.23	11.3	8/28/01 21:30

8/28/2001	214500	28.09	24.3	1.9	316	7.24	11.3	8/28/01 21:45
8/28/2001	220000	28.06	21.6	1.69	316	7.23	11.3	8/28/01 22:00
8/28/2001	221500	28.02	20.1	1.57	316	7.23	11.3	8/28/01 22:15
8/28/2001	223000	27.98	22	1.72	316	7.23	11.3	8/28/01 22:30
8/28/2001	224500	27.95	20.3	1.59	316	7.23	11.3	8/28/01 22:45
8/28/2001	230000	27.91	18.9	1.48	316	7.22	11.2	8/28/01 23:00
8/28/2001	231500	27.87	18.3	1.43	316	7.21	11.2	8/28/01 23:15
8/28/2001	233000	27.83	17	1.34	316	7.21	11.3	8/28/01 23:30
8/28/2001	234500	27.8	17.8	1.4	316	7.2	11.3	8/28/01 23:45
8/29/2001	0	27.75	17.2	1.35	315	7.2	11.3	8/29/01 0:00
8/29/2001	1500	27.72	16.3	1.28	315	7.2	11.3	8/29/01 0:15
8/29/2001	3000	27.67	15.9	1.25	315	7.2	11.3	8/29/01 0:30
8/29/2001	4500	27.64	17	1.34	315	7.19	11.3	8/29/01 0:45
8/29/2001	10000	27.6	17.4	1.37	315	7.2	11.3	8/29/01 1:00
8/29/2001	11500	27.57	15.6	1.23	315	7.19	11.3	8/29/01 1:15
8/29/2001	13000	27.53	16.3	1.29	315	7.19	11.3	8/29/01 1:30
8/29/2001	14500	27.51	14.5	1.14	315	7.18	11.3	8/29/01 1:45
8/29/2001	20000	27.48	13.6	1.08	315	7.17	11.3	8/29/01 2:00
8/29/2001	21500	27.45	12.3	0.97	315	7.17	11.3	8/29/01 2:15
8/29/2001	23000	27.41	11.9	0.94	315	7.17	11.2	8/29/01 2:30
8/29/2001	24500	27.39	12.1	0.96	315	7.17	11.2	8/29/01 2:45
8/29/2001	30000	27.36	11.8	0.93	315	7.16	11.3	8/29/01 3:00
8/29/2001	31500	27.33	11.2	0.89	315	7.17	11.2	8/29/01 3:15
8/29/2001	33000	27.31	10.6	0.84	315	7.16	11.2	8/29/01 3:30
8/29/2001	34500	27.28	9.6	0.76	316	7.16	11.2	8/29/01 3:45
8/29/2001	40000	27.25	11	0.87	316	7.16	11.2	8/29/01 4:00
8/29/2001	41500	27.24	9.4	0.74	316	7.16	11.2	8/29/01 4:15
8/29/2001	43000	27.21	9.7	0.77	316	7.16	11.2	8/29/01 4:30
8/29/2001	44500	27.19	8.1	0.64	316	7.15	11.2	8/29/01 4:45
8/29/2001	50000	27.16	8.6	0.68	316	7.15	11.2	8/29/01 5:00
8/29/2001	51500	27.15	8.4	0.67	316	7.15	11.2	8/29/01 5:15
8/29/2001	53000	27.12	8	0.63	316	7.15	11.3	8/29/01 5:30
8/29/2001	54500	27.1	8	0.63	316	7.15	11.2	8/29/01 5:45
8/29/2001	60000	27.08	7.1	0.56	316	7.15	11.2	8/29/01 6:00
8/29/2001	61500	27.06	7	0.56	317	7.15	11.3	8/29/01 6:15
8/29/2001	63000	27.05	7.1	0.56	317	7.14	11.3	8/29/01 6:30
8/29/2001	64500	27.02	6.4	0.51	317	7.15	11.2	8/29/01 6:45
8/29/2001	70000	27.01	5.6	0.45	318	7.14	11.3	8/29/01 7:00
8/29/2001	71500	27	5.3	0.42	317	7.14	11.2	8/29/01 7:15
8/29/2001	73000	26.98	5	0.4	318	7.14	11.3	8/29/01 7:30
8/29/2001	74500	26.96	4.8	0.38	318	7.14	11.2	8/29/01 7:45
8/29/2001	80000	26.95	4.5	0.36	318	7.14	11.2	8/29/01 8:00


Site BM3 Dissolved Oxygen and Temperature continous monitor data
Dissolved Oxygen (mg/l)
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0.5
1
1.5
2
2.5
3
3.5
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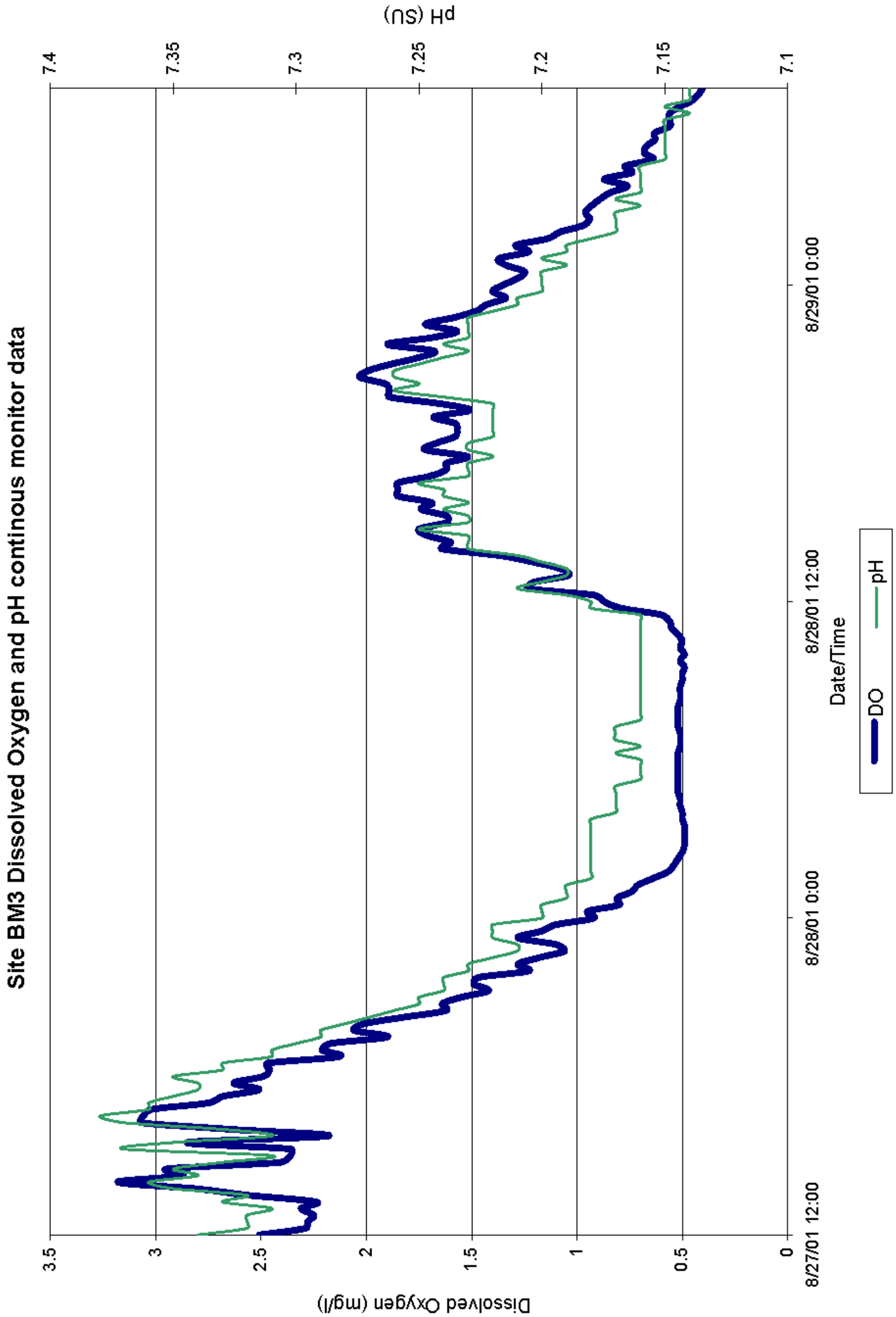
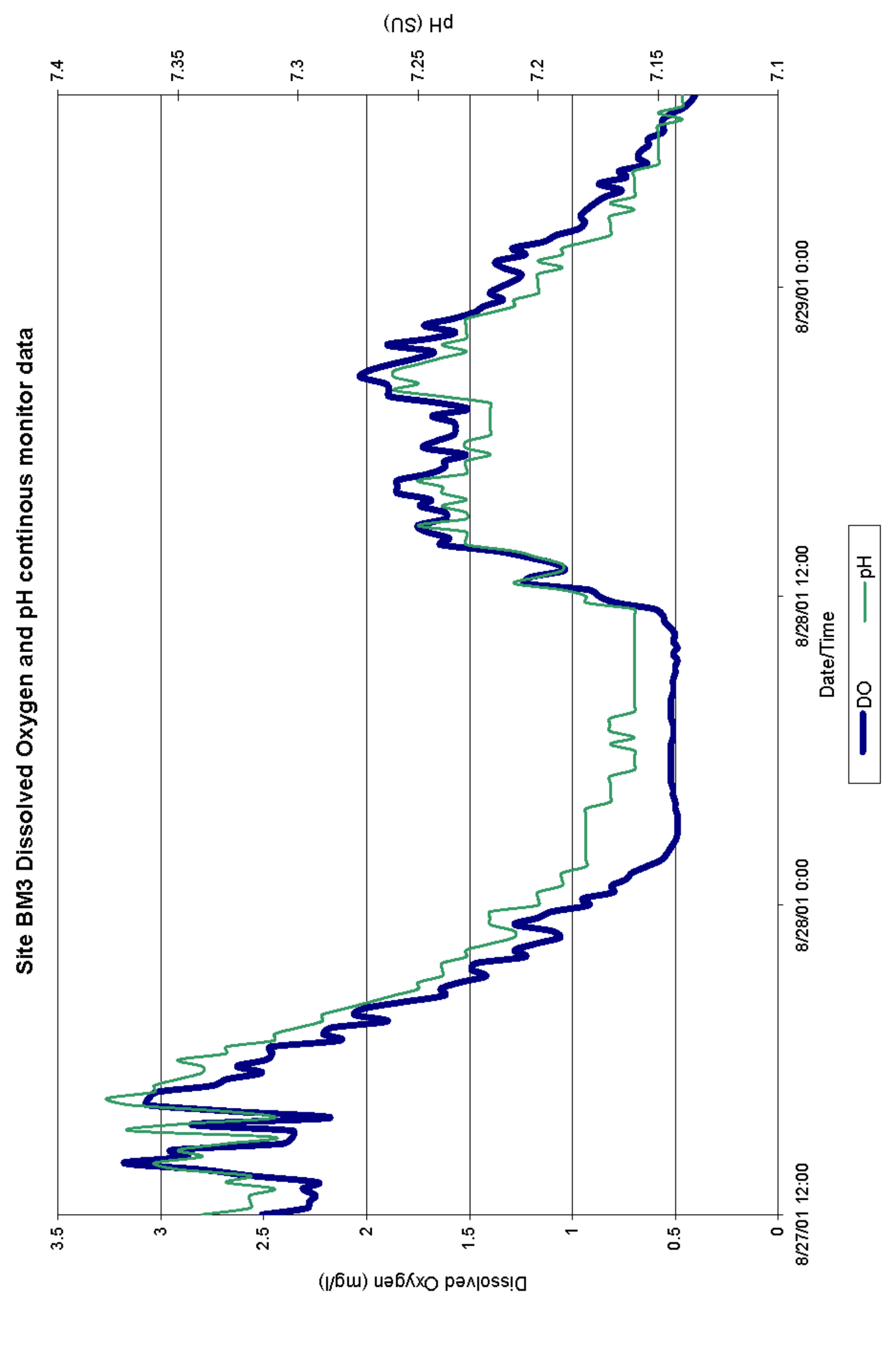
26.5
27
27.5
28
28.5
29
29.5
30
8/27/01 12:00
8/28/01 0:00
8/28/01 12:00
8/29/01 0:00
Date/Time
DO
Temperature


Site BM3 Dissolved Oxygen and pH continous monitor data
Dissolved Oxygen (mg/l)
0
0.5
1
1.5
2
2.5
3
3.5
pH (SU)
7.1
7.15
7.2
7.25
7.3
7.35
7.4
8/27/01 12:00
8/28/01 0:00
8/28/01 12:00
8/29/01 0:00
Date/Time
DO
pH


