

Big Creek Watershed TMDL  
Subsegment 080903  
Originated: May 15, 2001; Revised: August 30, 2001

**BIG CREEK WATERSHED TMDL  
FOR BIOCHEMICAL OXYGEN-DEMAND SUBSTANCES OR  
POLLUTANTS AND NUTRIENTS**

**SUBSEGMENT 080903**

TMDL Report

Engineering Section 2  
Environmental Technology Division  
Office of Environmental Assessment  
Louisiana Department of Environmental Quality

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## EXECUTIVE SUMMARY

A TMDL for biochemical oxygen-demand pollutants and nutrients has been developed for the Big Creek Watershed based on hydrologic and water quality data available as of February, 2000. Big Creek is listed on both the 1998 303(d) and 2000 305(b) list as not meeting its designated use of Fish and Wildlife Propagation. The suspected causes of impairment include organic enrichment/low DO, Nitrogen, Phosphorus, Pesticides, Suspended Solids, Turbidity, Salinity/TDS/chlorides/sulfates and pathogens. The suspected sources of impairment include agriculture, non-irrigated crop production, pastureland, land disposal and onsite wastewater (septic tanks). This TMDL addresses the organic enrichment/low DO as well as the nitrogen and phosphorus (Nutrients) suspected causes.

The ambient monitoring samples for Big Creek were obtained between 1995 and 1999 with several dissolved oxygen samples falling below the dissolved oxygen criteria for this waterbody. The majority of the samples below criteria were taken at the upper water quality station, located on Highway 80. The water quality survey conducted in September 1999, during a period of extreme drought conditions, revealed dissolved oxygen levels below criteria in the upper reaches of the creek. Big Creek was ranked as high priority (priority 1) on the list for development of a total maximum daily load (TMDL).

Big Creek was modeled from its headwaters, at Highway 879, to its confluence with the Boeuf River. The Big Creek watershed is subsegment 080903 of the Ouachita River Basin (Basin 08). Subsegment 080903 is comprised of Big Creek, Big Colewa and all their tributaries, including Bee Bayou, Turkey Creek, and Little Colewa.

Big Creek's land uses are 79.67% agriculture, 12.71% forestry, 0.12% urban, 5.27% water, 1.83% shrub/scrub, and 0.39% marsh. The urban areas had a small population growth in the last 10 years and a large percentage of the land use is already being utilized for agriculture and forestry. Due to these facts, the estimated nonpoint explicit margin of safety for this watershed was reduced from the standard 20% to 10%. The explicit point source margins of safety used in the TMDL load calculations was 20%.

The current annual dissolved oxygen criterion for the 080903 subsegment is 5.0 mg/l. Model projections were performed for the summer and winter critical seasons using the current DO criterion. Projections show that compliance with the current dissolved oxygen criterion will require a 35% to 75% reduction of man-made nonpoint loading, with the higher percent reductions being applied to the upper reaches of the watershed.

Several point sources fall within the subsegment. Many of these facilities were deemed either intermittent stormwater or small industrial dischargers without oxygen demand limits. Other municipal and industrial point sources discharging to tributaries of Big Creek were considered to be minor and not significantly contributing to the current problems in Big Creek (080903). These facilities' current state permit BOD and nitrogen component load limits were compiled and added to the TMDL WLA loads. The perennial tributaries were included in the model only

as a boundary condition to the mainstem of Big Creek. One municipal discharger, Village of Mangham, which discharges directly to Big Creek, was included in the water quality model. Its current permit limits were confirmed by the model and were added to the TMDL WLA loads. The nonpoint source loads included benthic nonpoint loading not associated with flow as well as headwater and tributary loads.

A survey was conducted (September 20-21, 1999) during a period of severe drought. The Big Creek watershed was in a low flow condition. There were only two tributaries that had velocities that could be measured with typical survey equipment, Bee Bayou and Turkey Creek.

The various spreadsheets used in conjunction with the modeling program may be found in the appendices. The water quality calibration was based on measurements taken during the September 20-21, 1999 survey. The projections were adjusted to meet the dissolved oxygen criteria by reducing man-made nonpoint source loads.

The waterbody was also listed as impaired due to nutrients. This TMDL establishes load limitations for oxygen-demanding substances and goals for reduction of those pollutants. LDEQ's position, as supported by the ruling in the lawsuit regarding water quality criteria for nutrients (*Sierra Club v. Givens*, 710 So.2d 249 (La. App. 1<sup>st</sup> Cir. 1997), writ denied, 705 So.2d 1106 (La. 1998), is that when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. The implementation of this TMDL through wastewater discharge permits and implementation of best management practices to control and reduce runoff of soil and oxygen-demanding pollutants from nonpoint sources in the watershed will also control and reduce the nutrient loading from those sources. **Also based on a review of the 1999 survey data and historical ambient data, the water body's nutrient values do not appear to be largely different from the background reference streams and ambient station average values. This indicates that nutrients should not be listed as a cause of impairment for Big Creek.**

Land use in the Big Creek watershed is fairly homogeneous with agriculture as the primary use. TMDLs have been calculated for Big Creek and are presented in the following tables. Due to the many assumptions made while developing the model, the inherent error within the model algorithms, and the scale of a watershed-based model, the results of this model should be used only as an aid in making water quality based decisions.

Current Standard: 5.0 mg/l

<u>TMDL component loads</u>	<u>Critical summer season</u>	
	<u>(May - Oct)</u>	
	<u>BOD Loading</u>	<u>% of TMDL</u>
	<u>(lbs/day)</u>	
Headwater/Tributary Loads	33	0.13
Benthic Loads	22,317	89.73
Point Source Loads	891	3.60
Margin Of Safety	1,634	6.54
Reduction of man-made nonpoint	35% - 75%	
Total maximum daily load (TMDL)	24,875	100

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## 1.0 Introduction

Big Creek, Subsegment 080903 of the Ouachita Basin, was part of the 1999 ambient sampling, as well as the LDEQ historical ambient program. Upon analysis the waterbody was found to be impaired due to organic enrichment/low DO and requiring the development of a total maximum daily load (TMDL) for dissolved oxygen. A water quality survey was performed, and upon completion a calibrated water quality model for the Big Creek watershed was developed. Based on the calibration model, a critical summer season projection was run to quantify the nonpoint source load allocations (LAs), wasteloads (WLAs) and margin of safety (MOS) required to meet established dissolved oxygen criteria. An additional winter season projection was run to verify the predicted instream dissolved oxygen values were still meeting the criteria, based on the seasonal 90th percentile temperatures and nonpoint loading determined by the critical season projection model. The winter projection also allows the determination of seasonal limits for the point sources.

The waterbody was also listed as impaired due to nutrients. This TMDL establishes load limitations for oxygen-demanding substances and goals for reduction of those pollutants. LDEQ's position, as supported by the ruling in the lawsuit regarding water quality criteria for nutrients (*Sierra Club v. Givens*, 710 So.2d 249 (La. App. 1<sup>st</sup> Cir. 1997), writ denied, 705 So.2d 1106 (La. 1998), is that when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. The implementation of this TMDL through wastewater discharge permits and implementation of best management practices to control and reduce runoff of soil and oxygen-demanding pollutants from nonpoint sources in the watershed will also control and reduce the nutrient loading from those sources. **Also based on a review of the 1999 survey data and historical ambient data, the water body's nutrient values do not appear to be largely different from the background reference streams and ambient station average values. Thus it is LDEQ's position that nutrients should not be listed as a cause of impairment for Big Creek.** This report presents the oxygen-demanding model development and results.

## 2.0 Study Area Description

### 2.1 Ouachita Basin

The Ouachita River's source is found in the Ouachita Mountains of west central Arkansas near the Oklahoma border. The Ouachita River flows south through northeastern Louisiana and joins with the Tensas River to form the Black River, which empties into the Red River. The Ouachita Basin covers over 10,000 square miles of drainage area. Most of the basin consists of rich, alluvial plains cultivated in cotton and soybeans. The northwest corner of the basin is forested in pine, which is commercially harvested. (LA DEQ, 1996).

### 2.2 Big Creek Watershed, Subsegment 080903

This area is typical of the basin and is primarily used for agriculture as documented in Table 1 (LADEQ, 2000). Subsegment 080903 is comprised of Big Colewa, which is renamed Big Creek at or near the Hwy 80 bridge. Big Creek flows in a general North to South direction from its headwaters to its confluence with the Boeuf River. The modeled portion of Big

Creek receives flow from the following perennial tributaries: Little Colewa Creek 1, Little Colewa Creek 2, Cypress Creek, Cow Bayou, Bee Bayou, Turkey Creek, Little Creek and several unnamed intermittent tributaries. The modeled reach is 134.2 kilometers in length, and has a total of six weirs/dams, which have an average fall height of 3-4 feet during low flow conditions. The reservoirs created behind these dams are used for agricultural purposes as well as some recreational ones.

Average annual precipitation in the segment, based on 30-years of record (1961-1990) for the Northeastern weather region, is 55 inches (SRCC, 2000). Land use in the Ouachita is largely agriculture. Land uses in Subsegment 080903 are shown in Table 1 below (LA DEQ GIS Center, 2000).

Table 1. Land uses in Subsegment 080903 of the Ouachita Basin

<u>Land use</u>	<u>Sq. Miles</u>	<u>%</u>
Agricultural	434.62	79.67
Forest Land	69.34	12.71
Water	28.75	5.27
Shrub/scrub	9.98	1.83
Marsh	2.13	0.39
Urban	0.65	0.12

### 2.3 Water Quality Standards

Water quality standards for the State of Louisiana have been defined (LA DEQ, 2000). The standards are defined according to designated uses of the waterbodies. The numerical criteria are shown in Table 2.

Designated uses for Big Creek from the headwaters to its confluence with Boeuf River, waterbody subsegment 080903, include primary contact recreation, secondary contact recreation, propagation of fish and wildlife.

Big Creek is listed on both the 1998 303(d) and 2000 305(b) list as not meeting its designated use of Fish and Wildlife Propagation. The suspected causes of impairment include organic enrichment/low DO, Nitrogen, Phosphorus, Pesticides, Suspended Solids, Turbidity, Salinity/TDS/chlorides/sulfates and pathogens. The suspected sources of impairment include agriculture, non-irrigated crop production, pastureland, land disposal and onsite wastewater (septic tanks)

Table 2. Current Numerical Criteria for Big Creek (LA DEQ, 2000)

<u>Parameter</u>	<u>Criteria</u>
Dissolved Oxygen, mg/l	5.0
Cl, mg/L	230
SO <sub>4</sub> , mg/L	75
pH	6.0-8.5
BAC	1
Temperature, deg Celsius	32
TDS, mg/L	685

#### 2.4 Discharger Inventory

A facility review was performed and included in Appendix A. Most of the dischargers in this watershed are small and located on tributaries to the 303(d) listed waterbody. These were not included in the TMDL model. It is unlikely that they will have an impact on the targeted waterbody due to the small load and/or the distance from the waterbody named on the 303(d) lists. These dischargers are included in the TMDL load calculations using their current state policy based permit limits along with their anticipated flows. The majority of these facilities discharge to perennial tributaries, which were included in the model as tributary boundary conditions. One discharger, the Town of Mangham, was included in the TMDL model because it discharges directly into Big Creek via a short drainage canal. All other facilities found in the inventory would not significantly contribute to the CBOD or NBOD loading of the stream and were not included in this model or the TMDL calculations.

Several facilities were found in the subsegment 080905, which is a tributary to Big Creek. This subsegment was assessed and found to be meeting its dissolved oxygen criteria and was not included on the 303(d) list. It is assumed that the current state policy limits assigned to these facilities are adequately protecting the waterbody. Since the waterbody is meeting its requirements, the facilities found in this watershed were not added to this TMDL's WLA.

#### 2.5 Previous Studies and Other Data

The majority of the data used for this project was obtained during a watershed survey conducted on September 20-21, 1999. Discharge data, cross-section data, field data, and lab water quality data from the watershed survey are presented in Appendix C.

The BOD suppressant failed between days 6 and 10 in the 20-day suppressed BOD test. Two additional trips were made and BOD samples were collected from four of the original survey sites. These samples were analyzed using the new BOD test method for determining ultimate CBOD and NBOD values. This new method requires the reading of multiple total BOD daily values over 60 days, and the measurement of the Nitrite/Nitrate values taken on the same day as the total BOD reading. The delta Nitrite/Nitrate daily reading values are used to determine the NBOD and this value is subtracted from the total BOD reading to determine the measured CBOD. The Ultimate BOD determination worksheets and plots are attached in Appendix C.

Using the calculated ultimate CBOD values, NBOD values and decay rates found with the subsequent sampling and new test method, correlations were determined between these parameters and surrogate parameters that were sampled during the original survey. The relationships derived from these correlations were used to approximate ultimate CBOD and NBOD values and decay rates for the original survey dataset.

LADEQ had two monthly water quality sampling stations on Big Creek. LDEQ WQ site 0328's period of record is 1991-1998 and site 0069's period of record is 1978-1999. Data collected during the Eularian survey conducted September 20-21, 1999, was used to establish the input for the model calibration and is presented in Appendix C.

### 3.0 Documentation of Calibration Model

#### 3.1 Model Description and Input Data Documention

##### 3.1.1 Program Description

The model used for this TMDL was LA-QUAL, a steady-state one-dimensional water quality model. Its history dates back to the QUAL-I model developed by the Texas Water Development Board with Frank D. Masch & Associates in 1970 and 1971. William A. White wrote the original code.

In June, 1972, the United States Environmental Protection Agency awarded Water Resources Engineers, Inc. (now Camp Dresser & McKee) a contract to modify QUAL-I for application to the Chattahoochee-Flint River, the Upper Mississippi River, the Iowa-Cedar River, and the Santee River. The modified version of QUAL-I was known as QUAL-II.

Over the next three years, several versions of the model evolved in response to specific client needs. In March, 1976, the Southeast Michigan Council of Governments (SEMCOG) contracted with Water Resources Engineers, Inc. to make further modifications and to combine the best features of the existing versions of QUAL-II into a single model. That became known as the QUAL-II/SEMCOG version.

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

In 1999, the Louisiana Department of Environmental Quality and Wiland Consulting, Inc. developed LA-QUAL based on QUAL-TX Version 3.4. The program was converted from a DOS-based program to a Windows-based program with a graphical interface and enhanced graphic output. Other program modifications specific to the needs of Louisiana and the Louisiana DEQ were also made. LA-QUAL is a user-oriented model and is intended to provide the basis for evaluating total maximum daily loads in the State of Louisiana.

### 3.1.2 Model Schematic or Vector Diagram

A vector diagram of the modeled area is presented in Appendix F. The vector diagram shows the reach/element design and the locations of major tributaries. The modeled segment consists of 16 reaches numbered in ascending order from headwater to Big Creek's confluence with the Boeuf River. Reaches 5, 7, 9, 11, 13, 15 are one-element reaches that characterize the six weirs/dams that are distributed along the lower half of the waterbody. The modeled area is characterized by 15 sample sites on Big Creek, 2 sample sites on flowing tributaries, 1 sample site at the town of Mangham discharge and 1 sample site on the Boeuf River upstream of the confluence with Big Creek. A digitized map of the stream showing river kilometers, cross-section locations, six dams/weirs and the September 20-21, 1999 sampling sites is included in Appendix F.

### 3.1.3 Hydrology and Stream Geometry and Sources

The stream geometry at the headwater is shallow and narrow. No geometry data within this reach was collected during the survey; however visual observations were made by the modeling staff during the reconnaissance and survey. The model was adjusted to approximate the visual observations. The stream in general continues to widen and deepen until it reaches the section of the creek where the dams/weirs start to affect the stream geometry. Below this point the stream width becomes very stable with the stream depths fluctuating between dams/weirs. Cross-section data was collected at multiple sites along the stream, with the majority of them on the lower half. This data was used in the calibration. The individual cross-sectional area, width and average depth calculations are attached in Appendix C.

Rather than directly inputting the widths and depths of the stream, the model requires that advective hydraulic characteristics (a modification of the Leopold Coefficients and Exponents) be entered. Three sites were chosen as stream geometry sites. A cross-section measurement was made at these sites at an optimum location to best depict the average width and depth for the adjoining stream reaches. Width and depth data were also collected above the water line, up the banks, to above the bankfull level. The water level at that time was then taken with a tapedown at the nearest bridge, and a flow measurement was made at an optimum nearby location. Subsequent visits were made to these sites to measure flows and tapedowns. Using the relationship between the tapedown and the average cross-sectional area, width and depth, LDEQ could then compare these values to the measured stream flows. This relationship allowed us to determine the geometric coefficients and exponents required by the model for each reach. One site located at Hwy 2 could not be used due to the severe drought conditions and the lack of measurable flow. Two sites located at Hwy 134 and Hwy 135 had sufficient flow and hydrologic data to calculate these coefficients and exponents. The values for the Hwy 134 site were used for the upper reaches not affected by the dams/weirs. The values for the Hwy 135 site were used for the lower reaches affected by the dams/weirs. These calculations and worksheets are attached in Appendix C. The constants used for each reach were determined via the hydrologic calibration using the cross-sectional data collected during the survey and other times at similar flow conditions to the survey.

The reach and element design for the Big Creek model was made using a 0.10 km element length. The total number of reaches and elements were within the limitations of the model. "The current version is dimensioned for a maximum of 200 reaches, 100 headwaters, 300 wasteloads and 3000 elements" (LA-QUAL User's Manual). The final design incorporated 16 reaches, 1 headwater, 7 tributaries and 1,342 elements. A simple spreadsheet was used to calculate the reach length, element length, and cumulative number of elements at the bottom of each reach. This spreadsheet is presented in Appendix A.

### 3.1.4 Headwater

Since the survey was conducted during drought conditions, no measurable headwater flow was obtainable with the current instrumentation. Therefore, a minimum flow of 0.0037 cms or 0.13 cfs was used for headwater. This flow was calculated by applying the ratio (0.0208 cfs/square mile) of the measured flow during the survey at Mitchner Rd to the drainage area at this location. This calculated flow is very near the LTP default headwater summer flow. This calculation is shown in the flow determination spreadsheet shown in Appendix A.

### 3.1.5 Water Quality Input Data and Their Sources

Water quality data collected during the September 20-21, 1999 survey on Big Creek and its tributaries was entered in a spreadsheet for ease of analysis. This spreadsheet is given in Appendix C. Overall, water quality was fair with most the current numerical criteria being met for this modeled area with the exceptions of pH and Chlorides at single sites, TDS at two sites, and DO at three sites.

Upon a review of the continuous monitor data, given in Appendix C, diurnal DO variations were noted and attributed to two causes: temperature induced and possible algal production and respiration. **Chlorophyll a** and suspended solids were relatively low. Dissolved solids were relatively high.

The ultimate CBOD, NBOD, and corresponding decay rates were computed for each sample taken using the correlations described in Paragraph 2.5 of this report. The calculations and correlations are presented in Appendix C. This data was the primary source for the model calibration input data for initial conditions, decay rates, headwater temperature, and headwater DO.

#### 3.1.5.1 Temperature Correction of Kinetics, Data Type 4

The model input temperature values 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 model reach 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

(LAQUAL Documentation and User Model, 1998)

In 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, 2000).

### 3.1.5.2 Initial Conditions, Data Type 11

The initial conditions are used to reduce the number of iterations required by the model. The values required for this model's purposes were temperature, chlorophyll A and dissolved oxygen by reach. The initial condition input values were determined from the September 20-21, 1999 survey stations located on Big Creek. The average DO of the mainstem Big Creek sites was used. The temperature throughout the stream was fairly consistent, thus the average temperature was used for model stability and consistency. The reach values for the other parameters were determined by the survey site data in or near the reach location.

### 3.1.5.3 Reaeration Rates, Data Type 12

The Louisiana equation was used for reaches 1-6 and 16. These reaches had depths and the majority of the velocities in the allowable ranges for this equation. The 0.7 meters/day was used as the minimum  $K_L$  for those elements where the velocities are extremely low. The average river depths and low velocities in reaches 7-15 did not meet any of the standard reaeration rate equation's depth and velocity ranges. The minimum  $K_L$  of 0.7 meters/day was used to simulate the reaeration rate for these reaches in the model. This minimum  $K_L$  value was then adjusted for water surface wind velocities. This waterbody within these reaches is wide and susceptible to seasonable winds. The equation used to make this adjustment is Equation (3-23), page 122, in the Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was derived from the daily average for September 20, 1999 at the Shreveport historical climate station. This daily average was based on wind velocities measured at 10 meters height. The daily average value was then reduced to its equivalent water surface wind velocity at a 0.1 meters height. The equivalent water surface wind velocity was used in the above equation to calculate the adjusted minimum  $K_L$  value.

The reaeration rate across the weirs at the time of the survey was minimal. This was determined by measuring the dissolved oxygen concentrations above and below the accessible weirs with continuous monitors as well as in-situ instruments. The records showed variations in the concentrations, however a consistent increase over the weirs could not be determined. The flow across the accessible weirs was found to be only a trickle, thus a conservative approach was taken by assuming the increase in aeration across the weirs to be zero. The data, calculations and justifications are shown in Appendix A.

#### 3.1.5.4 Sediment Oxygen Demand, Data Type 12

The SOD values used were achieved through the model's dissolved oxygen calibration runs. The SOD value for each reach is shown in Appendix A.

#### 3.1.5.5 Carbonaceous BOD Decay and Settling Rates, Data Type 12

These rates are labeled Aerobic BOD Decay and BOD Settling in LA-Qual. The individual reach decay rates used were based on the average of the Big Creek survey site's estimated bottle rates using the correlations described in Paragraph 2.5 of this report. These estimated rates were similar throughout the waterbody, so an overall average was used. The settling velocities were taken from the Texas "Waste Load Evaluation Methodology", page D-14. The decay rates and settling velocities used and their justifications for each reach are shown in Appendix A.

#### 3.1.5.6 Nitrogenous Decay and Settling Rates, Data Type 13

These rates are labeled NCM decay and NCM Settling in LA-QUAL. The individual reach decay rates were based on the average of the September 20-21, 1999 survey sites correlation estimated decay rates for the sites in proximity to the reach. The settling velocities were based on the Texas "Waste Load Evaluation Methodology" guidelines for Org-N. These rates were not modified during calibration. The Org-N settling velocities were used to simulate NBOD rates because the Org-N decay rate is the limiting rate in the Nitrogen cycle and is the part of NBOD that is settleable. The decay rates and settling velocities used and their justifications for each reach are shown in Appendix A.

#### 3.1.5.7 Incremental Conditions, Data Types 16, 17, and 18

The incremental conditions are used in the calibration to represent nonpoint source loads associated with flows. Incremental inflows were determined in reaches 1-16. There were distinct increases in flows throughout the system, for which the flowing tributaries or dischargers could not account. After a review of the flow measurements during the survey and the 7Q10 data at the Hwy 80 and Hwy 15 bridges, it was determined that an incremental flow break point occurs at or near the Hwy 80 bridge. Above this point the incremental flows appear to be minimal compared to the flows coming into the system below Hwy 80. Thus the calibration incremental flows above Hwy 80 were based on the flow measurement at Mitchner Road during the survey and the surrounding drainage areas. Below Hwy 80, the flows don't appear to be dependent upon the drainage areas, and are probably groundwater intrusion into the deeper channel. Thus incremental flows below Hwy 80 were derived from the measured flows on Big Creek at Weir #1, Bee Bayou, Turkey Creek and the stream length within the reaches.

No data was available as to the general water quality values for the groundwater in the area. It was assumed that the DO, CBODu and NBODu were all zero. This is an acceptable practice for groundwater encroachment water quality. Any loading that might be entering the system through this avenue will be accounted for with the nonpoint loading not associated

with flow. The incremental flows and water quality data for each reach are shown in Appendix C.

#### 3.1.5.8 Nonpoint Sources, Data Type 19

Nonpoint source loads, which are not associated with a flow, are input into this part of the model. These can be most easily understood as resuspended CBOD and NBOD load from the bottom sediments. The values used in the model were determined via calibration. The data and sources are presented in Appendix A.

#### 3.1.5.9 Headwaters, Data Types 20, 21, and 22

The headwater flow was calculated by multiplying the headwater differential drainage area by 0.0208 cfs/sq.mile. This cfs/sq.mile ratio was determined by dividing the measured flow at the Mitchner Road bridge by the drainage area above the bridge. The flow was 0.0037 cms or 0.13 cfs. The bayou was actually dry and pooled above this point; however the estimated headwater flow is very near LDEQ's LTP default value of 0.1 cfs. Thus it was decided to stay with the calculated flow, since a small flow was required to run the computer model and should adequately simulate the system. The water quality data was derived from the measured water quality data during the September 20-21, 1999 survey for Site 15 at the Hwy 879 bridge.

#### 3.1.5.10 Wasteloads, Data Types 24, 25, and 26

The wasteloads entered in the model were of two different types: treatment plant effluent and unmodeled tributaries. The unmodeled tributaries consisted of Little Colewa Creek 1, Little Colewa Creek 2, Cypress Creek, Cow Bayou, Bee Bayou, Turkey Creek, and Little Creek. Two of the unmodeled tributaries, Bee Bayou and Turkey Creek, were sampled during the survey and the results of these samples were the basis for the input data for all the tributaries. The Turkey Creek water quality was determined to be the best representation of the tributaries, due to its similar land uses. The Bee Bayou water quality data appeared to be influenced by several aqua cultural ponds running alongside of the bayou. The wasteload from the Town of Mangham treatment plant was determined from the permit data and application. Since temperature is not being modeled the treated effluent temperature was set to the same value as the modeled temperature within the reach. The data and sources are presented in Appendix A.

#### 3.1.5.11 Boundary Conditions, Data Type 27

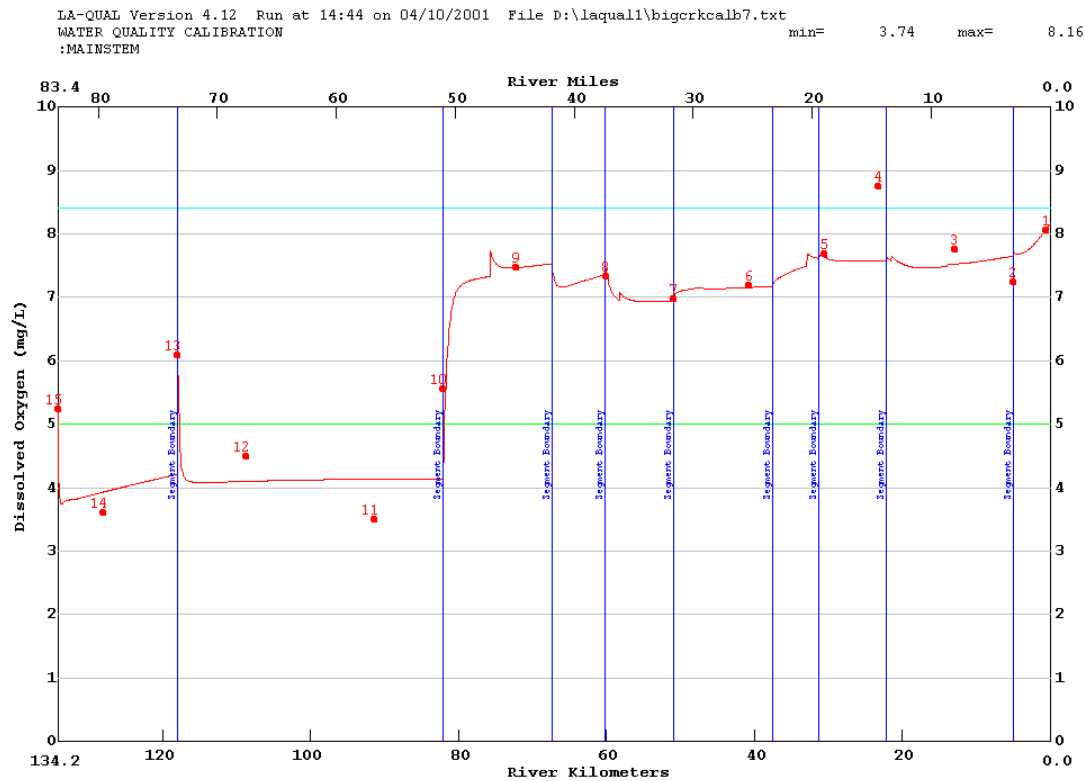
This waterbody was not tidally influenced. However, with the flow of the Boeuf River meeting the minimal flow of Big Creek at their confluence, dispersion was calculated by the model for reach 16. Reach 16 is the bottom of the modeled segment. Dispersion with the Boeuf River is prevented by Weir #1 located in Reach 15. Only temperature and Chlorophyll a values were used in this section to correlate to the values set in the "Initial Conditions" section of the model input. If these values are not set, the model will extrapolate these values to zero at the model's end point, thus skewing the last reach's calculated values. The other modeled parameters were allowed to reach their own equilibrium, and this value was

compared to the measured values at Site 1 from the September 20-21, 1999 survey. The data and sources are presented in Appendix A.

### 3.2 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 1.

Figure 1. Calibration Model--Dissolved Oxygen versus River Kilometer



Big Creek main stem extends from its headwaters to its confluence with the Boeuf River and is represented by Reaches 1 - 16. A good calibration was achieved for CBOD and NBOD on the main stem. Both wind and algal oxygen production effects were taken into consideration in the calibration. The model simulates the measured values of DO adequately at the one meter depth. The survey data shows that in September 1999, the current DO standard of 5.0 mg/L was not being met in certain reaches of the upper modeled portion of Big Creek. The model could not go through the minimal values using reasonable model input values, but it was on the conservative side compared to the other samples and was determined to be a reasonable calibration.

#### 4.0 Water Quality Projections

The traditional summer critical projection loading scenario was performed at the current annual DO standard criteria. This scenario was based on reduced man-made nonpoint loads at summer season critical condition. An additional winter projection was run to verify the model predicted dissolved oxygen did meet the criteria and to allow the modeler to address seasonal permit limits for the dischargers.

#### 4.1 Critical Conditions

##### 4.1.1 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 Big Creek 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 Big Creek using long term water quality data from the LDEQ Ambient Monitoring Network. The 90<sup>th</sup> 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, all of which combined characterize the summer season.

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 Big Creek dissolved oxygen TMDL projection modeling by using the default flows from the Louisiana Technical Procedures Manual, and the 90<sup>th</sup> percentile temperature. Model loading was from perennial tributaries, sediment oxygen demand, resuspension of sediments and the one discharger.

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

Critical summer conditions were simulated in the Big Creek oxygen demand TMDL projection modeling by using an estimated 0.1 cfs for all headwaters and tributaries as stated in the Louisiana Technical Procedures Manual and temperatures ranging from 28.4°C to 31.1°C, depending on the reach, for the summer season. Incremental flow was used in the projection hydrology due to its presence during severe drought conditions. The total summer projection flows were adjusted to coincide with the determined summer season 7Q10 for the stream at known locations. Model loading was input as sediment oxygen demand and resuspended CBOD/NBOD loadings. These man-made loads were then reduced to meet the dissolved oxygen criteria of 5.0 mg/l. A 10% MOS was used instead of the standard 20%, in the summer projections. This reduction in the MOS was justified by the large portion of the watershed's landuse already in use by non-point sources, minimizing the possibility of additional loading being added to the system. Also a review of recent and projected Census records does not justify a larger MOS. A 20% MOS for the point sources was applied.

Winter projection conditions were simulated by using an estimated 1.0 cfs for all headwaters and tributaries as stated in the Louisiana Technical Procedures Manual and temperature of 17.3°C to 17.5°C, depending on the reach. Again, incremental flows were used in the projection hydrology due to its presence during severe drought conditions. The total winter projection flows were adjusted to coincide with the determined winter season 7Q10 for the stream at known locations. Model loading was input as sediment oxygen demand and resuspended CBOD/NBOD loadings. The percentage reductions of the man-made nonpoint loads were held at the same values as the summer critical projection model. A 10% MOS was also used in the Winter projection. A 20% MOS for the point sources was applied.

#### 4.1.2 Hydrology, Stream Geometry and Sources

The headwater flows used in all the projection scenarios were based on the summer and winter defaults listed in the Louisiana Technical Procedures Manual (LTP). All incremental flows were assumed to be present during critical flow periods since they were present during drought conditions. This assumption was based on the survey data being taken at drought conditions.

The seasonal 7Q10 flows for Big Creek were derived from two USGS partial record stations and one LDEQ/USCOE flow station. The USGS stations were located at Hwy 80 and Hwy 15. The LDEQ/USCOE flow station was located at Hwy 135. There was insufficient data from the two USGS partial record stations to derive seasonal 7Q10's. The measured data by LDEQ and USCOE at Hwy 135 was plotted against the USGS continuous record station on Bayou Macon at Delhi. Using the seasonal 7Q10 values for the station on Bayou Macon and the previous plot, the corresponding annual and seasonal 7Q10's were calculated. The determined annual 7Q10 at Hwy 135 was adjusted to the annual 7Q10 for the USGS partial record station at Hwy 15. The corresponding values were within 3% of each other, thus LDEQ believed this to be a valid method of determining the seasonal critical flow values.

Rather than directly inputting the widths and depths of the stream, the model requires that the advective hydraulic characteristics (a modification of the Leopold Coefficients and Exponents) be entered. Two sites located at Hwy 134 and Hwy 135 had sufficient flow and hydrologic data to calculate these coefficients and exponents. The values for the Hwy 134 site were used for the upper reaches not affected by the dams/weirs. The values for the Hwy 135 site were used for the lower reaches affected by the dams/weirs. The constants used for each reach were determined during the hydrologic calibration.

#### 4.1.3 Water Quality Input Data and Their Sources

The initial condition temperatures were set to the 90<sup>th</sup> percentile critical season temperature in accordance with the LTP. Critical temperatures for each season were determined from the temperature data collected by LADEQ as part of its current ambient monitoring strategy. The 90<sup>th</sup> percentile temperatures for each season were computed for LADEQ water quality ambient stations #0069 and 0328 on Big Creek from 1995 to 2001. This represented three to four years of record, depending on the site. [The temperature analysis spreadsheet is shown in Appendix B.](#) In accordance with the LTP the dissolved oxygen values for the initial conditions were set at 90% of the DO saturation at the 90<sup>th</sup> percentile temperature for the season.

The CBOD decay rates and settling velocities as well as the NBOD decay rates and settling velocities, were held constant at the calibration rates. The reaeration rates were based on the Louisiana equation in reaches 1-6 and 16. These reaches had depths, and a majority of the velocities within the allowable ranges for this equation. The 0.7 meters/day was used as the minimum  $K_L$  for those elements where the velocities are extremely low. The average river depths and low velocities in reaches 7-15 did not meet any of the standard reaeration rate equation's depth and velocity ranges. The minimum  $K_L$  of 0.7 meters/day was used to

simulate the reaeration rate for these reaches in the model. This minimum  $K_L$  value was then adjusted for water surface wind velocities. This waterbody within these reaches is wide and susceptible to seasonable winds. The equation used to make this adjustment is Equation (3-23), page 122, in the Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was derived from the monthly averages for the two seasons, May-October and November-April, for the Shreveport historical climate station. These monthly averages were based on wind velocities measured at 10 meters height. These monthly average values were reduced to their equivalent water surface wind velocity at a 0.1 meters height. The equivalent water surface wind velocity was used in the above equation to calculate the adjusted minimum  $K_L$  value. The data and calculations are shown in [Appendix A](#).

The incremental conditions are normally used in the calibration to represent nonpoint source loads associated with flows. For the projection and scenario runs, the incremental flows were also assumed to be present in reaches 4-16 because of their presence during the severe drought conditions. This assumption was also supported by the annual 7Q10 values derived for the USGS partial record stations.

No data was available as to the general water quality values for the groundwater in the area. It was assumed that the DO, CBOD<sub>u</sub> and NBOD<sub>u</sub> were all zero. This is an acceptable practice for groundwater. Any loading that might be entering the system through this avenue will be accounted for with the nonpoint loading not associated with flow. [The incremental flows and water quality data used for each reach are shown in Appendix C1.](#)

The headwater UCBOD and UNBOD used in all the projection scenarios were taken from the September 1999 survey data from the headwater site 15. The temperature used was the 90<sup>th</sup> percentile critical season temperature determined from the LADEQ ambient monitoring station on Big Creek (Site # 0328). The DO was determined as 90% of the DO saturation at the 90<sup>th</sup> percentile temperature for each season. The period of record used was 1995 to 1998.

#### 4.1.3.1 Sediment Oxygen Demand, Data Type 12

In the summer critical projections, the benthic man-made SOD load was added to the resuspended benthic CBOD and NBOD loads and the total man-made benthic load was reduced in each reach, as necessary, to meet the dissolved oxygen criterion.

#### 4.1.3.2 Nonpoint Sources, Data Type 19

The resuspended man-made CBOD and NBOD loading was reduced by 75% for reaches 1-2, and by 35% for reaches 3-16, in the summer critical projection scenario to meet the summer water quality criterion for dissolved oxygen. Since LADEQ assumes these benthic loads are long term loads brought to the stream by various sources throughout the year, the same percentage reductions were made in the winter projection model as were in the summer critical projection model. These reductions met the summer dissolved oxygen criteria and well surpassed requirements in the non-critical winter projection.



These reductions were determined using the calibrated values for nonpoint CBOD & NBOD and the total benthic natural loading of 1.0 gm O<sub>2</sub>/m<sup>2</sup>/day. The background loading value was determined from the Meridian Creek reference stream data, see (Smythe, 1999). This reference stream is not similar in hydrology to the current man altered Big Creek. However it probably is a good representation of what Big Creek was like before man's modification of the system.

The natural benthic value was subtracted from the total calibration benthic load to determine the reach's man-made benthic loading value. This man-made benthic load was then reduced to meet the dissolved oxygen criteria in each reach. Using the ratios determined in calibration, this reduced man-made load was then broken into its components of CBOD/NBOD (resuspension) and SOD. The percentage reduction within each reach was calculated based on the comparison of the reduced total man-made benthic load to the calibration total man-made benthic load. These calculations are shown in [Appendix B](#). The value and sources of CBOD and NBOD for each projection run are presented in [Appendix B](#).

#### 4.1.3.3 Wasteloads, Data Types 24, 25, and 26

The wasteloads entered in the model were of two different types: treatment plant effluent and unmodeled tributaries. The unmodeled tributaries consisted of Little Colewa Creek 1, Little Colewa Creek 2, Cypress Creek, Cow Bayou, Bee Bayou, Turkey Creek, and Little Creek. The water quality concentrations were maintained at the values used in the calibration model. The wasteload concentrations and flows from the Town of Mangham treatment plant were determined from the permit data and application, which have been included or summarized in [Appendix B](#). Since the treatment plant effluent had already received a regulated reduction in its discharge loads via the LDEQ permit limits, and its load was very small portion of the system's total load, no additional reductions were required. Since temperature is not being modeled, the treated effluent temperature was set to the same value as the modeled temperature within the reach. [The data and sources are presented in Appendix B.](#)

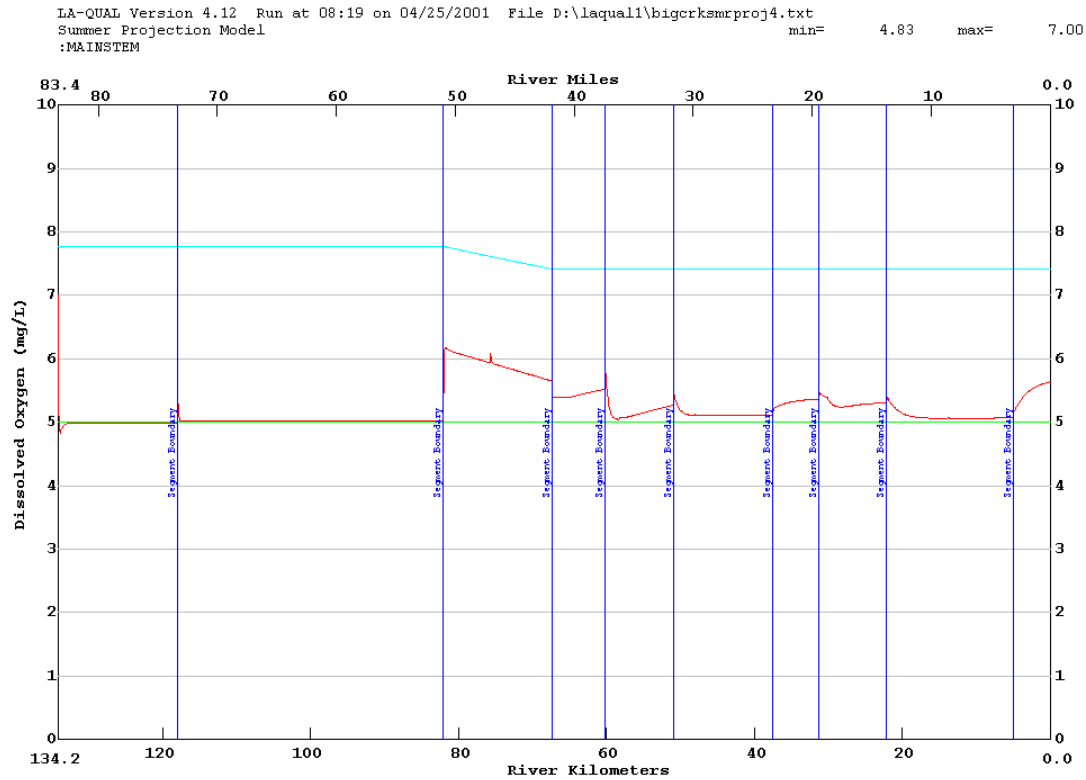
## 4.2 Projection Model Discussion and Results

The projection model inputs and output data sets are presented in [Appendix B](#).

### 4.2.1 Summer Projections

Summer projections were run for the current standard of 5.0 mg/L May – November. In order to meet the standard, a 75% reduction in reaches 1-2 with a 35% reduction in reaches 3-16, of man-made nonpoint sources is necessary. With these percentage reductions, the bayou is within the 0.2 mg/l EPA Region 6 allowable variance of the dissolved oxygen criterion. The minimum DO on the main stem is 4.83 mg/L. A graph of the dissolved oxygen concentrations versus river kilometers for the summer projection is presented in [Figure 2](#).

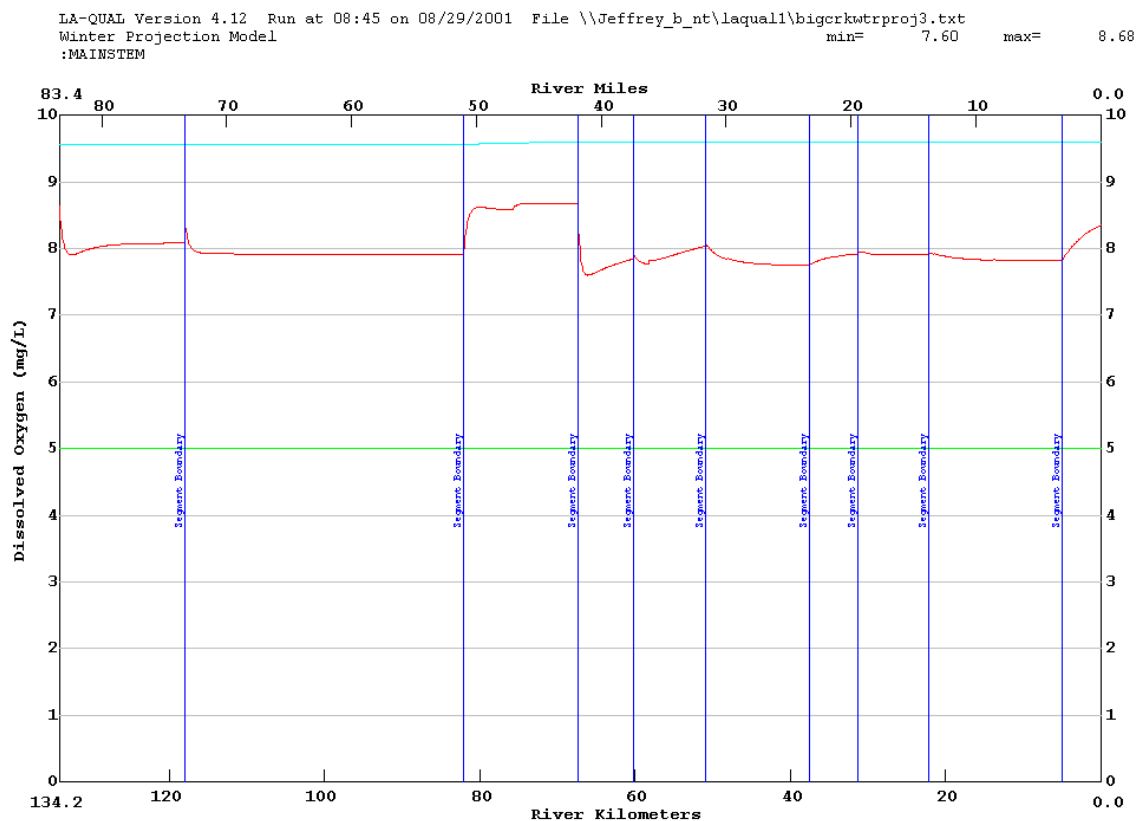
Figure 2. Summer Projection Model--Dissolved Oxygen versus River Kilometer



#### 4.2.2 Winter Projection

Winter projections were run at the current standard. The current standard is 5.0 mg/L November - April. Using the percentage reduction of the man-made nonpoint loading, as determined in the summer critical projection model, no additional reductions are required in the winter projection model to meet the dissolved oxygen criteria. As shown in the output graph, the bayou meets and exceeds the DO criterion. The minimum DO on the main stem is 7.60 mg/L. A graph of the projected winter dissolved oxygen concentration versus river kilometer is presented in Figure 3.

Figure 3. Winter Projection Model--Dissolved Oxygen versus River Kilometer



### 4.3 Calculated TMDLs, WLAs and LAs

#### 4.3.1 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.

4.3.1.1 The natural background benthic loading was estimated from the Meridian Creek reference stream resuspension (non-point NBOD and CBOD) and SOD load data.

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

- Calibration resuspension (nonpoint CBOD and NBOD), and SOD loads were summed for each reach as gm O<sub>2</sub>/m<sup>2</sup>-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.

4.3.1.3 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. 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 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<sub>2</sub>/m<sup>2</sup>-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 critical projection loads are also computed in units of lb/d and kg/d for each reach and used in the TMDL calculations.

4.3.1.4 The total maximum stream loading capacity (TMDL) during critical conditions is calculated as the sum of:

- Critical summer projection headwater and tributary CBOD and NBOD loading in lb/d and kg/d.
- The critical summer projection 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 critical summer projection margin of safety in lb/d and kg/d.

#### 4.3.2 Big Creek TMDL

The TMDL for this subsegment has been calculated based on the summer critical projection run. [These calculations are presented in Appendix E.](#) A summary of the loads is presented in Table 4.

Table 3. Total Maximum Daily Load Summaries—Based on Current Criteria

ALLOCATION	SUMMER (May-Oct) DO criterion=5.0 mg/L Oxygen demand substances (lbs/day)
Point Source WLA	891
Headwater/Tributary Loads	33
Benthic Loads	22,317
Margin of Safety	1,634
TMDL = WLA + LA + MOS	24,875

### 5.0 Sensitivity Analyses

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 LA-QUAL 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 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 to these parameters is presented in Table 6. Parameters were varied by +/- 30%, except temperature, which was adjusted +/- 2 degrees Centigrade. The calibration model minimum DO was 3.74 mg/L.

Table 4 Summary of Calibration Model Sensitivity Analysis

Parameter	Negative Changes in parameter			Positive Changes in parameter		
	% change	Minimum DO (mg/l)	Percentage Difference	% change	Minimum DO (mg/l)	Percentage Difference
Stream Reaeration	-30.0	1.86	-50.40	30.0	4.78	27.60
Benthic Demand	-30.0	5.04	34.70	30.0	2.39	-36.30
Initial Temperature	-2 deg C	4.42	18.10	2 deg C	3.40	-18.70
Initial Chlorophyll a	-30.0	3.58	-4.30	30.0	3.90	4.30
Stream Velocity	-30.0	3.86	3.00	30.0	3.65	-2.60
Headwater DO	-30.0	3.62	-3.20	30.0	3.76	0.50
BOD Decay Rate	-30.0	3.81	1.80	30.0	3.68	-1.70
BOD Settling Rate	-30.0	3.70	-1.10	30.0	3.77	0.80
Nonconservative Settling	-30.0	3.70	-1.20	30.0	3.78	0.90
Nonconservative Decay	-30.0	3.81	1.80	30.0	3.69	-1.50

As shown in the summary table, reaeration is the parameter to which DO is most sensitive (-50.4% to 27.6%). The other parameters creating major variations in the minimum DO values are Benthic Demand (-36.3% to 34.7%), and Initial Temperature (-18.7% to 18.1%). Initial Chlorophyll a, Headwater DO and Stream Velocity are moderately sensitive with

variations ranging from -4.3% to 4.3%. The model was only slightly sensitive to the rest of the parameters reviewed, with percentage changes in the minimum dissolved oxygen ranging between -1.2% and 0.9%.

## 6.0 Conclusions

Based on the winter and summer projection model outputs and a review of the historical records, the summer season was determined to be the critical conditions for this watershed and the basis of the TMDL calculations. The results of the summer critical projections show that the current water quality standard for dissolved oxygen for Big Creek (WQ Subsegment 080903) of 5.0 mg/L can be maintained during the summer critical season, (May – October). This can be accomplished with the imposition of a 35-75% reduction of seasonal man-made nonpoint source loads depending upon the reach and a 10% MOS. The results of the winter projection model show that the water quality criterion for dissolved oxygen for Big Creek of 5.0 mg/L will be maintained and exceeded during the winter season, (December – February). **The TMDL was also developed in accordance with Louisiana's antidegradation policy (LAC 33:IX.1109.A).**

LDEQ's position, as supported by the ruling in the lawsuit regarding water quality criteria for nutrients (*Sierra Club v. Givens*, 710 So.2d 249 (La. App. 1<sup>st</sup> Cir. 1997), writ denied, 705 So.2d 1106 (La. 1998), is that when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. Based on this ruling, LDEQ believes that the nutrient loads will be reduced and the Nitrogen/Phosphorus ratios will improve. Thus LDEQ submits this oxygen-demanding TMDL as the TMDL for the control of nitrogen and phosphorus.

**Although, in 1999, nitrogen and phosphorus were present in excess of the amount needed to produce the observed levels of chlorophyll a, the nutrient levels in Big Creek, during the 1999 survey, are not significantly greater than the natural background levels found in reference streams that have been sampled and ambient network stations that are considered representative of natural background conditions. The average values of the mainstem 1999 survey sites on Big Creek were 0.72 mg/l total nitrogen, 0.17 mg/l total phosphorus and 4.0 as the ratio of total nitrogen to total phosphorus. The natural background average values ranged from 0.77 to 0.79 mg/l for total nitrogen, 0.10 to 0.11 mg/l for total phosphorus and 8 to 12 for the ratio of total nitrogen to total phosphorus. Also a review of the last ten years of water quality data was performed on at two separate sites located near Rayville (LDEQ 0328) and Winnsboro (LDEQ 0069). This review showed the total nitrogen median values ranging between 1.05 and 1.15 mg/l with the total phosphorus median values for this time period from 0.24 to 0.28 mg/l. A median ratio of TN/TP from 3.91 to 4.18 indicates a nitrogen-limited system.**

**It is unlikely, therefore, that a reduction in "man-made" nitrogen and phosphorus would effect a general improvement in dissolved oxygen levels in Big Creek. Based upon this analysis of the data, nutrient load reductions were not calculated. This analysis indicates that nutrients should not be listed as a cause of impairment for Big Creek.**

Nonpoint sources will be addressed through the existing Nonpoint Source Management Program. Continued monitoring is recommended to see how well the nonpoint reductions improve the dissolved oxygen values. Additional modeling may be required if the improvements do not meet expectations.

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

- 1998 - Mermentau and Vermilion-Teche River Basins
- 1999 - Calcasieu and Ouachita River Basins
- 2000 - Barataria and Terrebonne Basins
- 2001 - Lake Pontchartrain Basin and Pearl River Basin
- 2002 - Red and Sabine River Basins

(Atchafalaya and Mississippi Rivers will be sampled continuously.)  
Ouachita and Calcasieu Basins will be sampled again in 2004.

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## Appendix A

### Calibration Model Development

# Appendix A1

## Calibration Model Development

### Discharger list

**Facility review - Subsegment 080903, Big Creek, Ouachita Basin**

ID #	File #	Facility Name	Facility Name + File #	Company	Location	SIC code	Facility Types	Receiving Stream	Design Discharge	
1	142	LA000781	Allen Canning Company - Vegetable canning plant	Allen Canning Company - Vegetable canning plant - LA000781	Allen Canning Company PO Box 368, Oak Grove, LA 71263	West of Hwy 17, 1 Mile south of Hwy 2, on Oak Grove, LA	2033	Vegetable canning plant - processing sweet potatoes	Unnamed drainage canal, thence into Deer Creek, thence into Little Hurricane Creek, thence into Colewa Bayou	15,000gpd obtains from city water for canning process, 430,000gpd from well water for plant production and operation. Combined discharge 350,000 gpd (200,000gpd-Point 002, 150,000 gpd-Point 003)
2	2477	LA0043648	Oak Grove Wastewater Treatment Facility	Oak Grove Wastewater Treatment Facility - LA0043648	Town of Oak Grove	LA 2 at Wells Lamont St. Town of Oak Grove, West Carroll Parish	4952	Municipal Wastewater Treatment Plant	Unnamed ditch, thence into Little Colewa Bayou, thence into Big Creek, Thence into Boeuf River	Design capacity: 0.30 MGD
3	3557	LA0007625	EPPS Compressor Station #66	EPPS Compressor Station #66 - LA0007625	Trunkline Gas Co.	EPPS, 11 miles N of I-20 on LA 183, West Carroll Parish	4922	Natural Gas Compressor Station	Unnamed highway ditch; thence into Big Colewa Creek; thence into Big Creek	Outfall 001 = 7,700 gpd-stormwater runoff; Outfall 002: 11,600gpd-stormwater runoff; Outfall 003 = 41,700 gpd-Treated sanitary waste and stormwaters runoff; Outfall 103 = 3,000 gpd-Treated sanitary wastewater; Sheetflow Stormwater Runoff = 19,300 gpd-from 41 acres area
4	3976	LAG540290	Elysian Fields WWTP	Elysian Fields WWTP - LAG540290		Rayville S of I-20, 1.5 miles S of Rayville, Richland Parish	4952	Residential subdivision: Three-cell Oxidation pond- 12,400 gpd	Unnamed ditch, thence into Hwy 135 roadside ditch, thence into Little Creek, thence into Big Creek	Design capacity: 125 houses at 400 gpd = 50,000 gpd. Actual flow: 31 houses at 400 gpd = 12,400 gpd
5	4787	LAG540138	Sugar Hill Community	Sugar Hill Community - LAG540138	Archibald Water System, Inc.	Old Rayville Mangham Hwy, 3/4 mile N of Hwy 15, Archibald, Richland Parish	4952	Residential subdivision: Three-cell Oxidation pond - 22,800 gpd	Unnamed ditch, thence into Big Creek, thence into Bayou Boeuf	Design capacity: 56 lots at 400 gpd = 22,400 gpd.
6	9166	LA0111741	Bee Bayou Truck Stop	Bee Bayou Truck Stop - LA0111741	Wilson Oil Company, Inc.	2599 Hwy 583, Rayville, LA. 1/4 miles N of I-20, Bee Bayou Exit, Richland Parish	5541	Truck stop (Café & Showers), three-cell oxidation pond	Unnamed ditch, thence into Cow Bayou, thence into Big Creek	Three-cell oxidation pond. Proposed effluent of no more than 3,000 gpd
7	11848	LAG540492	Mangham Square Apartment	Mangham Square Apartment LAG540492	Mangham Square Partnership	Intersections of Hwy 15 & LA 132, Richland Parish	4952	Apartment complex for elderly- Extended Aeration Sewage Packaged Plant	Unnamed ditch, thence into Buzzard Creek, thence into Big Creek	5,000 gpd 32 units X 115 gpd/unit = 3,680 gpd plus washing machine at 400 gpd for a total of 4,880 gpd
8	14012	LAG530224	Branch Crossing STP	Branch Crossing STP - LAG530224	LWC Management, Inc.	At the intersection of Branch Crossing and Baker Lane, Rayville, Richland Parish	4952	A small, extended aeration package plant.	unnamed ditch, thence into Burns Bayou, thence into Bee Bayou.	11 home at 400 gpd = 4,400 gpd
9	4272	LA0093033	RAYVILLE MTCE BLDG	RAYVILLE MTCE BLDG - LA0093033	LA DOTD	RAYVILLE LA 137 & I-20	4231	OFF/MAIN/WHSE	DRY FORK CREEK	Three outfalls, Outfall 001 = 7200 gpd, the other two discharges do not include a BOD or Nitrogen component discharge.
10	15234	LAG110071	LI Ready Mix Plant #27	LI Ready Mix Plant #27 - LAG110071	TXI Operations, LP Louisiana Industries, LI	Hwy 137, north of Rayville, Richland Parish, 70769		Ready mix concrete plant	Unnamed ditch, thence into Little Creek, thence into Big Creek	Discharge process wastewater, stormwater. BOD5 , 5,000 gpd
11	2202	LA0032115	Mangham Wastewater Treatment Plant	Mangham Wastewater Treatment Plant - LA0032115		On LA Hwy 132, 1/4 mile E of LA Hwy 15 in Mangham, Richland Parish	4952	POTW: treatment facility consists of a single cell oxidation pond. CI is the method of disinfections	A natural ditch; thence into Big Creek	Design capacity: 0.0643 MGD
1	9848	GP9848	PROPOSED STP	PROPOSED STP - GP9848	FOREST VILLAGE OF	FOREST	4952	MUNICIPAL STP		
2	1743	LA0007536		LA0007536	INTERNATIONAL PAPER CO.	RAYVILLE				
3	6110	GP6110		GP6110	STARCRAFT OPERATIONS	DELHI				
4	6098	GP6098		GP6098	RUFFIN PRE-FAB COMPANY	OAK GROVE				
5	6068	GP6068		GP6068	MODEL GIN SERVICE COMPANY	RAYVILLE				

ID #	File #	Facility Name	Facility Name + File #	Company	Location	SIC code	Facility Types	Receiving Stream	Design Discharge
6	6076	GP6076	GP6076	OAK GROVE MANUFACTURING COMPANY	OAK GROVE				
7	9390	GP9390	GP9390	KEN'S PAINT AND BOBY SHOP	801 FAIR AVE.		BODY SHOP	DITCH	
8	9719	GP9719	GP9719	M&W OIL & GAS CO	CONNER #1 N/2 OF SE/4, SEC30 T16N, R8E	1311	OIL/GAS EXP. PROD. & DEV.	SURFACE DRAINAGE	
9	9893	GP9893	COMMINGLING FACILITY - GP9893	ELAND ENERGY, INC.	DELHI OIL & GAS FIELD		OIL & GAS EXP. PROD. & DEV.MJI		
10	9908	GP9908	GP9908	ONSHORE PIPELINE CONSTRUCTION CO.	BIG CREEK OIL FIELD		OIL & GAS EXP. PROD. & DEV.	SURFACE DRAINAGE	
11	12858	GP12858	GP12858	SOWELL FARMS	OAK GROVE, 13770 HWY 17 N		SWEET POTATO PACKING		
12	14926	GP14926	BCC DETENTION CNTR - GP14926	BCC INC	RAYVILLE, 456 HWY 15	4952	DETENTION CENTER	NOT AVAILABLE	
13	11578	GP11578	JIMMY COLEMAN NO 1 - GP11578	PETE CALDWELL DRILLING CO INC	EPPS FLD	1311	OIL/GAS EXPLR PROD & DEV		
14	9142	GP9142	ACQUA FARM SYSTEMS - GP9142	AFS GROUP INC			AQUA-CULTURAL & VEG. CROPS.		
15	3503	LA0062596	Tifton Aluminum Company, Inc. - LA0062596	Alcoa	100 Tifton Drive, Delhi, Richland Parish	3354	Aluminum extrusion, anodizing, and painting facility	Turkey Creek via an unnamed ditch; to Turkey Creek Cut-off; thence to Big Creek	Outfall 001: Design discharge = 0.262 MGD; Outfall 002: Design discharge = 0.014 MGD
16	10635	WP4269	Delhi Compressor Station - WP4269	ANR Pipeline Company	Hwy 80, west of Delhi, Richland Parish, LA 71232	4922	Natural Gas Compressor Station	Unnamed ditch, thence into Wildcat Slough, thence into Little Creek, thence into Big Creek	
17	11808	LA0102326	Pilot Travel Center #335 - LA0102326	Pilot Corp.	103 Grimshaw St. intersection of I-20 and state road 137, Rayville, Richland Parish, LA	5541	Truck stop, service station and restaurant	Unnamed ditch, thence into Dry Fork Creek, thence into Bee Bayou, thence into Big Creek	500 gpd average-mainly runoff from truck fueling and UST area. Runoff routes to a three-chamber oil/water separator before discharges to an on-site vegetative grassy swale for additional treatment.
18	13135	LA0107409	Town of Rayville New Water Treatment Plant - LA0107409	Town of Rayville	406 Rosa St., Rayville, Richland Parish	Portable water supply, SIC code??	Portable water treatment plant-Iron filter backwash water from a portable water treatment plant serving the town of Rayville	Unnamed ditch, thence into Little Creek, thence into Big Creek	Iron filter backwash water expected flow is 0.038 MGD.

Facilities to be included in TMDL:

Facilities not being included in TMDL:

Facility review - Subsegmen

ID #	File #	Facility Name	Design Discharge (cfs)	Discharge Limitations	Comments	
1	142	LA000781	Allen Canning Company - Vegetable canning plant	Point 2 = .309 Point 3 = .232	Outfall 001 & 004: BOD <sub>5</sub> = 30 ppm daily average, 50 ppm daily max.; Outfall 001 & 004: COD = 52 ppm daily average, 78 ppm daily max. Outfall 002 & 003: BOD <sub>5</sub> = 45 ppm daily average and max. Outfall 002 & 003: COD = 2 ppm daily average, 4 ppm daily max.	Plant in operation only from August through November during growing season to can 106 tons of sweet potatoes a day. Plant is not in production the rest of the year.
2	2477	LA0043648	Oak Grove Wastewater Treatment Facility	0.464169	CBOD <sub>5</sub> = 15 ppm weekly average., 10 ppm monthly average	Existing facility consist of a single oxidation pond. Through LA Community Development Block Grant a second oxidation pond is to be constructed to expend plant capacity, and to meet DEQ permit requirements.
3	3557	LA0007625	EPPS Compressor Station #66	0.00464169	Outfall 001, 002, 003-stormwater runoff: TOC = 50 ppm daily max.; Outfall 103-BOD <sub>5</sub> = 45 ppm weekly average; Sheetflow Stormwater runoff-TOC = 50 ppm daily max.	Exceeding the discharge limits are very seldom.
4	3976	LAG540290	Elysian Fields WWTP	0.0773615	BOD <sub>5</sub> = 30 ppm monthly average, 45 ppm weekly average.	New permit issued since 1995. Facility have no discharges most of the time since issuance of permit.
5	4787	LAG540138	Sugar Hill Community	0.034657952	BOD <sub>5</sub> = 30 ppm monthly average, 45 ppm weekly average.	Facility is well maintained with occasional excursions of BOD, TSS and Fecal, but very seldom. Excellent in record keepings and submittals.
6	9166	LA0111741	Bee Bayou Truck Stop	0.00464169	BOD <sub>5</sub> = 30 ppm monthly average, 45 ppm weekly average. COD = 100 ppm daily max.	No DMRs on file. Facility operates under Compliance Order & Notice of Potential Penalty WE-CN-00-0177, dated 12/11/2000.
7	11848	LAG540492	Mangham Square Apartment	0.00773615	Max. discharge = 5,000 gpd. BOD <sub>5</sub> = 30 ppm	NPDES Compliance Inspection Report conducted on August 28, 97, revealed Mangham Square Apartment had never been constructed. No LPDES permit is required.
8	14012	LAG530224	Branch Crossing STP	0.006807812	BOD <sub>5</sub> = 30 ppm monthly average, 45 ppm weekly average.	Consolidated Compliance Order and Notice of Potential Penalty was issued to the facility for discharging STP wastewater without LPDES permit. Judge's order dismissing this Order dated 7/31/2000 and formally closed the file.
9	4272	LA0093033	RAYVILLE MTCE BLDG		BDO5 = 65 mg/l daily max, 45 mg/l daily average	
10	15234	LAG110071	LI Ready Mix Plant #27	0.00773615	Measured parameters: flow, TSS, oil & grease, pH, BOD <sub>5</sub> = 45 ppm weekly average. COD = 200 ppm monthly average, 300 ppm daily max.	No discharge violation since issuance of permit.
11	2202	LA0032115	Mangham Wastewater Treatment Plant		Maximum discharge of 0.0643 MGD. BOD <sub>5</sub> = 30 ppm monthly average, 45 ppm weekly average	Fecal violations 34 times since 1/1/96
1	9848	GP9848	PROPOSED STP			Could not find confirmation that the facility had been built. Did not include in the TMDL.
2	1743	LA0007536				Will not include in TMDL. Facility tied into the Town of Rayville's treatment system in 1976.
3	6110	GP6110				Will not be included in the TMDL. Only documentation found in files was a letter requesting the facility to determine its categorical or non-categorical status. No response was found by facility.
4	6098	GP6098				Will not be included in the TMDL. Only documentation found in files was a letter requesting the facility to determine its categorical or non-categorical status. No response was found by facility.
5	6068	GP6068				Will not be included in the TMDL. Only documentation found in files was a letter requesting the facility to determine its categorical or non-categorical status. No response was found by facility.

ID #	File #	Facility Name	Design Discharge (cfs)	Discharge Limitations	Comments
6	6076	GP6076			Will not be included in the TMDL. Only documentation found in files was a letter requesting the facility to determine its categorical or non-categorical status. No response was found by facility.
7	9390	GP9390			Should not be included in TMDL. Compliance order required no discharge. A letter was received stating that the facility was now in compliance with order.
8	9719	GP9719			Should not be included in TMDL. Oil field site. No known application or discharge could be determined from LDEQ files.
9	9893	GP9893	COMMINGLING FACILITY		Should not be included in the model. Compliance order was issued to cease all saltwater and oilfield waste discharges. In a reply to DEQ the discharger stated that it had ceased all discharges of brine and waste.
10	9908	GP9908			Should not be included in the model. Compliance order was issued to cease all saltwater and oilfield waste discharges. In a reply to DEQ the discharger stated that it had ceased all discharges of brine and waste.
11	12858	GP12858			Was not included in TMDL. Several request have been made for an application to discharge to the company. No application appears in the F or A folders, assumed that none has been received.
12	14926	GP14926	BCC DETENTION CNTR		Will not be included in the TMDL. Application was requested to be returned, in lieu of refiling of two applications for separate plants. No other information was in the file. The current application listed Bayou Lafourche as the proposed receiving stream.
13	11578	GP11578	JIMMY COLEMAN NO 1		Should not be included in the model. Compliance order was issued to cease all saltwater and oilfield waste discharges. Letter was received from the discharger stating that a saltwater disposal well located on the site will be taking the waste from now on.
14	9142	GP9142	ACQUA FARM SYSTEMS		Single batch discharge. Should not be included in the TMDL.
15	3503	LA0062596	Tifton Aluminum Company, Inc.	Outfall 001: COD = 117 ppm daily average; 220 ppm daily max. Outfall 002: COD = 100 ppm daily max.	This co. made great stride in improving/maintaining a decent wastewater treatment system. Excursions are less common & effluent characteristics have been consistent, implying good process control. Not included in the TMDL, limitations don't include BOD or nitrogen components.
16	10635	WP4269	Delhi Compressor Station		This facility is exempt from having to obtain a discharge permit. LWDPS permit is no longer needed for this facility
17	11808	LA0102326	Pilot Travel Center #335	TOC = 50 ppm daily max.	Compliance Order issued 8/7/95 and amended 11/19/96 due to discharge of oil from diesel fueling area. Not included in the TMDL, limitations don't include BOD or nitrogen components.
18	13135	LA0107409	Town of Rayville New Water Treatment Plant	Max discharge: 38,400 gpd. Portable water supply come from 2 water wells supplying portable water for the town of Rayville. This permit is for the discharge of iron filter backwash water from a portable water treatment plant. Wastewater is generated by backwashing of iron filters.	Well water is subjected to potassium permanganate then pumped through 2 iron and manganese filters, then through zeolite softener. This water is then chlorinated before pumped to supply the town with water. Not included in the TMDL, limitations don't include BOD or nitrogen components.

Facilities to be included in TMDL:

Facilities not being included in TMDL:

## Appendix A2

### Calibration Model Development

#### Calibration model input/output



## Big Creek – 080903 – Calibration model output:

LA-QUAL Version 4.12  
Louisiana Department of Environmental Quality

Input file is D:\laqual1\bigcrkcalb7.txt  
Output produced at 14:44 on 04/10/2001

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

CARD TYPE            CONTROL TITLES

TITLE01            **Big Creek - STREAM MODEL**  
TITLE02            **WATER QUALITY CALIBRATION**  
CNTROL11    NO    SEQUENCING OUTPUT  
CNTROL12    YES    METRIC UNITS  
CNTROL13    YES    OXYGEN DEPENDENT RATES  
ENDATA01

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

CARD TYPE            MODEL OPTION

MODEPT01    NO    TEMPERATURE  
MODEPT02    NO    SALINITY  
MODEPT03    NO    CONSERVATIVE MATERIAL I = CHLORIDES            IN MG/L  
MODEPT04    NO    CONSERVATIVE MATERIAL II = SULFATES            IN MG/L  
MODEPT05    YES    DISSOLVED OXYGEN  
MODEPT06    YES    BIOCHEMICAL OXYGEN DEMAND  
MODEPT07    NO    NITROGEN  
MODEPT08    NO    PHOSPHORUS  
MODEPT09    NO    CHLOROPHYLL A  
MODEPT10    NO    MACROPHYTES  
MODEPT11    NO    COLIFORM  
MODEPT12    YES    NONCONSERVATIVE MATERIAL = NBOD            IN MG/L  
ENDATA02

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

CARD TYPE	DESCRIPTION OF CONSTANT	VALUE
PROGRAM	MAXIMUM ITERATION LIMIT	= 200.00000
PROGRAM	PLOT TYPE	= 3.00000
PROGRAM	FINAL REPORT TYPE	= 1.00000
PROGRAM	SPECIAL REPORT TYPE	= 3.00000
PROGRAM	BOD OXYGEN UPTAKE RATE	= 1.00000
PROGRAM	KL MINIMUM	= 0.70000
PROGRAM	NCM OXYGEN UPTAKE RATE	= 1.00000
PROGRAM	INHIBITION CONTROL VALUE	= 3.00000
PROGRAM	DISPERSION EQUATION	= 1.00000
PROGRAM	OCEAN EXCHANGE RATIO	= 0.00000
PROGRAM	HYDRAULIC CALCULATION METHOD	= 2.00000
PROGRAM	SETTLED RATE UNITS	= 1.00000
PROGRAM	ALGAE OXYGEN PROD	= 0.05000
PROGRAM	EFFECTIVE BOD DUE TO ALGAE	= 0.00000
ENDATA03		

Big Creek – 080903 – Calibration model output:

\$\$\$ 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	BC	BIG CREEK, RKM 134.2 RKM 118	134.20	TO 118.00	0.1000	16.20	162	1	162
REACH ID	2	BC	BIG CREEK, RKM 100 TO MITCHNER	118.00	TO 82.10	0.1000	35.90	359	163	521
REACH ID	3	BC	BIG CREEK, MITCHNER TO RKM 67.4	82.10	TO 67.40	0.1000	14.70	147	522	668
REACH ID	4	BC	BIG CREEK, RKM 67.4 TO WEIR #6	67.40	TO 60.20	0.1000	7.20	72	669	740
REACH ID	5	BC	WEIR #6	60.20	TO 60.10	0.1000	0.10	1	741	741
REACH ID	6	BC	BIG CREEK, WEIR #6 TO WEIR #5	60.10	TO 50.90	0.1000	9.20	92	742	833
REACH ID	7	BC	WEIR #5	50.90	TO 50.80	0.1000	0.10	1	834	834
REACH ID	8	BC	BIG CREEK, WEIR #5 TO WEIR #4	50.80	TO 37.50	0.1000	13.30	133	835	967
REACH ID	9	BC	WEIR #4	37.50	TO 37.40	0.1000	0.10	1	968	968
REACH ID	10	BC	BIG CREEK, WEIR #4 TO WEIR #3	37.40	TO 31.30	0.1000	6.10	61	969	1029
REACH ID	11	BC	WEIR #3	31.30	TO 31.20	0.1000	0.10	1	1030	1030
REACH ID	12	BC	BIG CREEK, WEIR #3 TO WEIR #2	31.20	TO 22.10	0.1000	9.10	91	1031	1121
REACH ID	13	BC	WEIR #2	22.10	TO 22.00	0.1000	0.10	1	1122	1122
REACH ID	14	BC	BIG CREEK, WEIR #2 TO WEIR #1	22.00	TO 5.00	0.1000	17.00	170	1123	1292
REACH ID	15	BC	WEIR #1	5.00	TO 4.90	0.1000	0.10	1	1293	1293
REACH ID	16	BC	BIG CREEK, WEIR#1 TO BOEUF RVR	4.90	TO 0.00	0.1000	4.90	49	1294	1342

ENDATA08

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

CARD TYPE    REACH    ID      WIDTH      WIDTH      WIDTH      DEPTH      DEPTH      DEPTH      SLOPE      MANNINGS

   "A"      "B"      "C"      "D"      "E"      "F"      "N"

\*\*\*\*\* WARNING: VELOCITY AND DEPTH EXPONENTS ADD TO GREATER THAN 1.0 IN REACH 1

HYDR-1	1	BC	3.926	0.570	6.100	0.344	0.905	0.300	0.00000	0.030
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**Big Creek – 080903 – Calibration model output:**

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***** WARNING: VELOCITY AND DEPTH EXPONENTS ADD TO GREATER THAN 1.0 IN REACH 2
HYDR-1      2  BC      3.926      0.570      14.750      0.344      0.905      0.400      0.00000      0.030
***** WARNING: VELOCITY AND DEPTH EXPONENTS ADD TO GREATER THAN 1.0 IN REACH 3
HYDR-1      3  BC      3.926      0.570      12.500      0.344      0.905      0.350      0.00000      0.030
***** WARNING: VELOCITY AND DEPTH EXPONENTS ADD TO GREATER THAN 1.0 IN REACH 4
HYDR-1      4  BC      3.926      0.570      33.000      0.344      0.905      0.500      0.00000      0.030
HYDR-1      5  BC      2.500      0.277      30.000      0.165      0.156      0.420      0.00000      0.030
HYDR-1      6  BC      2.500      0.277      30.000      0.165      0.156      0.420      0.00000      0.030
HYDR-1      7  BC      2.500      0.277      30.000      0.165      0.156      1.600      0.00000      0.030
HYDR-1      8  BC      2.500      0.277      30.000      0.165      0.156      1.600      0.00000      0.030
HYDR-1      9  BC      2.500      0.277      30.000      0.165      0.156      1.600      0.00000      0.030
HYDR-1     10  BC      2.500      0.277      38.500      0.165      0.156      1.600      0.00000      0.030
HYDR-1     11  BC      2.500      0.277      38.500      0.165      0.156      1.600      0.00000      0.030
HYDR-1     12  BC      2.500      0.277      38.500      0.165      0.156      1.600      0.00000      0.030
HYDR-1     13  BC      2.500      0.277      38.500      0.165      0.156      1.600      0.00000      0.030
HYDR-1     14  BC      2.500      0.277      38.500      0.165      0.156      1.600      0.00000      0.030
HYDR-1     15  BC      2.500      0.277      38.500      0.165      0.156      1.600      0.00000      0.030
HYDR-1     16  BC      2.500      0.277      38.500      0.165      0.156      0.700      0.00000      0.030
ENDATA09

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

CARD TYPE	REACH	ID	TIDAL RANGE	DISPERSION "A"	DISPERSION "B"	DISPERSION "C"	DISPERSION "D"
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ENDATA10

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

CARD TYPE	REACH	ID	TEMP	SALIN	DO	NH3	NO3+2	PHOS	CHL A	MACRO
INITIAL	1	BC	24.10	0.00	6.46	0.00	0.00	0.00	22.88	0.00
INITIAL	2	BC	24.10	0.00	6.46	0.00	0.00	0.00	28.48	0.00
INITIAL	3	BC	24.10	0.00	6.46	0.00	0.00	0.00	10.05	0.00
INITIAL	4	BC	24.10	0.00	6.46	0.00	0.00	0.00	18.07	0.00
INITIAL	5	BC	24.10	0.00	6.46	0.00	0.00	0.00	20.57	0.00
INITIAL	6	BC	24.10	0.00	6.46	0.00	0.00	0.00	20.57	0.00
INITIAL	7	BC	24.10	0.00	6.46	0.00	0.00	0.00	13.79	0.00
INITIAL	8	BC	24.10	0.00	6.46	0.00	0.00	0.00	13.79	0.00
INITIAL	9	BC	24.10	0.00	6.46	0.00	0.00	0.00	14.96	0.00
INITIAL	10	BC	24.10	0.00	6.46	0.00	0.00	0.00	14.96	0.00
INITIAL	11	BC	24.10	0.00	6.46	0.00	0.00	0.00	16.14	0.00
INITIAL	12	BC	24.10	0.00	6.46	0.00	0.00	0.00	16.14	0.00
INITIAL	13	BC	24.10	0.00	6.46	0.00	0.00	0.00	16.47	0.00
INITIAL	14	BC	24.10	0.00	6.46	0.00	0.00	0.00	16.47	0.00
INITIAL	15	BC	24.10	0.00	6.46	0.00	0.00	0.00	20.59	0.00
INITIAL	16	BC	24.10	0.00	6.46	0.00	0.00	0.00	20.59	0.00

ENDATA11

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

CARD TYPE	REACH	ID	K2 OPT	K2 "A"	K2 "B"	K2 "C"	BKGRND SOD	AEROB BOD DECAY	BOD SETT	BOD CONV TO SOD	ANAER BOD DECAY
COEF-1	1	BC	15 LOUISIANA	0.700	0.000	0.000	2.700	0.070	0.100	0.000	0.000

**Big Creek – 080903 – Calibration model output:**

COEF-1	2	BC	15	LOUISIANA	0.700	0.000	0.000	2.650	0.070	0.100	0.000	0.000
COEF-1	3	BC	15	LOUISIANA	0.700	0.000	0.000	0.650	0.070	0.100	0.000	0.000
COEF-1	4	BC	15	LOUISIANA	0.700	0.000	0.000	0.620	0.070	0.100	0.000	0.000
COEF-1	5	BC	15	LOUISIANA	0.700	0.000	0.000	0.000	0.070	0.100	0.000	0.000
COEF-1	6	BC	15	LOUISIANA	0.700	0.000	0.000	1.000	0.070	0.100	0.000	0.000
COEF-1	7	BC	20	K2=a/D	1.160	0.000	0.000	0.000	0.070	0.100	0.000	0.000
COEF-1	8	BC	20	K2=a/D	1.160	0.000	0.000	1.000	0.070	0.100	0.000	0.000
COEF-1	9	BC	20	K2=a/D	1.160	0.000	0.000	0.000	0.070	0.100	0.000	0.000
COEF-1	10	BC	20	K2=a/D	1.160	0.000	0.000	0.900	0.070	0.100	0.000	0.000
COEF-1	11	BC	20	K2=a/D	1.160	0.000	0.000	0.000	0.070	0.100	0.000	0.000
COEF-1	12	BC	20	K2=a/D	1.160	0.000	0.000	0.950	0.070	0.100	0.000	0.000
COEF-1	13	BC	20	K2=a/D	1.160	0.000	0.000	0.000	0.070	0.100	0.000	0.000
COEF-1	14	BC	20	K2=a/D	1.160	0.000	0.000	1.150	0.070	0.100	0.000	0.000
COEF-1	15	BC	20	K2=a/D	1.160	0.000	0.000	0.000	0.070	0.100	0.000	0.000
COEF-1	16	BC	15	LOUISIANA	0.700	0.000	0.000	1.000	0.070	0.100	0.000	0.000

ENDATA12

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

CARD TYPE	REACH	ID	ORG-N DECA	ORG-N SETT	ORGN CONV TO NH3 SRCE	NH3 DECA	NH3 SRCE	PHOS SRCE	DENIT RATE
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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
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ENDATA14

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

CARD TYPE	REACH	ID	COLIFORM DIE-OFF	NCM DECAY	NCM SETT	NCM CONV TO SOD
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COEF-4	1	BC	0.00	0.28	0.10	0.00
COEF-4	2	BC	0.00	0.28	0.10	0.00
COEF-4	3	BC	0.00	0.28	0.10	0.00
COEF-4	4	BC	0.00	0.16	0.10	0.00
COEF-4	5	BC	0.00	0.16	0.10	0.00
COEF-4	6	BC	0.00	0.16	0.10	0.00
COEF-4	7	BC	0.00	0.16	0.10	0.00
COEF-4	8	BC	0.00	0.16	0.10	0.00
COEF-4	9	BC	0.00	0.16	0.10	0.00
COEF-4	10	BC	0.00	0.16	0.10	0.00
COEF-4	11	BC	0.00	0.16	0.10	0.00
COEF-4	12	BC	0.00	0.16	0.10	0.00
COEF-4	13	BC	0.00	0.16	0.10	0.00
COEF-4	14	BC	0.00	0.16	0.10	0.00
COEF-4	15	BC	0.00	0.16	0.10	0.00
COEF-4	16	BC	0.00	0.16	0.10	0.00

ENDATA15

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

Big Creek – 080903 – Calibration model output:

CARD TYPE	REACH	ID	OUTFLOW	INFLOW	TEMP	SALIN	CM-I	CM-II	IN/DIST	OUT/DIST
INCR-1	1	BC	0.00000	0.00750	24.10	0.00	0.00	0.00	0.00046	0.00000
INCR-1	2	BC	0.00000	0.05390	24.10	0.00	0.00	0.00	0.00150	0.00000
INCR-1	3	BC	0.00000	0.01710	24.10	0.00	0.00	0.00	0.00116	0.00000
INCR-1	4	BC	0.00000	0.14570	24.10	0.00	0.00	0.00	0.02024	0.00000
INCR-1	5	BC	0.00000	0.00200	24.10	0.00	0.00	0.00	0.02000	0.00000
INCR-1	6	BC	0.00000	0.18610	24.10	0.00	0.00	0.00	0.02023	0.00000
INCR-1	7	BC	0.00000	0.00200	24.10	0.00	0.00	0.00	0.02000	0.00000
INCR-1	8	BC	0.00000	0.26910	24.10	0.00	0.00	0.00	0.02023	0.00000
INCR-1	9	BC	0.00000	0.00200	24.10	0.00	0.00	0.00	0.02000	0.00000
INCR-1	10	BC	0.00000	0.12540	24.10	0.00	0.00	0.00	0.02056	0.00000
INCR-1	11	BC	0.00000	0.00200	24.10	0.00	0.00	0.00	0.02000	0.00000
INCR-1	12	BC	0.00000	0.18210	24.10	0.00	0.00	0.00	0.02001	0.00000
INCR-1	13	BC	0.00000	0.00200	24.10	0.00	0.00	0.00	0.02000	0.00000
INCR-1	14	BC	0.00000	0.34190	24.10	0.00	0.00	0.00	0.02011	0.00000
INCR-1	15	BC	0.00000	0.00200	24.10	0.00	0.00	0.00	0.02000	0.00000
INCR-1	16	BC	0.00000	0.10120	24.10	0.00	0.00	0.00	0.02065	0.00000

ENDATA16

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

CARD TYPE	REACH	ID	DO	BOD	ORG-N	NH3	NO3+2
INCR-2	1	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	2	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	3	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	4	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	5	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	6	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	7	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	8	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	9	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	10	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	11	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	12	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	13	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	14	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	15	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	16	BC	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	BC	0.00	0.00	0.00	0.00
INCR-3	2	BC	0.00	0.00	0.00	0.00
INCR-3	3	BC	0.00	0.00	0.00	0.00
INCR-3	4	BC	0.00	0.00	0.00	0.00
INCR-3	5	BC	0.00	0.00	0.00	0.00
INCR-3	6	BC	0.00	0.00	0.00	0.00
INCR-3	7	BC	0.00	0.00	0.00	0.00
INCR-3	8	BC	0.00	0.00	0.00	0.00

Big Creek – 080903 – Calibration model output:

INCR-3	9	BC	0.00	0.00	0.00	0.00
INCR-3	10	BC	0.00	0.00	0.00	0.00
INCR-3	11	BC	0.00	0.00	0.00	0.00
INCR-3	12	BC	0.00	0.00	0.00	0.00
INCR-3	13	BC	0.00	0.00	0.00	0.00
INCR-3	14	BC	0.00	0.00	0.00	0.00
INCR-3	15	BC	0.00	0.00	0.00	0.00
INCR-3	16	BC	0.00	0.00	0.00	0.00

ENDATA18

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

CARD TYPE	REACH	ID	BOD	ORG-N	COLI	NCM	DO
NONPOINT	1	BC	95.00	0.00	0.00	45.00	0.00
NONPOINT	2	BC	790.00	0.00	0.00	250.00	0.00
NONPOINT	3	BC	235.00	0.00	0.00	63.00	0.00
NONPOINT	4	BC	390.00	0.00	0.00	72.00	0.00
NONPOINT	5	BC	0.00	0.00	0.00	0.00	0.00
NONPOINT	6	BC	485.00	0.00	0.00	52.00	0.00
NONPOINT	7	BC	0.00	0.00	0.00	0.00	0.00
NONPOINT	8	BC	1055.00	0.00	0.00	165.00	0.00
NONPOINT	9	BC	0.00	0.00	0.00	0.00	0.00
NONPOINT	10	BC	550.00	0.00	0.00	45.00	0.00
NONPOINT	11	BC	0.00	0.00	0.00	0.00	0.00
NONPOINT	12	BC	840.00	0.00	0.00	65.00	0.00
NONPOINT	13	BC	0.00	0.00	0.00	0.00	0.00
NONPOINT	14	BC	1440.00	0.00	0.00	250.00	0.00
NONPOINT	15	BC	0.00	0.00	0.00	0.00	0.00
NONPOINT	16	BC	350.00	0.00	0.00	5.00	0.00

ENDATA19

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

CARD TYPE	ELEMENT	NAME	UNIT	FLOW	TEMP	SALIN	CM-I	CM-II
HDWTR-1	1	BIG CREEK	0	0.00370	24.100	0.000	0.000	0.000

ENDATA20

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

CARD TYPE	ELEMENT	NAME	DO	BOD	ORG-N	NH3	NO3+2
HDWTR-2	1	BIG CREEK	5.24	8.87	0.00	0.00	0.00

ENDATA21

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

CARD TYPE	ELEMENT	NAME	PHOS	CHL A	COLI	NCM
HDWTR-3	1	BIG CREEK	0.00	0.00	0.00	3.41

ENDATA22

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

## Big Creek – 080903 – Calibration model output:

CARD TYPE	JUNCTION ELEMENT	UPSTRM ELEMENT	RIVER KILOM	NAME
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ENDATA23

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

CARD TYPE	ELEMENT	RKILO	NAME	FLOW	TEMP	SAL	CM-I	CM-II
WSTLD-1	162	118.10	LITTLE COLEWA CRK 1	0.00980	24.100	0.000	0.000	0.000
WSTLD-1	585	75.80	LITTLE COLEWA CRK 2	0.02230	24.100	0.000	0.000	0.000
WSTLD-1	760	58.30	CYPRESS CRK	0.01910	24.100	0.000	0.000	0.000
WSTLD-1	861	48.20	COW BAYOU	0.00570	24.100	0.000	0.000	0.000
WSTLD-1	1014	32.90	BEE BAYOU	0.05010	24.100	0.000	0.000	0.000
WSTLD-1	1043	30.00	VILLAGE OF MANGHAM	0.00280	24.100	0.000	0.000	0.000
WSTLD-1	1128	21.50	TURKEY CREEK	0.05240	24.100	0.000	0.000	0.000
WSTLD-1	1204	13.90	LITTLE CREEK	0.02490	24.100	0.000	0.000	0.000

ENDATA24

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

CARD TYPE	ELEMENT	NAME	DO	BOD	% BOD RMVL	ORG-N	NH3	% NITRIF	NO3+2
WSTLD-2	162	LITTLE COLEWA CRK 1	9.43	6.40	0.00	0.00	0.00	0.00	0.00
WSTLD-2	585	LITTLE COLEWA CRK 2	9.43	6.40	0.00	0.00	0.00	0.00	0.00
WSTLD-2	760	CYPRESS CRK	9.43	6.40	0.00	0.00	0.00	0.00	0.00
WSTLD-2	861	COW BAYOU	9.43	6.40	0.00	0.00	0.00	0.00	0.00
WSTLD-2	1014	BEE BAYOU	11.00	6.74	0.00	0.00	0.00	0.00	0.00
WSTLD-2	1043	VILLAGE OF MANGHAM	5.05	18.12	0.00	0.00	0.00	0.00	0.00
WSTLD-2	1128	TURKEY CREEK	9.43	6.40	0.00	0.00	0.00	0.00	0.00
WSTLD-2	1204	LITTLE CREEK	9.43	6.40	0.00	0.00	0.00	0.00	0.00

ENDATA25

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

CARD TYPE	ELEMENT	NAME	PHOS	CHL A	COLI	NCM
WSTLD-3	162	LITTLE COLEWA CRK 1	0.00	0.00	0.00	0.46
WSTLD-3	585	LITTLE COLEWA CRK 2	0.00	0.00	0.00	0.46
WSTLD-3	760	CYPRESS CRK	0.00	0.00	0.00	0.46
WSTLD-3	861	COW BAYOU	0.00	0.00	0.00	0.46
WSTLD-3	1014	BEE BAYOU	0.00	0.00	0.00	0.07
WSTLD-3	1043	VILLAGE OF MANGHAM	0.00	0.00	0.00	11.69
WSTLD-3	1128	TURKEY CREEK	0.00	0.00	0.00	0.46
WSTLD-3	1204	LITTLE CREEK	0.00	0.00	0.00	0.46

ENDATA26

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

CARD TYPE	CONSTITUENT	CONCENTRATION
LOWER BC	TEMPERATURE	= 24.100 deg C
LOWER BC	SALINITY	= 0.000 ppt
LOWER BC	CONSERVATIVE MATERIAL I	= 0.000 MG/L

Big Creek – 080903 – Calibration model output:

```
LOWER BC      CONSERVATIVE MATERIAL II      =      0.000 MG/L
LOWER BC      DISSOLVED OXYGEN              =      0.000 mg/L
LOWER BC      BIOCHEMICAL OXYGEN DEMAND     =      0.000 mg/L
LOWER BC      ORGANIC NITROGEN              =      0.000 mg/L
LOWER BC      AMMONIA NITROGEN              =      0.000 mg/L
LOWER BC      NITRATE + NITRITE            =      0.000 mg/L
LOWER BC      PHOSPHORUS                    =      0.000 mg/L
LOWER BC      CHLOROPHYLL A                 =      46.410 µg/L
LOWER BC      COLIFORM                      =      0.000 #/100 mL
LOWER BC      NONCONSERVATIVE MATERIAL      =      0.000 MG/L
ENDATA27
```

\$\$\$ DATA TYPE 28 (RESERVED FOR FUTURE DATA INPUT) \$\$\$

CARD TYPE

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 = 16
PLOT RCH 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
NUMBER OF REACHES IN PLOT 2 = 16
PLOT RCH 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
ENDATA30
```

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

```
OVERLAY 1 bigov1.txt      :MAINSTEM
OVERLAY 2 bigov2.txt      :MAINSTEM
ENDATA31
```

```
.....NO ERRORS DETECTED IN INPUT DATA
.....HYDRAULIC CALCULATIONS COMPLETED
.....TRIDIAGONAL MATRIX TERMS INITIALIZED
.....OXYGEN DEPENDENT RATES CONVERGENT IN 19 ITERATIONS
.....CONSTITUENT CALCULATIONS COMPLETED
.....GRAPHICS DATA FOR PLOT 1 WRITTEN TO UNIT 11
.....GRAPHICS DATA FOR PLOT 2 WRITTEN TO UNIT 12
```

```
FINAL REPORT      BIG CREEK
REACH NO. 1       BIG CREEK, RKM 134.2 RKM 118
```

```
Big Creek - STREAM MODEL
WATER QUALITY CALIBRATION
```



**Big Creek – 080903 – Calibration model output:**

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
1	HDWTR	0.00370	24.10	0.00	0.00	0.00	5.24	8.87	8.87	0.00	0.00	0.00	0.00	22.88	0.00	3.41
EACH	INCR	0.0000	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
162	WSTLD	0.00980	24.10	0.00	0.00	0.00	9.43	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.46

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
1	134.20	134.10	0.00375	0.00	0.00198	0.58	0.30	6.26	189.25	626.28	1.89	0.00	0.000	0.000	0.002
2	134.10	134.00	0.00379	0.00	0.00200	0.58	0.30	6.26	189.30	626.39	1.89	0.00	0.000	0.000	0.002
3	134.00	133.90	0.00384	0.00	0.00203	0.57	0.30	6.27	189.35	626.51	1.89	0.00	0.000	0.000	0.002
4	133.90	133.80	0.00389	0.00	0.00205	0.56	0.30	6.27	189.40	626.62	1.89	0.00	0.000	0.000	0.002
5	133.80	133.70	0.00393	0.00	0.00208	0.56	0.30	6.27	189.45	626.73	1.89	0.00	0.000	0.000	0.002
6	133.70	133.60	0.00398	0.00	0.00210	0.55	0.30	6.27	189.50	626.84	1.90	0.00	0.000	0.000	0.002
7	133.60	133.50	0.00402	0.00	0.00212	0.55	0.30	6.27	189.55	626.96	1.90	0.00	0.000	0.000	0.002
8	133.50	133.40	0.00407	0.00	0.00215	0.54	0.30	6.27	189.60	627.07	1.90	0.00	0.000	0.000	0.002
9	133.40	133.30	0.00412	0.00	0.00217	0.53	0.30	6.27	189.65	627.18	1.90	0.00	0.000	0.000	0.002
10	133.30	133.20	0.00416	0.00	0.00219	0.53	0.30	6.27	189.70	627.29	1.90	0.00	0.000	0.000	0.002
11	133.20	133.10	0.00421	0.00	0.00222	0.52	0.30	6.27	189.75	627.40	1.90	0.00	0.000	0.000	0.002
12	133.10	133.00	0.00426	0.00	0.00224	0.52	0.30	6.28	189.79	627.51	1.90	0.00	0.000	0.000	0.002
13	133.00	132.90	0.00430	0.00	0.00227	0.51	0.30	6.28	189.84	627.61	1.90	0.00	0.000	0.000	0.002
14	132.90	132.80	0.00435	0.00	0.00229	0.51	0.30	6.28	189.89	627.72	1.90	0.00	0.000	0.000	0.002
15	132.80	132.70	0.00439	0.00	0.00231	0.50	0.30	6.28	189.94	627.83	1.90	0.00	0.000	0.000	0.002
16	132.70	132.60	0.00444	0.00	0.00234	0.50	0.30	6.28	189.98	627.94	1.90	0.00	0.000	0.000	0.002
17	132.60	132.50	0.00449	0.00	0.00236	0.49	0.30	6.28	190.03	628.04	1.90	0.00	0.000	0.000	0.002
18	132.50	132.40	0.00453	0.00	0.00238	0.49	0.30	6.28	190.08	628.15	1.90	0.00	0.000	0.000	0.002
19	132.40	132.30	0.00458	0.00	0.00241	0.48	0.30	6.28	190.13	628.25	1.90	0.00	0.000	0.000	0.002
20	132.30	132.20	0.00463	0.00	0.00243	0.48	0.30	6.28	190.17	628.36	1.90	0.00	0.000	0.000	0.002
21	132.20	132.10	0.00467	0.00	0.00246	0.47	0.30	6.28	190.22	628.46	1.90	0.00	0.000	0.001	0.002
22	132.10	132.00	0.00472	0.00	0.00248	0.47	0.30	6.29	190.27	628.57	1.90	0.00	0.000	0.001	0.002
23	132.00	131.90	0.00476	0.00	0.00250	0.46	0.30	6.29	190.31	628.67	1.90	0.00	0.000	0.001	0.003
24	131.90	131.80	0.00481	0.00	0.00253	0.46	0.30	6.29	190.36	628.77	1.90	0.00	0.000	0.001	0.003
25	131.80	131.70	0.00486	0.00	0.00255	0.45	0.30	6.29	190.40	628.88	1.90	0.00	0.000	0.001	0.003
26	131.70	131.60	0.00490	0.00	0.00257	0.45	0.30	6.29	190.45	628.98	1.90	0.00	0.000	0.001	0.003
27	131.60	131.50	0.00495	0.00	0.00260	0.45	0.30	6.29	190.50	629.08	1.90	0.00	0.000	0.001	0.003
28	131.50	131.40	0.00500	0.00	0.00262	0.44	0.30	6.29	190.54	629.18	1.91	0.00	0.000	0.001	0.003
29	131.40	131.30	0.00504	0.00	0.00265	0.44	0.30	6.29	190.59	629.28	1.91	0.00	0.000	0.001	0.003
30	131.30	131.20	0.00509	0.00	0.00267	0.43	0.30	6.29	190.63	629.38	1.91	0.00	0.000	0.001	0.003
31	131.20	131.10	0.00514	0.00	0.00269	0.43	0.30	6.29	190.68	629.48	1.91	0.00	0.000	0.001	0.003
32	131.10	131.00	0.00518	0.00	0.00272	0.43	0.30	6.30	190.72	629.58	1.91	0.00	0.000	0.001	0.003
33	131.00	130.90	0.00523	0.00	0.00274	0.42	0.30	6.30	190.77	629.68	1.91	0.00	0.000	0.001	0.003
34	130.90	130.80	0.00527	0.00	0.00276	0.42	0.30	6.30	190.81	629.78	1.91	0.00	0.000	0.001	0.003
35	130.80	130.70	0.00532	0.00	0.00279	0.42	0.30	6.30	190.86	629.88	1.91	0.00	0.000	0.001	0.003
36	130.70	130.60	0.00537	0.00	0.00281	0.41	0.30	6.30	190.90	629.98	1.91	0.00	0.000	0.001	0.003
37	130.60	130.50	0.00541	0.00	0.00283	0.41	0.30	6.30	190.95	630.08	1.91	0.00	0.000	0.001	0.003
38	130.50	130.40	0.00546	0.00	0.00286	0.40	0.30	6.30	190.99	630.17	1.91	0.00	0.000	0.001	0.003

Big Creek – 080903 – Calibration model output:

39	130.40	130.30	0.00551	0.00	0.00288	0.40	0.30	6.30	191.04	630.27	1.91	0.00	0.000	0.001	0.003
40	130.30	130.20	0.00555	0.00	0.00291	0.40	0.30	6.30	191.08	630.37	1.91	0.00	0.000	0.001	0.003
41	130.20	130.10	0.00560	0.00	0.00293	0.40	0.30	6.30	191.12	630.46	1.91	0.00	0.000	0.001	0.003
42	130.10	130.00	0.00564	0.00	0.00295	0.39	0.30	6.31	191.17	630.56	1.91	0.00	0.000	0.001	0.003
43	130.00	129.90	0.00569	0.00	0.00298	0.39	0.30	6.31	191.21	630.66	1.91	0.00	0.000	0.001	0.003
44	129.90	129.80	0.00574	0.00	0.00300	0.39	0.30	6.31	191.26	630.75	1.91	0.00	0.000	0.001	0.003
45	129.80	129.70	0.00578	0.00	0.00302	0.38	0.30	6.31	191.30	630.85	1.91	0.00	0.000	0.001	0.003
46	129.70	129.60	0.00583	0.00	0.00305	0.38	0.30	6.31	191.34	630.94	1.91	0.00	0.000	0.001	0.003
47	129.60	129.50	0.00588	0.00	0.00307	0.38	0.30	6.31	191.39	631.04	1.91	0.00	0.000	0.001	0.003
48	129.50	129.40	0.00592	0.00	0.00309	0.37	0.30	6.31	191.43	631.13	1.91	0.00	0.000	0.001	0.003
49	129.40	129.30	0.00597	0.00	0.00312	0.37	0.30	6.31	191.47	631.23	1.91	0.00	0.000	0.001	0.003
50	129.30	129.20	0.00601	0.00	0.00314	0.37	0.30	6.31	191.52	631.32	1.92	0.00	0.000	0.001	0.003
51	129.20	129.10	0.00606	0.00	0.00316	0.37	0.30	6.31	191.56	631.41	1.92	0.00	0.000	0.001	0.003
52	129.10	129.00	0.00611	0.00	0.00319	0.36	0.30	6.32	191.60	631.51	1.92	0.00	0.000	0.001	0.003
53	129.00	128.90	0.00615	0.00	0.00321	0.36	0.30	6.32	191.65	631.60	1.92	0.00	0.000	0.001	0.003
54	128.90	128.80	0.00620	0.00	0.00323	0.36	0.30	6.32	191.69	631.69	1.92	0.00	0.000	0.001	0.003
55	128.80	128.70	0.00625	0.00	0.00326	0.36	0.30	6.32	191.73	631.78	1.92	0.00	0.000	0.001	0.003
56	128.70	128.60	0.00629	0.00	0.00328	0.35	0.30	6.32	191.77	631.87	1.92	0.00	0.000	0.001	0.003
57	128.60	128.50	0.00634	0.00	0.00330	0.35	0.30	6.32	191.82	631.97	1.92	0.00	0.000	0.001	0.003
58	128.50	128.40	0.00639	0.00	0.00333	0.35	0.30	6.32	191.86	632.06	1.92	0.00	0.000	0.001	0.003
59	128.40	128.30	0.00643	0.00	0.00335	0.35	0.30	6.32	191.90	632.15	1.92	0.00	0.000	0.001	0.003
60	128.30	128.20	0.00648	0.00	0.00337	0.34	0.30	6.32	191.94	632.24	1.92	0.00	0.000	0.001	0.003
61	128.20	128.10	0.00652	0.00	0.00340	0.34	0.30	6.32	191.99	632.33	1.92	0.00	0.000	0.001	0.003
62	128.10	128.00	0.00657	0.00	0.00342	0.34	0.30	6.32	192.03	632.42	1.92	0.00	0.000	0.001	0.003
63	128.00	127.90	0.00662	0.00	0.00344	0.34	0.30	6.33	192.07	632.51	1.92	0.00	0.000	0.001	0.003
64	127.90	127.80	0.00666	0.00	0.00347	0.33	0.30	6.33	192.11	632.60	1.92	0.00	0.000	0.001	0.003
65	127.80	127.70	0.00671	0.00	0.00349	0.33	0.30	6.33	192.15	632.69	1.92	0.00	0.000	0.001	0.003
66	127.70	127.60	0.00676	0.00	0.00351	0.33	0.30	6.33	192.20	632.78	1.92	0.00	0.000	0.001	0.004
67	127.60	127.50	0.00680	0.00	0.00354	0.33	0.30	6.33	192.24	632.87	1.92	0.00	0.000	0.001	0.004
68	127.50	127.40	0.00685	0.00	0.00356	0.32	0.30	6.33	192.28	632.95	1.92	0.00	0.000	0.001	0.004
69	127.40	127.30	0.00689	0.00	0.00358	0.32	0.30	6.33	192.32	633.04	1.92	0.00	0.000	0.001	0.004
70	127.30	127.20	0.00694	0.00	0.00361	0.32	0.30	6.33	192.36	633.13	1.92	0.00	0.000	0.001	0.004
71	127.20	127.10	0.00699	0.00	0.00363	0.32	0.30	6.33	192.40	633.22	1.92	0.00	0.000	0.001	0.004
72	127.10	127.00	0.00703	0.00	0.00365	0.32	0.30	6.33	192.44	633.31	1.92	0.00	0.000	0.001	0.004
73	127.00	126.90	0.00708	0.00	0.00368	0.31	0.30	6.33	192.49	633.39	1.92	0.00	0.000	0.001	0.004
74	126.90	126.80	0.00713	0.00	0.00370	0.31	0.30	6.33	192.53	633.48	1.93	0.00	0.000	0.001	0.004
75	126.80	126.70	0.00717	0.00	0.00372	0.31	0.30	6.34	192.57	633.57	1.93	0.00	0.000	0.001	0.004
76	126.70	126.60	0.00722	0.00	0.00375	0.31	0.30	6.34	192.61	633.65	1.93	0.00	0.000	0.001	0.004
77	126.60	126.50	0.00726	0.00	0.00377	0.31	0.30	6.34	192.65	633.74	1.93	0.00	0.000	0.001	0.004
78	126.50	126.40	0.00731	0.00	0.00379	0.31	0.30	6.34	192.69	633.83	1.93	0.00	0.000	0.001	0.004
79	126.40	126.30	0.00736	0.00	0.00382	0.30	0.30	6.34	192.73	633.91	1.93	0.00	0.000	0.001	0.004
80	126.30	126.20	0.00740	0.00	0.00384	0.30	0.30	6.34	192.77	634.00	1.93	0.00	0.000	0.001	0.004
81	126.20	126.10	0.00745	0.00	0.00386	0.30	0.30	6.34	192.81	634.08	1.93	0.00	0.000	0.001	0.004
82	126.10	126.00	0.00750	0.00	0.00389	0.30	0.30	6.34	192.85	634.17	1.93	0.00	0.000	0.001	0.004
83	126.00	125.90	0.00754	0.00	0.00391	0.30	0.30	6.34	192.89	634.25	1.93	0.00	0.000	0.001	0.004
84	125.90	125.80	0.00759	0.00	0.00393	0.29	0.30	6.34	192.93	634.34	1.93	0.00	0.000	0.001	0.004
85	125.80	125.70	0.00764	0.00	0.00396	0.29	0.30	6.34	192.97	634.42	1.93	0.00	0.000	0.001	0.004
86	125.70	125.60	0.00768	0.00	0.00398	0.29	0.30	6.35	193.01	634.51	1.93	0.00	0.000	0.001	0.004
87	125.60	125.50	0.00773	0.00	0.00400	0.29	0.30	6.35	193.05	634.59	1.93	0.00	0.000	0.001	0.004
88	125.50	125.40	0.00777	0.00	0.00403	0.29	0.30	6.35	193.09	634.67	1.93	0.00	0.000	0.001	0.004
89	125.40	125.30	0.00782	0.00	0.00405	0.29	0.30	6.35	193.13	634.76	1.93	0.00	0.000	0.001	0.004
90	125.30	125.20	0.00787	0.00	0.00407	0.28	0.30	6.35	193.17	634.84	1.93	0.00	0.000	0.001	0.004
91	125.20	125.10	0.00791	0.00	0.00410	0.28	0.30	6.35	193.21	634.92	1.93	0.00	0.000	0.001	0.004
92	125.10	125.00	0.00796	0.00	0.00412	0.28	0.30	6.35	193.25	635.01	1.93	0.00	0.000	0.001	0.004
93	125.00	124.90	0.00801	0.00	0.00414	0.28	0.30	6.35	193.29	635.09	1.93	0.00	0.000	0.001	0.004

**Big Creek – 080903 – Calibration model output:**

94	124.90	124.80	0.00805	0.00	0.00416	0.28	0.30	6.35	193.33	635.17	1.93	0.00	0.000	0.001	0.004
95	124.80	124.70	0.00810	0.00	0.00419	0.28	0.30	6.35	193.37	635.26	1.93	0.00	0.000	0.001	0.004
96	124.70	124.60	0.00814	0.00	0.00421	0.27	0.30	6.35	193.41	635.34	1.93	0.00	0.000	0.001	0.004
97	124.60	124.50	0.00819	0.00	0.00423	0.27	0.30	6.35	193.45	635.42	1.93	0.00	0.000	0.001	0.004
98	124.50	124.40	0.00824	0.00	0.00426	0.27	0.30	6.36	193.49	635.50	1.93	0.00	0.000	0.001	0.004
99	124.40	124.30	0.00828	0.00	0.00428	0.27	0.30	6.36	193.53	635.58	1.94	0.00	0.000	0.001	0.004
100	124.30	124.20	0.00833	0.00	0.00430	0.27	0.30	6.36	193.57	635.66	1.94	0.00	0.000	0.001	0.004
101	124.20	124.10	0.00838	0.00	0.00433	0.27	0.30	6.36	193.61	635.75	1.94	0.00	0.000	0.001	0.004
102	124.10	124.00	0.00842	0.00	0.00435	0.27	0.30	6.36	193.65	635.83	1.94	0.00	0.000	0.001	0.004
103	124.00	123.90	0.00847	0.00	0.00437	0.26	0.30	6.36	193.68	635.91	1.94	0.00	0.000	0.001	0.004
104	123.90	123.80	0.00851	0.00	0.00440	0.26	0.30	6.36	193.72	635.99	1.94	0.00	0.000	0.001	0.004
105	123.80	123.70	0.00856	0.00	0.00442	0.26	0.30	6.36	193.76	636.07	1.94	0.00	0.000	0.001	0.004
106	123.70	123.60	0.00861	0.00	0.00444	0.26	0.30	6.36	193.80	636.15	1.94	0.00	0.000	0.001	0.004
107	123.60	123.50	0.00865	0.00	0.00446	0.26	0.30	6.36	193.84	636.23	1.94	0.00	0.000	0.001	0.004
108	123.50	123.40	0.00870	0.00	0.00449	0.26	0.30	6.36	193.88	636.31	1.94	0.00	0.000	0.001	0.004
109	123.40	123.30	0.00875	0.00	0.00451	0.26	0.30	6.36	193.92	636.39	1.94	0.00	0.000	0.001	0.005
110	123.30	123.20	0.00879	0.00	0.00453	0.26	0.30	6.36	193.96	636.47	1.94	0.00	0.000	0.001	0.005
111	123.20	123.10	0.00884	0.00	0.00456	0.25	0.30	6.37	193.99	636.55	1.94	0.00	0.000	0.001	0.005
112	123.10	123.00	0.00889	0.00	0.00458	0.25	0.30	6.37	194.03	636.63	1.94	0.00	0.000	0.001	0.005
113	123.00	122.90	0.00893	0.00	0.00460	0.25	0.30	6.37	194.07	636.70	1.94	0.00	0.000	0.001	0.005
114	122.90	122.80	0.00898	0.00	0.00463	0.25	0.30	6.37	194.11	636.78	1.94	0.00	0.000	0.001	0.005
115	122.80	122.70	0.00902	0.00	0.00465	0.25	0.30	6.37	194.15	636.86	1.94	0.00	0.000	0.001	0.005
116	122.70	122.60	0.00907	0.00	0.00467	0.25	0.30	6.37	194.19	636.94	1.94	0.00	0.000	0.001	0.005
117	122.60	122.50	0.00912	0.00	0.00469	0.25	0.30	6.37	194.22	637.02	1.94	0.00	0.000	0.001	0.005
118	122.50	122.40	0.00916	0.00	0.00472	0.25	0.30	6.37	194.26	637.10	1.94	0.00	0.000	0.001	0.005
119	122.40	122.30	0.00921	0.00	0.00474	0.24	0.30	6.37	194.30	637.17	1.94	0.00	0.000	0.001	0.005
120	122.30	122.20	0.00926	0.00	0.00476	0.24	0.30	6.37	194.34	637.25	1.94	0.00	0.000	0.001	0.005
121	122.20	122.10	0.00930	0.00	0.00479	0.24	0.30	6.37	194.38	637.33	1.94	0.00	0.000	0.001	0.005
122	122.10	122.00	0.00935	0.00	0.00481	0.24	0.31	6.37	194.41	637.41	1.94	0.00	0.000	0.001	0.005
123	122.00	121.90	0.00939	0.00	0.00483	0.24	0.31	6.37	194.45	637.48	1.94	0.00	0.000	0.001	0.005
124	121.90	121.80	0.00944	0.00	0.00485	0.24	0.31	6.38	194.49	637.56	1.94	0.00	0.000	0.001	0.005
125	121.80	121.70	0.00949	0.00	0.00488	0.24	0.31	6.38	194.53	637.64	1.95	0.00	0.000	0.001	0.005
126	121.70	121.60	0.00953	0.00	0.00490	0.24	0.31	6.38	194.57	637.72	1.95	0.00	0.000	0.001	0.005
127	121.60	121.50	0.00958	0.00	0.00492	0.24	0.31	6.38	194.60	637.79	1.95	0.00	0.000	0.001	0.005
128	121.50	121.40	0.00963	0.00	0.00495	0.23	0.31	6.38	194.64	637.87	1.95	0.00	0.000	0.001	0.005
129	121.40	121.30	0.00967	0.00	0.00497	0.23	0.31	6.38	194.68	637.95	1.95	0.00	0.000	0.001	0.005
130	121.30	121.20	0.00972	0.00	0.00499	0.23	0.31	6.38	194.72	638.02	1.95	0.00	0.000	0.001	0.005
131	121.20	121.10	0.00976	0.00	0.00501	0.23	0.31	6.38	194.75	638.10	1.95	0.00	0.000	0.001	0.005
132	121.10	121.00	0.00981	0.00	0.00504	0.23	0.31	6.38	194.79	638.17	1.95	0.00	0.000	0.001	0.005
133	121.00	120.90	0.00986	0.00	0.00506	0.23	0.31	6.38	194.83	638.25	1.95	0.00	0.000	0.001	0.005
134	120.90	120.80	0.00990	0.00	0.00508	0.23	0.31	6.38	194.87	638.32	1.95	0.00	0.000	0.001	0.005
135	120.80	120.70	0.00995	0.00	0.00511	0.23	0.31	6.38	194.90	638.40	1.95	0.00	0.000	0.001	0.005
136	120.70	120.60	0.01000	0.00	0.00513	0.23	0.31	6.38	194.94	638.47	1.95	0.00	0.000	0.001	0.005
137	120.60	120.50	0.01004	0.00	0.00515	0.22	0.31	6.39	194.98	638.55	1.95	0.00	0.000	0.001	0.005
138	120.50	120.40	0.01009	0.00	0.00517	0.22	0.31	6.39	195.01	638.62	1.95	0.00	0.000	0.001	0.005
139	120.40	120.30	0.01014	0.00	0.00520	0.22	0.31	6.39	195.05	638.70	1.95	0.00	0.000	0.001	0.005
140	120.30	120.20	0.01018	0.00	0.00522	0.22	0.31	6.39	195.09	638.77	1.95	0.00	0.000	0.001	0.005
141	120.20	120.10	0.01023	0.00	0.00524	0.22	0.31	6.39	195.13	638.85	1.95	0.00	0.000	0.001	0.005
142	120.10	120.00	0.01027	0.00	0.00526	0.22	0.31	6.39	195.16	638.92	1.95	0.00	0.000	0.001	0.005
143	120.00	119.90	0.01032	0.00	0.00529	0.22	0.31	6.39	195.20	639.00	1.95	0.00	0.000	0.001	0.005
144	119.90	119.80	0.01037	0.00	0.00531	0.22	0.31	6.39	195.24	639.07	1.95	0.00	0.000	0.001	0.005
145	119.80	119.70	0.01041	0.00	0.00533	0.22	0.31	6.39	195.27	639.14	1.95	0.00	0.000	0.001	0.005
146	119.70	119.60	0.01046	0.00	0.00536	0.22	0.31	6.39	195.31	639.22	1.95	0.00	0.000	0.001	0.005
147	119.60	119.50	0.01051	0.00	0.00538	0.22	0.31	6.39	195.35	639.29	1.95	0.00	0.000	0.001	0.005
148	119.50	119.40	0.01055	0.00	0.00540	0.21	0.31	6.39	195.38	639.37	1.95	0.00	0.000	0.001	0.005

**Big Creek – 080903 – Calibration model output:**

149	119.40	119.30	0.01060	0.00	0.00542	0.21	0.31	6.39	195.42	639.44	1.95	0.00	0.000	0.001	0.005
150	119.30	119.20	0.01064	0.00	0.00545	0.21	0.31	6.40	195.46	639.51	1.95	0.00	0.000	0.001	0.005
151	119.20	119.10	0.01069	0.00	0.00547	0.21	0.31	6.40	195.49	639.59	1.95	0.00	0.000	0.001	0.005
152	119.10	119.00	0.01074	0.00	0.00549	0.21	0.31	6.40	195.53	639.66	1.96	0.00	0.000	0.001	0.005
153	119.00	118.90	0.01078	0.00	0.00551	0.21	0.31	6.40	195.57	639.73	1.96	0.00	0.000	0.001	0.006
154	118.90	118.80	0.01083	0.00	0.00554	0.21	0.31	6.40	195.60	639.80	1.96	0.00	0.000	0.001	0.006
155	118.80	118.70	0.01088	0.00	0.00556	0.21	0.31	6.40	195.64	639.88	1.96	0.00	0.000	0.001	0.006
156	118.70	118.60	0.01092	0.00	0.00558	0.21	0.31	6.40	195.67	639.95	1.96	0.00	0.000	0.001	0.006
157	118.60	118.50	0.01097	0.00	0.00560	0.21	0.31	6.40	195.71	640.02	1.96	0.00	0.000	0.001	0.006
158	118.50	118.40	0.01101	0.00	0.00563	0.21	0.31	6.40	195.75	640.09	1.96	0.00	0.000	0.001	0.006
159	118.40	118.30	0.01106	0.00	0.00565	0.20	0.31	6.40	195.78	640.16	1.96	0.00	0.000	0.001	0.006
160	118.30	118.20	0.01111	0.00	0.00567	0.20	0.31	6.40	195.82	640.24	1.96	0.00	0.000	0.001	0.006
161	118.20	118.10	0.01115	0.00	0.00569	0.20	0.31	6.40	195.86	640.31	1.96	0.00	0.000	0.001	0.006
162	118.10	118.00	0.02100	46.67	0.01035	0.11	0.31	6.53	202.85	653.46	2.03	0.00	0.000	0.002	0.010
TOT									52.91	31231.99	102699.29				
AVG					0.00354			0.30	6.34			1.93			
CUM								52.91							

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAy 1/da	CBOD SETT 1/da	ANBOD DECAy 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAy 1/da	ORGN SETT 1/da	NH3 DECAy 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAy 1/da	NCM DECAy 1/da	NCM SETT 1/da
1	134.100	8.40	2.51	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.38	0.00	0.00	0.37	0.36
2	134.000	8.40	2.51	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.39	0.00	0.00	0.37	0.36
3	133.900	8.40	2.51	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.39	0.00	0.00	0.37	0.36
4	133.800	8.40	2.51	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.39	0.00	0.00	0.37	0.36
5	133.700	8.40	2.51	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.39	0.00	0.00	0.37	0.36
6	133.600	8.40	2.51	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.39	0.00	0.00	0.37	0.36
7	133.500	8.40	2.51	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.40	0.00	0.00	0.37	0.36
8	133.400	8.40	2.51	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.40	0.00	0.00	0.37	0.36
9	133.300	8.40	2.50	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.40	0.00	0.00	0.37	0.36
10	133.200	8.40	2.50	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.40	0.00	0.00	0.37	0.36
11	133.100	8.40	2.50	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.40	0.00	0.00	0.37	0.36
12	133.000	8.40	2.50	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.41	0.00	0.00	0.37	0.36
13	132.900	8.40	2.50	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.41	0.00	0.00	0.37	0.36
14	132.800	8.40	2.50	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.41	0.00	0.00	0.37	0.36
15	132.700	8.40	2.50	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.41	0.00	0.00	0.37	0.36
16	132.600	8.40	2.50	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.41	0.00	0.00	0.37	0.36
17	132.500	8.40	2.50	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.42	0.00	0.00	0.37	0.36
18	132.400	8.40	2.50	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.42	0.00	0.00	0.37	0.36
19	132.300	8.40	2.50	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.42	0.00	0.00	0.37	0.36
20	132.200	8.40	2.50	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.42	0.00	0.00	0.37	0.36
21	132.100	8.40	2.50	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.42	0.00	0.00	0.37	0.36
22	132.000	8.40	2.50	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.43	0.00	0.00	0.37	0.36
23	131.900	8.40	2.50	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.43	0.00	0.00	0.37	0.36
24	131.800	8.40	2.50	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.43	0.00	0.00	0.37	0.36
25	131.700	8.40	2.50	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.43	0.00	0.00	0.37	0.36
26	131.600	8.40	2.50	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.00	0.37	0.36
27	131.500	8.40	2.51	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.00	0.37	0.36
28	131.400	8.40	2.51	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.00	0.37	0.36
29	131.300	8.40	2.51	0.08	0.36	0.00	3.50	3.50	3.50	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.00	0.37	0.36













**Big Creek – 080903 – Calibration model output:**

131	121.100	24.10	0.00	0.00	0.00	4.13	6.47	6.47	0.00	0.00	0.00	0.00	0.00	27.41	0.00	0.00	1.90
132	121.000	24.10	0.00	0.00	0.00	4.13	6.47	6.47	0.00	0.00	0.00	0.00	0.00	27.44	0.00	0.00	1.90
133	120.900	24.10	0.00	0.00	0.00	4.14	6.47	6.47	0.00	0.00	0.00	0.00	0.00	27.48	0.00	0.00	1.90
134	120.800	24.10	0.00	0.00	0.00	4.14	6.46	6.46	0.00	0.00	0.00	0.00	0.00	27.51	0.00	0.00	1.90
135	120.700	24.10	0.00	0.00	0.00	4.14	6.46	6.46	0.00	0.00	0.00	0.00	0.00	27.55	0.00	0.00	1.90
136	120.600	24.10	0.00	0.00	0.00	4.14	6.46	6.46	0.00	0.00	0.00	0.00	0.00	27.58	0.00	0.00	1.90
137	120.500	24.10	0.00	0.00	0.00	4.15	6.46	6.46	0.00	0.00	0.00	0.00	0.00	27.62	0.00	0.00	1.90
138	120.400	24.10	0.00	0.00	0.00	4.15	6.46	6.46	0.00	0.00	0.00	0.00	0.00	27.65	0.00	0.00	1.90
139	120.300	24.10	0.00	0.00	0.00	4.15	6.46	6.46	0.00	0.00	0.00	0.00	0.00	27.68	0.00	0.00	1.90
140	120.200	24.10	0.00	0.00	0.00	4.15	6.46	6.46	0.00	0.00	0.00	0.00	0.00	27.72	0.00	0.00	1.90
141	120.100	24.10	0.00	0.00	0.00	4.16	6.46	6.46	0.00	0.00	0.00	0.00	0.00	27.75	0.00	0.00	1.90
142	120.000	24.10	0.00	0.00	0.00	4.16	6.46	6.46	0.00	0.00	0.00	0.00	0.00	27.79	0.00	0.00	1.90
143	119.900	24.10	0.00	0.00	0.00	4.16	6.46	6.46	0.00	0.00	0.00	0.00	0.00	27.82	0.00	0.00	1.90
144	119.800	24.10	0.00	0.00	0.00	4.16	6.46	6.46	0.00	0.00	0.00	0.00	0.00	27.86	0.00	0.00	1.90
145	119.700	24.10	0.00	0.00	0.00	4.17	6.46	6.46	0.00	0.00	0.00	0.00	0.00	27.89	0.00	0.00	1.90
146	119.600	24.10	0.00	0.00	0.00	4.17	6.46	6.46	0.00	0.00	0.00	0.00	0.00	27.93	0.00	0.00	1.90
147	119.500	24.10	0.00	0.00	0.00	4.17	6.45	6.45	0.00	0.00	0.00	0.00	0.00	27.96	0.00	0.00	1.90
148	119.400	24.10	0.00	0.00	0.00	4.18	6.45	6.45	0.00	0.00	0.00	0.00	0.00	28.00	0.00	0.00	1.90
149	119.300	24.10	0.00	0.00	0.00	4.18	6.45	6.45	0.00	0.00	0.00	0.00	0.00	28.03	0.00	0.00	1.90
150	119.200	24.10	0.00	0.00	0.00	4.18	6.45	6.45	0.00	0.00	0.00	0.00	0.00	28.07	0.00	0.00	1.90
151	119.100	24.10	0.00	0.00	0.00	4.18	6.45	6.45	0.00	0.00	0.00	0.00	0.00	28.10	0.00	0.00	1.89
152	119.000	24.10	0.00	0.00	0.00	4.19	6.45	6.45	0.00	0.00	0.00	0.00	0.00	28.13	0.00	0.00	1.89
153	118.900	24.10	0.00	0.00	0.00	4.19	6.45	6.45	0.00	0.00	0.00	0.00	0.00	28.17	0.00	0.00	1.89
154	118.800	24.10	0.00	0.00	0.00	4.19	6.45	6.45	0.00	0.00	0.00	0.00	0.00	28.20	0.00	0.00	1.89
155	118.700	24.10	0.00	0.00	0.00	4.19	6.45	6.45	0.00	0.00	0.00	0.00	0.00	28.24	0.00	0.00	1.89
156	118.600	24.10	0.00	0.00	0.00	4.20	6.45	6.45	0.00	0.00	0.00	0.00	0.00	28.27	0.00	0.00	1.89
157	118.500	24.10	0.00	0.00	0.00	4.20	6.45	6.45	0.00	0.00	0.00	0.00	0.00	28.31	0.00	0.00	1.89
158	118.400	24.10	0.00	0.00	0.00	4.20	6.45	6.45	0.00	0.00	0.00	0.00	0.00	28.34	0.00	0.00	1.89
159	118.300	24.10	0.00	0.00	0.00	4.21	6.45	6.45	0.00	0.00	0.00	0.00	0.00	28.38	0.00	0.00	1.89
160	118.200	24.10	0.00	0.00	0.00	4.21	6.44	6.44	0.00	0.00	0.00	0.00	0.00	28.41	0.00	0.00	1.89
161	118.100	24.10	0.00	0.00	0.00	4.21	6.44	6.44	0.00	0.00	0.00	0.00	0.00	28.45	0.00	0.00	1.89
162	118.000	24.10	0.00	0.00	0.00	6.16	6.42	6.42	0.00	0.00	0.00	0.00	0.00	28.48	0.00	0.00	1.27

\* CM-I = CHLORIDES  
MG/L

CM-II = SULFATES  
MG/L

NCM = NBOD  
MG/L

\*\* g/cu m

FINAL REPORT      BIG CREEK  
REACH NO. 2      BIG CREEK, RKM 100 TO MITCHNER

Big Creek - STREAM MODEL  
WATER QUALITY CALIBRATION

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
163	UPR RCH	0.02100	24.10	0.00	0.00	0.00	6.16	6.42	6.42	0.00	0.00	0.00	0.00	28.48	0.00	1.27
EACH	INCR	0.0002	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00

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

ELEM NO.	BEGIN DIST	ENDING DIST	FLOW	PCT EFF	ADVCTV VELO	TRAVEL TIME	DEPTH	WIDTH	VOLUME	SURFACE AREA	X-SECT AREA	TIDAL PRISM	TIDAL VELO	DISPRSN	MEAN VELO
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**Big Creek – 080903 – Calibration model output:**

	km	km	cms	m/s	days	m	m	cu m	sq m	sq m	cu m	m/s	sq m/s	m/s	
163	118.00	117.90	0.02115	46.34	0.00339	0.34	0.41	15.19	623.38	1518.64	6.23	0.00	0.000	0.001	0.003
164	117.90	117.80	0.02130	46.01	0.00342	0.34	0.41	15.19	623.56	1518.82	6.24	0.00	0.000	0.001	0.003
165	117.80	117.70	0.02145	45.69	0.00344	0.34	0.41	15.19	623.73	1518.99	6.24	0.00	0.000	0.001	0.003
166	117.70	117.60	0.02160	45.37	0.00346	0.33	0.41	15.19	623.91	1519.17	6.24	0.00	0.000	0.001	0.003
167	117.60	117.50	0.02175	45.06	0.00349	0.33	0.41	15.19	624.08	1519.34	6.24	0.00	0.000	0.001	0.003
168	117.50	117.40	0.02190	44.75	0.00351	0.33	0.41	15.20	624.25	1519.52	6.24	0.00	0.000	0.001	0.004
169	117.40	117.30	0.02205	44.44	0.00353	0.33	0.41	15.20	624.43	1519.69	6.24	0.00	0.000	0.001	0.004
170	117.30	117.20	0.02220	44.14	0.00355	0.33	0.41	15.20	624.60	1519.86	6.25	0.00	0.000	0.001	0.004
171	117.20	117.10	0.02235	43.85	0.00358	0.32	0.41	15.20	624.77	1520.03	6.25	0.00	0.000	0.001	0.004
172	117.10	117.00	0.02250	43.55	0.00360	0.32	0.41	15.20	624.95	1520.21	6.25	0.00	0.000	0.001	0.004
173	117.00	116.90	0.02265	43.26	0.00362	0.32	0.41	15.20	625.12	1520.38	6.25	0.00	0.000	0.001	0.004
174	116.90	116.80	0.02280	42.98	0.00365	0.32	0.41	15.21	625.29	1520.55	6.25	0.00	0.000	0.001	0.004
175	116.80	116.70	0.02295	42.70	0.00367	0.32	0.41	15.21	625.46	1520.72	6.25	0.00	0.000	0.001	0.004
176	116.70	116.60	0.02310	42.42	0.00369	0.31	0.41	15.21	625.63	1520.89	6.26	0.00	0.000	0.001	0.004
177	116.60	116.50	0.02325	42.15	0.00372	0.31	0.41	15.21	625.80	1521.06	6.26	0.00	0.000	0.001	0.004
178	116.50	116.40	0.02340	41.88	0.00374	0.31	0.41	15.21	625.98	1521.23	6.26	0.00	0.000	0.001	0.004
179	116.40	116.30	0.02355	41.61	0.00376	0.31	0.41	15.21	626.15	1521.40	6.26	0.00	0.000	0.001	0.004
180	116.30	116.20	0.02370	41.35	0.00378	0.31	0.41	15.22	626.32	1521.57	6.26	0.00	0.000	0.001	0.004
181	116.20	116.10	0.02385	41.09	0.00381	0.30	0.41	15.22	626.49	1521.73	6.26	0.00	0.000	0.001	0.004
182	116.10	116.00	0.02400	40.83	0.00383	0.30	0.41	15.22	626.66	1521.90	6.27	0.00	0.000	0.001	0.004
183	116.00	115.90	0.02415	40.57	0.00385	0.30	0.41	15.22	626.83	1522.07	6.27	0.00	0.000	0.001	0.004
184	115.90	115.80	0.02430	40.32	0.00388	0.30	0.41	15.22	627.00	1522.23	6.27	0.00	0.000	0.001	0.004
185	115.80	115.70	0.02445	40.08	0.00390	0.30	0.41	15.22	627.17	1522.40	6.27	0.00	0.000	0.001	0.004
186	115.70	115.60	0.02460	39.83	0.00392	0.30	0.41	15.23	627.34	1522.57	6.27	0.00	0.000	0.001	0.004
187	115.60	115.50	0.02475	39.59	0.00394	0.29	0.41	15.23	627.51	1522.73	6.28	0.00	0.000	0.001	0.004
188	115.50	115.40	0.02490	39.35	0.00397	0.29	0.41	15.23	627.67	1522.90	6.28	0.00	0.000	0.001	0.004
189	115.40	115.30	0.02505	39.12	0.00399	0.29	0.41	15.23	627.84	1523.06	6.28	0.00	0.000	0.001	0.004
190	115.30	115.20	0.02520	38.88	0.00401	0.29	0.41	15.23	628.01	1523.22	6.28	0.00	0.000	0.001	0.004
191	115.20	115.10	0.02535	38.65	0.00404	0.29	0.41	15.23	628.18	1523.39	6.28	0.00	0.000	0.001	0.004
192	115.10	115.00	0.02550	38.43	0.00406	0.29	0.41	15.24	628.35	1523.55	6.28	0.00	0.000	0.001	0.004
193	115.00	114.90	0.02565	38.20	0.00408	0.28	0.41	15.24	628.52	1523.71	6.29	0.00	0.000	0.001	0.004
194	114.90	114.80	0.02580	37.98	0.00410	0.28	0.41	15.24	628.68	1523.88	6.29	0.00	0.000	0.001	0.004
195	114.80	114.70	0.02595	37.76	0.00413	0.28	0.41	15.24	628.85	1524.04	6.29	0.00	0.000	0.001	0.004
196	114.70	114.60	0.02610	37.54	0.00415	0.28	0.41	15.24	629.02	1524.20	6.29	0.00	0.000	0.001	0.004
197	114.60	114.50	0.02625	37.33	0.00417	0.28	0.41	15.24	629.19	1524.36	6.29	0.00	0.000	0.001	0.004
198	114.50	114.40	0.02640	37.11	0.00420	0.28	0.41	15.25	629.35	1524.52	6.29	0.00	0.000	0.001	0.004
199	114.40	114.30	0.02656	36.90	0.00422	0.27	0.41	15.25	629.52	1524.68	6.30	0.00	0.000	0.001	0.004
200	114.30	114.20	0.02671	36.70	0.00424	0.27	0.41	15.25	629.69	1524.84	6.30	0.00	0.000	0.001	0.004
201	114.20	114.10	0.02686	36.49	0.00426	0.27	0.41	15.25	629.85	1525.00	6.30	0.00	0.000	0.001	0.004
202	114.10	114.00	0.02701	36.29	0.00429	0.27	0.41	15.25	630.02	1525.16	6.30	0.00	0.000	0.001	0.004
203	114.00	113.90	0.02716	36.09	0.00431	0.27	0.41	15.25	630.18	1525.32	6.30	0.00	0.000	0.001	0.004
204	113.90	113.80	0.02731	35.89	0.00433	0.27	0.41	15.25	630.35	1525.48	6.30	0.00	0.000	0.001	0.004
205	113.80	113.70	0.02746	35.69	0.00435	0.27	0.41	15.26	630.52	1525.63	6.31	0.00	0.000	0.001	0.004
206	113.70	113.60	0.02761	35.50	0.00438	0.26	0.41	15.26	630.68	1525.79	6.31	0.00	0.000	0.001	0.004
207	113.60	113.50	0.02776	35.31	0.00440	0.26	0.41	15.26	630.85	1525.95	6.31	0.00	0.000	0.001	0.004
208	113.50	113.40	0.02791	35.12	0.00442	0.26	0.41	15.26	631.01	1526.11	6.31	0.00	0.000	0.001	0.004
209	113.40	113.30	0.02806	34.93	0.00445	0.26	0.41	15.26	631.18	1526.26	6.31	0.00	0.000	0.001	0.004
210	113.30	113.20	0.02821	34.74	0.00447	0.26	0.41	15.26	631.34	1526.42	6.31	0.00	0.000	0.001	0.004
211	113.20	113.10	0.02836	34.56	0.00449	0.26	0.41	15.27	631.51	1526.57	6.32	0.00	0.000	0.001	0.004
212	113.10	113.00	0.02851	34.38	0.00451	0.26	0.41	15.27	631.67	1526.73	6.32	0.00	0.000	0.001	0.005
213	113.00	112.90	0.02866	34.20	0.00454	0.26	0.41	15.27	631.83	1526.88	6.32	0.00	0.000	0.001	0.005
214	112.90	112.80	0.02881	34.02	0.00456	0.25	0.41	15.27	632.00	1527.04	6.32	0.00	0.000	0.001	0.005
215	112.80	112.70	0.02896	33.84	0.00458	0.25	0.41	15.27	632.16	1527.19	6.32	0.00	0.000	0.001	0.005

Big Creek – 080903 – Calibration model output:

216	112.70	112.60	0.02911	33.67	0.00460	0.25	0.41	15.27	632.33	1527.35	6.32	0.00	0.000	0.001	0.005
217	112.60	112.50	0.02926	33.50	0.00463	0.25	0.41	15.28	632.49	1527.50	6.32	0.00	0.000	0.001	0.005
218	112.50	112.40	0.02941	33.32	0.00465	0.25	0.41	15.28	632.65	1527.65	6.33	0.00	0.000	0.001	0.005
219	112.40	112.30	0.02956	33.16	0.00467	0.25	0.41	15.28	632.82	1527.81	6.33	0.00	0.000	0.001	0.005
220	112.30	112.20	0.02971	32.99	0.00469	0.25	0.41	15.28	632.98	1527.96	6.33	0.00	0.000	0.001	0.005
221	112.20	112.10	0.02986	32.82	0.00472	0.25	0.41	15.28	633.14	1528.11	6.33	0.00	0.000	0.001	0.005
222	112.10	112.00	0.03001	32.66	0.00474	0.24	0.41	15.28	633.30	1528.26	6.33	0.00	0.000	0.001	0.005
223	112.00	111.90	0.03016	32.50	0.00476	0.24	0.41	15.28	633.47	1528.42	6.33	0.00	0.000	0.001	0.005
224	111.90	111.80	0.03031	32.33	0.00478	0.24	0.41	15.29	633.63	1528.57	6.34	0.00	0.000	0.001	0.005
225	111.80	111.70	0.03046	32.17	0.00481	0.24	0.41	15.29	633.79	1528.72	6.34	0.00	0.000	0.001	0.005
226	111.70	111.60	0.03061	32.02	0.00483	0.24	0.41	15.29	633.95	1528.87	6.34	0.00	0.000	0.001	0.005
227	111.60	111.50	0.03076	31.86	0.00485	0.24	0.41	15.29	634.11	1529.02	6.34	0.00	0.000	0.001	0.005
228	111.50	111.40	0.03091	31.71	0.00487	0.24	0.41	15.29	634.28	1529.17	6.34	0.00	0.000	0.001	0.005
229	111.40	111.30	0.03106	31.55	0.00490	0.24	0.41	15.29	634.44	1529.32	6.34	0.00	0.000	0.001	0.005
230	111.30	111.20	0.03121	31.40	0.00492	0.24	0.41	15.29	634.60	1529.47	6.35	0.00	0.000	0.001	0.005
231	111.20	111.10	0.03136	31.25	0.00494	0.23	0.41	15.30	634.76	1529.62	6.35	0.00	0.000	0.001	0.005
232	111.10	111.00	0.03151	31.10	0.00496	0.23	0.42	15.30	634.92	1529.77	6.35	0.00	0.000	0.001	0.005
233	111.00	110.90	0.03166	30.95	0.00499	0.23	0.42	15.30	635.08	1529.91	6.35	0.00	0.000	0.001	0.005
234	110.90	110.80	0.03181	30.81	0.00501	0.23	0.42	15.30	635.24	1530.06	6.35	0.00	0.000	0.001	0.005
235	110.80	110.70	0.03196	30.66	0.00503	0.23	0.42	15.30	635.40	1530.21	6.35	0.00	0.000	0.001	0.005
236	110.70	110.60	0.03211	30.52	0.00505	0.23	0.42	15.30	635.56	1530.36	6.36	0.00	0.000	0.001	0.005
237	110.60	110.50	0.03226	30.38	0.00507	0.23	0.42	15.31	635.72	1530.51	6.36	0.00	0.000	0.001	0.005
238	110.50	110.40	0.03241	30.24	0.00510	0.23	0.42	15.31	635.88	1530.65	6.36	0.00	0.000	0.001	0.005
239	110.40	110.30	0.03256	30.10	0.00512	0.23	0.42	15.31	636.04	1530.80	6.36	0.00	0.000	0.001	0.005
240	110.30	110.20	0.03271	29.96	0.00514	0.23	0.42	15.31	636.20	1530.95	6.36	0.00	0.000	0.001	0.005
241	110.20	110.10	0.03286	29.82	0.00516	0.22	0.42	15.31	636.36	1531.09	6.36	0.00	0.000	0.001	0.005
242	110.10	110.00	0.03301	29.69	0.00519	0.22	0.42	15.31	636.52	1531.24	6.37	0.00	0.000	0.001	0.005
243	110.00	109.90	0.03316	29.55	0.00521	0.22	0.42	15.31	636.68	1531.38	6.37	0.00	0.000	0.001	0.005
244	109.90	109.80	0.03331	29.42	0.00523	0.22	0.42	15.32	636.84	1531.53	6.37	0.00	0.000	0.001	0.005
245	109.80	109.70	0.03346	29.29	0.00525	0.22	0.42	15.32	637.00	1531.67	6.37	0.00	0.000	0.001	0.005
246	109.70	109.60	0.03361	29.16	0.00528	0.22	0.42	15.32	637.16	1531.82	6.37	0.00	0.000	0.001	0.005
247	109.60	109.50	0.03376	29.03	0.00530	0.22	0.42	15.32	637.32	1531.96	6.37	0.00	0.000	0.001	0.005
248	109.50	109.40	0.03391	28.90	0.00532	0.22	0.42	15.32	637.48	1532.11	6.37	0.00	0.000	0.001	0.005
249	109.40	109.30	0.03406	28.77	0.00534	0.22	0.42	15.32	637.64	1532.25	6.38	0.00	0.000	0.001	0.005
250	109.30	109.20	0.03421	28.64	0.00536	0.22	0.42	15.32	637.79	1532.39	6.38	0.00	0.000	0.001	0.005
251	109.20	109.10	0.03436	28.52	0.00539	0.21	0.42	15.33	637.95	1532.54	6.38	0.00	0.000	0.001	0.005
252	109.10	109.00	0.03451	28.40	0.00541	0.21	0.42	15.33	638.11	1532.68	6.38	0.00	0.000	0.001	0.005
253	109.00	108.90	0.03466	28.27	0.00543	0.21	0.42	15.33	638.27	1532.82	6.38	0.00	0.000	0.001	0.005
254	108.90	108.80	0.03481	28.15	0.00545	0.21	0.42	15.33	638.43	1532.97	6.38	0.00	0.000	0.001	0.005
255	108.80	108.70	0.03496	28.03	0.00548	0.21	0.42	15.33	638.58	1533.11	6.39	0.00	0.000	0.001	0.005
256	108.70	108.60	0.03511	27.91	0.00550	0.21	0.42	15.33	638.74	1533.25	6.39	0.00	0.000	0.001	0.005
257	108.60	108.50	0.03526	27.79	0.00552	0.21	0.42	15.33	638.90	1533.39	6.39	0.00	0.000	0.001	0.006
258	108.50	108.40	0.03541	27.67	0.00554	0.21	0.42	15.34	639.06	1533.53	6.39	0.00	0.000	0.001	0.006
259	108.40	108.30	0.03556	27.56	0.00556	0.21	0.42	15.34	639.21	1533.68	6.39	0.00	0.000	0.001	0.006
260	108.30	108.20	0.03571	27.44	0.00559	0.21	0.42	15.34	639.37	1533.82	6.39	0.00	0.000	0.001	0.006
261	108.20	108.10	0.03586	27.33	0.00561	0.21	0.42	15.34	639.53	1533.96	6.40	0.00	0.000	0.002	0.006
262	108.10	108.00	0.03601	27.21	0.00563	0.21	0.42	15.34	639.69	1534.10	6.40	0.00	0.000	0.002	0.006
263	108.00	107.90	0.03616	27.10	0.00565	0.20	0.42	15.34	639.84	1534.24	6.40	0.00	0.000	0.002	0.006
264	107.90	107.80	0.03631	26.99	0.00567	0.20	0.42	15.34	640.00	1534.38	6.40	0.00	0.000	0.002	0.006
265	107.80	107.70	0.03646	26.88	0.00570	0.20	0.42	15.35	640.16	1534.52	6.40	0.00	0.000	0.002	0.006
266	107.70	107.60	0.03661	26.77	0.00572	0.20	0.42	15.35	640.31	1534.66	6.40	0.00	0.000	0.002	0.006
267	107.60	107.50	0.03676	26.66	0.00574	0.20	0.42	15.35	640.47	1534.80	6.40	0.00	0.000	0.002	0.006
268	107.50	107.40	0.03691	26.55	0.00576	0.20	0.42	15.35	640.62	1534.94	6.41	0.00	0.000	0.002	0.006
269	107.40	107.30	0.03706	26.44	0.00578	0.20	0.42	15.35	640.78	1535.07	6.41	0.00	0.000	0.002	0.006
270	107.30	107.20	0.03722	26.33	0.00581	0.20	0.42	15.35	640.94	1535.21	6.41	0.00	0.000	0.002	0.006

Big Creek – 080903 – Calibration model output:

271	107.20	107.10	0.03737	26.23	0.00583	0.20	0.42	15.35	641.09	1535.35	6.41	0.00	0.000	0.002	0.006
272	107.10	107.00	0.03752	26.12	0.00585	0.20	0.42	15.35	641.25	1535.49	6.41	0.00	0.000	0.002	0.006
273	107.00	106.90	0.03767	26.02	0.00587	0.20	0.42	15.36	641.40	1535.63	6.41	0.00	0.000	0.002	0.006
274	106.90	106.80	0.03782	25.92	0.00589	0.20	0.42	15.36	641.56	1535.76	6.42	0.00	0.000	0.002	0.006
275	106.80	106.70	0.03797	25.81	0.00592	0.20	0.42	15.36	641.71	1535.90	6.42	0.00	0.000	0.002	0.006
276	106.70	106.60	0.03812	25.71	0.00594	0.19	0.42	15.36	641.87	1536.04	6.42	0.00	0.000	0.002	0.006
277	106.60	106.50	0.03827	25.61	0.00596	0.19	0.42	15.36	642.02	1536.18	6.42	0.00	0.000	0.002	0.006
278	106.50	106.40	0.03842	25.51	0.00598	0.19	0.42	15.36	642.18	1536.31	6.42	0.00	0.000	0.002	0.006
279	106.40	106.30	0.03857	25.41	0.00600	0.19	0.42	15.36	642.33	1536.45	6.42	0.00	0.000	0.002	0.006
280	106.30	106.20	0.03872	25.31	0.00603	0.19	0.42	15.37	642.49	1536.58	6.42	0.00	0.000	0.002	0.006
281	106.20	106.10	0.03887	25.21	0.00605	0.19	0.42	15.37	642.64	1536.72	6.43	0.00	0.000	0.002	0.006
282	106.10	106.00	0.03902	25.12	0.00607	0.19	0.42	15.37	642.80	1536.86	6.43	0.00	0.000	0.002	0.006
283	106.00	105.90	0.03917	25.02	0.00609	0.19	0.42	15.37	642.95	1536.99	6.43	0.00	0.000	0.002	0.006
284	105.90	105.80	0.03932	24.93	0.00611	0.19	0.42	15.37	643.11	1537.13	6.43	0.00	0.000	0.002	0.006
285	105.80	105.70	0.03947	24.83	0.00614	0.19	0.42	15.37	643.26	1537.26	6.43	0.00	0.000	0.002	0.006
286	105.70	105.60	0.03962	24.74	0.00616	0.19	0.42	15.37	643.41	1537.40	6.43	0.00	0.000	0.002	0.006
287	105.60	105.50	0.03977	24.64	0.00618	0.19	0.42	15.38	643.57	1537.53	6.44	0.00	0.000	0.002	0.006
288	105.50	105.40	0.03992	24.55	0.00620	0.19	0.42	15.38	643.72	1537.67	6.44	0.00	0.000	0.002	0.006
289	105.40	105.30	0.04007	24.46	0.00622	0.19	0.42	15.38	643.88	1537.80	6.44	0.00	0.000	0.002	0.006
290	105.30	105.20	0.04022	24.37	0.00624	0.19	0.42	15.38	644.03	1537.93	6.44	0.00	0.000	0.002	0.006
291	105.20	105.10	0.04037	24.28	0.00627	0.18	0.42	15.38	644.18	1538.07	6.44	0.00	0.000	0.002	0.006
292	105.10	105.00	0.04052	24.19	0.00629	0.18	0.42	15.38	644.34	1538.20	6.44	0.00	0.000	0.002	0.006
293	105.00	104.90	0.04067	24.10	0.00631	0.18	0.42	15.38	644.49	1538.33	6.44	0.00	0.000	0.002	0.006
294	104.90	104.80	0.04082	24.01	0.00633	0.18	0.42	15.38	644.64	1538.47	6.45	0.00	0.000	0.002	0.006
295	104.80	104.70	0.04097	23.92	0.00635	0.18	0.42	15.39	644.80	1538.60	6.45	0.00	0.000	0.002	0.006
296	104.70	104.60	0.04112	23.83	0.00638	0.18	0.42	15.39	644.95	1538.73	6.45	0.00	0.000	0.002	0.006
297	104.60	104.50	0.04127	23.75	0.00640	0.18	0.42	15.39	645.10	1538.87	6.45	0.00	0.000	0.002	0.006
298	104.50	104.40	0.04142	23.66	0.00642	0.18	0.42	15.39	645.25	1539.00	6.45	0.00	0.000	0.002	0.006
299	104.40	104.30	0.04157	23.58	0.00644	0.18	0.42	15.39	645.41	1539.13	6.45	0.00	0.000	0.002	0.006
300	104.30	104.20	0.04172	23.49	0.00646	0.18	0.42	15.39	645.56	1539.26	6.46	0.00	0.000	0.002	0.006
301	104.20	104.10	0.04187	23.41	0.00648	0.18	0.42	15.39	645.71	1539.39	6.46	0.00	0.000	0.002	0.006
302	104.10	104.00	0.04202	23.32	0.00651	0.18	0.42	15.40	645.86	1539.53	6.46	0.00	0.000	0.002	0.007
303	104.00	103.90	0.04217	23.24	0.00653	0.18	0.42	15.40	646.02	1539.66	6.46	0.00	0.000	0.002	0.007
304	103.90	103.80	0.04232	23.16	0.00655	0.18	0.42	15.40	646.17	1539.79	6.46	0.00	0.000	0.002	0.007
305	103.80	103.70	0.04247	23.08	0.00657	0.18	0.42	15.40	646.32	1539.92	6.46	0.00	0.000	0.002	0.007
306	103.70	103.60	0.04262	22.99	0.00659	0.18	0.42	15.40	646.47	1540.05	6.46	0.00	0.000	0.002	0.007
307	103.60	103.50	0.04277	22.91	0.00661	0.17	0.42	15.40	646.62	1540.18	6.47	0.00	0.000	0.002	0.007
308	103.50	103.40	0.04292	22.83	0.00664	0.17	0.42	15.40	646.78	1540.31	6.47	0.00	0.000	0.002	0.007
309	103.40	103.30	0.04307	22.75	0.00666	0.17	0.42	15.40	646.93	1540.44	6.47	0.00	0.000	0.002	0.007
310	103.30	103.20	0.04322	22.67	0.00668	0.17	0.42	15.41	647.08	1540.57	6.47	0.00	0.000	0.002	0.007
311	103.20	103.10	0.04337	22.60	0.00670	0.17	0.42	15.41	647.23	1540.70	6.47	0.00	0.000	0.002	0.007
312	103.10	103.00	0.04352	22.52	0.00672	0.17	0.42	15.41	647.38	1540.83	6.47	0.00	0.000	0.002	0.007
313	103.00	102.90	0.04367	22.44	0.00674	0.17	0.42	15.41	647.53	1540.96	6.48	0.00	0.000	0.002	0.007
314	102.90	102.80	0.04382	22.36	0.00677	0.17	0.42	15.41	647.68	1541.09	6.48	0.00	0.000	0.002	0.007
315	102.80	102.70	0.04397	22.29	0.00679	0.17	0.42	15.41	647.84	1541.22	6.48	0.00	0.000	0.002	0.007
316	102.70	102.60	0.04412	22.21	0.00681	0.17	0.42	15.41	647.99	1541.34	6.48	0.00	0.000	0.002	0.007
317	102.60	102.50	0.04427	22.14	0.00683	0.17	0.42	15.41	648.14	1541.47	6.48	0.00	0.000	0.002	0.007
318	102.50	102.40	0.04442	22.06	0.00685	0.17	0.42	15.42	648.29	1541.60	6.48	0.00	0.000	0.002	0.007
319	102.40	102.30	0.04457	21.99	0.00687	0.17	0.42	15.42	648.44	1541.73	6.48	0.00	0.000	0.002	0.007
320	102.30	102.20	0.04472	21.91	0.00690	0.17	0.42	15.42	648.59	1541.86	6.49	0.00	0.000	0.002	0.007
321	102.20	102.10	0.04487	21.84	0.00692	0.17	0.42	15.42	648.74	1541.99	6.49	0.00	0.000	0.002	0.007
322	102.10	102.00	0.04502	21.77	0.00694	0.17	0.42	15.42	648.89	1542.11	6.49	0.00	0.000	0.002	0.007
323	102.00	101.90	0.04517	21.69	0.00696	0.17	0.42	15.42	649.04	1542.24	6.49	0.00	0.000	0.002	0.007
324	101.90	101.80	0.04532	21.62	0.00698	0.17	0.42	15.42	649.19	1542.37	6.49	0.00	0.000	0.002	0.007
325	101.80	101.70	0.04547	21.55	0.00700	0.17	0.42	15.42	649.34	1542.49	6.49	0.00	0.000	0.002	0.007

Big Creek – 080903 – Calibration model output:

326	101.70	101.60	0.04562	21.48	0.00702	0.16	0.42	15.43	649.49	1542.62	6.49	0.00	0.000	0.002	0.007
327	101.60	101.50	0.04577	21.41	0.00705	0.16	0.42	15.43	649.64	1542.75	6.50	0.00	0.000	0.002	0.007
328	101.50	101.40	0.04592	21.34	0.00707	0.16	0.42	15.43	649.79	1542.87	6.50	0.00	0.000	0.002	0.007
329	101.40	101.30	0.04607	21.27	0.00709	0.16	0.42	15.43	649.94	1543.00	6.50	0.00	0.000	0.002	0.007
330	101.30	101.20	0.04622	21.20	0.00711	0.16	0.42	15.43	650.09	1543.13	6.50	0.00	0.000	0.002	0.007
331	101.20	101.10	0.04637	21.13	0.00713	0.16	0.42	15.43	650.24	1543.25	6.50	0.00	0.000	0.002	0.007
332	101.10	101.00	0.04652	21.06	0.00715	0.16	0.42	15.43	650.39	1543.38	6.50	0.00	0.000	0.002	0.007
333	101.00	100.90	0.04667	21.00	0.00717	0.16	0.42	15.44	650.54	1543.50	6.51	0.00	0.000	0.002	0.007
334	100.90	100.80	0.04682	20.93	0.00720	0.16	0.42	15.44	650.69	1543.63	6.51	0.00	0.000	0.002	0.007
335	100.80	100.70	0.04697	20.86	0.00722	0.16	0.42	15.44	650.84	1543.76	6.51	0.00	0.000	0.002	0.007
336	100.70	100.60	0.04712	20.80	0.00724	0.16	0.42	15.44	650.99	1543.88	6.51	0.00	0.000	0.002	0.007
337	100.60	100.50	0.04727	20.73	0.00726	0.16	0.42	15.44	651.14	1544.01	6.51	0.00	0.000	0.002	0.007
338	100.50	100.40	0.04742	20.66	0.00728	0.16	0.42	15.44	651.29	1544.13	6.51	0.00	0.000	0.002	0.007
339	100.40	100.30	0.04757	20.60	0.00730	0.16	0.42	15.44	651.43	1544.26	6.51	0.00	0.000	0.002	0.007
340	100.30	100.20	0.04772	20.53	0.00732	0.16	0.42	15.44	651.58	1544.38	6.52	0.00	0.000	0.002	0.007
341	100.20	100.10	0.04787	20.47	0.00735	0.16	0.42	15.45	651.73	1544.50	6.52	0.00	0.000	0.002	0.007
342	100.10	100.00	0.04803	20.41	0.00737	0.16	0.42	15.45	651.88	1544.63	6.52	0.00	0.000	0.002	0.007
343	100.00	99.90	0.04818	20.34	0.00739	0.16	0.42	15.45	652.03	1544.75	6.52	0.00	0.000	0.002	0.007
344	99.90	99.80	0.04833	20.28	0.00741	0.16	0.42	15.45	652.18	1544.88	6.52	0.00	0.000	0.002	0.007
345	99.80	99.70	0.04848	20.22	0.00743	0.16	0.42	15.45	652.33	1545.00	6.52	0.00	0.000	0.002	0.007
346	99.70	99.60	0.04863	20.15	0.00745	0.16	0.42	15.45	652.47	1545.12	6.52	0.00	0.000	0.002	0.007
347	99.60	99.50	0.04878	20.09	0.00747	0.15	0.42	15.45	652.62	1545.25	6.53	0.00	0.000	0.002	0.007
348	99.50	99.40	0.04893	20.03	0.00750	0.15	0.42	15.45	652.77	1545.37	6.53	0.00	0.000	0.002	0.007
349	99.40	99.30	0.04908	19.97	0.00752	0.15	0.42	15.45	652.92	1545.49	6.53	0.00	0.000	0.002	0.008
350	99.30	99.20	0.04923	19.91	0.00754	0.15	0.42	15.46	653.07	1545.61	6.53	0.00	0.000	0.002	0.008
351	99.20	99.10	0.04938	19.85	0.00756	0.15	0.42	15.46	653.21	1545.74	6.53	0.00	0.000	0.002	0.008
352	99.10	99.00	0.04953	19.79	0.00758	0.15	0.42	15.46	653.36	1545.86	6.53	0.00	0.000	0.002	0.008
353	99.00	98.90	0.04968	19.73	0.00760	0.15	0.42	15.46	653.51	1545.98	6.54	0.00	0.000	0.002	0.008
354	98.90	98.80	0.04983	19.67	0.00762	0.15	0.42	15.46	653.66	1546.10	6.54	0.00	0.000	0.002	0.008
355	98.80	98.70	0.04998	19.61	0.00764	0.15	0.42	15.46	653.81	1546.23	6.54	0.00	0.000	0.002	0.008
356	98.70	98.60	0.05013	19.55	0.00767	0.15	0.42	15.46	653.95	1546.35	6.54	0.00	0.000	0.002	0.008
357	98.60	98.50	0.05028	19.49	0.00769	0.15	0.42	15.46	654.10	1546.47	6.54	0.00	0.000	0.002	0.008
358	98.50	98.40	0.05043	19.43	0.00771	0.15	0.42	15.47	654.25	1546.59	6.54	0.00	0.000	0.002	0.008
359	98.40	98.30	0.05058	19.38	0.00773	0.15	0.42	15.47	654.40	1546.71	6.54	0.00	0.000	0.002	0.008
360	98.30	98.20	0.05073	19.32	0.00775	0.15	0.42	15.47	654.54	1546.83	6.55	0.00	0.000	0.002	0.008
361	98.20	98.10	0.05088	19.26	0.00777	0.15	0.42	15.47	654.69	1546.95	6.55	0.00	0.000	0.002	0.008
362	98.10	98.00	0.05103	19.21	0.00779	0.15	0.42	15.47	654.84	1547.08	6.55	0.00	0.000	0.002	0.008
363	98.00	97.90	0.05118	19.15	0.00781	0.15	0.42	15.47	654.98	1547.20	6.55	0.00	0.000	0.002	0.008
364	97.90	97.80	0.05133	19.09	0.00783	0.15	0.42	15.47	655.13	1547.32	6.55	0.00	0.000	0.002	0.008
365	97.80	97.70	0.05148	19.04	0.00786	0.15	0.42	15.47	655.28	1547.44	6.55	0.00	0.000	0.002	0.008
366	97.70	97.60	0.05163	18.98	0.00788	0.15	0.42	15.48	655.42	1547.56	6.55	0.00	0.000	0.002	0.008
367	97.60	97.50	0.05178	18.93	0.00790	0.15	0.42	15.48	655.57	1547.68	6.56	0.00	0.000	0.002	0.008
368	97.50	97.40	0.05193	18.87	0.00792	0.15	0.42	15.48	655.72	1547.80	6.56	0.00	0.000	0.002	0.008
369	97.40	97.30	0.05208	18.82	0.00794	0.15	0.42	15.48	655.86	1547.92	6.56	0.00	0.000	0.002	0.008
370	97.30	97.20	0.05223	18.76	0.00796	0.15	0.42	15.48	656.01	1548.04	6.56	0.00	0.000	0.002	0.008
371	97.20	97.10	0.05238	18.71	0.00798	0.14	0.42	15.48	656.16	1548.16	6.56	0.00	0.000	0.002	0.008
372	97.10	97.00	0.05253	18.66	0.00800	0.14	0.42	15.48	656.30	1548.28	6.56	0.00	0.000	0.002	0.008
373	97.00	96.90	0.05268	18.60	0.00802	0.14	0.42	15.48	656.45	1548.40	6.56	0.00	0.000	0.002	0.008
374	96.90	96.80	0.05283	18.55	0.00805	0.14	0.42	15.49	656.60	1548.51	6.57	0.00	0.000	0.002	0.008
375	96.80	96.70	0.05298	18.50	0.00807	0.14	0.42	15.49	656.74	1548.63	6.57	0.00	0.000	0.002	0.008
376	96.70	96.60	0.05313	18.45	0.00809	0.14	0.42	15.49	656.89	1548.75	6.57	0.00	0.000	0.002	0.008
377	96.60	96.50	0.05328	18.39	0.00811	0.14	0.42	15.49	657.03	1548.87	6.57	0.00	0.000	0.002	0.008
378	96.50	96.40	0.05343	18.34	0.00813	0.14	0.42	15.49	657.18	1548.99	6.57	0.00	0.000	0.002	0.008
379	96.40	96.30	0.05358	18.29	0.00815	0.14	0.42	15.49	657.33	1549.11	6.57	0.00	0.000	0.002	0.008
380	96.30	96.20	0.05373	18.24	0.00817	0.14	0.42	15.49	657.47	1549.23	6.57	0.00	0.000	0.002	0.008

Big Creek – 080903 – Calibration model output:

381	96.20	96.10	0.05388	18.19	0.00819	0.14	0.42	15.49	657.62	1549.34	6.58	0.00	0.000	0.002	0.008
382	96.10	96.00	0.05403	18.14	0.00821	0.14	0.42	15.49	657.76	1549.46	6.58	0.00	0.000	0.002	0.008
383	96.00	95.90	0.05418	18.09	0.00824	0.14	0.42	15.50	657.91	1549.58	6.58	0.00	0.000	0.002	0.008
384	95.90	95.80	0.05433	18.04	0.00826	0.14	0.42	15.50	658.05	1549.70	6.58	0.00	0.000	0.002	0.008
385	95.80	95.70	0.05448	17.99	0.00828	0.14	0.42	15.50	658.20	1549.82	6.58	0.00	0.000	0.002	0.008
386	95.70	95.60	0.05463	17.94	0.00830	0.14	0.42	15.50	658.34	1549.93	6.58	0.00	0.000	0.002	0.008
387	95.60	95.50	0.05478	17.89	0.00832	0.14	0.42	15.50	658.49	1550.05	6.58	0.00	0.000	0.002	0.008
388	95.50	95.40	0.05493	17.84	0.00834	0.14	0.42	15.50	658.63	1550.17	6.59	0.00	0.000	0.002	0.008
389	95.40	95.30	0.05508	17.79	0.00836	0.14	0.42	15.50	658.78	1550.28	6.59	0.00	0.000	0.002	0.008
390	95.30	95.20	0.05523	17.74	0.00838	0.14	0.43	15.50	658.92	1550.40	6.59	0.00	0.000	0.002	0.008
391	95.20	95.10	0.05538	17.70	0.00840	0.14	0.43	15.51	659.07	1550.52	6.59	0.00	0.000	0.002	0.008
392	95.10	95.00	0.05553	17.65	0.00842	0.14	0.43	15.51	659.21	1550.63	6.59	0.00	0.000	0.002	0.008
393	95.00	94.90	0.05568	17.60	0.00844	0.14	0.43	15.51	659.36	1550.75	6.59	0.00	0.000	0.002	0.008
394	94.90	94.80	0.05583	17.55	0.00847	0.14	0.43	15.51	659.50	1550.87	6.60	0.00	0.000	0.002	0.008
395	94.80	94.70	0.05598	17.51	0.00849	0.14	0.43	15.51	659.65	1550.98	6.60	0.00	0.000	0.002	0.008
396	94.70	94.60	0.05613	17.46	0.00851	0.14	0.43	15.51	659.79	1551.10	6.60	0.00	0.000	0.002	0.009
397	94.60	94.50	0.05628	17.41	0.00853	0.14	0.43	15.51	659.94	1551.21	6.60	0.00	0.000	0.002	0.009
398	94.50	94.40	0.05643	17.37	0.00855	0.14	0.43	15.51	660.08	1551.33	6.60	0.00	0.000	0.002	0.009
399	94.40	94.30	0.05658	17.32	0.00857	0.14	0.43	15.51	660.23	1551.45	6.60	0.00	0.000	0.002	0.009
400	94.30	94.20	0.05673	17.27	0.00859	0.13	0.43	15.52	660.37	1551.56	6.60	0.00	0.000	0.002	0.009
401	94.20	94.10	0.05688	17.23	0.00861	0.13	0.43	15.52	660.52	1551.68	6.61	0.00	0.000	0.002	0.009
402	94.10	94.00	0.05703	17.18	0.00863	0.13	0.43	15.52	660.66	1551.79	6.61	0.00	0.000	0.002	0.009
403	94.00	93.90	0.05718	17.14	0.00865	0.13	0.43	15.52	660.80	1551.91	6.61	0.00	0.000	0.002	0.009
404	93.90	93.80	0.05733	17.09	0.00867	0.13	0.43	15.52	660.95	1552.02	6.61	0.00	0.000	0.002	0.009
405	93.80	93.70	0.05748	17.05	0.00870	0.13	0.43	15.52	661.09	1552.14	6.61	0.00	0.000	0.002	0.009
406	93.70	93.60	0.05763	17.00	0.00872	0.13	0.43	15.52	661.24	1552.25	6.61	0.00	0.000	0.002	0.009
407	93.60	93.50	0.05778	16.96	0.00874	0.13	0.43	15.52	661.38	1552.37	6.61	0.00	0.000	0.002	0.009
408	93.50	93.40	0.05793	16.92	0.00876	0.13	0.43	15.52	661.52	1552.48	6.62	0.00	0.000	0.002	0.009
409	93.40	93.30	0.05808	16.87	0.00878	0.13	0.43	15.53	661.67	1552.60	6.62	0.00	0.000	0.002	0.009
410	93.30	93.20	0.05823	16.83	0.00880	0.13	0.43	15.53	661.81	1552.71	6.62	0.00	0.000	0.002	0.009
411	93.20	93.10	0.05838	16.79	0.00882	0.13	0.43	15.53	661.96	1552.82	6.62	0.00	0.000	0.002	0.009
412	93.10	93.00	0.05853	16.74	0.00884	0.13	0.43	15.53	662.10	1552.94	6.62	0.00	0.000	0.002	0.009
413	93.00	92.90	0.05869	16.70	0.00886	0.13	0.43	15.53	662.24	1553.05	6.62	0.00	0.000	0.002	0.009
414	92.90	92.80	0.05884	16.66	0.00888	0.13	0.43	15.53	662.39	1553.17	6.62	0.00	0.000	0.002	0.009
415	92.80	92.70	0.05899	16.61	0.00890	0.13	0.43	15.53	662.53	1553.28	6.63	0.00	0.000	0.002	0.009
416	92.70	92.60	0.05914	16.57	0.00892	0.13	0.43	15.53	662.67	1553.39	6.63	0.00	0.000	0.002	0.009
417	92.60	92.50	0.05929	16.53	0.00894	0.13	0.43	15.54	662.82	1553.51	6.63	0.00	0.000	0.002	0.009
418	92.50	92.40	0.05944	16.49	0.00897	0.13	0.43	15.54	662.96	1553.62	6.63	0.00	0.000	0.002	0.009
419	92.40	92.30	0.05959	16.45	0.00899	0.13	0.43	15.54	663.10	1553.73	6.63	0.00	0.000	0.002	0.009
420	92.30	92.20	0.05974	16.41	0.00901	0.13	0.43	15.54	663.25	1553.84	6.63	0.00	0.000	0.002	0.009
421	92.20	92.10	0.05989	16.36	0.00903	0.13	0.43	15.54	663.39	1553.96	6.63	0.00	0.000	0.002	0.009
422	92.10	92.00	0.06004	16.32	0.00905	0.13	0.43	15.54	663.53	1554.07	6.64	0.00	0.000	0.002	0.009
423	92.00	91.90	0.06019	16.28	0.00907	0.13	0.43	15.54	663.67	1554.18	6.64	0.00	0.000	0.002	0.009
424	91.90	91.80	0.06034	16.24	0.00909	0.13	0.43	15.54	663.82	1554.30	6.64	0.00	0.000	0.002	0.009
425	91.80	91.70	0.06049	16.20	0.00911	0.13	0.43	15.54	663.96	1554.41	6.64	0.00	0.000	0.002	0.009
426	91.70	91.60	0.06064	16.16	0.00913	0.13	0.43	15.55	664.10	1554.52	6.64	0.00	0.000	0.002	0.009
427	91.60	91.50	0.06079	16.12	0.00915	0.13	0.43	15.55	664.25	1554.63	6.64	0.00	0.000	0.003	0.009
428	91.50	91.40	0.06094	16.08	0.00917	0.13	0.43	15.55	664.39	1554.74	6.64	0.00	0.000	0.003	0.009
429	91.40	91.30	0.06109	16.04	0.00919	0.13	0.43	15.55	664.53	1554.86	6.65	0.00	0.000	0.003	0.009
430	91.30	91.20	0.06124	16.00	0.00921	0.13	0.43	15.55	664.67	1554.97	6.65	0.00	0.000	0.003	0.009
431	91.20	91.10	0.06139	15.96	0.00923	0.13	0.43	15.55	664.82	1555.08	6.65	0.00	0.000	0.003	0.009
432	91.10	91.00	0.06154	15.93	0.00925	0.13	0.43	15.55	664.96	1555.19	6.65	0.00	0.000	0.003	0.009
433	91.00	90.90	0.06169	15.89	0.00927	0.12	0.43	15.55	665.10	1555.30	6.65	0.00	0.000	0.003	0.009
434	90.90	90.80	0.06184	15.85	0.00930	0.12	0.43	15.55	665.24	1555.41	6.65	0.00	0.000	0.003	0.009
435	90.80	90.70	0.06199	15.81	0.00932	0.12	0.43	15.56	665.38	1555.52	6.65	0.00	0.000	0.003	0.009

Big Creek – 080903 – Calibration model output:

436	90.70	90.60	0.06214	15.77	0.00934	0.12	0.43	15.56	665.53	1555.64	6.66	0.00	0.000	0.003	0.009
437	90.60	90.50	0.06229	15.73	0.00936	0.12	0.43	15.56	665.67	1555.75	6.66	0.00	0.000	0.003	0.009
438	90.50	90.40	0.06244	15.70	0.00938	0.12	0.43	15.56	665.81	1555.86	6.66	0.00	0.000	0.003	0.009
439	90.40	90.30	0.06259	15.66	0.00940	0.12	0.43	15.56	665.95	1555.97	6.66	0.00	0.000	0.003	0.009
440	90.30	90.20	0.06274	15.62	0.00942	0.12	0.43	15.56	666.09	1556.08	6.66	0.00	0.000	0.003	0.009
441	90.20	90.10	0.06289	15.58	0.00944	0.12	0.43	15.56	666.24	1556.19	6.66	0.00	0.000	0.003	0.009
442	90.10	90.00	0.06304	15.55	0.00946	0.12	0.43	15.56	666.38	1556.30	6.66	0.00	0.000	0.003	0.009
443	90.00	89.90	0.06319	15.51	0.00948	0.12	0.43	15.56	666.52	1556.41	6.67	0.00	0.000	0.003	0.009
444	89.90	89.80	0.06334	15.47	0.00950	0.12	0.43	15.57	666.66	1556.52	6.67	0.00	0.000	0.003	0.010
445	89.80	89.70	0.06349	15.44	0.00952	0.12	0.43	15.57	666.80	1556.63	6.67	0.00	0.000	0.003	0.010
446	89.70	89.60	0.06364	15.40	0.00954	0.12	0.43	15.57	666.94	1556.74	6.67	0.00	0.000	0.003	0.010
447	89.60	89.50	0.06379	15.36	0.00956	0.12	0.43	15.57	667.09	1556.85	6.67	0.00	0.000	0.003	0.010
448	89.50	89.40	0.06394	15.33	0.00958	0.12	0.43	15.57	667.23	1556.96	6.67	0.00	0.000	0.003	0.010
449	89.40	89.30	0.06409	15.29	0.00960	0.12	0.43	15.57	667.37	1557.07	6.67	0.00	0.000	0.003	0.010
450	89.30	89.20	0.06424	15.26	0.00962	0.12	0.43	15.57	667.51	1557.18	6.68	0.00	0.000	0.003	0.010
451	89.20	89.10	0.06439	15.22	0.00964	0.12	0.43	15.57	667.65	1557.29	6.68	0.00	0.000	0.003	0.010
452	89.10	89.00	0.06454	15.18	0.00966	0.12	0.43	15.57	667.79	1557.40	6.68	0.00	0.000	0.003	0.010
453	89.00	88.90	0.06469	15.15	0.00969	0.12	0.43	15.58	667.93	1557.51	6.68	0.00	0.000	0.003	0.010
454	88.90	88.80	0.06484	15.11	0.00971	0.12	0.43	15.58	668.08	1557.62	6.68	0.00	0.000	0.003	0.010
455	88.80	88.70	0.06499	15.08	0.00973	0.12	0.43	15.58	668.22	1557.72	6.68	0.00	0.000	0.003	0.010
456	88.70	88.60	0.06514	15.04	0.00975	0.12	0.43	15.58	668.36	1557.83	6.68	0.00	0.000	0.003	0.010
457	88.60	88.50	0.06529	15.01	0.00977	0.12	0.43	15.58	668.50	1557.94	6.68	0.00	0.000	0.003	0.010
458	88.50	88.40	0.06544	14.98	0.00979	0.12	0.43	15.58	668.64	1558.05	6.69	0.00	0.000	0.003	0.010
459	88.40	88.30	0.06559	14.94	0.00981	0.12	0.43	15.58	668.78	1558.16	6.69	0.00	0.000	0.003	0.010
460	88.30	88.20	0.06574	14.91	0.00983	0.12	0.43	15.58	668.92	1558.27	6.69	0.00	0.000	0.003	0.010
461	88.20	88.10	0.06589	14.87	0.00985	0.12	0.43	15.58	669.06	1558.38	6.69	0.00	0.000	0.003	0.010
462	88.10	88.00	0.06604	14.84	0.00987	0.12	0.43	15.58	669.20	1558.48	6.69	0.00	0.000	0.003	0.010
463	88.00	87.90	0.06619	14.81	0.00989	0.12	0.43	15.59	669.34	1558.59	6.69	0.00	0.000	0.003	0.010
464	87.90	87.80	0.06634	14.77	0.00991	0.12	0.43	15.59	669.48	1558.70	6.69	0.00	0.000	0.003	0.010
465	87.80	87.70	0.06649	14.74	0.00993	0.12	0.43	15.59	669.62	1558.81	6.70	0.00	0.000	0.003	0.010
466	87.70	87.60	0.06664	14.71	0.00995	0.12	0.43	15.59	669.77	1558.92	6.70	0.00	0.000	0.003	0.010
467	87.60	87.50	0.06679	14.67	0.00997	0.12	0.43	15.59	669.91	1559.02	6.70	0.00	0.000	0.003	0.010
468	87.50	87.40	0.06694	14.64	0.00999	0.12	0.43	15.59	670.05	1559.13	6.70	0.00	0.000	0.003	0.010
469	87.40	87.30	0.06709	14.61	0.01001	0.12	0.43	15.59	670.19	1559.24	6.70	0.00	0.000	0.003	0.010
470	87.30	87.20	0.06724	14.57	0.01003	0.12	0.43	15.59	670.33	1559.35	6.70	0.00	0.000	0.003	0.010
471	87.20	87.10	0.06739	14.54	0.01005	0.12	0.43	15.59	670.47	1559.45	6.70	0.00	0.000	0.003	0.010
472	87.10	87.00	0.06754	14.51	0.01007	0.11	0.43	15.60	670.61	1559.56	6.71	0.00	0.000	0.003	0.010
473	87.00	86.90	0.06769	14.48	0.01009	0.11	0.43	15.60	670.75	1559.67	6.71	0.00	0.000	0.003	0.010
474	86.90	86.80	0.06784	14.45	0.01011	0.11	0.43	15.60	670.89	1559.77	6.71	0.00	0.000	0.003	0.010
475	86.80	86.70	0.06799	14.41	0.01013	0.11	0.43	15.60	671.03	1559.88	6.71	0.00	0.000	0.003	0.010
476	86.70	86.60	0.06814	14.38	0.01015	0.11	0.43	15.60	671.17	1559.99	6.71	0.00	0.000	0.003	0.010
477	86.60	86.50	0.06829	14.35	0.01017	0.11	0.43	15.60	671.31	1560.09	6.71	0.00	0.000	0.003	0.010
478	86.50	86.40	0.06844	14.32	0.01019	0.11	0.43	15.60	671.45	1560.20	6.71	0.00	0.000	0.003	0.010
479	86.40	86.30	0.06859	14.29	0.01021	0.11	0.43	15.60	671.59	1560.31	6.72	0.00	0.000	0.003	0.010
480	86.30	86.20	0.06874	14.26	0.01023	0.11	0.43	15.60	671.73	1560.41	6.72	0.00	0.000	0.003	0.010
481	86.20	86.10	0.06889	14.22	0.01025	0.11	0.43	15.61	671.87	1560.52	6.72	0.00	0.000	0.003	0.010
482	86.10	86.00	0.06904	14.19	0.01027	0.11	0.43	15.61	672.01	1560.63	6.72	0.00	0.000	0.003	0.010
483	86.00	85.90	0.06919	14.16	0.01029	0.11	0.43	15.61	672.15	1560.73	6.72	0.00	0.000	0.003	0.010
484	85.90	85.80	0.06934	14.13	0.01031	0.11	0.43	15.61	672.29	1560.84	6.72	0.00	0.000	0.003	0.010
485	85.80	85.70	0.06950	14.10	0.01033	0.11	0.43	15.61	672.42	1560.94	6.72	0.00	0.000	0.003	0.010
486	85.70	85.60	0.06965	14.07	0.01036	0.11	0.43	15.61	672.56	1561.05	6.73	0.00	0.000	0.003	0.010
487	85.60	85.50	0.06980	14.04	0.01038	0.11	0.43	15.61	672.70	1561.15	6.73	0.00	0.000	0.003	0.010
488	85.50	85.40	0.06995	14.01	0.01040	0.11	0.43	15.61	672.84	1561.26	6.73	0.00	0.000	0.003	0.010
489	85.40	85.30	0.07010	13.98	0.01042	0.11	0.43	15.61	672.98	1561.37	6.73	0.00	0.000	0.003	0.010
490	85.30	85.20	0.07025	13.95	0.01044	0.11	0.43	15.61	673.12	1561.47	6.73	0.00	0.000	0.003	0.010



Big Creek – 080903 – Calibration model output:

491	85.20	85.10	0.07040	13.92	0.01046	0.11	0.43	15.62	673.26	1561.58	6.73	0.00	0.000	0.003	0.010
492	85.10	85.00	0.07055	13.89	0.01048	0.11	0.43	15.62	673.40	1561.68	6.73	0.00	0.000	0.003	0.010
493	85.00	84.90	0.07070	13.86	0.01050	0.11	0.43	15.62	673.54	1561.79	6.74	0.00	0.000	0.003	0.010
494	84.90	84.80	0.07085	13.83	0.01052	0.11	0.43	15.62	673.68	1561.89	6.74	0.00	0.000	0.003	0.011
495	84.80	84.70	0.07100	13.80	0.01054	0.11	0.43	15.62	673.82	1562.00	6.74	0.00	0.000	0.003	0.011
496	84.70	84.60	0.07115	13.77	0.01056	0.11	0.43	15.62	673.96	1562.10	6.74	0.00	0.000	0.003	0.011
497	84.60	84.50	0.07130	13.75	0.01058	0.11	0.43	15.62	674.10	1562.21	6.74	0.00	0.000	0.003	0.011
498	84.50	84.40	0.07145	13.72	0.01060	0.11	0.43	15.62	674.23	1562.31	6.74	0.00	0.000	0.003	0.011
499	84.40	84.30	0.07160	13.69	0.01062	0.11	0.43	15.62	674.37	1562.41	6.74	0.00	0.000	0.003	0.011
500	84.30	84.20	0.07175	13.66	0.01064	0.11	0.43	15.63	674.51	1562.52	6.75	0.00	0.000	0.003	0.011
501	84.20	84.10	0.07190	13.63	0.01066	0.11	0.43	15.63	674.65	1562.62	6.75	0.00	0.000	0.003	0.011
502	84.10	84.00	0.07205	13.60	0.01068	0.11	0.43	15.63	674.79	1562.73	6.75	0.00	0.000	0.003	0.011
503	84.00	83.90	0.07220	13.57	0.01070	0.11	0.43	15.63	674.93	1562.83	6.75	0.00	0.000	0.003	0.011
504	83.90	83.80	0.07235	13.55	0.01072	0.11	0.43	15.63	675.07	1562.94	6.75	0.00	0.000	0.003	0.011
505	83.80	83.70	0.07250	13.52	0.01074	0.11	0.43	15.63	675.21	1563.04	6.75	0.00	0.000	0.003	0.011
506	83.70	83.60	0.07265	13.49	0.01076	0.11	0.43	15.63	675.34	1563.14	6.75	0.00	0.000	0.003	0.011
507	83.60	83.50	0.07280	13.46	0.01078	0.11	0.43	15.63	675.48	1563.25	6.75	0.00	0.000	0.003	0.011
508	83.50	83.40	0.07295	13.43	0.01080	0.11	0.43	15.63	675.62	1563.35	6.76	0.00	0.000	0.003	0.011
509	83.40	83.30	0.07310	13.41	0.01082	0.11	0.43	15.63	675.76	1563.45	6.76	0.00	0.000	0.003	0.011
510	83.30	83.20	0.07325	13.38	0.01084	0.11	0.43	15.64	675.90	1563.56	6.76	0.00	0.000	0.003	0.011
511	83.20	83.10	0.07340	13.35	0.01086	0.11	0.43	15.64	676.04	1563.66	6.76	0.00	0.000	0.003	0.011
512	83.10	83.00	0.07355	13.32	0.01088	0.11	0.43	15.64	676.17	1563.76	6.76	0.00	0.000	0.003	0.011
513	83.00	82.90	0.07370	13.30	0.01090	0.11	0.43	15.64	676.31	1563.87	6.76	0.00	0.000	0.003	0.011
514	82.90	82.80	0.07385	13.27	0.01092	0.11	0.43	15.64	676.45	1563.97	6.76	0.00	0.000	0.003	0.011
515	82.80	82.70	0.07400	13.24	0.01094	0.11	0.43	15.64	676.59	1564.07	6.77	0.00	0.000	0.003	0.011
516	82.70	82.60	0.07415	13.22	0.01096	0.11	0.43	15.64	676.73	1564.18	6.77	0.00	0.000	0.003	0.011
517	82.60	82.50	0.07430	13.19	0.01098	0.11	0.43	15.64	676.87	1564.28	6.77	0.00	0.000	0.003	0.011
518	82.50	82.40	0.07445	13.16	0.01100	0.11	0.43	15.64	677.00	1564.38	6.77	0.00	0.000	0.003	0.011
519	82.40	82.30	0.07460	13.14	0.01102	0.11	0.43	15.64	677.14	1564.48	6.77	0.00	0.000	0.003	0.011
520	82.30	82.20	0.07475	13.11	0.01104	0.10	0.43	15.65	677.28	1564.59	6.77	0.00	0.000	0.003	0.011
521	82.20	82.10	0.07490	13.08	0.01106	0.10	0.43	15.65	677.42	1564.69	6.77	0.00	0.000	0.003	0.011

TOT						63.18			233854.34	554179.81					
AVG					0.00658			0.42	15.44					6.51	
CUM						116.09									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECATY 1/da	CBOD SETT 1/da	ANBOD DECATY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECATY 1/da	ORGN SETT 1/da	NH3 DECATY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECATY 1/da	NCM DECATY 1/da	NCM SETT 1/da
163	117.900	8.40	1.88	0.08	0.27	0.00	3.43	3.43	3.43	0.00	0.00	0.00	0.00	0.00	0.00	1.72	0.00	0.00	0.37	0.27
164	117.800	8.40	1.88	0.08	0.27	0.00	3.43	3.43	3.43	0.00	0.00	0.00	0.00	0.00	0.00	1.71	0.00	0.00	0.37	0.27
165	117.700	8.40	1.88	0.08	0.27	0.00	3.43	3.43	3.43	0.00	0.00	0.00	0.00	0.00	0.00	1.71	0.00	0.00	0.37	0.27
166	117.600	8.40	1.88	0.08	0.27	0.00	3.43	3.43	3.43	0.00	0.00	0.00	0.00	0.00	0.00	1.71	0.00	0.00	0.37	0.27
167	117.500	8.40	1.88	0.08	0.27	0.00	3.43	3.43	3.43	0.00	0.00	0.00	0.00	0.00	0.00	1.70	0.00	0.00	0.37	0.27
168	117.400	8.40	1.88	0.08	0.27	0.00	3.43	3.43	3.43	0.00	0.00	0.00	0.00	0.00	0.00	1.70	0.00	0.00	0.37	0.27
169	117.300	8.40	1.88	0.08	0.27	0.00	3.43	3.43	3.43	0.00	0.00	0.00	0.00	0.00	0.00	1.70	0.00	0.00	0.37	0.27
170	117.200	8.40	1.88	0.08	0.27	0.00	3.43	3.43	3.43	0.00	0.00	0.00	0.00	0.00	0.00	1.69	0.00	0.00	0.37	0.27
171	117.100	8.40	1.88	0.08	0.27	0.00	3.43	3.43	3.43	0.00	0.00	0.00	0.00	0.00	0.00	1.69	0.00	0.00	0.37	0.27
172	117.000	8.40	1.88	0.08	0.27	0.00	3.43	3.43	3.43	0.00	0.00	0.00	0.00	0.00	0.00	1.69	0.00	0.00	0.37	0.27
173	116.900	8.40	1.88	0.08	0.27	0.00	3.43	3.43	3.43	0.00	0.00	0.00	0.00	0.00	0.00	1.68	0.00	0.00	0.37	0.27
174	116.800	8.40	1.88	0.08	0.27	0.00	3.43	3.43	3.43	0.00	0.00	0.00	0.00	0.00	0.00	1.68	0.00	0.00	0.37	0.27





























**Big Creek – 080903 – Calibration model output:**

519	82.301	24.10	0.00	0.00	0.00	4.14	9.09	9.09	0.00	0.00	0.00	0.00	0.00	10.15	0.00	0.00	1.60
520	82.201	24.10	0.00	0.00	0.00	4.14	9.09	9.09	0.00	0.00	0.00	0.00	0.00	10.10	0.00	0.00	1.60
521	82.101	24.10	0.00	0.00	0.00	4.14	9.09	9.09	0.00	0.00	0.00	0.00	0.00	10.05	0.00	0.00	1.60

\* CM-I = CHLORIDES  
MG/L

CM-II = SULFATES  
MG/L

NCM = NBOD  
MG/L

\*\* g/cu m

FINAL REPORT BIG CREEK  
REACH NO. 3 BIG CREEK, MITCHNER TO RKM 67.4

Big Creek - STREAM MODEL  
WATER QUALITY CALIBRATION

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
522	UPR RCH	0.07490	24.10	0.00	0.00	0.00	4.14	9.09	9.09	0.00	0.00	0.00	0.00	10.05	0.00	1.60
EACH	INCR	0.0001	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
585	WSTLD	0.02230	24.10	0.00	0.00	0.00	9.43	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.46

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
522	82.10	82.00	0.07502	13.06	0.01462	0.08	0.38	13.40	513.11	1339.77	5.13	0.00	0.000	0.004	0.015
523	82.00	81.90	0.07513	13.04	0.01464	0.08	0.38	13.40	513.21	1339.85	5.13	0.00	0.000	0.004	0.015
524	81.90	81.80	0.07525	13.02	0.01466	0.08	0.38	13.40	513.30	1339.93	5.13	0.00	0.000	0.004	0.015
525	81.80	81.70	0.07537	13.00	0.01468	0.08	0.38	13.40	513.39	1340.01	5.13	0.00	0.000	0.004	0.015
526	81.70	81.60	0.07548	12.98	0.01470	0.08	0.38	13.40	513.48	1340.09	5.13	0.00	0.000	0.004	0.015
527	81.60	81.50	0.07560	12.96	0.01472	0.08	0.38	13.40	513.58	1340.16	5.14	0.00	0.000	0.004	0.015
528	81.50	81.40	0.07571	12.94	0.01474	0.08	0.38	13.40	513.67	1340.24	5.14	0.00	0.000	0.004	0.015
529	81.40	81.30	0.07583	12.92	0.01476	0.08	0.38	13.40	513.76	1340.32	5.14	0.00	0.000	0.004	0.015
530	81.30	81.20	0.07595	12.90	0.01478	0.08	0.38	13.40	513.85	1340.40	5.14	0.00	0.000	0.004	0.015
531	81.20	81.10	0.07606	12.88	0.01480	0.08	0.38	13.40	513.94	1340.48	5.14	0.00	0.000	0.004	0.015
532	81.10	81.00	0.07618	12.86	0.01482	0.08	0.38	13.41	514.04	1340.56	5.14	0.00	0.000	0.004	0.015
533	81.00	80.90	0.07630	12.84	0.01484	0.08	0.38	13.41	514.13	1340.64	5.14	0.00	0.000	0.004	0.015
534	80.90	80.80	0.07641	12.83	0.01486	0.08	0.38	13.41	514.22	1340.72	5.14	0.00	0.000	0.004	0.015
535	80.80	80.70	0.07653	12.81	0.01488	0.08	0.38	13.41	514.31	1340.80	5.14	0.00	0.000	0.004	0.015
536	80.70	80.60	0.07664	12.79	0.01490	0.08	0.38	13.41	514.40	1340.87	5.14	0.00	0.000	0.004	0.015
537	80.60	80.50	0.07676	12.77	0.01492	0.08	0.38	13.41	514.50	1340.95	5.14	0.00	0.000	0.004	0.015
538	80.50	80.40	0.07688	12.75	0.01494	0.08	0.38	13.41	514.59	1341.03	5.15	0.00	0.000	0.004	0.015
539	80.40	80.30	0.07699	12.73	0.01496	0.08	0.38	13.41	514.68	1341.11	5.15	0.00	0.000	0.004	0.015
540	80.30	80.20	0.07711	12.71	0.01498	0.08	0.38	13.41	514.77	1341.19	5.15	0.00	0.000	0.004	0.015
541	80.20	80.10	0.07723	12.69	0.01500	0.08	0.38	13.41	514.86	1341.27	5.15	0.00	0.000	0.004	0.015
542	80.10	80.00	0.07734	12.67	0.01502	0.08	0.38	13.41	514.96	1341.34	5.15	0.00	0.000	0.004	0.015
543	80.00	79.90	0.07746	12.65	0.01504	0.08	0.38	13.41	515.05	1341.42	5.15	0.00	0.000	0.004	0.015
544	79.90	79.80	0.07758	12.63	0.01506	0.08	0.38	13.42	515.14	1341.50	5.15	0.00	0.000	0.004	0.015
545	79.80	79.70	0.07769	12.61	0.01508	0.08	0.38	13.42	515.23	1341.58	5.15	0.00	0.000	0.004	0.015
546	79.70	79.60	0.07781	12.60	0.01510	0.08	0.38	13.42	515.32	1341.66	5.15	0.00	0.000	0.004	0.015
547	79.60	79.50	0.07792	12.58	0.01512	0.08	0.38	13.42	515.42	1341.74	5.15	0.00	0.000	0.004	0.015

Big Creek – 080903 – Calibration model output:

548	79.50	79.40	0.07804	12.56	0.01514	0.08	0.38	13.42	515.51	1341.81	5.16	0.00	0.000	0.004	0.015
549	79.40	79.30	0.07816	12.54	0.01516	0.08	0.38	13.42	515.60	1341.89	5.16	0.00	0.000	0.004	0.015
550	79.30	79.20	0.07827	12.52	0.01518	0.08	0.38	13.42	515.69	1341.97	5.16	0.00	0.000	0.004	0.015
551	79.20	79.10	0.07839	12.50	0.01520	0.08	0.38	13.42	515.78	1342.05	5.16	0.00	0.000	0.004	0.015
552	79.10	79.00	0.07851	12.48	0.01522	0.08	0.38	13.42	515.88	1342.12	5.16	0.00	0.000	0.004	0.015
553	79.00	78.90	0.07862	12.46	0.01524	0.08	0.38	13.42	515.97	1342.20	5.16	0.00	0.000	0.004	0.015
554	78.90	78.80	0.07874	12.45	0.01526	0.08	0.38	13.42	516.06	1342.28	5.16	0.00	0.000	0.004	0.015
555	78.80	78.70	0.07886	12.43	0.01528	0.08	0.38	13.42	516.15	1342.36	5.16	0.00	0.000	0.004	0.015
556	78.70	78.60	0.07897	12.41	0.01530	0.08	0.38	13.42	516.24	1342.44	5.16	0.00	0.000	0.004	0.015
557	78.60	78.50	0.07909	12.39	0.01532	0.08	0.38	13.43	516.33	1342.51	5.16	0.00	0.000	0.004	0.015
558	78.50	78.40	0.07920	12.37	0.01534	0.08	0.38	13.43	516.43	1342.59	5.16	0.00	0.000	0.004	0.015
559	78.40	78.30	0.07932	12.35	0.01536	0.08	0.38	13.43	516.52	1342.67	5.17	0.00	0.000	0.004	0.015
560	78.30	78.20	0.07944	12.34	0.01538	0.08	0.38	13.43	516.61	1342.75	5.17	0.00	0.000	0.004	0.015
561	78.20	78.10	0.07955	12.32	0.01540	0.08	0.38	13.43	516.70	1342.82	5.17	0.00	0.000	0.004	0.015
562	78.10	78.00	0.07967	12.30	0.01542	0.08	0.38	13.43	516.79	1342.90	5.17	0.00	0.000	0.004	0.015
563	78.00	77.90	0.07979	12.28	0.01544	0.07	0.38	13.43	516.88	1342.98	5.17	0.00	0.000	0.004	0.015
564	77.90	77.80	0.07990	12.27	0.01546	0.07	0.38	13.43	516.98	1343.05	5.17	0.00	0.000	0.004	0.015
565	77.80	77.70	0.08002	12.25	0.01548	0.07	0.38	13.43	517.07	1343.13	5.17	0.00	0.000	0.004	0.015
566	77.70	77.60	0.08013	12.23	0.01550	0.07	0.39	13.43	517.16	1343.21	5.17	0.00	0.000	0.004	0.015
567	77.60	77.50	0.08025	12.21	0.01551	0.07	0.39	13.43	517.25	1343.29	5.17	0.00	0.000	0.004	0.016
568	77.50	77.40	0.08037	12.19	0.01553	0.07	0.39	13.43	517.34	1343.36	5.17	0.00	0.000	0.004	0.016
569	77.40	77.30	0.08048	12.18	0.01555	0.07	0.39	13.43	517.43	1343.44	5.17	0.00	0.000	0.004	0.016
570	77.30	77.20	0.08060	12.16	0.01557	0.07	0.39	13.44	517.52	1343.52	5.18	0.00	0.000	0.004	0.016
571	77.20	77.10	0.08072	12.14	0.01559	0.07	0.39	13.44	517.62	1343.59	5.18	0.00	0.000	0.004	0.016
572	77.10	77.00	0.08083	12.12	0.01561	0.07	0.39	13.44	517.71	1343.67	5.18	0.00	0.000	0.004	0.016
573	77.00	76.90	0.08095	12.11	0.01563	0.07	0.39	13.44	517.80	1343.75	5.18	0.00	0.000	0.004	0.016
574	76.90	76.80	0.08107	12.09	0.01565	0.07	0.39	13.44	517.89	1343.82	5.18	0.00	0.000	0.004	0.016
575	76.80	76.70	0.08118	12.07	0.01567	0.07	0.39	13.44	517.98	1343.90	5.18	0.00	0.000	0.004	0.016
576	76.70	76.60	0.08130	12.05	0.01569	0.07	0.39	13.44	518.07	1343.98	5.18	0.00	0.000	0.004	0.016
577	76.60	76.50	0.08141	12.04	0.01571	0.07	0.39	13.44	518.16	1344.05	5.18	0.00	0.000	0.004	0.016
578	76.50	76.40	0.08153	12.02	0.01573	0.07	0.39	13.44	518.25	1344.13	5.18	0.00	0.000	0.004	0.016
579	76.40	76.30	0.08165	12.00	0.01575	0.07	0.39	13.44	518.35	1344.21	5.18	0.00	0.000	0.004	0.016
580	76.30	76.20	0.08176	11.99	0.01577	0.07	0.39	13.44	518.44	1344.28	5.18	0.00	0.000	0.004	0.016
581	76.20	76.10	0.08188	11.97	0.01579	0.07	0.39	13.44	518.53	1344.36	5.19	0.00	0.000	0.004	0.016
582	76.10	76.00	0.08200	11.95	0.01581	0.07	0.39	13.44	518.62	1344.44	5.19	0.00	0.000	0.004	0.016
583	76.00	75.90	0.08211	11.93	0.01583	0.07	0.39	13.45	518.71	1344.51	5.19	0.00	0.000	0.004	0.016
584	75.90	75.80	0.08223	11.92	0.01585	0.07	0.39	13.45	518.80	1344.59	5.19	0.00	0.000	0.004	0.016
585	75.80	75.70	0.10464	30.68	0.01952	0.06	0.39	13.59	536.05	1358.51	5.36	0.00	0.000	0.005	0.020
586	75.70	75.60	0.10476	30.64	0.01954	0.06	0.39	13.59	536.14	1358.58	5.36	0.00	0.000	0.005	0.020
587	75.60	75.50	0.10488	30.61	0.01956	0.06	0.39	13.59	536.22	1358.65	5.36	0.00	0.000	0.005	0.020
588	75.50	75.40	0.10499	30.57	0.01958	0.06	0.39	13.59	536.31	1358.72	5.36	0.00	0.000	0.005	0.020
589	75.40	75.30	0.10511	30.54	0.01960	0.06	0.39	13.59	536.40	1358.79	5.36	0.00	0.000	0.005	0.020
590	75.30	75.20	0.10523	30.51	0.01961	0.06	0.39	13.59	536.49	1358.86	5.36	0.00	0.000	0.005	0.020
591	75.20	75.10	0.10534	30.47	0.01963	0.06	0.39	13.59	536.58	1358.93	5.37	0.00	0.000	0.005	0.020
592	75.10	75.00	0.10546	30.44	0.01965	0.06	0.39	13.59	536.66	1358.99	5.37	0.00	0.000	0.005	0.020
593	75.00	74.90	0.10558	30.40	0.01967	0.06	0.39	13.59	536.75	1359.06	5.37	0.00	0.000	0.005	0.020
594	74.90	74.80	0.10569	30.37	0.01969	0.06	0.39	13.59	536.84	1359.13	5.37	0.00	0.000	0.005	0.020
595	74.80	74.70	0.10581	30.34	0.01971	0.06	0.40	13.59	536.93	1359.20	5.37	0.00	0.000	0.005	0.020
596	74.70	74.60	0.10592	30.30	0.01972	0.06	0.40	13.59	537.02	1359.27	5.37	0.00	0.000	0.005	0.020
597	74.60	74.50	0.10604	30.27	0.01974	0.06	0.40	13.59	537.10	1359.34	5.37	0.00	0.000	0.005	0.020
598	74.50	74.40	0.10616	30.24	0.01976	0.06	0.40	13.59	537.19	1359.40	5.37	0.00	0.000	0.005	0.020
599	74.40	74.30	0.10627	30.21	0.01978	0.06	0.40	13.59	537.28	1359.47	5.37	0.00	0.000	0.005	0.020
600	74.30	74.20	0.10639	30.17	0.01980	0.06	0.40	13.60	537.37	1359.54	5.37	0.00	0.000	0.005	0.020
601	74.20	74.10	0.10651	30.14	0.01982	0.06	0.40	13.60	537.45	1359.61	5.37	0.00	0.000	0.005	0.020
602	74.10	74.00	0.10662	30.11	0.01984	0.06	0.40	13.60	537.54	1359.68	5.38	0.00	0.000	0.005	0.020



Big Creek – 080903 – Calibration model output:

603	74.00	73.90	0.10674	30.07	0.01985	0.06	0.40	13.60	537.63	1359.75	5.38	0.00	0.000	0.005	0.020
604	73.90	73.80	0.10686	30.04	0.01987	0.06	0.40	13.60	537.72	1359.81	5.38	0.00	0.000	0.005	0.020
605	73.80	73.70	0.10697	30.01	0.01989	0.06	0.40	13.60	537.81	1359.88	5.38	0.00	0.000	0.005	0.020
606	73.70	73.60	0.10709	29.98	0.01991	0.06	0.40	13.60	537.89	1359.95	5.38	0.00	0.000	0.005	0.020
607	73.60	73.50	0.10720	29.94	0.01993	0.06	0.40	13.60	537.98	1360.02	5.38	0.00	0.000	0.005	0.020
608	73.50	73.40	0.10732	29.91	0.01995	0.06	0.40	13.60	538.07	1360.09	5.38	0.00	0.000	0.005	0.020
609	73.40	73.30	0.10744	29.88	0.01996	0.06	0.40	13.60	538.16	1360.15	5.38	0.00	0.000	0.005	0.020
610	73.30	73.20	0.10755	29.85	0.01998	0.06	0.40	13.60	538.24	1360.22	5.38	0.00	0.000	0.005	0.020
611	73.20	73.10	0.10767	29.81	0.02000	0.06	0.40	13.60	538.33	1360.29	5.38	0.00	0.000	0.005	0.020
612	73.10	73.00	0.10779	29.78	0.02002	0.06	0.40	13.60	538.42	1360.36	5.38	0.00	0.000	0.005	0.020
613	73.00	72.90	0.10790	29.75	0.02004	0.06	0.40	13.60	538.51	1360.42	5.39	0.00	0.000	0.005	0.020
614	72.90	72.80	0.10802	29.72	0.02006	0.06	0.40	13.60	538.60	1360.49	5.39	0.00	0.000	0.005	0.020
615	72.80	72.70	0.10813	29.69	0.02007	0.06	0.40	13.61	538.68	1360.56	5.39	0.00	0.000	0.005	0.020
616	72.70	72.60	0.10825	29.65	0.02009	0.06	0.40	13.61	538.77	1360.63	5.39	0.00	0.000	0.005	0.020
617	72.60	72.50	0.10837	29.62	0.02011	0.06	0.40	13.61	538.86	1360.70	5.39	0.00	0.000	0.005	0.020
618	72.50	72.40	0.10848	29.59	0.02013	0.06	0.40	13.61	538.95	1360.76	5.39	0.00	0.000	0.005	0.020
619	72.40	72.30	0.10860	29.56	0.02015	0.06	0.40	13.61	539.03	1360.83	5.39	0.00	0.000	0.005	0.020
620	72.30	72.20	0.10872	29.53	0.02017	0.06	0.40	13.61	539.12	1360.90	5.39	0.00	0.000	0.005	0.020
621	72.20	72.10	0.10883	29.49	0.02018	0.06	0.40	13.61	539.21	1360.97	5.39	0.00	0.000	0.005	0.020
622	72.10	72.00	0.10895	29.46	0.02020	0.06	0.40	13.61	539.30	1361.03	5.39	0.00	0.000	0.005	0.020
623	72.00	71.90	0.10907	29.43	0.02022	0.06	0.40	13.61	539.38	1361.10	5.39	0.00	0.000	0.005	0.020
624	71.90	71.80	0.10918	29.40	0.02024	0.06	0.40	13.61	539.47	1361.17	5.39	0.00	0.000	0.005	0.020
625	71.80	71.70	0.10930	29.37	0.02026	0.06	0.40	13.61	539.56	1361.24	5.40	0.00	0.000	0.005	0.020
626	71.70	71.60	0.10941	29.34	0.02028	0.06	0.40	13.61	539.65	1361.30	5.40	0.00	0.000	0.005	0.020
627	71.60	71.50	0.10953	29.31	0.02029	0.06	0.40	13.61	539.73	1361.37	5.40	0.00	0.000	0.005	0.020
628	71.50	71.40	0.10965	29.28	0.02031	0.06	0.40	13.61	539.82	1361.44	5.40	0.00	0.000	0.005	0.020
629	71.40	71.30	0.10976	29.24	0.02033	0.06	0.40	13.62	539.91	1361.51	5.40	0.00	0.000	0.005	0.020
630	71.30	71.20	0.10988	29.21	0.02035	0.06	0.40	13.62	540.00	1361.57	5.40	0.00	0.000	0.005	0.020
631	71.20	71.10	0.11000	29.18	0.02037	0.06	0.40	13.62	540.08	1361.64	5.40	0.00	0.000	0.005	0.020
632	71.10	71.00	0.11011	29.15	0.02038	0.06	0.40	13.62	540.17	1361.71	5.40	0.00	0.000	0.005	0.020
633	71.00	70.90	0.11023	29.12	0.02040	0.06	0.40	13.62	540.26	1361.78	5.40	0.00	0.000	0.005	0.020
634	70.90	70.80	0.11034	29.09	0.02042	0.06	0.40	13.62	540.35	1361.84	5.40	0.00	0.000	0.005	0.020
635	70.80	70.70	0.11046	29.06	0.02044	0.06	0.40	13.62	540.43	1361.91	5.40	0.00	0.000	0.005	0.020
636	70.70	70.60	0.11058	29.03	0.02046	0.06	0.40	13.62	540.52	1361.98	5.41	0.00	0.000	0.005	0.020
637	70.60	70.50	0.11069	29.00	0.02048	0.06	0.40	13.62	540.61	1362.04	5.41	0.00	0.000	0.005	0.020
638	70.50	70.40	0.11081	28.97	0.02049	0.06	0.40	13.62	540.70	1362.11	5.41	0.00	0.000	0.005	0.020
639	70.40	70.30	0.11093	28.94	0.02051	0.06	0.40	13.62	540.78	1362.18	5.41	0.00	0.000	0.005	0.021
640	70.30	70.20	0.11104	28.91	0.02053	0.06	0.40	13.62	540.87	1362.24	5.41	0.00	0.000	0.005	0.021
641	70.20	70.10	0.11116	28.88	0.02055	0.06	0.40	13.62	540.96	1362.31	5.41	0.00	0.000	0.005	0.021
642	70.10	70.00	0.11128	28.85	0.02057	0.06	0.40	13.62	541.05	1362.38	5.41	0.00	0.000	0.005	0.021
643	70.00	69.90	0.11139	28.82	0.02058	0.06	0.40	13.62	541.13	1362.45	5.41	0.00	0.000	0.005	0.021
644	69.90	69.80	0.11151	28.79	0.02060	0.06	0.40	13.63	541.22	1362.51	5.41	0.00	0.000	0.005	0.021
645	69.80	69.70	0.11162	28.76	0.02062	0.06	0.40	13.63	541.31	1362.58	5.41	0.00	0.000	0.005	0.021
646	69.70	69.60	0.11174	28.73	0.02064	0.06	0.40	13.63	541.40	1362.65	5.41	0.00	0.000	0.005	0.021
647	69.60	69.50	0.11186	28.70	0.02066	0.06	0.40	13.63	541.48	1362.71	5.41	0.00	0.000	0.005	0.021
648	69.50	69.40	0.11197	28.67	0.02068	0.06	0.40	13.63	541.57	1362.78	5.42	0.00	0.000	0.005	0.021
649	69.40	69.30	0.11209	28.64	0.02069	0.06	0.40	13.63	541.66	1362.85	5.42	0.00	0.000	0.005	0.021
650	69.30	69.20	0.11221	28.61	0.02071	0.06	0.40	13.63	541.74	1362.91	5.42	0.00	0.000	0.005	0.021
651	69.20	69.10	0.11232	28.58	0.02073	0.06	0.40	13.63	541.83	1362.98	5.42	0.00	0.000	0.005	0.021
652	69.10	69.00	0.11244	28.55	0.02075	0.06	0.40	13.63	541.92	1363.05	5.42	0.00	0.000	0.005	0.021
653	69.00	68.90	0.11255	28.52	0.02077	0.06	0.40	13.63	542.01	1363.11	5.42	0.00	0.000	0.005	0.021
654	68.90	68.80	0.11267	28.49	0.02078	0.06	0.40	13.63	542.09	1363.18	5.42	0.00	0.000	0.005	0.021
655	68.80	68.70	0.11279	28.46	0.02080	0.06	0.40	13.63	542.18	1363.25	5.42	0.00	0.000	0.005	0.021
656	68.70	68.60	0.11290	28.43	0.02082	0.06	0.40	13.63	542.27	1363.31	5.42	0.00	0.000	0.005	0.021
657	68.60	68.50	0.11302	28.40	0.02084	0.06	0.40	13.63	542.35	1363.38	5.42	0.00	0.000	0.005	0.021

**Big Creek – 080903 – Calibration model output:**

658	68.50	68.40	0.11314	28.37	0.02086	0.06	0.40	13.63	542.44	1363.45	5.42	0.00	0.000	0.005	0.021
659	68.40	68.30	0.11325	28.34	0.02088	0.06	0.40	13.64	542.53	1363.51	5.43	0.00	0.000	0.005	0.021
660	68.30	68.20	0.11337	28.31	0.02089	0.06	0.40	13.64	542.62	1363.58	5.43	0.00	0.000	0.005	0.021
661	68.20	68.10	0.11349	28.29	0.02091	0.06	0.40	13.64	542.70	1363.64	5.43	0.00	0.000	0.005	0.021
662	68.10	68.00	0.11360	28.26	0.02093	0.06	0.40	13.64	542.79	1363.71	5.43	0.00	0.000	0.005	0.021
663	68.00	67.90	0.11372	28.23	0.02095	0.06	0.40	13.64	542.88	1363.78	5.43	0.00	0.000	0.005	0.021
664	67.90	67.80	0.11383	28.20	0.02097	0.06	0.40	13.64	542.96	1363.84	5.43	0.00	0.000	0.005	0.021
665	67.80	67.70	0.11395	28.17	0.02098	0.06	0.40	13.64	543.05	1363.91	5.43	0.00	0.000	0.005	0.021
666	67.70	67.60	0.11407	28.14	0.02100	0.06	0.40	13.64	543.14	1363.98	5.43	0.00	0.000	0.005	0.021
667	67.60	67.50	0.11418	28.11	0.02102	0.06	0.40	13.64	543.23	1364.04	5.43	0.00	0.000	0.005	0.021
668	67.50	67.40	0.11430	28.08	0.02104	0.06	0.40	13.64	543.31	1364.11	5.43	0.00	0.000	0.005	0.021

TOT						9.58			77839.45	198909.84										
AVG			0.01775				0.39	13.53						5.30						
CUM						125.68														

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECA 1/da	CBOD SETT 1/da	ANBOD DECA 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECA 1/da	ORGN SETT 1/da	NH3 DECA 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECA 1/da	NCM DECA 1/da	NCM SETT 1/da
522	82.000	8.40	2.47	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.37	0.29
523	81.900	8.40	2.47	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.61	0.00	0.00	0.37	0.29
524	81.800	8.40	2.47	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.00	0.00	0.37	0.29
525	81.700	8.40	2.47	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.00	0.00	0.37	0.29