Site BM3 Dissolved Oxygen and pH continous monitor data
Dissolved Oxygen (mg/l)
pH (SU)
Date/Time
8/27/01 12:00
8/28/01 0:00
8/28/01 12:00
8/29/01 0:00
DO
pH

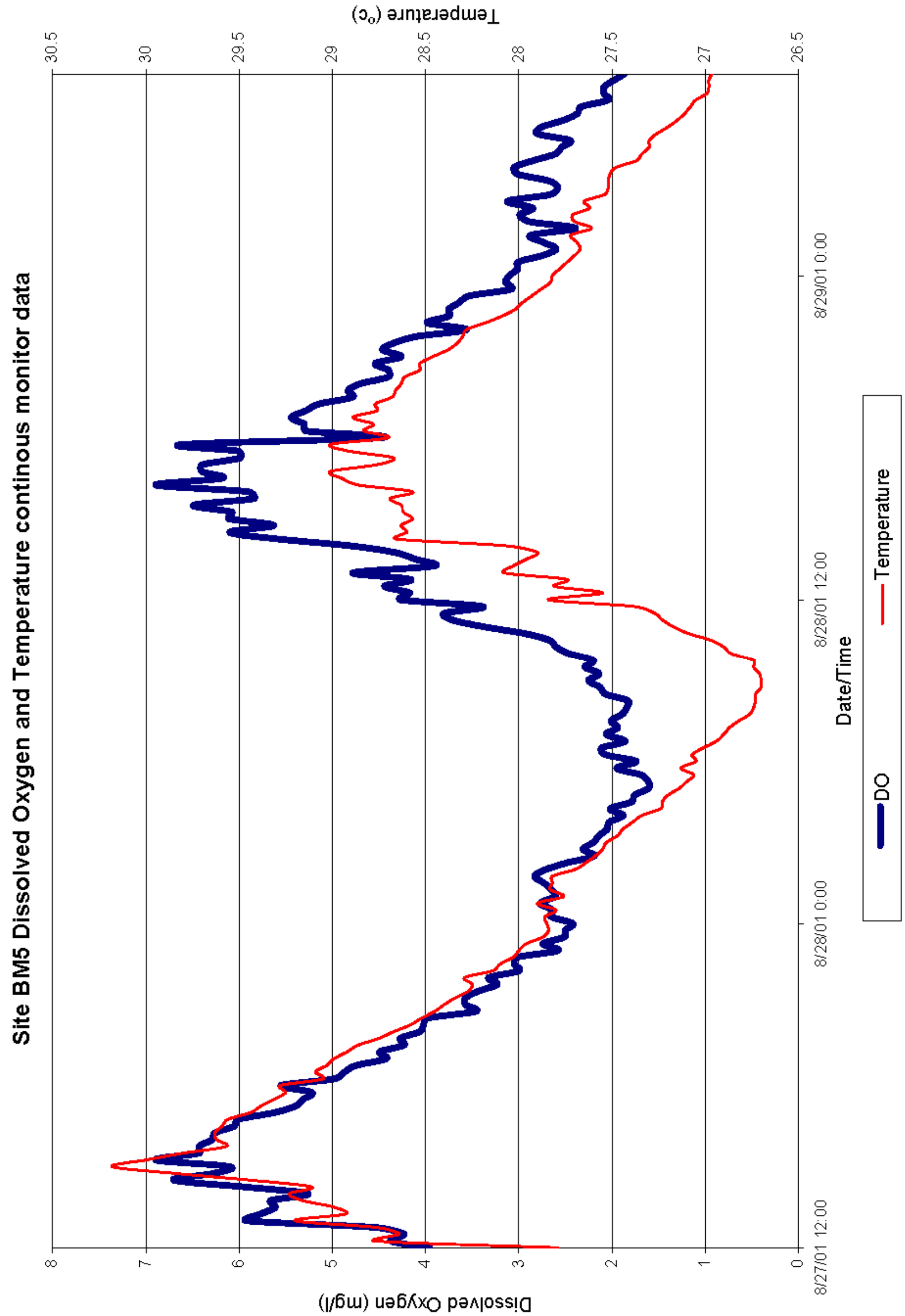
DataSonde 4a 37757				24 Hour	
Log File Name : Bayou Maringouin Site 5	Average	3.714		Average	3.564
Setup Date (MMDDYY) : 082701	Min	1.61		min	1.61
Setup Time (HHMMSS) : 075915	Max	6.89		max	6.89
Starting Date (MMDDYY) : 082701				Min + 1	2.61
Starting Time (HHMMSS) : 080000	Survey Period				
Stopping Date (MMDDYY) : 083001	Average	2.765			
Stopping Time (HHMMSS) : 080000	Min	2.13			
Interval (HHMMSS) : 001500	Max	3.8			
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	
8/27/2001	120000	27.79	50.5	3.96	7.91	253	11	8/27/01 12:00
8/27/2001	121500	28.77	56.6	4.37	7.73	252	11.1	8/27/01 12:15
8/27/2001	123000	28.64	54.7	4.23	7.71	252	10.9	8/27/01 12:30
8/27/2001	124500	28.76	58.7	4.53	7.76	251	10.9	8/27/01 12:45
8/27/2001	130000	29.2	77.4	5.92	7.88	250	11	8/27/01 13:00
8/27/2001	131500	28.93	75	5.77	7.84	251	11	8/27/01 13:15
8/27/2001	133000	28.99	73	5.61	7.81	253	10.9	8/27/01 13:30
8/27/2001	134500	29.16	73.9	5.66	7.83	252	11	8/27/01 13:45
8/27/2001	140000	29.23	68.7	5.26	7.83	252	10.9	8/27/01 14:00
8/27/2001	141500	29.11	77.5	5.94	7.84	254	11	8/27/01 14:15
8/27/2001	143000	29.44	87.9	6.7	7.92	254	11	8/27/01 14:30
8/27/2001	144500	29.84	82.9	6.28	7.87	254	10.9	8/27/01 14:45
8/27/2001	150000	30.18	81	6.1	7.92	253	10.9	8/27/01 15:00
8/27/2001	151500	30	91.3	6.89	7.96	252	11	8/27/01 15:15
8/27/2001	153000	29.8	84.9	6.43	7.97	252	11	8/27/01 15:30
8/27/2001	154500	29.57	84.5	6.43	7.93	251	11	8/27/01 15:45
8/27/2001	160000	29.62	82.7	6.29	7.96	250	10.9	8/27/01 16:00
8/27/2001	161500	29.63	82.4	6.26	7.95	250	10.9	8/27/01 16:15
8/27/2001	163000	29.59	79.6	6.05	7.93	250	11	8/27/01 16:30
8/27/2001	164500	29.56	78.9	6.01	7.93	250	11	8/27/01 16:45
8/27/2001	170000	29.44	73.8	5.62	7.87	250	10.9	8/27/01 17:00
8/27/2001	171500	29.38	70.7	5.39	7.82	250	10.9	8/27/01 17:15
8/27/2001	173000	29.31	69.4	5.31	7.8	250	11	8/27/01 17:30
8/27/2001	174500	29.25	68.3	5.22	7.81	250	10.9	8/27/01 17:45
8/27/2001	180000	29.28	72.6	5.55	7.86	249	10.8	8/27/01 18:00
8/27/2001	181500	29.05	64.9	4.98	7.8	249	10.9	8/27/01 18:15
8/27/2001	183000	29.09	63.5	4.87	7.76	249	11	8/27/01 18:30
8/27/2001	184500	29.03	61.8	4.74	7.72	249	10.8	8/27/01 18:45
8/27/2001	190000	28.99	57.5	4.42	7.7	249	11	8/27/01 19:00
8/27/2001	191500	28.92	58.4	4.49	7.7	249	10.9	8/27/01 19:15
8/27/2001	193000	28.86	55	4.23	7.68	250	10.8	8/27/01 19:30
8/27/2001	194500	28.75	55.3	4.27	7.67	250	10.9	8/27/01 19:45
8/27/2001	200000	28.67	52.5	4.06	7.66	250	10.8	8/27/01 20:00

8/27/2001	201500	28.58	51.9	4.02	7.64	250	10.9	8/27/01 20:15
8/27/2001	203000	28.52	51.4	3.98	7.62	251	11	8/27/01 20:30
8/27/2001	204500	28.45	44.6	3.46	7.6	250	10.9	8/27/01 20:45
8/27/2001	210000	28.4	45.9	3.57	7.59	250	10.9	8/27/01 21:00
8/27/2001	211500	28.34	45.9	3.57	7.58	250	10.9	8/27/01 21:15
8/27/2001	213000	28.27	44.1	3.43	7.58	250	10.9	8/27/01 21:30
8/27/2001	214500	28.25	41.4	3.23	7.58	251	10.9	8/27/01 21:45
8/27/2001	220000	28.29	42.7	3.32	7.6	250	10.9	8/27/01 22:00
8/27/2001	221500	28.14	38.5	3	7.55	251	10.9	8/27/01 22:15
8/27/2001	223000	28.1	39.1	3.05	7.54	251	10.8	8/27/01 22:30
8/27/2001	224500	28.03	38.6	3.02	7.52	251	10.9	8/27/01 22:45
8/27/2001	230000	28	33	2.58	7.52	251	10.9	8/27/01 23:00
8/27/2001	231500	27.96	35	2.74	7.53	251	10.8	8/27/01 23:15
8/27/2001	233000	27.87	32	2.51	7.49	252	10.9	8/27/01 23:30
8/27/2001	234500	27.84	31.9	2.5	7.47	252	10.8	8/27/01 23:45
8/28/2001	0	27.85	30.9	2.42	7.48	252	10.8	8/28/01 0:00
8/28/2001	1500	27.86	33.8	2.65	7.5	252	10.8	8/28/01 0:15
8/28/2001	3000	27.8	33.7	2.64	7.5	252	10.8	8/28/01 0:30
8/28/2001	4500	27.9	35.3	2.77	7.5	252	10.8	8/28/01 0:45
8/28/2001	10000	27.76	33.2	2.61	7.48	252	10.8	8/28/01 1:00
8/28/2001	11500	27.83	33.8	2.65	7.49	252	10.9	8/28/01 1:15
8/28/2001	13000	27.82	34.8	2.73	7.49	252	10.9	8/28/01 1:30
8/28/2001	14500	27.82	36.1	2.83	7.51	252	10.8	8/28/01 1:45
8/28/2001	20000	27.7	34.5	2.71	7.47	252	10.9	8/28/01 2:00
8/28/2001	21500	27.64	31.5	2.48	7.46	253	10.9	8/28/01 2:15
8/28/2001	23000	27.59	27.8	2.19	7.42	253	10.8	8/28/01 2:30
8/28/2001	24500	27.55	29.3	2.31	7.42	253	10.9	8/28/01 2:45
8/28/2001	30000	27.53	27.9	2.2	7.39	254	10.8	8/28/01 3:00
8/28/2001	31500	27.47	27.1	2.14	7.4	254	10.9	8/28/01 3:15
8/28/2001	33000	27.44	26	2.05	7.38	255	10.8	8/28/01 3:30
8/28/2001	34500	27.39	25.7	2.03	7.37	255	10.8	8/28/01 3:45
8/28/2001	40000	27.34	23.8	1.88	7.37	254	10.9	8/28/01 4:00
8/28/2001	41500	27.24	25.5	2.02	7.38	254	10.8	8/28/01 4:15
8/28/2001	43000	27.23	22.5	1.79	7.36	255	10.9	8/28/01 4:30
8/28/2001	44500	27.2	22.1	1.76	7.37	255	10.8	8/28/01 4:45
8/28/2001	50000	27.14	20.3	1.61	7.35	255	10.9	8/28/01 5:00
8/28/2001	51500	27.1	20.2	1.61	7.38	255	10.8	8/28/01 5:15
8/28/2001	53000	27.06	21.2	1.69	7.38	255	10.8	8/28/01 5:30
8/28/2001	54500	27.13	24.6	1.95	7.41	254	10.8	8/28/01 5:45
8/28/2001	60000	27.05	21.9	1.74	7.36	255	10.8	8/28/01 6:00
8/28/2001	61500	27.07	26	2.07	7.38	255	10.8	8/28/01 6:15
8/28/2001	63000	27.01	26.5	2.11	7.41	255	10.8	8/28/01 6:30
8/28/2001	64500	26.94	23.3	1.86	7.37	255	10.8	8/28/01 6:45
8/28/2001	70000	26.9	25.9	2.06	7.38	256	10.8	8/28/01 7:00
8/28/2001	71500	26.87	24.3	1.94	7.38	256	10.8	8/28/01 7:15
8/28/2001	73000	26.82	25.2	2.01	7.46	256	10.8	8/28/01 7:30
8/28/2001	74500	26.76	23.6	1.89	7.39	256	10.8	8/28/01 7:45
8/28/2001	80000	26.74	23	1.84	7.37	256	10.9	8/28/01 8:00
8/28/2001	81500	26.73	22.9	1.83	7.37	257	10.8	8/28/01 8:15
8/28/2001	83000	26.73	25.9	2.07	7.43	257	10.9	8/28/01 8:30
8/28/2001	84500	26.7	26.6	2.13	7.4	257	10.8	8/28/01 8:45

8/28/2001	90000	26.7	28.1	2.25	7.42	258	10.8	8/28/01 9:00
8/28/2001	91500	26.71	26.7	2.14	7.41	257	10.8	8/28/01 9:15
8/28/2001	93000	26.74	28.7	2.29	7.41	257	10.8	8/28/01 9:30
8/28/2001	94500	26.74	27.6	2.2	7.41	258	10.8	8/28/01 9:45
8/28/2001	100000	26.86	30.9	2.46	7.44	258	10.8	8/28/01 10:00
8/28/2001	101500	26.9	32.6	2.6	7.43	258	10.8	8/28/01 10:15
8/28/2001	103000	26.97	33.5	2.67	7.45	258	10.9	8/28/01 10:30
8/28/2001	104500	27.09	37	2.94	7.5	258	10.8	8/28/01 10:45
8/28/2001	110000	27.17	42.5	3.37	7.51	258	10.8	8/28/01 11:00
8/28/2001	111500	27.23	46.8	3.71	7.52	258	10.8	8/28/01 11:15
8/28/2001	113000	27.27	48	3.8	7.53	258	10.8	8/28/01 11:30
8/28/2001	114500	27.38	42.9	3.39	7.54	259	10.8	8/28/01 11:45
8/28/2001	120000	27.84	54.5	4.27	7.66	258	10.8	8/28/01 12:00
8/28/2001	121500	27.55	52.9	4.17	7.6	258	10.8	8/28/01 12:15
8/28/2001	123000	27.81	56.6	4.44	7.66	258	10.8	8/28/01 12:30
8/28/2001	124500	27.74	53	4.16	7.6	257	10.8	8/28/01 12:45
8/28/2001	130000	28.08	61.3	4.78	7.62	256	10.8	8/28/01 13:00
8/28/2001	131500	28.03	50	3.91	7.61	258	10.8	8/28/01 13:15
8/28/2001	133000	27.96	52.5	4.11	7.61	258	10.8	8/28/01 13:30
8/28/2001	134500	27.9	55.3	4.33	7.61	258	10.8	8/28/01 13:45
8/28/2001	140000	28.07	61.6	4.81	7.66	259	10.8	8/28/01 14:00
8/28/2001	141500	28.66	72.4	5.59	7.75	258	10.8	8/28/01 14:15
8/28/2001	143000	28.6	78.8	6.1	7.84	258	10.8	8/28/01 14:30
8/28/2001	144500	28.63	72.8	5.63	7.82	257	10.8	8/28/01 14:45
8/28/2001	150000	28.57	78.9	6.11	7.89	257	10.8	8/28/01 15:00
8/28/2001	151500	28.62	78.6	6.08	7.94	257	10.8	8/28/01 15:15
8/28/2001	153000	28.63	84	6.49	7.91	257	10.8	8/28/01 15:30
8/28/2001	154500	28.69	75.6	5.84	7.85	258	10.8	8/28/01 15:45
8/28/2001	160000	28.57	76.2	5.9	7.86	257	10.8	8/28/01 16:00
8/28/2001	161500	28.86	89.4	6.89	7.95	257	10.8	8/28/01 16:15
8/28/2001	163000	28.95	80.4	6.18	7.91	258	10.8	8/28/01 16:30
8/28/2001	164500	29.01	83.3	6.4	7.89	257	10.8	8/28/01 16:45
8/28/2001	170000	28.76	82.8	6.39	7.82	258	10.8	8/28/01 17:00
8/28/2001	171500	28.67	77.5	5.99	7.75	258	10.8	8/28/01 17:15
8/28/2001	173000	28.91	78.1	6.01	7.82	258	10.8	8/28/01 17:30
8/28/2001	174500	29.01	86.1	6.61	7.91	258	10.8	8/28/01 17:45
8/28/2001	180000	28.7	57.8	4.47	7.67	258	10.8	8/28/01 18:00
8/28/2001	181500	28.83	68.5	5.28	7.71	259	10.8	8/28/01 18:15
8/28/2001	183000	28.78	68.7	5.3	7.69	259	10.8	8/28/01 18:30
8/28/2001	184500	28.89	70.7	5.44	7.79	258	10.8	8/28/01 18:45
8/28/2001	190000	28.76	68.4	5.28	7.79	258	10.8	8/28/01 19:00
8/28/2001	191500	28.77	66.6	5.14	7.74	258	10.8	8/28/01 19:15
8/28/2001	193000	28.68	61.9	4.78	7.66	259	10.8	8/28/01 19:30
8/28/2001	194500	28.66	62.5	4.83	7.66	260	10.8	8/28/01 19:45
8/28/2001	200000	28.63	60.7	4.69	7.66	259	10.8	8/28/01 20:00
8/28/2001	201500	28.61	56.8	4.4	7.69	259	10.8	8/28/01 20:15
8/28/2001	203000	28.53	56.8	4.4	7.66	259	10.8	8/28/01 20:30
8/28/2001	204500	28.53	58.7	4.54	7.65	260	10.8	8/28/01 20:45
8/28/2001	210000	28.46	54.9	4.26	7.63	259	10.8	8/28/01 21:00
8/28/2001	211500	28.38	57.4	4.46	7.65	259	10.8	8/28/01 21:15
8/28/2001	213000	28.33	55.9	4.34	7.63	259	10.8	8/28/01 21:30

8/28/2001	214500	28.3	52.6	4.09	7.61	259	10.8	8/28/01 21:45
8/28/2001	220000	28.28	45.7	3.56	7.56	259	10.8	8/28/01 22:00
8/28/2001	221500	28.18	51.1	3.98	7.58	260	10.8	8/28/01 22:15
8/28/2001	223000	28.09	48	3.75	7.59	259	10.8	8/28/01 22:30
8/28/2001	224500	28.02	47.9	3.75	7.57	259	10.8	8/28/01 22:45
8/28/2001	230000	27.98	46.5	3.64	7.56	259	10.8	8/28/01 23:00
8/28/2001	231500	27.93	45.1	3.53	7.54	259	10.8	8/28/01 23:15
8/28/2001	233000	27.88	39.2	3.08	7.52	259	10.8	8/28/01 23:30
8/28/2001	234500	27.83	40	3.14	7.5	260	10.8	8/28/01 23:45
8/29/2001	0	27.82	39.6	3.1	7.49	260	10.8	8/29/01 0:00
8/29/2001	1500	27.78	38.4	3.01	7.49	260	10.8	8/29/01 0:15
8/29/2001	3000	27.74	38.3	3.01	7.48	260	10.8	8/29/01 0:30
8/29/2001	4500	27.7	34.9	2.74	7.48	260	10.8	8/29/01 0:45
8/29/2001	10000	27.67	33.1	2.6	7.47	260	10.8	8/29/01 1:00
8/29/2001	11500	27.69	35	2.75	7.46	260	10.8	8/29/01 1:15
8/29/2001	13000	27.72	36.6	2.87	7.48	260	10.7	8/29/01 1:30
8/29/2001	14500	27.61	30.3	2.39	7.44	261	10.8	8/29/01 1:45
8/29/2001	20000	27.7	36.8	2.89	7.48	261	10.8	8/29/01 2:00
8/29/2001	21500	27.71	38	2.99	7.5	261	10.8	8/29/01 2:15
8/29/2001	23000	27.62	36.2	2.85	7.49	261	10.8	8/29/01 2:30
8/29/2001	24500	27.65	39.7	3.12	7.5	260	10.7	8/29/01 2:45
8/29/2001	30000	27.54	33.8	2.66	7.46	261	10.8	8/29/01 3:00
8/29/2001	31500	27.52	32.8	2.58	7.45	261	10.7	8/29/01 3:15
8/29/2001	33000	27.52	33.9	2.67	7.45	261	10.8	8/29/01 3:30
8/29/2001	34500	27.51	38.1	3.01	7.49	261	10.8	8/29/01 3:45
8/29/2001	40000	27.48	38.6	3.05	7.5	261	10.8	8/29/01 4:00
8/29/2001	41500	27.37	36	2.85	7.47	261	10.8	8/29/01 4:15
8/29/2001	43000	27.34	33	2.61	7.43	262	10.8	8/29/01 4:30
8/29/2001	44500	27.3	32.1	2.54	7.42	261	10.7	8/29/01 4:45
8/29/2001	50000	27.3	31	2.45	7.44	262	10.8	8/29/01 5:00
8/29/2001	51500	27.26	35.3	2.8	7.48	262	10.8	8/29/01 5:15
8/29/2001	53000	27.2	34.6	2.75	7.47	263	10.8	8/29/01 5:30
8/29/2001	54500	27.15	31.8	2.52	7.43	263	10.8	8/29/01 5:45
8/29/2001	60000	27.11	29.8	2.37	7.42	263	10.8	8/29/01 6:00
8/29/2001	61500	27.08	29.4	2.33	7.43	263	10.8	8/29/01 6:15
8/29/2001	63000	27.05	25.6	2.04	7.38	263	10.8	8/29/01 6:30
8/29/2001	64500	26.99	26.2	2.09	7.39	263	10.7	8/29/01 6:45
8/29/2001	70000	26.98	26.1	2.08	7.37	264	10.7	8/29/01 7:00
8/29/2001	71500	26.98	24.7	1.97	7.36	264	10.8	8/29/01 7:15
8/29/2001	73000	26.96	23.4	1.86	7.36	264	10.7	8/29/01 7:30
8/29/2001	74500	26.94	23.2	1.85	7.35	263	10.8	8/29/01 7:45
8/29/2001	80000	26.88	22.2	1.77	7.35	263	10.8	8/29/01 8:00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Dissolved Oxygen (mg/l)
Temperature (°c)
Date/Time
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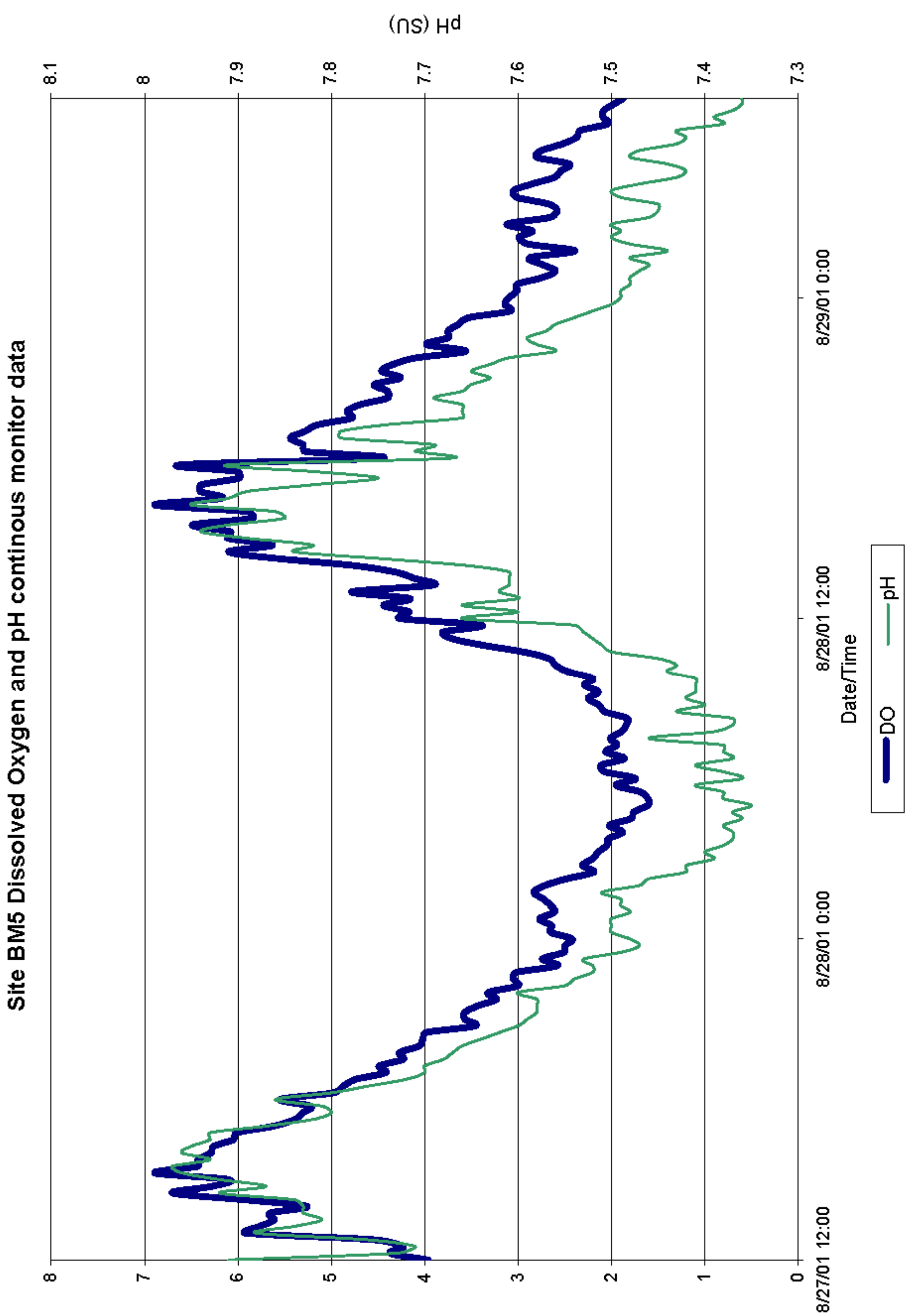
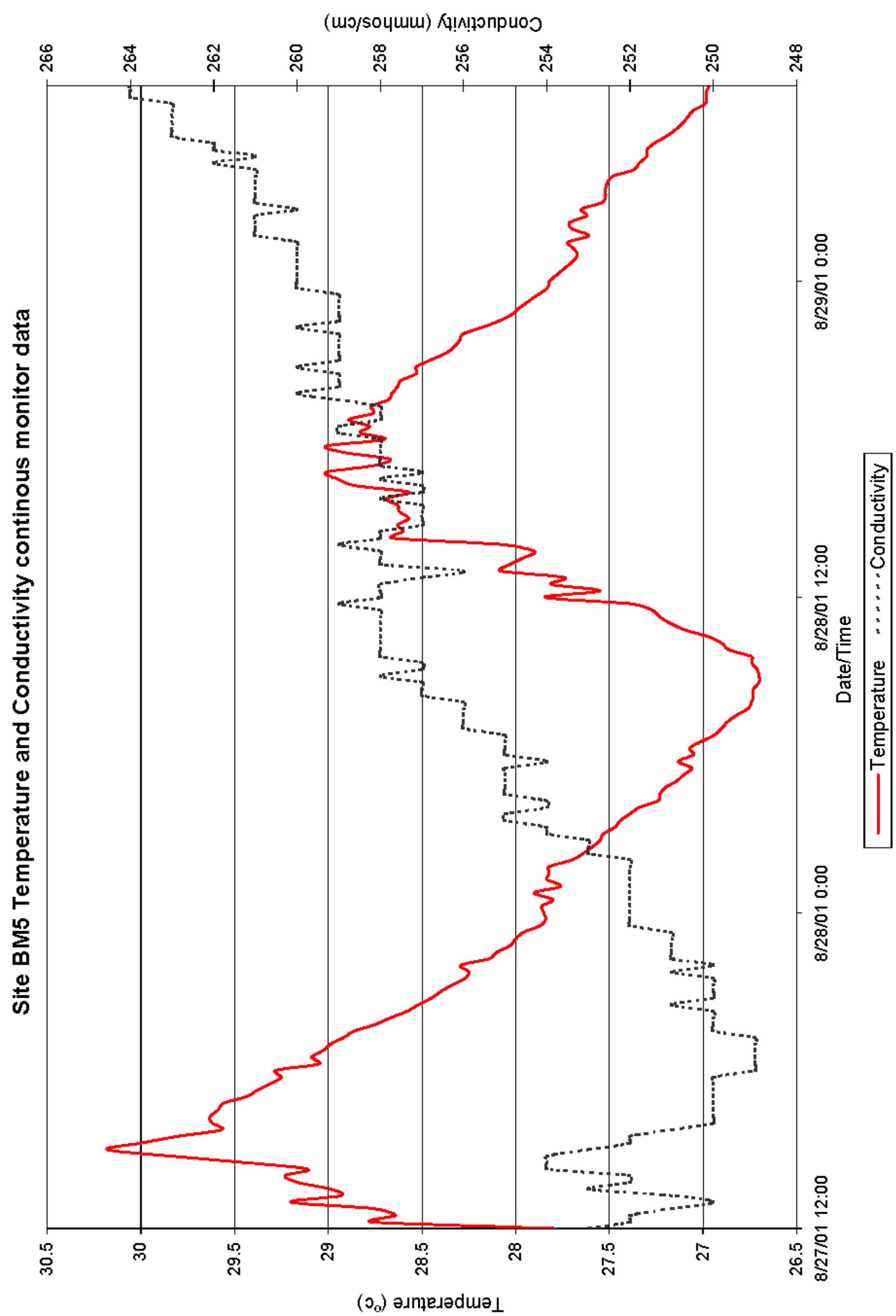
8/28/01 0:00
8/28/01 12:00
8/29/01 0:00
0
1
2
3
4
5
6
7
8
26.5
27
27.5
28
28.5
29
29.5
30
30.5
DO
Temperature