526	81.600	8.40	2.47	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.00	0.00	0.37	0.29
527	81.500	8.40	2.47	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.00	0.00	0.37	0.29
528	81.400	8.40	2.47	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.00	0.00	0.37	0.29
529	81.300	8.40	2.47	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.00	0.00	0.37	0.29
530	81.200	8.40	2.47	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.00	0.00	0.37	0.29
531	81.100	8.40	2.47	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.00	0.00	0.37	0.29
532	81.000	8.40	2.47	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.00	0.00	0.37	0.29
533	80.900	8.40	2.47	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.00	0.00	0.37	0.29
534	80.800	8.40	2.47	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.00	0.00	0.37	0.29
535	80.700	8.40	2.47	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.00	0.00	0.37	0.29
536	80.600	8.40	2.47	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.00	0.00	0.37	0.29
537	80.500	8.40	2.47	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.00	0.00	0.37	0.29
538	80.400	8.40	2.47	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.00	0.00	0.37	0.29
539	80.300	8.40	2.47	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.00	0.00	0.37	0.29
540	80.200	8.40	2.48	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.00	0.00	0.37	0.29
541	80.100	8.40	2.48	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.00	0.00	0.37	0.29
542	80.000	8.40	2.48	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.00	0.00	0.37	0.29
543	79.900	8.40	2.48	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.00	0.00	0.37	0.29
544	79.800	8.40	2.48	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.00	0.00	0.37	0.29
545	79.700	8.40	2.48	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.00	0.00	0.37	0.29
546	79.600	8.40	2.48	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.00	0.00	0.37	0.29
547	79.500	8.40	2.48	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.00	0.00	0.37	0.29
548	79.400	8.40	2.48	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.00	0.00	0.37	0.29
549	79.300	8.40	2.48	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.00	0.00	0.37	0.29
550	79.200	8.40	2.48	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.70	0.00	0.00	0.37	0.29
551	79.100	8.40	2.48	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.00	0.00	0.37	0.29
552	79.000	8.40	2.48	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.00	0.00	0.37	0.29
553	78.900	8.40	2.48	0.08	0.29	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.00	0.00	0.37	0.29





**Big Creek – 080903 – Calibration model output:**

664	67.800	8.40	2.62	0.08	0.28	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	1.08	0.00	0.00	0.37	0.28
665	67.700	8.40	2.62	0.08	0.28	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	1.08	0.00	0.00	0.37	0.28
666	67.600	8.40	2.62	0.08	0.28	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	1.08	0.00	0.00	0.37	0.28
667	67.500	8.40	2.62	0.08	0.28	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	1.09	0.00	0.00	0.37	0.28
668	67.400	8.40	2.62	0.08	0.28	0.00	0.84	0.84	0.84	0.00	0.00	0.00	0.00	0.00	0.00	1.09	0.00	0.00	0.37	0.28

20 DEG C RATE				0.07		0.00	0.65			0.00		0.00	0.00	0.00	0.00			0.00	0.28	
AVG 20 DEG C RATE			2.36		0.26					0.00										0.26

\* g/sq m/d                      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
522	82.000	24.10	0.00	0.00	0.00	4.64	9.06	9.06	0.00	0.00	0.00	0.00	0.00	10.10	0.00	0.00	1.58
523	81.900	24.10	0.00	0.00	0.00	5.05	9.02	9.02	0.00	0.00	0.00	0.00	0.00	10.16	0.00	0.00	1.56
524	81.800	24.10	0.00	0.00	0.00	5.40	8.99	8.99	0.00	0.00	0.00	0.00	0.00	10.21	0.00	0.00	1.55
525	81.700	24.10	0.00	0.00	0.00	5.69	8.96	8.96	0.00	0.00	0.00	0.00	0.00	10.27	0.00	0.00	1.53
526	81.600	24.10	0.00	0.00	0.00	5.93	8.93	8.93	0.00	0.00	0.00	0.00	0.00	10.32	0.00	0.00	1.52
527	81.500	24.10	0.00	0.00	0.00	6.14	8.90	8.90	0.00	0.00	0.00	0.00	0.00	10.38	0.00	0.00	1.50
528	81.400	24.10	0.00	0.00	0.00	6.31	8.87	8.87	0.00	0.00	0.00	0.00	0.00	10.43	0.00	0.00	1.49
529	81.300	24.10	0.00	0.00	0.00	6.45	8.84	8.84	0.00	0.00	0.00	0.00	0.00	10.49	0.00	0.00	1.48
530	81.200	24.10	0.00	0.00	0.00	6.57	8.82	8.82	0.00	0.00	0.00	0.00	0.00	10.54	0.00	0.00	1.46
531	81.100	24.10	0.00	0.00	0.00	6.68	8.79	8.79	0.00	0.00	0.00	0.00	0.00	10.60	0.00	0.00	1.45
532	81.000	24.10	0.00	0.00	0.00	6.76	8.77	8.77	0.00	0.00	0.00	0.00	0.00	10.65	0.00	0.00	1.44
533	80.900	24.10	0.00	0.00	0.00	6.83	8.74	8.74	0.00	0.00	0.00	0.00	0.00	10.70	0.00	0.00	1.43
534	80.800	24.10	0.00	0.00	0.00	6.90	8.72	8.72	0.00	0.00	0.00	0.00	0.00	10.76	0.00	0.00	1.42
535	80.700	24.10	0.00	0.00	0.00	6.95	8.69	8.69	0.00	0.00	0.00	0.00	0.00	10.81	0.00	0.00	1.41
536	80.600	24.10	0.00	0.00	0.00	6.99	8.67	8.67	0.00	0.00	0.00	0.00	0.00	10.87	0.00	0.00	1.40
537	80.500	24.10	0.00	0.00	0.00	7.03	8.65	8.65	0.00	0.00	0.00	0.00	0.00	10.92	0.00	0.00	1.39
538	80.400	24.10	0.00	0.00	0.00	7.06	8.63	8.63	0.00	0.00	0.00	0.00	0.00	10.98	0.00	0.00	1.39
539	80.300	24.10	0.00	0.00	0.00	7.09	8.61	8.61	0.00	0.00	0.00	0.00	0.00	11.03	0.00	0.00	1.38
540	80.200	24.10	0.00	0.00	0.00	7.11	8.59	8.59	0.00	0.00	0.00	0.00	0.00	11.09	0.00	0.00	1.37
541	80.100	24.10	0.00	0.00	0.00	7.13	8.57	8.57	0.00	0.00	0.00	0.00	0.00	11.14	0.00	0.00	1.36
542	80.000	24.10	0.00	0.00	0.00	7.15	8.55	8.55	0.00	0.00	0.00	0.00	0.00	11.20	0.00	0.00	1.36
543	79.900	24.10	0.00	0.00	0.00	7.16	8.53	8.53	0.00	0.00	0.00	0.00	0.00	11.25	0.00	0.00	1.35
544	79.800	24.10	0.00	0.00	0.00	7.18	8.52	8.52	0.00	0.00	0.00	0.00	0.00	11.30	0.00	0.00	1.35
545	79.700	24.10	0.00	0.00	0.00	7.19	8.50	8.50	0.00	0.00	0.00	0.00	0.00	11.36	0.00	0.00	1.34
546	79.600	24.10	0.00	0.00	0.00	7.20	8.48	8.48	0.00	0.00	0.00	0.00	0.00	11.41	0.00	0.00	1.33
547	79.500	24.10	0.00	0.00	0.00	7.21	8.47	8.47	0.00	0.00	0.00	0.00	0.00	11.47	0.00	0.00	1.33
548	79.400	24.10	0.00	0.00	0.00	7.22	8.45	8.45	0.00	0.00	0.00	0.00	0.00	11.52	0.00	0.00	1.32
549	79.300	24.10	0.00	0.00	0.00	7.22	8.44	8.44	0.00	0.00	0.00	0.00	0.00	11.58	0.00	0.00	1.32
550	79.200	24.10	0.00	0.00	0.00	7.23	8.42	8.42	0.00	0.00	0.00	0.00	0.00	11.63	0.00	0.00	1.31
551	79.100	24.10	0.00	0.00	0.00	7.23	8.41	8.41	0.00	0.00	0.00	0.00	0.00	11.69	0.00	0.00	1.31
552	79.000	24.10	0.00	0.00	0.00	7.24	8.39	8.39	0.00	0.00	0.00	0.00	0.00	11.74	0.00	0.00	1.31
553	78.900	24.10	0.00	0.00	0.00	7.24	8.38	8.38	0.00	0.00	0.00	0.00	0.00	11.80	0.00	0.00	1.30
554	78.800	24.10	0.00	0.00	0.00	7.25	8.37	8.37	0.00	0.00	0.00	0.00	0.00	11.85	0.00	0.00	1.30
555	78.700	24.10	0.00	0.00	0.00	7.25	8.36	8.36	0.00	0.00	0.00	0.00	0.00	11.90	0.00	0.00	1.30
556	78.600	24.10	0.00	0.00	0.00	7.26	8.34	8.34	0.00	0.00	0.00	0.00	0.00	11.96	0.00	0.00	1.29
557	78.500	24.10	0.00	0.00	0.00	7.26	8.33	8.33	0.00	0.00	0.00	0.00	0.00	12.01	0.00	0.00	1.29
558	78.400	24.10	0.00	0.00	0.00	7.26	8.32	8.32	0.00	0.00	0.00	0.00	0.00	12.07	0.00	0.00	1.29
559	78.300	24.10	0.00	0.00	0.00	7.27	8.31	8.31	0.00	0.00	0.00	0.00	0.00	12.12	0.00	0.00	1.28

Big Creek – 080903 – Calibration model output:

560	78.200	24.10	0.00	0.00	0.00	7.27	8.30	8.30	0.00	0.00	0.00	0.00	0.00	12.18	0.00	0.00	1.28
561	78.100	24.10	0.00	0.00	0.00	7.27	8.29	8.29	0.00	0.00	0.00	0.00	0.00	12.23	0.00	0.00	1.28
562	78.000	24.10	0.00	0.00	0.00	7.28	8.28	8.28	0.00	0.00	0.00	0.00	0.00	12.29	0.00	0.00	1.28
563	77.900	24.10	0.00	0.00	0.00	7.28	8.27	8.27	0.00	0.00	0.00	0.00	0.00	12.34	0.00	0.00	1.27
564	77.800	24.10	0.00	0.00	0.00	7.28	8.26	8.26	0.00	0.00	0.00	0.00	0.00	12.40	0.00	0.00	1.27
565	77.700	24.10	0.00	0.00	0.00	7.29	8.25	8.25	0.00	0.00	0.00	0.00	0.00	12.45	0.00	0.00	1.27
566	77.600	24.10	0.00	0.00	0.00	7.29	8.24	8.24	0.00	0.00	0.00	0.00	0.00	12.51	0.00	0.00	1.27
567	77.500	24.10	0.00	0.00	0.00	7.29	8.23	8.23	0.00	0.00	0.00	0.00	0.00	12.56	0.00	0.00	1.27
568	77.400	24.10	0.00	0.00	0.00	7.29	8.22	8.22	0.00	0.00	0.00	0.00	0.00	12.61	0.00	0.00	1.26
569	77.300	24.10	0.00	0.00	0.00	7.30	8.21	8.21	0.00	0.00	0.00	0.00	0.00	12.67	0.00	0.00	1.26
570	77.200	24.10	0.00	0.00	0.00	7.30	8.20	8.20	0.00	0.00	0.00	0.00	0.00	12.72	0.00	0.00	1.26
571	77.100	24.10	0.00	0.00	0.00	7.30	8.20	8.20	0.00	0.00	0.00	0.00	0.00	12.78	0.00	0.00	1.26
572	77.000	24.10	0.00	0.00	0.00	7.30	8.19	8.19	0.00	0.00	0.00	0.00	0.00	12.83	0.00	0.00	1.26
573	76.900	24.10	0.00	0.00	0.00	7.31	8.18	8.18	0.00	0.00	0.00	0.00	0.00	12.89	0.00	0.00	1.26
574	76.800	24.10	0.00	0.00	0.00	7.31	8.17	8.17	0.00	0.00	0.00	0.00	0.00	12.94	0.00	0.00	1.25
575	76.700	24.10	0.00	0.00	0.00	7.31	8.17	8.17	0.00	0.00	0.00	0.00	0.00	13.00	0.00	0.00	1.25
576	76.600	24.10	0.00	0.00	0.00	7.31	8.16	8.16	0.00	0.00	0.00	0.00	0.00	13.05	0.00	0.00	1.25
577	76.500	24.10	0.00	0.00	0.00	7.31	8.15	8.15	0.00	0.00	0.00	0.00	0.00	13.11	0.00	0.00	1.25
578	76.400	24.10	0.00	0.00	0.00	7.32	8.15	8.15	0.00	0.00	0.00	0.00	0.00	13.16	0.00	0.00	1.25
579	76.300	24.10	0.00	0.00	0.00	7.32	8.14	8.14	0.00	0.00	0.00	0.00	0.00	13.21	0.00	0.00	1.25
580	76.200	24.10	0.00	0.00	0.00	7.32	8.13	8.13	0.00	0.00	0.00	0.00	0.00	13.27	0.00	0.00	1.25
581	76.100	24.10	0.00	0.00	0.00	7.32	8.13	8.13	0.00	0.00	0.00	0.00	0.00	13.32	0.00	0.00	1.25
582	76.000	24.10	0.00	0.00	0.00	7.32	8.12	8.12	0.00	0.00	0.00	0.00	0.00	13.38	0.00	0.00	1.24
583	75.900	24.10	0.00	0.00	0.00	7.33	8.11	8.11	0.00	0.00	0.00	0.00	0.00	13.43	0.00	0.00	1.24
584	75.800	24.10	0.00	0.00	0.00	7.33	8.11	8.11	0.00	0.00	0.00	0.00	0.00	13.49	0.00	0.00	1.24
585	75.700	24.10	0.00	0.00	0.00	7.73	7.75	7.75	0.00	0.00	0.00	0.00	0.00	13.54	0.00	0.00	1.08
586	75.600	24.10	0.00	0.00	0.00	7.69	7.75	7.75	0.00	0.00	0.00	0.00	0.00	13.60	0.00	0.00	1.09
587	75.500	24.10	0.00	0.00	0.00	7.66	7.75	7.75	0.00	0.00	0.00	0.00	0.00	13.65	0.00	0.00	1.09
588	75.400	24.10	0.00	0.00	0.00	7.63	7.75	7.75	0.00	0.00	0.00	0.00	0.00	13.71	0.00	0.00	1.09
589	75.300	24.10	0.00	0.00	0.00	7.60	7.75	7.75	0.00	0.00	0.00	0.00	0.00	13.76	0.00	0.00	1.10
590	75.200	24.10	0.00	0.00	0.00	7.58	7.75	7.75	0.00	0.00	0.00	0.00	0.00	13.81	0.00	0.00	1.10
591	75.100	24.10	0.00	0.00	0.00	7.56	7.75	7.75	0.00	0.00	0.00	0.00	0.00	13.87	0.00	0.00	1.10
592	75.000	24.10	0.00	0.00	0.00	7.54	7.75	7.75	0.00	0.00	0.00	0.00	0.00	13.92	0.00	0.00	1.11
593	74.900	24.10	0.00	0.00	0.00	7.53	7.75	7.75	0.00	0.00	0.00	0.00	0.00	13.98	0.00	0.00	1.11
594	74.800	24.10	0.00	0.00	0.00	7.52	7.75	7.75	0.00	0.00	0.00	0.00	0.00	14.03	0.00	0.00	1.11
595	74.700	24.10	0.00	0.00	0.00	7.51	7.75	7.75	0.00	0.00	0.00	0.00	0.00	14.09	0.00	0.00	1.12
596	74.600	24.10	0.00	0.00	0.00	7.50	7.76	7.76	0.00	0.00	0.00	0.00	0.00	14.14	0.00	0.00	1.12
597	74.500	24.10	0.00	0.00	0.00	7.49	7.76	7.76	0.00	0.00	0.00	0.00	0.00	14.20	0.00	0.00	1.12
598	74.400	24.10	0.00	0.00	0.00	7.49	7.76	7.76	0.00	0.00	0.00	0.00	0.00	14.25	0.00	0.00	1.13
599	74.300	24.10	0.00	0.00	0.00	7.48	7.76	7.76	0.00	0.00	0.00	0.00	0.00	14.31	0.00	0.00	1.13
600	74.200	24.10	0.00	0.00	0.00	7.48	7.76	7.76	0.00	0.00	0.00	0.00	0.00	14.36	0.00	0.00	1.13
601	74.100	24.10	0.00	0.00	0.00	7.47	7.76	7.76	0.00	0.00	0.00	0.00	0.00	14.41	0.00	0.00	1.13
602	74.000	24.10	0.00	0.00	0.00	7.47	7.76	7.76	0.00	0.00	0.00	0.00	0.00	14.47	0.00	0.00	1.14
603	73.900	24.10	0.00	0.00	0.00	7.47	7.76	7.76	0.00	0.00	0.00	0.00	0.00	14.52	0.00	0.00	1.14
604	73.800	24.10	0.00	0.00	0.00	7.47	7.76	7.76	0.00	0.00	0.00	0.00	0.00	14.58	0.00	0.00	1.14
605	73.700	24.10	0.00	0.00	0.00	7.46	7.76	7.76	0.00	0.00	0.00	0.00	0.00	14.63	0.00	0.00	1.14
606	73.600	24.10	0.00	0.00	0.00	7.46	7.76	7.76	0.00	0.00	0.00	0.00	0.00	14.69	0.00	0.00	1.14
607	73.500	24.10	0.00	0.00	0.00	7.46	7.76	7.76	0.00	0.00	0.00	0.00	0.00	14.74	0.00	0.00	1.15
608	73.400	24.10	0.00	0.00	0.00	7.46	7.76	7.76	0.00	0.00	0.00	0.00	0.00	14.80	0.00	0.00	1.15
609	73.300	24.10	0.00	0.00	0.00	7.46	7.76	7.76	0.00	0.00	0.00	0.00	0.00	14.85	0.00	0.00	1.15
610	73.200	24.10	0.00	0.00	0.00	7.46	7.76	7.76	0.00	0.00	0.00	0.00	0.00	14.91	0.00	0.00	1.15
611	73.100	24.10	0.00	0.00	0.00	7.46	7.76	7.76	0.00	0.00	0.00	0.00	0.00	14.96	0.00	0.00	1.15
612	73.000	24.10	0.00	0.00	0.00	7.46	7.76	7.76	0.00	0.00	0.00	0.00	0.00	15.01	0.00	0.00	1.15
613	72.900	24.10	0.00	0.00	0.00	7.46	7.76	7.76	0.00	0.00	0.00	0.00	0.00	15.07	0.00	0.00	1.16
614	72.800	24.10	0.00	0.00	0.00	7.46	7.76	7.76	0.00	0.00	0.00	0.00	0.00	15.12	0.00	0.00	1.16



**Big Creek – 080903 – Calibration model output:**

\* CM-I = CHLORIDES  
MG/L  
\*\* g/cu m

CM-II = SULFATES  
MG/L

NCM = NBOD  
MG/L

FINAL REPORT BIG CREEK  
REACH NO. 4 BIG CREEK, RKM 67.4 TO WEIR #6

Big Creek - STREAM MODEL  
WATER QUALITY CALIBRATION

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
669	UPR RCH	0.11430	24.10	0.00	0.00	0.00	7.53	7.76	7.76	0.00	0.00	0.00	0.00	18.07	0.00	1.18
EACH	INCR	0.0020	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
669	67.40	67.30	0.11632	27.60	0.00620	0.19	0.55	34.15	1875.20	3415.26	18.75	0.00	0.000	0.002	0.006
670	67.30	67.20	0.11835	27.12	0.00630	0.18	0.55	34.16	1878.46	3416.39	18.78	0.00	0.000	0.002	0.006
671	67.20	67.10	0.12037	26.67	0.00640	0.18	0.55	34.18	1881.71	3417.52	18.82	0.00	0.000	0.002	0.006
672	67.10	67.00	0.12239	26.23	0.00649	0.18	0.55	34.19	1884.96	3418.64	18.85	0.00	0.000	0.002	0.006
673	67.00	66.90	0.12442	25.80	0.00659	0.18	0.55	34.20	1888.20	3419.76	18.88	0.00	0.000	0.002	0.007
674	66.90	66.80	0.12644	25.39	0.00668	0.17	0.55	34.21	1891.44	3420.86	18.91	0.00	0.000	0.002	0.007
675	66.80	66.70	0.12847	24.99	0.00678	0.17	0.55	34.22	1894.66	3421.96	18.95	0.00	0.000	0.002	0.007
676	66.70	66.60	0.13049	24.60	0.00688	0.17	0.55	34.23	1897.89	3423.05	18.98	0.00	0.000	0.002	0.007
677	66.60	66.50	0.13251	24.22	0.00697	0.17	0.56	34.24	1901.10	3424.14	19.01	0.00	0.000	0.002	0.007
678	66.50	66.40	0.13454	23.86	0.00706	0.16	0.56	34.25	1904.31	3425.21	19.04	0.00	0.000	0.002	0.007
679	66.40	66.30	0.13656	23.51	0.00716	0.16	0.56	34.26	1907.51	3426.28	19.08	0.00	0.000	0.002	0.007
680	66.30	66.20	0.13858	23.16	0.00725	0.16	0.56	34.27	1910.71	3427.35	19.11	0.00	0.000	0.002	0.007
681	66.20	66.10	0.14061	22.83	0.00735	0.16	0.56	34.28	1913.90	3428.40	19.14	0.00	0.000	0.003	0.007
682	66.10	66.00	0.14263	22.51	0.00744	0.16	0.56	34.29	1917.09	3429.45	19.17	0.00	0.000	0.003	0.007
683	66.00	65.90	0.14465	22.19	0.00753	0.15	0.56	34.30	1920.27	3430.49	19.20	0.00	0.000	0.003	0.008
684	65.90	65.80	0.14668	21.88	0.00763	0.15	0.56	34.32	1923.45	3431.53	19.23	0.00	0.000	0.003	0.008
685	65.80	65.70	0.14870	21.59	0.00772	0.15	0.56	34.33	1926.62	3432.56	19.27	0.00	0.000	0.003	0.008
686	65.70	65.60	0.15072	21.30	0.00781	0.15	0.56	34.34	1929.78	3433.59	19.30	0.00	0.000	0.003	0.008
687	65.60	65.50	0.15275	21.01	0.00790	0.15	0.56	34.35	1932.94	3434.60	19.33	0.00	0.000	0.003	0.008
688	65.50	65.40	0.15477	20.74	0.00799	0.14	0.56	34.36	1936.10	3435.62	19.36	0.00	0.000	0.003	0.008
689	65.40	65.30	0.15680	20.47	0.00809	0.14	0.56	34.37	1939.25	3436.63	19.39	0.00	0.000	0.003	0.008
690	65.30	65.20	0.15882	20.21	0.00818	0.14	0.57	34.38	1942.39	3437.63	19.42	0.00	0.000	0.003	0.008
691	65.20	65.10	0.16084	19.96	0.00827	0.14	0.57	34.39	1945.53	3438.62	19.46	0.00	0.000	0.003	0.008
692	65.10	65.00	0.16287	19.71	0.00836	0.14	0.57	34.40	1948.67	3439.61	19.49	0.00	0.000	0.003	0.008
693	65.00	64.90	0.16489	19.47	0.00845	0.14	0.57	34.41	1951.80	3440.60	19.52	0.00	0.000	0.003	0.008
694	64.90	64.80	0.16691	19.23	0.00854	0.14	0.57	34.42	1954.93	3441.58	19.55	0.00	0.000	0.003	0.009
695	64.80	64.70	0.16894	19.00	0.00863	0.13	0.57	34.43	1958.05	3442.56	19.58	0.00	0.000	0.003	0.009
696	64.70	64.60	0.17096	18.78	0.00872	0.13	0.57	34.44	1961.17	3443.53	19.61	0.00	0.000	0.003	0.009
697	64.60	64.50	0.17298	18.56	0.00881	0.13	0.57	34.44	1964.28	3444.49	19.64	0.00	0.000	0.003	0.009
698	64.50	64.40	0.17501	18.34	0.00890	0.13	0.57	34.45	1967.39	3445.45	19.67	0.00	0.000	0.003	0.009
699	64.40	64.30	0.17703	18.13	0.00898	0.13	0.57	34.46	1970.50	3446.41	19.70	0.00	0.000	0.003	0.009



Big Creek – 080903 – Calibration model output:

700	64.30	64.20	0.17906	17.93	0.00907	0.13	0.57	34.47	1973.60	3447.36	19.74	0.00	0.000	0.003	0.009
701	64.20	64.10	0.18108	17.73	0.00916	0.13	0.57	34.48	1976.70	3448.31	19.77	0.00	0.000	0.003	0.009
702	64.10	64.00	0.18310	17.53	0.00925	0.13	0.57	34.49	1979.79	3449.25	19.80	0.00	0.000	0.003	0.009
703	64.00	63.90	0.18513	17.34	0.00934	0.12	0.57	34.50	1982.88	3450.19	19.83	0.00	0.000	0.003	0.009
704	63.90	63.80	0.18715	17.15	0.00942	0.12	0.58	34.51	1985.96	3451.12	19.86	0.00	0.000	0.003	0.009
705	63.80	63.70	0.18917	16.97	0.00951	0.12	0.58	34.52	1989.05	3452.05	19.89	0.00	0.000	0.003	0.010
706	63.70	63.60	0.19120	16.79	0.00960	0.12	0.58	34.53	1992.13	3452.97	19.92	0.00	0.000	0.003	0.010
707	63.60	63.50	0.19322	16.61	0.00968	0.12	0.58	34.54	1995.20	3453.89	19.95	0.00	0.000	0.003	0.010
708	63.50	63.40	0.19524	16.44	0.00977	0.12	0.58	34.55	1998.27	3454.81	19.98	0.00	0.000	0.003	0.010
709	63.40	63.30	0.19727	16.27	0.00986	0.12	0.58	34.56	2001.34	3455.72	20.01	0.00	0.000	0.003	0.010
710	63.30	63.20	0.19929	16.11	0.00994	0.12	0.58	34.57	2004.40	3456.63	20.04	0.00	0.000	0.004	0.010
711	63.20	63.10	0.20131	15.95	0.01003	0.12	0.58	34.58	2007.47	3457.53	20.07	0.00	0.000	0.004	0.010
712	63.10	63.00	0.20334	15.79	0.01011	0.11	0.58	34.58	2010.52	3458.43	20.11	0.00	0.000	0.004	0.010
713	63.00	62.90	0.20536	15.63	0.01020	0.11	0.58	34.59	2013.58	3459.33	20.14	0.00	0.000	0.004	0.010
714	62.90	62.80	0.20739	15.48	0.01028	0.11	0.58	34.60	2016.63	3460.22	20.17	0.00	0.000	0.004	0.010
715	62.80	62.70	0.20941	15.33	0.01037	0.11	0.58	34.61	2019.68	3461.11	20.20	0.00	0.000	0.004	0.010
716	62.70	62.60	0.21143	15.18	0.01045	0.11	0.58	34.62	2022.72	3461.99	20.23	0.00	0.000	0.004	0.010
717	62.60	62.50	0.21346	15.04	0.01054	0.11	0.58	34.63	2025.76	3462.88	20.26	0.00	0.000	0.004	0.011
718	62.50	62.40	0.21548	14.90	0.01062	0.11	0.59	34.64	2028.80	3463.75	20.29	0.00	0.000	0.004	0.011
719	62.40	62.30	0.21750	14.76	0.01070	0.11	0.59	34.65	2031.84	3464.63	20.32	0.00	0.000	0.004	0.011
720	62.30	62.20	0.21953	14.62	0.01079	0.11	0.59	34.65	2034.87	3465.50	20.35	0.00	0.000	0.004	0.011
721	62.20	62.10	0.22155	14.49	0.01087	0.11	0.59	34.66	2037.90	3466.37	20.38	0.00	0.000	0.004	0.011
722	62.10	62.00	0.22357	14.36	0.01095	0.11	0.59	34.67	2040.93	3467.23	20.41	0.00	0.000	0.004	0.011
723	62.00	61.90	0.22560	14.23	0.01104	0.10	0.59	34.68	2043.95	3468.09	20.44	0.00	0.000	0.004	0.011
724	61.90	61.80	0.22762	14.10	0.01112	0.10	0.59	34.69	2046.97	3468.95	20.47	0.00	0.000	0.004	0.011
725	61.80	61.70	0.22965	13.98	0.01120	0.10	0.59	34.70	2049.99	3469.80	20.50	0.00	0.000	0.004	0.011
726	61.70	61.60	0.23167	13.86	0.01128	0.10	0.59	34.71	2053.00	3470.65	20.53	0.00	0.000	0.004	0.011
727	61.60	61.50	0.23369	13.74	0.01137	0.10	0.59	34.72	2056.02	3471.50	20.56	0.00	0.000	0.004	0.011
728	61.50	61.40	0.23572	13.62	0.01145	0.10	0.59	34.72	2059.03	3472.35	20.59	0.00	0.000	0.004	0.011
729	61.40	61.30	0.23774	13.50	0.01153	0.10	0.59	34.73	2062.03	3473.19	20.62	0.00	0.000	0.004	0.012
730	61.30	61.20	0.23976	13.39	0.01161	0.10	0.59	34.74	2065.04	3474.03	20.65	0.00	0.000	0.004	0.012
731	61.20	61.10	0.24179	13.28	0.01169	0.10	0.60	34.75	2068.04	3474.86	20.68	0.00	0.000	0.004	0.012
732	61.10	61.00	0.24381	13.17	0.01177	0.10	0.60	34.76	2071.04	3475.69	20.71	0.00	0.000	0.004	0.012
733	61.00	60.90	0.24583	13.06	0.01185	0.10	0.60	34.77	2074.04	3476.52	20.74	0.00	0.000	0.004	0.012
734	60.90	60.80	0.24786	12.95	0.01193	0.10	0.60	34.77	2077.03	3477.35	20.77	0.00	0.000	0.004	0.012
735	60.80	60.70	0.24988	12.85	0.01201	0.10	0.60	34.78	2080.02	3478.17	20.80	0.00	0.000	0.004	0.012
736	60.70	60.60	0.25191	12.74	0.01209	0.10	0.60	34.79	2083.01	3478.99	20.83	0.00	0.000	0.004	0.012
737	60.60	60.50	0.25393	12.64	0.01217	0.10	0.60	34.80	2086.00	3479.81	20.86	0.00	0.000	0.004	0.012
738	60.50	60.40	0.25595	12.54	0.01225	0.09	0.60	34.81	2088.98	3480.63	20.89	0.00	0.000	0.004	0.012
739	60.40	60.30	0.25798	12.44	0.01233	0.09	0.60	34.81	2091.96	3481.44	20.92	0.00	0.000	0.004	0.012
740	60.30	60.20	0.26000	12.35	0.01241	0.09	0.60	34.82	2094.94	3482.25	20.95	0.00	0.000	0.005	0.012

TOT 9.21 143041.36 248445.30  
 AVG 0.00905 0.58 34.51 19.87  
 CUM 134.89

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
669	67.300	8.40	1.48	0.08	0.20	0.00	0.80	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.00	1.09	0.00	0.00	0.21	0.20
670	67.200	8.40	1.48	0.08	0.20	0.00	0.80	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.00	1.09	0.00	0.00	0.21	0.20



**Big Creek – 080903 – Calibration model output:**

726	61.600	8.40	1.51	0.08	0.19	0.00	0.80	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.00	1.21	0.00	0.00	0.21	0.19
727	61.500	8.40	1.51	0.08	0.19	0.00	0.80	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.00	1.21	0.00	0.00	0.21	0.19
728	61.400	8.40	1.51	0.08	0.19	0.00	0.80	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.00	0.00	0.21	0.19
729	61.300	8.40	1.51	0.08	0.19	0.00	0.80	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.00	0.00	0.21	0.19
730	61.200	8.40	1.51	0.08	0.19	0.00	0.80	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.00	0.00	0.21	0.19
731	61.100	8.40	1.51	0.08	0.19	0.00	0.80	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.00	0.00	0.21	0.19
732	61.000	8.40	1.51	0.08	0.18	0.00	0.80	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.00	0.00	0.21	0.18
733	60.900	8.40	1.51	0.08	0.18	0.00	0.80	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.00	1.23	0.00	0.00	0.21	0.18
734	60.800	8.40	1.51	0.08	0.18	0.00	0.80	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.00	1.23	0.00	0.00	0.21	0.18
735	60.700	8.40	1.51	0.08	0.18	0.00	0.80	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.00	1.23	0.00	0.00	0.21	0.18
736	60.600	8.40	1.51	0.08	0.18	0.00	0.80	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.00	1.23	0.00	0.00	0.21	0.18
737	60.500	8.40	1.51	0.08	0.18	0.00	0.80	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.00	1.24	0.00	0.00	0.21	0.18
738	60.400	8.40	1.51	0.08	0.18	0.00	0.80	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.00	1.24	0.00	0.00	0.21	0.18
739	60.300	8.40	1.51	0.08	0.18	0.00	0.80	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.00	1.24	0.00	0.00	0.21	0.18
740	60.200	8.40	1.51	0.08	0.18	0.00	0.80	0.80	0.80	0.00	0.00	0.00	0.00	0.00	0.00	1.24	0.00	0.00	0.21	0.18

20 DEG C RATE 0.07 0.00 0.62 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.16  
 AVG 20 DEG C RATE 1.39 0.17 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.17

\* g/sq m/d \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
669	67.300	24.10	0.00	0.00	0.00	7.43	7.75	7.75	0.00	0.00	0.00	0.00	0.00	18.10	0.00	0.00	1.17
670	67.200	24.10	0.00	0.00	0.00	7.36	7.75	7.75	0.00	0.00	0.00	0.00	0.00	18.14	0.00	0.00	1.16
671	67.100	24.10	0.00	0.00	0.00	7.30	7.74	7.74	0.00	0.00	0.00	0.00	0.00	18.17	0.00	0.00	1.15
672	67.000	24.10	0.00	0.00	0.00	7.26	7.73	7.73	0.00	0.00	0.00	0.00	0.00	18.21	0.00	0.00	1.15
673	66.900	24.10	0.00	0.00	0.00	7.23	7.72	7.72	0.00	0.00	0.00	0.00	0.00	18.24	0.00	0.00	1.14
674	66.800	24.10	0.00	0.00	0.00	7.21	7.72	7.72	0.00	0.00	0.00	0.00	0.00	18.28	0.00	0.00	1.13
675	66.700	24.10	0.00	0.00	0.00	7.19	7.71	7.71	0.00	0.00	0.00	0.00	0.00	18.31	0.00	0.00	1.12
676	66.600	24.10	0.00	0.00	0.00	7.18	7.70	7.70	0.00	0.00	0.00	0.00	0.00	18.35	0.00	0.00	1.12
677	66.500	24.10	0.00	0.00	0.00	7.17	7.70	7.70	0.00	0.00	0.00	0.00	0.00	18.38	0.00	0.00	1.11
678	66.400	24.10	0.00	0.00	0.00	7.17	7.69	7.69	0.00	0.00	0.00	0.00	0.00	18.42	0.00	0.00	1.11
679	66.300	24.10	0.00	0.00	0.00	7.16	7.68	7.68	0.00	0.00	0.00	0.00	0.00	18.45	0.00	0.00	1.10
680	66.200	24.10	0.00	0.00	0.00	7.16	7.68	7.68	0.00	0.00	0.00	0.00	0.00	18.49	0.00	0.00	1.10
681	66.100	24.10	0.00	0.00	0.00	7.16	7.67	7.67	0.00	0.00	0.00	0.00	0.00	18.52	0.00	0.00	1.10
682	66.000	24.10	0.00	0.00	0.00	7.16	7.67	7.67	0.00	0.00	0.00	0.00	0.00	18.56	0.00	0.00	1.09
683	65.900	24.10	0.00	0.00	0.00	7.16	7.66	7.66	0.00	0.00	0.00	0.00	0.00	18.59	0.00	0.00	1.09
684	65.800	24.10	0.00	0.00	0.00	7.16	7.66	7.66	0.00	0.00	0.00	0.00	0.00	18.63	0.00	0.00	1.08
685	65.700	24.10	0.00	0.00	0.00	7.17	7.65	7.65	0.00	0.00	0.00	0.00	0.00	18.66	0.00	0.00	1.08
686	65.600	24.10	0.00	0.00	0.00	7.17	7.65	7.65	0.00	0.00	0.00	0.00	0.00	18.69	0.00	0.00	1.08
687	65.500	24.10	0.00	0.00	0.00	7.17	7.64	7.64	0.00	0.00	0.00	0.00	0.00	18.73	0.00	0.00	1.08
688	65.400	24.10	0.00	0.00	0.00	7.18	7.64	7.64	0.00	0.00	0.00	0.00	0.00	18.76	0.00	0.00	1.07
689	65.300	24.10	0.00	0.00	0.00	7.18	7.63	7.63	0.00	0.00	0.00	0.00	0.00	18.80	0.00	0.00	1.07
690	65.200	24.10	0.00	0.00	0.00	7.18	7.63	7.63	0.00	0.00	0.00	0.00	0.00	18.83	0.00	0.00	1.07
691	65.100	24.10	0.00	0.00	0.00	7.19	7.63	7.63	0.00	0.00	0.00	0.00	0.00	18.87	0.00	0.00	1.07
692	65.000	24.10	0.00	0.00	0.00	7.19	7.62	7.62	0.00	0.00	0.00	0.00	0.00	18.90	0.00	0.00	1.06
693	64.900	24.10	0.00	0.00	0.00	7.19	7.62	7.62	0.00	0.00	0.00	0.00	0.00	18.94	0.00	0.00	1.06
694	64.800	24.10	0.00	0.00	0.00	7.20	7.61	7.61	0.00	0.00	0.00	0.00	0.00	18.97	0.00	0.00	1.06
695	64.700	24.10	0.00	0.00	0.00	7.20	7.61	7.61	0.00	0.00	0.00	0.00	0.00	19.01	0.00	0.00	1.06
696	64.600	24.10	0.00	0.00	0.00	7.20	7.60	7.60	0.00	0.00	0.00	0.00	0.00	19.04	0.00	0.00	1.06

Big Creek – 080903 – Calibration model output:

697	64.500	24.10	0.00	0.00	0.00	7.21	7.60	7.60	0.00	0.00	0.00	0.00	0.00	19.08	0.00	0.00	1.06
698	64.400	24.10	0.00	0.00	0.00	7.21	7.60	7.60	0.00	0.00	0.00	0.00	0.00	19.11	0.00	0.00	1.05
699	64.300	24.10	0.00	0.00	0.00	7.21	7.59	7.59	0.00	0.00	0.00	0.00	0.00	19.15	0.00	0.00	1.05
700	64.200	24.10	0.00	0.00	0.00	7.22	7.59	7.59	0.00	0.00	0.00	0.00	0.00	19.18	0.00	0.00	1.05
701	64.100	24.10	0.00	0.00	0.00	7.22	7.58	7.58	0.00	0.00	0.00	0.00	0.00	19.22	0.00	0.00	1.05
702	64.000	24.10	0.00	0.00	0.00	7.23	7.58	7.58	0.00	0.00	0.00	0.00	0.00	19.25	0.00	0.00	1.05
703	63.900	24.10	0.00	0.00	0.00	7.23	7.58	7.58	0.00	0.00	0.00	0.00	0.00	19.29	0.00	0.00	1.05
704	63.800	24.10	0.00	0.00	0.00	7.23	7.57	7.57	0.00	0.00	0.00	0.00	0.00	19.32	0.00	0.00	1.05
705	63.700	24.10	0.00	0.00	0.00	7.24	7.57	7.57	0.00	0.00	0.00	0.00	0.00	19.35	0.00	0.00	1.05
706	63.600	24.10	0.00	0.00	0.00	7.24	7.57	7.57	0.00	0.00	0.00	0.00	0.00	19.39	0.00	0.00	1.04
707	63.500	24.10	0.00	0.00	0.00	7.24	7.56	7.56	0.00	0.00	0.00	0.00	0.00	19.42	0.00	0.00	1.04
708	63.400	24.10	0.00	0.00	0.00	7.25	7.56	7.56	0.00	0.00	0.00	0.00	0.00	19.46	0.00	0.00	1.04
709	63.300	24.10	0.00	0.00	0.00	7.25	7.56	7.56	0.00	0.00	0.00	0.00	0.00	19.49	0.00	0.00	1.04
710	63.200	24.10	0.00	0.00	0.00	7.25	7.55	7.55	0.00	0.00	0.00	0.00	0.00	19.53	0.00	0.00	1.04
711	63.100	24.10	0.00	0.00	0.00	7.26	7.55	7.55	0.00	0.00	0.00	0.00	0.00	19.56	0.00	0.00	1.04
712	63.000	24.10	0.00	0.00	0.00	7.26	7.55	7.55	0.00	0.00	0.00	0.00	0.00	19.60	0.00	0.00	1.04
713	62.900	24.10	0.00	0.00	0.00	7.27	7.54	7.54	0.00	0.00	0.00	0.00	0.00	19.63	0.00	0.00	1.04
714	62.800	24.10	0.00	0.00	0.00	7.27	7.54	7.54	0.00	0.00	0.00	0.00	0.00	19.67	0.00	0.00	1.04
715	62.700	24.10	0.00	0.00	0.00	7.27	7.53	7.53	0.00	0.00	0.00	0.00	0.00	19.70	0.00	0.00	1.03
716	62.600	24.10	0.00	0.00	0.00	7.28	7.53	7.53	0.00	0.00	0.00	0.00	0.00	19.74	0.00	0.00	1.03
717	62.500	24.10	0.00	0.00	0.00	7.28	7.53	7.53	0.00	0.00	0.00	0.00	0.00	19.77	0.00	0.00	1.03
718	62.400	24.10	0.00	0.00	0.00	7.28	7.52	7.52	0.00	0.00	0.00	0.00	0.00	19.81	0.00	0.00	1.03
719	62.300	24.10	0.00	0.00	0.00	7.29	7.52	7.52	0.00	0.00	0.00	0.00	0.00	19.84	0.00	0.00	1.03
720	62.200	24.10	0.00	0.00	0.00	7.29	7.52	7.52	0.00	0.00	0.00	0.00	0.00	19.88	0.00	0.00	1.03
721	62.100	24.10	0.00	0.00	0.00	7.29	7.51	7.51	0.00	0.00	0.00	0.00	0.00	19.91	0.00	0.00	1.03
722	62.000	24.10	0.00	0.00	0.00	7.30	7.51	7.51	0.00	0.00	0.00	0.00	0.00	19.94	0.00	0.00	1.03
723	61.900	24.10	0.00	0.00	0.00	7.30	7.51	7.51	0.00	0.00	0.00	0.00	0.00	19.98	0.00	0.00	1.03
724	61.800	24.10	0.00	0.00	0.00	7.30	7.51	7.51	0.00	0.00	0.00	0.00	0.00	20.01	0.00	0.00	1.03
725	61.700	24.10	0.00	0.00	0.00	7.31	7.50	7.50	0.00	0.00	0.00	0.00	0.00	20.05	0.00	0.00	1.03
726	61.600	24.10	0.00	0.00	0.00	7.31	7.50	7.50	0.00	0.00	0.00	0.00	0.00	20.08	0.00	0.00	1.03
727	61.500	24.10	0.00	0.00	0.00	7.31	7.50	7.50	0.00	0.00	0.00	0.00	0.00	20.12	0.00	0.00	1.02
728	61.400	24.10	0.00	0.00	0.00	7.32	7.49	7.49	0.00	0.00	0.00	0.00	0.00	20.15	0.00	0.00	1.02
729	61.300	24.10	0.00	0.00	0.00	7.32	7.49	7.49	0.00	0.00	0.00	0.00	0.00	20.19	0.00	0.00	1.02
730	61.200	24.10	0.00	0.00	0.00	7.32	7.49	7.49	0.00	0.00	0.00	0.00	0.00	20.22	0.00	0.00	1.02
731	61.100	24.10	0.00	0.00	0.00	7.33	7.48	7.48	0.00	0.00	0.00	0.00	0.00	20.26	0.00	0.00	1.02
732	61.000	24.10	0.00	0.00	0.00	7.33	7.48	7.48	0.00	0.00	0.00	0.00	0.00	20.29	0.00	0.00	1.02
733	60.900	24.10	0.00	0.00	0.00	7.33	7.48	7.48	0.00	0.00	0.00	0.00	0.00	20.33	0.00	0.00	1.02
734	60.800	24.10	0.00	0.00	0.00	7.34	7.47	7.47	0.00	0.00	0.00	0.00	0.00	20.36	0.00	0.00	1.02
735	60.700	24.10	0.00	0.00	0.00	7.34	7.47	7.47	0.00	0.00	0.00	0.00	0.00	20.40	0.00	0.00	1.02
736	60.600	24.10	0.00	0.00	0.00	7.34	7.47	7.47	0.00	0.00	0.00	0.00	0.00	20.43	0.00	0.00	1.02
737	60.500	24.10	0.00	0.00	0.00	7.35	7.46	7.46	0.00	0.00	0.00	0.00	0.00	20.47	0.00	0.00	1.02
738	60.400	24.10	0.00	0.00	0.00	7.35	7.46	7.46	0.00	0.00	0.00	0.00	0.00	20.50	0.00	0.00	1.02
739	60.300	24.10	0.00	0.00	0.00	7.35	7.46	7.46	0.00	0.00	0.00	0.00	0.00	20.54	0.00	0.00	1.02
740	60.200	24.10	0.00	0.00	0.00	7.36	7.45	7.45	0.00	0.00	0.00	0.00	0.00	20.57	0.00	0.00	1.01

\* CM-I = CHLORIDES  
MG/L

CM-II = SULFATES  
MG/L

NCM = NBOD  
MG/L

\*\* g/cu m

FINAL REPORT      BIG CREEK  
REACH NO. 5      WEIR #6

Big Creek - STREAM MODEL  
WATER QUALITY CALIBRATION

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

**Big Creek – 080903 – Calibration model output:**

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
741	UPR RCH	0.26000	24.10	0.00	0.00	0.00	7.36	7.45	7.45	0.00	0.00	0.00	0.00	20.57	0.00	1.01
EACH	INCR	0.0020	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
741	60.20	60.10	0.26200	12.25	0.01491	0.08	0.55	31.73	1757.48	3172.53	17.57	0.00	0.000	0.005	0.015
TOT						0.08			1757.48	3172.53					
AVG					0.01491		0.55	31.73			17.57				
CUM						134.97									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECA 1/da	CBOD SETT 1/da	ANBOD DECA 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECA 1/da	ORGN SETT 1/da	NH3 DECA 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECA 1/da	NCM DECA 1/da	NCM SETT 1/da
741	60.100	8.40	1.71	0.08	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24	0.00	0.00	0.21	0.20
20 DEG C RATE				0.07		0.00	0.00			0.00		0.00	0.00	0.00	0.00			0.00	0.16	
AVG 20 DEG C RATE			1.58		0.18					0.00										0.18

\* g/sq m/d      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
741	60.100	24.10	0.00	0.00	0.00	7.46	7.24	7.24	0.00	0.00	0.00	0.00	0.00	20.57	0.00	0.00	0.98

\* CM-I = CHLORIDES MG/L      CM-II = SULFATES MG/L      NCM = NBOD MG/L  
 \*\* g/cu m

FINAL REPORT      BIG CREEK  
 REACH NO. 6      BIG CREEK, WEIR #6 TO WEIR #5

Big Creek - STREAM MODEL  
 WATER QUALITY CALIBRATION

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
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Big Creek – 080903 – Calibration model output:

742	UPR RCH	0.26200	24.10	0.00	0.00	0.00	7.46	7.24	7.24	0.00	0.00	0.00	0.00	20.57	0.00	0.98
EACH	INCR	0.0020	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
760	WSTLD	0.01910	24.10	0.00	0.00	0.00	9.43	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.46

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
742	60.10	60.00	0.26402	12.16	0.01502	0.08	0.55	31.73	1758.19	3172.90	17.58	0.00	0.000	0.005	0.015
743	60.00	59.90	0.26605	12.07	0.01513	0.08	0.55	31.73	1758.90	3173.26	17.59	0.00	0.000	0.005	0.015
744	59.90	59.80	0.26807	11.97	0.01523	0.08	0.55	31.74	1759.61	3173.63	17.60	0.00	0.000	0.005	0.015
745	59.80	59.70	0.27009	11.88	0.01534	0.08	0.55	31.74	1760.31	3173.99	17.60	0.00	0.000	0.005	0.015
746	59.70	59.60	0.27211	11.80	0.01545	0.07	0.55	31.74	1761.01	3174.35	17.61	0.00	0.000	0.005	0.015
747	59.60	59.50	0.27414	11.71	0.01556	0.07	0.55	31.75	1761.70	3174.71	17.62	0.00	0.000	0.005	0.016
748	59.50	59.40	0.27616	11.62	0.01567	0.07	0.56	31.75	1762.39	3175.06	17.62	0.00	0.000	0.005	0.016
749	59.40	59.30	0.27818	11.54	0.01578	0.07	0.56	31.75	1763.08	3175.42	17.63	0.00	0.000	0.005	0.016
750	59.30	59.20	0.28021	11.46	0.01589	0.07	0.56	31.76	1763.76	3175.77	17.64	0.00	0.000	0.005	0.016
751	59.20	59.10	0.28223	11.37	0.01600	0.07	0.56	31.76	1764.44	3176.12	17.64	0.00	0.000	0.005	0.016
752	59.10	59.00	0.28425	11.29	0.01610	0.07	0.56	31.76	1765.11	3176.47	17.65	0.00	0.000	0.005	0.016
753	59.00	58.90	0.28627	11.21	0.01621	0.07	0.56	31.77	1765.78	3176.82	17.66	0.00	0.000	0.006	0.016
754	58.90	58.80	0.28830	11.13	0.01632	0.07	0.56	31.77	1766.44	3177.16	17.66	0.00	0.000	0.006	0.016
755	58.80	58.70	0.29032	11.06	0.01643	0.07	0.56	31.78	1767.11	3177.50	17.67	0.00	0.000	0.006	0.016
756	58.70	58.60	0.29234	10.98	0.01654	0.07	0.56	31.78	1767.77	3177.85	17.68	0.00	0.000	0.006	0.017
757	58.60	58.50	0.29436	10.90	0.01665	0.07	0.56	31.78	1768.42	3178.19	17.68	0.00	0.000	0.006	0.017
758	58.50	58.40	0.29639	10.83	0.01675	0.07	0.56	31.79	1769.07	3178.52	17.69	0.00	0.000	0.006	0.017
759	58.40	58.30	0.29841	10.76	0.01686	0.07	0.56	31.79	1769.72	3178.86	17.70	0.00	0.000	0.006	0.017
760	58.30	58.20	0.31953	16.02	0.01799	0.06	0.56	31.82	1776.29	3182.28	17.76	0.00	0.000	0.006	0.018
761	58.20	58.10	0.32156	15.92	0.01810	0.06	0.56	31.83	1776.90	3182.60	17.77	0.00	0.000	0.006	0.018
762	58.10	58.00	0.32358	15.82	0.01820	0.06	0.56	31.83	1777.51	3182.92	17.78	0.00	0.000	0.006	0.018
763	58.00	57.90	0.32560	15.72	0.01831	0.06	0.56	31.83	1778.12	3183.23	17.78	0.00	0.000	0.006	0.018
764	57.90	57.80	0.32762	15.63	0.01842	0.06	0.56	31.84	1778.72	3183.55	17.79	0.00	0.000	0.006	0.018
765	57.80	57.70	0.32965	15.53	0.01853	0.06	0.56	31.84	1779.32	3183.86	17.79	0.00	0.000	0.006	0.019
766	57.70	57.60	0.33167	15.44	0.01863	0.06	0.56	31.84	1779.91	3184.17	17.80	0.00	0.000	0.006	0.019
767	57.60	57.50	0.33369	15.34	0.01874	0.06	0.56	31.84	1780.51	3184.48	17.81	0.00	0.000	0.006	0.019
768	57.50	57.40	0.33572	15.25	0.01885	0.06	0.56	31.85	1781.10	3184.79	17.81	0.00	0.000	0.006	0.019
769	57.40	57.30	0.33774	15.16	0.01896	0.06	0.56	31.85	1781.69	3185.10	17.82	0.00	0.000	0.006	0.019
770	57.30	57.20	0.33976	15.07	0.01906	0.06	0.56	31.85	1782.27	3185.41	17.82	0.00	0.000	0.007	0.019
771	57.20	57.10	0.34178	14.98	0.01917	0.06	0.56	31.86	1782.85	3185.71	17.83	0.00	0.000	0.007	0.019
772	57.10	57.00	0.34381	14.89	0.01928	0.06	0.56	31.86	1783.43	3186.02	17.83	0.00	0.000	0.007	0.019
773	57.00	56.90	0.34583	14.80	0.01938	0.06	0.56	31.86	1784.01	3186.32	17.84	0.00	0.000	0.007	0.019
774	56.90	56.80	0.34785	14.72	0.01949	0.06	0.56	31.87	1784.59	3186.62	17.85	0.00	0.000	0.007	0.019
775	56.80	56.70	0.34988	14.63	0.01960	0.06	0.56	31.87	1785.16	3186.92	17.85	0.00	0.000	0.007	0.020
776	56.70	56.60	0.35190	14.55	0.01971	0.06	0.56	31.87	1785.73	3187.22	17.86	0.00	0.000	0.007	0.020
777	56.60	56.50	0.35392	14.47	0.01981	0.06	0.56	31.88	1786.29	3187.52	17.86	0.00	0.000	0.007	0.020
778	56.50	56.40	0.35594	14.38	0.01992	0.06	0.56	31.88	1786.86	3187.81	17.87	0.00	0.000	0.007	0.020
779	56.40	56.30	0.35797	14.30	0.02003	0.06	0.56	31.88	1787.42	3188.11	17.87	0.00	0.000	0.007	0.020
780	56.30	56.20	0.35999	14.22	0.02013	0.06	0.56	31.88	1787.98	3188.40	17.88	0.00	0.000	0.007	0.020
781	56.20	56.10	0.36201	14.14	0.02024	0.06	0.56	31.89	1788.54	3188.69	17.89	0.00	0.000	0.007	0.020
782	56.10	56.00	0.36404	14.06	0.02035	0.06	0.56	31.89	1789.09	3188.99	17.89	0.00	0.000	0.007	0.020
783	56.00	55.90	0.36606	13.99	0.02045	0.06	0.56	31.89	1789.64	3189.28	17.90	0.00	0.000	0.007	0.020
784	55.90	55.80	0.36808	13.91	0.02056	0.06	0.56	31.90	1790.19	3189.57	17.90	0.00	0.000	0.007	0.021

Big Creek – 080903 – Calibration model output:

785	55.80	55.70	0.37010	13.83	0.02067	0.06	0.56	31.90	1790.74	3189.85	17.91	0.00	0.000	0.007	0.021
786	55.70	55.60	0.37213	13.76	0.02077	0.06	0.56	31.90	1791.28	3190.14	17.91	0.00	0.000	0.007	0.021
787	55.60	55.50	0.37415	13.68	0.02088	0.06	0.56	31.90	1791.83	3190.43	17.92	0.00	0.000	0.007	0.021
788	55.50	55.40	0.37617	13.61	0.02099	0.06	0.56	31.91	1792.37	3190.71	17.92	0.00	0.000	0.007	0.021
789	55.40	55.30	0.37820	13.54	0.02109	0.05	0.56	31.91	1792.90	3190.99	17.93	0.00	0.000	0.007	0.021
790	55.30	55.20	0.38022	13.47	0.02120	0.05	0.56	31.91	1793.44	3191.28	17.93	0.00	0.000	0.007	0.021
791	55.20	55.10	0.38224	13.39	0.02131	0.05	0.56	31.92	1793.97	3191.56	17.94	0.00	0.000	0.007	0.021
792	55.10	55.00	0.38426	13.32	0.02141	0.05	0.56	31.92	1794.50	3191.84	17.95	0.00	0.000	0.007	0.021
793	55.00	54.90	0.38629	13.25	0.02152	0.05	0.56	31.92	1795.03	3192.12	17.95	0.00	0.000	0.007	0.022
794	54.90	54.80	0.38831	13.19	0.02163	0.05	0.56	31.92	1795.56	3192.40	17.96	0.00	0.000	0.007	0.022
795	54.80	54.70	0.39033	13.12	0.02173	0.05	0.56	31.93	1796.08	3192.67	17.96	0.00	0.000	0.007	0.022
796	54.70	54.60	0.39236	13.05	0.02184	0.05	0.56	31.93	1796.61	3192.95	17.97	0.00	0.000	0.008	0.022
797	54.60	54.50	0.39438	12.98	0.02194	0.05	0.56	31.93	1797.13	3193.22	17.97	0.00	0.000	0.008	0.022
798	54.50	54.40	0.39640	12.92	0.02205	0.05	0.56	31.93	1797.64	3193.50	17.98	0.00	0.000	0.008	0.022
799	54.40	54.30	0.39842	12.85	0.02216	0.05	0.56	31.94	1798.16	3193.77	17.98	0.00	0.000	0.008	0.022
800	54.30	54.20	0.40045	12.79	0.02226	0.05	0.56	31.94	1798.68	3194.04	17.99	0.00	0.000	0.008	0.022
801	54.20	54.10	0.40247	12.72	0.02237	0.05	0.56	31.94	1799.19	3194.31	17.99	0.00	0.000	0.008	0.022
802	54.10	54.00	0.40449	12.66	0.02248	0.05	0.56	31.95	1799.70	3194.58	18.00	0.00	0.000	0.008	0.022
803	54.00	53.90	0.40652	12.59	0.02258	0.05	0.56	31.95	1800.21	3194.85	18.00	0.00	0.000	0.008	0.023
804	53.90	53.80	0.40854	12.53	0.02269	0.05	0.56	31.95	1800.71	3195.12	18.01	0.00	0.000	0.008	0.023
805	53.80	53.70	0.41056	12.47	0.02279	0.05	0.56	31.95	1801.22	3195.39	18.01	0.00	0.000	0.008	0.023
806	53.70	53.60	0.41258	12.41	0.02290	0.05	0.56	31.96	1801.72	3195.65	18.02	0.00	0.000	0.008	0.023
807	53.60	53.50	0.41461	12.35	0.02301	0.05	0.56	31.96	1802.22	3195.92	18.02	0.00	0.000	0.008	0.023
808	53.50	53.40	0.41663	12.29	0.02311	0.05	0.56	31.96	1802.72	3196.18	18.03	0.00	0.000	0.008	0.023
809	53.40	53.30	0.41865	12.23	0.02322	0.05	0.56	31.96	1803.21	3196.45	18.03	0.00	0.000	0.008	0.023
810	53.30	53.20	0.42068	12.17	0.02332	0.05	0.56	31.97	1803.71	3196.71	18.04	0.00	0.000	0.008	0.023
811	53.20	53.10	0.42270	12.11	0.02343	0.05	0.56	31.97	1804.20	3196.97	18.04	0.00	0.000	0.008	0.023
812	53.10	53.00	0.42472	12.05	0.02353	0.05	0.56	31.97	1804.69	3197.23	18.05	0.00	0.000	0.008	0.024
813	53.00	52.90	0.42674	12.00	0.02364	0.05	0.56	31.97	1805.18	3197.49	18.05	0.00	0.000	0.008	0.024
814	52.90	52.80	0.42877	11.94	0.02375	0.05	0.56	31.98	1805.67	3197.75	18.06	0.00	0.000	0.008	0.024
815	52.80	52.70	0.43079	11.89	0.02385	0.05	0.56	31.98	1806.15	3198.01	18.06	0.00	0.000	0.008	0.024
816	52.70	52.60	0.43281	11.83	0.02396	0.05	0.56	31.98	1806.64	3198.27	18.07	0.00	0.000	0.008	0.024
817	52.60	52.50	0.43483	11.77	0.02406	0.05	0.56	31.99	1807.12	3198.52	18.07	0.00	0.000	0.008	0.024
818	52.50	52.40	0.43686	11.72	0.02417	0.05	0.57	31.99	1807.60	3198.78	18.08	0.00	0.000	0.008	0.024
819	52.40	52.30	0.43888	11.67	0.02427	0.05	0.57	31.99	1808.08	3199.03	18.08	0.00	0.000	0.008	0.024
820	52.30	52.20	0.44090	11.61	0.02438	0.05	0.57	31.99	1808.55	3199.29	18.09	0.00	0.000	0.008	0.024
821	52.20	52.10	0.44293	11.56	0.02448	0.05	0.57	32.00	1809.03	3199.54	18.09	0.00	0.000	0.008	0.024
822	52.10	52.00	0.44495	11.51	0.02459	0.05	0.57	32.00	1809.50	3199.79	18.10	0.00	0.000	0.009	0.025
823	52.00	51.90	0.44697	11.45	0.02469	0.05	0.57	32.00	1809.97	3200.04	18.10	0.00	0.000	0.009	0.025
824	51.90	51.80	0.44899	11.40	0.02480	0.05	0.57	32.00	1810.45	3200.29	18.10	0.00	0.000	0.009	0.025
825	51.80	51.70	0.45102	11.35	0.02491	0.05	0.57	32.01	1810.91	3200.54	18.11	0.00	0.000	0.009	0.025
826	51.70	51.60	0.45304	11.30	0.02501	0.05	0.57	32.01	1811.38	3200.79	18.11	0.00	0.000	0.009	0.025
827	51.60	51.50	0.45506	11.25	0.02512	0.05	0.57	32.01	1811.84	3201.04	18.12	0.00	0.000	0.009	0.025
828	51.50	51.40	0.45709	11.20	0.02522	0.05	0.57	32.01	1812.31	3201.29	18.12	0.00	0.000	0.009	0.025
829	51.40	51.30	0.45911	11.15	0.02533	0.05	0.57	32.02	1812.77	3201.53	18.13	0.00	0.000	0.009	0.025
830	51.30	51.20	0.46113	11.10	0.02543	0.05	0.57	32.02	1813.23	3201.78	18.13	0.00	0.000	0.009	0.025
831	51.20	51.10	0.46315	11.05	0.02554	0.05	0.57	32.02	1813.69	3202.02	18.14	0.00	0.000	0.009	0.026
832	51.10	51.00	0.46518	11.01	0.02564	0.05	0.57	32.02	1814.15	3202.27	18.14	0.00	0.000	0.009	0.026
833	51.00	50.90	0.46720	10.96	0.02575	0.04	0.57	32.03	1814.60	3202.51	18.15	0.00	0.000	0.009	0.026

TOT						5.27			164685.16	293437.53					
AVG			0.02022				0.56	31.90			17.90				
CUM						140.23									

# Big Creek – 080903 – Calibration model output:

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECA 1/da	CBOD SETT 1/da	ANBOD DECA 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECA 1/da	ORGN SETT 1/da	NH3 DECA 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECA 1/da	NCM DECA 1/da	NCM SETT 1/da
742	60.000	8.40	1.72	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.24	0.00	0.00	0.21	0.20
743	59.900	8.40	1.72	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.23	0.00	0.00	0.21	0.20
744	59.800	8.40	1.72	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.23	0.00	0.00	0.21	0.20
745	59.700	8.40	1.72	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.00	0.00	0.21	0.20
746	59.600	8.40	1.73	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.00	0.00	0.21	0.20
747	59.500	8.40	1.73	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.21	0.00	0.00	0.21	0.20
748	59.400	8.40	1.73	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.21	0.00	0.00	0.21	0.20
749	59.300	8.40	1.73	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.21	0.00	0.00	0.21	0.20
750	59.200	8.40	1.74	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.00	0.00	0.21	0.20
751	59.100	8.40	1.74	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.00	0.00	0.21	0.20
752	59.000	8.40	1.74	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.19	0.00	0.00	0.21	0.20
753	58.900	8.40	1.74	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.19	0.00	0.00	0.21	0.20
754	58.800	8.40	1.75	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.18	0.00	0.00	0.21	0.20
755	58.700	8.40	1.75	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.18	0.00	0.00	0.21	0.20
756	58.600	8.40	1.75	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.17	0.00	0.00	0.21	0.20
757	58.500	8.40	1.75	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.17	0.00	0.00	0.21	0.20
758	58.400	8.40	1.76	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.17	0.00	0.00	0.21	0.20
759	58.300	8.40	1.76	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.16	0.00	0.00	0.21	0.20
760	58.200	8.40	1.79	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.16	0.00	0.00	0.21	0.20
761	58.100	8.40	1.79	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.15	0.00	0.00	0.21	0.20
762	58.000	8.40	1.79	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.15	0.00	0.00	0.21	0.20
763	57.900	8.40	1.79	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.14	0.00	0.00	0.21	0.20
764	57.800	8.40	1.80	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.14	0.00	0.00	0.21	0.20
765	57.700	8.40	1.80	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.13	0.00	0.00	0.21	0.20
766	57.600	8.40	1.80	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.13	0.00	0.00	0.21	0.20
767	57.500	8.40	1.80	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.13	0.00	0.00	0.21	0.20
768	57.400	8.40	1.81	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.12	0.00	0.00	0.21	0.20
769	57.300	8.40	1.81	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.12	0.00	0.00	0.21	0.20
770	57.200	8.40	1.81	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.11	0.00	0.00	0.21	0.20
771	57.100	8.40	1.81	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.11	0.00	0.00	0.21	0.20
772	57.000	8.40	1.82	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.10	0.00	0.00	0.21	0.20
773	56.900	8.40	1.82	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.10	0.00	0.00	0.21	0.20
774	56.800	8.40	1.82	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.09	0.00	0.00	0.21	0.20
775	56.700	8.40	1.82	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.09	0.00	0.00	0.21	0.20
776	56.600	8.40	1.83	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.09	0.00	0.00	0.21	0.20
777	56.500	8.40	1.83	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.08	0.00	0.00	0.21	0.20
778	56.400	8.40	1.83	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.08	0.00	0.00	0.21	0.20
779	56.300	8.40	1.83	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.07	0.00	0.00	0.21	0.20
780	56.200	8.40	1.84	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.07	0.00	0.00	0.21	0.20
781	56.100	8.40	1.84	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.06	0.00	0.00	0.21	0.20
782	56.000	8.40	1.84	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.06	0.00	0.00	0.21	0.20
783	55.900	8.40	1.84	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0.00	0.00	0.21	0.20
784	55.800	8.40	1.85	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0.00	0.00	0.21	0.20
785	55.700	8.40	1.85	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0.00	0.00	0.21	0.20
786	55.600	8.40	1.85	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.04	0.00	0.00	0.21	0.20
787	55.500	8.40	1.85	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.04	0.00	0.00	0.21	0.20
788	55.400	8.40	1.86	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.03	0.00	0.00	0.21	0.20
789	55.300	8.40	1.86	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.03	0.00	0.00	0.21	0.20
790	55.200	8.40	1.86	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.02	0.00	0.00	0.21	0.20



Big Creek – 080903 – Calibration model output:

791	55.100	8.40	1.86	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.02	0.00	0.00	0.21	0.20
792	55.000	8.40	1.87	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.00	0.00	0.21	0.20
793	54.900	8.40	1.87	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.00	0.00	0.21	0.20
794	54.800	8.40	1.87	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.00	0.00	0.21	0.20
795	54.700	8.40	1.87	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.21	0.20
796	54.600	8.40	1.88	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.21	0.20
797	54.500	8.40	1.88	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.99	0.00	0.00	0.21	0.20
798	54.400	8.40	1.88	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.99	0.00	0.00	0.21	0.20
799	54.300	8.40	1.88	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.20
800	54.200	8.40	1.89	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.20
801	54.100	8.40	1.89	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.97	0.00	0.00	0.21	0.20
802	54.000	8.40	1.89	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.97	0.00	0.00	0.21	0.20
803	53.900	8.40	1.89	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.97	0.00	0.00	0.21	0.20
804	53.800	8.40	1.90	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.00	0.00	0.21	0.20
805	53.700	8.40	1.90	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.96	0.00	0.00	0.21	0.20
806	53.600	8.40	1.90	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.95	0.00	0.00	0.21	0.20
807	53.500	8.40	1.90	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.95	0.00	0.00	0.21	0.20
808	53.400	8.40	1.91	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.00	0.00	0.21	0.20
809	53.300	8.40	1.91	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.94	0.00	0.00	0.21	0.20
810	53.200	8.40	1.91	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.00	0.21	0.20
811	53.100	8.40	1.92	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.00	0.21	0.20
812	53.000	8.40	1.92	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.00	0.21	0.20
813	52.900	8.40	1.92	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.21	0.20
814	52.800	8.40	1.92	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.21	0.20
815	52.700	8.40	1.93	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.00	0.00	0.21	0.20
816	52.600	8.40	1.93	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.00	0.00	0.21	0.20
817	52.500	8.40	1.93	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.00	0.00	0.21	0.20
818	52.400	8.40	1.93	0.08	0.20	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.00	0.00	0.21	0.20
819	52.300	8.40	1.94	0.08	0.19	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.00	0.00	0.21	0.19
820	52.200	8.40	1.94	0.08	0.19	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.00	0.00	0.21	0.19
821	52.100	8.40	1.94	0.08	0.19	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.00	0.00	0.21	0.19
822	52.000	8.40	1.94	0.08	0.19	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.00	0.00	0.21	0.19
823	51.900	8.40	1.95	0.08	0.19	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.00	0.00	0.21	0.19
824	51.800	8.40	1.95	0.08	0.19	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.00	0.00	0.21	0.19
825	51.700	8.40	1.95	0.08	0.19	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.00	0.00	0.21	0.19
826	51.600	8.40	1.95	0.08	0.19	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.86	0.00	0.00	0.21	0.19
827	51.500	8.40	1.96	0.08	0.19	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.86	0.00	0.00	0.21	0.19
828	51.400	8.40	1.96	0.08	0.19	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.00	0.00	0.21	0.19
829	51.300	8.40	1.96	0.08	0.19	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.00	0.00	0.21	0.19
830	51.200	8.40	1.96	0.08	0.19	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.00	0.00	0.21	0.19
831	51.100	8.40	1.97	0.08	0.19	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.00	0.21	0.19
832	51.000	8.40	1.97	0.08	0.19	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.00	0.21	0.19
833	50.900	8.40	1.97	0.08	0.19	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.00	0.00	0.21	0.19

20 DEG C RATE 0.07 0.00 1.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.16  
 AVG 20 DEG C RATE 1.71 0.18 0.00 0.18

\* g/sq m/d \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
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Big Creek – 080903 – Calibration model output:

742	60.000	24.10	0.00	0.00	0.00	7.39	7.26	7.26	0.00	0.00	0.00	0.00	0.00	20.50	0.00	0.00	0.96
743	59.900	24.10	0.00	0.00	0.00	7.33	7.27	7.27	0.00	0.00	0.00	0.00	0.00	20.42	0.00	0.00	0.95
744	59.800	24.10	0.00	0.00	0.00	7.27	7.29	7.29	0.00	0.00	0.00	0.00	0.00	20.35	0.00	0.00	0.94
745	59.700	24.10	0.00	0.00	0.00	7.23	7.30	7.30	0.00	0.00	0.00	0.00	0.00	20.28	0.00	0.00	0.93
746	59.600	24.10	0.00	0.00	0.00	7.18	7.32	7.32	0.00	0.00	0.00	0.00	0.00	20.20	0.00	0.00	0.92
747	59.500	24.10	0.00	0.00	0.00	7.15	7.33	7.33	0.00	0.00	0.00	0.00	0.00	20.13	0.00	0.00	0.91
748	59.400	24.10	0.00	0.00	0.00	7.12	7.35	7.35	0.00	0.00	0.00	0.00	0.00	20.05	0.00	0.00	0.90
749	59.300	24.10	0.00	0.00	0.00	7.09	7.36	7.36	0.00	0.00	0.00	0.00	0.00	19.98	0.00	0.00	0.89
750	59.200	24.10	0.00	0.00	0.00	7.07	7.37	7.37	0.00	0.00	0.00	0.00	0.00	19.91	0.00	0.00	0.88
751	59.100	24.10	0.00	0.00	0.00	7.05	7.38	7.38	0.00	0.00	0.00	0.00	0.00	19.83	0.00	0.00	0.87
752	59.000	24.10	0.00	0.00	0.00	7.03	7.40	7.40	0.00	0.00	0.00	0.00	0.00	19.76	0.00	0.00	0.86
753	58.900	24.10	0.00	0.00	0.00	7.01	7.41	7.41	0.00	0.00	0.00	0.00	0.00	19.69	0.00	0.00	0.85
754	58.800	24.10	0.00	0.00	0.00	7.00	7.42	7.42	0.00	0.00	0.00	0.00	0.00	19.61	0.00	0.00	0.84
755	58.700	24.10	0.00	0.00	0.00	6.99	7.43	7.43	0.00	0.00	0.00	0.00	0.00	19.54	0.00	0.00	0.84
756	58.600	24.10	0.00	0.00	0.00	6.98	7.44	7.44	0.00	0.00	0.00	0.00	0.00	19.46	0.00	0.00	0.83
757	58.500	24.10	0.00	0.00	0.00	6.97	7.45	7.45	0.00	0.00	0.00	0.00	0.00	19.39	0.00	0.00	0.82
758	58.400	24.10	0.00	0.00	0.00	6.96	7.46	7.46	0.00	0.00	0.00	0.00	0.00	19.32	0.00	0.00	0.82
759	58.300	24.10	0.00	0.00	0.00	6.95	7.47	7.47	0.00	0.00	0.00	0.00	0.00	19.24	0.00	0.00	0.81
760	58.200	24.10	0.00	0.00	0.00	6.95	7.47	7.47	0.00	0.00	0.00	0.00	0.00	19.24	0.00	0.00	0.81
760	58.200	24.10	0.00	0.00	0.00	7.08	7.41	7.41	0.00	0.00	0.00	0.00	0.00	19.17	0.00	0.00	0.78
761	58.100	24.10	0.00	0.00	0.00	7.07	7.42	7.42	0.00	0.00	0.00	0.00	0.00	19.10	0.00	0.00	0.78
762	58.000	24.10	0.00	0.00	0.00	7.05	7.43	7.43	0.00	0.00	0.00	0.00	0.00	19.02	0.00	0.00	0.77
763	57.900	24.10	0.00	0.00	0.00	7.04	7.44	7.44	0.00	0.00	0.00	0.00	0.00	18.95	0.00	0.00	0.77
764	57.800	24.10	0.00	0.00	0.00	7.03	7.45	7.45	0.00	0.00	0.00	0.00	0.00	18.87	0.00	0.00	0.76
765	57.700	24.10	0.00	0.00	0.00	7.02	7.46	7.46	0.00	0.00	0.00	0.00	0.00	18.80	0.00	0.00	0.76
766	57.600	24.10	0.00	0.00	0.00	7.01	7.46	7.46	0.00	0.00	0.00	0.00	0.00	18.73	0.00	0.00	0.76
767	57.500	24.10	0.00	0.00	0.00	7.00	7.47	7.47	0.00	0.00	0.00	0.00	0.00	18.65	0.00	0.00	0.75
768	57.400	24.10	0.00	0.00	0.00	6.99	7.48	7.48	0.00	0.00	0.00	0.00	0.00	18.58	0.00	0.00	0.75
769	57.300	24.10	0.00	0.00	0.00	6.98	7.49	7.49	0.00	0.00	0.00	0.00	0.00	18.51	0.00	0.00	0.74
770	57.200	24.10	0.00	0.00	0.00	6.98	7.49	7.49	0.00	0.00	0.00	0.00	0.00	18.43	0.00	0.00	0.74
771	57.100	24.10	0.00	0.00	0.00	6.97	7.50	7.50	0.00	0.00	0.00	0.00	0.00	18.36	0.00	0.00	0.74
772	57.000	24.10	0.00	0.00	0.00	6.97	7.51	7.51	0.00	0.00	0.00	0.00	0.00	18.29	0.00	0.00	0.73
773	56.900	24.10	0.00	0.00	0.00	6.96	7.51	7.51	0.00	0.00	0.00	0.00	0.00	18.21	0.00	0.00	0.73
774	56.800	24.10	0.00	0.00	0.00	6.96	7.52	7.52	0.00	0.00	0.00	0.00	0.00	18.14	0.00	0.00	0.73
775	56.700	24.10	0.00	0.00	0.00	6.96	7.53	7.53	0.00	0.00	0.00	0.00	0.00	18.06	0.00	0.00	0.73
776	56.600	24.10	0.00	0.00	0.00	6.95	7.53	7.53	0.00	0.00	0.00	0.00	0.00	17.99	0.00	0.00	0.72
777	56.500	24.10	0.00	0.00	0.00	6.95	7.54	7.54	0.00	0.00	0.00	0.00	0.00	17.92	0.00	0.00	0.72
778	56.400	24.10	0.00	0.00	0.00	6.95	7.54	7.54	0.00	0.00	0.00	0.00	0.00	17.84	0.00	0.00	0.72
779	56.300	24.10	0.00	0.00	0.00	6.95	7.55	7.55	0.00	0.00	0.00	0.00	0.00	17.77	0.00	0.00	0.71
780	56.200	24.10	0.00	0.00	0.00	6.95	7.55	7.55	0.00	0.00	0.00	0.00	0.00	17.70	0.00	0.00	0.71
781	56.100	24.10	0.00	0.00	0.00	6.94	7.56	7.56	0.00	0.00	0.00	0.00	0.00	17.62	0.00	0.00	0.71
782	56.000	24.10	0.00	0.00	0.00	6.94	7.56	7.56	0.00	0.00	0.00	0.00	0.00	17.55	0.00	0.00	0.71
783	55.900	24.10	0.00	0.00	0.00	6.94	7.57	7.57	0.00	0.00	0.00	0.00	0.00	17.47	0.00	0.00	0.70
784	55.800	24.10	0.00	0.00	0.00	6.94	7.57	7.57	0.00	0.00	0.00	0.00	0.00	17.40	0.00	0.00	0.70
785	55.700	24.10	0.00	0.00	0.00	6.94	7.58	7.58	0.00	0.00	0.00	0.00	0.00	17.33	0.00	0.00	0.70
786	55.600	24.10	0.00	0.00	0.00	6.94	7.58	7.58	0.00	0.00	0.00	0.00	0.00	17.25	0.00	0.00	0.70
787	55.500	24.10	0.00	0.00	0.00	6.94	7.58	7.58	0.00	0.00	0.00	0.00	0.00	17.18	0.00	0.00	0.70
788	55.400	24.10	0.00	0.00	0.00	6.94	7.59	7.59	0.00	0.00	0.00	0.00	0.00	17.11	0.00	0.00	0.69
789	55.300	24.10	0.00	0.00	0.00	6.94	7.59	7.59	0.00	0.00	0.00	0.00	0.00	17.03	0.00	0.00	0.69
790	55.200	24.10	0.00	0.00	0.00	6.93	7.60	7.60	0.00	0.00	0.00	0.00	0.00	16.96	0.00	0.00	0.69
791	55.100	24.10	0.00	0.00	0.00	6.93	7.60	7.60	0.00	0.00	0.00	0.00	0.00	16.89	0.00	0.00	0.69
792	55.000	24.10	0.00	0.00	0.00	6.93	7.60	7.60	0.00	0.00	0.00	0.00	0.00	16.81	0.00	0.00	0.69
793	54.900	24.10	0.00	0.00	0.00	6.93	7.61	7.61	0.00	0.00	0.00	0.00	0.00	16.74	0.00	0.00	0.69
794	54.800	24.10	0.00	0.00	0.00	6.93	7.61	7.61	0.00	0.00	0.00	0.00	0.00	16.66	0.00	0.00	0.68
795	54.700	24.10	0.00	0.00	0.00	6.93	7.61	7.61	0.00	0.00	0.00	0.00	0.00	16.59	0.00	0.00	0.68
796	54.600	24.10	0.00	0.00	0.00	6.93	7.62	7.62	0.00	0.00	0.00	0.00	0.00	16.52	0.00	0.00	0.68

Big Creek – 080903 – Calibration model output:

797	54.500	24.10	0.00	0.00	0.00	6.93	7.62	7.62	0.00	0.00	0.00	0.00	0.00	16.44	0.00	0.00	0.68
798	54.400	24.10	0.00	0.00	0.00	6.93	7.62	7.62	0.00	0.00	0.00	0.00	0.00	16.37	0.00	0.00	0.68
799	54.300	24.10	0.00	0.00	0.00	6.93	7.62	7.62	0.00	0.00	0.00	0.00	0.00	16.30	0.00	0.00	0.68
800	54.200	24.10	0.00	0.00	0.00	6.93	7.63	7.63	0.00	0.00	0.00	0.00	0.00	16.22	0.00	0.00	0.67
801	54.100	24.10	0.00	0.00	0.00	6.93	7.63	7.63	0.00	0.00	0.00	0.00	0.00	16.15	0.00	0.00	0.67
802	54.000	24.10	0.00	0.00	0.00	6.93	7.63	7.63	0.00	0.00	0.00	0.00	0.00	16.07	0.00	0.00	0.67
803	53.900	24.10	0.00	0.00	0.00	6.93	7.63	7.63	0.00	0.00	0.00	0.00	0.00	16.00	0.00	0.00	0.67
804	53.800	24.10	0.00	0.00	0.00	6.93	7.64	7.64	0.00	0.00	0.00	0.00	0.00	15.93	0.00	0.00	0.67
805	53.700	24.10	0.00	0.00	0.00	6.93	7.64	7.64	0.00	0.00	0.00	0.00	0.00	15.85	0.00	0.00	0.67
806	53.600	24.10	0.00	0.00	0.00	6.93	7.64	7.64	0.00	0.00	0.00	0.00	0.00	15.78	0.00	0.00	0.67
807	53.500	24.10	0.00	0.00	0.00	6.93	7.64	7.64	0.00	0.00	0.00	0.00	0.00	15.71	0.00	0.00	0.67
808	53.400	24.10	0.00	0.00	0.00	6.93	7.65	7.65	0.00	0.00	0.00	0.00	0.00	15.63	0.00	0.00	0.67
809	53.300	24.10	0.00	0.00	0.00	6.93	7.65	7.65	0.00	0.00	0.00	0.00	0.00	15.56	0.00	0.00	0.66
810	53.200	24.10	0.00	0.00	0.00	6.93	7.65	7.65	0.00	0.00	0.00	0.00	0.00	15.48	0.00	0.00	0.66
811	53.100	24.10	0.00	0.00	0.00	6.93	7.65	7.65	0.00	0.00	0.00	0.00	0.00	15.41	0.00	0.00	0.66
812	53.000	24.10	0.00	0.00	0.00	6.93	7.65	7.65	0.00	0.00	0.00	0.00	0.00	15.34	0.00	0.00	0.66
813	52.900	24.10	0.00	0.00	0.00	6.93	7.66	7.66	0.00	0.00	0.00	0.00	0.00	15.26	0.00	0.00	0.66
814	52.800	24.10	0.00	0.00	0.00	6.93	7.66	7.66	0.00	0.00	0.00	0.00	0.00	15.19	0.00	0.00	0.66
815	52.700	24.10	0.00	0.00	0.00	6.93	7.66	7.66	0.00	0.00	0.00	0.00	0.00	15.12	0.00	0.00	0.66
816	52.600	24.10	0.00	0.00	0.00	6.93	7.66	7.66	0.00	0.00	0.00	0.00	0.00	15.04	0.00	0.00	0.66
817	52.500	24.10	0.00	0.00	0.00	6.93	7.66	7.66	0.00	0.00	0.00	0.00	0.00	14.97	0.00	0.00	0.66
818	52.400	24.10	0.00	0.00	0.00	6.93	7.66	7.66	0.00	0.00	0.00	0.00	0.00	14.90	0.00	0.00	0.66
819	52.300	24.10	0.00	0.00	0.00	6.93	7.67	7.67	0.00	0.00	0.00	0.00	0.00	14.82	0.00	0.00	0.66
820	52.200	24.10	0.00	0.00	0.00	6.93	7.67	7.67	0.00	0.00	0.00	0.00	0.00	14.75	0.00	0.00	0.65
821	52.100	24.10	0.00	0.00	0.00	6.93	7.67	7.67	0.00	0.00	0.00	0.00	0.00	14.67	0.00	0.00	0.65
822	52.000	24.10	0.00	0.00	0.00	6.93	7.67	7.67	0.00	0.00	0.00	0.00	0.00	14.60	0.00	0.00	0.65
823	51.900	24.10	0.00	0.00	0.00	6.93	7.67	7.67	0.00	0.00	0.00	0.00	0.00	14.53	0.00	0.00	0.65
824	51.800	24.10	0.00	0.00	0.00	6.93	7.67	7.67	0.00	0.00	0.00	0.00	0.00	14.45	0.00	0.00	0.65
825	51.700	24.10	0.00	0.00	0.00	6.93	7.67	7.67	0.00	0.00	0.00	0.00	0.00	14.38	0.00	0.00	0.65
826	51.600	24.10	0.00	0.00	0.00	6.93	7.68	7.68	0.00	0.00	0.00	0.00	0.00	14.31	0.00	0.00	0.65
827	51.500	24.10	0.00	0.00	0.00	6.93	7.68	7.68	0.00	0.00	0.00	0.00	0.00	14.23	0.00	0.00	0.65
828	51.400	24.10	0.00	0.00	0.00	6.93	7.68	7.68	0.00	0.00	0.00	0.00	0.00	14.16	0.00	0.00	0.65
829	51.300	24.10	0.00	0.00	0.00	6.93	7.68	7.68	0.00	0.00	0.00	0.00	0.00	14.08	0.00	0.00	0.65
830	51.200	24.10	0.00	0.00	0.00	6.93	7.68	7.68	0.00	0.00	0.00	0.00	0.00	14.01	0.00	0.00	0.65
831	51.100	24.10	0.00	0.00	0.00	6.93	7.68	7.68	0.00	0.00	0.00	0.00	0.00	13.94	0.00	0.00	0.65
832	51.000	24.10	0.00	0.00	0.00	6.93	7.68	7.68	0.00	0.00	0.00	0.00	0.00	13.86	0.00	0.00	0.65
833	50.900	24.10	0.00	0.00	0.00	6.93	7.68	7.68	0.00	0.00	0.00	0.00	0.00	13.79	0.00	0.00	0.65

\* CM-I = CHLORIDES  
MG/L

CM-II = SULFATES  
MG/L

NCM = NBOD  
MG/L

\*\* g/cu m

FINAL REPORT BIG CREEK  
REACH NO. 7 WEIR #5

Big Creek - STREAM MODEL  
WATER QUALITY CALIBRATION

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
834	UPR RCH	0.46720	24.10	0.00	0.00	0.00	6.93	7.68	7.68	0.00	0.00	0.00	0.00	13.79	0.00	0.65
EACH	INCR	0.0020	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00

Big Creek – 080903 – Calibration model output:

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
834	50.90	50.80	0.46920	10.91	0.00839	0.14	1.75	32.03	5594.29	3202.75	55.94	0.00	0.000	0.007	0.008
TOT						0.14			5594.29	3202.75					
AVG					0.00839		1.75	32.03			55.94				
CUM						140.37									

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

ELEM NO.	ENDING DIST	SAT D.O.	REAER RATE	CBOD DECA	CBOD SETT	ANBOD DECA	BKGD SOD	FULL SOD	CORR SOD	ORGN DECA	ORGN SETT	NH3 DECA	NH3 SRCE	DENIT RATE	PO4 SRCE	ALG PROD	MAC PROD	COLI DECA	NCM DECA	NCM SETT	
		mg/L	1/da	1/da	1/da	1/da	*	*	*	1/da	1/da	1/da	*	1/da	*	**	**	1/da	1/da	1/da	
834	50.800	8.40	0.72	0.08	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.00	0.00	0.21	0.06	
20 DEG C RATE				0.07		0.00	0.00			0.00		0.00	0.00	0.00	0.00			0.00	0.16		
AVG 20 DEG C RATE			0.66		0.06					0.00										0.06	

\* g/sq m/d                      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
834	50.800	24.10	0.00	0.00	0.00	7.04	7.50	7.50	0.00	0.00	0.00	0.00	0.00	13.79	0.00	0.00	0.62

\* CM-I = CHLORIDES MG/L                      CM-II = SULFATES MG/L                      NCM = NBOD MG/L  
 \*\* g/cu m

FINAL REPORT                      BIG CREEK                      Big Creek - STREAM MODEL  
 REACH NO. 8                      BIG CREEK, WEIR #5 TO WEIR #4                      WATER QUALITY CALIBRATION

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
835	UPR RCH	0.46920	24.10	0.00	0.00	0.00	7.04	7.50	7.50	0.00	0.00	0.00	0.00	13.79	0.00	0.62
EACH	INCR	0.0020	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
861	WSTLD	0.00570	24.10	0.00	0.00	0.00	9.43	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.46

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

Big Creek – 080903 – Calibration model output:

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
835	50.80	50.70	0.47122	10.87	0.00842	0.14	1.75	32.03	5595.03	3202.99	55.95	0.00	0.000	0.007	0.008
836	50.70	50.60	0.47325	10.82	0.00846	0.14	1.75	32.03	5595.77	3203.23	55.96	0.00	0.000	0.007	0.008
837	50.60	50.50	0.47527	10.77	0.00849	0.14	1.75	32.03	5596.50	3203.47	55.97	0.00	0.000	0.008	0.008
838	50.50	50.40	0.47729	10.73	0.00853	0.14	1.75	32.04	5597.23	3203.71	55.97	0.00	0.000	0.008	0.009
839	50.40	50.30	0.47932	10.68	0.00856	0.14	1.75	32.04	5597.96	3203.95	55.98	0.00	0.000	0.008	0.009
840	50.30	50.20	0.48134	10.64	0.00860	0.13	1.75	32.04	5598.69	3204.19	55.99	0.00	0.000	0.008	0.009
841	50.20	50.10	0.48336	10.59	0.00863	0.13	1.75	32.04	5599.41	3204.43	55.99	0.00	0.000	0.008	0.009
842	50.10	50.00	0.48539	10.55	0.00867	0.13	1.75	32.05	5600.13	3204.66	56.00	0.00	0.000	0.008	0.009
843	50.00	49.90	0.48741	10.50	0.00870	0.13	1.75	32.05	5600.85	3204.90	56.01	0.00	0.000	0.008	0.009
844	49.90	49.80	0.48943	10.46	0.00874	0.13	1.75	32.05	5601.57	3205.13	56.02	0.00	0.000	0.008	0.009
845	49.80	49.70	0.49146	10.42	0.00877	0.13	1.75	32.05	5602.28	3205.37	56.02	0.00	0.000	0.008	0.009
846	49.70	49.60	0.49348	10.38	0.00881	0.13	1.75	32.06	5602.99	3205.60	56.03	0.00	0.000	0.008	0.009
847	49.60	49.50	0.49550	10.33	0.00884	0.13	1.75	32.06	5603.71	3205.84	56.04	0.00	0.000	0.008	0.009
848	49.50	49.40	0.49753	10.29	0.00888	0.13	1.75	32.06	5604.41	3206.07	56.04	0.00	0.000	0.008	0.009
849	49.40	49.30	0.49955	10.25	0.00891	0.13	1.75	32.06	5605.12	3206.30	56.05	0.00	0.000	0.008	0.009
850	49.30	49.20	0.50157	10.21	0.00895	0.13	1.75	32.07	5605.82	3206.53	56.06	0.00	0.000	0.008	0.009
851	49.20	49.10	0.50360	10.17	0.00898	0.13	1.75	32.07	5606.52	3206.76	56.07	0.00	0.000	0.008	0.009
852	49.10	49.00	0.50562	10.13	0.00902	0.13	1.75	32.07	5607.22	3206.99	56.07	0.00	0.000	0.008	0.009
853	49.00	48.90	0.50764	10.09	0.00905	0.13	1.75	32.07	5607.92	3207.22	56.08	0.00	0.000	0.008	0.009
854	48.90	48.80	0.50967	10.05	0.00909	0.13	1.75	32.07	5608.62	3207.45	56.09	0.00	0.000	0.008	0.009
855	48.80	48.70	0.51169	10.01	0.00912	0.13	1.75	32.08	5609.31	3207.68	56.09	0.00	0.000	0.008	0.009
856	48.70	48.60	0.51371	9.97	0.00916	0.13	1.75	32.08	5610.00	3207.90	56.10	0.00	0.000	0.008	0.009
857	48.60	48.50	0.51574	9.93	0.00919	0.13	1.75	32.08	5610.69	3208.13	56.11	0.00	0.000	0.008	0.009
858	48.50	48.40	0.51776	9.89	0.00923	0.13	1.75	32.08	5611.38	3208.36	56.11	0.00	0.000	0.008	0.009
859	48.40	48.30	0.51978	9.85	0.00926	0.12	1.75	32.09	5612.06	3208.58	56.12	0.00	0.000	0.008	0.009
860	48.30	48.20	0.52181	9.81	0.00930	0.12	1.75	32.09	5612.74	3208.81	56.13	0.00	0.000	0.008	0.009
861	48.20	48.10	0.52383	9.77	0.00933	0.12	1.75	32.09	5613.42	3209.03	56.13	0.00	0.000	0.008	0.009
862	48.10	48.00	0.52585	9.73	0.00936	0.12	1.75	32.09	5614.10	3209.25	56.14	0.00	0.000	0.008	0.009
863	48.00	47.90	0.52787	9.69	0.00939	0.12	1.75	32.09	5614.78	3209.47	56.14	0.00	0.000	0.008	0.009
864	47.90	47.80	0.52989	9.65	0.00942	0.12	1.75	32.09	5615.46	3209.69	56.15	0.00	0.000	0.008	0.009
865	47.80	47.70	0.53191	9.61	0.00945	0.12	1.75	32.09	5616.14	3209.91	56.15	0.00	0.000	0.008	0.009
866	47.70	47.60	0.53393	9.57	0.00948	0.12	1.75	32.09	5616.82	3210.13	56.16	0.00	0.000	0.008	0.009
867	47.60	47.50	0.53595	9.53	0.00951	0.12	1.75	32.09	5617.50	3210.35	56.16	0.00	0.000	0.008	0.009
868	47.50	47.40	0.53797	9.49	0.00954	0.12	1.75	32.09	5618.18	3210.57	56.17	0.00	0.000	0.008	0.009
869	47.40	47.30	0.53999	9.45	0.00957	0.12	1.75	32.09	5618.86	3210.79	56.17	0.00	0.000	0.008	0.009
870	47.30	47.20	0.54201	9.41	0.00960	0.12	1.75	32.09	5619.54	3211.01	56.18	0.00	0.000	0.008	0.009
871	47.20	47.10	0.54403	9.37	0.00963	0.12	1.75	32.09	5620.22	3211.23	56.18	0.00	0.000	0.008	0.009
872	47.10	47.00	0.54605	9.33	0.00966	0.12	1.75	32.09	5620.90	3211.45	56.19	0.00	0.000	0.008	0.009
873	47.00	46.90	0.54807	9.29	0.00969	0.12	1.75	32.09	5621.58	3211.67	56.19	0.00	0.000	0.008	0.009
874	46.90	46.80	0.55009	9.25	0.00972	0.12	1.75	32.09	5622.26	3211.89	56.20	0.00	0.000	0.008	0.009
875	46.80	46.70	0.55211	9.21	0.00975	0.12	1.75	32.09	5622.94	3212.11	56.20	0.00	0.000	0.008	0.009
876	46.70	46.60	0.55413	9.17	0.00978	0.12	1.75	32.09	5623.62	3212.33	56.21	0.00	0.000	0.008	0.009
877	46.60	46.50	0.55615	9.13	0.00981	0.12	1.75	32.09	5624.30	3212.55	56.21	0.00	0.000	0.008	0.009
878	46.50	46.40	0.55817	9.09	0.00984	0.12	1.75	32.09	5624.98	3212.77	56.22	0.00	0.000	0.008	0.009
879	46.40	46.30	0.56019	9.05	0.00987	0.12	1.75	32.09	5625.66	3212.99	56.22	0.00	0.000	0.008	0.009
880	46.30	46.20	0.56221	9.01	0.00990	0.12	1.75	32.09	5626.34	3213.21	56.23	0.00	0.000	0.008	0.009
881	46.20	46.10	0.56423	8.97	0.00993	0.12	1.75	32.09	5627.02	3213.43	56.23	0.00	0.000	0.008	0.009
882	46.10	46.00	0.56625	8.93	0.00996	0.12	1.75	32.09	5627.70	3213.65	56.24	0.00	0.000	0.008	0.009
883	46.00	45.90	0.56827	8.89	0.00999	0.12	1.75	32.09	5628.38	3213.87	56.24	0.00	0.000	0.008	0.009
884	45.90	45.80	0.57029	8.85	0.01002	0.12	1.75	32.09	5629.06	3214.09	56.25	0.00	0.000	0.008	0.009

Big Creek – 080903 – Calibration model output:

885	45.80	45.70	0.57809	9.84	0.01027	0.11	1.75	32.15	5630.98	3214.81	56.31	0.00	0.000	0.009	0.010
886	45.70	45.60	0.58011	9.81	0.01030	0.11	1.75	32.15	5631.61	3215.02	56.32	0.00	0.000	0.009	0.010
887	45.60	45.50	0.58213	9.77	0.01034	0.11	1.75	32.15	5632.24	3215.23	56.32	0.00	0.000	0.009	0.010
888	45.50	45.40	0.58416	9.74	0.01037	0.11	1.75	32.15	5632.86	3215.44	56.33	0.00	0.000	0.009	0.010
889	45.40	45.30	0.58618	9.71	0.01041	0.11	1.75	32.16	5633.49	3215.64	56.33	0.00	0.000	0.009	0.010
890	45.30	45.20	0.58820	9.67	0.01044	0.11	1.75	32.16	5634.11	3215.85	56.34	0.00	0.000	0.009	0.010
891	45.20	45.10	0.59023	9.64	0.01047	0.11	1.75	32.16	5634.73	3216.05	56.35	0.00	0.000	0.009	0.010
892	45.10	45.00	0.59225	9.61	0.01051	0.11	1.75	32.16	5635.35	3216.26	56.35	0.00	0.000	0.009	0.011
893	45.00	44.90	0.59427	9.57	0.01054	0.11	1.75	32.16	5635.97	3216.46	56.36	0.00	0.000	0.009	0.011
894	44.90	44.80	0.59630	9.54	0.01058	0.11	1.75	32.17	5636.59	3216.67	56.37	0.00	0.000	0.009	0.011
895	44.80	44.70	0.59832	9.51	0.01061	0.11	1.75	32.17	5637.21	3216.87	56.37	0.00	0.000	0.009	0.011
896	44.70	44.60	0.60034	9.48	0.01065	0.11	1.75	32.17	5637.82	3217.07	56.38	0.00	0.000	0.009	0.011
897	44.60	44.50	0.60237	9.45	0.01068	0.11	1.75	32.17	5638.43	3217.28	56.38	0.00	0.000	0.009	0.011
898	44.50	44.40	0.60439	9.41	0.01072	0.11	1.75	32.17	5639.04	3217.48	56.39	0.00	0.000	0.010	0.011
899	44.40	44.30	0.60641	9.38	0.01075	0.11	1.75	32.18	5639.65	3217.68	56.40	0.00	0.000	0.010	0.011
900	44.30	44.20	0.60844	9.35	0.01079	0.11	1.75	32.18	5640.26	3217.88	56.40	0.00	0.000	0.010	0.011
901	44.20	44.10	0.61046	9.32	0.01082	0.11	1.75	32.18	5640.86	3218.08	56.41	0.00	0.000	0.010	0.011
902	44.10	44.00	0.61248	9.29	0.01086	0.11	1.75	32.18	5641.47	3218.28	56.41	0.00	0.000	0.010	0.011
903	44.00	43.90	0.61451	9.26	0.01089	0.11	1.75	32.18	5642.07	3218.48	56.42	0.00	0.000	0.010	0.011
904	43.90	43.80	0.61653	9.23	0.01093	0.11	1.75	32.19	5642.67	3218.68	56.43	0.00	0.000	0.010	0.011
905	43.80	43.70	0.61855	9.20	0.01096	0.11	1.75	32.19	5643.27	3218.88	56.43	0.00	0.000	0.010	0.011
906	43.70	43.60	0.62058	9.17	0.01100	0.11	1.75	32.19	5643.87	3219.08	56.44	0.00	0.000	0.010	0.011
907	43.60	43.50	0.62260	9.14	0.01103	0.10	1.75	32.19	5644.47	3219.27	56.44	0.00	0.000	0.010	0.011
908	43.50	43.40	0.62462	9.11	0.01106	0.10	1.75	32.19	5645.06	3219.47	56.45	0.00	0.000	0.010	0.011
909	43.40	43.30	0.62665	9.08	0.01110	0.10	1.75	32.20	5645.66	3219.67	56.46	0.00	0.000	0.010	0.011
910	43.30	43.20	0.62867	9.05	0.01113	0.10	1.75	32.20	5646.25	3219.86	56.46	0.00	0.000	0.010	0.011
911	43.20	43.10	0.63069	9.02	0.01117	0.10	1.75	32.20	5646.84	3220.06	56.47	0.00	0.000	0.010	0.011
912	43.10	43.00	0.63272	8.99	0.01120	0.10	1.75	32.20	5647.43	3220.26	56.47	0.00	0.000	0.010	0.011
913	43.00	42.90	0.63474	8.96	0.01124	0.10	1.75	32.20	5648.02	3220.45	56.48	0.00	0.000	0.010	0.011
914	42.90	42.80	0.63676	8.94	0.01127	0.10	1.75	32.21	5648.61	3220.64	56.49	0.00	0.000	0.010	0.011
915	42.80	42.70	0.63879	8.91	0.01131	0.10	1.75	32.21	5649.19	3220.84	56.49	0.00	0.000	0.010	0.011
916	42.70	42.60	0.64081	8.88	0.01134	0.10	1.75	32.21	5649.78	3221.03	56.50	0.00	0.000	0.010	0.011
917	42.60	42.50	0.64283	8.85	0.01138	0.10	1.75	32.21	5650.36	3221.23	56.50	0.00	0.000	0.010	0.011
918	42.50	42.40	0.64486	8.82	0.01141	0.10	1.75	32.21	5650.94	3221.42	56.51	0.00	0.000	0.010	0.011
919	42.40	42.30	0.64688	8.80	0.01145	0.10	1.75	32.22	5651.52	3221.61	56.52	0.00	0.000	0.010	0.011
920	42.30	42.20	0.64890	8.77	0.01148	0.10	1.75	32.22	5652.10	3221.80	56.52	0.00	0.000	0.010	0.011
921	42.20	42.10	0.65093	8.74	0.01152	0.10	1.75	32.22	5652.68	3221.99	56.53	0.00	0.000	0.010	0.012
922	42.10	42.00	0.65295	8.71	0.01155	0.10	1.75	32.22	5653.25	3222.18	56.53	0.00	0.000	0.010	0.012
923	42.00	41.90	0.65497	8.69	0.01158	0.10	1.75	32.22	5653.83	3222.38	56.54	0.00	0.000	0.010	0.012
924	41.90	41.80	0.65700	8.66	0.01162	0.10	1.75	32.23	5654.40	3222.57	56.54	0.00	0.000	0.010	0.012
925	41.80	41.70	0.65902	8.63	0.01165	0.10	1.75	32.23	5654.97	3222.75	56.55	0.00	0.000	0.010	0.012
926	41.70	41.60	0.66104	8.61	0.01169	0.10	1.75	32.23	5655.54	3222.94	56.56	0.00	0.000	0.010	0.012
927	41.60	41.50	0.66307	8.58	0.01172	0.10	1.75	32.23	5656.11	3223.13	56.56	0.00	0.000	0.010	0.012
928	41.50	41.40	0.66509	8.56	0.01176	0.10	1.75	32.23	5656.68	3223.32	56.57	0.00	0.000	0.010	0.012
929	41.40	41.30	0.66711	8.53	0.01179	0.10	1.75	32.24	5657.25	3223.51	56.57	0.00	0.000	0.010	0.012
930	41.30	41.20	0.66914	8.50	0.01183	0.10	1.76	32.24	5657.81	3223.70	56.58	0.00	0.000	0.011	0.012
931	41.20	41.10	0.67116	8.48	0.01186	0.10	1.76	32.24	5658.38	3223.88	56.58	0.00	0.000	0.011	0.012
932	41.10	41.00	0.67318	8.45	0.01190	0.10	1.76	32.24	5658.94	3224.07	56.59	0.00	0.000	0.011	0.012
933	41.00	40.90	0.67521	8.43	0.01193	0.10	1.76	32.24	5659.50	3224.26	56.60	0.00	0.000	0.011	0.012
934	40.90	40.80	0.67723	8.40	0.01197	0.10	1.76	32.24	5660.06	3224.44	56.60	0.00	0.000	0.011	0.012
935	40.80	40.70	0.67925	8.38	0.01200	0.10	1.76	32.25	5660.62	3224.63	56.61	0.00	0.000	0.011	0.012
936	40.70	40.60	0.68128	8.35	0.01203	0.10	1.76	32.25	5661.18	3224.81	56.61	0.00	0.000	0.011	0.012
937	40.60	40.50	0.68330	8.33	0.01207	0.10	1.76	32.25	5661.73	3225.00	56.62	0.00	0.000	0.011	0.012
938	40.50	40.40	0.68532	8.30	0.01210	0.10	1.76	32.25	5662.29	3225.18	56.62	0.00	0.000	0.011	0.012
939	40.40	40.30	0.68735	8.28	0.01214	0.10	1.76	32.25	5662.84	3225.37	56.63	0.00	0.000	0.011	0.012

Big Creek – 080903 – Calibration model output:

940	40.30	40.20	0.68937	8.25	0.01217	0.10	1.76	32.26	5663.40	3225.55	56.63	0.00	0.000	0.011	0.012
941	40.20	40.10	0.69139	8.23	0.01221	0.09	1.76	32.26	5663.95	3225.73	56.64	0.00	0.000	0.011	0.012
942	40.10	40.00	0.69341	8.21	0.01224	0.09	1.76	32.26	5664.50	3225.92	56.64	0.00	0.000	0.011	0.012
943	40.00	39.90	0.69544	8.18	0.01228	0.09	1.76	32.26	5665.05	3226.10	56.65	0.00	0.000	0.011	0.012
944	39.90	39.80	0.69746	8.16	0.01231	0.09	1.76	32.26	5665.59	3226.28	56.66	0.00	0.000	0.011	0.012
945	39.80	39.70	0.69948	8.13	0.01234	0.09	1.76	32.26	5666.14	3226.46	56.66	0.00	0.000	0.011	0.012
946	39.70	39.60	0.70151	8.11	0.01238	0.09	1.76	32.27	5666.69	3226.64	56.67	0.00	0.000	0.011	0.012
947	39.60	39.50	0.70353	8.09	0.01241	0.09	1.76	32.27	5667.23	3226.82	56.67	0.00	0.000	0.011	0.012
948	39.50	39.40	0.70555	8.06	0.01245	0.09	1.76	32.27	5667.77	3227.00	56.68	0.00	0.000	0.011	0.012
949	39.40	39.30	0.70758	8.04	0.01248	0.09	1.76	32.27	5668.31	3227.19	56.68	0.00	0.000	0.011	0.012
950	39.30	39.20	0.70960	8.02	0.01252	0.09	1.76	32.27	5668.86	3227.36	56.69	0.00	0.000	0.011	0.013
951	39.20	39.10	0.71162	8.00	0.01255	0.09	1.76	32.28	5669.40	3227.54	56.69	0.00	0.000	0.011	0.013
952	39.10	39.00	0.71365	7.97	0.01259	0.09	1.76	32.28	5669.93	3227.72	56.70	0.00	0.000	0.011	0.013
953	39.00	38.90	0.71567	7.95	0.01262	0.09	1.76	32.28	5670.47	3227.90	56.70	0.00	0.000	0.011	0.013
954	38.90	38.80	0.71769	7.93	0.01266	0.09	1.76	32.28	5671.01	3228.08	56.71	0.00	0.000	0.011	0.013
955	38.80	38.70	0.71972	7.91	0.01269	0.09	1.76	32.28	5671.54	3228.26	56.72	0.00	0.000	0.011	0.013
956	38.70	38.60	0.72174	7.88	0.01272	0.09	1.76	32.28	5672.08	3228.44	56.72	0.00	0.000	0.011	0.013
957	38.60	38.50	0.72376	7.86	0.01276	0.09	1.76	32.29	5672.61	3228.61	56.73	0.00	0.000	0.011	0.013
958	38.50	38.40	0.72579	7.84	0.01279	0.09	1.76	32.29	5673.14	3228.79	56.73	0.00	0.000	0.011	0.013
959	38.40	38.30	0.72781	7.82	0.01283	0.09	1.76	32.29	5673.67	3228.97	56.74	0.00	0.000	0.011	0.013
960	38.30	38.20	0.72983	7.80	0.01286	0.09	1.76	32.29	5674.20	3229.14	56.74	0.00	0.000	0.011	0.013
961	38.20	38.10	0.73186	7.77	0.01290	0.09	1.76	32.29	5674.73	3229.32	56.75	0.00	0.000	0.011	0.013
962	38.10	38.00	0.73388	7.75	0.01293	0.09	1.76	32.29	5675.25	3229.49	56.75	0.00	0.000	0.011	0.013
963	38.00	37.90	0.73590	7.73	0.01297	0.09	1.76	32.30	5675.78	3229.67	56.76	0.00	0.000	0.012	0.013
964	37.90	37.80	0.73793	7.71	0.01300	0.09	1.76	32.30	5676.30	3229.84	56.76	0.00	0.000	0.012	0.013
965	37.80	37.70	0.73995	7.69	0.01303	0.09	1.76	32.30	5676.83	3230.02	56.77	0.00	0.000	0.012	0.013
966	37.70	37.60	0.74197	7.67	0.01307	0.09	1.76	32.30	5677.35	3230.19	56.77	0.00	0.000	0.012	0.013
967	37.60	37.50	0.74400	7.65	0.01310	0.09	1.76	32.30	5677.87	3230.37	56.78	0.00	0.000	0.012	0.013
TOT								14.49		750032.50	427940.34				
AVG			0.01062					1.75	32.18			56.39			
CUM								154.86							

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECA 1/da	CBOD SETT 1/da	ANBOD DECA 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECA 1/da	ORGN SETT 1/da	NH3 DECA 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECA 1/da	NCM DECA 1/da	NCM SETT 1/da
835	50.700	8.40	0.72	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.00	0.00	0.21	0.06
836	50.600	8.40	0.72	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.00	0.00	0.21	0.06
837	50.500	8.40	0.72	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.00	0.00	0.21	0.06
838	50.400	8.40	0.72	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.83	0.00	0.00	0.21	0.06
839	50.300	8.40	0.72	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.00	0.21	0.06
840	50.200	8.40	0.72	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.00	0.21	0.06
841	50.100	8.40	0.72	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.00	0.21	0.06
842	50.000	8.40	0.72	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.00	0.21	0.06
843	49.900	8.40	0.72	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.00	0.21	0.06
844	49.800	8.40	0.72	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.00	0.21	0.06
845	49.700	8.40	0.72	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.00	0.21	0.06
846	49.600	8.40	0.72	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.00	0.21	0.06
847	49.500	8.40	0.72	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.00	0.21	0.06
848	49.400	8.40	0.72	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.00	0.21	0.06
849	49.300	8.40	0.72	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.00	0.00	0.21	0.06







**Big Creek – 080903 – Calibration model output:**

960	38.200	8.40	0.71	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.00	0.00	0.21	0.06
961	38.100	8.40	0.71	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.00	0.00	0.21	0.06
962	38.000	8.40	0.71	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.00	0.00	0.21	0.06
963	37.900	8.40	0.71	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.00	0.00	0.21	0.06
964	37.800	8.40	0.71	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.00	0.00	0.21	0.06
965	37.700	8.40	0.71	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.00	0.00	0.21	0.06
966	37.600	8.40	0.71	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.00	0.00	0.21	0.06
967	37.500	8.40	0.71	0.08	0.06	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.00	0.00	0.21	0.06

20 DEG C RATE				0.07		0.00	1.00			0.00		0.00	0.00	0.00	0.00			0.00	0.16	
AVG 20 DEG C RATE			0.66		0.06						0.00									0.06

\* g/sq m/d                      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
835	50.700	24.10	0.00	0.00	0.00	7.05	7.51	7.51	0.00	0.00	0.00	0.00	0.00	13.80	0.00	0.00	0.62
836	50.600	24.10	0.00	0.00	0.00	7.06	7.52	7.52	0.00	0.00	0.00	0.00	0.00	13.81	0.00	0.00	0.63
837	50.500	24.10	0.00	0.00	0.00	7.07	7.53	7.53	0.00	0.00	0.00	0.00	0.00	13.82	0.00	0.00	0.63
838	50.400	24.10	0.00	0.00	0.00	7.08	7.54	7.54	0.00	0.00	0.00	0.00	0.00	13.83	0.00	0.00	0.64
839	50.300	24.10	0.00	0.00	0.00	7.08	7.55	7.55	0.00	0.00	0.00	0.00	0.00	13.83	0.00	0.00	0.64
840	50.200	24.10	0.00	0.00	0.00	7.09	7.56	7.56	0.00	0.00	0.00	0.00	0.00	13.84	0.00	0.00	0.64
841	50.100	24.10	0.00	0.00	0.00	7.09	7.56	7.56	0.00	0.00	0.00	0.00	0.00	13.85	0.00	0.00	0.65
842	50.000	24.10	0.00	0.00	0.00	7.10	7.57	7.57	0.00	0.00	0.00	0.00	0.00	13.86	0.00	0.00	0.65
843	49.900	24.10	0.00	0.00	0.00	7.10	7.58	7.58	0.00	0.00	0.00	0.00	0.00	13.87	0.00	0.00	0.65
844	49.800	24.10	0.00	0.00	0.00	7.11	7.59	7.59	0.00	0.00	0.00	0.00	0.00	13.88	0.00	0.00	0.65
845	49.700	24.10	0.00	0.00	0.00	7.11	7.60	7.60	0.00	0.00	0.00	0.00	0.00	13.89	0.00	0.00	0.66
846	49.600	24.10	0.00	0.00	0.00	7.11	7.60	7.60	0.00	0.00	0.00	0.00	0.00	13.90	0.00	0.00	0.66
847	49.500	24.10	0.00	0.00	0.00	7.11	7.61	7.61	0.00	0.00	0.00	0.00	0.00	13.90	0.00	0.00	0.66
848	49.400	24.10	0.00	0.00	0.00	7.12	7.62	7.62	0.00	0.00	0.00	0.00	0.00	13.91	0.00	0.00	0.67
849	49.300	24.10	0.00	0.00	0.00	7.12	7.62	7.62	0.00	0.00	0.00	0.00	0.00	13.92	0.00	0.00	0.67
850	49.200	24.10	0.00	0.00	0.00	7.12	7.63	7.63	0.00	0.00	0.00	0.00	0.00	13.93	0.00	0.00	0.67
851	49.100	24.10	0.00	0.00	0.00	7.12	7.64	7.64	0.00	0.00	0.00	0.00	0.00	13.94	0.00	0.00	0.67
852	49.000	24.10	0.00	0.00	0.00	7.12	7.64	7.64	0.00	0.00	0.00	0.00	0.00	13.95	0.00	0.00	0.67
853	48.900	24.10	0.00	0.00	0.00	7.12	7.65	7.65	0.00	0.00	0.00	0.00	0.00	13.96	0.00	0.00	0.68
854	48.800	24.10	0.00	0.00	0.00	7.13	7.66	7.66	0.00	0.00	0.00	0.00	0.00	13.97	0.00	0.00	0.68
855	48.700	24.10	0.00	0.00	0.00	7.13	7.66	7.66	0.00	0.00	0.00	0.00	0.00	13.97	0.00	0.00	0.68
856	48.600	24.10	0.00	0.00	0.00	7.13	7.67	7.67	0.00	0.00	0.00	0.00	0.00	13.98	0.00	0.00	0.68
857	48.500	24.10	0.00	0.00	0.00	7.13	7.67	7.67	0.00	0.00	0.00	0.00	0.00	13.99	0.00	0.00	0.68
858	48.400	24.10	0.00	0.00	0.00	7.13	7.68	7.68	0.00	0.00	0.00	0.00	0.00	14.00	0.00	0.00	0.68
859	48.300	24.10	0.00	0.00	0.00	7.13	7.68	7.68	0.00	0.00	0.00	0.00	0.00	14.01	0.00	0.00	0.69
860	48.200	24.10	0.00	0.00	0.00	7.13	7.69	7.69	0.00	0.00	0.00	0.00	0.00	14.02	0.00	0.00	0.69
861	48.100	24.10	0.00	0.00	0.00	7.15	7.68	7.68	0.00	0.00	0.00	0.00	0.00	14.03	0.00	0.00	0.69
862	48.000	24.10	0.00	0.00	0.00	7.15	7.68	7.68	0.00	0.00	0.00	0.00	0.00	14.04	0.00	0.00	0.69
863	47.900	24.10	0.00	0.00	0.00	7.15	7.69	7.69	0.00	0.00	0.00	0.00	0.00	14.05	0.00	0.00	0.69
864	47.800	24.10	0.00	0.00	0.00	7.15	7.69	7.69	0.00	0.00	0.00	0.00	0.00	14.05	0.00	0.00	0.69
865	47.700	24.10	0.00	0.00	0.00	7.15	7.70	7.70	0.00	0.00	0.00	0.00	0.00	14.06	0.00	0.00	0.69
866	47.600	24.10	0.00	0.00	0.00	7.15	7.70	7.70	0.00	0.00	0.00	0.00	0.00	14.07	0.00	0.00	0.69
867	47.500	24.10	0.00	0.00	0.00	7.14	7.71	7.71	0.00	0.00	0.00	0.00	0.00	14.08	0.00	0.00	0.69
868	47.400	24.10	0.00	0.00	0.00	7.14	7.71	7.71	0.00	0.00	0.00	0.00	0.00	14.09	0.00	0.00	0.69
869	47.300	24.10	0.00	0.00	0.00	7.14	7.71	7.71	0.00	0.00	0.00	0.00	0.00	14.10	0.00	0.00	0.70



Big Creek – 080903 – Calibration model output:

925	41.700	24.10	0.00	0.00	0.00	7.15	7.83	7.83	0.00	0.00	0.00	0.00	0.00	14.59	0.00	0.00	0.72
926	41.600	24.10	0.00	0.00	0.00	7.15	7.83	7.83	0.00	0.00	0.00	0.00	0.00	14.60	0.00	0.00	0.72
927	41.500	24.10	0.00	0.00	0.00	7.15	7.83	7.83	0.00	0.00	0.00	0.00	0.00	14.61	0.00	0.00	0.72
928	41.400	24.10	0.00	0.00	0.00	7.15	7.83	7.83	0.00	0.00	0.00	0.00	0.00	14.62	0.00	0.00	0.72
929	41.300	24.10	0.00	0.00	0.00	7.15	7.83	7.83	0.00	0.00	0.00	0.00	0.00	14.63	0.00	0.00	0.72
930	41.200	24.10	0.00	0.00	0.00	7.15	7.83	7.83	0.00	0.00	0.00	0.00	0.00	14.63	0.00	0.00	0.72
931	41.100	24.10	0.00	0.00	0.00	7.15	7.83	7.83	0.00	0.00	0.00	0.00	0.00	14.64	0.00	0.00	0.72
932	41.000	24.10	0.00	0.00	0.00	7.15	7.83	7.83	0.00	0.00	0.00	0.00	0.00	14.65	0.00	0.00	0.72
933	40.900	24.10	0.00	0.00	0.00	7.15	7.83	7.83	0.00	0.00	0.00	0.00	0.00	14.66	0.00	0.00	0.72
934	40.800	24.10	0.00	0.00	0.00	7.15	7.83	7.83	0.00	0.00	0.00	0.00	0.00	14.67	0.00	0.00	0.72
935	40.700	24.10	0.00	0.00	0.00	7.16	7.83	7.83	0.00	0.00	0.00	0.00	0.00	14.68	0.00	0.00	0.72
936	40.600	24.10	0.00	0.00	0.00	7.16	7.83	7.83	0.00	0.00	0.00	0.00	0.00	14.69	0.00	0.00	0.72
937	40.500	24.10	0.00	0.00	0.00	7.16	7.83	7.83	0.00	0.00	0.00	0.00	0.00	14.70	0.00	0.00	0.72
938	40.400	24.10	0.00	0.00	0.00	7.16	7.83	7.83	0.00	0.00	0.00	0.00	0.00	14.70	0.00	0.00	0.72
939	40.300	24.10	0.00	0.00	0.00	7.16	7.83	7.83	0.00	0.00	0.00	0.00	0.00	14.71	0.00	0.00	0.72
940	40.200	24.10	0.00	0.00	0.00	7.16	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.72	0.00	0.00	0.72
941	40.100	24.10	0.00	0.00	0.00	7.16	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.73	0.00	0.00	0.72
942	40.000	24.10	0.00	0.00	0.00	7.16	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.74	0.00	0.00	0.72
943	39.900	24.10	0.00	0.00	0.00	7.16	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.75	0.00	0.00	0.72
944	39.800	24.10	0.00	0.00	0.00	7.16	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.76	0.00	0.00	0.72
945	39.700	24.10	0.00	0.00	0.00	7.16	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.77	0.00	0.00	0.72
946	39.600	24.10	0.00	0.00	0.00	7.16	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.78	0.00	0.00	0.72
947	39.500	24.10	0.00	0.00	0.00	7.16	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.78	0.00	0.00	0.72
948	39.400	24.10	0.00	0.00	0.00	7.16	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.79	0.00	0.00	0.72
949	39.300	24.10	0.00	0.00	0.00	7.16	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.80	0.00	0.00	0.72
950	39.200	24.10	0.00	0.00	0.00	7.16	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.81	0.00	0.00	0.72
951	39.100	24.10	0.00	0.00	0.00	7.16	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.82	0.00	0.00	0.72
952	39.000	24.10	0.00	0.00	0.00	7.17	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.83	0.00	0.00	0.72
953	38.900	24.10	0.00	0.00	0.00	7.17	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.84	0.00	0.00	0.72
954	38.800	24.10	0.00	0.00	0.00	7.17	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.85	0.00	0.00	0.72
955	38.700	24.10	0.00	0.00	0.00	7.17	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.85	0.00	0.00	0.72
956	38.600	24.10	0.00	0.00	0.00	7.17	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.86	0.00	0.00	0.72
957	38.500	24.10	0.00	0.00	0.00	7.17	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.87	0.00	0.00	0.72
958	38.400	24.10	0.00	0.00	0.00	7.17	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.88	0.00	0.00	0.72
959	38.300	24.10	0.00	0.00	0.00	7.17	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.89	0.00	0.00	0.72
960	38.200	24.10	0.00	0.00	0.00	7.17	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.90	0.00	0.00	0.72
961	38.100	24.10	0.00	0.00	0.00	7.17	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.91	0.00	0.00	0.72
962	38.000	24.10	0.00	0.00	0.00	7.17	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.92	0.00	0.00	0.72
963	37.900	24.10	0.00	0.00	0.00	7.17	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.92	0.00	0.00	0.72
964	37.800	24.10	0.00	0.00	0.00	7.17	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.93	0.00	0.00	0.72
965	37.700	24.10	0.00	0.00	0.00	7.17	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.94	0.00	0.00	0.72
966	37.600	24.10	0.00	0.00	0.00	7.17	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.95	0.00	0.00	0.72
967	37.500	24.10	0.00	0.00	0.00	7.18	7.84	7.84	0.00	0.00	0.00	0.00	0.00	14.96	0.00	0.00	0.72

\* CM-I = CHLORIDES  
MG/L

CM-II = SULFATES  
MG/L

NCM = NBOD  
MG/L

\*\* g/cu m

FINAL REPORT BIG CREEK  
REACH NO. 9 WEIR #4

Big Creek - STREAM MODEL  
WATER QUALITY CALIBRATION

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

**Big Creek – 080903 – Calibration model output:**

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
968	UPR RCH	0.74400	24.10	0.00	0.00	0.00	7.18	7.84	7.84	0.00	0.00	0.00	0.00	14.96	0.00	0.72
EACH	INCR	0.0020	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
968	37.50	37.40	0.74600	7.63	0.01314	0.09	1.76	32.31	5678.39	3230.54	56.78	0.00	0.000	0.012	0.013
TOT						0.09			5678.39	3230.54					
AVG					0.01314		1.76	32.31			56.78				
CUM						154.95									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECA 1/da	CBOD SETT 1/da	ANBOD DECA 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECA 1/da	ORGN SETT 1/da	NH3 DECA 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECA 1/da	NCM DECA 1/da	NCM SETT 1/da
968	37.400	8.40	0.71	0.08	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.00	0.00	0.21	0.06
20	DEG C RATE			0.07		0.00	0.00		0.00		0.00	0.00	0.00	0.00	0.00			0.00	0.16	
AVG	20 DEG C RATE		0.66		0.06					0.00										0.06

\* g/sq m/d                      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
968	37.400	24.10	0.00	0.00	0.00	7.24	7.72	7.72	0.00	0.00	0.00	0.00	0.00	14.96	0.00	0.00	0.70

\* CM-I = CHLORIDES MG/L                      CM-II = SULFATES MG/L                      NCM = NBOD MG/L  
 \*\* g/cu m

FINAL REPORT                      BIG CREEK                      Big Creek - STREAM MODEL  
 REACH NO. 10                      BIG CREEK, WEIR #4 TO WEIR #3                      WATER QUALITY CALIBRATION

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
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**Big Creek – 080903 – Calibration model output:**

969	UPR RCH	0.74600	24.10	0.00	0.00	0.00	7.24	7.72	7.72	0.00	0.00	0.00	0.00	14.96	0.00	0.70
EACH	INCR	0.0021	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1014	WSTLD	0.05010	24.10	0.00	0.00	0.00	11.00	6.74	6.74	0.00	0.00	0.00	0.00	0.00	0.00	0.07

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
969	37.40	37.30	0.74805	7.61	0.01043	0.11	1.76	40.81	7173.04	4080.71	71.73	0.00	0.000	0.009	0.010
970	37.30	37.20	0.75011	7.59	0.01046	0.11	1.76	40.81	7173.62	4080.89	71.74	0.00	0.000	0.009	0.010
971	37.20	37.10	0.75216	7.56	0.01048	0.11	1.76	40.81	7174.20	4081.06	71.74	0.00	0.000	0.009	0.010
972	37.10	37.00	0.75422	7.54	0.01051	0.11	1.76	40.81	7174.79	4081.24	71.75	0.00	0.000	0.009	0.011
973	37.00	36.90	0.75628	7.52	0.01054	0.11	1.76	40.81	7175.37	4081.41	71.75	0.00	0.000	0.009	0.011
974	36.90	36.80	0.75833	7.50	0.01057	0.11	1.76	40.82	7175.95	4081.59	71.76	0.00	0.000	0.009	0.011
975	36.80	36.70	0.76039	7.48	0.01060	0.11	1.76	40.82	7176.52	4081.76	71.77	0.00	0.000	0.009	0.011
976	36.70	36.60	0.76244	7.46	0.01062	0.11	1.76	40.82	7177.10	4081.93	71.77	0.00	0.000	0.009	0.011
977	36.60	36.50	0.76450	7.44	0.01065	0.11	1.76	40.82	7177.68	4082.11	71.78	0.00	0.000	0.009	0.011
978	36.50	36.40	0.76655	7.42	0.01068	0.11	1.76	40.82	7178.25	4082.28	71.78	0.00	0.000	0.009	0.011
979	36.40	36.30	0.76861	7.40	0.01071	0.11	1.76	40.82	7178.82	4082.45	71.79	0.00	0.000	0.010	0.011
980	36.30	36.20	0.77067	7.38	0.01073	0.11	1.76	40.83	7179.40	4082.62	71.79	0.00	0.000	0.010	0.011
981	36.20	36.10	0.77272	7.36	0.01076	0.11	1.76	40.83	7179.97	4082.80	71.80	0.00	0.000	0.010	0.011
982	36.10	36.00	0.77478	7.34	0.01079	0.11	1.76	40.83	7180.54	4082.97	71.81	0.00	0.000	0.010	0.011
983	36.00	35.90	0.77683	7.32	0.01082	0.11	1.76	40.83	7181.11	4083.14	71.81	0.00	0.000	0.010	0.011
984	35.90	35.80	0.77889	7.31	0.01085	0.11	1.76	40.83	7181.67	4083.31	71.82	0.00	0.000	0.010	0.011
985	35.80	35.70	0.78094	7.29	0.01087	0.11	1.76	40.83	7182.24	4083.48	71.82	0.00	0.000	0.010	0.011
986	35.70	35.60	0.78300	7.27	0.01090	0.11	1.76	40.84	7182.80	4083.65	71.83	0.00	0.000	0.010	0.011
987	35.60	35.50	0.78506	7.25	0.01093	0.11	1.76	40.84	7183.37	4083.82	71.83	0.00	0.000	0.010	0.011
988	35.50	35.40	0.78711	7.23	0.01096	0.11	1.76	40.84	7183.93	4083.99	71.84	0.00	0.000	0.010	0.011
989	35.40	35.30	0.78917	7.21	0.01098	0.11	1.76	40.84	7184.49	4084.16	71.84	0.00	0.000	0.010	0.011
990	35.30	35.20	0.79122	7.19	0.01101	0.11	1.76	40.84	7185.05	4084.33	71.85	0.00	0.000	0.010	0.011
991	35.20	35.10	0.79328	7.17	0.01104	0.10	1.76	40.84	7185.61	4084.49	71.86	0.00	0.000	0.010	0.011
992	35.10	35.00	0.79534	7.15	0.01107	0.10	1.76	40.85	7186.17	4084.66	71.86	0.00	0.000	0.010	0.011
993	35.00	34.90	0.79739	7.14	0.01110	0.10	1.76	40.85	7186.73	4084.83	71.87	0.00	0.000	0.010	0.011
994	34.90	34.80	0.79945	7.12	0.01112	0.10	1.76	40.85	7187.29	4085.00	71.87	0.00	0.000	0.010	0.011
995	34.80	34.70	0.80150	7.10	0.01115	0.10	1.76	40.85	7187.84	4085.17	71.88	0.00	0.000	0.010	0.011
996	34.70	34.60	0.80356	7.08	0.01118	0.10	1.76	40.85	7188.40	4085.33	71.88	0.00	0.000	0.010	0.011
997	34.60	34.50	0.80561	7.06	0.01121	0.10	1.76	40.85	7188.95	4085.50	71.89	0.00	0.000	0.010	0.011
998	34.50	34.40	0.80767	7.04	0.01123	0.10	1.76	40.86	7189.50	4085.67	71.90	0.00	0.000	0.010	0.011
999	34.40	34.30	0.80973	7.03	0.01126	0.10	1.76	40.86	7190.05	4085.83	71.90	0.00	0.000	0.010	0.011
1000	34.30	34.20	0.81178	7.01	0.01129	0.10	1.76	40.86	7190.60	4086.00	71.91	0.00	0.000	0.010	0.011
1001	34.20	34.10	0.81384	6.99	0.01132	0.10	1.76	40.86	7191.15	4086.16	71.91	0.00	0.000	0.010	0.011
1002	34.10	34.00	0.81589	6.97	0.01134	0.10	1.76	40.86	7191.70	4086.33	71.92	0.00	0.000	0.010	0.011
1003	34.00	33.90	0.81795	6.96	0.01137	0.10	1.76	40.86	7192.25	4086.49	71.92	0.00	0.000	0.010	0.011
1004	33.90	33.80	0.82000	6.94	0.01140	0.10	1.76	40.87	7192.79	4086.66	71.93	0.00	0.000	0.010	0.011
1005	33.80	33.70	0.82206	6.92	0.01143	0.10	1.76	40.87	7193.34	4086.82	71.93	0.00	0.000	0.010	0.011
1006	33.70	33.60	0.82412	6.90	0.01146	0.10	1.76	40.87	7193.88	4086.99	71.94	0.00	0.000	0.010	0.011
1007	33.60	33.50	0.82617	6.89	0.01148	0.10	1.76	40.87	7194.42	4087.15	71.94	0.00	0.000	0.010	0.011
1008	33.50	33.40	0.82823	6.87	0.01151	0.10	1.76	40.87	7194.96	4087.31	71.95	0.00	0.000	0.010	0.012
1009	33.40	33.30	0.83028	6.85	0.01154	0.10	1.76	40.87	7195.50	4087.47	71.96	0.00	0.000	0.010	0.012
1010	33.30	33.20	0.83234	6.84	0.01157	0.10	1.76	40.88	7196.04	4087.64	71.96	0.00	0.000	0.010	0.012
1011	33.20	33.10	0.83439	6.82	0.01159	0.10	1.76	40.88	7196.58	4087.80	71.97	0.00	0.000	0.010	0.012
1012	33.10	33.00	0.83645	6.80	0.01162	0.10	1.76	40.88	7197.12	4087.96	71.97	0.00	0.000	0.010	0.012

**Big Creek – 080903 – Calibration model output:**

1013	33.00	32.90	0.83851	6.79	0.01165	0.10	1.76	40.88	7197.65	4088.12	71.98	0.00	0.000	0.010	0.012
1014	32.90	32.80	0.89066	12.01	0.01235	0.09	1.76	40.92	7210.94	4092.14	72.11	0.00	0.000	0.011	0.012
1015	32.80	32.70	0.89272	11.99	0.01238	0.09	1.76	40.92	7211.45	4092.29	72.11	0.00	0.000	0.011	0.012
1016	32.70	32.60	0.89477	11.96	0.01241	0.09	1.76	40.92	7211.96	4092.45	72.12	0.00	0.000	0.011	0.012
1017	32.60	32.50	0.89683	11.93	0.01243	0.09	1.76	40.93	7212.47	4092.60	72.12	0.00	0.000	0.011	0.012
1018	32.50	32.40	0.89889	11.90	0.01246	0.09	1.76	40.93	7212.98	4092.76	72.13	0.00	0.000	0.011	0.012
1019	32.40	32.30	0.90094	11.88	0.01249	0.09	1.76	40.93	7213.49	4092.91	72.13	0.00	0.000	0.011	0.012
1020	32.30	32.20	0.90300	11.85	0.01252	0.09	1.76	40.93	7213.99	4093.06	72.14	0.00	0.000	0.011	0.013
1021	32.20	32.10	0.90505	11.82	0.01254	0.09	1.76	40.93	7214.50	4093.22	72.14	0.00	0.000	0.011	0.013
1022	32.10	32.00	0.90711	11.80	0.01257	0.09	1.76	40.93	7215.00	4093.37	72.15	0.00	0.000	0.011	0.013
1023	32.00	31.90	0.90916	11.77	0.01260	0.09	1.76	40.94	7215.51	4093.52	72.16	0.00	0.000	0.011	0.013
1024	31.90	31.80	0.91122	11.74	0.01263	0.09	1.76	40.94	7216.01	4093.67	72.16	0.00	0.000	0.011	0.013
1025	31.80	31.70	0.91328	11.72	0.01266	0.09	1.76	40.94	7216.51	4093.83	72.17	0.00	0.000	0.011	0.013
1026	31.70	31.60	0.91533	11.69	0.01268	0.09	1.76	40.94	7217.02	4093.98	72.17	0.00	0.000	0.011	0.013
1027	31.60	31.50	0.91739	11.66	0.01271	0.09	1.76	40.94	7217.52	4094.13	72.18	0.00	0.000	0.011	0.013
1028	31.50	31.40	0.91944	11.64	0.01274	0.09	1.76	40.94	7218.02	4094.28	72.18	0.00	0.000	0.011	0.013
1029	31.40	31.30	0.92150	11.61	0.01277	0.09	1.76	40.94	7218.51	4094.43	72.19	0.00	0.000	0.011	0.013

TOT						6.20			438784.31	249293.73											
AVG						0.01139		1.76	40.87		71.93										
CUM						161.14															

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECA 1/da	CBOD SETT 1/da	ANBOD DECA 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECA 1/da	ORGN SETT 1/da	NH3 DECA 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECA 1/da	NCM DECA 1/da	NCM SETT 1/da
969	37.300	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.00	0.00	0.21	0.06
970	37.200	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.00	0.00	0.21	0.06
971	37.100	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.00	0.00	0.21	0.06
972	37.000	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.00	0.00	0.21	0.06
973	36.900	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.00	0.00	0.21	0.06
974	36.800	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.00	0.00	0.21	0.06
975	36.700	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.00	0.00	0.21	0.06
976	36.600	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.00	0.00	0.21	0.06
977	36.500	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.00	0.00	0.21	0.06
978	36.400	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.00	0.00	0.21	0.06
979	36.300	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.21	0.06
980	36.200	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.21	0.06
981	36.100	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.21	0.06
982	36.000	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.21	0.06
983	35.900	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.21	0.06
984	35.800	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.21	0.06
985	35.700	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.21	0.06
986	35.600	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.21	0.06
987	35.500	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.00	0.21	0.06
988	35.400	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.00	0.21	0.06
989	35.300	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.00	0.21	0.06
990	35.200	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.00	0.21	0.06
991	35.100	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.00	0.21	0.06
992	35.000	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.00	0.21	0.06
993	34.900	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.00	0.21	0.06
994	34.800	8.40	0.71	0.08	0.06	0.00	1.17	1.17	1.17	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.00	0.21	0.06





Big Creek – 080903 – Calibration model output:

977	36.500	24.10	0.00	0.00	0.00	7.32	7.66	7.66	0.00	0.00	0.00	0.00	0.00	15.13	0.00	0.00	0.61
978	36.400	24.10	0.00	0.00	0.00	7.32	7.65	7.65	0.00	0.00	0.00	0.00	0.00	15.15	0.00	0.00	0.60
979	36.300	24.10	0.00	0.00	0.00	7.33	7.64	7.64	0.00	0.00	0.00	0.00	0.00	15.17	0.00	0.00	0.59
980	36.200	24.10	0.00	0.00	0.00	7.34	7.64	7.64	0.00	0.00	0.00	0.00	0.00	15.19	0.00	0.00	0.59
981	36.100	24.10	0.00	0.00	0.00	7.34	7.63	7.63	0.00	0.00	0.00	0.00	0.00	15.21	0.00	0.00	0.58
982	36.000	24.10	0.00	0.00	0.00	7.35	7.63	7.63	0.00	0.00	0.00	0.00	0.00	15.23	0.00	0.00	0.57
983	35.900	24.10	0.00	0.00	0.00	7.36	7.62	7.62	0.00	0.00	0.00	0.00	0.00	15.25	0.00	0.00	0.56
984	35.800	24.10	0.00	0.00	0.00	7.36	7.61	7.61	0.00	0.00	0.00	0.00	0.00	15.27	0.00	0.00	0.56
985	35.700	24.10	0.00	0.00	0.00	7.37	7.61	7.61	0.00	0.00	0.00	0.00	0.00	15.29	0.00	0.00	0.55
986	35.600	24.10	0.00	0.00	0.00	7.38	7.60	7.60	0.00	0.00	0.00	0.00	0.00	15.31	0.00	0.00	0.54
987	35.500	24.10	0.00	0.00	0.00	7.38	7.60	7.60	0.00	0.00	0.00	0.00	0.00	15.33	0.00	0.00	0.54
988	35.400	24.10	0.00	0.00	0.00	7.39	7.59	7.59	0.00	0.00	0.00	0.00	0.00	15.35	0.00	0.00	0.53
989	35.300	24.10	0.00	0.00	0.00	7.39	7.59	7.59	0.00	0.00	0.00	0.00	0.00	15.37	0.00	0.00	0.53
990	35.200	24.10	0.00	0.00	0.00	7.40	7.58	7.58	0.00	0.00	0.00	0.00	0.00	15.39	0.00	0.00	0.52
991	35.100	24.10	0.00	0.00	0.00	7.40	7.58	7.58	0.00	0.00	0.00	0.00	0.00	15.40	0.00	0.00	0.51
992	35.000	24.10	0.00	0.00	0.00	7.41	7.57	7.57	0.00	0.00	0.00	0.00	0.00	15.42	0.00	0.00	0.51
993	34.900	24.10	0.00	0.00	0.00	7.41	7.57	7.57	0.00	0.00	0.00	0.00	0.00	15.44	0.00	0.00	0.50
994	34.800	24.10	0.00	0.00	0.00	7.42	7.56	7.56	0.00	0.00	0.00	0.00	0.00	15.46	0.00	0.00	0.50
995	34.700	24.10	0.00	0.00	0.00	7.42	7.56	7.56	0.00	0.00	0.00	0.00	0.00	15.48	0.00	0.00	0.50
996	34.600	24.10	0.00	0.00	0.00	7.43	7.55	7.55	0.00	0.00	0.00	0.00	0.00	15.50	0.00	0.00	0.49
997	34.500	24.10	0.00	0.00	0.00	7.43	7.55	7.55	0.00	0.00	0.00	0.00	0.00	15.52	0.00	0.00	0.49
998	34.400	24.10	0.00	0.00	0.00	7.44	7.54	7.54	0.00	0.00	0.00	0.00	0.00	15.54	0.00	0.00	0.48
999	34.300	24.10	0.00	0.00	0.00	7.44	7.54	7.54	0.00	0.00	0.00	0.00	0.00	15.56	0.00	0.00	0.48
1000	34.200	24.10	0.00	0.00	0.00	7.44	7.54	7.54	0.00	0.00	0.00	0.00	0.00	15.58	0.00	0.00	0.47
1001	34.100	24.10	0.00	0.00	0.00	7.45	7.53	7.53	0.00	0.00	0.00	0.00	0.00	15.60	0.00	0.00	0.47
1002	34.000	24.10	0.00	0.00	0.00	7.45	7.53	7.53	0.00	0.00	0.00	0.00	0.00	15.62	0.00	0.00	0.47
1003	33.900	24.10	0.00	0.00	0.00	7.46	7.52	7.52	0.00	0.00	0.00	0.00	0.00	15.64	0.00	0.00	0.46
1004	33.800	24.10	0.00	0.00	0.00	7.46	7.52	7.52	0.00	0.00	0.00	0.00	0.00	15.66	0.00	0.00	0.46
1005	33.700	24.10	0.00	0.00	0.00	7.46	7.52	7.52	0.00	0.00	0.00	0.00	0.00	15.68	0.00	0.00	0.46
1006	33.600	24.10	0.00	0.00	0.00	7.47	7.51	7.51	0.00	0.00	0.00	0.00	0.00	15.70	0.00	0.00	0.45
1007	33.500	24.10	0.00	0.00	0.00	7.47	7.51	7.51	0.00	0.00	0.00	0.00	0.00	15.71	0.00	0.00	0.45
1008	33.400	24.10	0.00	0.00	0.00	7.47	7.51	7.51	0.00	0.00	0.00	0.00	0.00	15.73	0.00	0.00	0.45
1009	33.300	24.10	0.00	0.00	0.00	7.48	7.50	7.50	0.00	0.00	0.00	0.00	0.00	15.75	0.00	0.00	0.44
1010	33.200	24.10	0.00	0.00	0.00	7.48	7.50	7.50	0.00	0.00	0.00	0.00	0.00	15.77	0.00	0.00	0.44
1011	33.100	24.10	0.00	0.00	0.00	7.49	7.49	7.49	0.00	0.00	0.00	0.00	0.00	15.79	0.00	0.00	0.44
1012	33.000	24.10	0.00	0.00	0.00	7.49	7.49	7.49	0.00	0.00	0.00	0.00	0.00	15.81	0.00	0.00	0.43
1013	32.900	24.10	0.00	0.00	0.00	7.49	7.49	7.49	0.00	0.00	0.00	0.00	0.00	15.83	0.00	0.00	0.43
1014	32.800	24.10	0.00	0.00	0.00	7.68	7.44	7.44	0.00	0.00	0.00	0.00	0.00	15.85	0.00	0.00	0.41
1015	32.700	24.10	0.00	0.00	0.00	7.67	7.44	7.44	0.00	0.00	0.00	0.00	0.00	15.87	0.00	0.00	0.41
1016	32.600	24.10	0.00	0.00	0.00	7.67	7.44	7.44	0.00	0.00	0.00	0.00	0.00	15.89	0.00	0.00	0.41
1017	32.500	24.10	0.00	0.00	0.00	7.66	7.44	7.44	0.00	0.00	0.00	0.00	0.00	15.91	0.00	0.00	0.40
1018	32.400	24.10	0.00	0.00	0.00	7.65	7.43	7.43	0.00	0.00	0.00	0.00	0.00	15.93	0.00	0.00	0.40
1019	32.300	24.10	0.00	0.00	0.00	7.65	7.43	7.43	0.00	0.00	0.00	0.00	0.00	15.95	0.00	0.00	0.40
1020	32.200	24.10	0.00	0.00	0.00	7.64	7.43	7.43	0.00	0.00	0.00	0.00	0.00	15.97	0.00	0.00	0.40
1021	32.100	24.10	0.00	0.00	0.00	7.64	7.43	7.43	0.00	0.00	0.00	0.00	0.00	15.99	0.00	0.00	0.40
1022	32.000	24.10	0.00	0.00	0.00	7.63	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.00	0.00	0.00	0.40
1023	31.900	24.10	0.00	0.00	0.00	7.63	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.02	0.00	0.00	0.40
1024	31.800	24.10	0.00	0.00	0.00	7.63	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.04	0.00	0.00	0.39
1025	31.700	24.10	0.00	0.00	0.00	7.62	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.06	0.00	0.00	0.39
1026	31.600	24.10	0.00	0.00	0.00	7.62	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.08	0.00	0.00	0.39
1027	31.500	24.10	0.00	0.00	0.00	7.62	7.41	7.41	0.00	0.00	0.00	0.00	0.00	16.10	0.00	0.00	0.39
1028	31.400	24.10	0.00	0.00	0.00	7.61	7.41	7.41	0.00	0.00	0.00	0.00	0.00	16.12	0.00	0.00	0.39
1029	31.300	24.10	0.00	0.00	0.00	7.61	7.41	7.41	0.00	0.00	0.00	0.00	0.00	16.14	0.00	0.00	0.39

\* CM-I = CHLORIDES

CM-II = SULFATES

NCM = NBOD

Big Creek – 080903 – Calibration model output:

MG/L
MG/L
MG/L  
 \*\* g/cu m

FINAL REPORT      BIG CREEK  
 REACH NO. 11      WEIR #3

Big Creek - STREAM MODEL  
 WATER QUALITY CALIBRATION

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
1030	UPR RCH	0.92150	24.10	0.00	0.00	0.00	7.61	7.41	7.41	0.00	0.00	0.00	0.00	16.14	0.00	0.39
EACH	INCR	0.0020	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
1030	31.30	31.20	0.92350	11.59	0.01279	0.09	1.76	40.95	7219.00	4094.58	72.19	0.00	0.000	0.011	0.013
TOT						0.09			7219.00	4094.58					
AVG					0.01279		1.76	40.95			72.19				
CUM						161.23									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECA 1/da	CBOD SETT 1/da	ANBOD DECA 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECA 1/da	ORGN SETT 1/da	NH3 DECA 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECA 1/da	NCM DECA 1/da	NCM SETT 1/da	
1030	31.200	8.40	0.71	0.08	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.97	0.00	0.00	0.21	0.06	
	20 DEG C RATE			0.07		0.00	0.00		0.00		0.00	0.00	0.00	0.00				0.00	0.16		
	AVG 20 DEG C RATE			0.66		0.06				0.00										0.06	

\* g/sq m/d                      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
1030	31.200	24.10	0.00	0.00	0.00	7.67	7.30	7.30	0.00	0.00	0.00	0.00	0.00	16.14	0.00	0.00	0.38

\* CM-I = CHLORIDES                      CM-II = SULFATES                      NCM = NBOD  
           MG/L    MG/L    MG/L  
 \*\* g/cu m

Big Creek – 080903 – Calibration model output:

FINAL REPORT      BIG CREEK  
 REACH NO. 12      BIG CREEK, WEIR #3 TO WEIR #2

Big Creek - STREAM MODEL  
 WATER QUALITY CALIBRATION

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
1031	UPR RCH	0.92350	24.10	0.00	0.00	0.00	7.67	7.30	7.30	0.00	0.00	0.00	0.00	16.14	0.00	0.38
EACH	INCR	0.0020	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
1043	WSTLD	0.00280	24.10	0.00	0.00	0.00	5.05	18.12	18.12	0.00	0.00	0.00	0.00	0.00	0.00	11.69

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
1031	31.20	31.10	0.92550	11.56	0.01282	0.09	1.76	40.95	7219.48	4094.73	72.19	0.00	0.000	0.011	0.013
1032	31.10	31.00	0.92750	11.54	0.01285	0.09	1.76	40.95	7219.97	4094.87	72.20	0.00	0.000	0.011	0.013
1033	31.00	30.90	0.92950	11.51	0.01287	0.09	1.76	40.95	7220.45	4095.02	72.20	0.00	0.000	0.011	0.013
1034	30.90	30.80	0.93150	11.49	0.01290	0.09	1.76	40.95	7220.93	4095.16	72.21	0.00	0.000	0.012	0.013
1035	30.80	30.70	0.93350	11.46	0.01293	0.09	1.76	40.95	7221.41	4095.31	72.21	0.00	0.000	0.012	0.013
1036	30.70	30.60	0.93551	11.44	0.01295	0.09	1.76	40.95	7221.89	4095.46	72.22	0.00	0.000	0.012	0.013
1037	30.60	30.50	0.93751	11.41	0.01298	0.09	1.76	40.96	7222.37	4095.60	72.22	0.00	0.000	0.012	0.013
1038	30.50	30.40	0.93951	11.39	0.01301	0.09	1.76	40.96	7222.85	4095.75	72.23	0.00	0.000	0.012	0.013
1039	30.40	30.30	0.94151	11.36	0.01303	0.09	1.76	40.96	7223.33	4095.89	72.23	0.00	0.000	0.012	0.013
1040	30.30	30.20	0.94351	11.34	0.01306	0.09	1.76	40.96	7223.81	4096.04	72.24	0.00	0.000	0.012	0.013
1041	30.20	30.10	0.94551	11.32	0.01309	0.09	1.76	40.96	7224.28	4096.18	72.24	0.00	0.000	0.012	0.013
1042	30.10	30.00	0.94751	11.29	0.01311	0.09	1.76	40.96	7224.76	4096.32	72.25	0.00	0.000	0.012	0.013
1043	30.00	29.90	0.95231	11.53	0.01318	0.09	1.76	40.97	7225.89	4096.67	72.26	0.00	0.000	0.012	0.013
1044	29.90	29.80	0.95431	11.51	0.01321	0.09	1.76	40.97	7226.37	4096.81	72.26	0.00	0.000	0.012	0.013
1045	29.80	29.70	0.95631	11.48	0.01323	0.09	1.76	40.97	7226.84	4096.96	72.27	0.00	0.000	0.012	0.013
1046	29.70	29.60	0.95832	11.46	0.01326	0.09	1.76	40.97	7227.31	4097.10	72.27	0.00	0.000	0.012	0.013
1047	29.60	29.50	0.96032	11.43	0.01329	0.09	1.76	40.97	7227.78	4097.24	72.28	0.00	0.000	0.012	0.013
1048	29.50	29.40	0.96232	11.41	0.01331	0.09	1.76	40.97	7228.25	4097.38	72.28	0.00	0.000	0.012	0.013
1049	29.40	29.30	0.96432	11.39	0.01334	0.09	1.76	40.98	7228.72	4097.53	72.29	0.00	0.000	0.012	0.013
1050	29.30	29.20	0.96632	11.36	0.01337	0.09	1.76	40.98	7229.19	4097.67	72.29	0.00	0.000	0.012	0.013
1051	29.20	29.10	0.96832	11.34	0.01339	0.09	1.76	40.98	7229.66	4097.81	72.30	0.00	0.000	0.012	0.013
1052	29.10	29.00	0.97032	11.32	0.01342	0.09	1.76	40.98	7230.12	4097.95	72.30	0.00	0.000	0.012	0.013
1053	29.00	28.90	0.97232	11.29	0.01345	0.09	1.76	40.98	7230.59	4098.09	72.31	0.00	0.000	0.012	0.013
1054	28.90	28.80	0.97432	11.27	0.01347	0.09	1.76	40.98	7231.05	4098.23	72.31	0.00	0.000	0.012	0.013
1055	28.80	28.70	0.97633	11.25	0.01350	0.09	1.76	40.98	7231.52	4098.38	72.32	0.00	0.000	0.012	0.014
1056	28.70	28.60	0.97833	11.22	0.01353	0.09	1.76	40.99	7231.98	4098.52	72.32	0.00	0.000	0.012	0.014
1057	28.60	28.50	0.98033	11.20	0.01355	0.09	1.76	40.99	7232.45	4098.66	72.32	0.00	0.000	0.012	0.014
1058	28.50	28.40	0.98233	11.18	0.01358	0.09	1.76	40.99	7232.91	4098.80	72.33	0.00	0.000	0.012	0.014
1059	28.40	28.30	0.98433	11.15	0.01361	0.09	1.76	40.99	7233.37	4098.94	72.33	0.00	0.000	0.012	0.014
1060	28.30	28.20	0.98633	11.13	0.01363	0.08	1.76	40.99	7233.83	4099.08	72.34	0.00	0.000	0.012	0.014
1061	28.20	28.10	0.98833	11.11	0.01366	0.08	1.76	40.99	7234.29	4099.22	72.34	0.00	0.000	0.012	0.014
1062	28.10	28.00	0.99033	11.09	0.01369	0.08	1.76	40.99	7234.75	4099.36	72.35	0.00	0.000	0.012	0.014
1063	28.00	27.90	0.99233	11.06	0.01372	0.08	1.76	40.99	7235.21	4099.50	72.35	0.00	0.000	0.012	0.014
1064	27.90	27.80	0.99434	11.04	0.01374	0.08	1.76	41.00	7235.67	4099.64	72.36	0.00	0.000	0.012	0.014

Big Creek – 080903 – Calibration model output:

1065	27.80	27.70	0.99634	11.02	0.01377	0.08	1.77	41.00	7236.13	4099.78	72.36	0.00	0.000	0.012	0.014
1066	27.70	27.60	0.99834	11.00	0.01380	0.08	1.77	41.00	7236.58	4099.92	72.37	0.00	0.000	0.012	0.014
1067	27.60	27.50	1.00034	10.98	0.01382	0.08	1.77	41.00	7237.04	4100.05	72.37	0.00	0.000	0.012	0.014
1068	27.50	27.40	1.00234	10.95	0.01385	0.08	1.77	41.00	7237.50	4100.19	72.37	0.00	0.000	0.012	0.014
1069	27.40	27.30	1.00434	10.93	0.01388	0.08	1.77	41.00	7237.95	4100.33	72.38	0.00	0.000	0.012	0.014
1070	27.30	27.20	1.00634	10.91	0.01390	0.08	1.77	41.00	7238.40	4100.47	72.38	0.00	0.000	0.012	0.014
1071	27.20	27.10	1.00834	10.89	0.01393	0.08	1.77	41.01	7238.86	4100.61	72.39	0.00	0.000	0.012	0.014
1072	27.10	27.00	1.01034	10.87	0.01396	0.08	1.77	41.01	7239.31	4100.74	72.39	0.00	0.000	0.012	0.014
1073	27.00	26.90	1.01235	10.85	0.01398	0.08	1.77	41.01	7239.76	4100.88	72.40	0.00	0.000	0.012	0.014
1074	26.90	26.80	1.01435	10.82	0.01401	0.08	1.77	41.01	7240.21	4101.02	72.40	0.00	0.000	0.013	0.014
1075	26.80	26.70	1.01635	10.80	0.01404	0.08	1.77	41.01	7240.66	4101.16	72.41	0.00	0.000	0.013	0.014
1076	26.70	26.60	1.01835	10.78	0.01406	0.08	1.77	41.01	7241.11	4101.29	72.41	0.00	0.000	0.013	0.014
1077	26.60	26.50	1.02035	10.76	0.01409	0.08	1.77	41.01	7241.56	4101.43	72.42	0.00	0.000	0.013	0.014
1078	26.50	26.40	1.02235	10.74	0.01412	0.08	1.77	41.02	7242.01	4101.57	72.42	0.00	0.000	0.013	0.014
1079	26.40	26.30	1.02435	10.72	0.01414	0.08	1.77	41.02	7242.46	4101.70	72.42	0.00	0.000	0.013	0.014
1080	26.30	26.20	1.02635	10.70	0.01417	0.08	1.77	41.02	7242.91	4101.84	72.43	0.00	0.000	0.013	0.014
1081	26.20	26.10	1.02835	10.68	0.01420	0.08	1.77	41.02	7243.35	4101.97	72.43	0.00	0.000	0.013	0.014
1082	26.10	26.00	1.03035	10.66	0.01422	0.08	1.77	41.02	7243.80	4102.11	72.44	0.00	0.000	0.013	0.014
1083	26.00	25.90	1.03236	10.64	0.01425	0.08	1.77	41.02	7244.25	4102.25	72.44	0.00	0.000	0.013	0.014
1084	25.90	25.80	1.03436	10.62	0.01428	0.08	1.77	41.02	7244.69	4102.38	72.45	0.00	0.000	0.013	0.014
1085	25.80	25.70	1.03636	10.59	0.01430	0.08	1.77	41.03	7245.13	4102.52	72.45	0.00	0.000	0.013	0.014
1086	25.70	25.60	1.03836	10.57	0.01433	0.08	1.77	41.03	7245.58	4102.65	72.46	0.00	0.000	0.013	0.014
1087	25.60	25.50	1.04036	10.55	0.01436	0.08	1.77	41.03	7246.02	4102.79	72.46	0.00	0.000	0.013	0.014
1088	25.50	25.40	1.04236	10.53	0.01438	0.08	1.77	41.03	7246.46	4102.92	72.46	0.00	0.000	0.013	0.014
1089	25.40	25.30	1.04436	10.51	0.01441	0.08	1.77	41.03	7246.90	4103.05	72.47	0.00	0.000	0.013	0.014
1090	25.30	25.20	1.04636	10.49	0.01444	0.08	1.77	41.03	7247.34	4103.19	72.47	0.00	0.000	0.013	0.014
1091	25.20	25.10	1.04836	10.47	0.01446	0.08	1.77	41.03	7247.78	4103.32	72.48	0.00	0.000	0.013	0.014
1092	25.10	25.00	1.05037	10.45	0.01449	0.08	1.77	41.03	7248.22	4103.46	72.48	0.00	0.000	0.013	0.014
1093	25.00	24.90	1.05237	10.43	0.01452	0.08	1.77	41.04	7248.66	4103.59	72.49	0.00	0.000	0.013	0.015
1094	24.90	24.80	1.05437	10.41	0.01454	0.08	1.77	41.04	7249.10	4103.72	72.49	0.00	0.000	0.013	0.015
1095	24.80	24.70	1.05637	10.39	0.01457	0.08	1.77	41.04	7249.54	4103.86	72.50	0.00	0.000	0.013	0.015
1096	24.70	24.60	1.05837	10.37	0.01460	0.08	1.77	41.04	7249.98	4103.99	72.50	0.00	0.000	0.013	0.015
1097	24.60	24.50	1.06037	10.35	0.01462	0.08	1.77	41.04	7250.41	4104.12	72.50	0.00	0.000	0.013	0.015
1098	24.50	24.40	1.06237	10.34	0.01465	0.08	1.77	41.04	7250.85	4104.26	72.51	0.00	0.000	0.013	0.015
1099	24.40	24.30	1.06437	10.32	0.01468	0.08	1.77	41.04	7251.28	4104.39	72.51	0.00	0.000	0.013	0.015
1100	24.30	24.20	1.06637	10.30	0.01471	0.08	1.77	41.05	7251.72	4104.52	72.52	0.00	0.000	0.013	0.015
1101	24.20	24.10	1.06837	10.28	0.01473	0.08	1.77	41.05	7252.15	4104.65	72.52	0.00	0.000	0.013	0.015
1102	24.10	24.00	1.07038	10.26	0.01476	0.08	1.77	41.05	7252.58	4104.78	72.53	0.00	0.000	0.013	0.015
1103	24.00	23.90	1.07238	10.24	0.01479	0.08	1.77	41.05	7253.02	4104.92	72.53	0.00	0.000	0.013	0.015
1104	23.90	23.80	1.07438	10.22	0.01481	0.08	1.77	41.05	7253.45	4105.05	72.53	0.00	0.000	0.013	0.015
1105	23.80	23.70	1.07638	10.20	0.01484	0.08	1.77	41.05	7253.88	4105.18	72.54	0.00	0.000	0.013	0.015
1106	23.70	23.60	1.07838	10.18	0.01487	0.08	1.77	41.05	7254.31	4105.31	72.54	0.00	0.000	0.013	0.015
1107	23.60	23.50	1.08038	10.16	0.01489	0.08	1.77	41.05	7254.74	4105.44	72.55	0.00	0.000	0.013	0.015
1108	23.50	23.40	1.08238	10.14	0.01492	0.08	1.77	41.06	7255.17	4105.57	72.55	0.00	0.000	0.013	0.015
1109	23.40	23.30	1.08438	10.13	0.01495	0.08	1.77	41.06	7255.60	4105.70	72.56	0.00	0.000	0.013	0.015
1110	23.30	23.20	1.08638	10.11	0.01497	0.08	1.77	41.06	7256.03	4105.83	72.56	0.00	0.000	0.013	0.015
1111	23.20	23.10	1.08839	10.09	0.01500	0.08	1.77	41.06	7256.46	4105.96	72.56	0.00	0.000	0.013	0.015
1112	23.10	23.00	1.09039	10.07	0.01503	0.08	1.77	41.06	7256.88	4106.10	72.57	0.00	0.000	0.013	0.015
1113	23.00	22.90	1.09239	10.05	0.01505	0.08	1.77	41.06	7257.31	4106.23	72.57	0.00	0.000	0.013	0.015
1114	22.90	22.80	1.09439	10.03	0.01508	0.08	1.77	41.06	7257.74	4106.36	72.58	0.00	0.000	0.013	0.015
1115	22.80	22.70	1.09639	10.01	0.01511	0.08	1.77	41.06	7258.16	4106.49	72.58	0.00	0.000	0.013	0.015
1116	22.70	22.60	1.09839	10.00	0.01513	0.08	1.77	41.07	7258.58	4106.61	72.59	0.00	0.000	0.014	0.015
1117	22.60	22.50	1.10039	9.98	0.01516	0.08	1.77	41.07	7259.01	4106.74	72.59	0.00	0.000	0.014	0.015
1118	22.50	22.40	1.10239	9.96	0.01519	0.08	1.77	41.07	7259.43	4106.87	72.59	0.00	0.000	0.014	0.015
1119	22.40	22.30	1.10439	9.94	0.01521	0.08	1.77	41.07	7259.86	4107.00	72.60	0.00	0.000	0.014	0.015

**Big Creek – 080903 – Calibration model output:**

1120	22.30	22.20	1.10639	9.92	0.01524	0.08	1.77	41.07	7260.28	4107.13	72.60	0.00	0.000	0.014	0.015
1121	22.20	22.10	1.10840	9.91	0.01527	0.08	1.77	41.07	7260.70	4107.26	72.61	0.00	0.000	0.014	0.015
TOT									7.51		658912.06	373209.06			
AVG									0.01402	1.77	41.01			72.41	
CUM									168.74						

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAy 1/da	CBOD SETT 1/da	ANBOD DECAy 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAy 1/da	ORGN SETT 1/da	NH3 DECAy 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAy 1/da	NCM DECAy 1/da	NCM SETT 1/da
1031	31.100	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.97	0.00	0.00	0.21	0.06
1032	31.000	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.97	0.00	0.00	0.21	0.06
1033	30.900	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.97	0.00	0.00	0.21	0.06
1034	30.800	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1035	30.700	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1036	30.600	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1037	30.500	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1038	30.400	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1039	30.300	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1040	30.200	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1041	30.100	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1042	30.000	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1043	29.900	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1044	29.800	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1045	29.700	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1046	29.600	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1047	29.500	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1048	29.400	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1049	29.300	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1050	29.200	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1051	29.100	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1052	29.000	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1053	28.900	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1054	28.800	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1055	28.700	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1056	28.600	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1057	28.500	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1058	28.400	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1059	28.300	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1060	28.200	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1061	28.100	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1062	28.000	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1063	27.900	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1064	27.800	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1065	27.700	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1066	27.600	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1067	27.500	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1068	27.400	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1069	27.300	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1070	27.200	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06
1071	27.100	8.40	0.71	0.08	0.06	0.00	1.23	1.23	1.23	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	0.21	0.06



Big Creek – 080903 – Calibration model output:

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
1031	31.100	24.10	0.00	0.00	0.00	7.66	7.30	7.30	0.00	0.00	0.00	0.00	0.00	16.14	0.00	0.00	0.38
1032	31.000	24.10	0.00	0.00	0.00	7.66	7.30	7.30	0.00	0.00	0.00	0.00	0.00	16.15	0.00	0.00	0.37
1033	30.900	24.10	0.00	0.00	0.00	7.65	7.30	7.30	0.00	0.00	0.00	0.00	0.00	16.15	0.00	0.00	0.37
1034	30.800	24.10	0.00	0.00	0.00	7.64	7.31	7.31	0.00	0.00	0.00	0.00	0.00	16.15	0.00	0.00	0.37
1035	30.700	24.10	0.00	0.00	0.00	7.64	7.31	7.31	0.00	0.00	0.00	0.00	0.00	16.16	0.00	0.00	0.37
1036	30.600	24.10	0.00	0.00	0.00	7.63	7.31	7.31	0.00	0.00	0.00	0.00	0.00	16.16	0.00	0.00	0.37
1037	30.500	24.10	0.00	0.00	0.00	7.63	7.31	7.31	0.00	0.00	0.00	0.00	0.00	16.17	0.00	0.00	0.37
1038	30.400	24.10	0.00	0.00	0.00	7.63	7.32	7.32	0.00	0.00	0.00	0.00	0.00	16.17	0.00	0.00	0.37
1039	30.300	24.10	0.00	0.00	0.00	7.62	7.32	7.32	0.00	0.00	0.00	0.00	0.00	16.17	0.00	0.00	0.37
1040	30.200	24.10	0.00	0.00	0.00	7.62	7.32	7.32	0.00	0.00	0.00	0.00	0.00	16.18	0.00	0.00	0.37
1041	30.100	24.10	0.00	0.00	0.00	7.61	7.32	7.32	0.00	0.00	0.00	0.00	0.00	16.18	0.00	0.00	0.37
1042	30.000	24.10	0.00	0.00	0.00	7.61	7.33	7.33	0.00	0.00	0.00	0.00	0.00	16.18	0.00	0.00	0.37
1043	29.900	24.10	0.00	0.00	0.00	7.60	7.36	7.36	0.00	0.00	0.00	0.00	0.00	16.19	0.00	0.00	0.40
1044	29.800	24.10	0.00	0.00	0.00	7.60	7.36	7.36	0.00	0.00	0.00	0.00	0.00	16.19	0.00	0.00	0.40
1045	29.700	24.10	0.00	0.00	0.00	7.59	7.36	7.36	0.00	0.00	0.00	0.00	0.00	16.19	0.00	0.00	0.39
1046	29.600	24.10	0.00	0.00	0.00	7.59	7.36	7.36	0.00	0.00	0.00	0.00	0.00	16.20	0.00	0.00	0.39
1047	29.500	24.10	0.00	0.00	0.00	7.59	7.37	7.37	0.00	0.00	0.00	0.00	0.00	16.20	0.00	0.00	0.39
1048	29.400	24.10	0.00	0.00	0.00	7.59	7.37	7.37	0.00	0.00	0.00	0.00	0.00	16.21	0.00	0.00	0.39
1049	29.300	24.10	0.00	0.00	0.00	7.59	7.37	7.37	0.00	0.00	0.00	0.00	0.00	16.21	0.00	0.00	0.39
1050	29.200	24.10	0.00	0.00	0.00	7.58	7.37	7.37	0.00	0.00	0.00	0.00	0.00	16.21	0.00	0.00	0.39
1051	29.100	24.10	0.00	0.00	0.00	7.58	7.37	7.37	0.00	0.00	0.00	0.00	0.00	16.22	0.00	0.00	0.38
1052	29.000	24.10	0.00	0.00	0.00	7.58	7.37	7.37	0.00	0.00	0.00	0.00	0.00	16.22	0.00	0.00	0.38
1053	28.900	24.10	0.00	0.00	0.00	7.58	7.37	7.37	0.00	0.00	0.00	0.00	0.00	16.22	0.00	0.00	0.38
1054	28.800	24.10	0.00	0.00	0.00	7.58	7.38	7.38	0.00	0.00	0.00	0.00	0.00	16.23	0.00	0.00	0.38
1055	28.700	24.10	0.00	0.00	0.00	7.58	7.38	7.38	0.00	0.00	0.00	0.00	0.00	16.23	0.00	0.00	0.38
1056	28.600	24.10	0.00	0.00	0.00	7.57	7.38	7.38	0.00	0.00	0.00	0.00	0.00	16.23	0.00	0.00	0.38
1057	28.500	24.10	0.00	0.00	0.00	7.57	7.38	7.38	0.00	0.00	0.00	0.00	0.00	16.24	0.00	0.00	0.38
1058	28.400	24.10	0.00	0.00	0.00	7.57	7.38	7.38	0.00	0.00	0.00	0.00	0.00	16.24	0.00	0.00	0.38
1059	28.300	24.10	0.00	0.00	0.00	7.57	7.38	7.38	0.00	0.00	0.00	0.00	0.00	16.25	0.00	0.00	0.38
1060	28.200	24.10	0.00	0.00	0.00	7.57	7.38	7.38	0.00	0.00	0.00	0.00	0.00	16.25	0.00	0.00	0.37
1061	28.100	24.10	0.00	0.00	0.00	7.57	7.39	7.39	0.00	0.00	0.00	0.00	0.00	16.25	0.00	0.00	0.37
1062	28.000	24.10	0.00	0.00	0.00	7.57	7.39	7.39	0.00	0.00	0.00	0.00	0.00	16.26	0.00	0.00	0.37
1063	27.900	24.10	0.00	0.00	0.00	7.57	7.39	7.39	0.00	0.00	0.00	0.00	0.00	16.26	0.00	0.00	0.37
1064	27.800	24.10	0.00	0.00	0.00	7.57	7.39	7.39	0.00	0.00	0.00	0.00	0.00	16.26	0.00	0.00	0.37
1065	27.700	24.10	0.00	0.00	0.00	7.57	7.39	7.39	0.00	0.00	0.00	0.00	0.00	16.27	0.00	0.00	0.37
1066	27.600	24.10	0.00	0.00	0.00	7.57	7.39	7.39	0.00	0.00	0.00	0.00	0.00	16.27	0.00	0.00	0.37
1067	27.500	24.10	0.00	0.00	0.00	7.57	7.39	7.39	0.00	0.00	0.00	0.00	0.00	16.27	0.00	0.00	0.37
1068	27.400	24.10	0.00	0.00	0.00	7.57	7.39	7.39	0.00	0.00	0.00	0.00	0.00	16.28	0.00	0.00	0.37
1069	27.300	24.10	0.00	0.00	0.00	7.57	7.39	7.39	0.00	0.00	0.00	0.00	0.00	16.28	0.00	0.00	0.37
1070	27.200	24.10	0.00	0.00	0.00	7.57	7.40	7.40	0.00	0.00	0.00	0.00	0.00	16.29	0.00	0.00	0.36
1071	27.100	24.10	0.00	0.00	0.00	7.57	7.40	7.40	0.00	0.00	0.00	0.00	0.00	16.29	0.00	0.00	0.36
1072	27.000	24.10	0.00	0.00	0.00	7.57	7.40	7.40	0.00	0.00	0.00	0.00	0.00	16.29	0.00	0.00	0.36
1073	26.900	24.10	0.00	0.00	0.00	7.57	7.40	7.40	0.00	0.00	0.00	0.00	0.00	16.30	0.00	0.00	0.36
1074	26.800	24.10	0.00	0.00	0.00	7.57	7.40	7.40	0.00	0.00	0.00	0.00	0.00	16.30	0.00	0.00	0.36
1075	26.700	24.10	0.00	0.00	0.00	7.57	7.40	7.40	0.00	0.00	0.00	0.00	0.00	16.30	0.00	0.00	0.36
1076	26.600	24.10	0.00	0.00	0.00	7.57	7.40	7.40	0.00	0.00	0.00	0.00	0.00	16.31	0.00	0.00	0.36
1077	26.500	24.10	0.00	0.00	0.00	7.57	7.40	7.40	0.00	0.00	0.00	0.00	0.00	16.31	0.00	0.00	0.36
1078	26.400	24.10	0.00	0.00	0.00	7.57	7.40	7.40	0.00	0.00	0.00	0.00	0.00	16.31	0.00	0.00	0.36

Big Creek – 080903 – Calibration model output:

1079	26.300	24.10	0.00	0.00	0.00	7.57	7.40	7.40	0.00	0.00	0.00	0.00	0.00	16.32	0.00	0.00	0.36
1080	26.200	24.10	0.00	0.00	0.00	7.57	7.40	7.40	0.00	0.00	0.00	0.00	0.00	16.32	0.00	0.00	0.36
1081	26.100	24.10	0.00	0.00	0.00	7.57	7.40	7.40	0.00	0.00	0.00	0.00	0.00	16.32	0.00	0.00	0.36
1082	26.000	24.10	0.00	0.00	0.00	7.57	7.41	7.41	0.00	0.00	0.00	0.00	0.00	16.33	0.00	0.00	0.36
1083	25.900	24.10	0.00	0.00	0.00	7.57	7.41	7.41	0.00	0.00	0.00	0.00	0.00	16.33	0.00	0.00	0.36
1084	25.800	24.10	0.00	0.00	0.00	7.57	7.41	7.41	0.00	0.00	0.00	0.00	0.00	16.34	0.00	0.00	0.36
1085	25.700	24.10	0.00	0.00	0.00	7.57	7.41	7.41	0.00	0.00	0.00	0.00	0.00	16.34	0.00	0.00	0.35
1086	25.600	24.10	0.00	0.00	0.00	7.57	7.41	7.41	0.00	0.00	0.00	0.00	0.00	16.34	0.00	0.00	0.35
1087	25.500	24.10	0.00	0.00	0.00	7.57	7.41	7.41	0.00	0.00	0.00	0.00	0.00	16.35	0.00	0.00	0.35
1088	25.400	24.10	0.00	0.00	0.00	7.57	7.41	7.41	0.00	0.00	0.00	0.00	0.00	16.35	0.00	0.00	0.35
1089	25.300	24.10	0.00	0.00	0.00	7.57	7.41	7.41	0.00	0.00	0.00	0.00	0.00	16.35	0.00	0.00	0.35
1090	25.200	24.10	0.00	0.00	0.00	7.57	7.41	7.41	0.00	0.00	0.00	0.00	0.00	16.36	0.00	0.00	0.35
1091	25.100	24.10	0.00	0.00	0.00	7.57	7.41	7.41	0.00	0.00	0.00	0.00	0.00	16.36	0.00	0.00	0.35
1092	25.000	24.10	0.00	0.00	0.00	7.57	7.41	7.41	0.00	0.00	0.00	0.00	0.00	16.36	0.00	0.00	0.35
1093	24.900	24.10	0.00	0.00	0.00	7.57	7.41	7.41	0.00	0.00	0.00	0.00	0.00	16.37	0.00	0.00	0.35
1094	24.800	24.10	0.00	0.00	0.00	7.57	7.41	7.41	0.00	0.00	0.00	0.00	0.00	16.37	0.00	0.00	0.35
1095	24.700	24.10	0.00	0.00	0.00	7.57	7.41	7.41	0.00	0.00	0.00	0.00	0.00	16.38	0.00	0.00	0.35
1096	24.600	24.10	0.00	0.00	0.00	7.57	7.41	7.41	0.00	0.00	0.00	0.00	0.00	16.38	0.00	0.00	0.35
1097	24.500	24.10	0.00	0.00	0.00	7.57	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.38	0.00	0.00	0.35
1098	24.400	24.10	0.00	0.00	0.00	7.57	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.39	0.00	0.00	0.35
1099	24.300	24.10	0.00	0.00	0.00	7.57	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.39	0.00	0.00	0.35
1100	24.200	24.10	0.00	0.00	0.00	7.57	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.39	0.00	0.00	0.35
1101	24.100	24.10	0.00	0.00	0.00	7.57	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.35
1102	24.000	24.10	0.00	0.00	0.00	7.57	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.35
1103	23.900	24.10	0.00	0.00	0.00	7.57	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.40	0.00	0.00	0.35
1104	23.800	24.10	0.00	0.00	0.00	7.57	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.41	0.00	0.00	0.35
1105	23.700	24.10	0.00	0.00	0.00	7.57	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.41	0.00	0.00	0.35
1106	23.600	24.10	0.00	0.00	0.00	7.57	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.42	0.00	0.00	0.35
1107	23.500	24.10	0.00	0.00	0.00	7.57	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.42	0.00	0.00	0.35
1108	23.400	24.10	0.00	0.00	0.00	7.57	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.42	0.00	0.00	0.34
1109	23.300	24.10	0.00	0.00	0.00	7.57	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.43	0.00	0.00	0.34
1110	23.200	24.10	0.00	0.00	0.00	7.57	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.43	0.00	0.00	0.34
1111	23.100	24.10	0.00	0.00	0.00	7.57	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.43	0.00	0.00	0.34
1112	23.000	24.10	0.00	0.00	0.00	7.57	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.44	0.00	0.00	0.34
1113	22.900	24.10	0.00	0.00	0.00	7.57	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.44	0.00	0.00	0.34
1114	22.800	24.10	0.00	0.00	0.00	7.57	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.44	0.00	0.00	0.34
1115	22.700	24.10	0.00	0.00	0.00	7.58	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.45	0.00	0.00	0.34
1116	22.600	24.10	0.00	0.00	0.00	7.58	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.45	0.00	0.00	0.34
1117	22.500	24.10	0.00	0.00	0.00	7.58	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.46	0.00	0.00	0.34
1118	22.400	24.10	0.00	0.00	0.00	7.58	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.46	0.00	0.00	0.34
1119	22.300	24.10	0.00	0.00	0.00	7.58	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.46	0.00	0.00	0.34
1120	22.200	24.10	0.00	0.00	0.00	7.58	7.43	7.43	0.00	0.00	0.00	0.00	0.00	16.47	0.00	0.00	0.34
1121	22.100	24.10	0.00	0.00	0.00	7.58	7.42	7.42	0.00	0.00	0.00	0.00	0.00	16.47	0.00	0.00	0.34

\* CM-I = CHLORIDES  
MG/L

CM-II = SULFATES  
MG/L

NCM = NBOD  
MG/L

\*\* g/cu m

FINAL REPORT BIG CREEK  
REACH NO. 13 WEIR #2

Big Creek - STREAM MODEL  
WATER QUALITY CALIBRATION

\*\*\*\*\* REACH INPUTS \*\*\*\*\*



**Big Creek – 080903 – Calibration model output:**

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
1122	UPR RCH	1.10840	24.10	0.00	0.00	0.00	7.58	7.42	7.42	0.00	0.00	0.00	0.00	16.47	0.00	0.34
EACH	INCR	0.0020	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
1122	22.10	22.00	1.11040	9.89	0.01529	0.08	1.77	41.07	7261.12	4107.39	72.61	0.00	0.000	0.014	0.015
TOT						0.08			7261.12	4107.39					
AVG					0.01529		1.77	41.07			72.61				
CUM						168.82									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECA 1/da	CBOD SETT 1/da	ANBOD DECA 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECA 1/da	ORGN SETT 1/da	NH3 DECA 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECA 1/da	NCM DECA 1/da	NCM SETT 1/da
1122	22.000	8.40	0.71	0.08	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.99	0.00	0.00	0.21	0.06
20	DEG C RATE			0.07	0.00	0.00				0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.16	
AVG	20 DEG C RATE		0.66		0.06					0.00										0.06

\* g/sq m/d                      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
1122	22.000	24.10	0.00	0.00	0.00	7.63	7.33	7.33	0.00	0.00	0.00	0.00	0.00	16.47	0.00	0.00	0.33

\* CM-I = CHLORIDES MG/L                      CM-II = SULFATES MG/L                      NCM = NBOD MG/L  
 \*\* g/cu m

FINAL REPORT                      BIG CREEK                      Big Creek - STREAM MODEL  
 REACH NO. 14                      BIG CREEK, WEIR #2 TO WEIR #1                      WATER QUALITY CALIBRATION

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
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**Big Creek – 080903 – Calibration model output:**

1123	UPR RCH	1.11040	24.10	0.00	0.00	0.00	7.63	7.33	7.33	0.00	0.00	0.00	0.00	16.47	0.00	0.33
EACH	INCR	0.0020	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1128	WSTLD	0.05240	24.10	0.00	0.00	0.00	9.43	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.46
1204	WSTLD	0.02490	24.10	0.00	0.00	0.00	9.43	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.46

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
1123	22.00	21.90	1.11241	9.87	0.01532	0.08	1.77	41.08	7261.54	4107.52	72.62	0.00	0.000	0.014	0.015
1124	21.90	21.80	1.11442	9.85	0.01535	0.08	1.77	41.08	7261.97	4107.65	72.62	0.00	0.000	0.014	0.015
1125	21.80	21.70	1.11643	9.83	0.01537	0.08	1.77	41.08	7262.39	4107.78	72.62	0.00	0.000	0.014	0.015
1126	21.70	21.60	1.11844	9.82	0.01540	0.08	1.77	41.08	7262.81	4107.90	72.63	0.00	0.000	0.014	0.015
1127	21.60	21.50	1.12045	9.80	0.01543	0.08	1.77	41.08	7263.23	4108.03	72.63	0.00	0.000	0.014	0.015
1128	21.50	21.40	1.17486	13.81	0.01615	0.07	1.77	41.11	7274.39	4111.44	72.74	0.00	0.000	0.014	0.016
1129	21.40	21.30	1.17687	13.78	0.01618	0.07	1.77	41.12	7274.80	4111.57	72.75	0.00	0.000	0.014	0.016
1130	21.30	21.20	1.17889	13.76	0.01620	0.07	1.77	41.12	7275.20	4111.69	72.75	0.00	0.000	0.014	0.016
1131	21.20	21.10	1.18090	13.74	0.01623	0.07	1.77	41.12	7275.60	4111.82	72.76	0.00	0.000	0.015	0.016
1132	21.10	21.00	1.18291	13.71	0.01626	0.07	1.77	41.12	7276.01	4111.94	72.76	0.00	0.000	0.015	0.016
1133	21.00	20.90	1.18492	13.69	0.01628	0.07	1.77	41.12	7276.41	4112.06	72.76	0.00	0.000	0.015	0.016
1134	20.90	20.80	1.18693	13.67	0.01631	0.07	1.77	41.12	7276.81	4112.19	72.77	0.00	0.000	0.015	0.016
1135	20.80	20.70	1.18894	13.64	0.01634	0.07	1.77	41.12	7277.21	4112.31	72.77	0.00	0.000	0.015	0.016
1136	20.70	20.60	1.19095	13.62	0.01636	0.07	1.77	41.12	7277.62	4112.43	72.78	0.00	0.000	0.015	0.016
1137	20.60	20.50	1.19296	13.60	0.01639	0.07	1.77	41.13	7278.02	4112.55	72.78	0.00	0.000	0.015	0.016
1138	20.50	20.40	1.19497	13.57	0.01642	0.07	1.77	41.13	7278.42	4112.68	72.78	0.00	0.000	0.015	0.016
1139	20.40	20.30	1.19699	13.55	0.01644	0.07	1.77	41.13	7278.82	4112.80	72.79	0.00	0.000	0.015	0.016
1140	20.30	20.20	1.19900	13.53	0.01647	0.07	1.77	41.13	7279.22	4112.92	72.79	0.00	0.000	0.015	0.016
1141	20.20	20.10	1.20101	13.51	0.01650	0.07	1.77	41.13	7279.62	4113.04	72.80	0.00	0.000	0.015	0.016
1142	20.10	20.00	1.20302	13.48	0.01652	0.07	1.77	41.13	7280.01	4113.16	72.80	0.00	0.000	0.015	0.017
1143	20.00	19.90	1.20503	13.46	0.01655	0.07	1.77	41.13	7280.41	4113.29	72.80	0.00	0.000	0.015	0.017
1144	19.90	19.80	1.20704	13.44	0.01658	0.07	1.77	41.13	7280.81	4113.41	72.81	0.00	0.000	0.015	0.017
1145	19.80	19.70	1.20905	13.42	0.01661	0.07	1.77	41.14	7281.21	4113.53	72.81	0.00	0.000	0.015	0.017
1146	19.70	19.60	1.21106	13.39	0.01663	0.07	1.77	41.14	7281.60	4113.65	72.82	0.00	0.000	0.015	0.017
1147	19.60	19.50	1.21308	13.37	0.01666	0.07	1.77	41.14	7282.00	4113.77	72.82	0.00	0.000	0.015	0.017
1148	19.50	19.40	1.21509	13.35	0.01669	0.07	1.77	41.14	7282.39	4113.89	72.82	0.00	0.000	0.015	0.017
1149	19.40	19.30	1.21710	13.33	0.01671	0.07	1.77	41.14	7282.79	4114.01	72.83	0.00	0.000	0.015	0.017
1150	19.30	19.20	1.21911	13.30	0.01674	0.07	1.77	41.14	7283.18	4114.13	72.83	0.00	0.000	0.015	0.017
1151	19.20	19.10	1.22112	13.28	0.01677	0.07	1.77	41.14	7283.57	4114.26	72.84	0.00	0.000	0.015	0.017
1152	19.10	19.00	1.22313	13.26	0.01679	0.07	1.77	41.14	7283.97	4114.38	72.84	0.00	0.000	0.015	0.017
1153	19.00	18.90	1.22514	13.24	0.01682	0.07	1.77	41.14	7284.36	4114.50	72.84	0.00	0.000	0.015	0.017
1154	18.90	18.80	1.22715	13.22	0.01685	0.07	1.77	41.15	7284.75	4114.62	72.85	0.00	0.000	0.015	0.017
1155	18.80	18.70	1.22916	13.20	0.01687	0.07	1.77	41.15	7285.14	4114.74	72.85	0.00	0.000	0.015	0.017
1156	18.70	18.60	1.23118	13.17	0.01690	0.07	1.77	41.15	7285.54	4114.86	72.86	0.00	0.000	0.015	0.017
1157	18.60	18.50	1.23319	13.15	0.01693	0.07	1.77	41.15	7285.93	4114.98	72.86	0.00	0.000	0.015	0.017
1158	18.50	18.40	1.23520	13.13	0.01695	0.07	1.77	41.15	7286.32	4115.10	72.86	0.00	0.000	0.015	0.017
1159	18.40	18.30	1.23721	13.11	0.01698	0.07	1.77	41.15	7286.71	4115.22	72.87	0.00	0.000	0.015	0.017
1160	18.30	18.20	1.23922	13.09	0.01701	0.07	1.77	41.15	7287.10	4115.33	72.87	0.00	0.000	0.015	0.017
1161	18.20	18.10	1.24123	13.07	0.01703	0.07	1.77	41.15	7287.48	4115.45	72.87	0.00	0.000	0.015	0.017
1162	18.10	18.00	1.24324	13.05	0.01706	0.07	1.77	41.16	7287.87	4115.57	72.88	0.00	0.000	0.015	0.017
1163	18.00	17.90	1.24525	13.03	0.01709	0.07	1.77	41.16	7288.26	4115.69	72.88	0.00	0.000	0.015	0.017
1164	17.90	17.80	1.24727	13.00	0.01711	0.07	1.77	41.16	7288.65	4115.81	72.89	0.00	0.000	0.015	0.017
1165	17.80	17.70	1.24928	12.98	0.01714	0.07	1.77	41.16	7289.04	4115.93	72.89	0.00	0.000	0.015	0.017

Big Creek – 080903 – Calibration model output:

1166	17.70	17.60	1.25129	12.96	0.01717	0.07	1.77	41.16	7289.42	4116.05	72.89	0.00	0.000	0.015	0.017
1167	17.60	17.50	1.25330	12.94	0.01719	0.07	1.77	41.16	7289.81	4116.17	72.90	0.00	0.000	0.015	0.017
1168	17.50	17.40	1.25531	12.92	0.01722	0.07	1.77	41.16	7290.19	4116.28	72.90	0.00	0.000	0.015	0.017
1169	17.40	17.30	1.25732	12.90	0.01725	0.07	1.77	41.16	7290.58	4116.40	72.91	0.00	0.000	0.015	0.017
1170	17.30	17.20	1.25933	12.88	0.01727	0.07	1.77	41.17	7290.96	4116.52	72.91	0.00	0.000	0.015	0.017
1171	17.20	17.10	1.26134	12.86	0.01730	0.07	1.77	41.17	7291.35	4116.64	72.91	0.00	0.000	0.015	0.017
1172	17.10	17.00	1.26335	12.84	0.01733	0.07	1.77	41.17	7291.73	4116.76	72.92	0.00	0.000	0.016	0.017
1173	17.00	16.90	1.26537	12.82	0.01735	0.07	1.77	41.17	7292.11	4116.87	72.92	0.00	0.000	0.016	0.017
1174	16.90	16.80	1.26738	12.80	0.01738	0.07	1.77	41.17	7292.50	4116.99	72.92	0.00	0.000	0.016	0.017
1175	16.80	16.70	1.26939	12.78	0.01741	0.07	1.77	41.17	7292.88	4117.11	72.93	0.00	0.000	0.016	0.017
1176	16.70	16.60	1.27140	12.76	0.01743	0.07	1.77	41.17	7293.26	4117.23	72.93	0.00	0.000	0.016	0.017
1177	16.60	16.50	1.27341	12.74	0.01746	0.07	1.77	41.17	7293.64	4117.34	72.94	0.00	0.000	0.016	0.017
1178	16.50	16.40	1.27542	12.72	0.01749	0.07	1.77	41.17	7294.02	4117.46	72.94	0.00	0.000	0.016	0.017
1179	16.40	16.30	1.27743	12.70	0.01751	0.07	1.77	41.18	7294.40	4117.58	72.94	0.00	0.000	0.016	0.018
1180	16.30	16.20	1.27944	12.68	0.01754	0.07	1.77	41.18	7294.78	4117.69	72.95	0.00	0.000	0.016	0.018
1181	16.20	16.10	1.28146	12.66	0.01757	0.07	1.77	41.18	7295.16	4117.81	72.95	0.00	0.000	0.016	0.018
1182	16.10	16.00	1.28347	12.64	0.01759	0.07	1.77	41.18	7295.54	4117.93	72.96	0.00	0.000	0.016	0.018
1183	16.00	15.90	1.28548	12.62	0.01762	0.07	1.77	41.18	7295.92	4118.04	72.96	0.00	0.000	0.016	0.018
1184	15.90	15.80	1.28749	12.60	0.01765	0.07	1.77	41.18	7296.30	4118.16	72.96	0.00	0.000	0.016	0.018
1185	15.80	15.70	1.28950	12.58	0.01767	0.07	1.77	41.18	7296.68	4118.27	72.97	0.00	0.000	0.016	0.018
1186	15.70	15.60	1.29151	12.56	0.01770	0.07	1.77	41.18	7297.05	4118.39	72.97	0.00	0.000	0.016	0.018
1187	15.60	15.50	1.29352	12.54	0.01773	0.07	1.77	41.19	7297.43	4118.51	72.97	0.00	0.000	0.016	0.018
1188	15.50	15.40	1.29553	12.52	0.01775	0.07	1.77	41.19	7297.81	4118.62	72.98	0.00	0.000	0.016	0.018
1189	15.40	15.30	1.29754	12.50	0.01778	0.07	1.77	41.19	7298.18	4118.74	72.98	0.00	0.000	0.016	0.018
1190	15.30	15.20	1.29956	12.48	0.01781	0.07	1.77	41.19	7298.56	4118.85	72.99	0.00	0.000	0.016	0.018
1191	15.20	15.10	1.30157	12.46	0.01783	0.06	1.77	41.19	7298.93	4118.97	72.99	0.00	0.000	0.016	0.018
1192	15.10	15.00	1.30358	12.44	0.01786	0.06	1.77	41.19	7299.31	4119.08	72.99	0.00	0.000	0.016	0.018
1193	15.00	14.90	1.30559	12.42	0.01789	0.06	1.77	41.19	7299.68	4119.20	73.00	0.00	0.000	0.016	0.018
1194	14.90	14.80	1.30760	12.40	0.01791	0.06	1.77	41.19	7300.06	4119.31	73.00	0.00	0.000	0.016	0.018
1195	14.80	14.70	1.30961	12.39	0.01794	0.06	1.77	41.19	7300.43	4119.43	73.00	0.00	0.000	0.016	0.018
1196	14.70	14.60	1.31162	12.37	0.01797	0.06	1.77	41.20	7300.80	4119.54	73.01	0.00	0.000	0.016	0.018
1197	14.60	14.50	1.31363	12.35	0.01799	0.06	1.77	41.20	7301.17	4119.66	73.01	0.00	0.000	0.016	0.018
1198	14.50	14.40	1.31565	12.33	0.01802	0.06	1.77	41.20	7301.55	4119.77	73.02	0.00	0.000	0.016	0.018
1199	14.40	14.30	1.31766	12.31	0.01805	0.06	1.77	41.20	7301.92	4119.88	73.02	0.00	0.000	0.016	0.018
1200	14.30	14.20	1.31967	12.29	0.01807	0.06	1.77	41.20	7302.29	4120.00	73.02	0.00	0.000	0.016	0.018
1201	14.20	14.10	1.32168	12.27	0.01810	0.06	1.77	41.20	7302.66	4120.11	73.03	0.00	0.000	0.016	0.018
1202	14.10	14.00	1.32369	12.25	0.01813	0.06	1.77	41.20	7303.03	4120.23	73.03	0.00	0.000	0.016	0.018
1203	14.00	13.90	1.32570	12.24	0.01815	0.06	1.77	41.20	7303.40	4120.34	73.03	0.00	0.000	0.016	0.018
1204	13.90	13.80	1.35261	13.83	0.01851	0.06	1.77	41.22	7308.31	4121.85	73.08	0.00	0.000	0.017	0.019
1205	13.80	13.70	1.35462	13.81	0.01853	0.06	1.77	41.22	7308.67	4121.96	73.09	0.00	0.000	0.017	0.019
1206	13.70	13.60	1.35663	13.79	0.01856	0.06	1.77	41.22	7309.03	4122.07	73.09	0.00	0.000	0.017	0.019
1207	13.60	13.50	1.35865	13.77	0.01859	0.06	1.77	41.22	7309.40	4122.18	73.09	0.00	0.000	0.017	0.019
1208	13.50	13.40	1.36066	13.75	0.01861	0.06	1.77	41.22	7309.76	4122.30	73.10	0.00	0.000	0.017	0.019
1209	13.40	13.30	1.36267	13.73	0.01864	0.06	1.77	41.22	7310.12	4122.41	73.10	0.00	0.000	0.017	0.019
1210	13.30	13.20	1.36468	13.71	0.01867	0.06	1.77	41.23	7310.48	4122.52	73.10	0.00	0.000	0.017	0.019
1211	13.20	13.10	1.36669	13.69	0.01869	0.06	1.77	41.23	7310.85	4122.63	73.11	0.00	0.000	0.017	0.019
1212	13.10	13.00	1.36870	13.67	0.01872	0.06	1.77	41.23	7311.21	4122.74	73.11	0.00	0.000	0.017	0.019
1213	13.00	12.90	1.37071	13.65	0.01875	0.06	1.77	41.23	7311.57	4122.85	73.12	0.00	0.000	0.017	0.019
1214	12.90	12.80	1.37272	13.63	0.01877	0.06	1.77	41.23	7311.93	4122.96	73.12	0.00	0.000	0.017	0.019
1215	12.80	12.70	1.37474	13.61	0.01880	0.06	1.77	41.23	7312.29	4123.07	73.12	0.00	0.000	0.017	0.019
1216	12.70	12.60	1.37675	13.59	0.01883	0.06	1.77	41.23	7312.65	4123.18	73.13	0.00	0.000	0.017	0.019
1217	12.60	12.50	1.37876	13.57	0.01885	0.06	1.77	41.23	7313.00	4123.29	73.13	0.00	0.000	0.017	0.019
1218	12.50	12.40	1.38077	13.55	0.01888	0.06	1.77	41.23	7313.36	4123.40	73.13	0.00	0.000	0.017	0.019
1219	12.40	12.30	1.38278	13.53	0.01891	0.06	1.77	41.24	7313.72	4123.51	73.14	0.00	0.000	0.017	0.019
1220	12.30	12.20	1.38479	13.51	0.01893	0.06	1.77	41.24	7314.08	4123.62	73.14	0.00	0.000	0.017	0.019

Big Creek – 080903 – Calibration model output:

1221	12.20	12.10	1.38680	13.49	0.01896	0.06	1.77	41.24	7314.44	4123.73	73.14	0.00	0.000	0.017	0.019
1222	12.10	12.00	1.38881	13.47	0.01899	0.06	1.77	41.24	7314.79	4123.84	73.15	0.00	0.000	0.017	0.019
1223	12.00	11.90	1.39082	13.45	0.01901	0.06	1.77	41.24	7315.15	4123.95	73.15	0.00	0.000	0.017	0.019
1224	11.90	11.80	1.39284	13.43	0.01904	0.06	1.77	41.24	7315.51	4124.06	73.16	0.00	0.000	0.017	0.019
1225	11.80	11.70	1.39485	13.41	0.01907	0.06	1.77	41.24	7315.86	4124.17	73.16	0.00	0.000	0.017	0.019
1226	11.70	11.60	1.39686	13.39	0.01909	0.06	1.77	41.24	7316.22	4124.28	73.16	0.00	0.000	0.017	0.019
1227	11.60	11.50	1.39887	13.38	0.01912	0.06	1.77	41.24	7316.57	4124.39	73.17	0.00	0.000	0.017	0.019
1228	11.50	11.40	1.40088	13.36	0.01915	0.06	1.77	41.25	7316.93	4124.50	73.17	0.00	0.000	0.017	0.019
1229	11.40	11.30	1.40289	13.34	0.01917	0.06	1.77	41.25	7317.28	4124.61	73.17	0.00	0.000	0.017	0.019
1230	11.30	11.20	1.40490	13.32	0.01920	0.06	1.77	41.25	7317.63	4124.72	73.18	0.00	0.000	0.017	0.019
1231	11.20	11.10	1.40691	13.30	0.01923	0.06	1.77	41.25	7317.99	4124.83	73.18	0.00	0.000	0.017	0.019
1232	11.10	11.00	1.40893	13.28	0.01925	0.06	1.77	41.25	7318.34	4124.94	73.18	0.00	0.000	0.017	0.019
1233	11.00	10.90	1.41094	13.26	0.01928	0.06	1.77	41.25	7318.69	4125.05	73.19	0.00	0.000	0.017	0.019
1234	10.90	10.80	1.41295	13.24	0.01931	0.06	1.77	41.25	7319.05	4125.15	73.19	0.00	0.000	0.017	0.019
1235	10.80	10.70	1.41496	13.22	0.01933	0.06	1.77	41.25	7319.40	4125.26	73.19	0.00	0.000	0.017	0.019
1236	10.70	10.60	1.41697	13.20	0.01936	0.06	1.77	41.25	7319.75	4125.37	73.20	0.00	0.000	0.017	0.019
1237	10.60	10.50	1.41898	13.19	0.01938	0.06	1.77	41.25	7320.10	4125.48	73.20	0.00	0.000	0.017	0.019
1238	10.50	10.40	1.42099	13.17	0.01941	0.06	1.77	41.26	7320.45	4125.59	73.20	0.00	0.000	0.017	0.019
1239	10.40	10.30	1.42300	13.15	0.01944	0.06	1.77	41.26	7320.80	4125.70	73.21	0.00	0.000	0.017	0.019
1240	10.30	10.20	1.42501	13.13	0.01946	0.06	1.77	41.26	7321.15	4125.80	73.21	0.00	0.000	0.017	0.019
1241	10.20	10.10	1.42703	13.11	0.01949	0.06	1.77	41.26	7321.50	4125.91	73.22	0.00	0.000	0.017	0.019
1242	10.10	10.00	1.42904	13.09	0.01952	0.06	1.77	41.26	7321.85	4126.02	73.22	0.00	0.000	0.017	0.020
1243	10.00	9.90	1.43105	13.07	0.01954	0.06	1.77	41.26	7322.20	4126.13	73.22	0.00	0.000	0.018	0.020
1244	9.90	9.80	1.43306	13.06	0.01957	0.06	1.77	41.26	7322.55	4126.23	73.23	0.00	0.000	0.018	0.020
1245	9.80	9.70	1.43507	13.04	0.01960	0.06	1.77	41.26	7322.90	4126.34	73.23	0.00	0.000	0.018	0.020
1246	9.70	9.60	1.43708	13.02	0.01962	0.06	1.77	41.26	7323.24	4126.45	73.23	0.00	0.000	0.018	0.020
1247	9.60	9.50	1.43909	13.00	0.01965	0.06	1.77	41.27	7323.59	4126.56	73.24	0.00	0.000	0.018	0.020
1248	9.50	9.40	1.44110	12.98	0.01968	0.06	1.77	41.27	7323.94	4126.66	73.24	0.00	0.000	0.018	0.020
1249	9.40	9.30	1.44312	12.97	0.01970	0.06	1.77	41.27	7324.29	4126.77	73.24	0.00	0.000	0.018	0.020
1250	9.30	9.20	1.44513	12.95	0.01973	0.06	1.77	41.27	7324.63	4126.88	73.25	0.00	0.000	0.018	0.020
1251	9.20	9.10	1.44714	12.93	0.01976	0.06	1.77	41.27	7324.98	4126.98	73.25	0.00	0.000	0.018	0.020
1252	9.10	9.00	1.44915	12.91	0.01978	0.06	1.77	41.27	7325.32	4127.09	73.25	0.00	0.000	0.018	0.020
1253	9.00	8.90	1.45116	12.89	0.01981	0.06	1.77	41.27	7325.67	4127.20	73.26	0.00	0.000	0.018	0.020
1254	8.90	8.80	1.45317	12.88	0.01984	0.06	1.78	41.27	7326.01	4127.30	73.26	0.00	0.000	0.018	0.020
1255	8.80	8.70	1.45518	12.86	0.01986	0.06	1.78	41.27	7326.36	4127.41	73.26	0.00	0.000	0.018	0.020
1256	8.70	8.60	1.45719	12.84	0.01989	0.06	1.78	41.28	7326.70	4127.52	73.27	0.00	0.000	0.018	0.020
1257	8.60	8.50	1.45921	12.82	0.01992	0.06	1.78	41.28	7327.05	4127.62	73.27	0.00	0.000	0.018	0.020
1258	8.50	8.40	1.46122	12.80	0.01994	0.06	1.78	41.28	7327.39	4127.73	73.27	0.00	0.000	0.018	0.020
1259	8.40	8.30	1.46323	12.79	0.01997	0.06	1.78	41.28	7327.73	4127.83	73.28	0.00	0.000	0.018	0.020
1260	8.30	8.20	1.46524	12.77	0.01999	0.06	1.78	41.28	7328.07	4127.94	73.28	0.00	0.000	0.018	0.020
1261	8.20	8.10	1.46725	12.75	0.02002	0.06	1.78	41.28	7328.42	4128.04	73.28	0.00	0.000	0.018	0.020
1262	8.10	8.00	1.46926	12.73	0.02005	0.06	1.78	41.28	7328.76	4128.15	73.29	0.00	0.000	0.018	0.020
1263	8.00	7.90	1.47127	12.72	0.02007	0.06	1.78	41.28	7329.10	4128.25	73.29	0.00	0.000	0.018	0.020
1264	7.90	7.80	1.47328	12.70	0.02010	0.06	1.78	41.28	7329.44	4128.36	73.29	0.00	0.000	0.018	0.020
1265	7.80	7.70	1.47529	12.68	0.02013	0.06	1.78	41.28	7329.78	4128.47	73.30	0.00	0.000	0.018	0.020
1266	7.70	7.60	1.47731	12.66	0.02015	0.06	1.78	41.29	7330.12	4128.57	73.30	0.00	0.000	0.018	0.020
1267	7.60	7.50	1.47932	12.65	0.02018	0.06	1.78	41.29	7330.46	4128.68	73.30	0.00	0.000	0.018	0.020
1268	7.50	7.40	1.48133	12.63	0.02021	0.06	1.78	41.29	7330.80	4128.78	73.31	0.00	0.000	0.018	0.020
1269	7.40	7.30	1.48334	12.61	0.02023	0.06	1.78	41.29	7331.14	4128.89	73.31	0.00	0.000	0.018	0.020
1270	7.30	7.20	1.48535	12.60	0.02026	0.06	1.78	41.29	7331.48	4128.99	73.31	0.00	0.000	0.018	0.020
1271	7.20	7.10	1.48736	12.58	0.02029	0.06	1.78	41.29	7331.82	4129.09	73.32	0.00	0.000	0.018	0.020
1272	7.10	7.00	1.48937	12.56	0.02031	0.06	1.78	41.29	7332.16	4129.20	73.32	0.00	0.000	0.018	0.020
1273	7.00	6.90	1.49138	12.55	0.02034	0.06	1.78	41.29	7332.50	4129.30	73.32	0.00	0.000	0.018	0.020
1274	6.90	6.80	1.49340	12.53	0.02037	0.06	1.78	41.29	7332.83	4129.41	73.33	0.00	0.000	0.018	0.020
1275	6.80	6.70	1.49541	12.51	0.02039	0.06	1.78	41.30	7333.17	4129.51	73.33	0.00	0.000	0.018	0.020

**Big Creek – 080903 – Calibration model output:**

1276	6.70	6.60	1.49742	12.49	0.02042	0.06	1.78	41.30	7333.51	4129.62	73.34	0.00	0.000	0.018	0.020
1277	6.60	6.50	1.49943	12.48	0.02045	0.06	1.78	41.30	7333.85	4129.72	73.34	0.00	0.000	0.018	0.020
1278	6.50	6.40	1.50144	12.46	0.02047	0.06	1.78	41.30	7334.18	4129.82	73.34	0.00	0.000	0.018	0.020
1279	6.40	6.30	1.50345	12.44	0.02050	0.06	1.78	41.30	7334.52	4129.93	73.35	0.00	0.000	0.018	0.020
1280	6.30	6.20	1.50546	12.43	0.02052	0.06	1.78	41.30	7334.85	4130.03	73.35	0.00	0.000	0.018	0.021
1281	6.20	6.10	1.50747	12.41	0.02055	0.06	1.78	41.30	7335.19	4130.13	73.35	0.00	0.000	0.018	0.021
1282	6.10	6.00	1.50948	12.39	0.02058	0.06	1.78	41.30	7335.52	4130.24	73.36	0.00	0.000	0.018	0.021
1283	6.00	5.90	1.51150	12.38	0.02060	0.06	1.78	41.30	7335.86	4130.34	73.36	0.00	0.000	0.018	0.021
1284	5.90	5.80	1.51351	12.36	0.02063	0.06	1.78	41.30	7336.19	4130.45	73.36	0.00	0.000	0.019	0.021
1285	5.80	5.70	1.51552	12.35	0.02066	0.06	1.78	41.31	7336.53	4130.55	73.37	0.00	0.000	0.019	0.021
1286	5.70	5.60	1.51753	12.33	0.02068	0.06	1.78	41.31	7336.86	4130.65	73.37	0.00	0.000	0.019	0.021
1287	5.60	5.50	1.51954	12.31	0.02071	0.06	1.78	41.31	7337.19	4130.75	73.37	0.00	0.000	0.019	0.021
1288	5.50	5.40	1.52155	12.30	0.02074	0.06	1.78	41.31	7337.53	4130.86	73.38	0.00	0.000	0.019	0.021
1289	5.40	5.30	1.52356	12.28	0.02076	0.06	1.78	41.31	7337.86	4130.96	73.38	0.00	0.000	0.019	0.021
1290	5.30	5.20	1.52557	12.26	0.02079	0.06	1.78	41.31	7338.19	4131.06	73.38	0.00	0.000	0.019	0.021
1291	5.20	5.10	1.52759	12.25	0.02082	0.06	1.78	41.31	7338.52	4131.17	73.39	0.00	0.000	0.019	0.021
1292	5.10	5.00	1.52960	12.23	0.02084	0.06	1.78	41.31	7338.85	4131.27	73.39	0.00	0.000	0.019	0.021

TOT						10.75			1242104.62	700621.25													
AVG						0.01830		1.77	41.21														73.06
CUM								179.57															

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECA 1/da	CBOD SETT 1/da	ANBOD DECA 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECA 1/da	ORGN SETT 1/da	NH3 DECA 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECA 1/da	NCM DECA 1/da	NCM SETT 1/da
1123	21.900	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.21	0.06
1124	21.800	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.21	0.06
1125	21.700	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.21	0.06
1126	21.600	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.21	0.06
1127	21.500	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.21	0.06
1128	21.400	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.21	0.06
1129	21.300	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.21	0.06
1130	21.200	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.00	0.00	0.21	0.06
1131	21.100	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.00	0.00	0.21	0.06
1132	21.000	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.00	0.00	0.21	0.06
1133	20.900	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.00	0.00	0.21	0.06
1134	20.800	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.00	0.00	0.21	0.06
1135	20.700	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.00	0.00	0.21	0.06
1136	20.600	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.00	0.00	0.21	0.06
1137	20.500	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.02	0.00	0.00	0.21	0.06
1138	20.400	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.02	0.00	0.00	0.21	0.06
1139	20.300	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.02	0.00	0.00	0.21	0.06
1140	20.200	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.02	0.00	0.00	0.21	0.06
1141	20.100	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.02	0.00	0.00	0.21	0.06
1142	20.000	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.02	0.00	0.00	0.21	0.06
1143	19.900	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.02	0.00	0.00	0.21	0.06
1144	19.800	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.03	0.00	0.00	0.21	0.06
1145	19.700	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.03	0.00	0.00	0.21	0.06
1146	19.600	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.03	0.00	0.00	0.21	0.06
1147	19.500	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.03	0.00	0.00	0.21	0.06
1148	19.400	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.03	0.00	0.00	0.21	0.06





**Big Creek – 080903 – Calibration model output:**

1259	8.300	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.19	0.00	0.00	0.21	0.06
1260	8.200	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.00	0.00	0.21	0.06
1261	8.100	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.00	0.00	0.21	0.06
1262	8.000	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.00	0.00	0.21	0.06
1263	7.900	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.00	0.00	0.21	0.06
1264	7.800	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.00	0.00	0.21	0.06
1265	7.700	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.00	0.00	0.21	0.06
1266	7.600	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.00	0.00	0.21	0.06
1267	7.500	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.21	0.00	0.00	0.21	0.06
1268	7.400	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.21	0.00	0.00	0.21	0.06
1269	7.300	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.21	0.00	0.00	0.21	0.06
1270	7.200	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.21	0.00	0.00	0.21	0.06
1271	7.100	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.21	0.00	0.00	0.21	0.06
1272	7.000	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.21	0.00	0.00	0.21	0.06
1273	6.900	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.00	0.00	0.21	0.06
1274	6.800	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.00	0.00	0.21	0.06
1275	6.700	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.00	0.00	0.21	0.06
1276	6.600	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.00	0.00	0.21	0.06
1277	6.500	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.00	0.00	0.21	0.06
1278	6.400	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.00	0.00	0.21	0.06
1279	6.300	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.00	0.00	0.21	0.06
1280	6.200	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.23	0.00	0.00	0.21	0.06
1281	6.100	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.23	0.00	0.00	0.21	0.06
1282	6.000	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.23	0.00	0.00	0.21	0.06
1283	5.900	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.23	0.00	0.00	0.21	0.06
1284	5.800	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.23	0.00	0.00	0.21	0.06
1285	5.700	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.23	0.00	0.00	0.21	0.06
1286	5.600	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.23	0.00	0.00	0.21	0.06
1287	5.500	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.24	0.00	0.00	0.21	0.06
1288	5.400	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.24	0.00	0.00	0.21	0.06
1289	5.300	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.24	0.00	0.00	0.21	0.06
1290	5.200	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.24	0.00	0.00	0.21	0.06
1291	5.100	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.24	0.00	0.00	0.21	0.06
1292	5.000	8.40	0.71	0.08	0.06	0.00	1.49	1.49	1.49	0.00	0.00	0.00	0.00	0.00	0.00	1.24	0.00	0.00	0.21	0.06
20 DEG C RATE				0.07		0.00	1.15			0.00		0.00	0.00	0.00	0.00		0.00	0.16		
AVG 20 DEG C RATE			0.65		0.06					0.00										0.06

\* g/sq m/d                      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
1123	21.900	24.10	0.00	0.00	0.00	7.62	7.32	7.32	0.00	0.00	0.00	0.00	0.00	16.49	0.00	0.00	0.34
1124	21.800	24.10	0.00	0.00	0.00	7.60	7.32	7.32	0.00	0.00	0.00	0.00	0.00	16.52	0.00	0.00	0.35
1125	21.700	24.10	0.00	0.00	0.00	7.59	7.31	7.31	0.00	0.00	0.00	0.00	0.00	16.54	0.00	0.00	0.36
1126	21.600	24.10	0.00	0.00	0.00	7.58	7.31	7.31	0.00	0.00	0.00	0.00	0.00	16.57	0.00	0.00	0.36
1127	21.500	24.10	0.00	0.00	0.00	7.57	7.30	7.30	0.00	0.00	0.00	0.00	0.00	16.59	0.00	0.00	0.37
1128	21.400	24.10	0.00	0.00	0.00	7.64	7.25	7.25	0.00	0.00	0.00	0.00	0.00	16.62	0.00	0.00	0.38
1129	21.300	24.10	0.00	0.00	0.00	7.63	7.25	7.25	0.00	0.00	0.00	0.00	0.00	16.64	0.00	0.00	0.39
1130	21.200	24.10	0.00	0.00	0.00	7.62	7.24	7.24	0.00	0.00	0.00	0.00	0.00	16.66	0.00	0.00	0.39
1131	21.100	24.10	0.00	0.00	0.00	7.61	7.24	7.24	0.00	0.00	0.00	0.00	0.00	16.69	0.00	0.00	0.40







Big Creek – 080903 – Calibration model output:

1242	10.000	24.10	0.00	0.00	0.00	7.56	6.92	6.92	0.00	0.00	0.00	0.00	0.00	19.38	0.00	0.00	0.64
1243	9.900	24.10	0.00	0.00	0.00	7.56	6.92	6.92	0.00	0.00	0.00	0.00	0.00	19.40	0.00	0.00	0.64
1244	9.800	24.10	0.00	0.00	0.00	7.56	6.92	6.92	0.00	0.00	0.00	0.00	0.00	19.43	0.00	0.00	0.64
1245	9.700	24.10	0.00	0.00	0.00	7.56	6.92	6.92	0.00	0.00	0.00	0.00	0.00	19.45	0.00	0.00	0.64
1246	9.600	24.10	0.00	0.00	0.00	7.57	6.92	6.92	0.00	0.00	0.00	0.00	0.00	19.48	0.00	0.00	0.65
1247	9.500	24.10	0.00	0.00	0.00	7.57	6.92	6.92	0.00	0.00	0.00	0.00	0.00	19.50	0.00	0.00	0.65
1248	9.400	24.10	0.00	0.00	0.00	7.57	6.92	6.92	0.00	0.00	0.00	0.00	0.00	19.52	0.00	0.00	0.65
1249	9.300	24.10	0.00	0.00	0.00	7.57	6.91	6.91	0.00	0.00	0.00	0.00	0.00	19.55	0.00	0.00	0.65
1250	9.200	24.10	0.00	0.00	0.00	7.57	6.91	6.91	0.00	0.00	0.00	0.00	0.00	19.57	0.00	0.00	0.65
1251	9.100	24.10	0.00	0.00	0.00	7.57	6.91	6.91	0.00	0.00	0.00	0.00	0.00	19.60	0.00	0.00	0.65
1252	9.000	24.10	0.00	0.00	0.00	7.58	6.91	6.91	0.00	0.00	0.00	0.00	0.00	19.62	0.00	0.00	0.65
1253	8.900	24.10	0.00	0.00	0.00	7.58	6.91	6.91	0.00	0.00	0.00	0.00	0.00	19.64	0.00	0.00	0.65
1254	8.800	24.10	0.00	0.00	0.00	7.58	6.91	6.91	0.00	0.00	0.00	0.00	0.00	19.67	0.00	0.00	0.65
1255	8.700	24.10	0.00	0.00	0.00	7.58	6.91	6.91	0.00	0.00	0.00	0.00	0.00	19.69	0.00	0.00	0.65
1256	8.600	24.10	0.00	0.00	0.00	7.58	6.91	6.91	0.00	0.00	0.00	0.00	0.00	19.72	0.00	0.00	0.65
1257	8.500	24.10	0.00	0.00	0.00	7.59	6.91	6.91	0.00	0.00	0.00	0.00	0.00	19.74	0.00	0.00	0.65
1258	8.400	24.10	0.00	0.00	0.00	7.59	6.90	6.90	0.00	0.00	0.00	0.00	0.00	19.77	0.00	0.00	0.65
1259	8.300	24.10	0.00	0.00	0.00	7.59	6.90	6.90	0.00	0.00	0.00	0.00	0.00	19.79	0.00	0.00	0.65
1260	8.200	24.10	0.00	0.00	0.00	7.59	6.90	6.90	0.00	0.00	0.00	0.00	0.00	19.81	0.00	0.00	0.65
1261	8.100	24.10	0.00	0.00	0.00	7.59	6.90	6.90	0.00	0.00	0.00	0.00	0.00	19.84	0.00	0.00	0.65
1262	8.000	24.10	0.00	0.00	0.00	7.59	6.90	6.90	0.00	0.00	0.00	0.00	0.00	19.86	0.00	0.00	0.65
1263	7.900	24.10	0.00	0.00	0.00	7.60	6.90	6.90	0.00	0.00	0.00	0.00	0.00	19.89	0.00	0.00	0.65
1264	7.800	24.10	0.00	0.00	0.00	7.60	6.90	6.90	0.00	0.00	0.00	0.00	0.00	19.91	0.00	0.00	0.65
1265	7.700	24.10	0.00	0.00	0.00	7.60	6.90	6.90	0.00	0.00	0.00	0.00	0.00	19.94	0.00	0.00	0.65
1266	7.600	24.10	0.00	0.00	0.00	7.60	6.90	6.90	0.00	0.00	0.00	0.00	0.00	19.96	0.00	0.00	0.65
1267	7.500	24.10	0.00	0.00	0.00	7.60	6.89	6.89	0.00	0.00	0.00	0.00	0.00	19.98	0.00	0.00	0.65
1268	7.400	24.10	0.00	0.00	0.00	7.60	6.89	6.89	0.00	0.00	0.00	0.00	0.00	20.01	0.00	0.00	0.65
1269	7.300	24.10	0.00	0.00	0.00	7.61	6.89	6.89	0.00	0.00	0.00	0.00	0.00	20.03	0.00	0.00	0.66
1270	7.200	24.10	0.00	0.00	0.00	7.61	6.89	6.89	0.00	0.00	0.00	0.00	0.00	20.06	0.00	0.00	0.66
1271	7.100	24.10	0.00	0.00	0.00	7.61	6.89	6.89	0.00	0.00	0.00	0.00	0.00	20.08	0.00	0.00	0.66
1272	7.000	24.10	0.00	0.00	0.00	7.61	6.89	6.89	0.00	0.00	0.00	0.00	0.00	20.11	0.00	0.00	0.66
1273	6.900	24.10	0.00	0.00	0.00	7.61	6.89	6.89	0.00	0.00	0.00	0.00	0.00	20.13	0.00	0.00	0.66
1274	6.800	24.10	0.00	0.00	0.00	7.62	6.89	6.89	0.00	0.00	0.00	0.00	0.00	20.15	0.00	0.00	0.66
1275	6.700	24.10	0.00	0.00	0.00	7.62	6.89	6.89	0.00	0.00	0.00	0.00	0.00	20.18	0.00	0.00	0.66