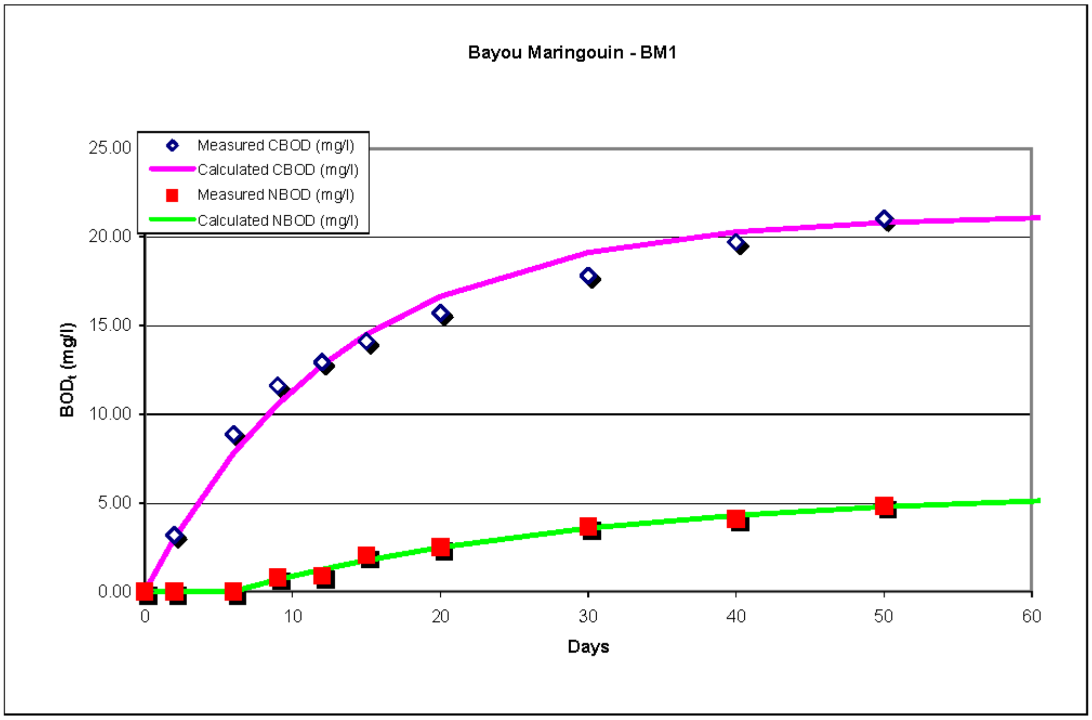

Site BM5 Dissolved Oxygen and pH continous monitor data
Dissolved Oxygen (mg/l)
pH (SU)
Date/Time
8/27/01 12:00
8/28/01 0:00
8/28/01 12:00
8/29/01 0:00
0
1
2
3
4
5
6
7
8
7.3
7.4
7.5
7.6
7.7
7.8
7.9
8
8.1
DO
pH


Site BM5 Temperature and Conductivity continous monitor data
Temperature (°c)
30.5
30
29.5
29
28.5
28
27.5
27
26.5
Conductivity (mmhos/cm)
266
264
262
260
258
256
254
252
250
248
8/27/01 12:00
8/28/01 0:00
8/28/01 12:00
8/29/01 0:00
Date/Time
Temperature
Conductivity

Appendix C5 – BOD Calculations

BOD Analysis of the for: **Bayou Maringouin - BM1**

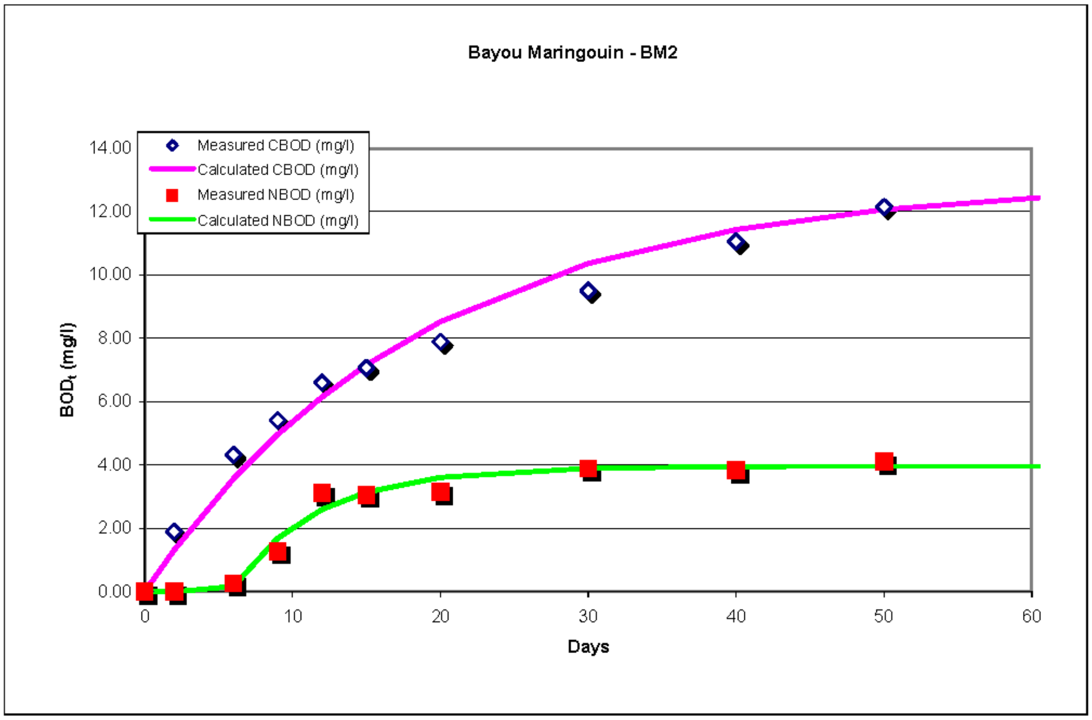
Measured Data					Calculated Data		
Days	***Total BOD (mg/l)***	***NOx as N (mg/l)***	***NBOD (mg/l)***	***CBOD (mg/l)***	***NBOD (mg/l)***	***CBOD (mg/l)***	
Note 1	Note 2	Note 3	Note 4	Note 5	Note 6	Note 7	
0		0.00					
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
2	3.2	0.00	0.00	3.20	0.00	3.01	
6	8.9	0.00	0.00	8.87	0.03	7.81	
9	12.3	0.18	0.82	11.62	0.68	10.56	
12	14.2	0.20	0.91	12.94	1.26	12.75	
15	15.9	0.45	2.06	14.12	1.78	14.49	
20	18.2	0.55	2.51	15.70	2.50	16.64	
30	21.4	0.80	3.66	17.81	3.59	19.11	
40	24.0	0.90	4.11	19.69	4.31	20.27	
50	25.8	1.06	4.84	21.01	4.79	20.80	
61	27.7	1.13	5.16	22.57	5.13	21.07	
					5.75	21.27	**UBOD (mg/l)**
					0.04	0.08	**k rate (1/day)**
					5.88	0.00	**Lag time (days)**



Note 1 - Days from the BOD test start date.
Note 2 - Measured total BOD at time in "Days" column.
Note 3 - Measured (NO_2 + NO_3 as nitrogen) at time in "Days" column.
Note 4 - Calculated by multipling the measured (NO_2 +NO_3 as nitrogen) minus the day zero (NO_2 +NO_3 as nitrogen) by 4.57.
Note 5 - Determined by subtracting the calculated NBOD from the measured total BOD.
Note 6 - Calculated from the formula {NBODt=UNBOD[1-e-(k(t-lag))]} using the listed values of UNBOD, k decay rate and lag time.
Note 7 - Calculated from the formula {CBODt=UCBOD[1-e-(k(t-lag))]} using the listed values of UCBOD, k decay rate and lag time.
Note 8 - Nox nondetects were input at 1/2 the detection level = 0.025 mg/l.