1276	6.600	24.10	0.00	0.00	0.00	7.62	6.89	6.89	0.00	0.00	0.00	0.00	0.00	20.20	0.00	0.00	0.66
1277	6.500	24.10	0.00	0.00	0.00	7.62	6.88	6.88	0.00	0.00	0.00	0.00	0.00	20.23	0.00	0.00	0.66
1278	6.400	24.10	0.00	0.00	0.00	7.62	6.88	6.88	0.00	0.00	0.00	0.00	0.00	20.25	0.00	0.00	0.66
1279	6.300	24.10	0.00	0.00	0.00	7.63	6.88	6.88	0.00	0.00	0.00	0.00	0.00	20.27	0.00	0.00	0.66
1280	6.200	24.10	0.00	0.00	0.00	7.63	6.88	6.88	0.00	0.00	0.00	0.00	0.00	20.30	0.00	0.00	0.66
1281	6.100	24.10	0.00	0.00	0.00	7.63	6.88	6.88	0.00	0.00	0.00	0.00	0.00	20.32	0.00	0.00	0.66
1282	6.000	24.10	0.00	0.00	0.00	7.63	6.88	6.88	0.00	0.00	0.00	0.00	0.00	20.35	0.00	0.00	0.66
1283	5.900	24.10	0.00	0.00	0.00	7.63	6.88	6.88	0.00	0.00	0.00	0.00	0.00	20.37	0.00	0.00	0.66
1284	5.800	24.10	0.00	0.00	0.00	7.63	6.88	6.88	0.00	0.00	0.00	0.00	0.00	20.40	0.00	0.00	0.66
1285	5.700	24.10	0.00	0.00	0.00	7.64	6.88	6.88	0.00	0.00	0.00	0.00	0.00	20.42	0.00	0.00	0.66
1286	5.600	24.10	0.00	0.00	0.00	7.64	6.88	6.88	0.00	0.00	0.00	0.00	0.00	20.44	0.00	0.00	0.66
1287	5.500	24.10	0.00	0.00	0.00	7.64	6.87	6.87	0.00	0.00	0.00	0.00	0.00	20.47	0.00	0.00	0.66
1288	5.400	24.10	0.00	0.00	0.00	7.64	6.87	6.87	0.00	0.00	0.00	0.00	0.00	20.49	0.00	0.00	0.66
1289	5.300	24.10	0.00	0.00	0.00	7.64	6.87	6.87	0.00	0.00	0.00	0.00	0.00	20.52	0.00	0.00	0.66
1290	5.200	24.10	0.00	0.00	0.00	7.65	6.87	6.87	0.00	0.00	0.00	0.00	0.00	20.54	0.00	0.00	0.66
1291	5.100	24.10	0.00	0.00	0.00	7.65	6.87	6.87	0.00	0.00	0.00	0.00	0.00	20.57	0.00	0.00	0.66
1292	5.000	24.10	0.00	0.00	0.00	7.65	6.87	6.87	0.00	0.00	0.00	0.00	0.00	20.59	0.00	0.00	0.66

\* CM-I = CHLORIDES  
MG/L

CM-II = SULFATES  
MG/L

NCM = NBOD  
MG/L

\*\* g/cu m

Big Creek – 080903 – Calibration model output:

FINAL REPORT BIG CREEK  
REACH NO. 15 WEIR #1

Big Creek - STREAM MODEL  
WATER QUALITY CALIBRATION

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
1293	UPR RCH	1.52960	24.10	0.00	0.00	0.00	7.65	6.87	6.87	0.00	0.00	0.00	0.00	20.59	0.00	0.66
EACH	INCR	0.0020	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
1293	5.00	4.90	1.53160	12.22	0.02087	0.06	1.78	41.31	7339.18	4131.37	73.39	0.00	0.000	0.019	0.021
TOT						0.06			7339.18	4131.37					
AVG					0.02087		1.78	41.31			73.39				
CUM						179.63									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECA 1/da	CBOD SETT 1/da	ANBOD DECA 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECA 1/da	ORGN SETT 1/da	NH3 DECA 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECA 1/da	NCM DECA 1/da	NCM SETT 1/da
1293	4.900	8.40	0.71	0.08	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24	0.00	0.00	0.21	0.06
20	DEG C RATE			0.07		0.00	0.00		0.00		0.00	0.00	0.00	0.00				0.00	0.16	
AVG	20 DEG C RATE		0.65		0.06					0.00										0.06

\* g/sq m/d      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
1293	4.900	24.10	0.00	0.00	0.00	7.70	6.81	6.81	0.00	0.00	0.00	0.00	0.00	20.59	0.00	0.00	0.65

\* CM-I = CHLORIDES MG/L      CM-II = SULFATES MG/L      NCM = NBOD MG/L  
\*\* g/cu m

FINAL REPORT BIG CREEK

Big Creek - STREAM MODEL

# Big Creek – 080903 – Calibration model output:

REACH NO. 16

BIG CREEK, WEIR#1 TO BOEUF RVR

WATER QUALITY CALIBRATION

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
1294	UPR RCH	1.53160	24.10	0.00	0.00	0.00	7.70	6.81	6.81	0.00	0.00	0.00	0.00	20.59	0.00	0.65
EACH	INCR	0.0021	24.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
1294	4.90	4.80	1.53366	12.20	0.04235	0.03	0.88	41.31	3621.20	4131.47	36.21	0.00	0.000	0.021	0.042
1295	4.80	4.70	1.53573	12.18	0.04241	0.03	0.88	41.32	3621.44	4131.58	36.21	0.00	0.000	0.021	0.042
1296	4.70	4.60	1.53779	12.17	0.04246	0.03	0.88	41.32	3621.69	4131.68	36.22	0.00	0.000	0.021	0.042
1297	4.60	4.50	1.53986	12.15	0.04251	0.03	0.88	41.32	3621.93	4131.79	36.22	0.00	0.000	0.021	0.043
1298	4.50	4.40	1.54192	12.13	0.04257	0.03	0.88	41.32	3622.18	4131.89	36.22	0.00	0.000	0.021	0.043
1299	4.40	4.30	1.54399	12.12	0.04262	0.03	0.88	41.32	3622.42	4132.00	36.22	0.00	0.000	0.021	0.043
1300	4.30	4.20	1.54605	12.10	0.04268	0.03	0.88	41.32	3622.66	4132.10	36.23	0.00	0.000	0.021	0.043
1301	4.20	4.10	1.54812	12.09	0.04273	0.03	0.88	41.32	3622.91	4132.21	36.23	0.00	0.000	0.021	0.043
1302	4.10	4.00	1.55018	12.07	0.04279	0.03	0.88	41.32	3623.15	4132.31	36.23	0.00	0.000	0.021	0.043
1303	4.00	3.90	1.55225	12.05	0.04284	0.03	0.88	41.32	3623.39	4132.42	36.23	0.00	0.000	0.021	0.043
1304	3.90	3.80	1.55431	12.04	0.04289	0.03	0.88	41.33	3623.64	4132.52	36.24	0.00	0.000	0.021	0.043
1305	3.80	3.70	1.55638	12.02	0.04295	0.03	0.88	41.33	3623.88	4132.62	36.24	0.00	0.000	0.021	0.043
1306	3.70	3.60	1.55845	12.01	0.04300	0.03	0.88	41.33	3624.12	4132.73	36.24	0.00	0.000	0.021	0.043
1307	3.60	3.50	1.56051	11.99	0.04306	0.03	0.88	41.33	3624.36	4132.83	36.24	0.00	0.000	0.021	0.043
1308	3.50	3.40	1.56258	11.97	0.04311	0.03	0.88	41.33	3624.61	4132.93	36.25	0.00	0.000	0.021	0.043
1309	3.40	3.30	1.56464	11.96	0.04316	0.03	0.88	41.33	3624.85	4133.04	36.25	0.00	0.000	0.022	0.043
1310	3.30	3.20	1.56671	11.94	0.04322	0.03	0.88	41.33	3625.09	4133.14	36.25	0.00	0.000	0.022	0.043
1311	3.20	3.10	1.56877	11.93	0.04327	0.03	0.88	41.33	3625.33	4133.25	36.25	0.00	0.000	0.022	0.043
1312	3.10	3.00	1.57084	11.91	0.04333	0.03	0.88	41.33	3625.57	4133.35	36.26	0.00	0.000	0.022	0.043
1313	3.00	2.90	1.57290	11.90	0.04338	0.03	0.88	41.33	3625.81	4133.45	36.26	0.00	0.000	0.022	0.043
1314	2.90	2.80	1.57497	11.88	0.04343	0.03	0.88	41.34	3626.05	4133.55	36.26	0.00	0.000	0.022	0.043
1315	2.80	2.70	1.57703	11.86	0.04349	0.03	0.88	41.34	3626.29	4133.66	36.26	0.00	0.000	0.022	0.043
1316	2.70	2.60	1.57910	11.85	0.04354	0.03	0.88	41.34	3626.53	4133.76	36.27	0.00	0.000	0.022	0.044
1317	2.60	2.50	1.58116	11.83	0.04360	0.03	0.88	41.34	3626.77	4133.86	36.27	0.00	0.000	0.022	0.044
1318	2.50	2.40	1.58323	11.82	0.04365	0.03	0.88	41.34	3627.01	4133.97	36.27	0.00	0.000	0.022	0.044
1319	2.40	2.30	1.58529	11.80	0.04371	0.03	0.88	41.34	3627.25	4134.07	36.27	0.00	0.000	0.022	0.044
1320	2.30	2.20	1.58736	11.79	0.04376	0.03	0.88	41.34	3627.49	4134.17	36.27	0.00	0.000	0.022	0.044
1321	2.20	2.10	1.58942	11.77	0.04381	0.03	0.88	41.34	3627.73	4134.27	36.28	0.00	0.000	0.022	0.044
1322	2.10	2.00	1.59149	11.76	0.04387	0.03	0.88	41.34	3627.97	4134.38	36.28	0.00	0.000	0.022	0.044
1323	2.00	1.90	1.59356	11.74	0.04392	0.03	0.88	41.34	3628.20	4134.48	36.28	0.00	0.000	0.022	0.044
1324	1.90	1.80	1.59562	11.73	0.04398	0.03	0.88	41.35	3628.44	4134.58	36.28	0.00	0.000	0.022	0.044
1325	1.80	1.70	1.59769	11.71	0.04403	0.03	0.88	41.35	3628.68	4134.68	36.29	0.00	0.000	0.022	0.044
1326	1.70	1.60	1.59975	11.70	0.04408	0.03	0.88	41.35	3628.92	4134.78	36.29	0.00	0.000	0.022	0.044
1327	1.60	1.50	1.60182	11.68	0.04414	0.03	0.88	41.35	3629.15	4134.89	36.29	0.00	0.000	0.022	0.044
1328	1.50	1.40	1.60388	11.67	0.04419	0.03	0.88	41.35	3629.39	4134.99	36.29	0.00	0.000	0.022	0.044
1329	1.40	1.30	1.60595	11.65	0.04425	0.03	0.88	41.35	3629.63	4135.09	36.30	0.00	0.000	0.022	0.044
1330	1.30	1.20	1.60801	11.64	0.04430	0.03	0.88	41.35	3629.86	4135.19	36.30	0.00	0.000	0.022	0.044

**Big Creek – 080903 – Calibration model output:**

1331	1.20	1.10	1.61008	11.62	0.04435	0.03	0.88	41.35	3630.10	4135.29	36.30	0.00	0.000	0.022	0.044
1332	1.10	1.00	1.61214	11.61	0.04441	0.03	0.88	41.35	3630.34	4135.39	36.30	0.00	0.000	0.022	0.044
1333	1.00	0.90	1.61421	11.59	0.04446	0.03	0.88	41.35	3630.57	4135.49	36.31	0.00	0.000	0.022	0.044
1334	0.90	0.80	1.61627	11.58	0.04452	0.03	0.88	41.36	3630.81	4135.59	36.31	0.00	0.000	0.022	0.045
1335	0.80	0.70	1.61834	11.56	0.04457	0.03	0.88	41.36	3631.04	4135.70	36.31	0.00	0.000	0.022	0.045
1336	0.70	0.60	1.62040	11.55	0.04462	0.03	0.88	41.36	3631.28	4135.80	36.31	0.00	0.000	0.022	0.045
1337	0.60	0.50	1.62247	11.53	0.04468	0.03	0.88	41.36	3631.51	4135.90	36.32	0.00	0.000	0.022	0.045
1338	0.50	0.40	1.62453	11.52	0.04473	0.03	0.88	41.36	3631.75	4136.00	36.32	0.00	0.000	0.022	0.045
1339	0.40	0.30	1.62660	11.50	0.04479	0.03	0.88	41.36	3631.98	4136.10	36.32	0.00	0.000	0.022	0.045
1340	0.30	0.20	1.62867	11.49	0.04484	0.03	0.88	41.36	3632.22	4136.20	36.32	0.00	0.000	0.022	0.045
1341	0.20	0.10	1.63073	11.47	0.04489	0.03	0.88	41.36	3632.45	4136.30	36.32	0.00	0.000	0.022	0.045
1342	0.10	0.00	1.63280	11.46	0.04495	0.03	0.88	41.36	3632.68	4136.40	36.33	0.00	0.000	0.022	0.045

TOT						1.30			177722.33	202563.86										
AVG			0.04364				0.88	41.34			36.27									
CUM						180.93														

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

ELEM NO.	ENDING DIST	SAT D.O.	REAER RATE	CBOD DECA	CBOD SETT	ANBOD DECA	BKGD SOD	FULL SOD	CORR SOD	ORGN DECA	ORGN SETT	NH3 DECA	NH3 SRCE	DENIT RATE	PO4 SRCE	ALG PROD	MAC PROD	COLI DECA	NCM DECA	NCM SETT
		mg/L	1/da	1/da	1/da	1/da	*	*	*	1/da	1/da	1/da	*	1/da	*	**	**	1/da	1/da	1/da
1294	4.800	8.40	1.57	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.00	0.21	0.13
1295	4.700	8.40	1.57	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.31	0.00	0.00	0.21	0.13
1296	4.600	8.40	1.57	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.34	0.00	0.00	0.21	0.13
1297	4.500	8.40	1.57	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.37	0.00	0.00	0.21	0.13
1298	4.400	8.40	1.57	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.40	0.00	0.00	0.21	0.13
1299	4.300	8.40	1.57	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.43	0.00	0.00	0.21	0.13
1300	4.200	8.40	1.57	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.47	0.00	0.00	0.21	0.13
1301	4.100	8.40	1.57	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.50	0.00	0.00	0.21	0.13
1302	4.000	8.40	1.57	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.53	0.00	0.00	0.21	0.13
1303	3.900	8.40	1.57	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.56	0.00	0.00	0.21	0.13
1304	3.800	8.40	1.58	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.59	0.00	0.00	0.21	0.13
1305	3.700	8.40	1.58	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.62	0.00	0.00	0.21	0.13
1306	3.600	8.40	1.58	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.66	0.00	0.00	0.21	0.13
1307	3.500	8.40	1.58	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.69	0.00	0.00	0.21	0.13
1308	3.400	8.40	1.58	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.72	0.00	0.00	0.21	0.13
1309	3.300	8.40	1.58	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.75	0.00	0.00	0.21	0.13
1310	3.200	8.40	1.58	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.78	0.00	0.00	0.21	0.13
1311	3.100	8.40	1.58	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.82	0.00	0.00	0.21	0.13
1312	3.000	8.40	1.58	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.85	0.00	0.00	0.21	0.13
1313	2.900	8.40	1.58	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.88	0.00	0.00	0.21	0.13
1314	2.800	8.40	1.58	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.91	0.00	0.00	0.21	0.13
1315	2.700	8.40	1.59	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.94	0.00	0.00	0.21	0.13
1316	2.600	8.40	1.59	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	1.97	0.00	0.00	0.21	0.13
1317	2.500	8.40	1.59	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	2.01	0.00	0.00	0.21	0.13
1318	2.400	8.40	1.59	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	2.04	0.00	0.00	0.21	0.13
1319	2.300	8.40	1.59	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	2.07	0.00	0.00	0.21	0.13
1320	2.200	8.40	1.59	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	2.10	0.00	0.00	0.21	0.13
1321	2.100	8.40	1.59	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	2.13	0.00	0.00	0.21	0.13
1322	2.000	8.40	1.59	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	2.17	0.00	0.00	0.21	0.13
1323	1.900	8.40	1.59	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	2.20	0.00	0.00	0.21	0.13
1324	1.800	8.40	1.59	0.08	0.13	0.00	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	2.23	0.00	0.00	0.21	0.13



**Big Creek – 080903 – Calibration model output:**

1319	2.300	24.10	0.00	0.00	0.00	7.82	6.94	6.94	0.00	0.00	0.00	0.00	0.00	34.29	0.00	0.00	0.51
1320	2.200	24.10	0.00	0.00	0.00	7.83	6.94	6.94	0.00	0.00	0.00	0.00	0.00	34.82	0.00	0.00	0.51
1321	2.100	24.10	0.00	0.00	0.00	7.85	6.95	6.95	0.00	0.00	0.00	0.00	0.00	35.34	0.00	0.00	0.51
1322	2.000	24.10	0.00	0.00	0.00	7.86	6.95	6.95	0.00	0.00	0.00	0.00	0.00	35.87	0.00	0.00	0.50
1323	1.900	24.10	0.00	0.00	0.00	7.87	6.96	6.96	0.00	0.00	0.00	0.00	0.00	36.40	0.00	0.00	0.50
1324	1.800	24.10	0.00	0.00	0.00	7.88	6.96	6.96	0.00	0.00	0.00	0.00	0.00	36.93	0.00	0.00	0.49
1325	1.700	24.10	0.00	0.00	0.00	7.90	6.96	6.96	0.00	0.00	0.00	0.00	0.00	37.45	0.00	0.00	0.49
1326	1.600	24.10	0.00	0.00	0.00	7.91	6.97	6.97	0.00	0.00	0.00	0.00	0.00	37.98	0.00	0.00	0.48
1327	1.500	24.10	0.00	0.00	0.00	7.93	6.97	6.97	0.00	0.00	0.00	0.00	0.00	38.51	0.00	0.00	0.48
1328	1.400	24.10	0.00	0.00	0.00	7.94	6.98	6.98	0.00	0.00	0.00	0.00	0.00	39.03	0.00	0.00	0.48
1329	1.300	24.10	0.00	0.00	0.00	7.95	6.98	6.98	0.00	0.00	0.00	0.00	0.00	39.56	0.00	0.00	0.47
1330	1.200	24.10	0.00	0.00	0.00	7.97	6.98	6.98	0.00	0.00	0.00	0.00	0.00	40.09	0.00	0.00	0.47
1331	1.100	24.10	0.00	0.00	0.00	7.98	6.99	6.99	0.00	0.00	0.00	0.00	0.00	40.61	0.00	0.00	0.46
1332	1.000	24.10	0.00	0.00	0.00	8.00	6.99	6.99	0.00	0.00	0.00	0.00	0.00	41.14	0.00	0.00	0.46
1333	0.900	24.10	0.00	0.00	0.00	8.01	7.00	7.00	0.00	0.00	0.00	0.00	0.00	41.67	0.00	0.00	0.46
1334	0.800	24.10	0.00	0.00	0.00	8.03	7.00	7.00	0.00	0.00	0.00	0.00	0.00	42.19	0.00	0.00	0.45
1335	0.700	24.10	0.00	0.00	0.00	8.04	7.00	7.00	0.00	0.00	0.00	0.00	0.00	42.72	0.00	0.00	0.45
1336	0.600	24.10	0.00	0.00	0.00	8.06	7.01	7.01	0.00	0.00	0.00	0.00	0.00	43.25	0.00	0.00	0.45
1337	0.500	24.10	0.00	0.00	0.00	8.08	7.01	7.01	0.00	0.00	0.00	0.00	0.00	43.78	0.00	0.00	0.44
1338	0.400	24.10	0.00	0.00	0.00	8.09	7.02	7.02	0.00	0.00	0.00	0.00	0.00	44.30	0.00	0.00	0.44
1339	0.300	24.10	0.00	0.00	0.00	8.11	7.02	7.02	0.00	0.00	0.00	0.00	0.00	44.83	0.00	0.00	0.43
1340	0.200	24.10	0.00	0.00	0.00	8.12	7.02	7.02	0.00	0.00	0.00	0.00	0.00	45.36	0.00	0.00	0.43
1341	0.100	24.10	0.00	0.00	0.00	8.14	7.03	7.03	0.00	0.00	0.00	0.00	0.00	45.88	0.00	0.00	0.43
1342	0.000	24.10	0.00	0.00	0.00	8.16	7.03	7.03	0.00	0.00	0.00	0.00	0.00	46.41	0.00	0.00	0.42

\* CM-I = CHLORIDES  
MG/L  
\*\* g/cu m

CM-II = SULFATES  
MG/L

NCM = NBOD  
MG/L

STREAM SUMMARY  
BIG CREEK

Big Creek - STREAM MODEL  
WATER QUALITY CALIBRATION

TRAVEL TIME = 180.93 DAYS

MAXIMUM EFFLUENT = 46.67 PERCENT

FLOW = 0.00375 TO 1.63280 cms  
DISPERSION = 0.0004 TO 0.0224 sq m/s  
VELOCITY = 0.00198 TO 0.04495 m/s  
DEPTH = 0.30 TO 1.78 m  
WIDTH = 6.26 TO 41.36 m

BOD DECAY = 0.08 TO 0.08 per day  
NH3 DECAY = 0.00 TO 0.00 per day  
SDMNT OXYGEN DMND= 0.00 TO 3.50 g/sq m/d  
NH3 SOURCE = 0.00 TO 0.00 g/sq m/d  
REAERATION = 0.71 TO 2.83 per day  
BOD SETTLING = 0.06 TO 0.36 per day  
ORGN DECAY = 0.00 TO 0.00 per day  
ORGN SETTLING = 0.00 TO 0.00 per day

TEMPERATURE = 24.10 TO 24.10 deg C  
DISSOLVED OXYGEN = 3.74 TO 8.16 mg/L



Big Creek – 080903 – Calibration model output:

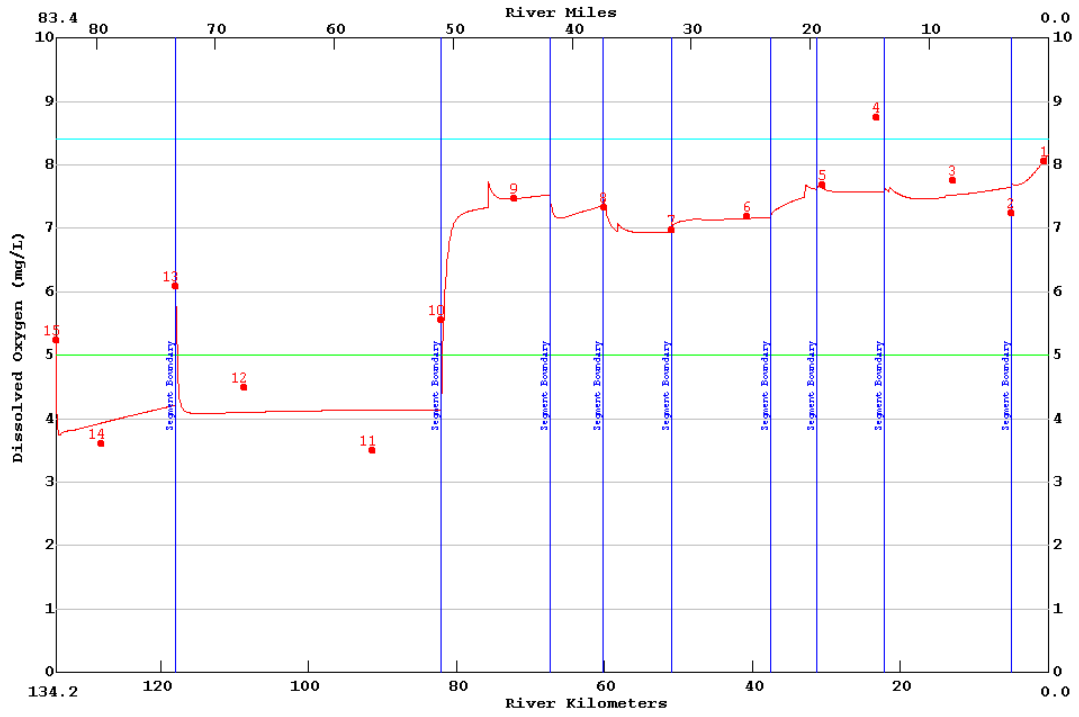
.....EXECUTION COMPLETED

## Appendix A3

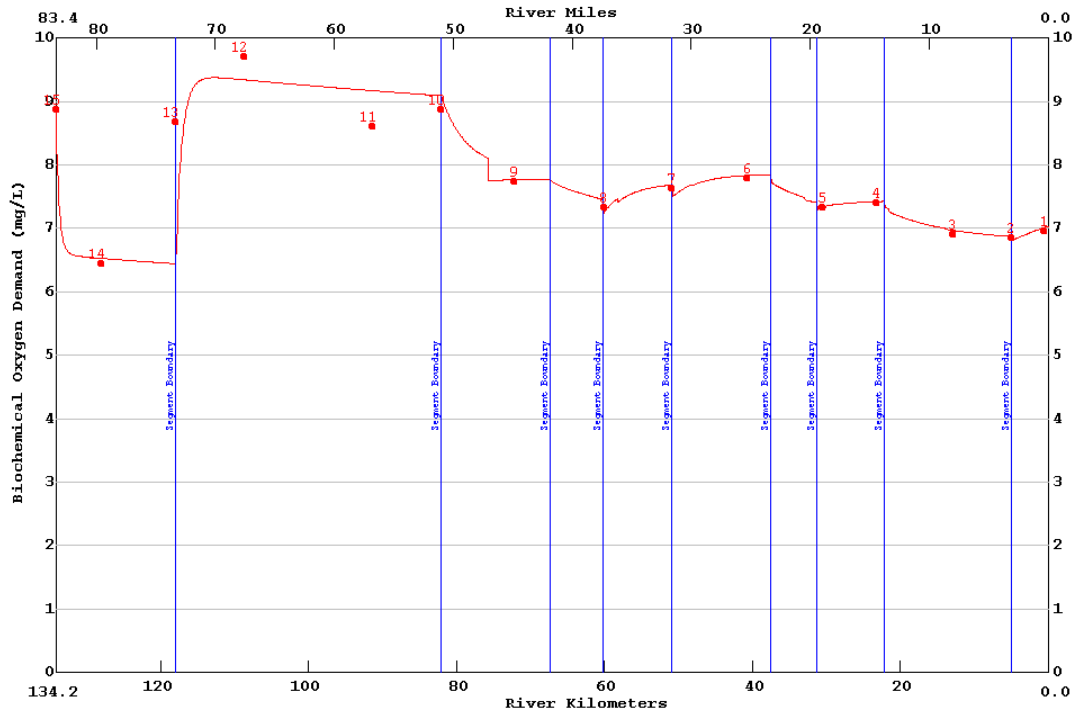
### Calibration Model Development

#### Calibration model output graphs

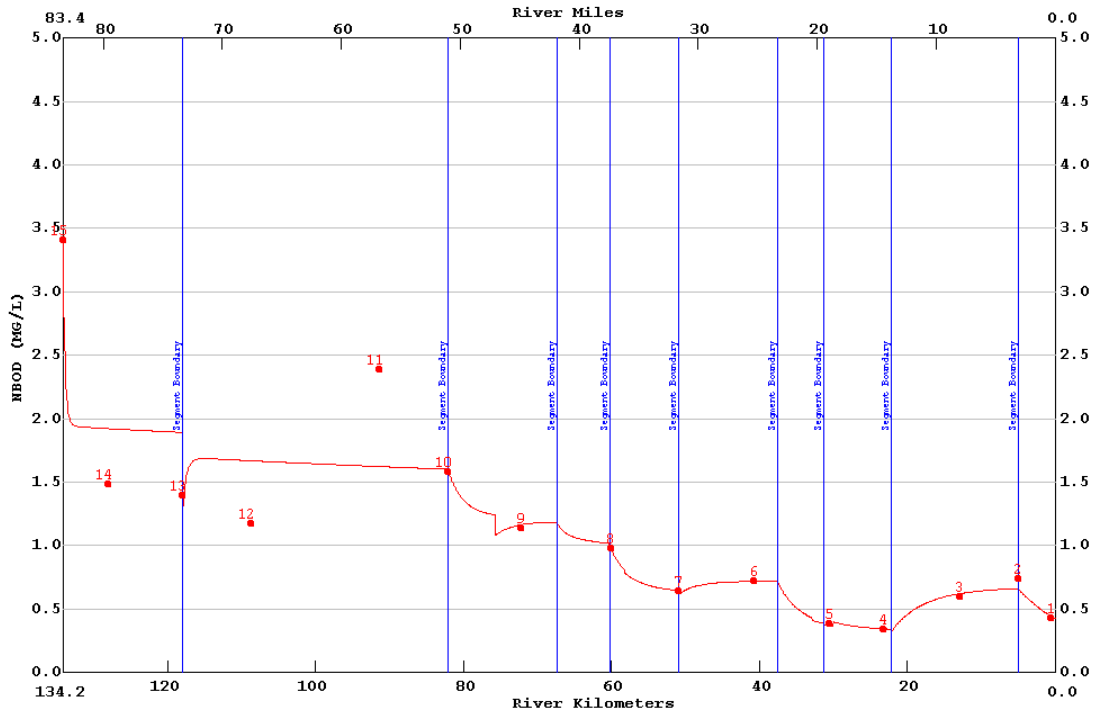
LA-QUAL Version 4.12 Run at 08:47 on 05/01/2001 File D:\laqual1\bigcrkcalb7.txt  
 WATER QUALITY CALIBRATION min= 3.74 max= 8.16  
 :MAINSTEM



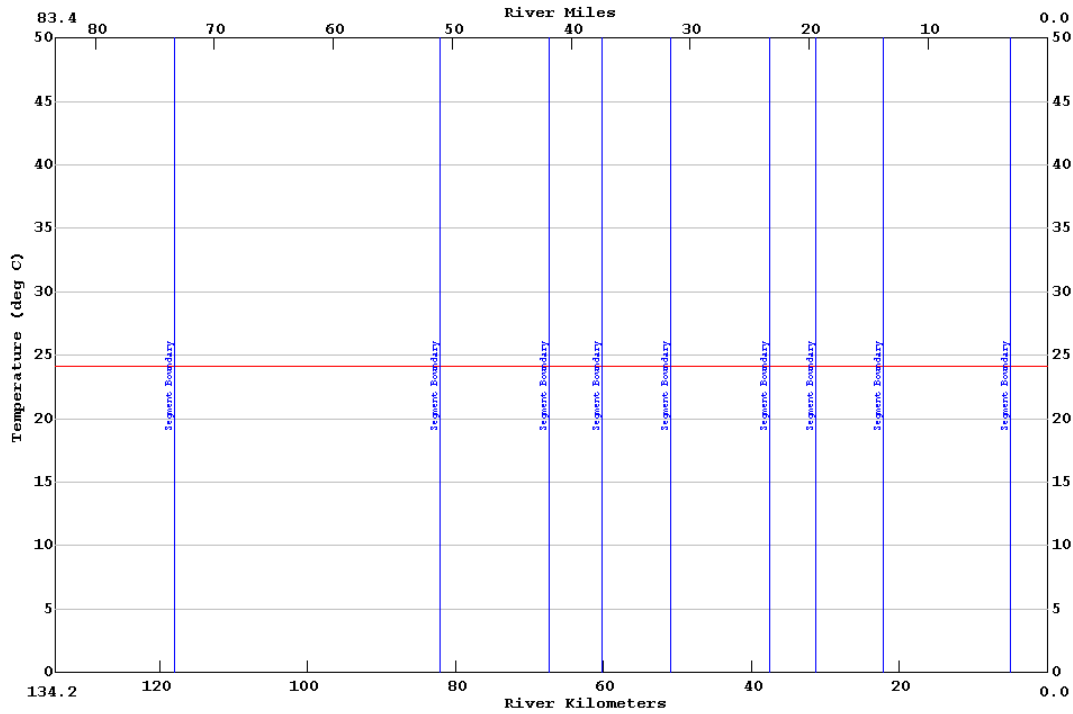
LA-QUAL Version 4.12 Run at 08:47 on 05/01/2001 File D:\laqual1\bigcrkcalb7.txt  
 WATER QUALITY CALIBRATION min= 6.42 max= 9.38  
 :MAINSTEM



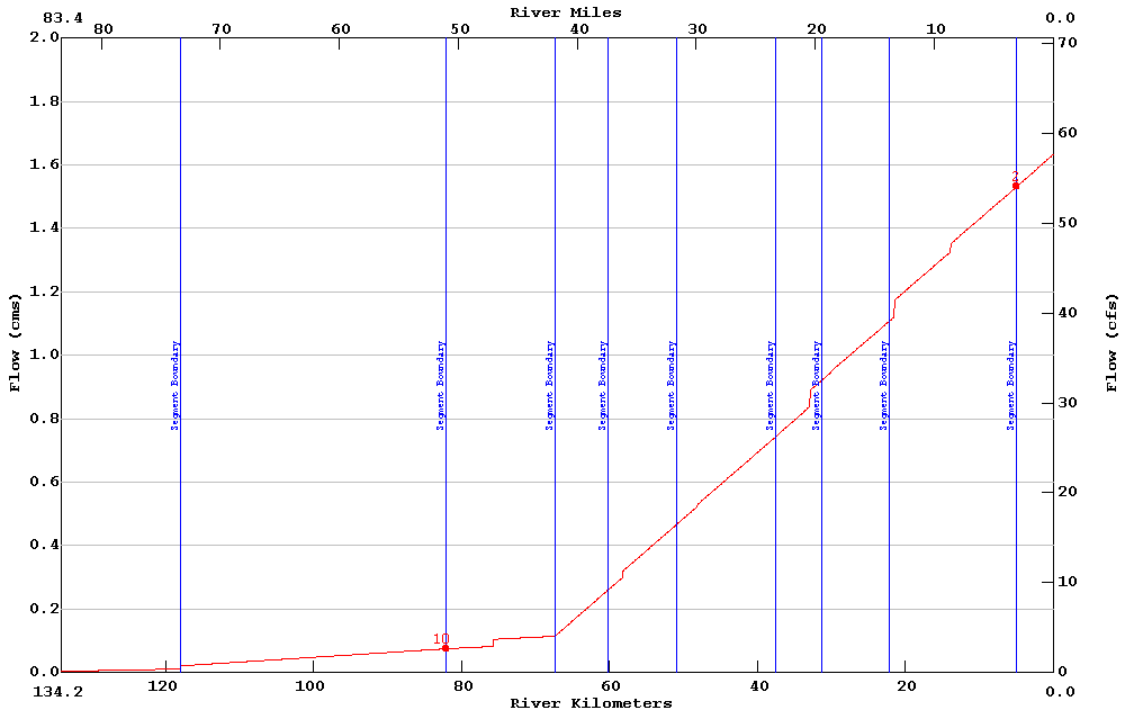
LA-QUAL Version 4.12 Run at 08:47 on 05/01/2001 File D:\laqual1\bigcrkcalb7.txt  
 WATER QUALITY CALIBRATION min= 0.33 max= 3.41  
 :MAINSTEM



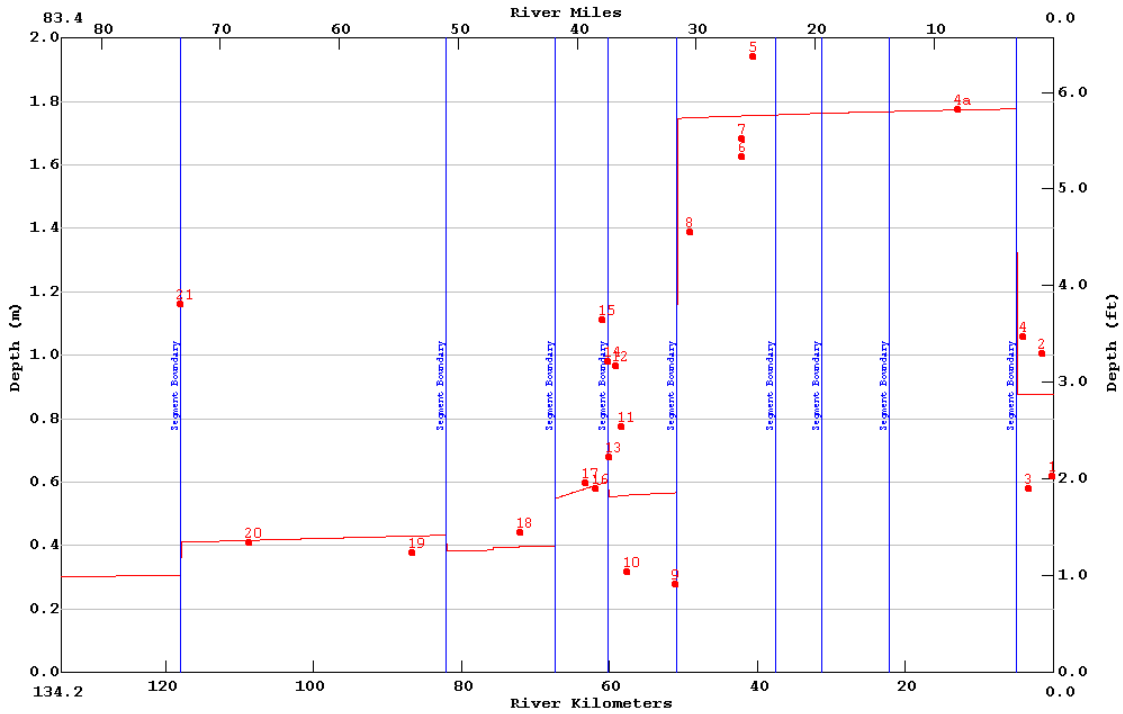
LA-QUAL Version 4.12 Run at 08:47 on 05/01/2001 File D:\laqual1\bigcrkcalb7.txt  
 WATER QUALITY CALIBRATION min= 24.10 max= 24.10  
 :MAINSTEM



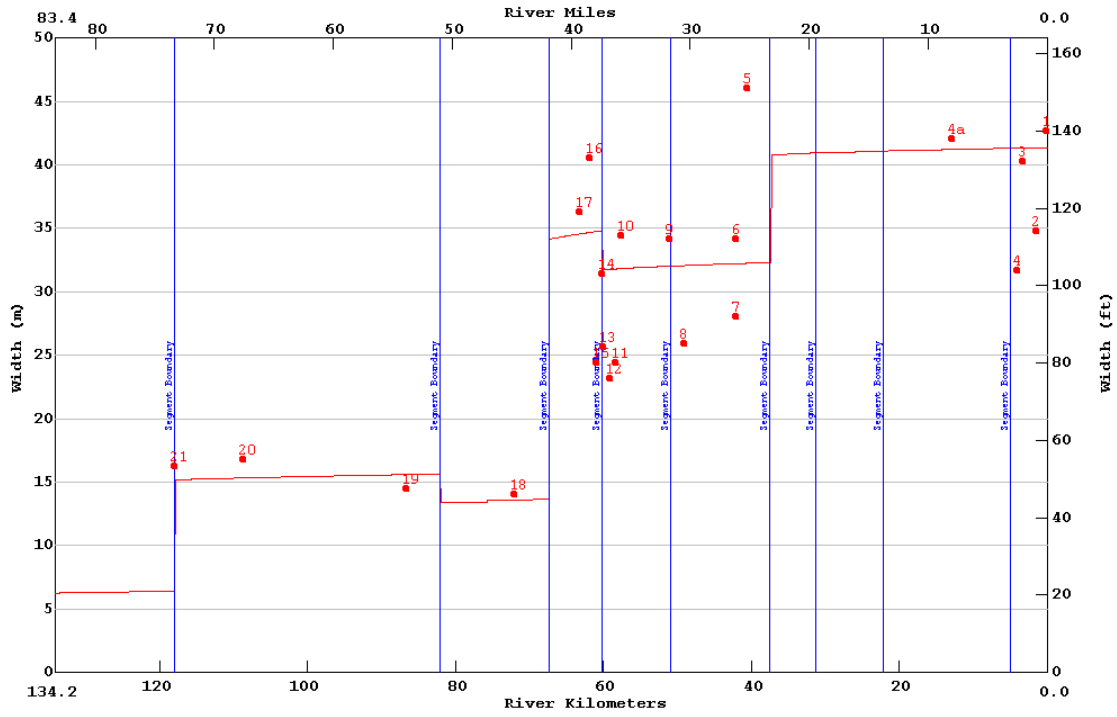
LA-QUAL Version 4.12 Run at 08:47 on 05/01/2001 File D:\laqual1\bigcrkcalb7.txt  
 WATER QUALITY CALIBRATION min= 0.00 max= 1.63  
 :MAINSTEM



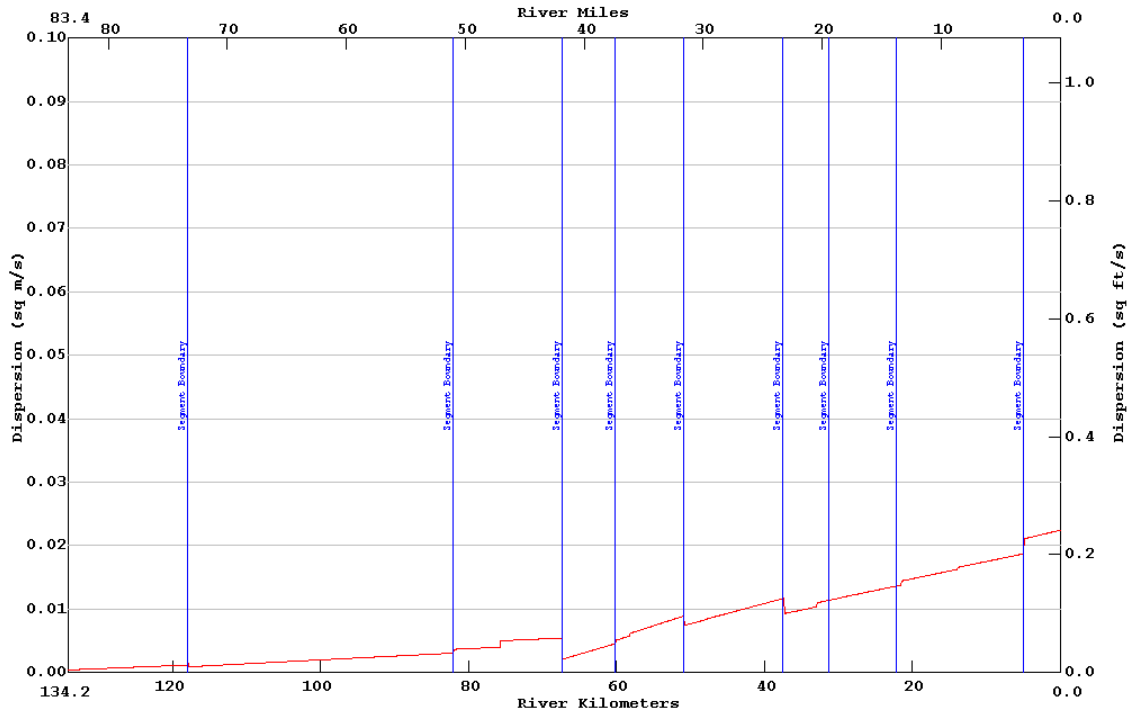
LA-QUAL Version 4.12 Run at 08:47 on 05/01/2001 File D:\laqual1\bigcrkcalb7.txt  
 WATER QUALITY CALIBRATION min= 0.30 max= 1.78  
 :MAINSTEM



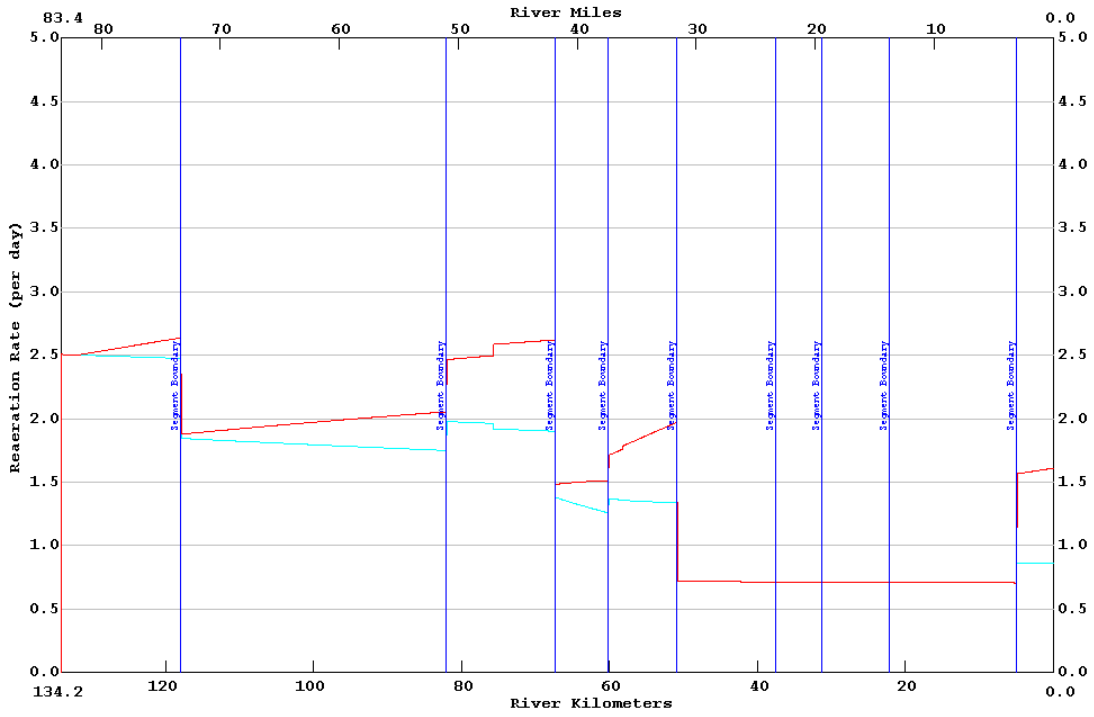
LA-QUAL Version 4.12 Run at 08:47 on 05/01/2001 File D:\laqual1\bigcrkcalb7.txt  
 WATER QUALITY CALIBRATION min= 6.26 max= 41.36  
 :MAINSTEM



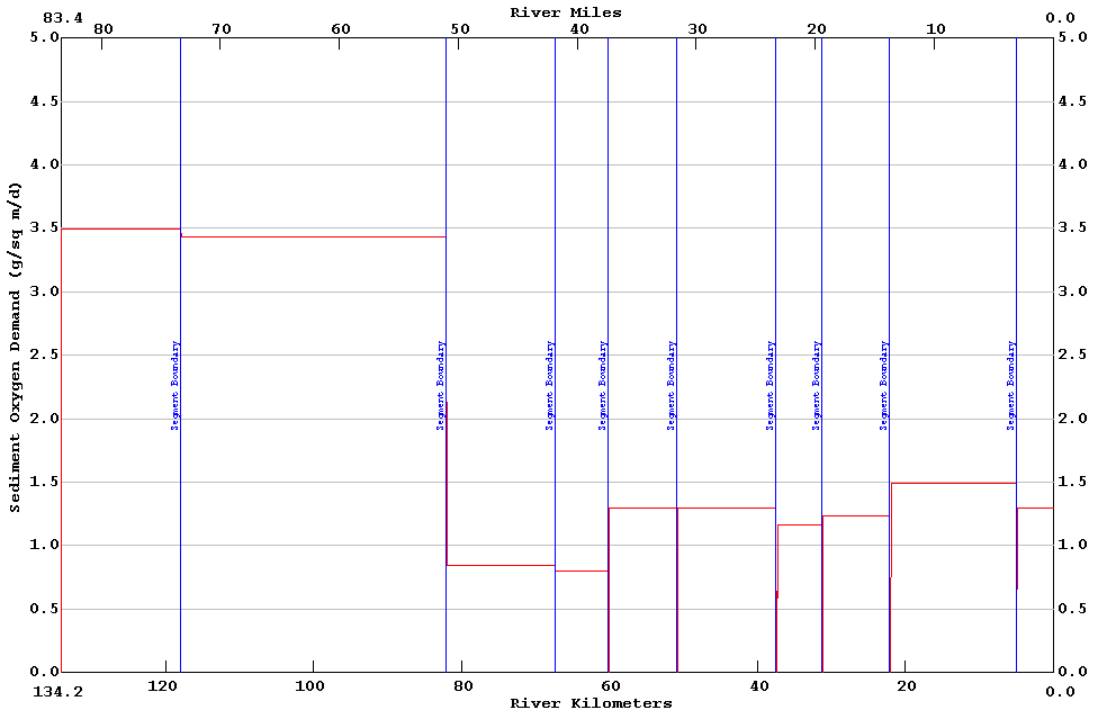
LA-QUAL Version 4.12 Run at 08:47 on 05/01/2001 File D:\laqual1\bigcrkcalb7.txt  
 WATER QUALITY CALIBRATION min= 0.00 max= 0.02  
 :MAINSTEM



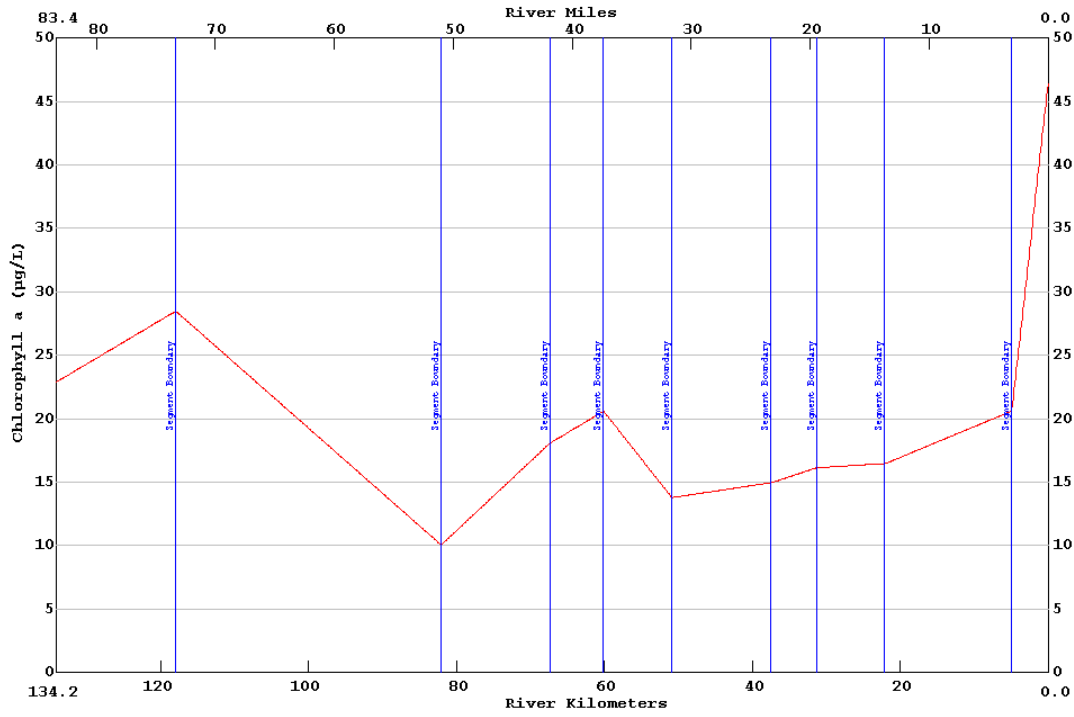
LA-QUAL Version 4.12 Run at 08:47 on 05/01/2001 File D:\laqual1\bigcrkcalb7.txt  
 WATER QUALITY CALIBRATION min= 0.00 max= 2.83  
 :MAINSTEM



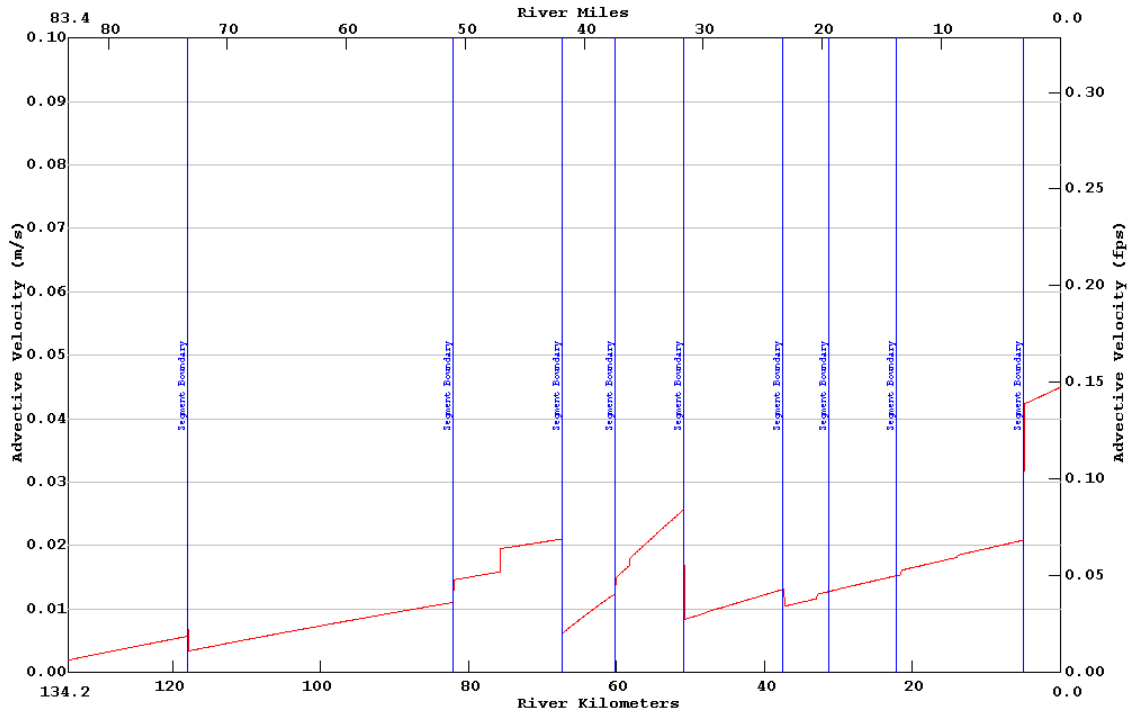
LA-QUAL Version 4.12 Run at 08:47 on 05/01/2001 File D:\laqual1\bigcrkcalb7.txt  
 WATER QUALITY CALIBRATION min= 0.00 max= 3.50  
 :MAINSTEM



LA-QUAL Version 4.12 Run at 08:47 on 05/01/2001 File D:\laqual1\bigcrkcalb7.txt  
 WATER QUALITY CALIBRATION min= 10.05 max= 46.41  
 :MAINSTEM



LA-QUAL Version 4.12 Run at 08:47 on 05/01/2001 File D:\laqual1\bigcrkcalb7.txt  
 WATER QUALITY CALIBRATION min= 0.00 max= 0.04  
 :MAINSTEM





## Appendix A4

### Calibration Model Development

#### **Calibration model input justification form**

## Big Creek Water Quality Calibration Model Input Description

DATA TYPE 3, Program Constants			
Description of Constant	Value	Result	Source/Justification
Maximum iteration limit	200.0		Standard
Plot type	3.0	Creates line printer plots for WQ parameters.	For reporting purposes.
Final report type	1.0	Report for all reach and stream summaries.	For reporting purposes.
Special report type	3.0		Hydraulic parameters
BOD oxygen uptake rate	1.0	Indicates model inputs are in ultimate BOD.	Modeler's Preference
KL Minimum	0.7	Minimum KL to be used.	The minimum KL of 2.3 ft/day converted to 0.70 m/day.
NCM Oxygen uptake rate	1.0	Indicates model inputs are in ultimate BOD.	Modeler's Preference
Inhibition control value	3.0	Inhibits all decay rates except SOD for low DO.	Standard LA modeling procedure.
Dispersion equation	1.0	Set the dispersion eq. to $E=a$ .	Let model determine the advective dispersion based on velocities and Manning's coefficients.
Ocean exchange ratio	0.0	Set 0% tidal exchange at lower boundary.	This was done to allow dispersion in the model but not to force the bottom element through the boundary conditions.
Hydraulic calculation method	2.0	Sets the Hydraulic calc. to width and depth coef.	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.
Settled rate units.	1.0	Sets the settled rate to a velocity (m/day).	By making the settling rate a velocity the rate becomes dependent upon the depth. Due to the depths in this waterbody, it was felt that this method would be a more appropriate representation of the actual conditions.
Algae oxygen prod	0.050	Sets the net oxygen production per chlorophyll a.	Recommended model default value.
Effective BOD due to Algae	0.0	Sets the effect that decaying algae will have on BOD.	Modeler's Preference

## Big Creek Water Quality Calibration Model Input Description

DATA TYPE 4, Temperature Correction Constants		
Description of Coefficient	Value	Source/Justification
No theta's were manually inputed.		This version of LAQUAL 4.12 had the Lousiana standard theta's built into its programming.

## Big Creek Water Quality Calibration Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 RKM 118	Width Coef "A"	Unitless	3.926	Value based on the flow to width relationship from a hydraulic station at the LA Highway 134 bridge.
		Width Exp "B"	Unitless	0.570	"
		Width Const "C"	Meter	6.100	Value determined via calibration.
		Depth Coef "D"	Unitless	0.344	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 134 bridge.
		Depth Exp "E"	Unitless	0.905	"
		Depth Const "F"	Meter	0.3	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
2	BIG CREEK, RKM 100 TO MITCHNER	Width Coef "A"	Unitless	3.926	Value based on the flow to width relationship from a hydraulic station at the LA Highway 134 bridge.
		Width Exp "B"	Unitless	0.570	"
		Width Const "C"	Meter	14.750	Value determined via calibration.
		Depth Coef "D"	Unitless	0.344	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 134 bridge.
		Depth Exp "E"	Unitless	0.905	"
		Depth Const "F"	Meter	0.4	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
3	BIG CREEK, MITCHNER TO RKM 67.4	Width Coef "A"	Unitless	3.926	Value based on the flow to width relationship from a hydraulic station at the LA Highway 134 bridge.
		Width Exp "B"	Unitless	0.570	"
		Width Const "C"	Meter	12.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.344	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 134 bridge.
		Depth Exp "E"	Unitless	0.905	"
		Depth Const "F"	Meter	0.35	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
4	BIG CREEK, RKM 67.4 TO WEIR #6	Width Coef "A"	Unitless	3.926	Value based on the flow to width relationship from a hydraulic station at the LA Highway 134 bridge.
		Width Exp "B"	Unitless	0.570	"
		Width Const "C"	Meter	33.000	Value determined via calibration.
		Depth Coef "D"	Unitless	0.344	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 134 bridge.
		Depth Exp "E"	Unitless	0.905	"
		Depth Const "F"	Meter	0.5	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.

# Big Creek Water Quality Calibration Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
5	WEIR #6	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	30.000	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	0.42	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
6	BIG CREEK, RKM 67.4 TO WEIR #6	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	30.000	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	0.42	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
7	WEIR #5	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	30.000	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
8	BIG CREEK, WEIR #5 TO WEIR #4	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	30.000	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.

# Big Creek Water Quality Calibration Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
9	WEIR #4	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	30.000	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
10	BIG CREEK, WEIR #4 TO WEIR #3	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	38.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
11	WEIR #3	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	38.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
12	BIG CREEK, WEIR #3 TO WEIR #2	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	38.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.

# Big Creek Water Quality Calibration Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
13	WEIR #2	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	38.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
14	BIG CREEK, WEIR #2 TO WEIR #1	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	38.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
15	WEIR #1	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	38.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
16	BIG CREEK, WEIR#1 TO BOEUF RVR	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	38.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	0.7	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.

# Big Creek Water Quality Calibration Model Input Description

DATA TYPE 10, Dispersive Hydraulic Coefficients					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
					Allowed the model to calculate it's own dispersion coefficients from the velocities and Manning's numbers.



## Big Creek Water Quality Calibration Model Input Descriptor

DATA TYPE 11, INITIAL CONDITIONS					
Reach #	REACH DESCRIPTION	Initial Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 RKM 118	Temperature	°Celcius	24.1	Average Temp for the measured sites during the Big Creek survey in September 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Dissolved O <sub>2</sub>	mg/l	6.46	Average insitu D.O. for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Chlorophyll a	ug/l	22.88	Average Insitu Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 12,13,14,15)
2	BIG CREEK, RKM 100 TO MITCHNER	Temperature	°Celcius	24.1	Average Temp for the measured sites during the Big Creek survey in September 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Dissolved O <sub>2</sub>	mg/l	6.46	Average insitu D.O. for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Chlorophyll a	ug/l	28.48	Insitu Temp for the measured site during the Big Creek survey in September, 1999. ( Site 11)
3	BIG CREEK, MITCHNER TO RKM 67.4	Temperature	°Celcius	24.1	Average Temp for the measured sites during the Big Creek survey in September 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Dissolved O <sub>2</sub>	mg/l	6.46	Average insitu D.O. for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Chlorophyll a	ug/l	10.05	Average Insitu Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 9,10)
4	BIG CREEK, RKM 67.4 TO WEIR #6	Temperature	°Celcius	24.1	Average Temp for the measured sites during the Big Creek survey in September 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Dissolved O <sub>2</sub>	mg/l	6.46	Average insitu D.O. for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Chlorophyll a	ug/l	18.07	Average Insitu Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 8,9,10)
5	WEIR #6	Temperature	°Celcius	24.1	Average Temp for the measured sites during the Big Creek survey in September 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Dissolved O <sub>2</sub>	mg/l	6.46	Average insitu D.O. for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Chlorophyll a	ug/l	20.57	Average Insitu Temp for the measured site during the Big Creek survey in September, 1999. ( Site 8)
6	BIG CREEK, WEIR #6 TO WEIR #5	Temperature	°Celcius	24.1	Average Temp for the measured sites during the Big Creek survey in September 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Dissolved O <sub>2</sub>	mg/l	6.46	Average insitu D.O. for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Chlorophyll a	ug/l	20.57	Average Insitu Temp for the measured site during the Big Creek survey in September, 1999. ( Site 8)
7	WEIR #5	Temperature	°Celcius	24.1	Average Temp for the measured sites during the Big Creek survey in September 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Dissolved O <sub>2</sub>	mg/l	6.46	Average insitu D.O. for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Chlorophyll a	ug/l	13.79	Average Insitu Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 6,7)
8	BIG CREEK, WEIR #5 TO WEIR #4	Temperature	°Celcius	24.1	Average Temp for the measured sites during the Big Creek survey in September 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Dissolved O <sub>2</sub>	mg/l	6.46	Average insitu D.O. for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Chlorophyll a	ug/l	13.79	Average Insitu Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 6,7)
9	WEIR #4	Temperature	°Celcius	24.1	Average Temp for the measured sites during the Big Creek survey in September 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Dissolved O <sub>2</sub>	mg/l	6.46	Average insitu D.O. for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Chlorophyll a	ug/l	14.96	Average Insitu Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 4,5,6,7)

## Big Creek Water Quality Calibration Model Input Descriptor

DATA TYPE 11, INITIAL CONDITIONS					
Reach #	REACH DESCRIPTION	Initial Parameter	Units	Value	Source/Justification
10	BIG CREEK, WEIR #4 TO WEIR #3	Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Dissolved O <sub>2</sub>	mg/l	6.46	Average insitu D.O. for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Chlorophyll a	ug/l	14.96	Average Insitu Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 4,5,6,7)
11	WEIR #3	Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Dissolved O <sub>2</sub>	mg/l	6.46	Average insitu D.O. for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Chlorophyll a	ug/l	16.14	Average Insitu Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 4,5)
12	BIG CREEK, WEIR #3 TO WEIR #2	Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Dissolved O <sub>2</sub>	mg/l	6.46	Average insitu D.O. for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Chlorophyll a	ug/l	16.14	Average Insitu Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 4,5)
13	WEIR #2	Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Dissolved O <sub>2</sub>	mg/l	6.46	Average insitu D.O. for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Chlorophyll a	ug/l	16.47	Average Insitu Temp for the measured site during the Big Creek survey in September, 1999. ( Site 3)
14	BIG CREEK, WEIR #2 TO WEIR #1	Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Dissolved O <sub>2</sub>	mg/l	6.46	Average insitu D.O. for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Chlorophyll a	ug/l	16.47	Average Insitu Temp for the measured site during the Big Creek survey in September, 1999. ( Site 3)
15	WEIR #1	Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Dissolved O <sub>2</sub>	mg/l	6.46	Average insitu D.O. for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Chlorophyll a	ug/l	20.59	Average Insitu Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2)
16	BIG CREEK, WEIR #1 TO BOEUF RVR	Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Dissolved O <sub>2</sub>	mg/l	6.46	Average insitu D.O. for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		Chlorophyll a	ug/l	20.59	Average Insitu Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2)

# Big Creek 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	BIG CREEK, RKM 134.2 RKM 118	K <sub>2</sub> option	Unitless	15	The velocity and depths are within the range of the Louisiana Equations limits
		Oxygen Transfer coef.	m/day	0.7	The minimum KL of 2.3 ft/day converted to 0.70 m/day.
		Background SOD	g/m <sup>2</sup> -day	2.70	BPJ. Determined from calibration.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
2	BIG CREEK, RKM 100 TO MITCHNER	K <sub>2</sub> option	Unitless	15	The velocity and depths are within the range of the Louisiana Equations limits
		Oxygen Transfer coef.	m/day	0.7	The minimum KL of 2.3 ft/day converted to 0.70 m/day.
		Background SOD	g/m <sup>2</sup> -day	2.65	BPJ. Determined from calibration.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
3	BIG CREEK, MITCHNER TO RKM 67.4	K <sub>2</sub> option	Unitless	15	The velocity and depths are within the range of the Louisiana Equations limits
		Oxygen Transfer coef.	m/day	0.7	The minimum KL of 2.3 ft/day converted to 0.70 m/day.
		Background SOD	g/m <sup>2</sup> -day	0.65	BPJ. Determined from calibration.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
4	BIG CREEK, RKM 67.4 TO WEIR #6	K <sub>2</sub> option	Unitless	15	The velocity and depths are within the range of the Louisiana Equations limits
		Oxygen Transfer coef.	m/day	0.7	The minimum KL of 2.3 ft/day converted to 0.70 m/day.
		Background SOD	g/m <sup>2</sup> -day	0.62	BPJ. Determined from calibration.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
5	WEIR #6	K <sub>2</sub> option	Unitless	15	The velocity and depths are within the range of the Louisiana Equations limits
		Oxygen Transfer coef.	m/day	0.7	The minimum KL of 2.3 ft/day converted to 0.70 m/day.
		Background SOD	g/m <sup>2</sup> -day	0.00	BPJ. Did not apply benthic loading in one element weir reaches.
		Aerobic BOD decay	1/day	0.07	Average of sites 05-MR-10,11,12,13.
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
6	BIG CREEK, WEIR #6 TO WEIR #5	K <sub>2</sub> option	Unitless	15	The velocity and depths are within the range of the Louisiana Equations limits
		Oxygen Transfer coef.	m/day	0.7	The minimum KL of 2.3 ft/day converted to 0.70 m/day.
		Background SOD	g/m <sup>2</sup> -day	1.00	BPJ. Determined from calibration.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
7	WEIR #5	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.16	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date, from the climate station in Shreveport. The 10 meter velocity was adjusted to a 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.00	BPJ. Did not apply benthic loading in one element weir reaches.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.

# Big Creek Water Quality Calibration Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
8	BIG CREEK, WEIR #5 TO WEIR #4	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.16	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date, from the climate station in Shreveport. The 10 meter velocity was adjusted to a 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	1.00	BPJ. Determined from calibration.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
9	WEIR #4	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.16	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date, from the climate station in Shreveport. The 10 meter velocity was adjusted to a 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.00	BPJ. Did not apply benthic loading in one element weir reaches.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
10	BIG CREEK, WEIR #4 TO WEIR #3	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.16	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date, from the climate station in Shreveport. The 10 meter velocity was adjusted to a 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.90	BPJ. Determined from calibration.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
11	WEIR #3	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.16	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date, from the climate station in Shreveport. The 10 meter velocity was adjusted to a 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.00	BPJ. Did not apply benthic loading in one element weir reaches.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.

# Big Creek Water Quality Calibration Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
12	BIG CREEK, WEIR #3 TO WEIR #2	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.16	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date, from the climate station in Shreveport. The 10 meter velocity was adjusted to a 0. meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.95	BPJ. Determined from calibration.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
13	WEIR #2	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.16	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date, from the climate station in Shreveport. The 10 meter velocity was adjusted to a 0. meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.00	BPJ. Did not apply benthic loading in one element weir reaches.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
14	BIG CREEK, WEIR #2 TO WEIR #1	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.16	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date, from the climate station in Shreveport. The 10 meter velocity was adjusted to a 0. meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	1.15	BPJ. Determined from calibration.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
15	WEIR #1	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.16	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date, from the climate station in Shreveport. The 10 meter velocity was adjusted to a 0. meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.00	BPJ. Did not apply benthic loading in one element weir reaches.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.

# Big Creek Water Quality Calibration Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
16	BIG CREEK, WEIR#1 TO BOEUF RVR	K <sub>2</sub> option	Unitless	15	The velocity and depths are within the range of the Louisiana Equations limits
		Oxygen Transfer coef.	m/day	0.70	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date, from the climate station in Shreveport. The 10 meter velocity was adjusted to a 0. meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	1.00	BPJ. Determined from calibration.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.

# Big Creek Water Quality Calibration Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
	Not needed, used NBOD as NCM.				

# Big Creek Water Quality Calibration Model Input Description

DATA TYPE 15, Coliform and Nonconservative Coefficients					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 RKM 118	NCM Decay	1/day	0.28	Average of sites 10-14, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
2	BIG CREEK, RKM 100 TO MITCHNER	NCM Decay	1/day	0.28	Average of sites 10-14, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
3	BIG CREEK, MITCHNER TO RKM 67.4	NCM Decay	1/day	0.28	Average of sites 10-14, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
4	BIG CREEK, RKM 67.4 TO WEIR #6	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
5	WEIR #6	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
6	BIG CREEK, WEIR #6 TO WEIR #5	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
7	WEIR #5	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
8	BIG CREEK, WEIR #5 TO WEIR #4	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.



# Big Creek Water Quality Calibration Model Input Description

DATA TYPE 15, Coliform and Nonconservative Coefficients					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
9	WEIR #4	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
10	BIG CREEK, WEIR #4 TO WEIR #3	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
11	WEIR #3	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
12	BIG CREEK, WEIR #3 TO WEIR #2	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
13	WEIR #2	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
14	BIG CREEK, WEIR #2 TO WEIR #1	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
15	WEIR #1	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
16	BIG CREEK, WEIR#1 TO BOEUF RVR	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.

# Big Creek 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	BIG CREEK, RKM 134.2 RKM 118	Incremental Inflow	m <sup>3</sup> /s	0.0075	Reach differential drainage area X 0.02 cfs/sq.mile. Determined by dividing the measured flow at the Hwy 134 bridge by the drainage area above the bridge.
		Temperature	°Celcius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
2	BIG CREEK, RKM 100 TO MITCHNER	Incremental Inflow	m <sup>3</sup> /s	0.0539	Reach differential drainage area X 0.02 cfs/sq.mile. Determined by dividing the measured flow at the Hwy 134 bridge by the drainage area above the bridge.
		Temperature	°Celcius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
3	BIG CREEK, MITCHNER TO RKM 67.4	Incremental Inflow	m <sup>3</sup> /s	0.0171	Reach differential drainage area X 0.02 cfs/sq.mile. Determined by dividing the measured flow at the Hwy 134 bridge by the drainage area above the bridge.
		Temperature	°Celcius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
4	BIG CREEK, RKM 67.4 TO WEIR #6	Incremental Inflow	m <sup>3</sup> /s	0.1457	Reach length X 0.714 cfs/kilometer. Determined by subtracting the {measured flow at the Hwy 134 bridge, the two tributaries measured flows, the one dischargers estimated flow and the estimated flows from all other perennial tributaries} from the measured flow at Weir #1. This differential flow was then divided by the stream length in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celcius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
5	WEIR #6	Incremental Inflow	m <sup>3</sup> /s	0.0020	Reach length X 0.714 cfs/kilometer. Determined by subtracting the {measured flow at the Hwy 134 bridge, the two tributaries measured flows, the one dischargers estimated flow and the estimated flows from all other perennial tributaries} from the measured flow at Weir #1. This differential flow was then divided by the stream length in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celcius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
6	BIG CREEK, WEIR #6 TO WEIR #5	Incremental Inflow	m <sup>3</sup> /s	0.1861	Reach length X 0.714 cfs/kilometer. Determined by subtracting the {measured flow at the Hwy 134 bridge, the two tributaries measured flows, the one dischargers estimated flow and the estimated flows from all other perennial tributaries} from the measured flow at Weir #1. This differential flow was then divided by the stream length in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celcius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
7	WEIR #5	Incremental Inflow	m <sup>3</sup> /s	0.0020	Reach length X 0.714 cfs/kilometer. Determined by subtracting the {measured flow at the Hwy 134 bridge, the two tributaries measured flows, the one dischargers estimated flow and the estimated flows from all other perennial tributaries} from the measured flow at Weir #1. This differential flow was then divided by the stream length in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celcius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)

# Big Creek 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
		Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
8	BIG CREEK, WEIR #5 TO WEIR #4	Incremental Inflow	m <sup>3</sup> /s	0.2691	Reach length X 0.714 cfs/kilometer. Determined by subtracting the {measured flow at the Hwy 134 bridge, the two tributaries measured flows, the one dischargers estimated flow and the estimated flows from all other perennial tributaries} from the measured flow at Weir #1. This differential flow was then divided by the stream length in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
9	WEIR #4	Incremental Inflow	m <sup>3</sup> /s	0.0020	Reach length X 0.714 cfs/kilometer. Determined by subtracting the {measured flow at the Hwy 134 bridge, the two tributaries measured flows, the one dischargers estimated flow and the estimated flows from all other perennial tributaries} from the measured flow at Weir #1. This differential flow was then divided by the stream length in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
10	BIG CREEK, WEIR #4 TO WEIR #3	Incremental Inflow	m <sup>3</sup> /s	0.1254	Reach length X 0.714 cfs/kilometer. Determined by subtracting the {measured flow at the Hwy 134 bridge, the two tributaries measured flows, the one dischargers estimated flow and the estimated flows from all other perennial tributaries} from the measured flow at Weir #1. This differential flow was then divided by the stream length in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
11	WEIR #3	Incremental Inflow	m <sup>3</sup> /s	0.0020	Reach length X 0.714 cfs/kilometer. Determined by subtracting the {measured flow at the Hwy 134 bridge, the two tributaries measured flows, the one dischargers estimated flow and the estimated flows from all other perennial tributaries} from the measured flow at Weir #1. This differential flow was then divided by the stream length in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
12	BIG CREEK, WEIR #3 TO WEIR #2	Incremental Inflow	m <sup>3</sup> /s	0.1821	Reach length X 0.714 cfs/kilometer. Determined by subtracting the {measured flow at the Hwy 134 bridge, the two tributaries measured flows, the one dischargers estimated flow and the estimated flows from all other perennial tributaries} from the measured flow at Weir #1. This differential flow was then divided by the stream length in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)

# Big Creek 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
13	WEIR #2	Incremental Inflow	m <sup>3</sup> /s	0.0020	Reach length X 0.714 cfs/kilometer. Determined by subtracting the {measured flow at the Hwy 134 bridge, the two tributaries measured flows, the one dischargers estimated flow and the estimated flows from all other perennial tributaries} from the measured flow at Weir #1. This differential flow was then divided by the stream length in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
14	BIG CREEK, WEIR #2 TO WEIR #1	Incremental Inflow	m <sup>3</sup> /s	0.3419	Reach length X 0.714 cfs/kilometer. Determined by subtracting the {measured flow at the Hwy 134 bridge, the two tributaries measured flows, the one dischargers estimated flow and the estimated flows from all other perennial tributaries} from the measured flow at Weir #1. This differential flow was then divided by the stream length in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
15	WEIR #1	Incremental Inflow	m <sup>3</sup> /s	0.0020	Reach length X 0.714 cfs/kilometer. Determined by subtracting the {measured flow at the Hwy 134 bridge, the two tributaries measured flows, the one dischargers estimated flow and the estimated flows from all other perennial tributaries} from the measured flow at Weir #1. This differential flow was then divided by the stream length in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
16	BIG CREEK, WEIR #1 TO BOEUF RVR	Incremental Inflow	m <sup>3</sup> /s	0.1012	Reach length X 0.714 cfs/kilometer. Determined by subtracting the {measured flow at the Hwy 134 bridge, the two tributaries measured flows, the one dischargers estimated flow and the estimated flows from all other perennial tributaries} from the measured flow at Weir #1. This differential flow was then divided by the stream length in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. (Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)

# Big Creek Water Quality Calibration Model Input Description

DATA TYPE 17, Incremental Data for DO, BOD, Nitrogen					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1-16	Big Creek, Hwy 879 to confluence with the Boeuf River	Dissolved O <sub>2</sub>	mg/l	0	Assumed groundwater inflow to be anaerobic.
		BOD	mg/l	0	No data was available to determine what these values. Assumed groundwater inflow to be void BOD loading. Any loading that may be entering the stream from this source will be simulated with the calibrated non-point loads not associated with flows.

## Big Creek Water Quality Calibration Model Input Description

DATA TYPE 18, Incremental Data for Phosphorus, Chlorophyll, Coliform, and Nonconservatives					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1-16	Big Creek, Hwy 879 to confluence with the Boeuf River	NCM	mg/l	0	No data was available to determine what these values. Assumed groundwater inflow to be void NCM loading. Any loading that may be entering the stream from this source will be simulated with the calibrated non-point loads not associated with flows.

# Big Creek Water Quality Calibration Model Input Description

DATA TYPE 19, Nonpoint Source Data					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 RKM 118	BOD	kg/day	95	Determined during calibration.
		Nonconservative matl.	kg/day	45	Determined during calibration.
2	BIG CREEK, RKM 100 TO MITCHNER	BOD	kg/day	790	Determined during calibration.
		Nonconservative matl.	kg/day	250	Determined during calibration.
3	BIG CREEK, MITCHNER TO RKM 67.4	BOD	kg/day	235	Determined during calibration.
		Nonconservative matl.	kg/day	63	Determined during calibration.
4	BIG CREEK, RKM 67.4 TO WEIR #6	BOD	kg/day	390	Determined during calibration.
		Nonconservative matl.	kg/day	72	Determined during calibration.
5	WEIR #6	BOD	kg/day	0	Determined during calibration.
		Nonconservative matl.	kg/day	0	Determined during calibration.
6	BIG CREEK, WEIR #6 TO WEIR #5	BOD	kg/day	485	Determined during calibration.
		Nonconservative matl.	kg/day	52	Determined during calibration.
7	WEIR #5	BOD	kg/day	0	Determined during calibration.
		Nonconservative matl.	kg/day	0	Determined during calibration.
8	BIG CREEK, WEIR #5 TO WEIR #4	BOD	kg/day	1055	Determined during calibration.
		Nonconservative matl.	kg/day	165	Determined during calibration.
9	WEIR #4	BOD	kg/day	0	Determined during calibration.
		Nonconservative matl.	kg/day	0	Determined during calibration.
10	BIG CREEK, WEIR #4 TO WEIR #3	BOD	kg/day	550	Determined during calibration.
		Nonconservative matl.	kg/day	45	Determined during calibration.
11	WEIR #3	BOD	kg/day	0	Determined during calibration.
		Nonconservative matl.	kg/day	0	Determined during calibration.
12	BIG CREEK, WEIR #3 TO WEIR #2	BOD	kg/day	840	Determined during calibration.
		Nonconservative matl.	kg/day	65	Determined during calibration.
13	WEIR #2	BOD	kg/day	0	Determined during calibration.
		Nonconservative matl.	kg/day	0	Determined during calibration.
14	BIG CREEK, WEIR #2 TO WEIR #1	BOD	kg/day	1440	Determined during calibration.
		Nonconservative matl.	kg/day	250	Determined during calibration.
15	WEIR #1	BOD	kg/day	0	Determined during calibration.
		Nonconservative matl.	kg/day	0	Determined during calibration.
16	BIG CREEK, WEIR #1 TO BOEUF RVR	BOD	kg/day	350	Determined during calibration.
		Nonconservative matl.	kg/day	5	Determined during calibration.

# Big Creek 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	BIG CREEK, RKM 134.2 RKM 118	Element # of input		1	Big Creek
		Headwater name		Big Creek	
		Headwater flow	cms	0.0037	Headwater differential drainage area X 0.02 cfs/sq.mile. This cfs/sq.mile ratio was determined by dividing the measured flow at the Hwy 134 bridge by the drainage area above the bridge. The bayou was actually dry above this point, however the estimated headwater flow is very near LDEQ's LTP default value of 0.1 cfs. Thus it was decided to stay with the calculated flow, since a small flow was required to run the computer model and should adequately simulate the system.
		Temperature	°Celcius	24.10	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)



# Big Creek Water Quality Calibration Model Input Description

DATA TYPE 21, Headwater Data for DO, BOD, and Nitrogen					
Reach #	NAME	Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 RKM 118	Element # of input		1	Big Creek
		Dissolved O <sub>2</sub>	mg/l	5.24	Measured parameter value from Site 15 during Sept. 1999 survey.
		BOD	mg/l	8.87	Measured parameter value from Site 15 during Sept. 1999 survey.

## Big Creek 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	BIG CREEK, RKM 134.2 RKM 118	Element # of input		1	Big Creek
		NCM	mg/l	3.41	Measured parameter value from Site 15 during Sept. 1999 survey.

# Big Creek 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
1	BIG CREEK, RKM 134.2 to RKM 118	Element # of input		162	
		Wasteload description		Tributary, Little Colewa Creek 1	
		Wasteload inflow	cms	0.0098	Flow determined by multiplying the tributary drainage area by the ratio of the measured flow at the Mitchner Rd bridge to the stream drainage area at that location.
		Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
3	BIG CREEK, MITCHNER TO RKM 67.4	Element # of input		585	
		Wasteload description		Tributary, Little Colewa Creek 2	
		Wasteload inflow	cms	0.0223	Flow determined by multiplying the tributary drainage area by the ratio of the measured flow at the Mitchner Rd bridge to the stream drainage area at that location.
		Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
6	BIG CREEK, WEIR #6 TO WEIR #5	Element # of input		760	
		Wasteload description		Tributary, Cypress Creek	
		Wasteload inflow	cms	0.0191	Flow determined by multiplying the tributary drainage area by the ratio of the measured flow at the Mitchner Rd bridge to the stream drainage area at that location.
		Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
8	BIG CREEK, WEIR #5 TO WEIR #4	Element # of input		861	
		Wasteload description		Tributary, Cow Bayou	
		Wasteload inflow	cms	0.0057	Flow determined by multiplying the tributary drainage area by the ratio of the measured flow at the Mitchner Rd bridge to the stream drainage area at that location.
		Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
10	BIG CREEK, WEIR #4 TO WEIR #3	Element # of input		1014	
		Wasteload description		Tributary, Bee Bayou	
		Wasteload inflow	cms	0.0501	Flow measured during Sept. 1999 survey.
		Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
12	BIG CREEK, WEIR #2 TO WEIR #1	Element # of input		1043	
		Wasteload description		Town of Mangham	
		Wasteload inflow	cms	0.0028	Flow used was the design flow from the permit application.
		Temperature	°Celsius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
14	BIG CREEK, WEIR #2 TO WEIR #1	Element # of input		1128	
		Wasteload description		Tributary, Turkey Creek	

## Big Creek Water Quality Calibration Model Input Description

DATA TYPE 24, Wastewater Data for Flow, Temperature, Salinity, and Conservatives					
		Wasteload inflow	cms	0.0524	Flow measured during Sept. 1999 survey.
		Temperature	°Celcius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
14	BIG CREEK, RKM 134.2 to RKM 118	Element # of input		1204	
		Wasteload description		Tributary, Little Creek	
		Wasteload inflow	cms	0.0249	Flow determined by multiplying the tributary drainage area by the ratio of the measured flow at the Mitchner Rd bridge to the stream drainage area at that location.
		Temperature	°Celcius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)

# Big Creek Water Quality Calibration Model Input Description

DATA TYPE 25, Wastewater Data for DO, BOD, and Nitrogen					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 to RKM 118	Element # of input		162	
		Wasteload description		Tributary, Little Colewa Creek 1	
		Dissolved O <sub>2</sub>	mg/l	9.43	Value used from the water quality sample taken on the Turkey Creek tributary during the Sept. 1999 survey.
		BOD	mg/l	6.4	Value used from the water quality sample taken on the Turkey Creek tributary during the Sept. 1999 survey.
3	BIG CREEK, MITCHNER TO RKM 67.4	Element # of input		585	
		Wasteload description		Tributary, Little Colewa Creek 2	
		Dissolved O <sub>2</sub>	mg/l	9.43	Value used from the water quality sample taken on the Turkey Creek tributary during the Sept. 1999 survey.
		BOD	mg/l	6.4	Value used from the water quality sample taken on the Turkey Creek tributary during the Sept. 1999 survey.
6	BIG CREEK, WEIR #6 TO WEIR #5	Element # of input		760	
		Wasteload description		Tributary, Cypress Creek	
		Dissolved O <sub>2</sub>	mg/l	9.43	Value used from the water quality sample taken on the Turkey Creek tributary during the Sept. 1999 survey.
		BOD	mg/l	6.4	Value used from the water quality sample taken on the Turkey Creek tributary during the Sept. 1999 survey.
8	BIG CREEK, WEIR #5 TO WEIR #4	Element # of input		861	
		Wasteload description		Tributary, Cow Bayou	
		Dissolved O <sub>2</sub>	mg/l	9.43	Value used from the water quality sample taken on the Turkey Creek tributary during the Sept. 1999 survey.
		BOD	mg/l	6.4	Value used from the water quality sample taken on the Turkey Creek tributary during the Sept. 1999 survey.
10	BIG CREEK, WEIR #4 TO WEIR #3	Element # of input		1014	
		Wasteload description		Tributary, Bee Bayou	
		Dissolved O <sub>2</sub>	mg/l	11	Value used from the water quality sample taken on the Turkey Creek tributary during the Sept. 1999 survey.
		BOD	mg/l	6.74	Value used from the water quality sample taken on the Turkey Creek tributary during the Sept. 1999 survey.
12	BIG CREEK, WEIR #2 TO WEIR #1	Element # of input		1043	
		Wasteload description		Town of Mangham	
		Dissolved O <sub>2</sub>	mg/l	5.05	Value used from the water quality sample taken on the Turkey Creek tributary during the Sept. 1999 survey.
		BOD	mg/l	18.12	Value used from the water quality sample taken on the Turkey Creek tributary during the Sept. 1999 survey.
14	BIG CREEK, WEIR #2 TO WEIR #1	Element # of input		1128	
		Wasteload description		Tributary, Turkey Creek	
		Dissolved O <sub>2</sub>	mg/l	9.43	Value used from the water quality sample taken on the Turkey Creek tributary during the Sept. 1999 survey.
		BOD	mg/l	6.4	Value used from the water quality sample taken on the Turkey Creek tributary during the Sept. 1999 survey.

# Big Creek Water Quality Calibration Model Input Description

DATA TYPE 25, Wastewater Data for DO, BOD, and Nitrogen					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
14	BIG CREEK, RKM 134.2 to RKM 118	Element # of input		1204	
		Wasteload description		Tributary, Little Creek	
		Dissolved O <sub>2</sub>	mg/l	9.43	Value used from the water quality sample taken on the Turkey Creek tributary during the Sept. 1999 survey.
		BOD	mg/l	6.4	Value used from the water quality sample taken on the Turkey Creek tributary during the Sept. 1999 survey.

# Big Creek Water Quality Calibration Model Input Description

DATA TYPE 25, Wastewater Data for DO, BOD, and Nitrogen					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 to RKM 118	Element # of input		1	
		Wasteload description		Tributary, Little Colewa Creek 1	
		NCM	mg/l	0.46	Value used from the water quality sample taken on the Turkey Creek tributary during the Sept. 1999 survey.
3	BIG CREEK, MITCHNER TO RKM 67.4	Element # of input		1	
		Wasteload description		Tributary, Little Colewa Creek 2	
		NCM	mg/l	0.46	Value used from the water quality sample taken on the Turkey Creek tributary during the Sept. 1999 survey.
6	BIG CREEK, WEIR #6 TO WEIR #5	Element # of input		1	
		Wasteload description		Tributary, Cypress Creek	
		NCM	mg/l	0.46	Value used from the water quality sample taken on the Turkey Creek tributary during the Sept. 1999 survey.
8	BIG CREEK, WEIR #5 TO WEIR #4	Element # of input		1	
		Wasteload description		Tributary, Cow Bayou	
		NCM	mg/l	0.46	Value used from the water quality sample taken on the Turkey Creek tributary during the Sept. 1999 survey.
10	BIG CREEK, WEIR #4 TO WEIR #3	Element # of input		1	
		Wasteload description		Tributary, Bee Bayou	
		NCM	mg/l	0.07	Value used from the water quality sample taken on the Bee Bayou tributary during the Sept. 1999 survey.
12	BIG CREEK, WEIR #2 TO WEIR #1	Element # of input		1	
		Wasteload description		Town of Mangham	
		NCM	mg/l	11.69	Value used from the water quality sample taken at the discharge point during the Sept. 1999 survey.
14	BIG CREEK, WEIR #2 TO WEIR #1	Element # of input		1	
		Wasteload description		Tributary, Turkey Creek	
		NCM	mg/l	0.46	Value used from the water quality sample taken on the Turkey Creek tributary during the Sept. 1999 survey.
14	BIG CREEK, RKM 134.2 to RKM 118	Element # of input		1	
		Wasteload description		Tributary, Little Creek	
		NCM	mg/l	0.46	Value used from the water quality sample taken on the Turkey Creek tributary during the Sept. 1999 survey.

# Mermentau River Water Quality Calibration Model Input Description

DATA TYPE 27, Lower Boundary Conditions					
Reach #	NAME	Parameter	Units	Value	Source/Justification
3	Mermentau River, river km 4.0 to 0.0	Temperature	°Celcius	24.1	Average Temp for the measured sites during the Big Creek survey in September, 1999. ( Sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15)
		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		0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		Dissolved O <sub>2</sub>	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.
		Org.- N	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		NH <sub>3</sub> -N	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		NO <sub>2+3</sub> -N	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		Chlorophyll a	ug/l	46.41	Sample taken from the Boeuf River just above confluence with Big Creek.
		NCM	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.



## Appendix A5

### Calibration Model Development

#### **Calibration flow determinations**

**Big Creek Calibration flow determinations from Sept. 1999 survey data:**

Reach Description	Reach #	Tributaries/ Dischargers	Start Km	End Km	Notes	Flow sources (cfs)					Drainage Area (sq. miles)				
						Increm. D.A.	Dischargers	Tributaries	Headwaters	Subtotal	Increm. D.A.	Dischargers	Tributaries	Headwaters	Subtotal
Rkm 134.2 to Rkm 100	1	Little Colewa Crk 1	134.20	118.00	(1)	0.263		0.35	0.13	0.74	12.66		16.62	6.21	35.49
Rkm 100 to Mitchner rd	2		118.00	82.10	(1)	1.902				1.90	91.39				91.39
Michner rd to Rkm 67.4	3	Little Colewa Crk 2	82.10	67.40	(1)	0.605		0.79		1.39	29.07		41.87		70.94
Rkm 67.4 to Weir #6	4		67.40	60.20	(2)	5.143				5.14	16.29				16.29
Weir #6	5		60.20	60.10	(2)	0.071				0.07					
Weir #6 to Weir #5	6	Cypress Crk	60.10	50.90	(2)	6.572		0.67		7.25	9.20		35.87		45.07
Weir #5	7		50.90	50.80	(2)	0.071				0.07					
Weir #5 to Weir #4	8	Cow Bayou	50.80	37.50	(2)	9.501		0.20		9.70	23.27		10.81		34.08
Weir #4	9		37.50	37.40	(2)	0.071				0.07					
Weir #4 to Weir #3	10	Bee Bayou	37.40	31.20	(3)	4.429		1.77		6.20	11.01		42.26		53.27
Weir #3	11		31.20	31.10	(2)	0.071				0.07					
Weir #3 to Weir #2	12	Town of Mangham	31.10	22.10	(4)	6.429	0.10			6.53	9.03				9.03
Weir #2	13		22.10	22.00	(2)	0.071				0.07					
Weir #2 to Weir #1	14	Turkey Crk / Little Crk	22.00	5.10	(3)	12.073		2.73		14.80	42.58		145.39		187.97
Weir #1	15		5.10	5.00	(2)	0.071				0.07					
Weir #1 to confluence with Boeuf River	16		5.00	0.00	(2)	3.572				3.57	2.00				2.00
						50.92	0.10	6.51	0.13	57.66	246.50		292.82	6.21	545.53

Measured flow minus tributaries, dischargers and incremental flows to Rkm 67.4 = Incremental flow = **44.6** cfs

Incremental flow divided by linear kilometers to Rkm 5: **0.714** cfs/linear kilometer =  $R_{IF}$

Reach Description	Reach #	Tributaries/ Dischargers	Start Km	End Km	Notes	Flow sources (cms)				
						Increm. D.A.	Dischargers	Tributaries	Headwaters	Subtotal
Rkm 120 to Hwy 2 (Rkm 118)	1	Little Colewa Crk 1	134.20	100.00	(5)	0.0075		0.0098	0.0037	0.0209
Hwy 2 to Mitchner rd	2		100.00	82.10	(5)	0.0539				0.0539
Michner rd to Rkm 67.4	3	Little Colewa Crk 2	82.10	67.40	(5)	0.0171		0.0223		0.0394
Rkm 67.4 to Weir #6	4		67.40	60.20	(5)	0.1457				0.1457
Weir #6	5		60.20	60.10	(5)	0.0020				0.0020
Weir #6 to Weir #5	6	Cypress Crk	60.10	50.90	(5)	0.1861		0.0191		0.2052
Weir #5	7		50.90	50.80	(5)	0.0020				0.0020
Weir #5 to Weir #4	8	Cow Bayou	50.80	37.50	(5)	0.2691		0.0057		0.2748
Weir #4	9		37.50	37.40	(5)	0.0020				0.0020
Weir #4 to Weir #3	10	Bee Bayou	37.40	31.20	(5)	0.1254		0.0501		0.1756
Weir #3	11		31.20	31.10	(5)	0.0020				0.0020
Weir #3 to Weir #2	12	Town of Mangham	31.10	22.10	(5)	0.1821	0.0028			0.1849
Weir #2	13		22.10	22.00	(5)	0.0020				0.0020
Weir #2 to Weir #1	14	Turkey Crk / Little Crk	22.00	5.10	(5)	0.3419		0.0773		0.4192
Weir #1	15		5.10	5.00	(5)	0.0020				0.0020
Weir #1 to confluence with Boeuf River	16		5.00	0.00	(5)	0.1012				0.1012
						1.4420	0.0028	0.1844	0.0037	1.6328

Drainage area to Mitchner Rd bridge = 126.88 sq. miles  
 Flow at Mitchner Road measured during Sept. 1999 survey: 2.64 cfs  
 $R_{HW}$  = Flow to drainage area ratio for survey: 0.0208 cfs/sq.mile

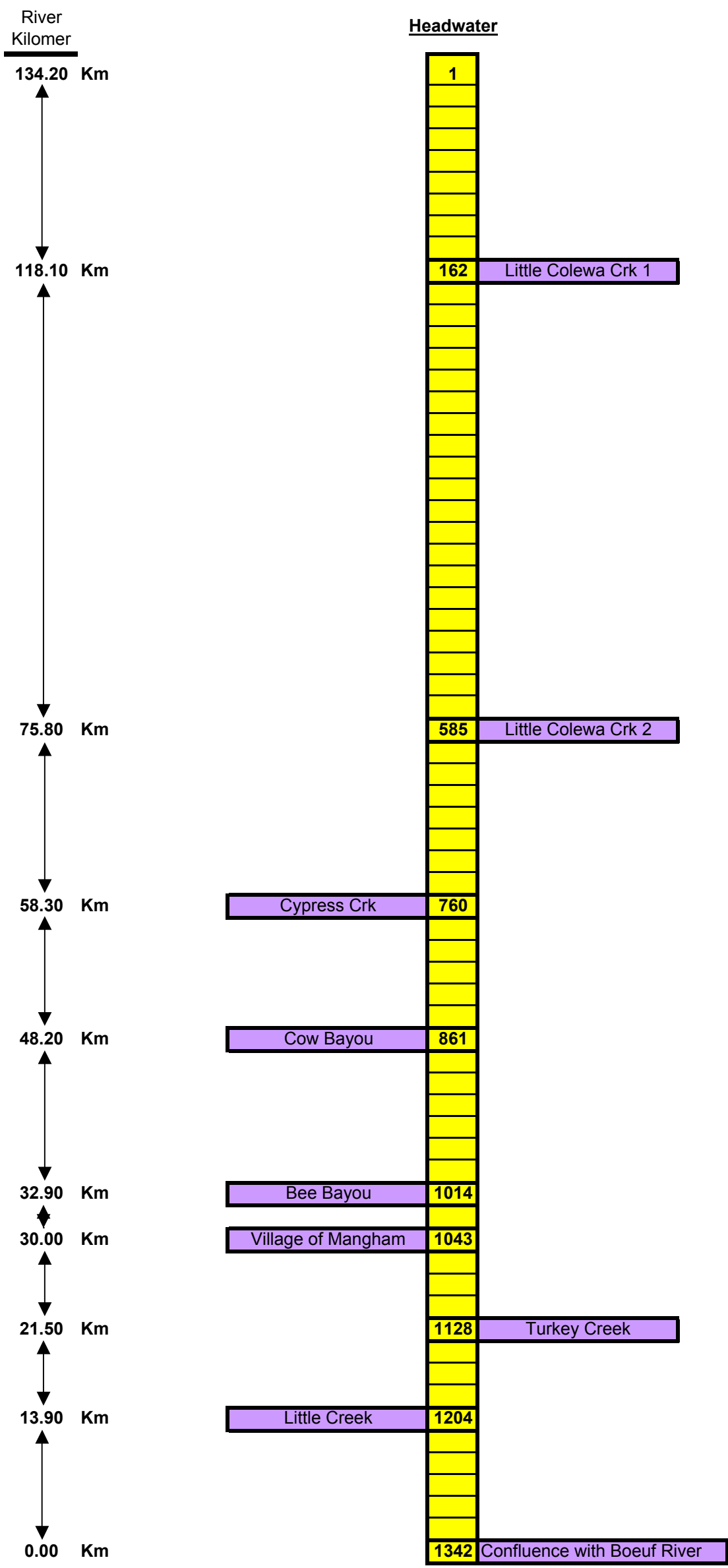
- Notes: (1) Incremental, Tributary and Headwater flows derived by multiplying the Drainage Area by the  $R_{HW}$  ratio.  
 (2) Tributary flows derived by multiplying the Drainage Area by the  $R_{HW}$  ratio. Incremental flow derived by multiplying the linear stream kilometers by the  $R_{IF}$  ratio.  
 (3) Tributary flows were the measured flow during the Sept. 1999 survey. Incremental flow derived by multiplying the linear stream kilometers by the  $R_{IF}$  ratio.  
 (4) Dischargers flow was determined from the anticipated flow for the facility using permit information. Incremental flow derived by multiplying the linear stream kilometers by the  $R_{IF}$  ratio.  
 (5) Flow converted from cfs to cms by multiplying the cfs by 0.02832.

## Appendix A6

### Calibration Model Development

#### **Model element and tributary layout**

**Big Creek - 080903, TMDL model layout  
Ouachita Basin**







## Appendix A7

### Calibration Model Development

#### **Wind data and K2 determinations**

**Average Wind Velocities in mph.**

**Data obtained from the LA Dept. of Climatology**

Date : March, 2001

These velocities were taken from the climate station in Shreveport at a height of 10 meters.

Month	Avg. wind velocity Lake Charles (mph)	Avg. wind velocity New Orleans (mph)	LADEQ WQ Criteria Season
December	8.80	9.00	Winter
January	9.20	9.30	Winter
February	9.60	9.80	Winter
March	10.00	9.90	Winter
April	9.60	9.40	Winter
May	8.30	8.10	Summer
June	7.60	6.80	Summer
July	7.10	6.10	Summer
August	6.60	5.90	Summer
September	7.20	7.30	Summer
October	7.40	7.60	Summer
November	8.50	8.70	Winter

Average wind speed during survey date:  
8 mph

	Shreveport (Mph) (3)	Shreveport (mps) (1)
Survey date (Sept 21,1999) average value adjusted to 0.1 meters, Calibration value (4)	4.14	1.85
Average Summer Season Value (May-Oct.) adjusted to 0.1 meters, Seasonal Projection value	3.82	1.71
Average Winter Season Value (Dec.-Feb.) adjusted to 0.1 meters, Seasonal Projection value	4.81	2.15

$$K_2 \text{ at wind conditions} = K_2 \text{ at zero wind velocity} [1 + (0.2395V_w^{1.643})]$$

- Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition)
- $V_w$  is measured in meters per second.
- $K_2$  is measured in 1 per day units.

**The minimum  $K_L$  equation for Reaeration is  $K_2 = K_L / \text{Depth}$ .**

$$K_L \text{ at wind conditions} / \text{Depth} = K_L \text{ at zero wind velocity} [1 + (0.2395V_w^{1.643})] / \text{Depth}$$

Depths cancel each other out.

$$K_L \text{ at wind conditions} = K_L \text{ at zero wind velocity} [1 + (0.2395V_w^{1.643})]$$

This relationship only applies when the depths dictate the Minimum  $K_L$  equation to estimate the stream reaeration.

The LA DEQ LTP default Minimum  $K_L$  used is 2.3 ft/day. This converts to 0.70 meters/day.

Season	$K_{Lo}$ (m/day)	Adjusted $K_L$ (2)
Calibration Run (4)	0.7	1.16
Summer Projection Run (3)	0.7	1.10
Winter Projection Run (3)	0.7	1.29

Notes:

- (1) Meters/second = Miles/Hour x 0.447
- (2) The Shreveport wind speeds were used to adjust the  $K_2$  for wind due to its proximity to the Ouachita System.
- (3) The monthly average summer/winter seasonal daily average wind velocity were used for projection purposes. These velocities were adjusted to a height of 0.1 meters high, using the equation  $U_{z@Height z} = U_{s@10meters} * [(z / s)^{(1/7)}]$ , this equation was obtained from Jay Grymes, LA Climatologist, its source is "CLIMATE, DATA AND RESOURCES. 1992, Edward Linacre. Routledge, Chapman & Hall, New York. pg. 218.
- (4) The average daily value for the survey date was used in the calibration.



## Appendix A8

### Calibration Model Development

#### **Calibration model sensitivity output**

SENSITIVITY ANALYSIS SUMMARY

Plot 1 Base Model Minimum DO = 3.74

Parameter	%Param Chg	Min D.O.	%D.O. Chg	%Param Chg	Min D.O.	%D.O. Chg
Stream Baseflow	30.	3.75	0.0	-30.	3.75	0.3
Initial Chorophyll a	30.	3.90	4.3	-30.	3.58	-4.3
Stream Velocity	30.	3.65	-2.6	-30.	3.86	3.0
Initial Temperature	2.	3.04	-18.7	-2.	4.42	18.1
BOD Decay Rate	30.	3.68	-1.7	-30.	3.81	1.8
BOD Settling Rate	30.	3.77	0.8	-30.	3.70	-1.1
Nonconservative Decay	30.	3.69	-1.5	-30.	3.81	1.8
Nonconservative Settling	30.	3.78	0.9	-30.	3.70	-1.2
Benthal Demand	30.	2.39	-36.3	-30.	5.04	34.7
Stream Dispersion	30.	3.74	0.0	-30.	3.74	0.0
Tidal Range	30.	3.74	0.0	-30.	3.74	0.0
Stream Reaeration	30.	4.78	27.6	-30.	1.86	-50.4
Wasteload DO	30.	3.74	0.0	-30.	3.74	0.0
Wasteload BOD	30.	3.74	0.0	-30.	3.74	0.0
Wasteload Nonconservative	30.	3.74	0.0	-30.	3.74	0.0
Headwater Flow	30.	3.75	0.1	-30.	3.75	0.2
Headwater Nonconservative	30.	3.70	-1.2	-30.	3.78	0.9
Headwater DO	30.	3.76	0.5	-30.	3.62	-3.2
Headwater BOD	30.	3.70	-1.0	-30.	3.78	0.9
Stream Depth	30.	3.78	1.0	-30.	3.75	0.3

SENSITIVITY ANALYSIS SUMMARY

Plot 2 Base Model Minimum DO = 3.74

Parameter	%Param Chg	Min D.O.	%D.O. Chg	%Param Chg	Min D.O.	%D.O. Chg
Stream Baseflow	30.	3.75	0.0	-30.	3.75	0.3
Initial Chorophyll a	30.	3.90	4.3	-30.	3.58	-4.3
Stream Velocity	30.	3.65	-2.6	-30.	3.86	3.0
Initial Temperature	2.	3.04	-18.7	-2.	4.42	18.1
BOD Decay Rate	30.	3.68	-1.7	-30.	3.81	1.8
BOD Settling Rate	30.	3.77	0.8	-30.	3.70	-1.1
Nonconservative Decay	30.	3.69	-1.5	-30.	3.81	1.8
Nonconservative Settling	30.	3.78	0.9	-30.	3.70	-1.2
Benthal Demand	30.	2.39	-36.3	-30.	5.04	34.7
Stream Dispersion	30.	3.74	0.0	-30.	3.74	0.0
Tidal Range	30.	3.74	0.0	-30.	3.74	0.0
Stream Reaeration	30.	4.78	27.6	-30.	1.86	-50.4
Wasteload DO	30.	3.74	0.0	-30.	3.74	0.0
Wasteload BOD	30.	3.74	0.0	-30.	3.74	0.0
Wasteload Nonconservative	30.	3.74	0.0	-30.	3.74	0.0
Headwater Flow	30.	3.75	0.1	-30.	3.75	0.2
Headwater Nonconservative	30.	3.70	-1.2	-30.	3.78	0.9
Headwater DO	30.	3.76	0.5	-30.	3.62	-3.2
Headwater BOD	30.	3.70	-1.0	-30.	3.78	0.9
Stream Depth	30.	3.78	1.0	-30.	3.75	0.3

## Appendix B

### Projection Model Development

## Appendix B1

### Projection Model Development

#### **Critical temperature determinations**



## Appendix B2

### Projection Model Development

#### **Summer projection model input/output**

# Big Creek – 080903 – Summer Projection model output:

LA-QUAL Version 4.12  
Louisiana Department of Environmental Quality

Input file is D:\laqual1\bigcrksmrproj4.txt  
Output produced at 08:19 on 04/25/2001

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

CARD TYPE	CONTROL TITLES
TITLE01	<b>Big Creek - STREAM MODEL</b>
TITLE02	<b><u>Summer Projection Model</u></b>
CNTROL11	NO SEQUENCING OUTPUT
CNTROL12	YES METRIC UNITS
CNTROL13	YES OXYGEN DEPENDENT RATES
ENDATA01	

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

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

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

CARD TYPE	DESCRIPTION OF CONSTANT	VALUE
PROGRAM	MAXIMUM ITERATION LIMIT =	200.00000
PROGRAM	PLOT TYPE =	3.00000
PROGRAM	FINAL REPORT TYPE =	1.00000
PROGRAM	SPECIAL REPORT TYPE =	3.00000
PROGRAM	BOD OXYGEN UPTAKE RATE =	1.00000
PROGRAM	KL MINIMUM =	0.70000
PROGRAM	NCM OXYGEN UPTAKE RATE =	1.00000
PROGRAM	INHIBITION CONTROL VALUE =	3.00000
PROGRAM	DISPERSION EQUATION =	1.00000
PROGRAM	OCEAN EXCHANGE RATIO =	0.00000
PROGRAM	HYDRAULIC CALCULATION METHOD =	2.00000
PROGRAM	SETTLED RATE UNITS =	1.00000
PROGRAM	ALGAE OXYGEN PROD =	0.05000

Big Creek – 080903 – Summer Projection model output:

PROGRAM EFFECTIVE BOD DUE TO ALGAE = 0.00000  
 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	BC	BIG CREEK, RKM 134.2 RKM 118	134.20	TO 118.00	0.1000	16.20	162	1	162
REACH ID	2	BC	BIG CREEK, RKM 100 TO MITCHNER	118.00	TO 82.10	0.1000	35.90	359	163	521
REACH ID	3	BC	BIG CREEK, MITCHNER TO RKM 67.4	82.10	TO 67.40	0.1000	14.70	147	522	668
REACH ID	4	BC	BIG CREEK, RKM 67.4 TO WEIR #6	67.40	TO 60.20	0.1000	7.20	72	669	740
REACH ID	5	BC	WEIR #6	60.20	TO 60.10	0.1000	0.10	1	741	741
REACH ID	6	BC	BIG CREEK, WEIR #6 TO WEIR #5	60.10	TO 50.90	0.1000	9.20	92	742	833
REACH ID	7	BC	WEIR #5	50.90	TO 50.80	0.1000	0.10	1	834	834
REACH ID	8	BC	BIG CREEK, WEIR #5 TO WEIR #4	50.80	TO 37.50	0.1000	13.30	133	835	967
REACH ID	9	BC	WEIR #4	37.50	TO 37.40	0.1000	0.10	1	968	968
REACH ID	10	BC	BIG CREEK, WEIR #4 TO WEIR #3	37.40	TO 31.30	0.1000	6.10	61	969	1029
REACH ID	11	BC	WEIR #3	31.30	TO 31.20	0.1000	0.10	1	1030	1030
REACH ID	12	BC	BIG CREEK, WEIR #3 TO WEIR #2	31.20	TO 22.10	0.1000	9.10	91	1031	1121
REACH ID	13	BC	WEIR #2	22.10	TO 22.00	0.1000	0.10	1	1122	1122
REACH ID	14	BC	BIG CREEK, WEIR #2 TO WEIR #1	22.00	TO 5.00	0.1000	17.00	170	1123	1292
REACH ID	15	BC	WEIR #1	5.00	TO 4.90	0.1000	0.10	1	1293	1293
REACH ID	16	BC	BIG CREEK, WEIR#1 TO BOEUF RVR	4.90	TO 0.00	0.1000	4.90	49	1294	1342

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

CARD TYPE REACH ID WIDTH WIDTH WIDTH DEPTH DEPTH DEPTH SLOPE MANNINGS



Big Creek – 080903 – Summer Projection model output:

	"A"	"B"	"C"	"D"	"E"	"F"	"N"
***** WARNING: VELOCITY AND DEPTH EXPONENTS ADD TO GREATER THAN 1.0 IN REACH 1							
HYDR-1 1 BC	3.926	0.570	6.100	0.344	0.905	0.300	0.00000 0.030
***** WARNING: VELOCITY AND DEPTH EXPONENTS ADD TO GREATER THAN 1.0 IN REACH 2							
HYDR-1 2 BC	3.926	0.570	14.750	0.344	0.905	0.400	0.00000 0.030
***** WARNING: VELOCITY AND DEPTH EXPONENTS ADD TO GREATER THAN 1.0 IN REACH 3							
HYDR-1 3 BC	3.926	0.570	12.500	0.344	0.905	0.350	0.00000 0.030
***** WARNING: VELOCITY AND DEPTH EXPONENTS ADD TO GREATER THAN 1.0 IN REACH 4							
HYDR-1 4 BC	3.926	0.570	33.000	0.344	0.905	0.500	0.00000 0.030
HYDR-1 5 BC	2.500	0.277	30.000	0.165	0.156	0.420	0.00000 0.030
HYDR-1 6 BC	2.500	0.277	30.000	0.165	0.156	0.420	0.00000 0.030
HYDR-1 7 BC	2.500	0.277	30.000	0.165	0.156	1.600	0.00000 0.030
HYDR-1 8 BC	2.500	0.277	30.000	0.165	0.156	1.600	0.00000 0.030
HYDR-1 9 BC	2.500	0.277	30.000	0.165	0.156	1.600	0.00000 0.030
HYDR-1 10 BC	2.500	0.277	38.500	0.165	0.156	1.600	0.00000 0.030
HYDR-1 11 BC	2.500	0.277	38.500	0.165	0.156	1.600	0.00000 0.030
HYDR-1 12 BC	2.500	0.277	38.500	0.165	0.156	1.600	0.00000 0.030
HYDR-1 13 BC	2.500	0.277	38.500	0.165	0.156	1.600	0.00000 0.030
HYDR-1 14 BC	2.500	0.277	38.500	0.165	0.156	1.600	0.00000 0.030
HYDR-1 15 BC	2.500	0.277	38.500	0.165	0.156	1.600	0.00000 0.030
HYDR-1 16 BC	2.500	0.277	38.500	0.165	0.156	0.700	0.00000 0.030

ENDATA09

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

CARD TYPE	REACH	ID	TIDAL RANGE	DISPERSION "A"	DISPERSION "B"	DISPERSION "C"	DISPERSION "D"
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ENDATA10

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

CARD TYPE	REACH	ID	TEMP	SALIN	DO	NH3	NO3+2	PHOS	CHL A	MACRO
INITIAL	1	BC	28.40	0.00	7.00	0.00	0.00	0.00	0.00	0.00
INITIAL	2	BC	28.40	0.00	7.00	0.00	0.00	0.00	0.00	0.00
INITIAL	3	BC	28.40	0.00	7.00	0.00	0.00	0.00	0.00	0.00
INITIAL	4	BC	31.10	0.00	6.68	0.00	0.00	0.00	0.00	0.00
INITIAL	5	BC	31.10	0.00	6.68	0.00	0.00	0.00	0.00	0.00
INITIAL	6	BC	31.10	0.00	6.68	0.00	0.00	0.00	0.00	0.00
INITIAL	7	BC	31.10	0.00	6.68	0.00	0.00	0.00	0.00	0.00
INITIAL	8	BC	31.10	0.00	6.68	0.00	0.00	0.00	0.00	0.00
INITIAL	9	BC	31.10	0.00	6.68	0.00	0.00	0.00	0.00	0.00
INITIAL	10	BC	31.10	0.00	6.68	0.00	0.00	0.00	0.00	0.00
INITIAL	11	BC	31.10	0.00	6.68	0.00	0.00	0.00	0.00	0.00
INITIAL	12	BC	31.10	0.00	6.68	0.00	0.00	0.00	0.00	0.00
INITIAL	13	BC	31.10	0.00	6.68	0.00	0.00	0.00	0.00	0.00
INITIAL	14	BC	31.10	0.00	6.68	0.00	0.00	0.00	0.00	0.00
INITIAL	15	BC	31.10	0.00	6.68	0.00	0.00	0.00	0.00	0.00
INITIAL	16	BC	31.10	0.00	6.68	0.00	0.00	0.00	0.00	0.00

ENDATA11

Big Creek – 080903 – Summer Projection model output:

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

CARD	TYPE	REACH	ID	K2 OPT	K2 "A"	K2 "B"	K2 "C"	BKGRND SOD	AEROB	BOD SETT	BOD CONV TO SOD	ANAER
									BOD DECAY			BOD DECAY
COEF-1		1	BC	15 LOUISIANA	0.700	0.000	0.000	1.230	0.070	0.100	0.000	0.000
COEF-1		2	BC	15 LOUISIANA	0.700	0.000	0.000	1.160	0.070	0.100	0.000	0.000
COEF-1		3	BC	15 LOUISIANA	0.700	0.000	0.000	0.550	0.070	0.100	0.000	0.000
COEF-1		4	BC	15 LOUISIANA	0.700	0.000	0.000	0.520	0.070	0.100	0.000	0.000
COEF-1		5	BC	15 LOUISIANA	0.700	0.000	0.000	0.000	0.070	0.100	0.000	0.000
COEF-1		6	BC	15 LOUISIANA	0.700	0.000	0.000	0.820	0.070	0.100	0.000	0.000
COEF-1		7	BC	20 K2=a/D	1.100	0.000	0.000	0.000	0.070	0.100	0.000	0.000
COEF-1		8	BC	20 K2=a/D	1.100	0.000	0.000	0.790	0.070	0.100	0.000	0.000
COEF-1		9	BC	20 K2=a/D	1.100	0.000	0.000	0.000	0.070	0.100	0.000	0.000
COEF-1		10	BC	20 K2=a/D	1.100	0.000	0.000	0.730	0.070	0.100	0.000	0.000
COEF-1		11	BC	20 K2=a/D	1.100	0.000	0.000	0.000	0.070	0.100	0.000	0.000
COEF-1		12	BC	20 K2=a/D	1.100	0.000	0.000	0.760	0.070	0.100	0.000	0.000
COEF-1		13	BC	20 K2=a/D	1.100	0.000	0.000	0.000	0.070	0.100	0.000	0.000
COEF-1		14	BC	20 K2=a/D	1.100	0.000	0.000	0.920	0.070	0.100	0.000	0.000
COEF-1		15	BC	20 K2=a/D	1.100	0.000	0.000	0.000	0.070	0.100	0.000	0.000
COEF-1		16	BC	15 LOUISIANA	0.700	0.000	0.000	0.820	0.070	0.100	0.000	0.000

ENDATA12

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

CARD	TYPE	REACH	ID	ORG-N DECA	ORG-N SETT	ORGN CONV TO NH3 SRCE	NH3 DECA	NH3 SRCE	PHOS SRCE	DENIT RATE
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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
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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	BC	0.00	0.28	0.10	0.00
COEF-4		2	BC	0.00	0.28	0.10	0.00
COEF-4		3	BC	0.00	0.28	0.10	0.00
COEF-4		4	BC	0.00	0.16	0.10	0.00
COEF-4		5	BC	0.00	0.16	0.10	0.00
COEF-4		6	BC	0.00	0.16	0.10	0.00
COEF-4		7	BC	0.00	0.16	0.10	0.00
COEF-4		8	BC	0.00	0.16	0.10	0.00
COEF-4		9	BC	0.00	0.16	0.10	0.00
COEF-4		10	BC	0.00	0.16	0.10	0.00
COEF-4		11	BC	0.00	0.16	0.10	0.00

Big Creek – 080903 – Summer Projection model output:

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COEF-4      12  BC      0.00    0.16    0.10    0.00
COEF-4      13  BC      0.00    0.16    0.10    0.00
COEF-4      14  BC      0.00    0.16    0.10    0.00
COEF-4      15  BC      0.00    0.16    0.10    0.00
COEF-4      16  BC      0.00    0.16    0.10    0.00
ENDATA15
  