BOD Analysis of the for: **Bayou Maringouin - BM2**

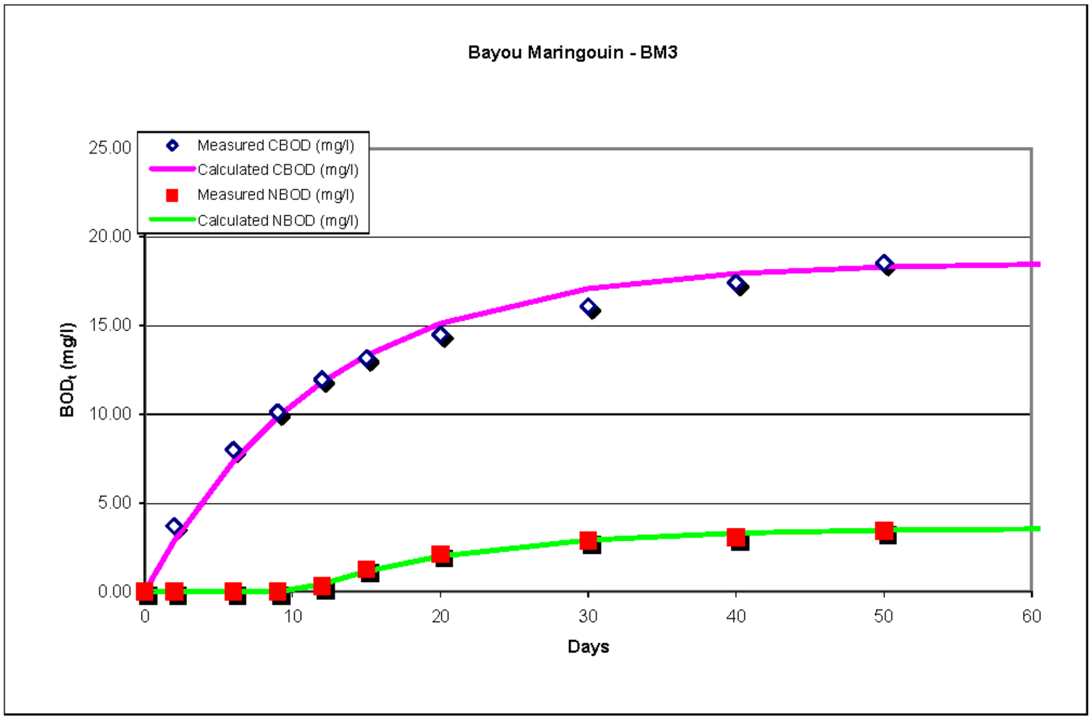
Measured Data					Calculated Data		
Days	***Total BOD (mg/l)***	***NOx as N (mg/l)***	***NBOD (mg/l)***	***CBOD (mg/l)***	***NBOD (mg/l)***	***CBOD (mg/l)***	
Note 1	Note 2	Note 3	Note 4	Note 5	Note 6	Note 7	
0		0.00					
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
2	1.9	0.00	0.00	1.90	0.00	1.32	
6	4.5	0.06	0.27	4.33	0.17	3.56	
9	7.1	0.28	1.28	5.41	1.69	4.96	
12	9.2	0.68	3.11	6.60	2.60	6.15	
15	10.2	0.67	3.06	7.06	3.14	7.16	
20	11.5	0.69	3.15	7.89	3.61	8.52	
30	13.4	0.85	3.88	9.50	3.90	10.35	
40	15.0	0.84	3.84	11.05	3.95	11.43	
50	16.1	0.90	4.11	12.14	3.96	12.06	
61	17.2	0.94	4.30	13.24	3.96	12.45	
					3.96	12.94	UBOD (mg/l)
					0.17	0.05	k rate (1/day)
					5.74	0.00	Lag time (days)



Note 1 - Days from the BOD test start date.
Note 2 - Measured total BOD at time in "Days" column.
Note 3 - Measured (NO_2 + NO_3 as nitrogen) at time in "Days" column.
Note 4 - Calculated by multipling the measured (NO_2 +NO_3 as nitrogen) minus the day zero (NO_2 +NO_3 as nitrogen) by 4.57.
Note 5 - Determined by subtracting the calculated NBOD from the measured total BOD.
Note 6 - Calculated from the formula {NBODt=UNBOD[1-e-(k(t-lag))]} using the listed values of UNBOD, k decay rate and lag time.
Note 7 - Calculated from the formula {CBODt=UCBOD[1-e-(k(t-lag))]} using the listed values of UCBOD, k decay rate and lag time.
Note 8 - Nox nondetects were input at 1/2 the detection level = 0.025 mg/l.

BOD Analysis of the for: **Bayou Maringouin - BM3**

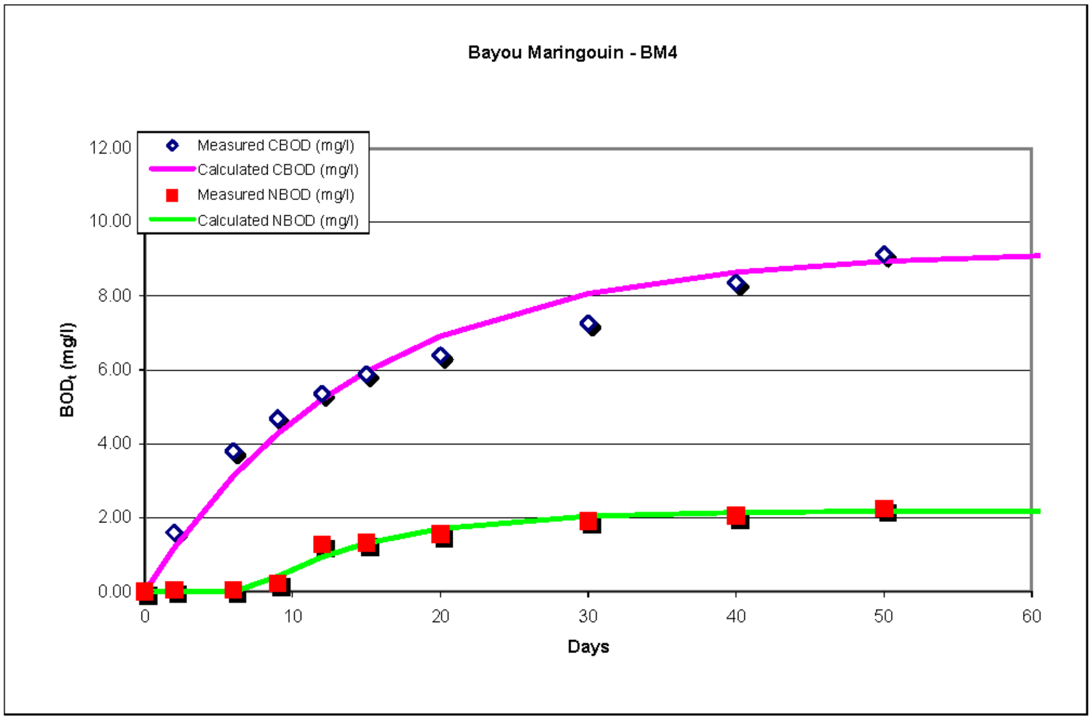
Measured Data					Calculated Data		
Days	***Total BOD (mg/l)***	***NOx as N (mg/l)***	***NBOD (mg/l)***	***CBOD (mg/l)***	***NBOD (mg/l)***	***CBOD (mg/l)***	
Note 1	Note 2	Note 3	Note 4	Note 5	Note 6	Note 7	
0		0.00					
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
2	3.7	0.00	0.00	3.70	0.00	2.87	
6	8.0	0.00	0.00	8.00	0.00	7.36	
9	10.1	0.00	0.00	10.10	0.00	9.86	
12	12.4	0.07	0.32	11.96	0.44	11.80	
15	14.3	0.28	1.28	13.15	1.15	13.31	
20	16.5	0.46	2.10	14.49	2.01	15.11	
30	19.0	0.63	2.88	16.08	2.92	17.08	
40	20.7	0.67	3.06	17.39	3.31	17.93	
50	22.0	0.75	3.43	18.53	3.47	18.29	
61	23.2	0.82	3.75	19.66	3.54	18.46	
					3.59	18.57	**UBOD (mg/l)**
					0.09	0.08	**k rate (1/day)**
					10.50	0.00	**Lag time (days)**



Note 1 - Days from the BOD test start date.
Note 2 - Measured total BOD at time in "Days" column.
Note 3 - Measured (NO_2 + NO_3 as nitrogen) at time in "Days" column.
Note 4 - Calculated by multipling the measured (NO_2 +NO_3 as nitrogen) minus the day zero (NO_2 +NO_3 as nitrogen) by 4.57.
Note 5 - Determined by subtracting the calculated NBOD from the measured total BOD.
Note 6 - Calculated from the formula {NBODt=UNBOD[1-e-(k(t-lag))]} using the listed values of UNBOD, k decay rate and lag time.
Note 7 - Calculated from the formula {CBODt=UCBOD[1-e-(k(t-lag))]} using the listed values of UCBOD, k decay rate and lag time.
Note 8 - Nox nondetects were input at 1/2 the detection level = 0.025 mg/l.

BOD Analysis of the for: **Bayou Maringouin - BM4**

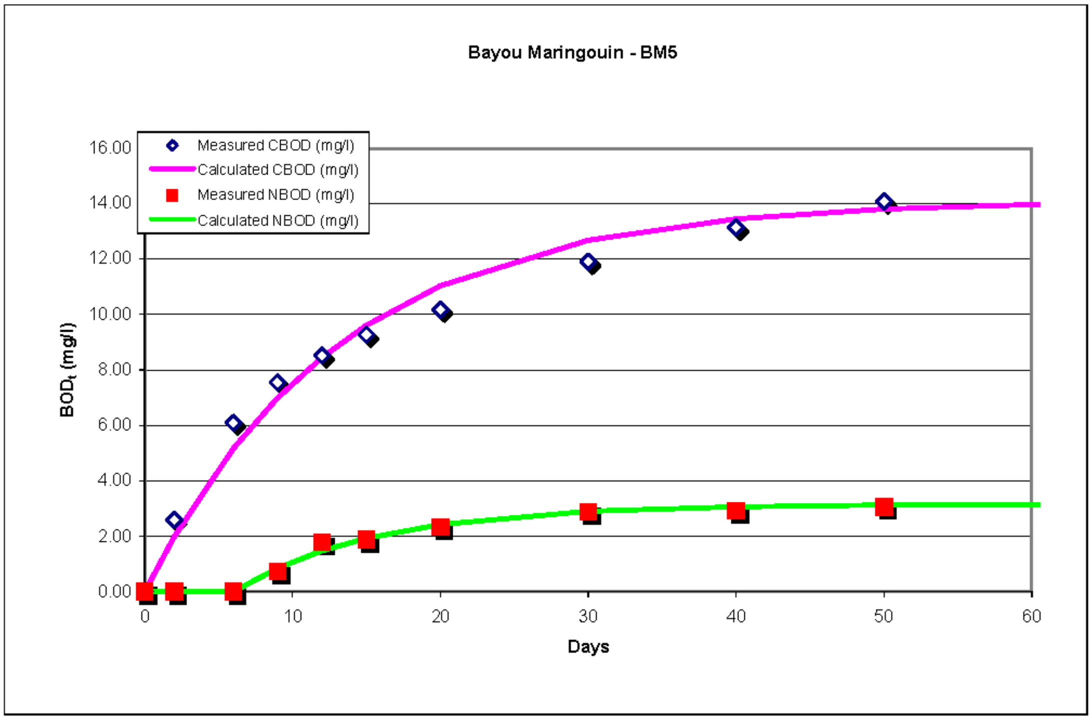
Measured Data					Calculated Data		
Days	***Total BOD (mg/l)***	***NOx as N (mg/l)***	***NBOD (mg/l)***	***CBOD (mg/l)***	***NBOD (mg/l)***	***CBOD (mg/l)***	
Note 1	Note 2	Note 3	Note 4	Note 5	Note 6	Note 7	
0		0.06					
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
2	1.6	0.07	0.05	1.60	0.00	1.19	
6	3.8	0.07	0.05	3.80	0.00	3.13	
9	5.1	0.11	0.23	4.69	0.41	4.27	
12	6.3	0.34	1.28	5.36	0.94	5.20	
15	7.2	0.35	1.33	5.88	1.32	5.95	
20	8.1	0.40	1.55	6.39	1.71	6.91	
30	9.3	0.48	1.92	7.26	2.04	8.06	
40	10.5	0.51	2.06	8.35	2.15	8.64	
50	11.3	0.55	2.24	9.12	2.18	8.93	
61	12.0	0.57	2.33	9.81	2.19	9.09	
					2.19	9.22	**UBOD (mg/l)**
					0.12	0.07	**k rate (1/day)**
					7.24	0.00	**Lag time (days)**



Note 1 - Days from the BOD test start date.
Note 2 - Measured total BOD at time in "Days" column.
Note 3 - Measured (NO_2 + NO_3 as nitrogen) at time in "Days" column.
Note 4 - Calculated by multipling the measured (NO_2 +NO_3 as nitrogen) minus the day zero (NO_2 +NO_3 as nitrogen) by 4.57.
Note 5 - Determined by subtracting the calculated NBOD from the measured total BOD.
Note 6 - Calculated from the formula {NBODt=UNBOD[1-e-(k(t-lag))]} using the listed values of UNBOD, k decay rate and lag time.
Note 7 - Calculated from the formula {CBODt=UCBOD[1-e-(k(t-lag))]} using the listed values of UCBOD, k decay rate and lag time.
Note 8 - Nox nondetects were input at 1/2 the detection level = 0.025 mg/l.

BOD Analysis of the for: **Bayou Maringouin - BM5**

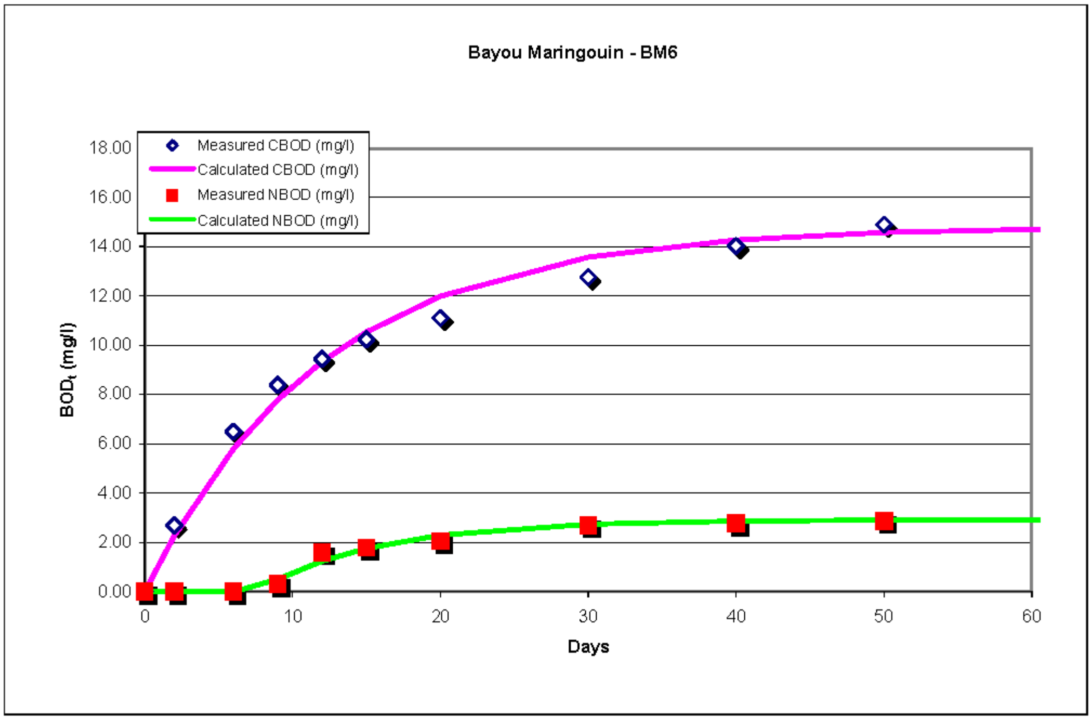
Measured Data					Calculated Data		
Days	**Total BOD (mg/l)**	**NOx as N (mg/l)**	**NBOD (mg/l)**	**CBOD (mg/l)**	**NBOD (mg/l)**	**CBOD (mg/l)**	
Note 1	Note 2	Note 3	Note 4	Note 5	Note 6	Note 7	
0		0.00					
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
2	2.6	0.00	0.00	2.60	0.00	1.99	
6	6.1	0.00	0.00	6.09	0.01	5.17	
9	8.4	0.16	0.73	7.54	0.86	7.00	
12	10.0	0.39	1.78	8.52	1.48	8.45	
15	11.2	0.41	1.87	9.27	1.93	9.60	
20	12.6	0.51	2.33	10.17	2.43	11.03	
30	14.8	0.63	2.88	11.90	2.90	12.67	
40	16.2	0.64	2.92	13.13	3.07	13.44	
50	17.2	0.67	3.06	14.07	3.13	13.80	
61	18.0	0.74	3.38	14.85	3.15	13.98	
					3.16	14.11	**UBOD (mg/l)**
					0.10	0.08	**k rate (1/day)**
					5.98	0.00	**Lag time (days)**



Note 1 - Days from the BOD test start date.
Note 2 - Measured total BOD at time in "Days" column.
Note 3 - Measured (NO_2 + NO_3 as nitrogen) at time in "Days" column.
Note 4 - Calculated by multipling the measured (NO_2 +NO_3 as nitrogen) minus the day zero (NO_2 +NO_3 as nitrogen) by 4.57.
Note 5 - Determined by subtracting the calculated NBOD from the measured total BOD.
Note 6 - Calculated from the formula {NBODt=UNBOD[1-e-(k(t-lag))]} using the listed values of UNBOD, k decay rate and lag time.
Note 7 - Calculated from the formula {CBODt=UCBOD[1-e-(k(t-lag))]} using the listed values of UCBOD, k decay rate and lag time.
Note 8 - Nox nondetects were input at 1/2 the detection level = 0.025 mg/l.

BOD Analysis of the for: **Bayou Maringouin - BM6**

Measured Data					Calculated Data		
Days	***Total BOD (mg/l)***	***NOx as N (mg/l)***	***NBOD (mg/l)***	***CBOD (mg/l)***	***NBOD (mg/l)***	***CBOD (mg/l)***	
Note 1	Note 2	Note 3	Note 4	Note 5	Note 6	Note 7	
0		0.00					
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
2	2.7	0.00	0.00	2.70	0.00	2.26	
6	6.5	0.00	0.00	6.50	0.00	5.80	
9	8.9	0.07	0.32	8.39	0.51	7.79	
12	10.7	0.35	1.60	9.45	1.25	9.33	
15	12.0	0.39	1.78	10.24	1.76	10.54	
20	13.4	0.45	2.06	11.11	2.29	11.99	
30	15.5	0.59	2.70	12.76	2.74	13.57	
40	16.9	0.61	2.79	14.03	2.87	14.27	
50	17.8	0.63	2.88	14.89	2.91	14.57	
61	18.5	0.69	3.15	15.58	2.92	14.71	
					2.93	14.81	**UBOD (mg/l)**
					0.12	0.08	**k rate (1/day)**
					7.44	0.00	**Lag time (days)**



Note 1 - Days from the BOD test start date.

Note 2 - Measured total BOD at time in "Days" column.

Note 3 - Measured (NO_2 + NO_3 as nitrogen) at time in "Days" column.

Note 4 - Calculated by multipling the measured (NO_2 +NO_3 as nitrogen) minus the day zero (NO_2 +NO_3 as nitrogen) by 4.57.

Note 5 - Determined by subtracting the calculated NBOD from the measured total BOD.

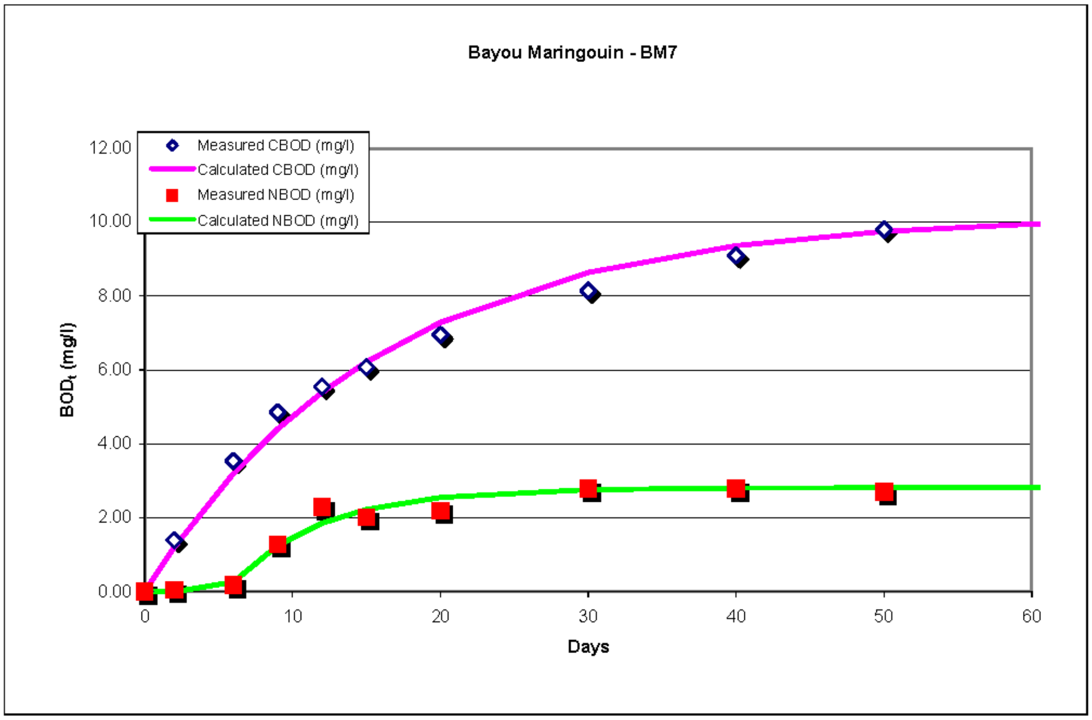
Note 6 - Calculated from the formula {NBODt=UNBOD[1-e-(k(t-lag))]} using the listed values of UNBOD, k decay rate and lag time.

Note 7 - Calculated from the formula {CBODt=UCBOD[1-e-(k(t-lag))]} using the listed values of UCBOD, k decay rate and lag time.

Note 8 - Nox nondetects were input at 1/2 the detection level = 0.025 mg/l.

BOD Analysis of the for: **Bayou Maringouin - BM7**

Measured Data					Calculated Data		
Days	***Total BOD (mg/l)***	***NOx as N (mg/l)***	***NBOD (mg/l)***	***CBOD (mg/l)***	***NBOD (mg/l)***	***CBOD (mg/l)***	
Note 1	Note 2	Note 3	Note 4	Note 5	Note 6	Note 7	
0		0.13					
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
2	1.4	0.14	0.05	1.40	0.00	1.20	
6	3.8	0.17	0.18	3.54	0.26	3.20	
9	6.1	0.41	1.28	4.85	1.25	4.40	
12	7.4	0.63	2.29	5.55	1.85	5.39	
15	8.3	0.57	2.01	6.07	2.23	6.22	
20	9.5	0.61	2.19	6.95	2.55	7.28	
30	10.9	0.74	2.79	8.14	2.76	8.64	
40	11.9	0.74	2.79	9.10	2.80	9.36	
50	12.6	0.72	2.70	9.79	2.81	9.74	
61	13.3	0.81	3.11	10.49	2.81	9.96	
					2.81	10.18	UBOD (mg/l)
					0.16	0.06	k rate (1/day)
					5.40	0.00	Lag time (days)



Note 1 - Days from the BOD test start date.
Note 2 - Measured total BOD at time in "Days" column.
Note 3 - Measured (NO_2 + NO_3 as nitrogen) at time in "Days" column.
Note 4 - Calculated by multipling the measured (NO_2 +NO_3 as nitrogen) minus the day zero (NO_2 +NO_3 as nitrogen) by 4.57.
Note 5 - Determined by subtracting the calculated NBOD from the measured total BOD.
Note 6 - Calculated from the formula {NBODt=UNBOD[1-e-(k(t-lag))]} using the listed values of UNBOD, k decay rate and lag time.
Note 7 - Calculated from the formula {CBODt=UCBOD[1-e-(k(t-lag))]} using the listed values of UCBOD, k decay rate and lag time.
Note 8 - Nox nondetects were input at 1/2 the detection level = 0.025 mg/l.

Appendix C6 – GPS Data

X	Y	LAT	LONG	SITE#	STREAM	LOCATION
638848	3379294	30.539648	-91.552586	BM1	BAYOU MARINGOUIN	hwy 77 near hwy 977
641396	3374781	30.498630	-91.526650	BM2	BAYOU MARINGOUIN	overton ln bridge
642029	3372673	30.479541	-91.520343	BM3	BAYOU MARINGOUIN	upstream of musson ln weir
641764	3371872	30.472353	-91.523213	BM3A	BAYOU MARINGOUIN	downstream of musson ln bridge
642277	3368851	30.445031	-91.518285	BM4	BAYOU MARINGOUIN	off hwy 76 north of dist
642287	3368519	30.442035	-91.518228	BM4A	UNNAMED DISTRIB	off hwy 76 north of W. Oak ln.
643792	3365622	30.415722	-91.502959	BM5	BAYOU MARINGOUIN	hwy 76 bridge
643483	3364565	30.406224	-91.506317	BM6	BAYOU MARINGOUIN	off hwy 76 north of dist in Ramah
640513	3377518	30.523431	-91.535478	BM7	UNNAMED TRIB	Canezaro Rd.

Appendix D – Historical and Ambient Data

Appendix D1 – Ambient Data

0977wqng.txt

Bayou Maringouin, Louisiana

This page last updated on: 02/20/02

DATE	TIME	DEPTH meters	ALKA-LINITY mg/l	HARD-NESS mg/l	TURB-IDITY NTU	COLOR PT-CO units	CHLOR-IDES mg/l	SULFATE mg/l	T.S.S. mg/l	T.D.S. mg/l	T.S. mg/l
11/28/00	0940	.9	156.0	171.0	38.0	55.0	10.4	18.0	16.0	244.0	.
10/24/00	1015	.6	166.0	158.0	23.0	50.0	10.2	2.6	72.0	234.0	.
09/26/00	0935	.3	143.0	138.0	110.0	55.0	7.2	5.8	245.0	190.0	.
08/29/00	1000	.3	146.0	123.0	20.0	55.0	8.8	4.6	40.0	182.0	.
08/01/00	1005	.9	136.0	109.0	18.0	50.0	9.2	4.4	30.0	163.0	.
06/06/00	1007	.6	207.0	186.0	70.0	42.0	23.8	1.9	160.0	262.0	.
05/30/00	1005	.6	235.0	216.0	90.0	30.0	23.0	1.9	124.0	298.0	.
05/02/00	0925	.2	274.0	256.0	3.2	22.0	21.7	4.7	K 4.0	308.0	.
04/04/00	1000	3.3	221.0	201.0	9.9	28.0	18.2	6.8	11.0	282.0	.
02/29/00	1000	.6	151.0	153.0	19.0	40.0	32.4	7.5	18.9	255.0	.
02/01/00	0945	1.0	267.0	274.0	18.0	19.0	13.7	14.1	28.5	334.0	.

0977wqnf.txt

Bayou Maringouin, Louisiana

This page last updated on: 02/20/02

DATE	TIME	DEPTH meters	FIELD PH	WATER TEMP (C)	D.O. mg/l	FIELD COND. umhos	SECCHI DISK inches	SALIN-ITY ppt
11/28/00	0940	.9	7.15	11.80	5.30	373.0	12.0	.
10/24/00	1015	.6	7.12	19.32	4.35	369.0	24.0	.
09/26/00	0935	.3	7.08	20.11	.83	326.0	12.0	.
08/29/00	1000	.3	7.08	25.75	5.02	336.0	12.0	.
08/01/00	1005	.9	6.63	25.78	.61	255.0	10.0	.
06/06/00	1007	.6	7.70	24.43	1.02	437.0	24.0	.
05/30/00	1005	.6	8.22	24.44	5.51	528.0	24.0	.
05/02/00	0925	.2	7.45	21.05	2.24	570.0	.	.
04/04/00	1000	3.3	7.77	17.63	5.27	488.0	24.0	.
02/29/00	1000	.6	7.56	15.10	5.34	425.0	24.0	.
02/01/00	0945	1.0	8.40	7.30	11.12	560.0	6.0	.

0977wqnn.txt

Bayou Maringouin, Louisiana

This page last updated on: 02/20/02

DATE	TIME	DEPTH meters		NO2+NO3 mg/l	T.K.N. mg/l	PHOS. TOTAL mg/l	T.O.C. mg/l
11/28/00	0940	.9		.330	.82	.54	8.60
10/24/00	1015	.6	K	.020	2.63	1.19	15.40
09/26/00	0935	.3		.040	2.73	1.11	12.60
08/29/00	1000	.3		.020	2.35	1.01	20.00
08/01/00	1005	.9		.020	2.56	1.03	10.50
06/06/00	1007	.6		.030	1.97	.83	11.70
05/30/00	1005	.6		.040	2.00	1.03	12.70
05/02/00	0925	.2		.030	1.32	.26	6.90
04/04/00	1000	3.3		.020	1.10	.31	10.30
02/29/00	1000	.6		.030	.24	.32	10.80
02/01/00	0945	1.0		.020	.47	.16	6.20

0977wqnm.txt

Bayou Maringouin, Louisiana

This page last updated on: 02/20/02

DATE	TIME	DEPTH meters	ARSENIC ug/l	CADMIUM ug/l	CHROMIUM ug/l	COPPER ug/l	MERCURY ug/l	LEAD ug/l	NICKEL ug/l
11/28/00	0940	.9	.	.	.	.	.	.	.
10/24/00	1015	.6	K 5.00	K .50	K 2.50	K 2.50	K .0500	K 5.00	K 5.00
09/26/00	0935	.3	.	.	.	.	.	.	.
08/29/00	1000	.3	10.00	K .50	K 2.50	K 2.50	K .0500	K 5.00	K 5.00
08/01/00	1005	.9	9.50	K .50	K 2.50	K 2.50	K .0500	K 5.00	K 5.00
06/06/00	1007	.6	.	.	.	.	.	.	.
05/30/00	1005	.6	.	.	.	.	.	.	.
05/02/00	0925	.2	10.90	K .50	K 2.50	K 2.50	K .0500	K 5.00	K 5.00
04/04/00	1000	3.3	.	.	.	.	.	.	.
02/29/00	1000	.6	.	.	.	.	.	.	.
02/01/00	0945	1.0	.	.	.	.	.	.	.

0977col.txt

Bayou Maringouin, Louisiana

This page last updated on: 02/20/02

DATE	TIME		FECAL COLIFORM MPN/100ML	TOTAL COLIFORM MPN/100ML
11/28/00	0940		300	.
10/24/00	0815		3000	.
09/26/00	0940		280	.
08/29/00	0955		800	.
08/01/00			500	.
06/06/00	1005		3000	5000
05/30/00	1000		110	5000
04/04/00	1010		30	.
02/29/00	0950		300	.
02/01/00	0945		240	.
01/04/00	1010	L	16000	.

Appendix D2 – Land Use

Land Type	Square Meters	Percent Land use
Agricultural/Cropland/Grassland	78443100.00	59.85
Wetland Forest Deciduous	38039400.00	29.02
Water	7322400.00	5.59
Vegetated Urban	5091300.00	3.88
Wetland Scrub/Shrub Deciduous	809100.00	0.62
Upland Forest Deciduous	570600.00	0.44
Fresh Marsh	363600.00	0.28
Upland Forest Evergreen	297000.00	0.23
Upland Scrub/Shrub Mixed	75600.00	0.06
Non-Vegetated Urban	38700.00	0.03
Upland Forest Mixed	6300.00	0.00
Upland Scrub/Shrub Evergreen	900.00	0.00

Appendix E – Recommended (TMDL)

Appendix E1 – Summer TMDL Summary

Summer TMDL Summary:

Bayou Maringouin -- LA120111

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		0	0
Benthic loads		628	2
Incremental Loads		1	0
SUB-TOTAL	**0**	**629**	**2**
TMDL = WLA + LA + MOS		***631***	***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		0	0
Benthic loads		1,385	4
Incremental Loads		2	0
SUB-TOTAL	**0**	**1,387**	**4**
TMDL = WLA + LA + MOS		***1,391***	***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		621	
Manmade Nonpoint Loads		8	2
SUB-TOTAL	**0**	**629**	**2**
TMDL = WLA + LA + MOS		***631***	***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		1,369	
Manmade Nonpoint Loads		18	4
SUB-TOTAL	**0**	**1,387**	**4**
TMDL = WLA + LA + MOS		***1,391***	***lbs/day***

Appendix E2 – Winter TMDL Summary

Winter TMDL Summary:

Bayou Maringouin -- LA120111

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		0	0
Benthic loads		431	7
Incremental Loads		0	0
SUB-TOTAL	**0**	**431**	**7**
TMDL = WLA + LA + MOS		***438 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		0	0
Benthic loads		950	15
Incremental Loads		0	0
SUB-TOTAL	**0**	**950**	**15**
TMDL = WLA + LA + MOS		***965 lbs/day***	

Notes:

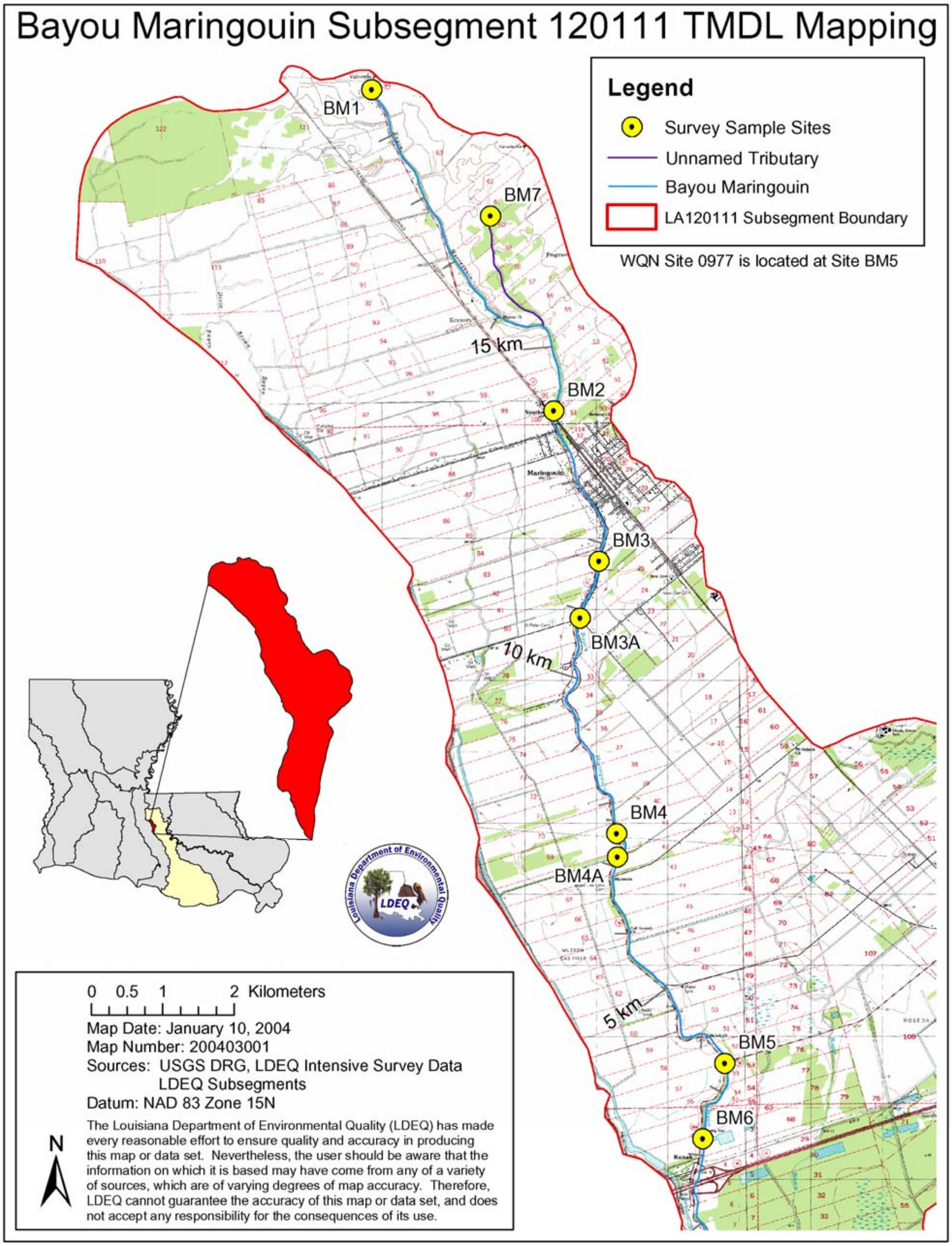
(1) - Load(lbs/day) = Load(kg/day) x 2.205

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		404	
Manmade Nonpoint Loads		28	7
SUB-TOTAL	**0**	**432**	**7**
TMDL = WLA + LA + MOS		***439 lbs/day***	

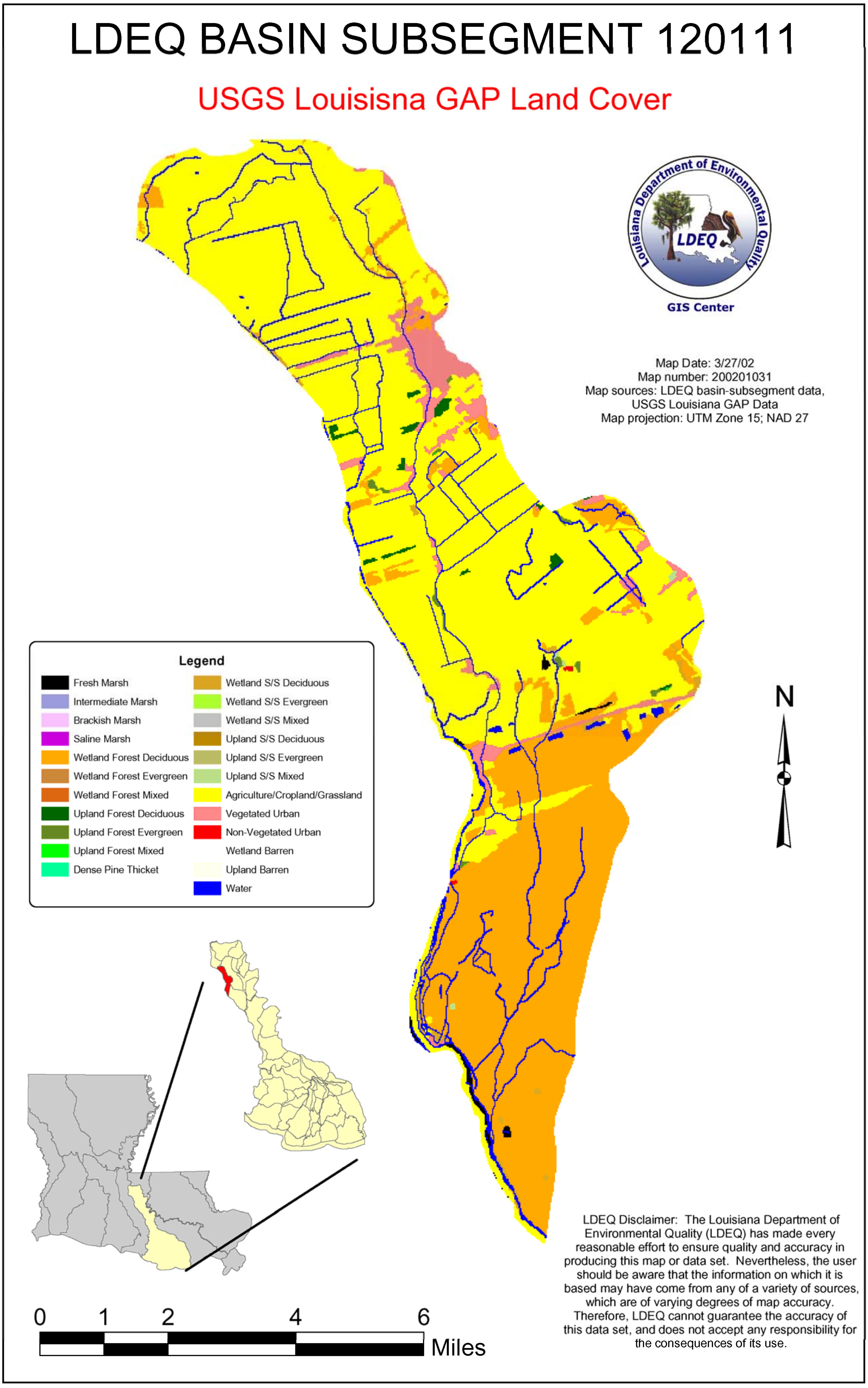
Calculation of the TMDL - Pounds per day			
Load description	WLA (lbs/day)	LA (lbs/day)	MOS Load (lbs/day)
Point Source loads	0		0
Natural Nonpoint Loads		890	
Manmade Nonpoint Loads		62	15
SUB-TOTAL	**0**	**952**	**15**
TMDL = WLA + LA + MOS		***967 lbs/day***	

Appendix F – Mapping

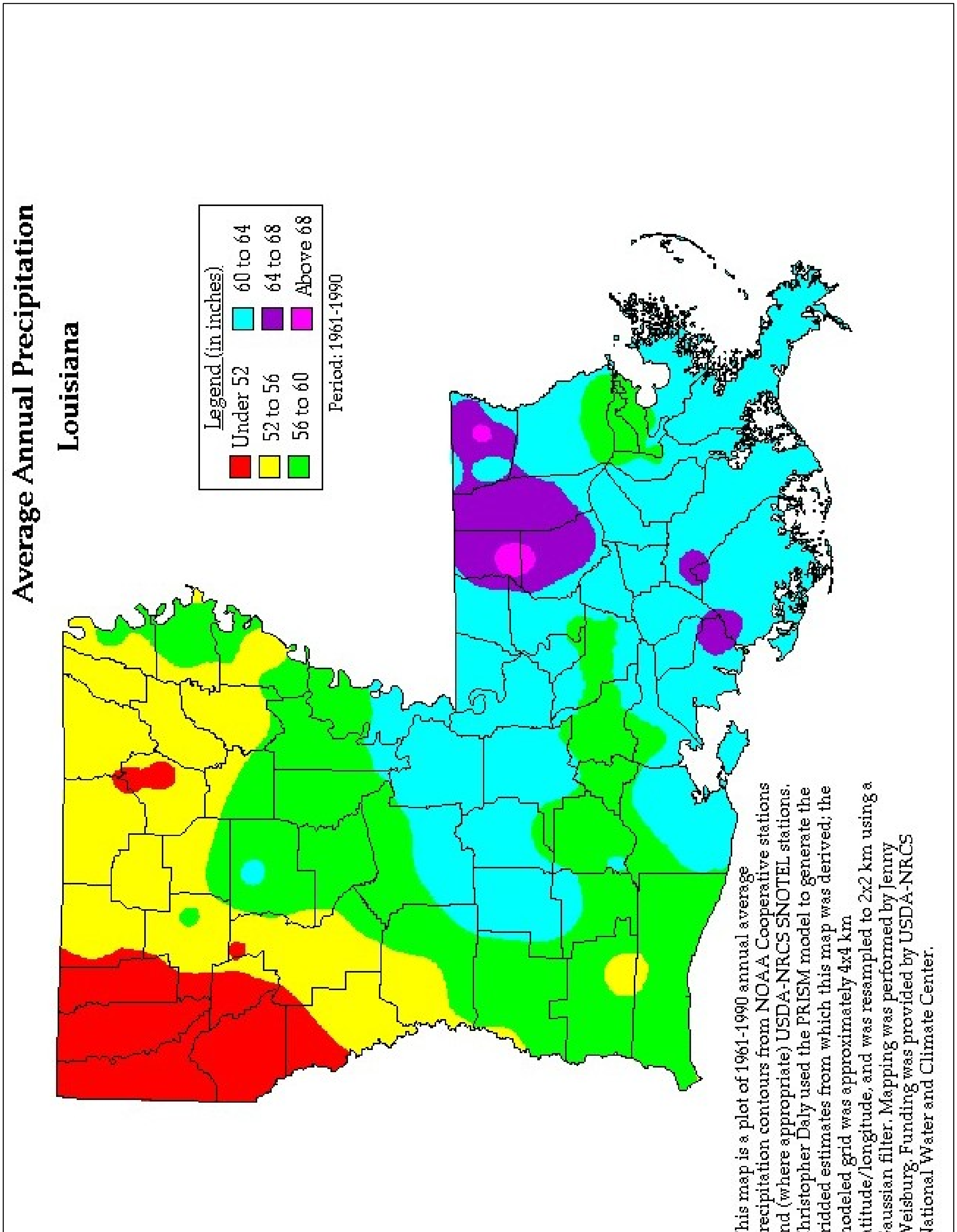
Appendix F1- Overview map



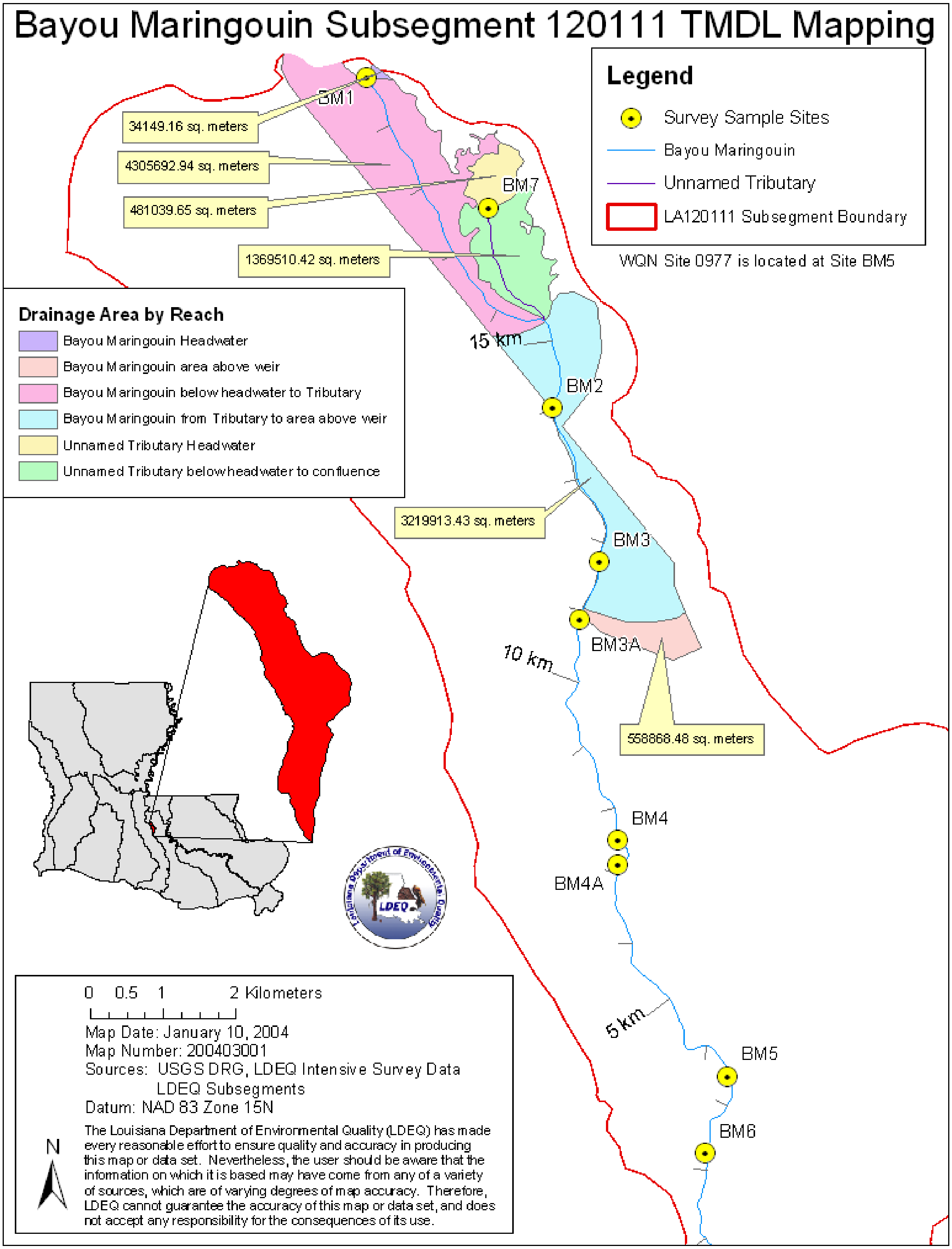
Appendix F2 – Land Use Map



Appendix F3 – La Precipitation Map



Appendix F4 – Drainage Area Map


Bayou Maringouin Subsegment 120111 TMDL Mapping
Legend
Survey Sample Sites
Bayou Maringouin
Unnamed Tributary
LA120111 Subsegment Boundary
WQN Site 0977 is located at Site BM5
Drainage Area by Reach
Bayou Maringouin Headwater
Bayou Maringouin area above weir
Bayou Maringouin below headwater to Tributary
Bayou Maringouin from Tributary to area above weir
Unnamed Tributary Headwater
Unnamed Tributary below headwater to confluence
34149.16 sq. meters
4305692.94 sq. meters
481039.65 sq. meters
1369510.42 sq. meters
3219913.43 sq. meters
558868.48 sq. meters
BM1
BM7
BM2
BM3
BM3A
BM4
BM4A
BM5
BM6
15 km
10 km
5 km
0 0.5 1 2 Kilometers
Map Date: January 10, 2004
Map Number: 200403001
Sources: USGS DRG, LDEQ Intensive Survey Data
LDEQ Subsegments
Datum: NAD 83 Zone 15N
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 map or data set, and does not accept any responsibility for the consequences of its use.
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Appendix F5 – Point Source Discharge Map