```

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

CARD TYPE	REACH	ID	OUTFLOW	INFLOW	TEMP	SALIN	CM-I	CM-II	IN/DIST	OUT/DIST
INCR-1	1	BC	0.00000	0.00000	28.40	0.00	0.00	0.00	0.00000	0.00000
INCR-1	2	BC	0.00000	0.00000	28.40	0.00	0.00	0.00	0.00000	0.00000
INCR-1	3	BC	0.00000	0.00000	28.40	0.00	0.00	0.00	0.00000	0.00000
INCR-1	4	BC	0.00000	0.11900	31.10	0.00	0.00	0.00	0.01653	0.00000
INCR-1	5	BC	0.00000	0.00170	31.10	0.00	0.00	0.00	0.01700	0.00000
INCR-1	6	BC	0.00000	0.15200	31.10	0.00	0.00	0.00	0.01652	0.00000
INCR-1	7	BC	0.00000	0.00170	31.10	0.00	0.00	0.00	0.01700	0.00000
INCR-1	8	BC	0.00000	0.21970	31.10	0.00	0.00	0.00	0.01652	0.00000
INCR-1	9	BC	0.00000	0.00170	31.10	0.00	0.00	0.00	0.01700	0.00000
INCR-1	10	BC	0.00000	0.10240	31.10	0.00	0.00	0.00	0.01679	0.00000
INCR-1	11	BC	0.00000	0.00170	31.10	0.00	0.00	0.00	0.01700	0.00000
INCR-1	12	BC	0.00000	0.14870	31.10	0.00	0.00	0.00	0.01634	0.00000
INCR-1	13	BC	0.00000	0.00170	31.10	0.00	0.00	0.00	0.01700	0.00000
INCR-1	14	BC	0.00000	0.27920	31.10	0.00	0.00	0.00	0.01642	0.00000
INCR-1	15	BC	0.00000	0.00170	31.10	0.00	0.00	0.00	0.01700	0.00000
INCR-1	16	BC	0.00000	0.08260	31.10	0.00	0.00	0.00	0.01686	0.00000

ENDATA16

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

CARD TYPE	REACH	ID	DO	BOD	ORG-N	NH3	NO3+2
INCR-2	1	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	2	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	3	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	4	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	5	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	6	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	7	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	8	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	9	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	10	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	11	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	12	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	13	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	14	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	15	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	16	BC	0.00	0.00	0.00	0.00	0.00

ENDATA17

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

Big Creek – 080903 – Summer Projection model output:

CARD TYPE	REACH	ID	PHOS	CHL A	COLI	NCM
INCR-3	1	BC	0.00	0.00	0.00	0.00
INCR-3	2	BC	0.00	0.00	0.00	0.00
INCR-3	3	BC	0.00	0.00	0.00	0.00
INCR-3	4	BC	0.00	0.00	0.00	0.00
INCR-3	5	BC	0.00	0.00	0.00	0.00
INCR-3	6	BC	0.00	0.00	0.00	0.00
INCR-3	7	BC	0.00	0.00	0.00	0.00
INCR-3	8	BC	0.00	0.00	0.00	0.00
INCR-3	9	BC	0.00	0.00	0.00	0.00
INCR-3	10	BC	0.00	0.00	0.00	0.00
INCR-3	11	BC	0.00	0.00	0.00	0.00
INCR-3	12	BC	0.00	0.00	0.00	0.00
INCR-3	13	BC	0.00	0.00	0.00	0.00
INCR-3	14	BC	0.00	0.00	0.00	0.00
INCR-3	15	BC	0.00	0.00	0.00	0.00
INCR-3	16	BC	0.00	0.00	0.00	0.00

ENDATA18

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

CARD TYPE	REACH	ID	BOD	ORG-N	COLI	NCM	DO
NONPOINT	1	BC	43.00	0.00	0.00	20.00	0.00
NONPOINT	2	BC	335.00	0.00	0.00	106.00	0.00
NONPOINT	3	BC	188.00	0.00	0.00	51.00	0.00
NONPOINT	4	BC	319.00	0.00	0.00	59.00	0.00
NONPOINT	5	BC	0.00	0.00	0.00	0.00	0.00
NONPOINT	6	BC	394.00	0.00	0.00	42.00	0.00
NONPOINT	7	BC	0.00	0.00	0.00	0.00	0.00
NONPOINT	8	BC	832.00	0.00	0.00	130.00	0.00
NONPOINT	9	BC	0.00	0.00	0.00	0.00	0.00
NONPOINT	10	BC	441.00	0.00	0.00	36.00	0.00
NONPOINT	11	BC	0.00	0.00	0.00	0.00	0.00
NONPOINT	12	BC	672.00	0.00	0.00	52.00	0.00
NONPOINT	13	BC	0.00	0.00	0.00	0.00	0.00
NONPOINT	14	BC	1145.00	0.00	0.00	199.00	0.00
NONPOINT	15	BC	0.00	0.00	0.00	0.00	0.00
NONPOINT	16	BC	286.00	0.00	0.00	4.00	0.00

ENDATA19

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

CARD TYPE	ELEMENT	NAME	UNIT	FLOW	TEMP	SALIN	CM-I	CM-II
HDWTR-1	1	BIG CREEK	0	0.00280	28.400	0.000	0.000	0.000

ENDATA20

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

CARD TYPE	ELEMENT	NAME	DO	BOD	ORG-N	NH3	NO3+2
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Big Creek – 080903 – Summer Projection model output:

HDWTR-2            1        BIG CREEK                    7.00        8.87        0.00        0.00        0.00  
 ENDATA21

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

CARD TYPE	ELEMENT	NAME	PHOS	CHL A	COLI	NCM
HDWTR-3	1	BIG CREEK	0.00	0.00	0.00	3.41

ENDATA22

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

CARD TYPE	JUNCTION ELEMENT	UPSTRM ELEMENT	RIVER KILOM	NAME
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ENDATA23

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

CARD TYPE	ELEMENT	RKILO	NAME	FLOW	TEMP	SAL	CM-I	CM-II
WSTLD-1	162	118.10	LITTLE COLEWA CRK 1	0.00280	28.400	0.000	0.000	0.000
WSTLD-1	585	75.80	LITTLE COLEWA CRK 2	0.00280	28.400	0.000	0.000	0.000
WSTLD-1	760	58.30	CYPRESS CRK	0.00280	31.100	0.000	0.000	0.000
WSTLD-1	861	48.20	COW BAYOU	0.00280	31.100	0.000	0.000	0.000
WSTLD-1	1014	32.90	BEE BAYOU	0.00280	31.100	0.000	0.000	0.000
WSTLD-1	1043	30.00	VILLAGE OF MANGHAM	0.00350	31.100	0.000	0.000	0.000
WSTLD-1	1128	21.50	TURKEY CREEK	0.00280	31.100	0.000	0.000	0.000
WSTLD-1	1204	13.90	LITTLE CREEK	0.00280	31.100	0.000	0.000	0.000

ENDATA24

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

CARD TYPE	ELEMENT	NAME	DO	BOD	% BOD RMVL	ORG-N	NH3	% NITRIF	NO3+2
WSTLD-2	162	LITTLE COLEWA CRK 1	7.00	6.40	0.00	0.00	0.00	0.00	0.00
WSTLD-2	585	LITTLE COLEWA CRK 2	7.00	6.40	0.00	0.00	0.00	0.00	0.00
WSTLD-2	760	CYPRESS CRK	6.68	6.40	0.00	0.00	0.00	0.00	0.00
WSTLD-2	861	COW BAYOU	6.68	6.40	0.00	0.00	0.00	0.00	0.00
WSTLD-2	1014	BEE BAYOU	6.68	6.74	0.00	0.00	0.00	0.00	0.00
WSTLD-2	1043	VILLAGE OF MANGHAM	2.00	69.00	0.00	0.00	0.00	0.00	0.00
WSTLD-2	1128	TURKEY CREEK	6.68	6.40	0.00	0.00	0.00	0.00	0.00
WSTLD-2	1204	LITTLE CREEK	6.68	6.40	0.00	0.00	0.00	0.00	0.00

ENDATA25

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

CARD TYPE	ELEMENT	NAME	PHOS	CHL A	COLI	NCM
WSTLD-3	162	LITTLE COLEWA CRK 1	0.00	0.00	0.00	0.46
WSTLD-3	585	LITTLE COLEWA CRK 2	0.00	0.00	0.00	0.46
WSTLD-3	760	CYPRESS CRK	0.00	0.00	0.00	0.46

Big Creek – 080903 – Summer Projection model output:

WSTLD-3	861	COW BAYOU	0.00	0.00	0.00	0.46
WSTLD-3	1014	BEE BAYOU	0.00	0.00	0.00	0.07
WSTLD-3	1043	VILLAGE OF MANGHAM	0.00	0.00	0.00	64.50
WSTLD-3	1128	TURKEY CREEK	0.00	0.00	0.00	0.46
WSTLD-3	1204	LITTLE CREEK	0.00	0.00	0.00	0.46

ENDATA26

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

CARD TYPE	CONSTITUENT	CONCENTRATION
LOWER BC	TEMPERATURE	= 31.100 deg C
LOWER BC	SALINITY	= 0.000 ppt
LOWER BC	CONSERVATIVE MATERIAL I	= 0.000 MG/L
LOWER BC	CONSERVATIVE MATERIAL II	= 0.000 MG/L
LOWER BC	DISSOLVED OXYGEN	= 0.000 mg/L
LOWER BC	BIOCHEMICAL OXYGEN DEMAND	= 0.000 mg/L
LOWER BC	ORGANIC NITROGEN	= 0.000 mg/L
LOWER BC	AMMONIA NITROGEN	= 0.000 mg/L
LOWER BC	NITRATE + NITRITE	= 0.000 mg/L
LOWER BC	PHOSPHORUS	= 0.000 mg/L
LOWER BC	CHLOROPHYLL A	= 0.000 µg/L
LOWER BC	COLIFORM	= 0.000 #/100 mL
LOWER BC	NONCONSERVATIVE MATERIAL	= 0.000 MG/L

ENDATA27

\$\$\$ DATA TYPE 28 (RESERVED FOR FUTURE DATA INPUT) \$\$\$

CARD TYPE

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
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ENDATA29

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

NUMBER OF PLOTS = 2  
 NUMBER OF REACHES IN PLOT 1 = 16  
 PLOT RCH 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16  
 NUMBER OF REACHES IN PLOT 2 = 16  
 PLOT RCH 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16  
 ENDATA30

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

OVERLAY 1 bigovlproj.txt :MAINSTEM  
 ENDATA31

Big Creek – 080903 – Summer Projection model output:

.....NO ERRORS DETECTED IN INPUT DATA  
 .....HYDRAULIC CALCULATIONS COMPLETED  
 .....TRIDIAGONAL MATRIX TERMS INITIALIZED  
 .....OXYGEN DEPENDENT RATES CONVERGENT IN 22 ITERATIONS  
 .....CONSTITUENT CALCULATIONS COMPLETED  
 .....GRAPHICS DATA FOR PLOT 1 WRITTEN TO UNIT 11  
 .....GRAPHICS DATA FOR PLOT 2 WRITTEN TO UNIT 12

FINAL REPORT      BIG CREEK  
 REACH NO. 1      BIG CREEK, RKM 134.2 RKM 118

Big Creek - STREAM MODEL  
 Summer Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
1	HDWTR	0.00280	28.40	0.00	0.00	0.00	7.00	8.87	8.87	0.00	0.00	0.00	0.00	0.00	0.00	3.41
162	WSTLD	0.00280	28.40	0.00	0.00	0.00	7.00	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.46

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
1	134.20	134.10	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
2	134.10	134.00	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
3	134.00	133.90	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
4	133.90	133.80	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
5	133.80	133.70	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
6	133.70	133.60	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
7	133.60	133.50	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
8	133.50	133.40	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
9	133.40	133.30	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
10	133.30	133.20	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
11	133.20	133.10	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
12	133.10	133.00	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
13	133.00	132.90	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
14	132.90	132.80	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
15	132.80	132.70	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
16	132.70	132.60	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
17	132.60	132.50	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
18	132.50	132.40	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
19	132.40	132.30	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
20	132.30	132.20	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
21	132.20	132.10	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
22	132.10	132.00	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001







Big Creek – 080903 – Summer Projection model output:

129	121.40	121.30	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
130	121.30	121.20	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
131	121.20	121.10	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
132	121.10	121.00	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
133	121.00	120.90	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
134	120.90	120.80	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
135	120.80	120.70	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
136	120.70	120.60	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
137	120.60	120.50	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
138	120.50	120.40	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
139	120.40	120.30	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
140	120.30	120.20	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
141	120.20	120.10	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
142	120.10	120.00	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
143	120.00	119.90	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
144	119.90	119.80	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
145	119.80	119.70	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
146	119.70	119.60	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
147	119.60	119.50	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
148	119.50	119.40	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
149	119.40	119.30	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
150	119.30	119.20	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
151	119.20	119.10	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
152	119.10	119.00	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
153	119.00	118.90	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
154	118.90	118.80	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
155	118.80	118.70	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
156	118.70	118.60	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
157	118.60	118.50	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
158	118.50	118.40	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
159	118.40	118.30	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
160	118.30	118.20	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
161	118.20	118.10	0.00280	0.00	0.00149	0.78	0.30	6.24	188.19	623.79	1.88	0.00	0.000	0.000	0.001
162	118.10	118.00	0.00560	50.00	0.00293	0.40	0.30	6.30	191.13	630.47	1.91	0.00	0.000	0.001	0.003
TOT						125.63			30489.23	101060.61					
AVG					0.00149		0.30	6.24			1.88				
CUM						125.63									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAy 1/da	CBOD SETT 1/da	ANBOD DECAy 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAy 1/da	ORGN SETT 1/da	NH3 DECAy 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAy 1/da	NCM DECAy 1/da	NCM SETT 1/da
1	134.100	7.77	2.71	0.10	0.40	0.00	2.09	2.09	2.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.40
2	134.000	7.77	2.71	0.10	0.40	0.00	2.09	2.09	2.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.40
3	133.900	7.77	2.71	0.10	0.40	0.00	2.09	2.09	2.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.40
4	133.800	7.77	2.71	0.10	0.40	0.00	2.09	2.09	2.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.40
5	133.700	7.77	2.71	0.10	0.40	0.00	2.09	2.09	2.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.40
6	133.600	7.77	2.71	0.10	0.40	0.00	2.09	2.09	2.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.40
7	133.500	7.77	2.71	0.10	0.40	0.00	2.09	2.09	2.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.40







Big Creek – 080903 – Summer Projection model output:

\* g/sq m/d                      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
1	134.100	28.40	0.00	0.00	0.00	5.32	7.14	7.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.31
2	134.000	28.40	0.00	0.00	0.00	4.90	5.91	5.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.66
3	133.900	28.40	0.00	0.00	0.00	4.83	5.02	5.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28
4	133.800	28.40	0.00	0.00	0.00	4.85	4.39	4.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05
5	133.700	28.40	0.00	0.00	0.00	4.89	3.93	3.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92
6	133.600	28.40	0.00	0.00	0.00	4.92	3.61	3.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
7	133.500	28.40	0.00	0.00	0.00	4.94	3.37	3.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80
8	133.400	28.40	0.00	0.00	0.00	4.95	3.20	3.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77
9	133.300	28.40	0.00	0.00	0.00	4.96	3.08	3.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75
10	133.200	28.40	0.00	0.00	0.00	4.97	3.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74
11	133.100	28.40	0.00	0.00	0.00	4.98	2.94	2.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74
12	133.000	28.40	0.00	0.00	0.00	4.98	2.89	2.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
13	132.900	28.40	0.00	0.00	0.00	4.98	2.86	2.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
14	132.800	28.40	0.00	0.00	0.00	4.98	2.84	2.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
15	132.700	28.40	0.00	0.00	0.00	4.98	2.82	2.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
16	132.600	28.40	0.00	0.00	0.00	4.98	2.81	2.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
17	132.500	28.40	0.00	0.00	0.00	4.98	2.80	2.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
18	132.400	28.40	0.00	0.00	0.00	4.98	2.79	2.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
19	132.300	28.40	0.00	0.00	0.00	4.98	2.79	2.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
20	132.200	28.40	0.00	0.00	0.00	4.98	2.79	2.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
21	132.100	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
22	132.000	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
23	131.900	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
24	131.800	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
25	131.700	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
26	131.600	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
27	131.500	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
28	131.400	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
29	131.300	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
30	131.200	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
31	131.100	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
32	131.000	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
33	130.900	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
34	130.800	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
35	130.700	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
36	130.600	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
37	130.500	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
38	130.400	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
39	130.300	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
40	130.200	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
41	130.100	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
42	130.000	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
43	129.900	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
44	129.800	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
45	129.700	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73







Big Creek – 080903 – Summer Projection model output:

152	119.000	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
153	118.900	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
154	118.800	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
155	118.700	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
156	118.600	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
157	118.500	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
158	118.400	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
159	118.300	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
160	118.200	28.40	0.00	0.00	0.00	4.98	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
161	118.100	28.40	0.00	0.00	0.00	4.99	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
162	118.000	28.40	0.00	0.00	0.00	5.46	4.28	4.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63

\* CM-I = CHLORIDES  
MG/L

CM-II = SULFATES  
MG/L

NCM = NBOD  
MG/L

\*\* g/cu m

FINAL REPORT BIG CREEK  
REACH NO. 2 BIG CREEK, RKM 100 TO MITCHNER

Big Creek - STREAM MODEL  
Summer Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
163	UPR RCH	0.00560	28.40	0.00	0.00	0.00	5.46	4.28	4.28	0.00	0.00	0.00	0.00	0.00	0.00	0.63

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
163	118.00	117.90	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
164	117.90	117.80	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
165	117.80	117.70	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
166	117.70	117.60	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
167	117.60	117.50	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
168	117.50	117.40	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
169	117.40	117.30	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
170	117.30	117.20	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
171	117.20	117.10	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
172	117.10	117.00	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
173	117.00	116.90	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
174	116.90	116.80	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
175	116.80	116.70	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
176	116.70	116.60	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
177	116.60	116.50	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
178	116.50	116.40	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
179	116.40	116.30	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
180	116.30	116.20	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001













Big Creek – 080903 – Summer Projection model output:

499	84.40	84.30	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
500	84.30	84.20	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
501	84.20	84.10	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
502	84.10	84.00	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
503	84.00	83.90	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
504	83.90	83.80	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
505	83.80	83.70	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
506	83.70	83.60	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
507	83.60	83.50	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
508	83.50	83.40	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
509	83.40	83.30	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
510	83.30	83.20	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
511	83.20	83.10	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
512	83.10	83.00	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
513	83.00	82.90	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
514	82.90	82.80	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
515	82.80	82.70	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
516	82.70	82.60	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
517	82.60	82.50	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
518	82.50	82.40	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
519	82.40	82.30	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
520	82.30	82.20	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
521	82.20	82.10	0.00560	50.00	0.00093	1.25	0.40	14.95	602.90	1495.47	6.03	0.00	0.000	0.000	0.001
TOT						447.34			216439.42	536873.50					
AVG			0.00093				0.40	14.95				6.03			
CUM						572.97									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECATY 1/da	CBOD SETT 1/da	ANBOD DECATY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECATY 1/da	ORGN SETT 1/da	NH3 DECATY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECATY 1/da	NCM DECATY 1/da	NCM SETT 1/da
163	117.900	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30
164	117.800	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30
165	117.700	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30
166	117.600	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30
167	117.500	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30
168	117.400	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30
169	117.300	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30
170	117.200	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30
171	117.100	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30
172	117.000	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30
173	116.900	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30
174	116.800	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30
175	116.700	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30
176	116.600	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30
177	116.500	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30
178	116.400	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30
179	116.300	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30
180	116.200	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30















Big Creek – 080903 – Summer Projection model output:

499	84.301	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
500	84.201	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
501	84.101	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
502	84.001	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
503	83.901	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
504	83.801	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
505	83.701	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
506	83.601	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
507	83.501	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
508	83.401	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
509	83.301	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
510	83.201	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
511	83.101	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
512	83.001	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
513	82.901	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
514	82.801	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
515	82.701	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
516	82.601	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
517	82.501	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
518	82.401	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
519	82.301	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
520	82.201	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
521	82.101	7.77	2.03	0.10	0.30	0.00	1.97	1.97	1.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.30	
20 DEG C RATE					0.07		0.00	1.16		0.00		0.00	0.00	0.00	0.00			0.00	0.28		
AVG 20 DEG C RATE				1.74		0.25					0.00									0.25	

\* g/sq m/d                      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
163	117.900	28.40	0.00	0.00	0.00	5.14	4.13	4.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
164	117.800	28.40	0.00	0.00	0.00	5.05	4.02	4.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
165	117.700	28.40	0.00	0.00	0.00	5.03	3.95	3.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
166	117.600	28.40	0.00	0.00	0.00	5.02	3.91	3.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
167	117.500	28.40	0.00	0.00	0.00	5.02	3.88	3.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
168	117.400	28.40	0.00	0.00	0.00	5.02	3.86	3.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
169	117.300	28.40	0.00	0.00	0.00	5.02	3.84	3.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
170	117.200	28.40	0.00	0.00	0.00	5.02	3.83	3.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
171	117.100	28.40	0.00	0.00	0.00	5.02	3.83	3.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
172	117.000	28.40	0.00	0.00	0.00	5.02	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
173	116.900	28.40	0.00	0.00	0.00	5.02	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
174	116.800	28.40	0.00	0.00	0.00	5.02	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
175	116.700	28.40	0.00	0.00	0.00	5.02	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
176	116.600	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
177	116.500	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
178	116.400	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
179	116.300	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
180	116.200	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61















Big Creek – 080903 – Summer Projection model output:

499	84.301	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
500	84.201	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
501	84.101	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
502	84.001	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
503	83.901	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
504	83.801	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
505	83.701	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
506	83.601	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
507	83.501	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
508	83.401	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
509	83.301	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
510	83.201	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
511	83.101	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
512	83.001	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
513	82.901	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
514	82.801	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
515	82.701	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
516	82.601	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
517	82.501	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
518	82.401	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
519	82.301	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
520	82.201	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
521	82.101	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61

\* CM-I = CHLORIDES  
MG/L

CM-II = SULFATES  
MG/L

NCM = NBOD  
MG/L

\*\* g/cu m

FINAL REPORT BIG CREEK  
REACH NO. 3 BIG CREEK, MITCHNER TO RKM 67.4

Big Creek - STREAM MODEL  
Summer Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
522	UPR RCH	0.00560	28.40	0.00	0.00	0.00	5.03	3.82	3.82	0.00	0.00	0.00	0.00	0.00	0.00	0.61
585	WSTLD	0.00280	28.40	0.00	0.00	0.00	7.00	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.46

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
522	82.10	82.00	0.00560	50.00	0.00125	0.93	0.35	12.70	448.67	1270.47	4.49	0.00	0.000	0.000	0.001
523	82.00	81.90	0.00560	50.00	0.00125	0.93	0.35	12.70	448.67	1270.47	4.49	0.00	0.000	0.000	0.001
524	81.90	81.80	0.00560	50.00	0.00125	0.93	0.35	12.70	448.67	1270.47	4.49	0.00	0.000	0.000	0.001
525	81.80	81.70	0.00560	50.00	0.00125	0.93	0.35	12.70	448.67	1270.47	4.49	0.00	0.000	0.000	0.001
526	81.70	81.60	0.00560	50.00	0.00125	0.93	0.35	12.70	448.67	1270.47	4.49	0.00	0.000	0.000	0.001







Big Creek – 080903 – Summer Projection model output:

633	71.00	70.90	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
634	70.90	70.80	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
635	70.80	70.70	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
636	70.70	70.60	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
637	70.60	70.50	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
638	70.50	70.40	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
639	70.40	70.30	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
640	70.30	70.20	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
641	70.20	70.10	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
642	70.10	70.00	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
643	70.00	69.90	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
644	69.90	69.80	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
645	69.80	69.70	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
646	69.70	69.60	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
647	69.60	69.50	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
648	69.50	69.40	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
649	69.40	69.30	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
650	69.30	69.20	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
651	69.20	69.10	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
652	69.10	69.00	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
653	69.00	68.90	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
654	68.90	68.80	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
655	68.80	68.70	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
656	68.70	68.60	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
657	68.60	68.50	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
658	68.50	68.40	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
659	68.40	68.30	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
660	68.30	68.20	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
661	68.20	68.10	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
662	68.10	68.00	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
663	68.00	67.90	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
664	67.90	67.80	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
665	67.80	67.70	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
666	67.70	67.60	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
667	67.60	67.50	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002
668	67.50	67.40	0.00840	66.67	0.00186	0.62	0.35	12.76	452.33	1275.79	4.52	0.00	0.000	0.000	0.002

TOT						110.77			66261.50	187205.47										
AVG					0.00154		0.35	12.74				4.51								
CUM						683.74														

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAT 1/da	CBOD SETT 1/da	ANBOD DECAT 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAT 1/da	ORGN SETT 1/da	NH3 DECAT 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAT 1/da	NCM DECAT 1/da	NCM SETT 1/da
522	82.000	7.77	2.32	0.10	0.35	0.00	0.93	0.93	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	0.35
523	81.900	7.77	2.32	0.10	0.35	0.00	0.94	0.94	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.35
524	81.800	7.76	2.32	0.10	0.35	0.00	0.94	0.94	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.35
525	81.700	7.76	2.32	0.10	0.35	0.00	0.94	0.94	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.35
526	81.600	7.76	2.32	0.10	0.35	0.00	0.94	0.94	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.35









Big Creek – 080903 – Summer Projection model output:

580	76.200	29.48	0.00	0.00	0.00	5.95	6.17	6.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87
581	76.100	29.50	0.00	0.00	0.00	5.95	6.16	6.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87
582	76.000	29.52	0.00	0.00	0.00	5.94	6.16	6.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87
583	75.900	29.54	0.00	0.00	0.00	5.94	6.16	6.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87
584	75.800	29.56	0.00	0.00	0.00	5.94	6.15	6.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87
585	75.700	29.58	0.00	0.00	0.00	6.09	6.21	6.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78
586	75.600	29.59	0.00	0.00	0.00	6.00	6.19	6.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81
587	75.500	29.61	0.00	0.00	0.00	5.96	6.17	6.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
588	75.400	29.63	0.00	0.00	0.00	5.94	6.15	6.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
589	75.300	29.65	0.00	0.00	0.00	5.93	6.14	6.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
590	75.200	29.67	0.00	0.00	0.00	5.92	6.13	6.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
591	75.100	29.69	0.00	0.00	0.00	5.92	6.12	6.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
592	75.000	29.70	0.00	0.00	0.00	5.91	6.11	6.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
593	74.900	29.72	0.00	0.00	0.00	5.91	6.11	6.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86
594	74.800	29.74	0.00	0.00	0.00	5.90	6.10	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86
595	74.700	29.76	0.00	0.00	0.00	5.90	6.10	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86
596	74.600	29.78	0.00	0.00	0.00	5.90	6.09	6.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
597	74.500	29.80	0.00	0.00	0.00	5.89	6.09	6.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
598	74.400	29.81	0.00	0.00	0.00	5.89	6.08	6.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
599	74.300	29.83	0.00	0.00	0.00	5.89	6.08	6.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
600	74.200	29.85	0.00	0.00	0.00	5.88	6.08	6.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
601	74.100	29.87	0.00	0.00	0.00	5.88	6.07	6.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
602	74.000	29.89	0.00	0.00	0.00	5.88	6.07	6.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
603	73.900	29.91	0.00	0.00	0.00	5.87	6.07	6.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
604	73.800	29.92	0.00	0.00	0.00	5.87	6.06	6.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
605	73.700	29.94	0.00	0.00	0.00	5.87	6.06	6.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
606	73.600	29.96	0.00	0.00	0.00	5.86	6.06	6.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
607	73.500	29.98	0.00	0.00	0.00	5.86	6.05	6.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
608	73.400	30.00	0.00	0.00	0.00	5.86	6.05	6.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
609	73.300	30.02	0.00	0.00	0.00	5.85	6.05	6.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
610	73.200	30.03	0.00	0.00	0.00	5.85	6.04	6.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
611	73.100	30.05	0.00	0.00	0.00	5.85	6.04	6.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
612	73.000	30.07	0.00	0.00	0.00	5.84	6.04	6.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
613	72.900	30.09	0.00	0.00	0.00	5.84	6.03	6.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
614	72.800	30.11	0.00	0.00	0.00	5.84	6.03	6.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
615	72.700	30.13	0.00	0.00	0.00	5.83	6.03	6.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
616	72.600	30.14	0.00	0.00	0.00	5.83	6.02	6.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
617	72.500	30.16	0.00	0.00	0.00	5.83	6.02	6.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
618	72.400	30.18	0.00	0.00	0.00	5.82	6.02	6.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
619	72.300	30.20	0.00	0.00	0.00	5.82	6.01	6.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
620	72.200	30.22	0.00	0.00	0.00	5.82	6.01	6.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
621	72.100	30.24	0.00	0.00	0.00	5.81	6.01	6.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
622	72.000	30.26	0.00	0.00	0.00	5.81	6.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
623	71.900	30.27	0.00	0.00	0.00	5.81	6.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
624	71.800	30.29	0.00	0.00	0.00	5.80	6.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
625	71.700	30.31	0.00	0.00	0.00	5.80	5.99	5.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
626	71.600	30.33	0.00	0.00	0.00	5.80	5.99	5.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
627	71.500	30.35	0.00	0.00	0.00	5.79	5.99	5.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
628	71.400	30.37	0.00	0.00	0.00	5.79	5.98	5.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
629	71.300	30.38	0.00	0.00	0.00	5.78	5.98	5.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
630	71.200	30.40	0.00	0.00	0.00	5.78	5.98	5.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
631	71.100	30.42	0.00	0.00	0.00	5.78	5.97	5.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
632	71.000	30.44	0.00	0.00	0.00	5.77	5.97	5.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83

Big Creek – 080903 – Summer Projection model output:

633	70.900	30.46	0.00	0.00	0.00	5.77	5.97	5.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
634	70.800	30.48	0.00	0.00	0.00	5.77	5.97	5.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
635	70.700	30.49	0.00	0.00	0.00	5.76	5.96	5.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
636	70.600	30.51	0.00	0.00	0.00	5.76	5.96	5.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
637	70.500	30.53	0.00	0.00	0.00	5.76	5.96	5.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
638	70.400	30.55	0.00	0.00	0.00	5.75	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
639	70.300	30.57	0.00	0.00	0.00	5.75	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
640	70.200	30.59	0.00	0.00	0.00	5.75	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
641	70.100	30.60	0.00	0.00	0.00	5.74	5.94	5.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
642	70.000	30.62	0.00	0.00	0.00	5.74	5.94	5.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
643	69.900	30.64	0.00	0.00	0.00	5.74	5.94	5.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
644	69.800	30.66	0.00	0.00	0.00	5.73	5.93	5.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
645	69.700	30.68	0.00	0.00	0.00	5.73	5.93	5.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
646	69.600	30.70	0.00	0.00	0.00	5.73	5.93	5.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
647	69.500	30.71	0.00	0.00	0.00	5.72	5.92	5.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
648	69.400	30.73	0.00	0.00	0.00	5.72	5.92	5.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
649	69.300	30.75	0.00	0.00	0.00	5.72	5.92	5.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81
650	69.200	30.77	0.00	0.00	0.00	5.71	5.91	5.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81
651	69.100	30.79	0.00	0.00	0.00	5.71	5.91	5.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81
652	69.000	30.81	0.00	0.00	0.00	5.71	5.91	5.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81
653	68.900	30.82	0.00	0.00	0.00	5.70	5.90	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81
654	68.800	30.84	0.00	0.00	0.00	5.70	5.90	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81
655	68.700	30.86	0.00	0.00	0.00	5.70	5.90	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81
656	68.600	30.88	0.00	0.00	0.00	5.69	5.90	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81
657	68.500	30.90	0.00	0.00	0.00	5.69	5.89	5.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81
658	68.400	30.92	0.00	0.00	0.00	5.69	5.89	5.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81
659	68.300	30.93	0.00	0.00	0.00	5.68	5.89	5.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81
660	68.200	30.95	0.00	0.00	0.00	5.68	5.88	5.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81
661	68.100	30.97	0.00	0.00	0.00	5.68	5.88	5.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81
662	68.000	30.99	0.00	0.00	0.00	5.67	5.88	5.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80
663	67.900	31.01	0.00	0.00	0.00	5.67	5.87	5.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80
664	67.800	31.03	0.00	0.00	0.00	5.67	5.87	5.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80
665	67.700	31.04	0.00	0.00	0.00	5.66	5.87	5.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80
666	67.600	31.06	0.00	0.00	0.00	5.66	5.86	5.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80
667	67.500	31.08	0.00	0.00	0.00	5.66	5.86	5.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80
668	67.400	31.10	0.00	0.00	0.00	5.65	5.86	5.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80

\* CM-I = CHLORIDES  
MG/L

CM-II = SULFATES  
MG/L

NCM = NBOD  
MG/L

\*\* g/cu m

FINAL REPORT      BIG CREEK  
REACH NO. 4      BIG CREEK, RKM 67.4 TO WEIR #6

Big Creek - STREAM MODEL  
Summer Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
669	UPR RCH	0.00840	31.10	0.00	0.00	0.00	5.65	5.86	5.86	0.00	0.00	0.00	0.00	0.00	0.00	0.80
EACH	INCR	0.0017	31.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Big Creek – 080903 – Summer Projection model output:

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
669	67.40	67.30	0.01005	55.71	0.00060	1.94	0.51	33.29	1682.09	3328.57	16.82	0.00	0.000	0.000	0.001
670	67.30	67.20	0.01171	47.84	0.00069	1.67	0.51	33.31	1686.03	3331.15	16.86	0.00	0.000	0.000	0.001
671	67.20	67.10	0.01336	41.92	0.00079	1.46	0.51	33.34	1689.86	3333.59	16.90	0.00	0.000	0.000	0.001
672	67.10	67.00	0.01501	37.31	0.00089	1.31	0.51	33.36	1693.60	3335.90	16.94	0.00	0.000	0.000	0.001
673	67.00	66.90	0.01666	33.61	0.00098	1.18	0.51	33.38	1697.26	3338.10	16.97	0.00	0.000	0.000	0.001
674	66.90	66.80	0.01832	30.57	0.00108	1.07	0.51	33.40	1700.86	3340.21	17.01	0.00	0.000	0.000	0.001
675	66.80	66.70	0.01997	28.04	0.00117	0.99	0.51	33.42	1704.39	3342.23	17.04	0.00	0.000	0.000	0.001
676	66.70	66.60	0.02162	25.90	0.00127	0.91	0.51	33.44	1707.88	3344.19	17.08	0.00	0.000	0.000	0.001
677	66.60	66.50	0.02327	24.06	0.00136	0.85	0.51	33.46	1711.31	3346.09	17.11	0.00	0.000	0.000	0.001
678	66.50	66.40	0.02493	22.46	0.00145	0.80	0.51	33.48	1714.70	3347.92	17.15	0.00	0.000	0.000	0.001
679	66.40	66.30	0.02658	21.07	0.00155	0.75	0.51	33.50	1718.06	3349.71	17.18	0.00	0.000	0.000	0.002
680	66.30	66.20	0.02823	19.83	0.00164	0.71	0.51	33.51	1721.37	3351.45	17.21	0.00	0.000	0.001	0.002
681	66.20	66.10	0.02989	18.74	0.00173	0.67	0.51	33.53	1724.66	3353.14	17.25	0.00	0.000	0.001	0.002
682	66.10	66.00	0.03154	17.76	0.00183	0.63	0.52	33.55	1727.91	3354.80	17.28	0.00	0.000	0.001	0.002
683	66.00	65.90	0.03319	16.87	0.00192	0.60	0.52	33.56	1731.14	3356.41	17.31	0.00	0.000	0.001	0.002
684	65.90	65.80	0.03484	16.07	0.00201	0.58	0.52	33.58	1734.33	3358.00	17.34	0.00	0.000	0.001	0.002
685	65.80	65.70	0.03650	15.34	0.00210	0.55	0.52	33.60	1737.51	3359.55	17.38	0.00	0.000	0.001	0.002
686	65.70	65.60	0.03815	14.68	0.00219	0.53	0.52	33.61	1740.66	3361.07	17.41	0.00	0.000	0.001	0.002
687	65.60	65.50	0.03980	14.07	0.00228	0.51	0.52	33.63	1743.78	3362.56	17.44	0.00	0.000	0.001	0.002
688	65.50	65.40	0.04146	13.51	0.00237	0.49	0.52	33.64	1746.89	3364.03	17.47	0.00	0.000	0.001	0.002
689	65.40	65.30	0.04311	12.99	0.00246	0.47	0.52	33.65	1749.98	3365.47	17.50	0.00	0.000	0.001	0.002
690	65.30	65.20	0.04476	12.51	0.00255	0.45	0.52	33.67	1753.04	3366.89	17.53	0.00	0.000	0.001	0.003
691	65.20	65.10	0.04641	12.07	0.00264	0.44	0.52	33.68	1756.09	3368.29	17.56	0.00	0.000	0.001	0.003
692	65.10	65.00	0.04807	11.65	0.00273	0.42	0.52	33.70	1759.13	3369.66	17.59	0.00	0.000	0.001	0.003
693	65.00	64.90	0.04972	11.26	0.00282	0.41	0.52	33.71	1762.14	3371.02	17.62	0.00	0.000	0.001	0.003
694	64.90	64.80	0.05137	10.90	0.00291	0.40	0.52	33.72	1765.14	3372.35	17.65	0.00	0.000	0.001	0.003
695	64.80	64.70	0.05302	10.56	0.00300	0.39	0.52	33.74	1768.13	3373.67	17.68	0.00	0.000	0.001	0.003
696	64.70	64.60	0.05468	10.24	0.00309	0.37	0.52	33.75	1771.10	3374.97	17.71	0.00	0.000	0.001	0.003
697	64.60	64.50	0.05633	9.94	0.00318	0.36	0.53	33.76	1774.06	3376.25	17.74	0.00	0.000	0.001	0.003
698	64.50	64.40	0.05798	9.66	0.00326	0.35	0.53	33.78	1777.01	3377.52	17.77	0.00	0.000	0.001	0.003
699	64.40	64.30	0.05964	9.39	0.00335	0.35	0.53	33.79	1779.94	3378.77	17.80	0.00	0.000	0.001	0.003
700	64.30	64.20	0.06129	9.14	0.00344	0.34	0.53	33.80	1782.86	3380.01	17.83	0.00	0.000	0.001	0.003
701	64.20	64.10	0.06294	8.90	0.00352	0.33	0.53	33.81	1785.77	3381.23	17.86	0.00	0.000	0.001	0.004
702	64.10	64.00	0.06459	8.67	0.00361	0.32	0.53	33.82	1788.67	3382.44	17.89	0.00	0.000	0.001	0.004
703	64.00	63.90	0.06625	8.45	0.00370	0.31	0.53	33.84	1791.55	3383.63	17.92	0.00	0.000	0.001	0.004
704	63.90	63.80	0.06790	8.25	0.00378	0.31	0.53	33.85	1794.43	3384.81	17.94	0.00	0.000	0.001	0.004
705	63.80	63.70	0.06955	8.05	0.00387	0.30	0.53	33.86	1797.29	3385.98	17.97	0.00	0.000	0.001	0.004
706	63.70	63.60	0.07121	7.86	0.00396	0.29	0.53	33.87	1800.15	3387.14	18.00	0.00	0.000	0.001	0.004
707	63.60	63.50	0.07286	7.69	0.00404	0.29	0.53	33.88	1803.00	3388.29	18.03	0.00	0.000	0.001	0.004
708	63.50	63.40	0.07451	7.52	0.00413	0.28	0.53	33.89	1805.84	3389.42	18.06	0.00	0.000	0.001	0.004
709	63.40	63.30	0.07616	7.35	0.00421	0.27	0.53	33.91	1808.66	3390.55	18.09	0.00	0.000	0.001	0.004
710	63.30	63.20	0.07782	7.20	0.00430	0.27	0.53	33.92	1811.48	3391.66	18.11	0.00	0.000	0.001	0.004
711	63.20	63.10	0.07947	7.05	0.00438	0.26	0.53	33.93	1814.30	3392.77	18.14	0.00	0.000	0.001	0.004
712	63.10	63.00	0.08112	6.90	0.00446	0.26	0.54	33.94	1817.10	3393.86	18.17	0.00	0.000	0.001	0.004
713	63.00	62.90	0.08277	6.77	0.00455	0.25	0.54	33.95	1819.89	3394.95	18.20	0.00	0.000	0.002	0.005



Big Creek – 080903 – Summer Projection model output:

714	62.90	62.80	0.08443	6.63	0.00463	0.25	0.54	33.96	1822.68	3396.02	18.23	0.00	0.000	0.002	0.005						
715	62.80	62.70	0.08608	6.51	0.00472	0.25	0.54	33.97	1825.46	3397.09	18.25	0.00	0.000	0.002	0.005						
716	62.70	62.60	0.08773	6.38	0.00480	0.24	0.54	33.98	1828.23	3398.15	18.28	0.00	0.000	0.002	0.005						
717	62.60	62.50	0.08939	6.26	0.00488	0.24	0.54	33.99	1831.00	3399.19	18.31	0.00	0.000	0.002	0.005						
718	62.50	62.40	0.09104	6.15	0.00496	0.23	0.54	34.00	1833.76	3400.24	18.34	0.00	0.000	0.002	0.005						
719	62.40	62.30	0.09269	6.04	0.00505	0.23	0.54	34.01	1836.51	3401.27	18.37	0.00	0.000	0.002	0.005						
720	62.30	62.20	0.09434	5.94	0.00513	0.23	0.54	34.02	1839.25	3402.29	18.39	0.00	0.000	0.002	0.005						
721	62.20	62.10	0.09600	5.83	0.00521	0.22	0.54	34.03	1841.99	3403.31	18.42	0.00	0.000	0.002	0.005						
722	62.10	62.00	0.09765	5.73	0.00529	0.22	0.54	34.04	1844.73	3404.32	18.45	0.00	0.000	0.002	0.005						
723	62.00	61.90	0.09930	5.64	0.00538	0.22	0.54	34.05	1847.45	3405.32	18.47	0.00	0.000	0.002	0.005						
724	61.90	61.80	0.10096	5.55	0.00546	0.21	0.54	34.06	1850.17	3406.32	18.50	0.00	0.000	0.002	0.005						
725	61.80	61.70	0.10261	5.46	0.00554	0.21	0.54	34.07	1852.89	3407.31	18.53	0.00	0.000	0.002	0.006						
726	61.70	61.60	0.10426	5.37	0.00562	0.21	0.54	34.08	1855.59	3408.29	18.56	0.00	0.000	0.002	0.006						
727	61.60	61.50	0.10591	5.29	0.00570	0.20	0.55	34.09	1858.30	3409.26	18.58	0.00	0.000	0.002	0.006						
728	61.50	61.40	0.10757	5.21	0.00578	0.20	0.55	34.10	1860.99	3410.23	18.61	0.00	0.000	0.002	0.006						
729	61.40	61.30	0.10922	5.13	0.00586	0.20	0.55	34.11	1863.69	3411.19	18.64	0.00	0.000	0.002	0.006						
730	61.30	61.20	0.11087	5.05	0.00594	0.19	0.55	34.12	1866.37	3412.15	18.66	0.00	0.000	0.002	0.006						
731	61.20	61.10	0.11252	4.98	0.00602	0.19	0.55	34.13	1869.05	3413.10	18.69	0.00	0.000	0.002	0.006						
732	61.10	61.00	0.11418	4.90	0.00610	0.19	0.55	34.14	1871.73	3414.04	18.72	0.00	0.000	0.002	0.006						
733	61.00	60.90	0.11583	4.83	0.00618	0.19	0.55	34.15	1874.40	3414.98	18.74	0.00	0.000	0.002	0.006						
734	60.90	60.80	0.11748	4.77	0.00626	0.18	0.55	34.16	1877.07	3415.91	18.77	0.00	0.000	0.002	0.006						
735	60.80	60.70	0.11914	4.70	0.00634	0.18	0.55	34.17	1879.73	3416.83	18.80	0.00	0.000	0.002	0.006						
736	60.70	60.60	0.12079	4.64	0.00642	0.18	0.55	34.18	1882.38	3417.76	18.82	0.00	0.000	0.002	0.006						
737	60.60	60.50	0.12244	4.57	0.00650	0.18	0.55	34.19	1885.04	3418.67	18.85	0.00	0.000	0.002	0.006						
738	60.50	60.40	0.12409	4.51	0.00657	0.18	0.55	34.20	1887.68	3419.58	18.88	0.00	0.000	0.002	0.007						
739	60.40	60.30	0.12575	4.45	0.00665	0.17	0.55	34.20	1890.33	3420.49	18.90	0.00	0.000	0.002	0.007						
740	60.30	60.20	0.12740	4.40	0.00673	0.17	0.55	34.21	1892.97	3421.39	18.93	0.00	0.000	0.002	0.007						
TOT																					
AVG					0.00258		32.25		0.53	33.82		129120.46		243524.89							17.93
CUM							715.99														

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
669	67.300	7.42	1.70	0.12	0.26	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.26
670	67.200	7.42	1.70	0.12	0.26	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.26
671	67.100	7.42	1.69	0.12	0.26	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.26
672	67.000	7.42	1.69	0.12	0.26	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.26
673	66.900	7.42	1.69	0.12	0.26	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.26
674	66.800	7.42	1.69	0.12	0.26	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.26
675	66.700	7.42	1.68	0.12	0.26	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.26
676	66.600	7.42	1.68	0.12	0.25	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.25
677	66.500	7.42	1.68	0.12	0.25	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.25
678	66.400	7.42	1.68	0.12	0.25	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.25
679	66.300	7.42	1.67	0.12	0.25	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.25
680	66.200	7.42	1.67	0.12	0.25	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.25
681	66.100	7.42	1.67	0.12	0.25	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.25
682	66.000	7.42	1.67	0.12	0.25	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.25



Big Creek – 080903 – Summer Projection model output:

736	60.600	7.42	1.68	0.12	0.24	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.24
737	60.500	7.42	1.68	0.12	0.24	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.24
738	60.400	7.42	1.68	0.12	0.24	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.24
739	60.300	7.42	1.68	0.12	0.24	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.24
740	60.200	7.42	1.68	0.12	0.24	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.24

20 DEG C RATE				0.07		0.00	0.52			0.00		0.00	0.00	0.00	0.00			0.00	0.16	
AVG 20 DEG C RATE	1.36				0.19						0.00									0.19

\* g/sq m/d                      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
669	67.300	31.10	0.00	0.00	0.00	5.43	5.80	5.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.75
670	67.200	31.10	0.00	0.00	0.00	5.40	5.77	5.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73
671	67.100	31.10	0.00	0.00	0.00	5.39	5.75	5.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72
672	67.000	31.10	0.00	0.00	0.00	5.39	5.74	5.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.72
673	66.900	31.10	0.00	0.00	0.00	5.39	5.73	5.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71
674	66.800	31.10	0.00	0.00	0.00	5.39	5.72	5.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71
675	66.700	31.10	0.00	0.00	0.00	5.39	5.72	5.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71
676	66.600	31.10	0.00	0.00	0.00	5.39	5.71	5.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71
677	66.500	31.10	0.00	0.00	0.00	5.39	5.71	5.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71
678	66.400	31.10	0.00	0.00	0.00	5.39	5.70	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71
679	66.300	31.10	0.00	0.00	0.00	5.39	5.70	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71
680	66.200	31.10	0.00	0.00	0.00	5.39	5.70	5.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71
681	66.100	31.10	0.00	0.00	0.00	5.39	5.69	5.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71
682	66.000	31.10	0.00	0.00	0.00	5.39	5.69	5.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
683	65.900	31.10	0.00	0.00	0.00	5.39	5.68	5.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
684	65.800	31.10	0.00	0.00	0.00	5.39	5.68	5.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
685	65.700	31.10	0.00	0.00	0.00	5.39	5.68	5.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
686	65.600	31.10	0.00	0.00	0.00	5.39	5.67	5.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
687	65.500	31.10	0.00	0.00	0.00	5.39	5.67	5.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
688	65.400	31.10	0.00	0.00	0.00	5.39	5.67	5.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
689	65.300	31.10	0.00	0.00	0.00	5.39	5.66	5.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
690	65.200	31.10	0.00	0.00	0.00	5.39	5.66	5.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
691	65.100	31.10	0.00	0.00	0.00	5.39	5.66	5.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
692	65.000	31.10	0.00	0.00	0.00	5.39	5.65	5.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
693	64.900	31.10	0.00	0.00	0.00	5.40	5.65	5.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
694	64.800	31.10	0.00	0.00	0.00	5.40	5.65	5.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
695	64.700	31.10	0.00	0.00	0.00	5.40	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
696	64.600	31.10	0.00	0.00	0.00	5.40	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
697	64.500	31.10	0.00	0.00	0.00	5.41	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
698	64.400	31.10	0.00	0.00	0.00	5.41	5.63	5.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
699	64.300	31.10	0.00	0.00	0.00	5.41	5.63	5.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
700	64.200	31.10	0.00	0.00	0.00	5.42	5.63	5.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
701	64.100	31.10	0.00	0.00	0.00	5.42	5.62	5.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
702	64.000	31.10	0.00	0.00	0.00	5.42	5.62	5.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
703	63.900	31.10	0.00	0.00	0.00	5.42	5.62	5.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
704	63.800	31.10	0.00	0.00	0.00	5.43	5.61	5.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69

Big Creek – 080903 – Summer Projection model output:

705	63.700	31.10	0.00	0.00	0.00	5.43	5.61	5.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
706	63.600	31.10	0.00	0.00	0.00	5.43	5.61	5.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
707	63.500	31.10	0.00	0.00	0.00	5.44	5.60	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
708	63.400	31.10	0.00	0.00	0.00	5.44	5.60	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
709	63.300	31.10	0.00	0.00	0.00	5.44	5.60	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
710	63.200	31.10	0.00	0.00	0.00	5.44	5.60	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
711	63.100	31.10	0.00	0.00	0.00	5.45	5.59	5.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
712	63.000	31.10	0.00	0.00	0.00	5.45	5.59	5.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
713	62.900	31.10	0.00	0.00	0.00	5.45	5.59	5.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
714	62.800	31.10	0.00	0.00	0.00	5.46	5.58	5.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
715	62.700	31.10	0.00	0.00	0.00	5.46	5.58	5.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
716	62.600	31.10	0.00	0.00	0.00	5.46	5.58	5.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
717	62.500	31.10	0.00	0.00	0.00	5.46	5.58	5.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
718	62.400	31.10	0.00	0.00	0.00	5.47	5.57	5.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
719	62.300	31.10	0.00	0.00	0.00	5.47	5.57	5.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
720	62.200	31.10	0.00	0.00	0.00	5.47	5.57	5.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
721	62.100	31.10	0.00	0.00	0.00	5.47	5.56	5.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
722	62.000	31.10	0.00	0.00	0.00	5.48	5.56	5.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
723	61.900	31.10	0.00	0.00	0.00	5.48	5.56	5.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
724	61.800	31.10	0.00	0.00	0.00	5.48	5.56	5.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
725	61.700	31.10	0.00	0.00	0.00	5.49	5.55	5.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
726	61.600	31.10	0.00	0.00	0.00	5.49	5.55	5.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
727	61.500	31.10	0.00	0.00	0.00	5.49	5.55	5.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
728	61.400	31.10	0.00	0.00	0.00	5.49	5.55	5.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
729	61.300	31.10	0.00	0.00	0.00	5.50	5.54	5.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
730	61.200	31.10	0.00	0.00	0.00	5.50	5.54	5.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
731	61.100	31.10	0.00	0.00	0.00	5.50	5.54	5.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68
732	61.000	31.10	0.00	0.00	0.00	5.50	5.53	5.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67
733	60.900	31.10	0.00	0.00	0.00	5.51	5.53	5.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67
734	60.800	31.10	0.00	0.00	0.00	5.51	5.53	5.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67
735	60.700	31.10	0.00	0.00	0.00	5.51	5.53	5.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67
736	60.600	31.10	0.00	0.00	0.00	5.51	5.52	5.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67
737	60.500	31.10	0.00	0.00	0.00	5.52	5.52	5.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67
738	60.400	31.10	0.00	0.00	0.00	5.52	5.52	5.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67
739	60.300	31.10	0.00	0.00	0.00	5.52	5.52	5.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67
740	60.200	31.10	0.00	0.00	0.00	5.52	5.51	5.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67

\* CM-I = CHLORIDES  
MG/L

CM-II = SULFATES  
MG/L

NCM = NBOD  
MG/L

\*\* g/cu m

FINAL REPORT BIG CREEK  
REACH NO. 5 WEIR #6

Big Creek - STREAM MODEL  
Summer Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
741	UPR RCH	0.12740	31.10	0.00	0.00	0.00	5.52	5.51	5.51	0.00	0.00	0.00	0.00	0.00	0.00	0.67
EACH	INCR	0.0017	31.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Big Creek – 080903 – Summer Projection model output:

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
741	60.20	60.10	0.12910	4.34	0.00761	0.15	0.54	31.42	1696.47	3141.81	16.96	0.00	0.000	0.003	0.008
TOT						0.15			1696.47	3141.81					
AVG					0.00761		0.54	31.42			16.96				
CUM						716.14									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da	
741	60.100	7.42	1.75	0.12	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.24	
20 DEG C RATE				0.07	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	0.16		
AVG 20 DEG C RATE				1.43	0.19				0.00												0.19
* g/sq m/d			** mg/L/day																		

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
741	60.100	31.10	0.00	0.00	0.00	5.77	5.16	5.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
* CM-I = CHLORIDES MG/L				CM-II = SULFATES MG/L				NCM = NBOD MG/L									
** g/cu m																	

FINAL REPORT BIG CREEK Big Creek - STREAM MODEL  
 REACH NO. 6 BIG CREEK, WEIR #6 TO WEIR #5 Summer Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
742	UPR RCH	0.12910	31.10	0.00	0.00	0.00	5.77	5.16	5.16	0.00	0.00	0.00	0.00	0.00	0.00	0.61
EACH	INCR	0.0017	31.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
760	WSTLD	0.00280	31.10	0.00	0.00	0.00	6.68	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.46

Big Creek – 080903 – Summer Projection model output:

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
742	60.10	60.00	0.13075	4.28	0.00770	0.15	0.54	31.42	1697.49	3142.31	16.97	0.00	0.000	0.003	0.008
743	60.00	59.90	0.13240	4.23	0.00780	0.15	0.54	31.43	1698.49	3142.81	16.98	0.00	0.000	0.003	0.008
744	59.90	59.80	0.13406	4.18	0.00789	0.15	0.54	31.43	1699.49	3143.30	16.99	0.00	0.000	0.003	0.008
745	59.80	59.70	0.13571	4.13	0.00798	0.15	0.54	31.44	1700.48	3143.79	17.00	0.00	0.000	0.003	0.008
746	59.70	59.60	0.13736	4.08	0.00807	0.14	0.54	31.44	1701.46	3144.27	17.01	0.00	0.000	0.003	0.008
747	59.60	59.50	0.13901	4.03	0.00817	0.14	0.54	31.45	1702.43	3144.75	17.02	0.00	0.000	0.003	0.008
748	59.50	59.40	0.14067	3.98	0.00826	0.14	0.54	31.45	1703.39	3145.22	17.03	0.00	0.000	0.003	0.008
749	59.40	59.30	0.14232	3.93	0.00835	0.14	0.54	31.46	1704.34	3145.69	17.04	0.00	0.000	0.003	0.008
750	59.30	59.20	0.14397	3.89	0.00844	0.14	0.54	31.46	1705.29	3146.16	17.05	0.00	0.000	0.003	0.008
751	59.20	59.10	0.14562	3.85	0.00853	0.14	0.54	31.47	1706.22	3146.62	17.06	0.00	0.000	0.003	0.009
752	59.10	59.00	0.14727	3.80	0.00863	0.13	0.54	31.47	1707.15	3147.08	17.07	0.00	0.000	0.003	0.009
753	59.00	58.90	0.14893	3.76	0.00872	0.13	0.54	31.48	1708.07	3147.54	17.08	0.00	0.000	0.003	0.009
754	58.90	58.80	0.15058	3.72	0.00881	0.13	0.54	31.48	1708.98	3147.99	17.09	0.00	0.000	0.003	0.009
755	58.80	58.70	0.15223	3.68	0.00890	0.13	0.54	31.48	1709.88	3148.44	17.10	0.00	0.000	0.003	0.009
756	58.70	58.60	0.15388	3.64	0.00899	0.13	0.54	31.49	1710.78	3148.88	17.11	0.00	0.000	0.003	0.009
757	58.60	58.50	0.15553	3.60	0.00909	0.13	0.54	31.49	1711.66	3149.32	17.12	0.00	0.000	0.003	0.009
758	58.50	58.40	0.15719	3.56	0.00918	0.13	0.54	31.50	1712.54	3149.76	17.13	0.00	0.000	0.003	0.009
759	58.40	58.30	0.15884	3.53	0.00927	0.12	0.54	31.50	1713.41	3150.20	17.13	0.00	0.000	0.003	0.009
760	58.30	58.20	0.16329	5.14	0.00952	0.12	0.54	31.51	1715.73	3151.35	17.16	0.00	0.000	0.003	0.010
761	58.20	58.10	0.16494	5.09	0.00961	0.12	0.54	31.52	1716.58	3151.77	17.17	0.00	0.000	0.003	0.010
762	58.10	58.00	0.16660	5.04	0.00970	0.12	0.54	31.52	1717.42	3152.19	17.17	0.00	0.000	0.003	0.010
763	58.00	57.90	0.16825	4.99	0.00979	0.12	0.55	31.53	1718.25	3152.61	17.18	0.00	0.000	0.003	0.010
764	57.90	57.80	0.16990	4.94	0.00988	0.12	0.55	31.53	1719.08	3153.02	17.19	0.00	0.000	0.003	0.010
765	57.80	57.70	0.17155	4.90	0.00997	0.12	0.55	31.53	1719.90	3153.43	17.20	0.00	0.000	0.003	0.010
766	57.70	57.60	0.17320	4.85	0.01007	0.11	0.55	31.54	1720.71	3153.84	17.21	0.00	0.000	0.003	0.010
767	57.60	57.50	0.17486	4.80	0.01016	0.11	0.55	31.54	1721.52	3154.25	17.22	0.00	0.000	0.003	0.010
768	57.50	57.40	0.17651	4.76	0.01025	0.11	0.55	31.55	1722.32	3154.65	17.22	0.00	0.000	0.003	0.010
769	57.40	57.30	0.17816	4.71	0.01034	0.11	0.55	31.55	1723.12	3155.05	17.23	0.00	0.000	0.003	0.010
770	57.30	57.20	0.17981	4.67	0.01043	0.11	0.55	31.55	1723.91	3155.45	17.24	0.00	0.000	0.004	0.010
771	57.20	57.10	0.18147	4.63	0.01052	0.11	0.55	31.56	1724.69	3155.84	17.25	0.00	0.000	0.004	0.011
772	57.10	57.00	0.18312	4.59	0.01061	0.11	0.55	31.56	1725.47	3156.23	17.25	0.00	0.000	0.004	0.011
773	57.00	56.90	0.18477	4.55	0.01070	0.11	0.55	31.57	1726.24	3156.62	17.26	0.00	0.000	0.004	0.011
774	56.90	56.80	0.18642	4.51	0.01079	0.11	0.55	31.57	1727.01	3157.01	17.27	0.00	0.000	0.004	0.011
775	56.80	56.70	0.18807	4.47	0.01089	0.11	0.55	31.57	1727.78	3157.39	17.28	0.00	0.000	0.004	0.011
776	56.70	56.60	0.18973	4.43	0.01098	0.11	0.55	31.58	1728.53	3157.77	17.29	0.00	0.000	0.004	0.011
777	56.60	56.50	0.19138	4.39	0.01107	0.10	0.55	31.58	1729.29	3158.15	17.29	0.00	0.000	0.004	0.011
778	56.50	56.40	0.19303	4.35	0.01116	0.10	0.55	31.59	1730.03	3158.53	17.30	0.00	0.000	0.004	0.011
779	56.40	56.30	0.19468	4.31	0.01125	0.10	0.55	31.59	1730.77	3158.90	17.31	0.00	0.000	0.004	0.011
780	56.30	56.20	0.19634	4.28	0.01134	0.10	0.55	31.59	1731.51	3159.28	17.32	0.00	0.000	0.004	0.011
781	56.20	56.10	0.19799	4.24	0.01143	0.10	0.55	31.60	1732.24	3159.65	17.32	0.00	0.000	0.004	0.011
782	56.10	56.00	0.19964	4.21	0.01152	0.10	0.55	31.60	1732.97	3160.01	17.33	0.00	0.000	0.004	0.012
783	56.00	55.90	0.20129	4.17	0.01161	0.10	0.55	31.60	1733.69	3160.38	17.34	0.00	0.000	0.004	0.012
784	55.90	55.80	0.20294	4.14	0.01170	0.10	0.55	31.61	1734.41	3160.74	17.34	0.00	0.000	0.004	0.012
785	55.80	55.70	0.20460	4.11	0.01179	0.10	0.55	31.61	1735.13	3161.11	17.35	0.00	0.000	0.004	0.012
786	55.70	55.60	0.20625	4.07	0.01188	0.10	0.55	31.61	1735.83	3161.46	17.36	0.00	0.000	0.004	0.012

Big Creek – 080903 – Summer Projection model output:

787	55.60	55.50	0.20790	4.04	0.01197	0.10	0.55	31.62	1736.54	3161.82	17.37	0.00	0.000	0.004	0.012
788	55.50	55.40	0.20955	4.01	0.01206	0.10	0.55	31.62	1737.24	3162.18	17.37	0.00	0.000	0.004	0.012
789	55.40	55.30	0.21120	3.98	0.01215	0.10	0.55	31.63	1737.93	3162.53	17.38	0.00	0.000	0.004	0.012
790	55.30	55.20	0.21286	3.95	0.01224	0.09	0.55	31.63	1738.63	3162.88	17.39	0.00	0.000	0.004	0.012
791	55.20	55.10	0.21451	3.92	0.01233	0.09	0.55	31.63	1739.31	3163.23	17.39	0.00	0.000	0.004	0.012
792	55.10	55.00	0.21616	3.89	0.01242	0.09	0.55	31.64	1740.00	3163.58	17.40	0.00	0.000	0.004	0.012
793	55.00	54.90	0.21781	3.86	0.01251	0.09	0.55	31.64	1740.67	3163.92	17.41	0.00	0.000	0.004	0.013
794	54.90	54.80	0.21947	3.83	0.01260	0.09	0.55	31.64	1741.35	3164.27	17.41	0.00	0.000	0.004	0.013
795	54.80	54.70	0.22112	3.80	0.01269	0.09	0.55	31.65	1742.02	3164.61	17.42	0.00	0.000	0.004	0.013
796	54.70	54.60	0.22277	3.77	0.01278	0.09	0.55	31.65	1742.69	3164.95	17.43	0.00	0.000	0.004	0.013
797	54.60	54.50	0.22442	3.74	0.01287	0.09	0.55	31.65	1743.35	3165.29	17.43	0.00	0.000	0.004	0.013
798	54.50	54.40	0.22607	3.72	0.01296	0.09	0.55	31.66	1744.01	3165.62	17.44	0.00	0.000	0.004	0.013
799	54.40	54.30	0.22773	3.69	0.01305	0.09	0.55	31.66	1744.66	3165.96	17.45	0.00	0.000	0.004	0.013
800	54.30	54.20	0.22938	3.66	0.01314	0.09	0.55	31.66	1745.32	3166.29	17.45	0.00	0.000	0.004	0.013
801	54.20	54.10	0.23103	3.64	0.01323	0.09	0.55	31.67	1745.96	3166.62	17.46	0.00	0.000	0.004	0.013
802	54.10	54.00	0.23268	3.61	0.01332	0.09	0.55	31.67	1746.61	3166.95	17.47	0.00	0.000	0.005	0.013
803	54.00	53.90	0.23434	3.58	0.01341	0.09	0.55	31.67	1747.25	3167.28	17.47	0.00	0.000	0.005	0.013
804	53.90	53.80	0.23599	3.56	0.01350	0.09	0.55	31.68	1747.89	3167.60	17.48	0.00	0.000	0.005	0.014
805	53.80	53.70	0.23764	3.53	0.01359	0.09	0.55	31.68	1748.52	3167.93	17.49	0.00	0.000	0.005	0.014
806	53.70	53.60	0.23929	3.51	0.01368	0.08	0.55	31.68	1749.15	3168.25	17.49	0.00	0.000	0.005	0.014
807	53.60	53.50	0.24094	3.49	0.01377	0.08	0.55	31.69	1749.78	3168.57	17.50	0.00	0.000	0.005	0.014
808	53.50	53.40	0.24260	3.46	0.01386	0.08	0.55	31.69	1750.40	3168.89	17.50	0.00	0.000	0.005	0.014
809	53.40	53.30	0.24425	3.44	0.01395	0.08	0.55	31.69	1751.02	3169.21	17.51	0.00	0.000	0.005	0.014
810	53.30	53.20	0.24590	3.42	0.01404	0.08	0.55	31.70	1751.64	3169.52	17.52	0.00	0.000	0.005	0.014
811	53.20	53.10	0.24755	3.39	0.01413	0.08	0.55	31.70	1752.25	3169.84	17.52	0.00	0.000	0.005	0.014
812	53.10	53.00	0.24920	3.37	0.01422	0.08	0.55	31.70	1752.86	3170.15	17.53	0.00	0.000	0.005	0.014
813	53.00	52.90	0.25086	3.35	0.01431	0.08	0.55	31.70	1753.47	3170.46	17.53	0.00	0.000	0.005	0.014
814	52.90	52.80	0.25251	3.33	0.01440	0.08	0.55	31.71	1754.07	3170.77	17.54	0.00	0.000	0.005	0.014
815	52.80	52.70	0.25416	3.30	0.01448	0.08	0.55	31.71	1754.67	3171.08	17.55	0.00	0.000	0.005	0.014
816	52.70	52.60	0.25581	3.28	0.01457	0.08	0.55	31.71	1755.27	3171.39	17.55	0.00	0.000	0.005	0.015
817	52.60	52.50	0.25747	3.26	0.01466	0.08	0.55	31.72	1755.86	3171.70	17.56	0.00	0.000	0.005	0.015
818	52.50	52.40	0.25912	3.24	0.01475	0.08	0.55	31.72	1756.46	3172.00	17.56	0.00	0.000	0.005	0.015
819	52.40	52.30	0.26077	3.22	0.01484	0.08	0.55	31.72	1757.04	3172.30	17.57	0.00	0.000	0.005	0.015
820	52.30	52.20	0.26242	3.20	0.01493	0.08	0.55	31.73	1757.63	3172.61	17.58	0.00	0.000	0.005	0.015
821	52.20	52.10	0.26407	3.18	0.01502	0.08	0.55	31.73	1758.21	3172.91	17.58	0.00	0.000	0.005	0.015
822	52.10	52.00	0.26573	3.16	0.01511	0.08	0.55	31.73	1758.79	3173.21	17.59	0.00	0.000	0.005	0.015
823	52.00	51.90	0.26738	3.14	0.01520	0.08	0.55	31.74	1759.37	3173.50	17.59	0.00	0.000	0.005	0.015
824	51.90	51.80	0.26903	3.12	0.01529	0.08	0.55	31.74	1759.94	3173.80	17.60	0.00	0.000	0.005	0.015
825	51.80	51.70	0.27068	3.10	0.01538	0.08	0.55	31.74	1760.52	3174.09	17.61	0.00	0.000	0.005	0.015
826	51.70	51.60	0.27234	3.08	0.01546	0.07	0.55	31.74	1761.08	3174.39	17.61	0.00	0.000	0.005	0.015
827	51.60	51.50	0.27399	3.07	0.01555	0.07	0.55	31.75	1761.65	3174.68	17.62	0.00	0.000	0.005	0.016
828	51.50	51.40	0.27564	3.05	0.01564	0.07	0.56	31.75	1762.21	3174.97	17.62	0.00	0.000	0.005	0.016
829	51.40	51.30	0.27729	3.03	0.01573	0.07	0.56	31.75	1762.78	3175.26	17.63	0.00	0.000	0.005	0.016
830	51.30	51.20	0.27894	3.01	0.01582	0.07	0.56	31.76	1763.33	3175.55	17.63	0.00	0.000	0.005	0.016
831	51.20	51.10	0.28060	2.99	0.01591	0.07	0.56	31.76	1763.89	3175.84	17.64	0.00	0.000	0.005	0.016
832	51.10	51.00	0.28225	2.98	0.01600	0.07	0.56	31.76	1764.44	3176.12	17.64	0.00	0.000	0.005	0.016
833	51.00	50.90	0.28390	2.96	0.01609	0.07	0.56	31.76	1764.99	3176.41	17.65	0.00	0.000	0.005	0.016
TOT						9.30			159618.41	290821.91					
AVG					0.01145		0.55	31.61			17.35				
CUM						725.44									







Big Creek – 080903 – Summer Projection model output:

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
742	60.000	31.10	0.00	0.00	0.00	5.59	5.20	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59
743	59.900	31.10	0.00	0.00	0.00	5.46	5.23	5.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57
744	59.800	31.10	0.00	0.00	0.00	5.36	5.26	5.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56
745	59.700	31.10	0.00	0.00	0.00	5.28	5.29	5.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54
746	59.600	31.10	0.00	0.00	0.00	5.22	5.31	5.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53
747	59.500	31.10	0.00	0.00	0.00	5.18	5.33	5.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52
748	59.400	31.10	0.00	0.00	0.00	5.14	5.36	5.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51
749	59.300	31.10	0.00	0.00	0.00	5.12	5.38	5.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
750	59.200	31.10	0.00	0.00	0.00	5.10	5.40	5.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
751	59.100	31.10	0.00	0.00	0.00	5.08	5.41	5.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
752	59.000	31.10	0.00	0.00	0.00	5.07	5.43	5.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
753	58.900	31.10	0.00	0.00	0.00	5.06	5.44	5.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47
754	58.800	31.10	0.00	0.00	0.00	5.06	5.46	5.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47
755	58.700	31.10	0.00	0.00	0.00	5.05	5.47	5.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
756	58.600	31.10	0.00	0.00	0.00	5.05	5.48	5.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
757	58.500	31.10	0.00	0.00	0.00	5.05	5.49	5.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45
758	58.400	31.10	0.00	0.00	0.00	5.05	5.51	5.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45
759	58.300	31.10	0.00	0.00	0.00	5.05	5.52	5.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45
760	58.200	31.10	0.00	0.00	0.00	5.07	5.54	5.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44
761	58.100	31.10	0.00	0.00	0.00	5.07	5.55	5.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44
762	58.000	31.10	0.00	0.00	0.00	5.07	5.55	5.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44
763	57.900	31.10	0.00	0.00	0.00	5.07	5.56	5.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43
764	57.800	31.10	0.00	0.00	0.00	5.07	5.57	5.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43
765	57.700	31.10	0.00	0.00	0.00	5.07	5.57	5.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43
766	57.600	31.10	0.00	0.00	0.00	5.07	5.58	5.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43
767	57.500	31.10	0.00	0.00	0.00	5.08	5.58	5.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43
768	57.400	31.10	0.00	0.00	0.00	5.08	5.59	5.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
769	57.300	31.10	0.00	0.00	0.00	5.08	5.59	5.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
770	57.200	31.10	0.00	0.00	0.00	5.08	5.60	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
771	57.100	31.10	0.00	0.00	0.00	5.09	5.60	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
772	57.000	31.10	0.00	0.00	0.00	5.09	5.60	5.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
773	56.900	31.10	0.00	0.00	0.00	5.09	5.61	5.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
774	56.800	31.10	0.00	0.00	0.00	5.09	5.61	5.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
775	56.700	31.10	0.00	0.00	0.00	5.10	5.61	5.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.42
776	56.600	31.10	0.00	0.00	0.00	5.10	5.61	5.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
777	56.500	31.10	0.00	0.00	0.00	5.10	5.62	5.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
778	56.400	31.10	0.00	0.00	0.00	5.11	5.62	5.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
779	56.300	31.10	0.00	0.00	0.00	5.11	5.62	5.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
780	56.200	31.10	0.00	0.00	0.00	5.11	5.62	5.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
781	56.100	31.10	0.00	0.00	0.00	5.12	5.63	5.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
782	56.000	31.10	0.00	0.00	0.00	5.12	5.63	5.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
783	55.900	31.10	0.00	0.00	0.00	5.12	5.63	5.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
784	55.800	31.10	0.00	0.00	0.00	5.13	5.63	5.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
785	55.700	31.10	0.00	0.00	0.00	5.13	5.63	5.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
786	55.600	31.10	0.00	0.00	0.00	5.13	5.63	5.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
787	55.500	31.10	0.00	0.00	0.00	5.14	5.63	5.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
788	55.400	31.10	0.00	0.00	0.00	5.14	5.63	5.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
789	55.300	31.10	0.00	0.00	0.00	5.14	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
790	55.200	31.10	0.00	0.00	0.00	5.14	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41

Big Creek – 080903 – Summer Projection model output:

791	55.100	31.10	0.00	0.00	0.00	5.15	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
792	55.000	31.10	0.00	0.00	0.00	5.15	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
793	54.900	31.10	0.00	0.00	0.00	5.15	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
794	54.800	31.10	0.00	0.00	0.00	5.16	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
795	54.700	31.10	0.00	0.00	0.00	5.16	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
796	54.600	31.10	0.00	0.00	0.00	5.16	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
797	54.500	31.10	0.00	0.00	0.00	5.17	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
798	54.400	31.10	0.00	0.00	0.00	5.17	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
799	54.300	31.10	0.00	0.00	0.00	5.17	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
800	54.200	31.10	0.00	0.00	0.00	5.18	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
801	54.100	31.10	0.00	0.00	0.00	5.18	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
802	54.000	31.10	0.00	0.00	0.00	5.18	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
803	53.900	31.10	0.00	0.00	0.00	5.19	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
804	53.800	31.10	0.00	0.00	0.00	5.19	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
805	53.700	31.10	0.00	0.00	0.00	5.19	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
806	53.600	31.10	0.00	0.00	0.00	5.19	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
807	53.500	31.10	0.00	0.00	0.00	5.20	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
808	53.400	31.10	0.00	0.00	0.00	5.20	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
809	53.300	31.10	0.00	0.00	0.00	5.20	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
810	53.200	31.10	0.00	0.00	0.00	5.21	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
811	53.100	31.10	0.00	0.00	0.00	5.21	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
812	53.000	31.10	0.00	0.00	0.00	5.21	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
813	52.900	31.10	0.00	0.00	0.00	5.22	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
814	52.800	31.10	0.00	0.00	0.00	5.22	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
815	52.700	31.10	0.00	0.00	0.00	5.22	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
816	52.600	31.10	0.00	0.00	0.00	5.22	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
817	52.500	31.10	0.00	0.00	0.00	5.23	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
818	52.400	31.10	0.00	0.00	0.00	5.23	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
819	52.300	31.10	0.00	0.00	0.00	5.23	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
820	52.200	31.10	0.00	0.00	0.00	5.24	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
821	52.100	31.10	0.00	0.00	0.00	5.24	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
822	52.000	31.10	0.00	0.00	0.00	5.24	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
823	51.900	31.10	0.00	0.00	0.00	5.25	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
824	51.800	31.10	0.00	0.00	0.00	5.25	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
825	51.700	31.10	0.00	0.00	0.00	5.25	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
826	51.600	31.10	0.00	0.00	0.00	5.25	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
827	51.500	31.10	0.00	0.00	0.00	5.26	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
828	51.400	31.10	0.00	0.00	0.00	5.26	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
829	51.300	31.10	0.00	0.00	0.00	5.26	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
830	51.200	31.10	0.00	0.00	0.00	5.27	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
831	51.100	31.10	0.00	0.00	0.00	5.27	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
832	51.000	31.10	0.00	0.00	0.00	5.27	5.64	5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
833	50.900	31.10	0.00	0.00	0.00	5.27	5.63	5.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40

\* CM-I = CHLORIDES  
MG/L

CM-II = SULFATES  
MG/L

NCM = NBOD  
MG/L

\*\* g/cu m

FINAL REPORT      BIG CREEK  
REACH NO. 7      WEIR #5

Big Creek - STREAM MODEL  
Summer Projection Model

Big Creek – 080903 – Summer Projection model output:

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
834	UPR RCH	0.28390	31.10	0.00	0.00	0.00	5.27	5.63	5.63	0.00	0.00	0.00	0.00	0.00	0.00	0.40
EACH	INCR	0.0017	31.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
834	50.90	50.80	0.28560	2.94	0.00518	0.22	1.74	31.77	5514.06	3176.70	55.14	0.00	0.000	0.005	0.005
TOT						0.22			5514.06	3176.70					
AVG					0.00518		1.74	31.77			55.14				
CUM						725.67									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da
834	50.800	7.42	0.78	0.12	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07
20	DEG C RATE			0.07		0.00	0.00			0.00		0.00	0.00	0.00	0.00			0.00	0.16	
AVG	20 DEG C RATE		0.63		0.06					0.00										0.06

\* g/sq m/d      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
834	50.800	31.10	0.00	0.00	0.00	5.42	5.37	5.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36

\* CM-I = CHLORIDES MG/L      CM-II = SULFATES MG/L      NCM = NBOD MG/L  
 \*\* g/cu m

FINAL REPORT      BIG CREEK      Big Creek - STREAM MODEL  
 REACH NO. 8      BIG CREEK, WEIR #5 TO WEIR #4      Summer Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

Big Creek – 080903 – Summer Projection model output:

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
835	UPR RCH	0.28560	31.10	0.00	0.00	0.00	5.42	5.37	5.37	0.00	0.00	0.00	0.00	0.00	0.00	0.36
EACH	INCR	0.0017	31.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
861	WSTLD	0.00280	31.10	0.00	0.00	0.00	6.68	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.46

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
835	50.80	50.70	0.28725	2.92	0.00521	0.22	1.74	31.77	5514.94	3176.98	55.15	0.00	0.000	0.005	0.005
836	50.70	50.60	0.28890	2.91	0.00524	0.22	1.74	31.77	5515.82	3177.26	55.16	0.00	0.000	0.005	0.005
837	50.60	50.50	0.29056	2.89	0.00527	0.22	1.74	31.78	5516.69	3177.54	55.17	0.00	0.000	0.005	0.005
838	50.50	50.40	0.29221	2.87	0.00530	0.22	1.74	31.78	5517.55	3177.82	55.18	0.00	0.000	0.005	0.005
839	50.40	50.30	0.29386	2.86	0.00533	0.22	1.74	31.78	5518.42	3178.10	55.18	0.00	0.000	0.005	0.005
840	50.30	50.20	0.29551	2.84	0.00535	0.22	1.74	31.78	5519.28	3178.38	55.19	0.00	0.000	0.005	0.005
841	50.20	50.10	0.29716	2.83	0.00538	0.22	1.74	31.79	5520.13	3178.65	55.20	0.00	0.000	0.005	0.005
842	50.10	50.00	0.29882	2.81	0.00541	0.21	1.74	31.79	5520.99	3178.93	55.21	0.00	0.000	0.005	0.005
843	50.00	49.90	0.30047	2.80	0.00544	0.21	1.74	31.79	5521.84	3179.20	55.22	0.00	0.000	0.005	0.005
844	49.90	49.80	0.30212	2.78	0.00547	0.21	1.74	31.79	5522.68	3179.47	55.23	0.00	0.000	0.005	0.005
845	49.80	49.70	0.30377	2.77	0.00550	0.21	1.74	31.80	5523.52	3179.75	55.24	0.00	0.000	0.005	0.005
846	49.70	49.60	0.30542	2.75	0.00553	0.21	1.74	31.80	5524.36	3180.02	55.24	0.00	0.000	0.005	0.006
847	49.60	49.50	0.30708	2.74	0.00556	0.21	1.74	31.80	5525.20	3180.28	55.25	0.00	0.000	0.005	0.006
848	49.50	49.40	0.30873	2.72	0.00559	0.21	1.74	31.81	5526.03	3180.55	55.26	0.00	0.000	0.005	0.006
849	49.40	49.30	0.31038	2.71	0.00562	0.21	1.74	31.81	5526.86	3180.82	55.27	0.00	0.000	0.005	0.006
850	49.30	49.20	0.31203	2.69	0.00564	0.21	1.74	31.81	5527.68	3181.09	55.28	0.00	0.000	0.005	0.006
851	49.20	49.10	0.31368	2.68	0.00567	0.20	1.74	31.81	5528.50	3181.35	55.29	0.00	0.000	0.005	0.006
852	49.10	49.00	0.31533	2.66	0.00570	0.20	1.74	31.82	5529.32	3181.61	55.29	0.00	0.000	0.005	0.006
853	49.00	48.90	0.31699	2.65	0.00573	0.20	1.74	31.82	5530.13	3181.88	55.30	0.00	0.000	0.005	0.006
854	48.90	48.80	0.31864	2.64	0.00576	0.20	1.74	31.82	5530.95	3182.14	55.31	0.00	0.000	0.005	0.006
855	48.80	48.70	0.32029	2.62	0.00579	0.20	1.74	31.82	5531.75	3182.40	55.32	0.00	0.000	0.005	0.006
856	48.70	48.60	0.32194	2.61	0.00582	0.20	1.74	31.83	5532.56	3182.66	55.33	0.00	0.000	0.005	0.006
857	48.60	48.50	0.32359	2.60	0.00585	0.20	1.74	31.83	5533.36	3182.92	55.33	0.00	0.000	0.005	0.006
858	48.50	48.40	0.32525	2.58	0.00588	0.20	1.74	31.83	5534.16	3183.18	55.34	0.00	0.000	0.005	0.006
859	48.40	48.30	0.32690	2.57	0.00591	0.20	1.74	31.83	5534.96	3183.44	55.35	0.00	0.000	0.005	0.006
860	48.30	48.20	0.32855	2.56	0.00594	0.20	1.74	31.84	5535.75	3183.69	55.36	0.00	0.000	0.005	0.006
861	48.20	48.10	0.33000	3.36	0.00601	0.19	1.74	31.84	5537.87	3184.38	55.38	0.00	0.000	0.005	0.006
862	48.10	48.00	0.33465	3.35	0.00604	0.19	1.74	31.85	5538.65	3184.63	55.39	0.00	0.000	0.005	0.006
863	48.00	47.90	0.33631	3.33	0.00607	0.19	1.74	31.85	5539.43	3184.88	55.39	0.00	0.000	0.005	0.006
864	47.90	47.80	0.33796	3.31	0.00610	0.19	1.74	31.85	5540.21	3185.13	55.40	0.00	0.000	0.005	0.006
865	47.80	47.70	0.33961	3.30	0.00613	0.19	1.74	31.85	5540.98	3185.38	55.41	0.00	0.000	0.005	0.006
866	47.70	47.60	0.34126	3.28	0.00616	0.19	1.74	31.86	5541.75	3185.63	55.42	0.00	0.000	0.005	0.006
867	47.60	47.50	0.34291	3.27	0.00619	0.19	1.74	31.86	5542.52	3185.88	55.43	0.00	0.000	0.005	0.006
868	47.50	47.40	0.34456	3.25	0.00622	0.19	1.74	31.86	5543.28	3186.13	55.43	0.00	0.000	0.005	0.006
869	47.40	47.30	0.34622	3.23	0.00624	0.19	1.74	31.86	5544.05	3186.38	55.44	0.00	0.000	0.006	0.006
870	47.30	47.20	0.34787	3.22	0.00627	0.18	1.74	31.87	5544.81	3186.62	55.45	0.00	0.000	0.006	0.006
871	47.20	47.10	0.34952	3.20	0.00630	0.18	1.74	31.87	5545.56	3186.87	55.46	0.00	0.000	0.006	0.006
872	47.10	47.00	0.35117	3.19	0.00633	0.18	1.74	31.87	5546.31	3187.11	55.46	0.00	0.000	0.006	0.006

Big Creek – 080903 – Summer Projection model output:

873	47.00	46.90	0.35282	3.17	0.00636	0.18	1.74	31.87	5547.07	3187.36	55.47	0.00	0.000	0.006	0.006
874	46.90	46.80	0.35448	3.16	0.00639	0.18	1.74	31.88	5547.81	3187.60	55.48	0.00	0.000	0.006	0.006
875	46.80	46.70	0.35613	3.14	0.00642	0.18	1.74	31.88	5548.56	3187.84	55.49	0.00	0.000	0.006	0.006
876	46.70	46.60	0.35778	3.13	0.00645	0.18	1.74	31.88	5549.30	3188.08	55.49	0.00	0.000	0.006	0.006
877	46.60	46.50	0.35943	3.12	0.00648	0.18	1.74	31.88	5550.04	3188.32	55.50	0.00	0.000	0.006	0.006
878	46.50	46.40	0.36108	3.10	0.00651	0.18	1.74	31.89	5550.78	3188.56	55.51	0.00	0.000	0.006	0.007
879	46.40	46.30	0.36274	3.09	0.00653	0.18	1.74	31.89	5551.52	3188.80	55.52	0.00	0.000	0.006	0.007
880	46.30	46.20	0.36439	3.07	0.00656	0.18	1.74	31.89	5552.25	3189.04	55.52	0.00	0.000	0.006	0.007
881	46.20	46.10	0.36604	3.06	0.00659	0.18	1.74	31.89	5552.98	3189.27	55.53	0.00	0.000	0.006	0.007
882	46.10	46.00	0.36769	3.05	0.00662	0.17	1.74	31.90	5553.71	3189.51	55.54	0.00	0.000	0.006	0.007
883	46.00	45.90	0.36934	3.03	0.00665	0.17	1.74	31.90	5554.43	3189.74	55.54	0.00	0.000	0.006	0.007
884	45.90	45.80	0.37099	3.02	0.00668	0.17	1.74	31.90	5555.15	3189.98	55.55	0.00	0.000	0.006	0.007
885	45.80	45.70	0.37265	3.01	0.00671	0.17	1.74	31.90	5555.87	3190.21	55.56	0.00	0.000	0.006	0.007
886	45.70	45.60	0.37430	2.99	0.00674	0.17	1.74	31.90	5556.59	3190.45	55.57	0.00	0.000	0.006	0.007
887	45.60	45.50	0.37595	2.98	0.00676	0.17	1.74	31.91	5557.31	3190.68	55.57	0.00	0.000	0.006	0.007
888	45.50	45.40	0.37760	2.97	0.00679	0.17	1.74	31.91	5558.02	3190.91	55.58	0.00	0.000	0.006	0.007
889	45.40	45.30	0.37925	2.95	0.00682	0.17	1.74	31.91	5558.73	3191.14	55.59	0.00	0.000	0.006	0.007
890	45.30	45.20	0.38091	2.94	0.00685	0.17	1.74	31.91	5559.44	3191.37	55.59	0.00	0.000	0.006	0.007
891	45.20	45.10	0.38256	2.93	0.00688	0.17	1.74	31.92	5560.15	3191.60	55.60	0.00	0.000	0.006	0.007
892	45.10	45.00	0.38421	2.92	0.00691	0.17	1.74	31.92	5560.85	3191.83	55.61	0.00	0.000	0.006	0.007
893	45.00	44.90	0.38586	2.90	0.00694	0.17	1.74	31.92	5561.55	3192.06	55.62	0.00	0.000	0.006	0.007
894	44.90	44.80	0.38751	2.89	0.00697	0.17	1.74	31.92	5562.25	3192.29	55.62	0.00	0.000	0.006	0.007
895	44.80	44.70	0.38917	2.88	0.00700	0.17	1.74	31.93	5562.95	3192.51	55.63	0.00	0.000	0.006	0.007
896	44.70	44.60	0.39082	2.87	0.00702	0.16	1.74	31.93	5563.64	3192.74	55.64	0.00	0.000	0.006	0.007
897	44.60	44.50	0.39247	2.85	0.00705	0.16	1.74	31.93	5564.33	3192.96	55.64	0.00	0.000	0.006	0.007
898	44.50	44.40	0.39412	2.84	0.00708	0.16	1.74	31.93	5565.02	3193.19	55.65	0.00	0.000	0.006	0.007
899	44.40	44.30	0.39577	2.83	0.00711	0.16	1.74	31.93	5565.71	3193.41	55.66	0.00	0.000	0.006	0.007
900	44.30	44.20	0.39742	2.82	0.00714	0.16	1.74	31.94	5566.40	3193.64	55.66	0.00	0.000	0.006	0.007
901	44.20	44.10	0.39908	2.81	0.00717	0.16	1.74	31.94	5567.08	3193.86	55.67	0.00	0.000	0.006	0.007
902	44.10	44.00	0.40073	2.79	0.00720	0.16	1.74	31.94	5567.76	3194.08	55.68	0.00	0.000	0.006	0.007
903	44.00	43.90	0.40238	2.78	0.00723	0.16	1.74	31.94	5568.44	3194.30	55.68	0.00	0.000	0.006	0.007
904	43.90	43.80	0.40403	2.77	0.00725	0.16	1.74	31.95	5569.12	3194.52	55.69	0.00	0.000	0.006	0.007
905	43.80	43.70	0.40568	2.76	0.00728	0.16	1.74	31.95	5569.79	3194.74	55.70	0.00	0.000	0.006	0.007
906	43.70	43.60	0.40734	2.75	0.00731	0.16	1.74	31.95	5570.47	3194.96	55.70	0.00	0.000	0.006	0.007
907	43.60	43.50	0.40899	2.74	0.00734	0.16	1.74	31.95	5571.14	3195.18	55.71	0.00	0.000	0.006	0.007
908	43.50	43.40	0.41064	2.73	0.00737	0.16	1.74	31.95	5571.81	3195.40	55.72	0.00	0.000	0.007	0.007
909	43.40	43.30	0.41229	2.72	0.00740	0.16	1.74	31.96	5572.47	3195.62	55.72	0.00	0.000	0.007	0.007
910	43.30	43.20	0.41394	2.71	0.00743	0.16	1.74	31.96	5573.14	3195.83	55.73	0.00	0.000	0.007	0.007
911	43.20	43.10	0.41560	2.69	0.00746	0.16	1.74	31.96	5573.80	3196.05	55.74	0.00	0.000	0.007	0.007
912	43.10	43.00	0.41725	2.68	0.00748	0.15	1.74	31.96	5574.46	3196.26	55.74	0.00	0.000	0.007	0.007
913	43.00	42.90	0.41890	2.67	0.00751	0.15	1.74	31.96	5575.12	3196.48	55.75	0.00	0.000	0.007	0.008
914	42.90	42.80	0.42055	2.66	0.00754	0.15	1.74	31.97	5575.78	3196.69	55.76	0.00	0.000	0.007	0.008
915	42.80	42.70	0.42220	2.65	0.00757	0.15	1.74	31.97	5576.43	3196.91	55.76	0.00	0.000	0.007	0.008
916	42.70	42.60	0.42386	2.64	0.00760	0.15	1.74	31.97	5577.08	3197.12	55.77	0.00	0.000	0.007	0.008
917	42.60	42.50	0.42551	2.63	0.00763	0.15	1.74	31.97	5577.73	3197.33	55.78	0.00	0.000	0.007	0.008
918	42.50	42.40	0.42716	2.62	0.00766	0.15	1.74	31.98	5578.38	3197.54	55.78	0.00	0.000	0.007	0.008
919	42.40	42.30	0.42881	2.61	0.00769	0.15	1.74	31.98	5579.03	3197.76	55.79	0.00	0.000	0.007	0.008
920	42.30	42.20	0.43046	2.60	0.00771	0.15	1.74	31.98	5579.68	3197.97	55.80	0.00	0.000	0.007	0.008
921	42.20	42.10	0.43211	2.59	0.00774	0.15	1.74	31.98	5580.32	3198.18	55.80	0.00	0.000	0.007	0.008
922	42.10	42.00	0.43377	2.58	0.00777	0.15	1.74	31.98	5580.96	3198.39	55.81	0.00	0.000	0.007	0.008
923	42.00	41.90	0.43542	2.57	0.00780	0.15	1.75	31.99	5581.60	3198.60	55.82	0.00	0.000	0.007	0.008
924	41.90	41.80	0.43707	2.56	0.00783	0.15	1.75	31.99	5582.24	3198.80	55.82	0.00	0.000	0.007	0.008
925	41.80	41.70	0.43872	2.55	0.00786	0.15	1.75	31.99	5582.87	3199.01	55.83	0.00	0.000	0.007	0.008



















Big Creek – 080903 – Summer Projection model output:

983	36.00	35.90	0.53498	2.09	0.00753	0.15	1.75	40.60	7104.43	4060.25	71.04	0.00	0.000	0.007	0.008
984	35.90	35.80	0.53666	2.09	0.00755	0.15	1.75	40.60	7105.05	4060.44	71.05	0.00	0.000	0.007	0.008
985	35.80	35.70	0.53834	2.08	0.00758	0.15	1.75	40.61	7105.66	4060.62	71.06	0.00	0.000	0.007	0.008
986	35.70	35.60	0.54002	2.07	0.00760	0.15	1.75	40.61	7106.28	4060.80	71.06	0.00	0.000	0.007	0.008
987	35.60	35.50	0.54170	2.07	0.00762	0.15	1.75	40.61	7106.89	4060.98	71.07	0.00	0.000	0.007	0.008
988	35.50	35.40	0.54338	2.06	0.00765	0.15	1.75	40.61	7107.50	4061.16	71.07	0.00	0.000	0.007	0.008
989	35.40	35.30	0.54505	2.05	0.00767	0.15	1.75	40.61	7108.11	4061.34	71.08	0.00	0.000	0.007	0.008
990	35.30	35.20	0.54673	2.05	0.00769	0.15	1.75	40.62	7108.71	4061.52	71.09	0.00	0.000	0.007	0.008
991	35.20	35.10	0.54841	2.04	0.00771	0.15	1.75	40.62	7109.32	4061.70	71.09	0.00	0.000	0.007	0.008
992	35.10	35.00	0.55009	2.04	0.00774	0.15	1.75	40.62	7109.93	4061.88	71.10	0.00	0.000	0.007	0.008
993	35.00	34.90	0.55177	2.03	0.00776	0.15	1.75	40.62	7110.53	4062.06	71.11	0.00	0.000	0.007	0.008
994	34.90	34.80	0.55345	2.02	0.00778	0.15	1.75	40.62	7111.13	4062.24	71.11	0.00	0.000	0.007	0.008
995	34.80	34.70	0.55513	2.02	0.00781	0.15	1.75	40.62	7111.73	4062.42	71.12	0.00	0.000	0.007	0.008
996	34.70	34.60	0.55680	2.01	0.00783	0.15	1.75	40.63	7112.33	4062.59	71.12	0.00	0.000	0.007	0.008
997	34.60	34.50	0.55848	2.01	0.00785	0.15	1.75	40.63	7112.93	4062.77	71.13	0.00	0.000	0.007	0.008
998	34.50	34.40	0.56016	2.00	0.00787	0.15	1.75	40.63	7113.53	4062.95	71.14	0.00	0.000	0.007	0.008
999	34.40	34.30	0.56184	1.99	0.00790	0.15	1.75	40.63	7114.12	4063.13	71.14	0.00	0.000	0.007	0.008
1000	34.30	34.20	0.56352	1.99	0.00792	0.15	1.75	40.63	7114.72	4063.30	71.15	0.00	0.000	0.007	0.008
1001	34.20	34.10	0.56520	1.98	0.00794	0.15	1.75	40.63	7115.31	4063.48	71.15	0.00	0.000	0.007	0.008
1002	34.10	34.00	0.56688	1.98	0.00797	0.15	1.75	40.64	7115.90	4063.65	71.16	0.00	0.000	0.007	0.008
1003	34.00	33.90	0.56856	1.97	0.00799	0.14	1.75	40.64	7116.49	4063.83	71.16	0.00	0.000	0.007	0.008
1004	33.90	33.80	0.57023	1.96	0.00801	0.14	1.75	40.64	7117.08	4064.00	71.17	0.00	0.000	0.007	0.008
1005	33.80	33.70	0.57191	1.96	0.00804	0.14	1.75	40.64	7117.67	4064.18	71.18	0.00	0.000	0.007	0.008
1006	33.70	33.60	0.57359	1.95	0.00806	0.14	1.75	40.64	7118.25	4064.35	71.18	0.00	0.000	0.007	0.008
1007	33.60	33.50	0.57527	1.95	0.00808	0.14	1.75	40.65	7118.84	4064.52	71.19	0.00	0.000	0.007	0.008
1008	33.50	33.40	0.57695	1.94	0.00810	0.14	1.75	40.65	7119.42	4064.70	71.19	0.00	0.000	0.007	0.008
1009	33.40	33.30	0.57863	1.94	0.00813	0.14	1.75	40.65	7120.00	4064.87	71.20	0.00	0.000	0.007	0.008
1010	33.30	33.20	0.58031	1.93	0.00815	0.14	1.75	40.65	7120.58	4065.04	71.21	0.00	0.000	0.007	0.008
1011	33.20	33.10	0.58199	1.92	0.00817	0.14	1.75	40.65	7121.16	4065.21	71.21	0.00	0.000	0.007	0.008
1012	33.10	33.00	0.58366	1.92	0.00820	0.14	1.75	40.65	7121.74	4065.39	71.22	0.00	0.000	0.007	0.008
1013	33.00	32.90	0.58534	1.91	0.00822	0.14	1.75	40.66	7122.32	4065.56	71.22	0.00	0.000	0.007	0.008
1014	32.90	32.80	0.58698	2.37	0.00828	0.14	1.75	40.66	7123.85	4066.01	71.24	0.00	0.000	0.007	0.008
1015	32.80	32.70	0.59150	2.37	0.00830	0.14	1.75	40.66	7124.42	4066.18	71.24	0.00	0.000	0.007	0.008
1016	32.70	32.60	0.59318	2.36	0.00833	0.14	1.75	40.66	7124.99	4066.35	71.25	0.00	0.000	0.007	0.008
1017	32.60	32.50	0.59486	2.35	0.00835	0.14	1.75	40.67	7125.56	4066.52	71.26	0.00	0.000	0.007	0.008
1018	32.50	32.40	0.59654	2.35	0.00837	0.14	1.75	40.67	7126.13	4066.69	71.26	0.00	0.000	0.007	0.008
1019	32.40	32.30	0.59821	2.34	0.00839	0.14	1.75	40.67	7126.70	4066.86	71.27	0.00	0.000	0.007	0.008
1020	32.30	32.20	0.59989	2.33	0.00842	0.14	1.75	40.67	7127.27	4067.03	71.27	0.00	0.000	0.007	0.008
1021	32.20	32.10	0.60157	2.33	0.00844	0.14	1.75	40.67	7127.83	4067.20	71.28	0.00	0.000	0.007	0.008
1022	32.10	32.00	0.60325	2.32	0.00846	0.14	1.75	40.67	7128.39	4067.37	71.28	0.00	0.000	0.008	0.008
1023	32.00	31.90	0.60493	2.31	0.00849	0.14	1.75	40.68	7128.96	4067.53	71.29	0.00	0.000	0.008	0.008
1024	31.90	31.80	0.60661	2.31	0.00851	0.14	1.75	40.68	7129.52	4067.70	71.30	0.00	0.000	0.008	0.009
1025	31.80	31.70	0.60829	2.30	0.00853	0.14	1.75	40.68	7130.08	4067.87	71.30	0.00	0.000	0.008	0.009
1026	31.70	31.60	0.60997	2.30	0.00855	0.14	1.75	40.68	7130.64	4068.03	71.31	0.00	0.000	0.008	0.009
1027	31.60	31.50	0.61164	2.29	0.00858	0.13	1.75	40.68	7131.19	4068.20	71.31	0.00	0.000	0.008	0.009
1028	31.50	31.40	0.61332	2.28	0.00860	0.13	1.75	40.68	7131.75	4068.36	71.32	0.00	0.000	0.008	0.009
1029	31.40	31.30	0.61500	2.28	0.00862	0.13	1.75	40.69	7132.31	4068.53	71.32	0.00	0.000	0.008	0.009
TOT							8.95		433963.62	247851.55					
AVG				0.00789			1.75	40.63			71.14				
CUM					756.81										







Big Creek – 080903 – Summer Projection model output:

996	34.600	31.10	0.00	0.00	0.00	5.33	4.90	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
997	34.500	31.10	0.00	0.00	0.00	5.33	4.90	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
998	34.400	31.10	0.00	0.00	0.00	5.33	4.90	4.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
999	34.300	31.10	0.00	0.00	0.00	5.34	4.89	4.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
1000	34.200	31.10	0.00	0.00	0.00	5.34	4.89	4.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
1001	34.100	31.10	0.00	0.00	0.00	5.34	4.89	4.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
1002	34.000	31.10	0.00	0.00	0.00	5.34	4.89	4.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
1003	33.900	31.10	0.00	0.00	0.00	5.34	4.88	4.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
1004	33.800	31.10	0.00	0.00	0.00	5.34	4.88	4.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
1005	33.700	31.10	0.00	0.00	0.00	5.34	4.88	4.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
1006	33.600	31.10	0.00	0.00	0.00	5.35	4.88	4.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
1007	33.500	31.10	0.00	0.00	0.00	5.35	4.88	4.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
1008	33.400	31.10	0.00	0.00	0.00	5.35	4.87	4.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
1009	33.300	31.10	0.00	0.00	0.00	5.35	4.87	4.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1010	33.200	31.10	0.00	0.00	0.00	5.35	4.87	4.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1011	33.100	31.10	0.00	0.00	0.00	5.35	4.87	4.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1012	33.000	31.10	0.00	0.00	0.00	5.35	4.87	4.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1013	32.900	31.10	0.00	0.00	0.00	5.35	4.86	4.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1014	32.800	31.10	0.00	0.00	0.00	5.36	4.87	4.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1015	32.700	31.10	0.00	0.00	0.00	5.36	4.87	4.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1016	32.600	31.10	0.00	0.00	0.00	5.36	4.87	4.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1017	32.500	31.10	0.00	0.00	0.00	5.36	4.87	4.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1018	32.400	31.10	0.00	0.00	0.00	5.36	4.86	4.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1019	32.300	31.10	0.00	0.00	0.00	5.36	4.86	4.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1020	32.200	31.10	0.00	0.00	0.00	5.36	4.86	4.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1021	32.100	31.10	0.00	0.00	0.00	5.36	4.86	4.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1022	32.000	31.10	0.00	0.00	0.00	5.36	4.86	4.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1023	31.900	31.10	0.00	0.00	0.00	5.36	4.86	4.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1024	31.800	31.10	0.00	0.00	0.00	5.36	4.85	4.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1025	31.700	31.10	0.00	0.00	0.00	5.36	4.85	4.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1026	31.600	31.10	0.00	0.00	0.00	5.36	4.85	4.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1027	31.500	31.10	0.00	0.00	0.00	5.36	4.85	4.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1028	31.400	31.10	0.00	0.00	0.00	5.36	4.85	4.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1029	31.300	31.10	0.00	0.00	0.00	5.36	4.85	4.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19

\* CM-I = CHLORIDES  
MG/L

CM-II = SULFATES  
MG/L

NCM = NBOD  
MG/L

\*\* g/cu m

FINAL REPORT      BIG CREEK  
REACH NO. 11      WEIR #3

Big Creek - STREAM MODEL  
Summer Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
1030	UPR RCH	0.61500	31.10	0.00	0.00	0.00	5.36	4.85	4.85	0.00	0.00	0.00	0.00	0.00	0.00	0.19
EACH	INCR	0.0017	31.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Big Creek – 080903 – Summer Projection model output:

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
1030	31.30	31.20	0.61670	2.27	0.00865	0.13	1.75	40.69	7132.87	4068.70	71.33	0.00	0.000	0.008	0.009
TOT						0.13			7132.87	4068.70					
AVG					0.00865		1.75	40.69			71.33				
CUM						756.95									

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

ELEM NO.	ENDING DIST	SAT D.O.	REAER RATE	CBOD DECAY	CBOD SETT	ANBOD DECAY	BKGD SOD	FULL SOD	CORR SOD	ORGN DECAY	ORGN SETT	NH3 DECAY	NH3 SRCE	DENIT RATE	PO4 SRCE	ALG PROD	MAC PROD	COLI DECAY	NCM DECAY	NCM SETT
1030	31.200	7.42	0.77	0.12	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07
20 DEG C RATE				0.07		0.00	0.00			0.00		0.00	0.00	0.00	0.00			0.00	0.16	
AVG 20 DEG C RATE			0.63		0.06					0.00										0.06

\* g/sq m/d                      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
1030	31.200	31.10	0.00	0.00	0.00	5.47	4.71	4.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18

\* CM-I = CHLORIDES MG/L                      CM-II = SULFATES MG/L                      NCM = NBOD MG/L  
 \*\* g/cu m

FINAL REPORT                      BIG CREEK                      Big Creek - STREAM MODEL  
 REACH NO. 12                      BIG CREEK, WEIR #3 TO WEIR #2                      Summer Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
1031	UPR RCH	0.61670	31.10	0.00	0.00	0.00	5.47	4.71	4.71	0.00	0.00	0.00	0.00	0.00	0.00	0.18
EACH	INCR	0.0016	31.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1043	WSTLD	0.00350	31.10	0.00	0.00	0.00	2.00	69.00	69.00	0.00	0.00	0.00	0.00	0.00	0.00	64.50

Big Creek – 080903 – Summer Projection model output:

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
1031	31.20	31.10	0.61834	2.26	0.00867	0.13	1.75	40.69	7133.41	4068.86	71.33	0.00	0.000	0.008	0.009
1032	31.10	31.00	0.61997	2.26	0.00869	0.13	1.75	40.69	7133.94	4069.02	71.34	0.00	0.000	0.008	0.009
1033	31.00	30.90	0.62160	2.25	0.00871	0.13	1.75	40.69	7134.48	4069.18	71.34	0.00	0.000	0.008	0.009
1034	30.90	30.80	0.62324	2.25	0.00873	0.13	1.75	40.69	7135.01	4069.34	71.35	0.00	0.000	0.008	0.009
1035	30.80	30.70	0.62487	2.24	0.00876	0.13	1.75	40.69	7135.55	4069.50	71.36	0.00	0.000	0.008	0.009
1036	30.70	30.60	0.62651	2.23	0.00878	0.13	1.75	40.70	7136.08	4069.65	71.36	0.00	0.000	0.008	0.009
1037	30.60	30.50	0.62814	2.23	0.00880	0.13	1.75	40.70	7136.61	4069.81	71.37	0.00	0.000	0.008	0.009
1038	30.50	30.40	0.62977	2.22	0.00882	0.13	1.75	40.70	7137.14	4069.97	71.37	0.00	0.000	0.008	0.009
1039	30.40	30.30	0.63141	2.22	0.00885	0.13	1.75	40.70	7137.67	4070.13	71.38	0.00	0.000	0.008	0.009
1040	30.30	30.20	0.63304	2.21	0.00887	0.13	1.75	40.70	7138.20	4070.29	71.38	0.00	0.000	0.008	0.009
1041	30.20	30.10	0.63468	2.21	0.00889	0.13	1.75	40.70	7138.73	4070.44	71.39	0.00	0.000	0.008	0.009
1042	30.10	30.00	0.63631	2.20	0.00891	0.13	1.75	40.71	7139.26	4070.60	71.39	0.00	0.000	0.008	0.009
1043	30.00	29.90	0.64144	2.73	0.00898	0.13	1.75	40.71	7140.90	4071.09	71.41	0.00	0.000	0.008	0.009
1044	29.90	29.80	0.64308	2.72	0.00900	0.13	1.75	40.71	7141.43	4071.25	71.41	0.00	0.000	0.008	0.009
1045	29.80	29.70	0.64471	2.71	0.00903	0.13	1.75	40.71	7141.95	4071.40	71.42	0.00	0.000	0.008	0.009
1046	29.70	29.60	0.64635	2.71	0.00905	0.13	1.75	40.72	7142.47	4071.56	71.42	0.00	0.000	0.008	0.009
1047	29.60	29.50	0.64798	2.70	0.00907	0.13	1.75	40.72	7142.99	4071.71	71.43	0.00	0.000	0.008	0.009
1048	29.50	29.40	0.64962	2.69	0.00909	0.13	1.75	40.72	7143.51	4071.87	71.44	0.00	0.000	0.008	0.009
1049	29.40	29.30	0.65125	2.69	0.00912	0.13	1.75	40.72	7144.02	4072.02	71.44	0.00	0.000	0.008	0.009
1050	29.30	29.20	0.65288	2.68	0.00914	0.13	1.75	40.72	7144.54	4072.18	71.45	0.00	0.000	0.008	0.009
1051	29.20	29.10	0.65452	2.67	0.00916	0.13	1.75	40.72	7145.05	4072.33	71.45	0.00	0.000	0.008	0.009
1052	29.10	29.00	0.65615	2.67	0.00918	0.13	1.75	40.72	7145.57	4072.49	71.46	0.00	0.000	0.008	0.009
1053	29.00	28.90	0.65779	2.66	0.00920	0.13	1.75	40.73	7146.08	4072.64	71.46	0.00	0.000	0.008	0.009
1054	28.90	28.80	0.65942	2.65	0.00923	0.13	1.75	40.73	7146.60	4072.79	71.47	0.00	0.000	0.008	0.009
1055	28.80	28.70	0.66105	2.65	0.00925	0.13	1.75	40.73	7147.11	4072.95	71.47	0.00	0.000	0.008	0.009
1056	28.70	28.60	0.66269	2.64	0.00927	0.12	1.75	40.73	7147.62	4073.10	71.48	0.00	0.000	0.008	0.009
1057	28.60	28.50	0.66432	2.63	0.00929	0.12	1.75	40.73	7148.13	4073.25	71.48	0.00	0.000	0.008	0.009
1058	28.50	28.40	0.66596	2.63	0.00932	0.12	1.75	40.73	7148.64	4073.40	71.49	0.00	0.000	0.008	0.009
1059	28.40	28.30	0.66759	2.62	0.00934	0.12	1.76	40.74	7149.14	4073.55	71.49	0.00	0.000	0.008	0.009
1060	28.30	28.20	0.66922	2.61	0.00936	0.12	1.76	40.74	7149.65	4073.70	71.50	0.00	0.000	0.008	0.009
1061	28.20	28.10	0.67086	2.61	0.00938	0.12	1.76	40.74	7150.16	4073.86	71.50	0.00	0.000	0.008	0.009
1062	28.10	28.00	0.67249	2.60	0.00940	0.12	1.76	40.74	7150.66	4074.01	71.51	0.00	0.000	0.008	0.009
1063	28.00	27.90	0.67413	2.60	0.00943	0.12	1.76	40.74	7151.16	4074.16	71.51	0.00	0.000	0.008	0.009
1064	27.90	27.80	0.67576	2.59	0.00945	0.12	1.76	40.74	7151.67	4074.31	71.52	0.00	0.000	0.008	0.009
1065	27.80	27.70	0.67739	2.58	0.00947	0.12	1.76	40.74	7152.17	4074.46	71.52	0.00	0.000	0.008	0.009
1066	27.70	27.60	0.67903	2.58	0.00949	0.12	1.76	40.75	7152.67	4074.61	71.53	0.00	0.000	0.008	0.009
1067	27.60	27.50	0.68066	2.57	0.00952	0.12	1.76	40.75	7153.17	4074.76	71.53	0.00	0.000	0.008	0.010
1068	27.50	27.40	0.68230	2.56	0.00954	0.12	1.76	40.75	7153.67	4074.91	71.54	0.00	0.000	0.008	0.010
1069	27.40	27.30	0.68393	2.56	0.00956	0.12	1.76	40.75	7154.17	4075.06	71.54	0.00	0.000	0.008	0.010
1070	27.30	27.20	0.68556	2.55	0.00958	0.12	1.76	40.75	7154.66	4075.20	71.55	0.00	0.000	0.009	0.010
1071	27.20	27.10	0.68720	2.55	0.00960	0.12	1.76	40.75	7155.16	4075.35	71.55	0.00	0.000	0.009	0.010
1072	27.10	27.00	0.68883	2.54	0.00963	0.12	1.76	40.76	7155.66	4075.50	71.56	0.00	0.000	0.009	0.010
1073	27.00	26.90	0.69047	2.53	0.00965	0.12	1.76	40.76	7156.15	4075.65	71.56	0.00	0.000	0.009	0.010
1074	26.90	26.80	0.69210	2.53	0.00967	0.12	1.76	40.76	7156.65	4075.80	71.57	0.00	0.000	0.009	0.010
1075	26.80	26.70	0.69373	2.52	0.00969	0.12	1.76	40.76	7157.14	4075.94	71.57	0.00	0.000	0.009	0.010
1076	26.70	26.60	0.69537	2.52	0.00972	0.12	1.76	40.76	7157.63	4076.09	71.58	0.00	0.000	0.009	0.010
1077	26.60	26.50	0.69700	2.51	0.00974	0.12	1.76	40.76	7158.12	4076.24	71.58	0.00	0.000	0.009	0.010

Big Creek – 080903 – Summer Projection model output:

1078	26.50	26.40	0.69864	2.50	0.00976	0.12	1.76	40.76	7158.61	4076.39	71.59	0.00	0.000	0.009	0.010
1079	26.40	26.30	0.70027	2.50	0.00978	0.12	1.76	40.77	7159.10	4076.53	71.59	0.00	0.000	0.009	0.010
1080	26.30	26.20	0.70191	2.49	0.00980	0.12	1.76	40.77	7159.59	4076.68	71.60	0.00	0.000	0.009	0.010
1081	26.20	26.10	0.70354	2.49	0.00983	0.12	1.76	40.77	7160.08	4076.82	71.60	0.00	0.000	0.009	0.010
1082	26.10	26.00	0.70517	2.48	0.00985	0.12	1.76	40.77	7160.56	4076.97	71.61	0.00	0.000	0.009	0.010
1083	26.00	25.90	0.70681	2.48	0.00987	0.12	1.76	40.77	7161.05	4077.12	71.61	0.00	0.000	0.009	0.010
1084	25.90	25.80	0.70844	2.47	0.00989	0.12	1.76	40.77	7161.53	4077.26	71.62	0.00	0.000	0.009	0.010
1085	25.80	25.70	0.71008	2.46	0.00991	0.12	1.76	40.77	7162.02	4077.41	71.62	0.00	0.000	0.009	0.010
1086	25.70	25.60	0.71171	2.46	0.00994	0.12	1.76	40.78	7162.50	4077.55	71.63	0.00	0.000	0.009	0.010
1087	25.60	25.50	0.71334	2.45	0.00996	0.12	1.76	40.78	7162.98	4077.70	71.63	0.00	0.000	0.009	0.010
1088	25.50	25.40	0.71498	2.45	0.00998	0.12	1.76	40.78	7163.47	4077.84	71.63	0.00	0.000	0.009	0.010
1089	25.40	25.30	0.71661	2.44	0.01000	0.12	1.76	40.78	7163.95	4077.98	71.64	0.00	0.000	0.009	0.010
1090	25.30	25.20	0.71825	2.44	0.01003	0.12	1.76	40.78	7164.43	4078.13	71.64	0.00	0.000	0.009	0.010
1091	25.20	25.10	0.71988	2.43	0.01005	0.12	1.76	40.78	7164.91	4078.27	71.65	0.00	0.000	0.009	0.010
1092	25.10	25.00	0.72151	2.43	0.01007	0.11	1.76	40.78	7165.38	4078.42	71.65	0.00	0.000	0.009	0.010
1093	25.00	24.90	0.72315	2.42	0.01009	0.11	1.76	40.79	7165.86	4078.56	71.66	0.00	0.000	0.009	0.010
1094	24.90	24.80	0.72478	2.41	0.01011	0.11	1.76	40.79	7166.34	4078.70	71.66	0.00	0.000	0.009	0.010
1095	24.80	24.70	0.72642	2.41	0.01014	0.11	1.76	40.79	7166.81	4078.84	71.67	0.00	0.000	0.009	0.010
1096	24.70	24.60	0.72805	2.40	0.01016	0.11	1.76	40.79	7167.29	4078.99	71.67	0.00	0.000	0.009	0.010
1097	24.60	24.50	0.72968	2.40	0.01018	0.11	1.76	40.79	7167.76	4079.13	71.68	0.00	0.000	0.009	0.010
1098	24.50	24.40	0.73132	2.39	0.01020	0.11	1.76	40.79	7168.24	4079.27	71.68	0.00	0.000	0.009	0.010
1099	24.40	24.30	0.73295	2.39	0.01022	0.11	1.76	40.79	7168.71	4079.41	71.69	0.00	0.000	0.009	0.010
1100	24.30	24.20	0.73459	2.38	0.01025	0.11	1.76	40.80	7169.18	4079.55	71.69	0.00	0.000	0.009	0.010
1101	24.20	24.10	0.73622	2.38	0.01027	0.11	1.76	40.80	7169.65	4079.70	71.70	0.00	0.000	0.009	0.010
1102	24.10	24.00	0.73785	2.37	0.01029	0.11	1.76	40.80	7170.12	4079.84	71.70	0.00	0.000	0.009	0.010
1103	24.00	23.90	0.73949	2.37	0.01031	0.11	1.76	40.80	7170.59	4079.98	71.71	0.00	0.000	0.009	0.010
1104	23.90	23.80	0.74112	2.36	0.01033	0.11	1.76	40.80	7171.06	4080.12	71.71	0.00	0.000	0.009	0.010
1105	23.80	23.70	0.74276	2.36	0.01036	0.11	1.76	40.80	7171.53	4080.26	71.72	0.00	0.000	0.009	0.010
1106	23.70	23.60	0.74439	2.35	0.01038	0.11	1.76	40.80	7171.99	4080.40	71.72	0.00	0.000	0.009	0.010
1107	23.60	23.50	0.74602	2.35	0.01040	0.11	1.76	40.81	7172.46	4080.54	71.72	0.00	0.000	0.009	0.010
1108	23.50	23.40	0.74766	2.34	0.01042	0.11	1.76	40.81	7172.93	4080.68	71.73	0.00	0.000	0.009	0.010
1109	23.40	23.30	0.74929	2.34	0.01045	0.11	1.76	40.81	7173.39	4080.82	71.73	0.00	0.000	0.009	0.010
1110	23.30	23.20	0.75093	2.33	0.01047	0.11	1.76	40.81	7173.85	4080.96	71.74	0.00	0.000	0.009	0.010
1111	23.20	23.10	0.75256	2.33	0.01049	0.11	1.76	40.81	7174.32	4081.10	71.74	0.00	0.000	0.009	0.010
1112	23.10	23.00	0.75420	2.32	0.01051	0.11	1.76	40.81	7174.78	4081.24	71.75	0.00	0.000	0.009	0.011
1113	23.00	22.90	0.75583	2.32	0.01053	0.11	1.76	40.81	7175.24	4081.37	71.75	0.00	0.000	0.009	0.011
1114	22.90	22.80	0.75746	2.31	0.01056	0.11	1.76	40.82	7175.70	4081.51	71.76	0.00	0.000	0.009	0.011
1115	22.80	22.70	0.75910	2.31	0.01058	0.11	1.76	40.82	7176.16	4081.65	71.76	0.00	0.000	0.009	0.011
1116	22.70	22.60	0.76073	2.30	0.01060	0.11	1.76	40.82	7176.62	4081.79	71.77	0.00	0.000	0.009	0.011
1117	22.60	22.50	0.76237	2.30	0.01062	0.11	1.76	40.82	7177.08	4081.93	71.77	0.00	0.000	0.009	0.011
1118	22.50	22.40	0.76400	2.29	0.01064	0.11	1.76	40.82	7177.54	4082.06	71.78	0.00	0.000	0.009	0.011
1119	22.40	22.30	0.76563	2.29	0.01067	0.11	1.76	40.82	7177.99	4082.20	71.78	0.00	0.000	0.009	0.011
1120	22.30	22.20	0.76727	2.28	0.01069	0.11	1.76	40.82	7178.45	4082.34	71.78	0.00	0.000	0.010	0.011
1121	22.20	22.10	0.76890	2.28	0.01071	0.11	1.76	40.82	7178.91	4082.48	71.79	0.00	0.000	0.010	0.011

TOT 10.89 651302.75 370912.47  
 AVG 0.00967 1.76 40.76 71.57  
 CUM 767.84

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

ELEM ENDING SAT REAER CBOD CBOD ANBOD BKGD FULL CORR ORGN ORGN NH3 NH3 DENIT PO4 ALG MAC COLI NCM NCM











Big Creek – 080903 – Summer Projection model output:

1122	UPR RCH	0.76890	31.10	0.00	0.00	0.00	5.31	4.93	4.93	0.00	0.00	0.00	0.00	0.00	0.00	0.19
EACH	INCR	0.0017	31.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
1122	22.10	22.00	0.77060	2.27	0.01073	0.11	1.76	40.83	7179.38	4082.62	71.79	0.00	0.000	0.010	0.011
TOT						0.11			7179.38	4082.62					
AVG					0.01073		1.76	40.83			71.79				
CUM						767.95									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAT 1/da	CBOD SETT 1/da	ANBOD DECAT 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAT 1/da	ORGN SETT 1/da	NH3 DECAT 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAT 1/da	NCM DECAT 1/da	NCM SETT 1/da	
1122	22.000	7.42	0.77	0.12	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07	
20 DEG C RATE				0.07		0.00	0.00		0.00		0.00	0.00	0.00	0.00				0.00	0.16		
AVG 20 DEG C RATE				0.63		0.06			0.00												0.06

\* g/sq m/d                      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
1122	22.000	31.10	0.00	0.00	0.00	5.40	4.82	4.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18

\* CM-I = CHLORIDES MG/L                      CM-II = SULFATES MG/L                      NCM = NBOD MG/L  
 \*\* g/cu m

FINAL REPORT                      BIG CREEK                      Big Creek - STREAM MODEL  
 REACH NO. 14                      BIG CREEK, WEIR #2 TO WEIR #1                      Summer Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
1123	UPR RCH	0.77060	31.10	0.00	0.00	0.00	5.40	4.82	4.82	0.00	0.00	0.00	0.00	0.00	0.00	0.18

Big Creek – 080903 – Summer Projection model output:

EACH	INCR	0.0016	31.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1128	WSTLD	0.00280	31.10	0.00	0.00	0.00	6.68	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.46
1204	WSTLD	0.00280	31.10	0.00	0.00	0.00	6.68	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.46

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
1123	22.00	21.90	0.77224	2.27	0.01076	0.11	1.76	40.83	7179.84	4082.76	71.80	0.00	0.000	0.010	0.011
1124	21.90	21.80	0.77389	2.26	0.01078	0.11	1.76	40.83	7180.29	4082.89	71.80	0.00	0.000	0.010	0.011
1125	21.80	21.70	0.77553	2.26	0.01080	0.11	1.76	40.83	7180.75	4083.03	71.81	0.00	0.000	0.010	0.011
1126	21.70	21.60	0.77717	2.25	0.01082	0.11	1.76	40.83	7181.20	4083.17	71.81	0.00	0.000	0.010	0.011
1127	21.60	21.50	0.77881	2.25	0.01084	0.11	1.76	40.83	7181.65	4083.30	71.82	0.00	0.000	0.010	0.011
1128	21.50	21.40	0.78326	2.59	0.01090	0.11	1.76	40.84	7182.88	4083.67	71.83	0.00	0.000	0.010	0.011
1129	21.40	21.30	0.78490	2.59	0.01093	0.11	1.76	40.84	7183.33	4083.81	71.83	0.00	0.000	0.010	0.011
1130	21.30	21.20	0.78654	2.58	0.01095	0.11	1.76	40.84	7183.78	4083.94	71.84	0.00	0.000	0.010	0.011
1131	21.20	21.10	0.78818	2.58	0.01097	0.11	1.76	40.84	7184.22	4084.08	71.84	0.00	0.000	0.010	0.011
1132	21.10	21.00	0.78983	2.57	0.01099	0.11	1.76	40.84	7184.67	4084.21	71.85	0.00	0.000	0.010	0.011
1133	21.00	20.90	0.79147	2.56	0.01102	0.11	1.76	40.84	7185.12	4084.35	71.85	0.00	0.000	0.010	0.011
1134	20.90	20.80	0.79311	2.56	0.01104	0.10	1.76	40.84	7185.57	4084.48	71.86	0.00	0.000	0.010	0.011
1135	20.80	20.70	0.79475	2.55	0.01106	0.10	1.76	40.85	7186.02	4084.62	71.86	0.00	0.000	0.010	0.011
1136	20.70	20.60	0.79639	2.55	0.01108	0.10	1.76	40.85	7186.46	4084.75	71.86	0.00	0.000	0.010	0.011
1137	20.60	20.50	0.79804	2.54	0.01110	0.10	1.76	40.85	7186.91	4084.88	71.87	0.00	0.000	0.010	0.011
1138	20.50	20.40	0.79968	2.54	0.01113	0.10	1.76	40.85	7187.35	4085.02	71.87	0.00	0.000	0.010	0.011
1139	20.40	20.30	0.80132	2.53	0.01115	0.10	1.76	40.85	7187.79	4085.15	71.88	0.00	0.000	0.010	0.011
1140	20.30	20.20	0.80296	2.53	0.01117	0.10	1.76	40.85	7188.24	4085.28	71.88	0.00	0.000	0.010	0.011
1141	20.20	20.10	0.80461	2.52	0.01119	0.10	1.76	40.85	7188.68	4085.42	71.89	0.00	0.000	0.010	0.011
1142	20.10	20.00	0.80625	2.52	0.01121	0.10	1.76	40.86	7189.12	4085.55	71.89	0.00	0.000	0.010	0.011
1143	20.00	19.90	0.80789	2.51	0.01124	0.10	1.76	40.86	7189.56	4085.68	71.90	0.00	0.000	0.010	0.011
1144	19.90	19.80	0.80953	2.51	0.01126	0.10	1.76	40.86	7190.00	4085.82	71.90	0.00	0.000	0.010	0.011
1145	19.80	19.70	0.81118	2.50	0.01128	0.10	1.76	40.86	7190.44	4085.95	71.90	0.00	0.000	0.010	0.011
1146	19.70	19.60	0.81282	2.50	0.01130	0.10	1.76	40.86	7190.88	4086.08	71.91	0.00	0.000	0.010	0.011
1147	19.60	19.50	0.81446	2.49	0.01133	0.10	1.76	40.86	7191.32	4086.21	71.91	0.00	0.000	0.010	0.011
1148	19.50	19.40	0.81610	2.49	0.01135	0.10	1.76	40.86	7191.75	4086.34	71.92	0.00	0.000	0.010	0.011
1149	19.40	19.30	0.81774	2.48	0.01137	0.10	1.76	40.86	7192.19	4086.48	71.92	0.00	0.000	0.010	0.011
1150	19.30	19.20	0.81939	2.48	0.01139	0.10	1.76	40.87	7192.63	4086.61	71.93	0.00	0.000	0.010	0.011
1151	19.20	19.10	0.82103	2.47	0.01141	0.10	1.76	40.87	7193.06	4086.74	71.93	0.00	0.000	0.010	0.011
1152	19.10	19.00	0.82267	2.47	0.01144	0.10	1.76	40.87	7193.50	4086.87	71.93	0.00	0.000	0.010	0.011
1153	19.00	18.90	0.82431	2.46	0.01146	0.10	1.76	40.87	7193.93	4087.00	71.94	0.00	0.000	0.010	0.011
1154	18.90	18.80	0.82596	2.46	0.01148	0.10	1.76	40.87	7194.36	4087.13	71.94	0.00	0.000	0.010	0.011
1155	18.80	18.70	0.82760	2.45	0.01150	0.10	1.76	40.87	7194.80	4087.26	71.95	0.00	0.000	0.010	0.012
1156	18.70	18.60	0.82924	2.45	0.01152	0.10	1.76	40.87	7195.23	4087.39	71.95	0.00	0.000	0.010	0.012
1157	18.60	18.50	0.83088	2.44	0.01155	0.10	1.76	40.88	7195.66	4087.52	71.96	0.00	0.000	0.010	0.012
1158	18.50	18.40	0.83253	2.44	0.01157	0.10	1.76	40.88	7196.09	4087.65	71.96	0.00	0.000	0.010	0.012
1159	18.40	18.30	0.83417	2.43	0.01159	0.10	1.76	40.88	7196.52	4087.78	71.97	0.00	0.000	0.010	0.012
1160	18.30	18.20	0.83581	2.43	0.01161	0.10	1.76	40.88	7196.95	4087.91	71.97	0.00	0.000	0.010	0.012
1161	18.20	18.10	0.83745	2.42	0.01164	0.10	1.76	40.88	7197.38	4088.04	71.97	0.00	0.000	0.010	0.012
1162	18.10	18.00	0.83910	2.42	0.01166	0.10	1.76	40.88	7197.81	4088.17	71.98	0.00	0.000	0.010	0.012
1163	18.00	17.90	0.84074	2.41	0.01168	0.10	1.76	40.88	7198.24	4088.30	71.98	0.00	0.000	0.010	0.012
1164	17.90	17.80	0.84238	2.41	0.01170	0.10	1.76	40.88	7198.66	4088.43	71.99	0.00	0.000	0.010	0.012

Big Creek – 080903 – Summer Projection model output:

1165	17.80	17.70	0.84402	2.41	0.01172	0.10	1.76	40.89	7199.09	4088.56	71.99	0.00	0.000	0.010	0.012
1166	17.70	17.60	0.84566	2.40	0.01175	0.10	1.76	40.89	7199.51	4088.69	72.00	0.00	0.000	0.010	0.012
1167	17.60	17.50	0.84731	2.40	0.01177	0.10	1.76	40.89	7199.94	4088.81	72.00	0.00	0.000	0.010	0.012
1168	17.50	17.40	0.84895	2.39	0.01179	0.10	1.76	40.89	7200.36	4088.94	72.00	0.00	0.000	0.011	0.012
1169	17.40	17.30	0.85059	2.39	0.01181	0.10	1.76	40.89	7200.79	4089.07	72.01	0.00	0.000	0.011	0.012
1170	17.30	17.20	0.85223	2.38	0.01183	0.10	1.76	40.89	7201.21	4089.20	72.01	0.00	0.000	0.011	0.012
1171	17.20	17.10	0.85388	2.38	0.01186	0.10	1.76	40.89	7201.63	4089.33	72.02	0.00	0.000	0.011	0.012
1172	17.10	17.00	0.85552	2.37	0.01188	0.10	1.76	40.89	7202.06	4089.45	72.02	0.00	0.000	0.011	0.012
1173	17.00	16.90	0.85716	2.37	0.01190	0.10	1.76	40.90	7202.48	4089.58	72.02	0.00	0.000	0.011	0.012
1174	16.90	16.80	0.85880	2.36	0.01192	0.10	1.76	40.90	7202.90	4089.71	72.03	0.00	0.000	0.011	0.012
1175	16.80	16.70	0.86045	2.36	0.01195	0.10	1.76	40.90	7203.32	4089.83	72.03	0.00	0.000	0.011	0.012
1176	16.70	16.60	0.86209	2.35	0.01197	0.10	1.76	40.90	7203.74	4089.96	72.04	0.00	0.000	0.011	0.012
1177	16.60	16.50	0.86373	2.35	0.01199	0.10	1.76	40.90	7204.16	4090.09	72.04	0.00	0.000	0.011	0.012
1178	16.50	16.40	0.86537	2.35	0.01201	0.10	1.76	40.90	7204.57	4090.21	72.05	0.00	0.000	0.011	0.012
1179	16.40	16.30	0.86702	2.34	0.01203	0.10	1.76	40.90	7204.99	4090.34	72.05	0.00	0.000	0.011	0.012
1180	16.30	16.20	0.86866	2.34	0.01206	0.10	1.76	40.90	7205.41	4090.47	72.05	0.00	0.000	0.011	0.012
1181	16.20	16.10	0.87030	2.33	0.01208	0.10	1.76	40.91	7205.82	4090.59	72.06	0.00	0.000	0.011	0.012
1182	16.10	16.00	0.87194	2.33	0.01210	0.10	1.76	40.91	7206.24	4090.72	72.06	0.00	0.000	0.011	0.012
1183	16.00	15.90	0.87358	2.32	0.01212	0.10	1.76	40.91	7206.66	4090.84	72.07	0.00	0.000	0.011	0.012
1184	15.90	15.80	0.87523	2.32	0.01214	0.10	1.76	40.91	7207.07	4090.97	72.07	0.00	0.000	0.011	0.012
1185	15.80	15.70	0.87687	2.32	0.01217	0.10	1.76	40.91	7207.48	4091.09	72.07	0.00	0.000	0.011	0.012
1186	15.70	15.60	0.87851	2.31	0.01219	0.09	1.76	40.91	7207.90	4091.22	72.08	0.00	0.000	0.011	0.012
1187	15.60	15.50	0.88015	2.31	0.01221	0.09	1.76	40.91	7208.31	4091.34	72.08	0.00	0.000	0.011	0.012
1188	15.50	15.40	0.88180	2.30	0.01223	0.09	1.76	40.91	7208.72	4091.47	72.09	0.00	0.000	0.011	0.012
1189	15.40	15.30	0.88344	2.30	0.01225	0.09	1.76	40.92	7209.13	4091.59	72.09	0.00	0.000	0.011	0.012
1190	15.30	15.20	0.88508	2.29	0.01228	0.09	1.76	40.92	7209.55	4091.72	72.10	0.00	0.000	0.011	0.012
1191	15.20	15.10	0.88672	2.29	0.01230	0.09	1.76	40.92	7209.96	4091.84	72.10	0.00	0.000	0.011	0.012
1192	15.10	15.00	0.88837	2.29	0.01232	0.09	1.76	40.92	7210.37	4091.96	72.10	0.00	0.000	0.011	0.012
1193	15.00	14.90	0.89001	2.28	0.01234	0.09	1.76	40.92	7210.78	4092.09	72.11	0.00	0.000	0.011	0.012
1194	14.90	14.80	0.89165	2.28	0.01236	0.09	1.76	40.92	7211.18	4092.21	72.11	0.00	0.000	0.011	0.012
1195	14.80	14.70	0.89329	2.27	0.01239	0.09	1.76	40.92	7211.59	4092.34	72.12	0.00	0.000	0.011	0.012
1196	14.70	14.60	0.89494	2.27	0.01241	0.09	1.76	40.92	7212.00	4092.46	72.12	0.00	0.000	0.011	0.012
1197	14.60	14.50	0.89658	2.26	0.01243	0.09	1.76	40.93	7212.41	4092.58	72.12	0.00	0.000	0.011	0.012
1198	14.50	14.40	0.89822	2.26	0.01245	0.09	1.76	40.93	7212.81	4092.71	72.13	0.00	0.000	0.011	0.012
1199	14.40	14.30	0.89986	2.26	0.01248	0.09	1.76	40.93	7213.22	4092.83	72.13	0.00	0.000	0.011	0.012
1200	14.30	14.20	0.90150	2.25	0.01250	0.09	1.76	40.93	7213.63	4092.95	72.14	0.00	0.000	0.011	0.012
1201	14.20	14.10	0.90315	2.25	0.01252	0.09	1.76	40.93	7214.03	4093.07	72.14	0.00	0.000	0.011	0.013
1202	14.10	14.00	0.90479	2.24	0.01254	0.09	1.76	40.93	7214.43	4093.20	72.14	0.00	0.000	0.011	0.013
1203	14.00	13.90	0.90643	2.24	0.01256	0.09	1.76	40.93	7214.84	4093.32	72.15	0.00	0.000	0.011	0.013
1204	13.90	13.80	0.91087	2.54	0.01262	0.09	1.76	40.94	7215.93	4093.65	72.16	0.00	0.000	0.011	0.013
1205	13.80	13.70	0.91252	2.53	0.01265	0.09	1.76	40.94	7216.33	4093.77	72.16	0.00	0.000	0.011	0.013
1206	13.70	13.60	0.91416	2.53	0.01267	0.09	1.76	40.94	7216.73	4093.89	72.17	0.00	0.000	0.011	0.013
1207	13.60	13.50	0.91580	2.52	0.01269	0.09	1.76	40.94	7217.13	4094.01	72.17	0.00	0.000	0.011	0.013
1208	13.50	13.40	0.91744	2.52	0.01271	0.09	1.76	40.94	7217.53	4094.13	72.18	0.00	0.000	0.011	0.013
1209	13.40	13.30	0.91909	2.51	0.01273	0.09	1.76	40.94	7217.93	4094.25	72.18	0.00	0.000	0.011	0.013
1210	13.30	13.20	0.92073	2.51	0.01276	0.09	1.76	40.94	7218.33	4094.37	72.18	0.00	0.000	0.011	0.013
1211	13.20	13.10	0.92237	2.50	0.01278	0.09	1.76	40.94	7218.73	4094.50	72.19	0.00	0.000	0.011	0.013
1212	13.10	13.00	0.92401	2.50	0.01280	0.09	1.76	40.95	7219.12	4094.62	72.19	0.00	0.000	0.011	0.013
1213	13.00	12.90	0.92566	2.50	0.01282	0.09	1.76	40.95	7219.52	4094.74	72.20	0.00	0.000	0.011	0.013
1214	12.90	12.80	0.92730	2.49	0.01284	0.09	1.76	40.95	7219.92	4094.86	72.20	0.00	0.000	0.011	0.013
1215	12.80	12.70	0.92894	2.49	0.01287	0.09	1.76	40.95	7220.31	4094.98	72.20	0.00	0.000	0.011	0.013
1216	12.70	12.60	0.93058	2.48	0.01289	0.09	1.76	40.95	7220.71	4095.10	72.21	0.00	0.000	0.011	0.013
1217	12.60	12.50	0.93222	2.48	0.01291	0.09	1.76	40.95	7221.10	4095.22	72.21	0.00	0.000	0.012	0.013

Big Creek – 080903 – Summer Projection model output:

1218	12.50	12.40	0.93387	2.47	0.01293	0.09	1.76	40.95	7221.50	4095.34	72.21	0.00	0.000	0.012	0.013
1219	12.40	12.30	0.93551	2.47	0.01295	0.09	1.76	40.95	7221.89	4095.46	72.22	0.00	0.000	0.012	0.013
1220	12.30	12.20	0.93715	2.46	0.01298	0.09	1.76	40.96	7222.29	4095.57	72.22	0.00	0.000	0.012	0.013
1221	12.20	12.10	0.93879	2.46	0.01300	0.09	1.76	40.96	7222.68	4095.69	72.23	0.00	0.000	0.012	0.013
1222	12.10	12.00	0.94044	2.46	0.01302	0.09	1.76	40.96	7223.07	4095.81	72.23	0.00	0.000	0.012	0.013
1223	12.00	11.90	0.94208	2.45	0.01304	0.09	1.76	40.96	7223.46	4095.93	72.23	0.00	0.000	0.012	0.013
1224	11.90	11.80	0.94372	2.45	0.01306	0.09	1.76	40.96	7223.86	4096.05	72.24	0.00	0.000	0.012	0.013
1225	11.80	11.70	0.94536	2.44	0.01309	0.09	1.76	40.96	7224.25	4096.17	72.24	0.00	0.000	0.012	0.013
1226	11.70	11.60	0.94701	2.44	0.01311	0.09	1.76	40.96	7224.64	4096.29	72.25	0.00	0.000	0.012	0.013
1227	11.60	11.50	0.94865	2.44	0.01313	0.09	1.76	40.96	7225.03	4096.41	72.25	0.00	0.000	0.012	0.013
1228	11.50	11.40	0.95029	2.43	0.01315	0.09	1.76	40.97	7225.42	4096.52	72.25	0.00	0.000	0.012	0.013
1229	11.40	11.30	0.95193	2.43	0.01317	0.09	1.76	40.97	7225.80	4096.64	72.26	0.00	0.000	0.012	0.013
1230	11.30	11.20	0.95357	2.42	0.01320	0.09	1.76	40.97	7226.19	4096.76	72.26	0.00	0.000	0.012	0.013
1231	11.20	11.10	0.95522	2.42	0.01322	0.09	1.76	40.97	7226.58	4096.88	72.27	0.00	0.000	0.012	0.013
1232	11.10	11.00	0.95686	2.41	0.01324	0.09	1.76	40.97	7226.97	4096.99	72.27	0.00	0.000	0.012	0.013
1233	11.00	10.90	0.95850	2.41	0.01326	0.09	1.76	40.97	7227.35	4097.11	72.27	0.00	0.000	0.012	0.013
1234	10.90	10.80	0.96014	2.41	0.01328	0.09	1.76	40.97	7227.74	4097.23	72.28	0.00	0.000	0.012	0.013
1235	10.80	10.70	0.96179	2.40	0.01331	0.09	1.76	40.97	7228.13	4097.35	72.28	0.00	0.000	0.012	0.013
1236	10.70	10.60	0.96343	2.40	0.01333	0.09	1.76	40.97	7228.51	4097.46	72.29	0.00	0.000	0.012	0.013
1237	10.60	10.50	0.96507	2.39	0.01335	0.09	1.76	40.98	7228.90	4097.58	72.29	0.00	0.000	0.012	0.013
1238	10.50	10.40	0.96671	2.39	0.01337	0.09	1.76	40.98	7229.28	4097.70	72.29	0.00	0.000	0.012	0.013
1239	10.40	10.30	0.96836	2.39	0.01339	0.09	1.76	40.98	7229.66	4097.81	72.30	0.00	0.000	0.012	0.013
1240	10.30	10.20	0.97000	2.38	0.01342	0.09	1.76	40.98	7230.05	4097.93	72.30	0.00	0.000	0.012	0.013
1241	10.20	10.10	0.97164	2.38	0.01344	0.09	1.76	40.98	7230.43	4098.05	72.30	0.00	0.000	0.012	0.013
1242	10.10	10.00	0.97328	2.37	0.01346	0.09	1.76	40.98	7230.81	4098.16	72.31	0.00	0.000	0.012	0.013
1243	10.00	9.90	0.97493	2.37	0.01348	0.09	1.76	40.98	7231.19	4098.28	72.31	0.00	0.000	0.012	0.013
1244	9.90	9.80	0.97657	2.37	0.01350	0.09	1.76	40.98	7231.58	4098.39	72.32	0.00	0.000	0.012	0.014
1245	9.80	9.70	0.97821	2.36	0.01353	0.09	1.76	40.99	7231.96	4098.51	72.32	0.00	0.000	0.012	0.014
1246	9.70	9.60	0.97985	2.36	0.01355	0.09	1.76	40.99	7232.34	4098.62	72.32	0.00	0.000	0.012	0.014
1247	9.60	9.50	0.98149	2.35	0.01357	0.09	1.76	40.99	7232.72	4098.74	72.33	0.00	0.000	0.012	0.014
1248	9.50	9.40	0.98314	2.35	0.01359	0.09	1.76	40.99	7233.10	4098.85	72.33	0.00	0.000	0.012	0.014
1249	9.40	9.30	0.98478	2.35	0.01361	0.09	1.76	40.99	7233.47	4098.97	72.33	0.00	0.000	0.012	0.014
1250	9.30	9.20	0.98642	2.34	0.01364	0.08	1.76	40.99	7233.85	4099.08	72.34	0.00	0.000	0.012	0.014
1251	9.20	9.10	0.98806	2.34	0.01366	0.08	1.76	40.99	7234.23	4099.20	72.34	0.00	0.000	0.012	0.014
1252	9.10	9.00	0.98971	2.33	0.01368	0.08	1.76	40.99	7234.61	4099.31	72.35	0.00	0.000	0.012	0.014
1253	9.00	8.90	0.99135	2.33	0.01370	0.08	1.76	40.99	7234.99	4099.43	72.35	0.00	0.000	0.012	0.014
1254	8.90	8.80	0.99299	2.33	0.01372	0.08	1.76	41.00	7235.36	4099.54	72.35	0.00	0.000	0.012	0.014
1255	8.80	8.70	0.99463	2.32	0.01375	0.08	1.76	41.00	7235.74	4099.66	72.36	0.00	0.000	0.012	0.014
1256	8.70	8.60	0.99628	2.32	0.01377	0.08	1.77	41.00	7236.11	4099.77	72.36	0.00	0.000	0.012	0.014
1257	8.60	8.50	0.99792	2.31	0.01379	0.08	1.77	41.00	7236.49	4099.89	72.36	0.00	0.000	0.012	0.014
1258	8.50	8.40	0.99956	2.31	0.01381	0.08	1.77	41.00	7236.86	4100.00	72.37	0.00	0.000	0.012	0.014
1259	8.40	8.30	1.00120	2.31	0.01383	0.08	1.77	41.00	7237.24	4100.11	72.37	0.00	0.000	0.012	0.014
1260	8.30	8.20	1.00285	2.30	0.01386	0.08	1.77	41.00	7237.61	4100.23	72.38	0.00	0.000	0.012	0.014
1261	8.20	8.10	1.00449	2.30	0.01388	0.08	1.77	41.00	7237.98	4100.34	72.38	0.00	0.000	0.012	0.014
1262	8.10	8.00	1.00613	2.30	0.01390	0.08	1.77	41.00	7238.36	4100.45	72.38	0.00	0.000	0.012	0.014
1263	8.00	7.90	1.00777	2.29	0.01392	0.08	1.77	41.01	7238.73	4100.57	72.39	0.00	0.000	0.012	0.014
1264	7.90	7.80	1.00941	2.29	0.01394	0.08	1.77	41.01	7239.10	4100.68	72.39	0.00	0.000	0.012	0.014
1265	7.80	7.70	1.01106	2.28	0.01397	0.08	1.77	41.01	7239.47	4100.79	72.39	0.00	0.000	0.012	0.014
1266	7.70	7.60	1.01270	2.28	0.01399	0.08	1.77	41.01	7239.84	4100.91	72.40	0.00	0.000	0.012	0.014
1267	7.60	7.50	1.01434	2.28	0.01401	0.08	1.77	41.01	7240.21	4101.02	72.40	0.00	0.000	0.013	0.014
1268	7.50	7.40	1.01598	2.27	0.01403	0.08	1.77	41.01	7240.58	4101.13	72.41	0.00	0.000	0.013	0.014
1269	7.40	7.30	1.01763	2.27	0.01405	0.08	1.77	41.01	7240.95	4101.24	72.41	0.00	0.000	0.013	0.014
1270	7.30	7.20	1.01927	2.27	0.01408	0.08	1.77	41.01	7241.32	4101.36	72.41	0.00	0.000	0.013	0.014

Big Creek – 080903 – Summer Projection model output:

1271	7.20	7.10	1.02091	2.26	0.01410	0.08	1.77	41.01	7241.69	4101.47	72.42	0.00	0.000	0.013	0.014
1272	7.10	7.00	1.02255	2.26	0.01412	0.08	1.77	41.02	7242.06	4101.58	72.42	0.00	0.000	0.013	0.014
1273	7.00	6.90	1.02420	2.26	0.01414	0.08	1.77	41.02	7242.43	4101.69	72.42	0.00	0.000	0.013	0.014
1274	6.90	6.80	1.02584	2.25	0.01416	0.08	1.77	41.02	7242.79	4101.80	72.43	0.00	0.000	0.013	0.014
1275	6.80	6.70	1.02748	2.25	0.01419	0.08	1.77	41.02	7243.16	4101.91	72.43	0.00	0.000	0.013	0.014
1276	6.70	6.60	1.02912	2.24	0.01421	0.08	1.77	41.02	7243.53	4102.03	72.44	0.00	0.000	0.013	0.014
1277	6.60	6.50	1.03077	2.24	0.01423	0.08	1.77	41.02	7243.89	4102.14	72.44	0.00	0.000	0.013	0.014
1278	6.50	6.40	1.03241	2.24	0.01425	0.08	1.77	41.02	7244.26	4102.25	72.44	0.00	0.000	0.013	0.014
1279	6.40	6.30	1.03405	2.23	0.01427	0.08	1.77	41.02	7244.62	4102.36	72.45	0.00	0.000	0.013	0.014
1280	6.30	6.20	1.03569	2.23	0.01430	0.08	1.77	41.02	7244.99	4102.47	72.45	0.00	0.000	0.013	0.014
1281	6.20	6.10	1.03733	2.23	0.01432	0.08	1.77	41.03	7245.35	4102.58	72.45	0.00	0.000	0.013	0.014
1282	6.10	6.00	1.03898	2.22	0.01434	0.08	1.77	41.03	7245.71	4102.69	72.46	0.00	0.000	0.013	0.014
1283	6.00	5.90	1.04062	2.22	0.01436	0.08	1.77	41.03	7246.08	4102.80	72.46	0.00	0.000	0.013	0.014
1284	5.90	5.80	1.04226	2.22	0.01438	0.08	1.77	41.03	7246.44	4102.91	72.46	0.00	0.000	0.013	0.014
1285	5.80	5.70	1.04390	2.21	0.01441	0.08	1.77	41.03	7246.80	4103.02	72.47	0.00	0.000	0.013	0.014
1286	5.70	5.60	1.04555	2.21	0.01443	0.08	1.77	41.03	7247.17	4103.13	72.47	0.00	0.000	0.013	0.014
1287	5.60	5.50	1.04719	2.21	0.01445	0.08	1.77	41.03	7247.53	4103.24	72.48	0.00	0.000	0.013	0.014
1288	5.50	5.40	1.04883	2.20	0.01447	0.08	1.77	41.03	7247.89	4103.35	72.48	0.00	0.000	0.013	0.014
1289	5.40	5.30	1.05047	2.20	0.01449	0.08	1.77	41.03	7248.25	4103.46	72.48	0.00	0.000	0.013	0.014
1290	5.30	5.20	1.05212	2.20	0.01451	0.08	1.77	41.04	7248.61	4103.57	72.49	0.00	0.000	0.013	0.015
1291	5.20	5.10	1.05376	2.19	0.01454	0.08	1.77	41.04	7248.97	4103.68	72.49	0.00	0.000	0.013	0.015
1292	5.10	5.00	1.05540	2.19	0.01456	0.08	1.77	41.04	7249.33	4103.79	72.49	0.00	0.000	0.013	0.015

TOT 15.64 1226770.62 695941.06  
 AVG 0.01258 1.76 40.94 72.16  
 CUM 783.58

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECA 1/da	CBOD SETT 1/da	ANBOD DECA 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECA 1/da	ORGN SETT 1/da	NH3 DECA 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECA 1/da	NCM DECA 1/da	NCM SETT 1/da
1123	21.900	7.42	0.77	0.12	0.07	0.00	1.85	1.85	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07
1124	21.800	7.42	0.77	0.12	0.07	0.00	1.85	1.85	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07
1125	21.700	7.42	0.77	0.12	0.07	0.00	1.85	1.85	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07
1126	21.600	7.42	0.77	0.12	0.07	0.00	1.85	1.85	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07
1127	21.500	7.42	0.77	0.12	0.07	0.00	1.85	1.85	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07
1128	21.400	7.42	0.77	0.12	0.07	0.00	1.85	1.85	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07
1129	21.300	7.42	0.77	0.12	0.07	0.00	1.85	1.85	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07
1130	21.200	7.42	0.77	0.12	0.07	0.00	1.85	1.85	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07
1131	21.100	7.42	0.77	0.12	0.07	0.00	1.85	1.85	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07
1132	21.000	7.42	0.77	0.12	0.07	0.00	1.85	1.85	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07
1133	20.900	7.42	0.77	0.12	0.07	0.00	1.85	1.85	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07
1134	20.800	7.42	0.77	0.12	0.07	0.00	1.85	1.85	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07
1135	20.700	7.42	0.77	0.12	0.07	0.00	1.85	1.85	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07
1136	20.600	7.42	0.77	0.12	0.07	0.00	1.85	1.85	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07
1137	20.500	7.42	0.77	0.12	0.07	0.00	1.85	1.85	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07
1138	20.400	7.42	0.77	0.12	0.07	0.00	1.85	1.85	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07
1139	20.300	7.42	0.77	0.12	0.07	0.00	1.85	1.85	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07
1140	20.200	7.42	0.77	0.12	0.07	0.00	1.85	1.85	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07
1141	20.100	7.42	0.77	0.12	0.07	0.00	1.85	1.85	1.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07









Big Creek – 080903 – Summer Projection model output:

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
1123	21.900	31.10	0.00	0.00	0.00	5.37	4.81	4.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
1124	21.800	31.10	0.00	0.00	0.00	5.35	4.81	4.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1125	21.700	31.10	0.00	0.00	0.00	5.33	4.80	4.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
1126	21.600	31.10	0.00	0.00	0.00	5.31	4.79	4.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
1127	21.500	31.10	0.00	0.00	0.00	5.29	4.78	4.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
1128	21.400	31.10	0.00	0.00	0.00	5.28	4.78	4.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
1129	21.300	31.10	0.00	0.00	0.00	5.27	4.78	4.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
1130	21.200	31.10	0.00	0.00	0.00	5.25	4.77	4.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
1131	21.100	31.10	0.00	0.00	0.00	5.24	4.76	4.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25
1132	21.000	31.10	0.00	0.00	0.00	5.23	4.76	4.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25
1133	20.900	31.10	0.00	0.00	0.00	5.22	4.75	4.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
1134	20.800	31.10	0.00	0.00	0.00	5.21	4.74	4.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
1135	20.700	31.10	0.00	0.00	0.00	5.20	4.74	4.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27
1136	20.600	31.10	0.00	0.00	0.00	5.19	4.73	4.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27
1137	20.500	31.10	0.00	0.00	0.00	5.18	4.72	4.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28
1138	20.400	31.10	0.00	0.00	0.00	5.17	4.72	4.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28
1139	20.300	31.10	0.00	0.00	0.00	5.16	4.71	4.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
1140	20.200	31.10	0.00	0.00	0.00	5.16	4.71	4.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
1141	20.100	31.10	0.00	0.00	0.00	5.15	4.70	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
1142	20.000	31.10	0.00	0.00	0.00	5.14	4.70	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30
1143	19.900	31.10	0.00	0.00	0.00	5.14	4.69	4.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30
1144	19.800	31.10	0.00	0.00	0.00	5.13	4.69	4.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30
1145	19.700	31.10	0.00	0.00	0.00	5.13	4.68	4.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31
1146	19.600	31.10	0.00	0.00	0.00	5.12	4.68	4.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31
1147	19.500	31.10	0.00	0.00	0.00	5.12	4.67	4.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31
1148	19.400	31.10	0.00	0.00	0.00	5.11	4.67	4.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32
1149	19.300	31.10	0.00	0.00	0.00	5.11	4.66	4.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32
1150	19.200	31.10	0.00	0.00	0.00	5.11	4.66	4.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32
1151	19.100	31.10	0.00	0.00	0.00	5.10	4.65	4.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32
1152	19.000	31.10	0.00	0.00	0.00	5.10	4.65	4.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
1153	18.900	31.10	0.00	0.00	0.00	5.10	4.65	4.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
1154	18.800	31.10	0.00	0.00	0.00	5.10	4.64	4.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
1155	18.700	31.10	0.00	0.00	0.00	5.09	4.64	4.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
1156	18.600	31.10	0.00	0.00	0.00	5.09	4.63	4.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
1157	18.500	31.10	0.00	0.00	0.00	5.09	4.63	4.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
1158	18.400	31.10	0.00	0.00	0.00	5.09	4.63	4.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34
1159	18.300	31.10	0.00	0.00	0.00	5.08	4.62	4.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34
1160	18.200	31.10	0.00	0.00	0.00	5.08	4.62	4.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34
1161	18.100	31.10	0.00	0.00	0.00	5.08	4.62	4.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34
1162	18.000	31.10	0.00	0.00	0.00	5.08	4.61	4.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34
1163	17.900	31.10	0.00	0.00	0.00	5.08	4.61	4.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34
1164	17.800	31.10	0.00	0.00	0.00	5.08	4.61	4.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
1165	17.700	31.10	0.00	0.00	0.00	5.08	4.60	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
1166	17.600	31.10	0.00	0.00	0.00	5.07	4.60	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
1167	17.500	31.10	0.00	0.00	0.00	5.07	4.60	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
1168	17.400	31.10	0.00	0.00	0.00	5.07	4.59	4.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
1169	17.300	31.10	0.00	0.00	0.00	5.07	4.59	4.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
1170	17.200	31.10	0.00	0.00	0.00	5.07	4.59	4.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
1171	17.100	31.10	0.00	0.00	0.00	5.07	4.59	4.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35





Big Creek – 080903 – Summer Projection model output:

1278	6.400	31.10	0.00	0.00	0.00	5.07	4.46	4.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
1279	6.300	31.10	0.00	0.00	0.00	5.07	4.46	4.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
1280	6.200	31.10	0.00	0.00	0.00	5.07	4.46	4.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
1281	6.100	31.10	0.00	0.00	0.00	5.07	4.46	4.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
1282	6.000	31.10	0.00	0.00	0.00	5.07	4.46	4.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
1283	5.900	31.10	0.00	0.00	0.00	5.07	4.46	4.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
1284	5.800	31.10	0.00	0.00	0.00	5.07	4.46	4.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
1285	5.700	31.10	0.00	0.00	0.00	5.07	4.46	4.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
1286	5.600	31.10	0.00	0.00	0.00	5.07	4.46	4.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
1287	5.500	31.10	0.00	0.00	0.00	5.07	4.46	4.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
1288	5.400	31.10	0.00	0.00	0.00	5.07	4.46	4.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
1289	5.300	31.10	0.00	0.00	0.00	5.07	4.45	4.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
1290	5.200	31.10	0.00	0.00	0.00	5.07	4.45	4.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
1291	5.100	31.10	0.00	0.00	0.00	5.07	4.45	4.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37
1292	5.000	31.10	0.00	0.00	0.00	5.07	4.45	4.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37

\* CM-I = CHLORIDES  
MG/L

CM-II = SULFATES  
MG/L

NCM = NBOD  
MG/L

\*\* g/cu m

FINAL REPORT BIG CREEK  
REACH NO. 15 WEIR #1

Big Creek - STREAM MODEL  
Summer Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
1293	UPR RCH	1.05540	31.10	0.00	0.00	0.00	5.07	4.45	4.45	0.00	0.00	0.00	0.00	0.00	0.00	0.37
EACH	INCR	0.0017	31.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
1293	5.00	4.90	1.05710	2.19	0.01458	0.08	1.77	41.04	7249.70	4103.91	72.50	0.00	0.000	0.013	0.015
TOT						0.08			7249.70	4103.91					
AVG					0.01458		1.77	41.04			72.50				
CUM						783.66									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAY 1/da	CBOD SETT 1/da	ANBOD DECAY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAY 1/da	ORGN SETT 1/da	NH3 DECAY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAY 1/da	NCM DECAY 1/da	NCM SETT 1/da	

**Big Creek – 080903 – Summer Projection model output:**

1293	4.900	7.42	0.76	0.12	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.07
20 DEG C RATE				0.07		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00			0.00	0.16			
AVG 20 DEG C RATE			0.62		0.06				0.00												0.06

\* g/sq m/d                      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
1293	4.900	31.10	0.00	0.00	0.00	5.15	4.38	4.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36

\* CM-I = CHLORIDES MG/L                      CM-II = SULFATES MG/L                      NCM = NBOD MG/L  
 \*\* g/cu m

FINAL REPORT	BIG CREEK	Big Creek - STREAM MODEL
REACH NO. 16	BIG CREEK, WEIR#1 TO BOEUF RVR	Summer Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
1294	UPR RCH	1.05710	31.10	0.00	0.00	0.00	5.15	4.38	4.38	0.00	0.00	0.00	0.00	0.00	0.00	0.36
EACH	INCR	0.0017	31.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
1294	4.90	4.80	1.05879	2.18	0.02977	0.04	0.87	41.04	3556.45	4104.02	35.56	0.00	0.000	0.015	0.030
1295	4.80	4.70	1.06047	2.18	0.02982	0.04	0.87	41.04	3556.72	4104.13	35.57	0.00	0.000	0.015	0.030
1296	4.70	4.60	1.06216	2.17	0.02986	0.04	0.87	41.04	3556.98	4104.24	35.57	0.00	0.000	0.015	0.030
1297	4.60	4.50	1.06384	2.17	0.02991	0.04	0.87	41.04	3557.25	4104.35	35.57	0.00	0.000	0.015	0.030
1298	4.50	4.40	1.06553	2.17	0.02995	0.04	0.87	41.04	3557.52	4104.46	35.58	0.00	0.000	0.015	0.030
1299	4.40	4.30	1.06721	2.16	0.03000	0.04	0.87	41.05	3557.78	4104.58	35.58	0.00	0.000	0.015	0.030
1300	4.30	4.20	1.06890	2.16	0.03004	0.04	0.87	41.05	3558.05	4104.69	35.58	0.00	0.000	0.015	0.030
1301	4.20	4.10	1.07059	2.16	0.03009	0.04	0.87	41.05	3558.31	4104.80	35.58	0.00	0.000	0.015	0.030
1302	4.10	4.00	1.07227	2.15	0.03013	0.04	0.87	41.05	3558.57	4104.91	35.59	0.00	0.000	0.015	0.030
1303	4.00	3.90	1.07396	2.15	0.03018	0.04	0.87	41.05	3558.84	4105.02	35.59	0.00	0.000	0.015	0.030
1304	3.90	3.80	1.07564	2.15	0.03022	0.04	0.87	41.05	3559.10	4105.13	35.59	0.00	0.000	0.015	0.030
1305	3.80	3.70	1.07733	2.14	0.03027	0.04	0.87	41.05	3559.37	4105.24	35.59	0.00	0.000	0.015	0.030
1306	3.70	3.60	1.07902	2.14	0.03031	0.04	0.87	41.05	3559.63	4105.35	35.60	0.00	0.000	0.015	0.030
1307	3.60	3.50	1.08070	2.14	0.03036	0.04	0.87	41.05	3559.89	4105.46	35.60	0.00	0.000	0.015	0.030

Big Creek – 080903 – Summer Projection model output:

1308	3.50	3.40	1.08239	2.13	0.03040	0.04	0.87	41.06	3560.16	4105.57	35.60	0.00	0.000	0.015	0.030
1309	3.40	3.30	1.08407	2.13	0.03045	0.04	0.87	41.06	3560.42	4105.68	35.60	0.00	0.000	0.015	0.030
1310	3.30	3.20	1.08576	2.13	0.03049	0.04	0.87	41.06	3560.68	4105.79	35.61	0.00	0.000	0.015	0.030
1311	3.20	3.10	1.08744	2.12	0.03054	0.04	0.87	41.06	3560.94	4105.90	35.61	0.00	0.000	0.015	0.031
1312	3.10	3.00	1.08913	2.12	0.03058	0.04	0.87	41.06	3561.20	4106.01	35.61	0.00	0.000	0.015	0.031
1313	3.00	2.90	1.09082	2.12	0.03063	0.04	0.87	41.06	3561.46	4106.12	35.61	0.00	0.000	0.015	0.031
1314	2.90	2.80	1.09250	2.11	0.03067	0.04	0.87	41.06	3561.72	4106.23	35.62	0.00	0.000	0.015	0.031
1315	2.80	2.70	1.09419	2.11	0.03072	0.04	0.87	41.06	3561.98	4106.34	35.62	0.00	0.000	0.015	0.031
1316	2.70	2.60	1.09587	2.11	0.03076	0.04	0.87	41.06	3562.24	4106.45	35.62	0.00	0.000	0.015	0.031
1317	2.60	2.50	1.09756	2.10	0.03081	0.04	0.87	41.07	3562.50	4106.56	35.63	0.00	0.000	0.015	0.031
1318	2.50	2.40	1.09924	2.10	0.03085	0.04	0.87	41.07	3562.76	4106.67	35.63	0.00	0.000	0.015	0.031
1319	2.40	2.30	1.10093	2.10	0.03090	0.04	0.87	41.07	3563.02	4106.78	35.63	0.00	0.000	0.015	0.031
1320	2.30	2.20	1.10262	2.10	0.03094	0.04	0.87	41.07	3563.28	4106.89	35.63	0.00	0.000	0.015	0.031
1321	2.20	2.10	1.10430	2.09	0.03099	0.04	0.87	41.07	3563.54	4107.00	35.64	0.00	0.000	0.015	0.031
1322	2.10	2.00	1.10599	2.09	0.03103	0.04	0.87	41.07	3563.80	4107.11	35.64	0.00	0.000	0.015	0.031
1323	2.00	1.90	1.10767	2.09	0.03108	0.04	0.87	41.07	3564.05	4107.21	35.64	0.00	0.000	0.015	0.031
1324	1.90	1.80	1.10936	2.08	0.03112	0.04	0.87	41.07	3564.31	4107.32	35.64	0.00	0.000	0.015	0.031
1325	1.80	1.70	1.11104	2.08	0.03117	0.04	0.87	41.07	3564.57	4107.43	35.65	0.00	0.000	0.015	0.031
1326	1.70	1.60	1.11273	2.08	0.03121	0.04	0.87	41.08	3564.83	4107.54	35.65	0.00	0.000	0.015	0.031
1327	1.60	1.50	1.11442	2.07	0.03126	0.04	0.87	41.08	3565.08	4107.65	35.65	0.00	0.000	0.015	0.031
1328	1.50	1.40	1.11610	2.07	0.03130	0.04	0.87	41.08	3565.34	4107.75	35.65	0.00	0.000	0.015	0.031
1329	1.40	1.30	1.11779	2.07	0.03135	0.04	0.87	41.08	3565.60	4107.86	35.66	0.00	0.000	0.015	0.031
1330	1.30	1.20	1.11947	2.06	0.03139	0.04	0.87	41.08	3565.85	4107.97	35.66	0.00	0.000	0.016	0.031
1331	1.20	1.10	1.12116	2.06	0.03144	0.04	0.87	41.08	3566.11	4108.08	35.66	0.00	0.000	0.016	0.031
1332	1.10	1.00	1.12284	2.06	0.03148	0.04	0.87	41.08	3566.36	4108.18	35.66	0.00	0.000	0.016	0.031
1333	1.00	0.90	1.12453	2.05	0.03153	0.04	0.87	41.08	3566.62	4108.29	35.67	0.00	0.000	0.016	0.032
1334	0.90	0.80	1.12622	2.05	0.03157	0.04	0.87	41.08	3566.87	4108.40	35.67	0.00	0.000	0.016	0.032
1335	0.80	0.70	1.12790	2.05	0.03162	0.04	0.87	41.09	3567.13	4108.51	35.67	0.00	0.000	0.016	0.032
1336	0.70	0.60	1.12959	2.04	0.03166	0.04	0.87	41.09	3567.38	4108.61	35.67	0.00	0.000	0.016	0.032
1337	0.60	0.50	1.13127	2.04	0.03171	0.04	0.87	41.09	3567.63	4108.72	35.68	0.00	0.000	0.016	0.032
1338	0.50	0.40	1.13296	2.04	0.03175	0.04	0.87	41.09	3567.89	4108.83	35.68	0.00	0.000	0.016	0.032
1339	0.40	0.30	1.13464	2.04	0.03180	0.04	0.87	41.09	3568.14	4108.93	35.68	0.00	0.000	0.016	0.032
1340	0.30	0.20	1.13633	2.03	0.03184	0.04	0.87	41.09	3568.39	4109.04	35.68	0.00	0.000	0.016	0.032
1341	0.20	0.10	1.13802	2.03	0.03189	0.04	0.87	41.09	3568.64	4109.15	35.69	0.00	0.000	0.016	0.032
1342	0.10	0.00	1.13970	2.03	0.03193	0.04	0.87	41.09	3568.90	4109.25	35.69	0.00	0.000	0.016	0.032
TOT						1.84			174573.84	201226.25					
AVG					0.03084		0.87	41.07			35.63				
CUM						785.50									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECA 1/da	CBOD SETT 1/da	ANBOD DECA 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECA 1/da	ORGN SETT 1/da	NH3 DECA 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECA 1/da	NCM DECA 1/da	NCM SETT 1/da
1294	4.800	7.42	1.54	0.12	0.15	0.00	1.65	1.65	1.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.15
1295	4.700	7.42	1.54	0.12	0.15	0.00	1.65	1.65	1.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.15
1296	4.600	7.42	1.54	0.12	0.15	0.00	1.65	1.65	1.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.15
1297	4.500	7.42	1.54	0.12	0.15	0.00	1.65	1.65	1.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.15
1298	4.400	7.42	1.54	0.12	0.15	0.00	1.65	1.65	1.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.15
1299	4.300	7.42	1.55	0.12	0.15	0.00	1.65	1.65	1.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.15





Big Creek – 080903 – Summer Projection model output:

NO.	DIST	DEG C	PPT	*	*	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	**	#/100mL	*
1294	4.800	31.10	0.00	0.00	0.00	5.17	4.39	4.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
1295	4.700	31.10	0.00	0.00	0.00	5.20	4.40	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35
1296	4.600	31.10	0.00	0.00	0.00	5.23	4.41	4.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34
1297	4.500	31.10	0.00	0.00	0.00	5.25	4.42	4.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34
1298	4.400	31.10	0.00	0.00	0.00	5.27	4.44	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
1299	4.300	31.10	0.00	0.00	0.00	5.29	4.45	4.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32
1300	4.200	31.10	0.00	0.00	0.00	5.31	4.46	4.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32
1301	4.100	31.10	0.00	0.00	0.00	5.33	4.47	4.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31
1302	4.000	31.10	0.00	0.00	0.00	5.35	4.48	4.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31
1303	3.900	31.10	0.00	0.00	0.00	5.36	4.49	4.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30
1304	3.800	31.10	0.00	0.00	0.00	5.38	4.50	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30
1305	3.700	31.10	0.00	0.00	0.00	5.39	4.51	4.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
1306	3.600	31.10	0.00	0.00	0.00	5.41	4.52	4.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
1307	3.500	31.10	0.00	0.00	0.00	5.42	4.53	4.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28
1308	3.400	31.10	0.00	0.00	0.00	5.43	4.53	4.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28
1309	3.300	31.10	0.00	0.00	0.00	5.45	4.54	4.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27
1310	3.200	31.10	0.00	0.00	0.00	5.46	4.55	4.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27
1311	3.100	31.10	0.00	0.00	0.00	5.47	4.56	4.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
1312	3.000	31.10	0.00	0.00	0.00	5.48	4.57	4.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
1313	2.900	31.10	0.00	0.00	0.00	5.49	4.58	4.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26
1314	2.800	31.10	0.00	0.00	0.00	5.50	4.59	4.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25
1315	2.700	31.10	0.00	0.00	0.00	5.51	4.60	4.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25
1316	2.600	31.10	0.00	0.00	0.00	5.51	4.61	4.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
1317	2.500	31.10	0.00	0.00	0.00	5.52	4.61	4.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
1318	2.400	31.10	0.00	0.00	0.00	5.53	4.62	4.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
1319	2.300	31.10	0.00	0.00	0.00	5.54	4.63	4.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
1320	2.200	31.10	0.00	0.00	0.00	5.54	4.64	4.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23
1321	2.100	31.10	0.00	0.00	0.00	5.55	4.65	4.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
1322	2.000	31.10	0.00	0.00	0.00	5.56	4.65	4.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
1323	1.900	31.10	0.00	0.00	0.00	5.56	4.66	4.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
1324	1.800	31.10	0.00	0.00	0.00	5.57	4.67	4.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
1325	1.700	31.10	0.00	0.00	0.00	5.57	4.68	4.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
1326	1.600	31.10	0.00	0.00	0.00	5.58	4.68	4.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21
1327	1.500	31.10	0.00	0.00	0.00	5.58	4.69	4.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1328	1.400	31.10	0.00	0.00	0.00	5.59	4.70	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1329	1.300	31.10	0.00	0.00	0.00	5.59	4.70	4.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1330	1.200	31.10	0.00	0.00	0.00	5.60	4.71	4.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
1331	1.100	31.10	0.00	0.00	0.00	5.60	4.72	4.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
1332	1.000	31.10	0.00	0.00	0.00	5.60	4.73	4.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
1333	0.900	31.10	0.00	0.00	0.00	5.61	4.73	4.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19
1334	0.800	31.10	0.00	0.00	0.00	5.61	4.74	4.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
1335	0.700	31.10	0.00	0.00	0.00	5.62	4.75	4.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
1336	0.600	31.10	0.00	0.00	0.00	5.62	4.75	4.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
1337	0.500	31.10	0.00	0.00	0.00	5.62	4.76	4.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18
1338	0.400	31.10	0.00	0.00	0.00	5.63	4.76	4.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
1339	0.300	31.10	0.00	0.00	0.00	5.63	4.77	4.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
1340	0.200	31.10	0.00	0.00	0.00	5.63	4.78	4.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
1341	0.100	31.10	0.00	0.00	0.00	5.63	4.78	4.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
1342	0.000	31.10	0.00	0.00	0.00	5.64	4.79	4.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16

\* CM-I = CHLORIDES

CM-II = SULFATES

NCM = NBOD

Big Creek – 080903 – Summer Projection model output:

MG/L  
\*\* g/cu m

MG/L

MG/L

STREAM SUMMARY  
BIG CREEK

Big Creek - STREAM MODEL  
Summer Projection Model

TRAVEL TIME = 785.50 DAYS  
MAXIMUM EFFLUENT = 66.67 PERCENT  
FLOW = 0.00280 TO 1.13970 cms  
DISPERSION = 0.0002 TO 0.0158 sq m/s  
VELOCITY = 0.00060 TO 0.03193 m/s  
DEPTH = 0.30 TO 1.77 m  
WIDTH = 6.24 TO 41.09 m  
BOD DECAY = 0.10 TO 0.12 per day  
NH3 DECAY = 0.00 TO 0.00 per day  
SDMNT OXYGEN DMND= 0.00 TO 2.09 g/sq m/d  
NH3 SOURCE = 0.00 TO 0.00 g/sq m/d  
REAERATION = 0.76 TO 2.72 per day  
BOD SETTLING = 0.07 TO 0.40 per day  
ORGN DECAY = 0.00 TO 0.00 per day  
ORGN SETTLING = 0.00 TO 0.00 per day  
TEMPERATURE = 28.40 TO 31.10 deg C  
DISSOLVED OXYGEN = 4.83 TO 6.17 mg/L

.....EXECUTION COMPLETED

## Appendix B3

### Projection Model Development

#### **Summer projection model justifications**

# Big Creek Water Quality Summer Projection Model Input Description

DATA TYPE 3, Program Constants			
Description of Constant	Value	Result	Source/Justification
Maximum iteration limit	200.0		Standard
Plot type	3.0	Creates line printer plots for WQ parameters.	For reporting purposes.
Final report type	1.0	Report for all reach and stream summaries.	For reporting purposes.
Special report type	3.0		Hydraulic parameters
BOD oxygen uptake rate	1.0	Indicates model inputs are in ultimate BOD.	Modeler's Preference
KL Minimum	0.7	Minimum KL to be used.	The minimum KL of 2.3 ft/day converted to 0.70 m/day.
NCM Oxygen uptake rate	1.0	Indicates model inputs are in ultimate BOD.	Modeler's Preference
Inhibition control value	3.0	Inhibits all decay rates except SOD for low DO.	Standard LA modeling procedure.
Dispersion equation	1.0	Set the dispersion eq. to E=a.	Let model determine the advective dispersion based on velocities and Manning's coefficients.
Ocean exchange ratio	0.0	Set 0% tidal exchange at lower boundary.	This was done to allow dispersion in the model but not to force the bottom element through the boundary conditions.
Hydraulic calculation method	2.0	Sets the Hydraulic calc. to width and depth coef	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.
Settled rate units.	1.0	Sets the settled rate to a velocity (m/day).	By making the settling rate a velocity the rate becomes dependent upon the depth. Due to the depths in this waterbody, it was felt that this method would be a more appropriate representation of the actual conditions.
Algae oxygen prod	0.050	Sets the net oxygen production per chlorophyll a.	Recommended model default value.
Effective BOD due to Algae	0.0	Sets the effect that decaying algae will have on BOD.	Algal processes are not normally included in Louisiana's projection runs.

## Big Creek Water Quality Summer Projection Model Input Description

<b>DATA TYPE 4, Temperature Correction Constants</b>		
<b>Description of Coefficient</b>	<b>Value</b>	<b>Source/Justification</b>
No theta's were manually inputed.		This version of LAQUAL 4.12 had the Lousiana standard theta's built into its programming.

# Big Creek Water Quality Summer Projection Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 RKM 118	Width Coef "A"	Unitless	3.926	Value based on the flow to width relationship from a hydraulic station at the LA Highway 134 bridge.
		Width Exp "B"	Unitless	0.570	"
		Width Const "C"	Meter	6.100	Value determined via calibration.
		Depth Coef "D"	Unitless	0.344	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 134 bridge.
		Depth Exp "E"	Unitless	0.905	"
		Depth Const "F"	Meter	0.3	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
2	BIG CREEK, RKM 100 TO MITCHNER	Width Coef "A"	Unitless	3.926	Value based on the flow to width relationship from a hydraulic station at the LA Highway 134 bridge.
		Width Exp "B"	Unitless	0.570	"
		Width Const "C"	Meter	14.750	Value determined via calibration.
		Depth Coef "D"	Unitless	0.344	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 134 bridge.
		Depth Exp "E"	Unitless	0.905	"
		Depth Const "F"	Meter	0.4	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
3	BIG CREEK, MITCHNER TO RKM 67.4	Width Coef "A"	Unitless	3.926	Value based on the flow to width relationship from a hydraulic station at the LA Highway 134 bridge.
		Width Exp "B"	Unitless	0.570	"
		Width Const "C"	Meter	12.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.344	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 134 bridge.
		Depth Exp "E"	Unitless	0.905	"
		Depth Const "F"	Meter	0.35	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
4	BIG CREEK, RKM 67.4 TO WEIR #6	Width Coef "A"	Unitless	3.926	Value based on the flow to width relationship from a hydraulic station at the LA Highway 134 bridge.
		Width Exp "B"	Unitless	0.570	"
		Width Const "C"	Meter	33.000	Value determined via calibration.
		Depth Coef "D"	Unitless	0.344	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 134 bridge.
		Depth Exp "E"	Unitless	0.905	"
		Depth Const "F"	Meter	0.5	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.

# Big Creek Water Quality Summer Projection Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
5	WEIR #6	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	30.000	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	0.42	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
6	BIG CREEK, WEIR #6 TO WEIR #5	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	30.000	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	0.42	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
7	WEIR #5	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	30.000	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
8	BIG CREEK, WEIR #5 TO WEIR #4	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	30.000	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.

# Big Creek Water Quality Summer Projection Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
9	WEIR #4	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	30.000	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
10	BIG CREEK, WEIR #4 TO WEIR #3	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	38.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
11	WEIR #3	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	38.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
12	BIG CREEK, WEIR #3 TO WEIR #2	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	38.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.



# Big Creek Water Quality Summer Projection Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
13	WEIR #2	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	38.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
14	BIG CREEK, WEIR #2 TO WEIR #1	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	38.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
15	WEIR #1	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	38.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
16	BIG CREEK, WEIR #1 TO BOEUF RVR	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	38.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	0.7	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.

# Big Creek Water Quality Summer Projection Model Input Description

DATA TYPE 10, Dispersive Hydraulic Coefficients					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
					Allowed the model to calculate it's own dispersion coefficients from the velocities and Manning's numbers.

# Big Creek Water Quality Summer Projection Model Input Description

DATA TYPE 11, INITIAL CONDITIONS					
Reach #	REACH DESCRIPTION	Initial Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 RKM 118	Temperature	°Celcius	28.4	Ninety percentile Temperature values from LADEQ station # 0328 @ Bi Creek east of Rayville. 1993 - 1998 dataset
		Dissolved O <sub>2</sub>	mg/l	7	Ninety percent of Dissolved Oxygen saturation at projection temperature
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs
2	BIG CREEK, RKM 100 TO MITCHNER	Temperature	°Celcius	28.4	Ninety percentile Temperature values from LADEQ station # 0328 @ Bi Creek east of Rayville. 1993 - 1998 dataset
		Dissolved O <sub>2</sub>	mg/l	7	Ninety percent of Dissolved Oxygen saturation at projection temperature
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs
3	BIG CREEK, MITCHNER TO RKM 67.4	Temperature	°Celcius	28.4	Ninety percentile Temperature values from LADEQ station # 0328 @ Bi Creek east of Rayville. 1993 - 1998 dataset
		Dissolved O <sub>2</sub>	mg/l	7	Ninety percent of Dissolved Oxygen saturation at projection temperature
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs
4	BIG CREEK, RKM 67.4 TO WEIR #6	Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	6.68	Ninety percent of Dissolved Oxygen saturation at projection temperature
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs
5	WEIR #6	Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	6.68	Ninety percent of Dissolved Oxygen saturation at projection temperature
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs
6	BIG CREEK, WEIR #6 TO WEIR #5	Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	6.68	Ninety percent of Dissolved Oxygen saturation at projection temperature
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs
7	WEIR #5	Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	6.68	Ninety percent of Dissolved Oxygen saturation at projection temperature
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs
8	BIG CREEK, WEIR #5 TO WEIR #4	Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	6.68	Ninety percent of Dissolved Oxygen saturation at projection temperature
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs
9	WEIR #4	Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	6.68	Ninety percent of Dissolved Oxygen saturation at projection temperature

# Big Creek Water Quality Summer Projection Model Input Description

DATA TYPE 11, INITIAL CONDITIONS					
Reach #	REACH DESCRIPTION	Initial Parameter	Units	Value	Source/Justification
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs
10	BIG CREEK, WEIR #4 TO WEIR #3	Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	6.68	Ninety percent of Dissolved Oxygen saturation at projection temperature
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs
11	WEIR #3	Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	6.68	Ninety percent of Dissolved Oxygen saturation at projection temperature
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs
12	BIG CREEK, WEIR #3 TO WEIR #2	Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	6.68	Ninety percent of Dissolved Oxygen saturation at projection temperature
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs
13	WEIR #2	Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	6.68	Ninety percent of Dissolved Oxygen saturation at projection temperature
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs
14	BIG CREEK, WEIR #2 TO WEIR #1	Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	6.68	Ninety percent of Dissolved Oxygen saturation at projection temperature
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs
15	WEIR #1	Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	6.68	Ninety percent of Dissolved Oxygen saturation at projection temperature
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs
16	BIG CREEK, WEIR #1 TO BOEUF RVR	Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	6.68	Ninety percent of Dissolved Oxygen saturation at projection temperature
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs

# Big Creek Water Quality Summer Projection Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 RKM 118	K <sub>2</sub> option	Unitless	15	The velocity and depths are within the range of the Louisiana Equations limits.
		Oxygen Transfer coef.	m/day	0.7	The minimum KL of 2.3 ft/day converted to 0.70 m/day.
		Background SOD	g/m <sup>2</sup> -day	1.23	75 % reduction in man-made non-point loading.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
2	BIG CREEK, RKM 100 TO MITCHNER	K <sub>2</sub> option	Unitless	15	The velocity and depths are within the range of the Louisiana Equations limits.
		Oxygen Transfer coef.	m/day	0.7	The minimum KL of 2.3 ft/day converted to 0.70 m/day.
		Background SOD	g/m <sup>2</sup> -day	1.16	75 % reduction in man-made non-point loading.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
3	BIG CREEK, MITCHNER TO RKM 67.4	K <sub>2</sub> option	Unitless	15	The velocity and depths are within the range of the Louisiana Equations limits.
		Oxygen Transfer coef.	m/day	0.7	The minimum KL of 2.3 ft/day converted to 0.70 m/day.
		Background SOD	g/m <sup>2</sup> -day	0.55	35 % reduction in man-made non-point loading.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
4	BIG CREEK, RKM 67.4 TO WEIR #6	K <sub>2</sub> option	Unitless	15	The velocity and depths are within the range of the Louisiana Equations limits.
		Oxygen Transfer coef.	m/day	0.7	The minimum KL of 2.3 ft/day converted to 0.70 m/day.
		Background SOD	g/m <sup>2</sup> -day	0.52	35 % reduction in man-made non-point loading.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
5	WEIR #6	K <sub>2</sub> option	Unitless	15	The velocity and depths are within the range of the Louisiana Equations limits.
		Oxygen Transfer coef.	m/day	0.7	The minimum KL of 2.3 ft/day converted to 0.70 m/day.
		Background SOD	g/m <sup>2</sup> -day	0.00	BPJ. Did not apply benthic loading in one element weir reaches.
		Aerobic BOD decay	1/day	0.07	Average of sites 05-MR-10,11,12,13.
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
6	BIG CREEK, WEIR #6 TO WEIR #5	K <sub>2</sub> option	Unitless	15	The velocity and depths are within the range of the Louisiana Equations limits.
		Oxygen Transfer coef.	m/day	0.7	The minimum KL of 2.3 ft/day converted to 0.70 m/day.
		Background SOD	g/m <sup>2</sup> -day	0.82	35 % reduction in man-made non-point loading.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
7	WEIR #5	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.10	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for seasonal average water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date, from the climate station in Shreveport. The 1 meter velocity was adjusted to a 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.00	BPJ. Did not apply benthic loading in one element weir reaches.

# Big Creek Water Quality Summer Projection Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
8	BIG CREEK, WEIR #5 TO WEIR #4	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.10	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for seasonal average water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date, from the climate station in Shreveport. The 1 meter velocity was adjusted to a 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.79	35 % reduction in man-made non-point loading.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
9	WEIR #4	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.10	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for seasonal average water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date, from the climate station in Shreveport. The 1 meter velocity was adjusted to a 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.00	BPI. Did not apply benthic loading in one element weir reaches.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
10	BIG CREEK, WEIR #4 TO WEIR #3	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.10	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for seasonal average water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date, from the climate station in Shreveport. The 1 meter velocity was adjusted to a 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.73	35 % reduction in man-made non-point loading.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
11	WEIR #3	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.

# Big Creek Water Quality Summer Projection Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
		Oxygen Transfer coef.	m/day	1.10	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for seasonal average water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date, from the climate station in Shreveport. The 1 meter velocity was adjusted to a 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.00	BPI. Did not apply benthic loading in one element weir reaches.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
12	BIG CREEK, WEIR #3 TO WEIR #2	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.10	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for seasonal average water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date, from the climate station in Shreveport. The 1 meter velocity was adjusted to a 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.76	35 % reduction in man-made non-point loading.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
13	WEIR #2	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.10	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for seasonal average water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date, from the climate station in Shreveport. The 1 meter velocity was adjusted to a 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.00	BPI. Did not apply benthic loading in one element weir reaches.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
14	BIG CREEK, WEIR #2 TO WEIR #1	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.

# Big Creek Water Quality Summer Projection Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
		Oxygen Transfer coef.	m/day	1.10	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for seasonal average water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date, from the climate station in Shreveport. The 1 meter velocity was adjusted to a 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.92	35 % reduction in man-made non-point loading.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
15	WEIR #1	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.10	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for seasonal average water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date, from the climate station in Shreveport. The 1 meter velocity was adjusted to a 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.00	BPJ. Did not apply benthic loading in one element weir reaches.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
16	BIG CREEK, WEIR#1 TO BOEUF RVR	K <sub>2</sub> option	Unitless	15	The velocity and depths are within the range of the Louisiana Equations limits.
		Oxygen Transfer coef.	m/day	0.70	The minimum KL of 2.3 ft/day converted to 0.70 m/day.
		Background SOD	g/m <sup>2</sup> -day	0.82	35 % reduction in man-made non-point loading.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.



# Big Creek Water Quality Summer Projection Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
	Not needed, used NBOD as NCM.				

# Big Creek Water Quality Summer Projection Model Input Description

DATA TYPE 15, Coliform and Nonconservative Coefficients					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 RKM 118	NCM Decay	1/day	0.28	Average of sites 10-14, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
2	BIG CREEK, RKM 100 TO MITCHNER	NCM Decay	1/day	0.28	Average of sites 10-14, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
3	BIG CREEK, MITCHNER TO RKM 67.4	NCM Decay	1/day	0.28	Average of sites 10-14, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
4	BIG CREEK, RKM 67.4 TO WEIR #6	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
5	WEIR #6	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
6	BIG CREEK, WEIR #6 TO WEIR #5	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
7	WEIR #5	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
8	BIG CREEK, WEIR #5 TO WEIR #4	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.

# Big Creek Water Quality Summer Projection Model Input Description

DATA TYPE 15, Coliform and Nonconservative Coefficients					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
9	WEIR #4	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
10	BIG CREEK, WEIR #4 TO WEIR #3	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
11	WEIR #3	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
12	BIG CREEK, WEIR #3 TO WEIR #2	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
13	WEIR #2	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
14	BIG CREEK, WEIR #2 TO WEIR #1	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
15	WEIR #1	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
16	BIG CREEK, WEIR#1 TO BOEUF RVR	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.

# Big Creek 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	BIG CREEK, RKM 134.2 RKM 118	Incremental Inflow	m <sup>3</sup> /s	0.0000	Based on the USGS 7Q10 estimated flow at Hwy 80, it was determined that the incremental flow during critical conditions, within this reach, would be negligible.
		Temperature	°Celsius	28.4	Ninety percentile Temperature values from LADEQ station # 0328 @ Bi Creek east of Rayville. 1993 - 1998 dataset
2	BIG CREEK, RKM 100 TO MITCHNER	Incremental Inflow	m <sup>3</sup> /s	0.0000	Based on the USGS 7Q10 estimated flow at Hwy 80, it was determined that the incremental flow during critical conditions, within this reach, would be negligible.
		Temperature	°Celsius	28.4	Ninety percentile Temperature values from LADEQ station # 0328 @ Bi Creek east of Rayville. 1993 - 1998 dataset
3	BIG CREEK, MITCHNER TO RKM 67.4	Incremental Inflow	m <sup>3</sup> /s	0.0000	Based on the USGS 7Q10 estimated flow at Hwy 80, it was determined that the incremental flow during critical conditions, within this reach, would be negligible.
		Temperature	°Celsius	28.4	Ninety percentile Temperature values from LADEQ station # 0328 @ Bi Creek east of Rayville. 1993 - 1998 dataset
4	BIG CREEK, RKM 67.4 TO WEIR #6	Incremental Inflow	m <sup>3</sup> /s	0.1190	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {0.1cfs x six tributaries, 0.1 cfs x one headwater and the one dischargers estimated flow} from the estimated summer season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
5	WEIR #6	Incremental Inflow	m <sup>3</sup> /s	0.0017	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {0.1cfs x six tributaries, 0.1 cfs x one headwater and the one dischargers estimated flow} from the estimated summer season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.

# Big Creek 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
6	BIG CREEK, WEIR #6 TO WEIR #5	Incremental Inflow	m <sup>3</sup> /s	0.1520	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {0.1cfs x six tributaries, 0.1 cfs x one headwater and the one dischargers estimated flow} from the estimated summer season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
7	WEIR #5	Incremental Inflow	m <sup>3</sup> /s	0.0017	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {0.1cfs x six tributaries, 0.1 cfs x one headwater and the one dischargers estimated flow} from the estimated summer season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
8	BIG CREEK, WEIR #5 TO WEIR #4	Incremental Inflow	m <sup>3</sup> /s	0.2197	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {0.1cfs x six tributaries, 0.1 cfs x one headwater and the one dischargers estimated flow} from the estimated summer season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
9	WEIR #4	Incremental Inflow	m <sup>3</sup> /s	0.0017	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {0.1cfs x six tributaries, 0.1 cfs x one headwater and the one dischargers estimated flow} from the estimated summer season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.

# Big Creek 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
10	BIG CREEK, WEIR #4 TO WEIR #3	Incremental Inflow	m <sup>3</sup> /s	0.1024	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {0.1cfs x six tributaries, 0.1 cfs x one headwater and the one dischargers estimated flow} from the estimated summer season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
11	WEIR #3	Incremental Inflow	m <sup>3</sup> /s	0.0017	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {0.1cfs x six tributaries, 0.1 cfs x one headwater and the one dischargers estimated flow} from the estimated summer season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
12	BIG CREEK, WEIR #3 TO WEIR #2	Incremental Inflow	m <sup>3</sup> /s	0.1487	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {0.1cfs x six tributaries, 0.1 cfs x one headwater and the one dischargers estimated flow} from the estimated summer season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
13	WEIR #2	Incremental Inflow	m <sup>3</sup> /s	0.0017	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {0.1cfs x six tributaries, 0.1 cfs x one headwater and the one dischargers estimated flow} from the estimated summer season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.

# Big Creek 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
14	BIG CREEK, WEIR #2 TO WEIR #1	Incremental Inflow	m <sup>3</sup> /s	0.2792	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {0.1cfs x six tributaries, 0.1 cfs x one headwater and the one dischargers estimated flow} from the estimated summer season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
15	WEIR #1	Incremental Inflow	m <sup>3</sup> /s	0.0017	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {0.1cfs x six tributaries, 0.1 cfs x one headwater and the one dischargers estimated flow} from the estimated summer season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
16	BIG CREEK, WEIR#1 TO BOEUF RVR	Incremental Inflow	m <sup>3</sup> /s	0.0826	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {0.1cfs x six tributaries, 0.1 cfs x one headwater and the one dischargers estimated flow} from the estimated summer season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.

# Big Creek Water Quality Summer Projection Model Input Description

DATA TYPE 17, Incremental Data for DO, BOD, Nitrogen					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1-16	Big Creek, Hwy 879 to confluence with the Boeuf River	Dissolved O <sub>2</sub>	mg/l	0	Assumed groundwater inflow to be anaerobic.
		BOD	mg/l	0	No data was available to determine these values. Assumed groundwater inflow to be void BOD loading. Any loading that may be entering the stream from this source will be simulated with the projection non-point loads not associated with flows.



## Big Creek Water Quality Summer Projection Model Input Description

DATA TYPE 18, Incremental Data for Phosphorus, Chlorophyll, Coliform, and Nonconservatives					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1-16	Big Creek, Hwy 879 to confluence with the Boeuf River	NCM	mg/l	0	No data was available to determine these values. Assumed groundwater inflow to be void NCM loading. Any loading that may be entering the stream from this source will be simulated with the calibrated non-point loads not associated with flows.

# Big Creek Water Quality Summer Projection Model Input Description

DATA TYPE 19, Nonpoint Source Data					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 RKM 118	BOD	kg/day	43	75 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	20	75 % reduction in man-made non-point loading.
2	BIG CREEK, RKM 100 TO MITCHNER	BOD	kg/day	335	75 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	106	75 % reduction in man-made non-point loading.
3	BIG CREEK, MITCHNER TO RKM 67.4	BOD	kg/day	188	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	51	35 % reduction in man-made non-point loading.
4	BIG CREEK, RKM 67.4 TO WEIR #6	BOD	kg/day	319	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	59	35 % reduction in man-made non-point loading.
5	WEIR #6	BOD	kg/day	0	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	0	35 % reduction in man-made non-point loading.
6	BIG CREEK, WEIR #6 TO WEIR #5	BOD	kg/day	394	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	42	35 % reduction in man-made non-point loading.
7	WEIR #5	BOD	kg/day	0	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	0	35 % reduction in man-made non-point loading.
8	BIG CREEK, WEIR #5 TO WEIR #4	BOD	kg/day	832	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	130	35 % reduction in man-made non-point loading.
9	WEIR #4	BOD	kg/day	0	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	0	35 % reduction in man-made non-point loading.
10	BIG CREEK, WEIR #4 TO WEIR #3	BOD	kg/day	441	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	36	35 % reduction in man-made non-point loading.
11	WEIR #3	BOD	kg/day	0	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	0	35 % reduction in man-made non-point loading.
12	BIG CREEK, WEIR #3 TO WEIR #2	BOD	kg/day	672	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	52	35 % reduction in man-made non-point loading.
13	WEIR #2	BOD	kg/day	0	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	0	35 % reduction in man-made non-point loading.
14	BIG CREEK, WEIR #2 TO WEIR #1	BOD	kg/day	1145	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	199	35 % reduction in man-made non-point loading.
15	WEIR #1	BOD	kg/day	0	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	0	35 % reduction in man-made non-point loading.
16	BIG CREEK, WEIR #1 TO BOEUF RVR	BOD	kg/day	286	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	4	35 % reduction in man-made non-point loading.

# Big Creek Water Quality Summer Projection Model Input Description

DATA TYPE 20, Headwater Data for Flow, Temperature, Salinity, and Conservatives					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 RKM 118	Element # of input		1	Big Creek
		Headwater name		Big Creek	
		Headwater flow	cms	0.0028	LDEQ's LTP summer default value of 0.1 cfs.
		Temperature	°Celcius	28.40	Summer seasonal ninety percentile Temperature values from LADE station # 0328 @ Big Creek east of Rayville. 1993 - 1998 dataset

## Big Creek Water Quality Summer Projection Model Input Description

DATA TYPE 21, Headwater Data for DO, BOD, and Nitrogen					
Reach #	NAME	Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 RKM 118	Element # of input		1	Big Creek
		Dissolved O <sub>2</sub>	mg/l	7	Ninety percent of Dissolved Oxygen saturation at projection temperature
		BOD	mg/l	8.87	Since the survey was taken at or near critical conditions the measured parameter value from Site 15 during Sept. 1999 survey was used.

# Big Creek Water Quality Summer Projection Model Input Description

DATA TYPE 22, Headwater Data for Phosphorus, Chlorophyll, Coliform, and Nonconservatives					
Reach #	NAME	Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 RKM 118	Element # of input		1	Big Creek
		NCM	mg/l	3.41	Since the survey was taken at or near critical conditions the measured parameter value from Site 15 during Sept. 1999 survey was used.

# Big Creek 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
1	BIG CREEK, RKM 134.2 to RKM 118	Element # of input		162	
		Wasteload description		Tributary, Little Colewa Creek 1	
		Wasteload inflow	cms	0.0028	LDEQ's LTP default value of 0.1 cfs.
		Temperature	°Celcius	28.4	Ninety percentile Temperature values from LADEQ station # 0328 @ Big Creek east of Rayville. 1993 - 1998 dataset
3	BIG CREEK, MITCHNER TO RKM 67.4	Element # of input		585	
		Wasteload description		Tributary, Little Colewa Creek 2	
		Wasteload inflow	cms	0.0028	LDEQ's LTP default value of 0.1 cfs.
		Temperature	°Celcius	28.4	Ninety percentile Temperature values from LADEQ station # 0328 @ Big Creek east of Rayville. 1993 - 1998 dataset
6	BIG CREEK, WEIR #6 TO WEIR #5	Element # of input		760	
		Wasteload description		Tributary, Cypress Creek	
		Wasteload inflow	cms	0.0028	LDEQ's LTP default value of 0.1 cfs.
		Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
8	BIG CREEK, WEIR #5 TO WEIR #4	Element # of input		861	
		Wasteload description		Tributary, Cow Bayou	
		Wasteload inflow	cms	0.0028	LDEQ's LTP default value of 0.1 cfs.
		Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
10	BIG CREEK, WEIR #4 TO WEIR #3	Element # of input		1014	
		Wasteload description		Tributary, Bee Bayou	
		Wasteload inflow	cms	0.0028	LDEQ's LTP default value of 0.1 cfs.
		Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
12	BIG CREEK, WEIR #3 TO WEIR #2	Element # of input		1043	
		Wasteload description		Town of Mangham	
		Wasteload inflow	cms	0.0035	Flow used was the design flow x 1.25 from the permit application. Equal a 20% margin of safety.
		Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.

## Big Creek Water Quality Summer Projection Model Input Description

DATA TYPE 24, Wastewater Data for Flow, Temperature, Salinity, and Conservatives					
14	BIG CREEK, WEIR #2 TO WEIR #1	Element # of input		1128	
		Wasteload description		Tributary, Turkey Creek	
		Wasteload inflow	cms	0.0028	LDEQ's LTP default value of 0.1 cfs.
		Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
14	BIG CREEK, WEIR #2 TO WEIR #1	Element # of input		1204	
		Wasteload description		Tributary, Little Creek	
		Wasteload inflow	cms	0.0028	LDEQ's LTP default value of 0.1 cfs.
		Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.

# Big Creek 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
1	BIG CREEK, RKM 134.2 to RKM 118	Element # of input		162	
		Wasteload description		Tributary, Little Colewa Creek 1	
		Dissolved O <sub>2</sub>	mg/l	7	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		BOD	mg/l	6.4	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.
3	BIG CREEK, MITCHNER TO RKM 67.4	Element # of input		585	
		Wasteload description		Tributary, Little Colewa Creek 2	
		Dissolved O <sub>2</sub>	mg/l	7	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		BOD	mg/l	6.4	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.
6	BIG CREEK, WEIR #6 TO WEIR #5	Element # of input		760	
		Wasteload description		Tributary, Cypress Creek	
		Dissolved O <sub>2</sub>	mg/l	6.68	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		BOD	mg/l	6.4	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.
8	BIG CREEK, WEIR #5 TO WEIR #4	Element # of input		861	
		Wasteload description		Tributary, Cow Bayou	
		Dissolved O <sub>2</sub>	mg/l	6.68	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		BOD	mg/l	6.4	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.
10	BIG CREEK, WEIR #4 TO WEIR #3	Element # of input		1014	
		Wasteload description		Tributary, Bee Bayou	
		Dissolved O <sub>2</sub>	mg/l	6.68	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		BOD	mg/l	6.74	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.
12	BIG CREEK, WEIR #3 TO WEIR #2	Element # of input		1043	
		Wasteload description		Town of Mangham	
		Dissolved O <sub>2</sub>	mg/l	2	BPJ
		BOD	mg/l	69	Permit limits: 30 mg/l (BOD5) x 2.3.



# Big Creek 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
14	BIG CREEK, WEIR #2 TO WEIR #1	Element # of input		1128	
		Wasteload description		Tributary, Turkey Creek	
		Dissolved O <sub>2</sub>	mg/l	6.68	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		BOD	mg/l	6.4	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.
14	BIG CREEK, WEIR #2 TO WEIR #1	Element # of input		1204	
		Wasteload description		Tributary, Little Creek	
		Dissolved O <sub>2</sub>	mg/l	6.68	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		BOD	mg/l	6.4	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.

## Big Creek 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
1	BIG CREEK, RKM 134.2 TO RKM 118	Element # of input		162	
		Wasteload description		Tributary, Little Colewa Creek 1	
		NCM	mg/l	0.46	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.
3	BIG CREEK, MITCHNER TO RKM 67.4	Element # of input		585	
		Wasteload description		Tributary, Little Colewa Creek 2	
		NCM	mg/l	0.46	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.
6	BIG CREEK, WEIR #6 TO WEIR #5	Element # of input		760	
		Wasteload description		Tributary, Cypress Creek	
		NCM	mg/l	0.46	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.
8	BIG CREEK, WEIR #5 TO WEIR #4	Element # of input		861	
		Wasteload description		Tributary, Cow Bayou	
		NCM	mg/l	0.46	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.
10	BIG CREEK, WEIR #4 TO WEIR #3	Element # of input		1014	
		Wasteload description		Tributary, Bee Bayou	
		NCM	mg/l	0.07	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.
12	BIG CREEK, WEIR #3 TO WEIR #2	Element # of input		1043	
		Wasteload description		Town of Mangham	
		NCM	mg/l	64.5	Permit limits: 15 mg/l (BOD5) x 4.3.
14	BIG CREEK, WEIR #2 TO WEIR #1	Element # of input		1128	
		Wasteload description		Tributary, Turkey Creek	
		NCM	mg/l	0.46	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.

## Big Creek 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
14	BIG CREEK, WEIR #2 TO WEIR #1	Element # of input		1204	
		Wasteload description		Tributary, Little Creek	
		NCM	mg/l	0.46	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.

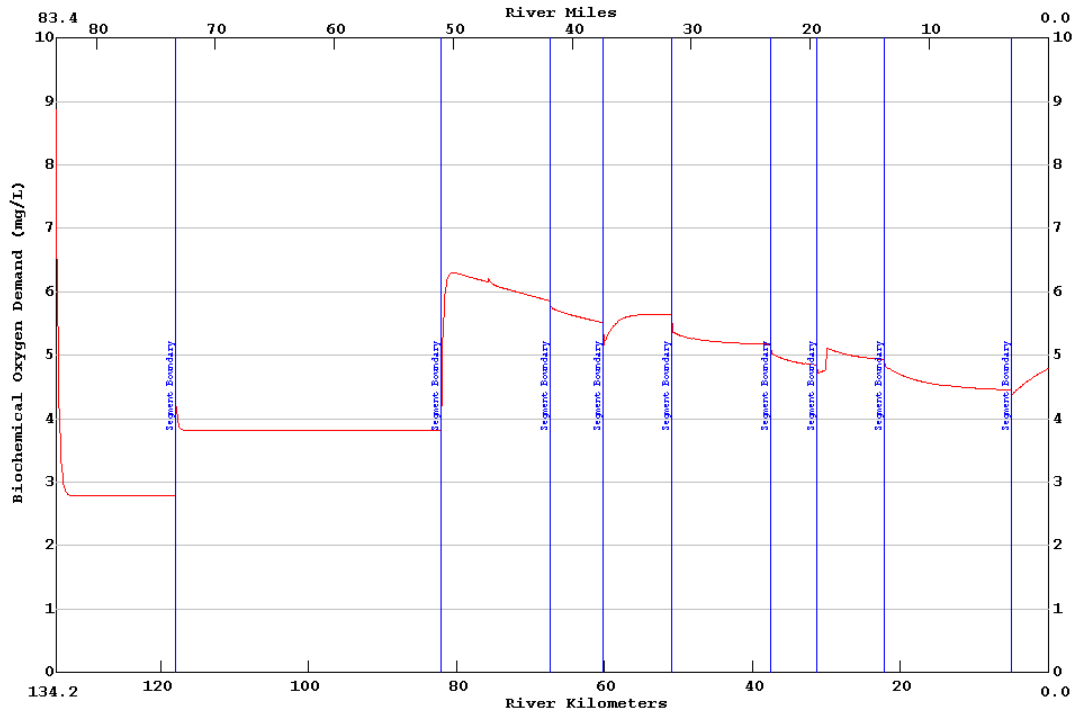
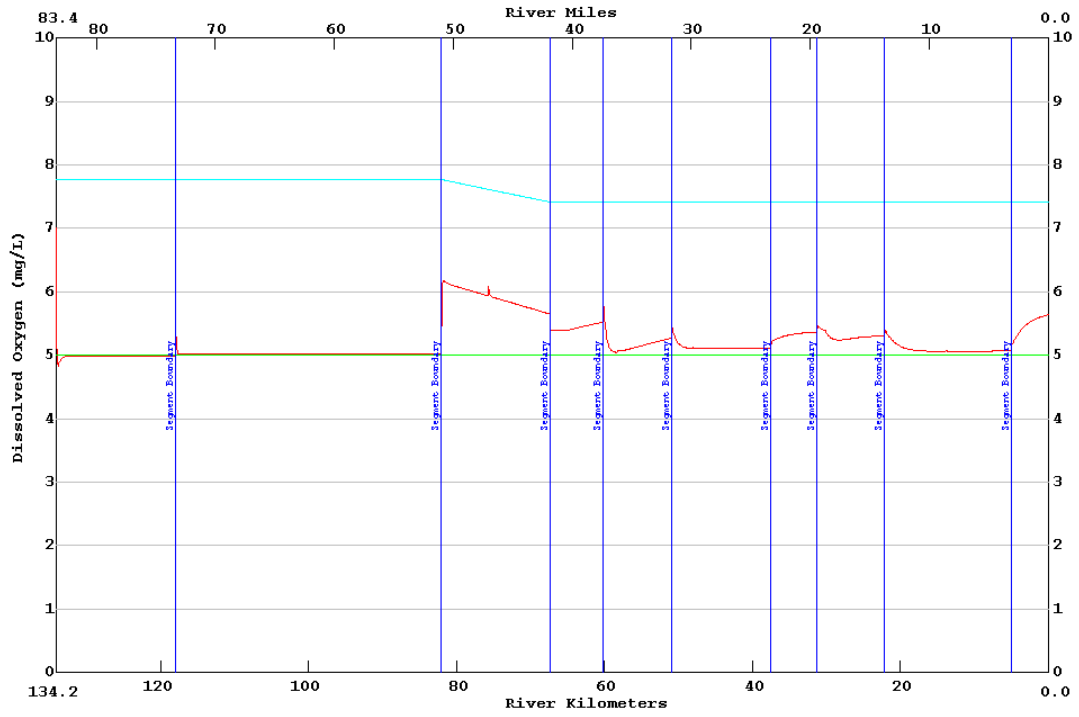
# Mermentau River Water Quality Calibration Model Input Description

DATA TYPE 27, Lower Boundary Conditions					
Reach #	NAME	Parameter	Units	Value	Source/Justification
3	Mermentau River, river km 4.0 to 0.0	Temperature	°Celcius	31.1	Ninety percentile Temperature values from LADEQ station # 0069 @ Bi Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		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		0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		Dissolved O <sub>2</sub>	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.
		Org.- N	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		NH <sub>3</sub> -N	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		NO <sub>2+3</sub> -N	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs.
		NCM	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.

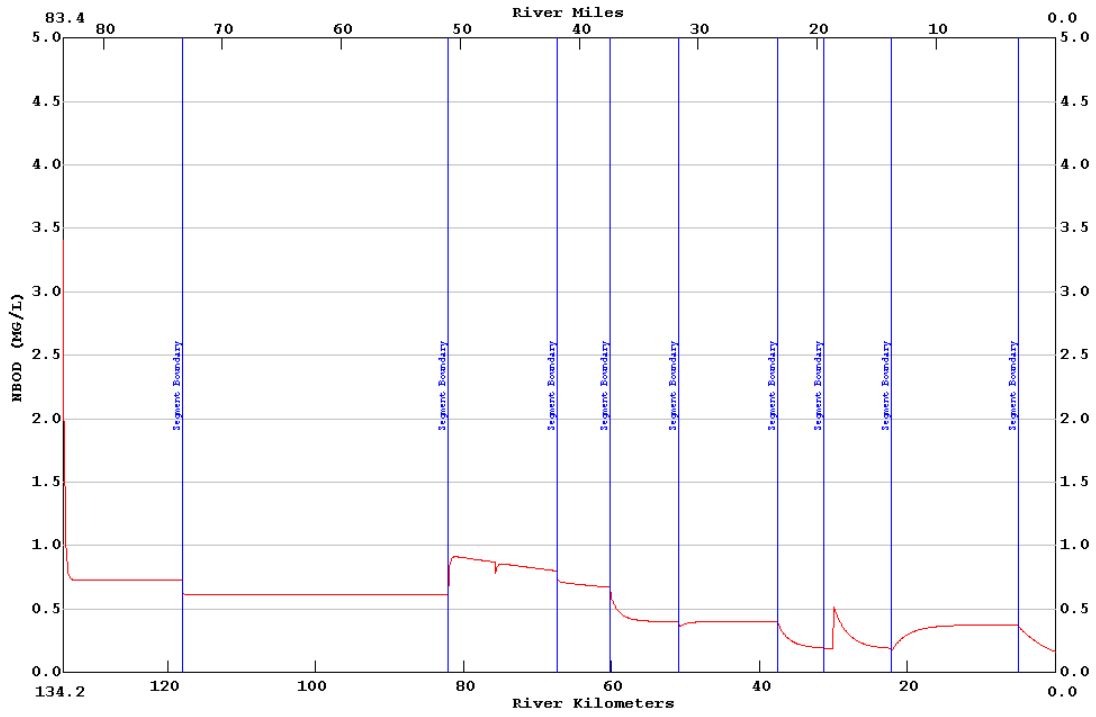
## Appendix B4

### Projection Model Development

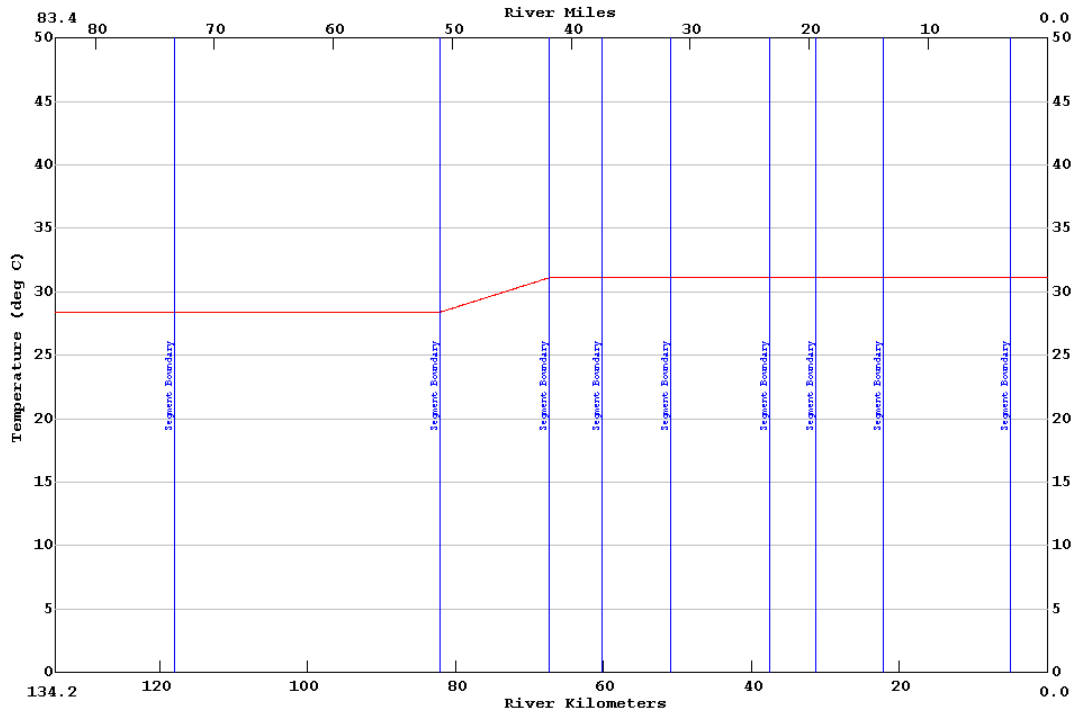
#### **Summer projection output graphs**



LA-QUAL Version 4.12 Run at 08:40 on 05/01/2001 File D:\laqual1\bigcrksmrproj4.txt  
 Summer Projection Model min= 0.16 max= 3.41  
 :MAINSTEM



LA-QUAL Version 4.12 Run at 08:40 on 05/01/2001 File D:\laqual1\bigcrksmrproj4.txt  
 Summer Projection Model min= 28.40 max= 31.10  
 :MAINSTEM



## Appendix B5

### Projection Model Development

#### **Winter projection model input/output**



LA-QUAL Version 4.12  
Louisiana Department of Environmental Quality

Input file is D:\laqual1\bigcrkwtrproj3.txt  
Output produced at 08:30 on 04/11/2001

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

CARD TYPE CONTROL TITLES

TITLE01 Big Creek - STREAM MODEL

**TITLE02 Winter Projection Model**

CNTROL11 NO SEQUENCING OUTPUT  
CNTROL12 YES METRIC UNITS  
CNTROL13 YES OXYGEN DEPENDENT RATES  
ENDATA01

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

CARD TYPE MODEL OPTION

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

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

CARD TYPE	DESCRIPTION OF CONSTANT	VALUE
PROGRAM	MAXIMUM ITERATION LIMIT	= 200.00000
PROGRAM	PLOT TYPE	= 3.00000
PROGRAM	FINAL REPORT TYPE	= 1.00000
PROGRAM	SPECIAL REPORT TYPE	= 3.00000
PROGRAM	BOD OXYGEN UPTAKE RATE	= 1.00000
PROGRAM	KL MINIMUM	= 0.70000
PROGRAM	NCM OXYGEN UPTAKE RATE	= 1.00000
PROGRAM	INHIBITION CONTROL VALUE	= 3.00000
PROGRAM	DISPERSION EQUATION	= 1.00000
PROGRAM	OCEAN EXCHANGE RATIO	= 0.00000
PROGRAM	HYDRAULIC CALCULATION METHOD	= 2.00000
PROGRAM	SETTLED RATE UNITS	= 1.00000
PROGRAM	ALGAE OXYGEN PROD	= 0.05000
PROGRAM	EFFECTIVE BOD DUE TO ALGAE	= 0.00000
ENDATA03		



HYDR-1	2	BC	3.926	0.570	14.750	0.344	0.905	0.400	0.00000	0.030
***** WARNING: VELOCITY AND DEPTH EXPONENTS ADD TO GREATER THAN 1.0 IN REACH 3										
HYDR-1	3	BC	3.926	0.570	12.500	0.344	0.905	0.350	0.00000	0.030
***** WARNING: VELOCITY AND DEPTH EXPONENTS ADD TO GREATER THAN 1.0 IN REACH 4										
HYDR-1	4	BC	3.926	0.570	33.000	0.344	0.905	0.500	0.00000	0.030
HYDR-1	5	BC	2.500	0.277	30.000	0.165	0.156	0.420	0.00000	0.030
HYDR-1	6	BC	2.500	0.277	30.000	0.165	0.156	0.420	0.00000	0.030
HYDR-1	7	BC	2.500	0.277	30.000	0.165	0.156	1.600	0.00000	0.030
HYDR-1	8	BC	2.500	0.277	30.000	0.165	0.156	1.600	0.00000	0.030
HYDR-1	9	BC	2.500	0.277	30.000	0.165	0.156	1.600	0.00000	0.030
HYDR-1	10	BC	2.500	0.277	38.500	0.165	0.156	1.600	0.00000	0.030
HYDR-1	11	BC	2.500	0.277	38.500	0.165	0.156	1.600	0.00000	0.030
HYDR-1	12	BC	2.500	0.277	38.500	0.165	0.156	1.600	0.00000	0.030
HYDR-1	13	BC	2.500	0.277	38.500	0.165	0.156	1.600	0.00000	0.030
HYDR-1	14	BC	2.500	0.277	38.500	0.165	0.156	1.600	0.00000	0.030
HYDR-1	15	BC	2.500	0.277	38.500	0.165	0.156	1.600	0.00000	0.030
HYDR-1	16	BC	2.500	0.277	38.500	0.165	0.156	0.700	0.00000	0.030

ENDATA09

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

CARD TYPE	REACH	ID	TIDAL RANGE	DISPERSION "A"	DISPERSION "B"	DISPERSION "C"	DISPERSION "D"
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ENDATA10

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

CARD TYPE	REACH	ID	TEMP	SALIN	DO	NH3	NO3+2	PHOS	CHL A	MACRO
INITIAL	1	BC	17.50	0.00	8.61	0.00	0.00	0.00	0.00	0.00
INITIAL	2	BC	17.50	0.00	8.61	0.00	0.00	0.00	0.00	0.00
INITIAL	3	BC	17.50	0.00	8.61	0.00	0.00	0.00	0.00	0.00
INITIAL	4	BC	17.30	0.00	8.64	0.00	0.00	0.00	0.00	0.00
INITIAL	5	BC	17.30	0.00	8.64	0.00	0.00	0.00	0.00	0.00
INITIAL	6	BC	17.30	0.00	8.64	0.00	0.00	0.00	0.00	0.00
INITIAL	7	BC	17.30	0.00	8.64	0.00	0.00	0.00	0.00	0.00
INITIAL	8	BC	17.30	0.00	8.64	0.00	0.00	0.00	0.00	0.00
INITIAL	9	BC	17.30	0.00	8.64	0.00	0.00	0.00	0.00	0.00
INITIAL	10	BC	17.30	0.00	8.64	0.00	0.00	0.00	0.00	0.00
INITIAL	11	BC	17.30	0.00	8.64	0.00	0.00	0.00	0.00	0.00
INITIAL	12	BC	17.30	0.00	8.64	0.00	0.00	0.00	0.00	0.00
INITIAL	13	BC	17.30	0.00	8.64	0.00	0.00	0.00	0.00	0.00
INITIAL	14	BC	17.30	0.00	8.64	0.00	0.00	0.00	0.00	0.00
INITIAL	15	BC	17.30	0.00	8.64	0.00	0.00	0.00	0.00	0.00
INITIAL	16	BC	17.30	0.00	8.64	0.00	0.00	0.00	0.00	0.00

ENDATA11

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

CARD TYPE	REACH	ID	K2 OPT	K2 "A"	K2 "B"	K2 "C"	BKGRND SOD	AEROB BOD DECAY	BOD SETT	BOD CONV TO SOD	ANAER BOD DECAY
COEF-1	1	BC	15 LOUISIANA	0.700	0.000	0.000	1.230	0.070	0.100	0.000	0.000
COEF-1	2	BC	15 LOUISIANA	0.700	0.000	0.000	1.160	0.070	0.100	0.000	0.000

COEF-1	3	BC	15	LOUISIANA	0.700	0.000	0.000	0.550	0.070	0.100	0.000	0.000
COEF-1	4	BC	15	LOUISIANA	0.700	0.000	0.000	0.520	0.070	0.100	0.000	0.000
COEF-1	5	BC	15	LOUISIANA	0.700	0.000	0.000	0.000	0.070	0.100	0.000	0.000
COEF-1	6	BC	15	LOUISIANA	0.700	0.000	0.000	0.820	0.070	0.100	0.000	0.000
COEF-1	7	BC	20	K2=a/D	1.290	0.000	0.000	0.000	0.070	0.100	0.000	0.000
COEF-1	8	BC	20	K2=a/D	1.290	0.000	0.000	0.790	0.070	0.100	0.000	0.000
COEF-1	9	BC	20	K2=a/D	1.290	0.000	0.000	0.000	0.070	0.100	0.000	0.000
COEF-1	10	BC	20	K2=a/D	1.290	0.000	0.000	0.730	0.070	0.100	0.000	0.000
COEF-1	11	BC	20	K2=a/D	1.290	0.000	0.000	0.000	0.070	0.100	0.000	0.000
COEF-1	12	BC	20	K2=a/D	1.290	0.000	0.000	0.760	0.070	0.100	0.000	0.000
COEF-1	13	BC	20	K2=a/D	1.290	0.000	0.000	0.000	0.070	0.100	0.000	0.000
COEF-1	14	BC	20	K2=a/D	1.290	0.000	0.000	0.920	0.070	0.100	0.000	0.000
COEF-1	15	BC	20	K2=a/D	1.290	0.000	0.000	0.000	0.070	0.100	0.000	0.000
COEF-1	16	BC	15	LOUISIANA	0.700	0.000	0.000	0.820	0.070	0.100	0.000	0.000

ENDATA12

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

CARD TYPE	REACH	ID	ORG-N DECA	ORG-N SETT	ORGN CONV TO NH3 SRCE	NH3 DECA	NH3 SRCE	PHOS SRCE	DENIT RATE
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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
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ENDATA14

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

CARD TYPE	REACH	ID	COLIFORM DIE-OFF	NCM DECAY	NCM SETT	NCM CONV TO SOD
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COEF-4	1	BC	0.00	0.28	0.10	0.00
COEF-4	2	BC	0.00	0.28	0.10	0.00
COEF-4	3	BC	0.00	0.28	0.10	0.00
COEF-4	4	BC	0.00	0.16	0.10	0.00
COEF-4	5	BC	0.00	0.16	0.10	0.00
COEF-4	6	BC	0.00	0.16	0.10	0.00
COEF-4	7	BC	0.00	0.16	0.10	0.00
COEF-4	8	BC	0.00	0.16	0.10	0.00
COEF-4	9	BC	0.00	0.16	0.10	0.00
COEF-4	10	BC	0.00	0.16	0.10	0.00
COEF-4	11	BC	0.00	0.16	0.10	0.00
COEF-4	12	BC	0.00	0.16	0.10	0.00
COEF-4	13	BC	0.00	0.16	0.10	0.00
COEF-4	14	BC	0.00	0.16	0.10	0.00
COEF-4	15	BC	0.00	0.16	0.10	0.00
COEF-4	16	BC	0.00	0.16	0.10	0.00

ENDATA15

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

CARD TYPE	REACH	ID	OUTFLOW	INFLOW	TEMP	SALIN	CM-I	CM-II	IN/DIST	OUT/DIST
INCR-1	1	BC	0.00000	0.00000	17.50	0.00	0.00	0.00	0.00000	0.00000
INCR-1	2	BC	0.00000	0.00000	17.50	0.00	0.00	0.00	0.00000	0.00000
INCR-1	3	BC	0.00000	0.00000	17.50	0.00	0.00	0.00	0.00000	0.00000
INCR-1	4	BC	0.00000	0.26110	17.30	0.00	0.00	0.00	0.03626	0.00000
INCR-1	5	BC	0.00000	0.00360	17.30	0.00	0.00	0.00	0.03600	0.00000
INCR-1	6	BC	0.00000	0.33360	17.30	0.00	0.00	0.00	0.03626	0.00000
INCR-1	7	BC	0.00000	0.00360	17.30	0.00	0.00	0.00	0.03600	0.00000
INCR-1	8	BC	0.00000	0.48220	17.30	0.00	0.00	0.00	0.03626	0.00000
INCR-1	9	BC	0.00000	0.00360	17.30	0.00	0.00	0.00	0.03600	0.00000
INCR-1	10	BC	0.00000	0.22480	17.30	0.00	0.00	0.00	0.03685	0.00000
INCR-1	11	BC	0.00000	0.00360	17.30	0.00	0.00	0.00	0.03600	0.00000
INCR-1	12	BC	0.00000	0.32630	17.30	0.00	0.00	0.00	0.03586	0.00000
INCR-1	13	BC	0.00000	0.00360	17.30	0.00	0.00	0.00	0.03600	0.00000
INCR-1	14	BC	0.00000	0.61270	17.30	0.00	0.00	0.00	0.03604	0.00000
INCR-1	15	BC	0.00000	0.00360	17.30	0.00	0.00	0.00	0.03600	0.00000
INCR-1	16	BC	0.00000	0.18130	17.30	0.00	0.00	0.00	0.03700	0.00000

ENDATA16

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

CARD TYPE	REACH	ID	DO	BOD	ORG-N	NH3	NO3+2
INCR-2	1	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	2	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	3	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	4	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	5	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	6	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	7	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	8	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	9	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	10	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	11	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	12	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	13	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	14	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	15	BC	0.00	0.00	0.00	0.00	0.00
INCR-2	16	BC	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	BC	0.00	0.00	0.00	0.00
INCR-3	2	BC	0.00	0.00	0.00	0.00
INCR-3	3	BC	0.00	0.00	0.00	0.00
INCR-3	4	BC	0.00	0.00	0.00	0.00
INCR-3	5	BC	0.00	0.00	0.00	0.00
INCR-3	6	BC	0.00	0.00	0.00	0.00
INCR-3	7	BC	0.00	0.00	0.00	0.00
INCR-3	8	BC	0.00	0.00	0.00	0.00
INCR-3	9	BC	0.00	0.00	0.00	0.00

INCR-3	10	BC	0.00	0.00	0.00	0.00
INCR-3	11	BC	0.00	0.00	0.00	0.00
INCR-3	12	BC	0.00	0.00	0.00	0.00
INCR-3	13	BC	0.00	0.00	0.00	0.00
INCR-3	14	BC	0.00	0.00	0.00	0.00
INCR-3	15	BC	0.00	0.00	0.00	0.00
INCR-3	16	BC	0.00	0.00	0.00	0.00

ENDATA18

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

CARD TYPE	REACH	ID	BOD	ORG-N	COLI	NCM	DO
NONPOINT	1	BC	45.00	0.00	0.00	21.00	0.00
NONPOINT	2	BC	347.00	0.00	0.00	110.00	0.00
NONPOINT	3	BC	198.00	0.00	0.00	53.00	0.00
NONPOINT	4	BC	326.00	0.00	0.00	60.00	0.00
NONPOINT	5	BC	0.00	0.00	0.00	0.00	0.00
NONPOINT	6	BC	400.00	0.00	0.00	43.00	0.00
NONPOINT	7	BC	0.00	0.00	0.00	0.00	0.00
NONPOINT	8	BC	846.00	0.00	0.00	132.00	0.00
NONPOINT	9	BC	0.00	0.00	0.00	0.00	0.00
NONPOINT	10	BC	448.00	0.00	0.00	37.00	0.00
NONPOINT	11	BC	0.00	0.00	0.00	0.00	0.00
NONPOINT	12	BC	682.00	0.00	0.00	53.00	0.00
NONPOINT	13	BC	0.00	0.00	0.00	0.00	0.00
NONPOINT	14	BC	1163.00	0.00	0.00	202.00	0.00
NONPOINT	15	BC	0.00	0.00	0.00	0.00	0.00
NONPOINT	16	BC	291.00	0.00	0.00	4.00	0.00

ENDATA19

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

CARD TYPE	ELEMENT	NAME	UNIT	FLOW	TEMP	SALIN	CM-I	CM-II
HDWTR-1	1	BIG CREEK	0	0.02830	17.500	0.000	0.000	0.000

ENDATA20

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

CARD TYPE	ELEMENT	NAME	DO	BOD	ORG-N	NH3	NO3+2
HDWTR-2	1	BIG CREEK	8.63	8.87	0.00	0.00	0.00

ENDATA21

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

CARD TYPE	ELEMENT	NAME	PHOS	CHL A	COLI	NCM
HDWTR-3	1	BIG CREEK	0.00	0.00	0.00	3.41

ENDATA22

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

CARD TYPE	JUNCTION	UPSTRM	RIVER	NAME
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ELEMENT ELEMENT KILOM

ENDATA23

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

CARD TYPE	ELEMENT	RKILO	NAME	FLOW	TEMP	SAL	CM-I	CM-II
WSTLD-1	162	118.10	LITTLE COLEWA CRK 1	0.02830	17.500	0.000	0.000	0.000
WSTLD-1	585	75.80	LITTLE COLEWA CRK 2	0.02830	17.500	0.000	0.000	0.000
WSTLD-1	760	58.30	CYPRESS CRK	0.02830	17.300	0.000	0.000	0.000
WSTLD-1	861	48.20	COW BAYOU	0.02830	17.300	0.000	0.000	0.000
WSTLD-1	1014	32.90	BEE BAYOU	0.02830	17.300	0.000	0.000	0.000
WSTLD-1	1043	30.00	VILLAGE OF MANGHAM	0.00350	17.300	0.000	0.000	0.000
WSTLD-1	1128	21.50	TURKEY CREEK	0.02830	17.300	0.000	0.000	0.000
WSTLD-1	1204	13.90	LITTLE CREEK	0.02830	17.300	0.000	0.000	0.000

ENDATA24

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

CARD TYPE	ELEMENT	NAME	DO	BOD	% BOD RMVL	ORG-N	NH3	% NITRIF	NO3+2
WSTLD-2	162	LITTLE COLEWA CRK 1	8.63	6.40	0.00	0.00	0.00	0.00	0.00
WSTLD-2	585	LITTLE COLEWA CRK 2	8.63	6.40	0.00	0.00	0.00	0.00	0.00
WSTLD-2	760	CYPRESS CRK	8.49	6.40	0.00	0.00	0.00	0.00	0.00
WSTLD-2	861	COW BAYOU	8.49	6.40	0.00	0.00	0.00	0.00	0.00
WSTLD-2	1014	BEE BAYOU	8.49	6.74	0.00	0.00	0.00	0.00	0.00
WSTLD-2	1043	VILLAGE OF MANGHAM	2.00	69.00	0.00	0.00	0.00	0.00	0.00
WSTLD-2	1128	TURKEY CREEK	8.49	6.40	0.00	0.00	0.00	0.00	0.00
WSTLD-2	1204	LITTLE CREEK	8.49	6.40	0.00	0.00	0.00	0.00	0.00

ENDATA25

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

CARD TYPE	ELEMENT	NAME	PHOS	CHL A	COLI	NCM
WSTLD-3	162	LITTLE COLEWA CRK 1	0.00	0.00	0.00	0.46
WSTLD-3	585	LITTLE COLEWA CRK 2	0.00	0.00	0.00	0.46
WSTLD-3	760	CYPRESS CRK	0.00	0.00	0.00	0.46
WSTLD-3	861	COW BAYOU	0.00	0.00	0.00	0.46
WSTLD-3	1014	BEE BAYOU	0.00	0.00	0.00	0.07
WSTLD-3	1043	VILLAGE OF MANGHAM	0.00	0.00	0.00	64.50
WSTLD-3	1128	TURKEY CREEK	0.00	0.00	0.00	0.46
WSTLD-3	1204	LITTLE CREEK	0.00	0.00	0.00	0.46

ENDATA26

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

CARD TYPE	CONSTITUENT	CONCENTRATION
LOWER BC	TEMPERATURE	= 17.300 deg C
LOWER BC	SALINITY	= 0.000 ppt
LOWER BC	CONSERVATIVE MATERIAL I	= 0.000 MG/L
LOWER BC	CONSERVATIVE MATERIAL II	= 0.000 MG/L

LOWER BC DISSOLVED OXYGEN = 0.000 mg/L  
 LOWER BC BIOCHEMICAL OXYGEN DEMAND = 0.000 mg/L  
 LOWER BC ORGANIC NITROGEN = 0.000 mg/L  
 LOWER BC AMMONIA NITROGEN = 0.000 mg/L  
 LOWER BC NITRATE + NITRITE = 0.000 mg/L  
 LOWER BC PHOSPHORUS = 0.000 mg/L  
 LOWER BC CHLOROPHYLL A = 0.000 µg/L  
 LOWER BC COLIFORM = 0.000 #/100 mL  
 LOWER BC NONCONSERVATIVE MATERIAL = 0.000 MG/L  
 ENDATA27

\$\$\$ DATA TYPE 28 (RESERVED FOR FUTURE DATA INPUT) \$\$\$

CARD TYPE

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
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ENDATA29

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

NUMBER OF PLOTS = 2  
 NUMBER OF REACHES IN PLOT 1 = 16  
 PLOT RCH 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16  
 NUMBER OF REACHES IN PLOT 2 = 16  
 PLOT RCH 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16  
 ENDATA30

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

OVERLAY 1 bigovlproj.txt :MAINSTEM  
 ENDATA31

.....NO ERRORS DETECTED IN INPUT DATA  
 .....HYDRAULIC CALCULATIONS COMPLETED  
 .....TRIDIAGONAL MATRIX TERMS INITIALIZED  
 .....OXYGEN DEPENDENT RATES CONVERGENT IN 15 ITERATIONS  
 .....CONSTITUENT CALCULATIONS COMPLETED  
 .....GRAPHICS DATA FOR PLOT 1 WRITTEN TO UNIT 11  
 .....GRAPHICS DATA FOR PLOT 2 WRITTEN TO UNIT 12

FINAL REPORT BIG CREEK Big Creek - STREAM MODEL  
 REACH NO. 1 BIG CREEK, RKM 134.2 RKM 118 Winter Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*



ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
1	HDWTR	0.02830	17.50	0.00	0.00	0.00	8.63	8.87	8.87	0.00	0.00	0.00	0.00	0.00	0.00	3.41
162	WSTLD	0.02830	17.50	0.00	0.00	0.00	8.63	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.46

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
1	134.20	134.10	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
2	134.10	134.00	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
3	134.00	133.90	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
4	133.90	133.80	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
5	133.80	133.70	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
6	133.70	133.60	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
7	133.60	133.50	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
8	133.50	133.40	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
9	133.40	133.30	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
10	133.30	133.20	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
11	133.20	133.10	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
12	133.10	133.00	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
13	133.00	132.90	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
14	132.90	132.80	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
15	132.80	132.70	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
16	132.70	132.60	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
17	132.60	132.50	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
18	132.50	132.40	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
19	132.40	132.30	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
20	132.30	132.20	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
21	132.20	132.10	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
22	132.10	132.00	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
23	132.00	131.90	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
24	131.90	131.80	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
25	131.80	131.70	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
26	131.70	131.60	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
27	131.60	131.50	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
28	131.50	131.40	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
29	131.40	131.30	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
30	131.30	131.20	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
31	131.20	131.10	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
32	131.10	131.00	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
33	131.00	130.90	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
34	130.90	130.80	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
35	130.80	130.70	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
36	130.70	130.60	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
37	130.60	130.50	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
38	130.50	130.40	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
39	130.40	130.30	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
40	130.30	130.20	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
41	130.20	130.10	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014





152	119.10	119.00	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
153	119.00	118.90	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
154	118.90	118.80	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
155	118.80	118.70	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
156	118.70	118.60	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
157	118.60	118.50	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
158	118.50	118.40	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
159	118.40	118.30	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
160	118.30	118.20	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
161	118.20	118.10	0.02830	0.00	0.01364	0.08	0.31	6.62	207.48	661.51	2.07	0.00	0.000	0.003	0.014
162	118.10	118.00	0.05660	50.00	0.02533	0.05	0.33	6.86	223.49	686.46	2.23	0.00	0.000	0.006	0.025

TOT  
AVG  
CUM

							13.71			33628.47	107190.45											
						0.01368		0.31	6.62													2.08
							13.71															

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECA 1/da	CBOD SETT 1/da	ANBOD DECA 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECA 1/da	ORGN SETT 1/da	NH3 DECA 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECA 1/da	NCM DECA 1/da	NCM SETT 1/da
1	134.100	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
2	134.000	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
3	133.900	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
4	133.800	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
5	133.700	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
6	133.600	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
7	133.500	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
8	133.400	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
9	133.300	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
10	133.200	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
11	133.100	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
12	133.000	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
13	132.900	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
14	132.800	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
15	132.700	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
16	132.600	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
17	132.500	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
18	132.400	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
19	132.300	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
20	132.200	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
21	132.100	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
22	132.000	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
23	131.900	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
24	131.800	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
25	131.700	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
26	131.600	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
27	131.500	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
28	131.400	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
29	131.300	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
30	131.200	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
31	131.100	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30
32	131.000	9.56	2.60	0.06	0.30	0.00	1.05	1.05	1.05	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.30













134	120.800	17.50	0.00	0.00	0.00	8.08	3.78	3.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
135	120.700	17.50	0.00	0.00	0.00	8.08	3.78	3.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
136	120.600	17.50	0.00	0.00	0.00	8.08	3.77	3.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
137	120.500	17.50	0.00	0.00	0.00	8.08	3.77	3.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
138	120.400	17.50	0.00	0.00	0.00	8.08	3.77	3.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
139	120.300	17.50	0.00	0.00	0.00	8.08	3.77	3.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
140	120.200	17.50	0.00	0.00	0.00	8.08	3.76	3.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
141	120.100	17.50	0.00	0.00	0.00	8.08	3.76	3.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
142	120.000	17.50	0.00	0.00	0.00	8.08	3.76	3.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
143	119.900	17.50	0.00	0.00	0.00	8.08	3.76	3.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
144	119.800	17.50	0.00	0.00	0.00	8.08	3.76	3.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
145	119.700	17.50	0.00	0.00	0.00	8.08	3.75	3.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
146	119.600	17.50	0.00	0.00	0.00	8.08	3.75	3.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
147	119.500	17.50	0.00	0.00	0.00	8.08	3.75	3.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
148	119.400	17.50	0.00	0.00	0.00	8.08	3.75	3.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
149	119.300	17.50	0.00	0.00	0.00	8.08	3.75	3.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
150	119.200	17.50	0.00	0.00	0.00	8.08	3.74	3.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
151	119.100	17.50	0.00	0.00	0.00	8.08	3.74	3.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
152	119.000	17.50	0.00	0.00	0.00	8.08	3.74	3.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
153	118.900	17.50	0.00	0.00	0.00	8.08	3.74	3.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
154	118.800	17.50	0.00	0.00	0.00	8.08	3.74	3.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
155	118.700	17.50	0.00	0.00	0.00	8.08	3.74	3.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
156	118.600	17.50	0.00	0.00	0.00	8.08	3.74	3.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
157	118.500	17.50	0.00	0.00	0.00	8.08	3.73	3.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
158	118.400	17.50	0.00	0.00	0.00	8.08	3.73	3.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
159	118.300	17.50	0.00	0.00	0.00	8.08	3.73	3.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
160	118.200	17.50	0.00	0.00	0.00	8.08	3.73	3.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
161	118.100	17.50	0.00	0.00	0.00	8.08	3.73	3.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.16
162	118.000	17.50	0.00	0.00	0.00	8.35	5.04	5.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82

\* CM-I = CHLORIDES  
MG/L

CM-II = SULFATES  
MG/L

NCM = NBOD  
MG/L

\*\* g/cu m

FINAL REPORT BIG CREEK  
REACH NO. 2 BIG CREEK, RKM 100 TO MITCHNER

Big Creek - STREAM MODEL  
Winter Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
163	UPR RCH	0.05660	17.50	0.00	0.00	0.00	8.35	5.04	5.04	0.00	0.00	0.00	0.00	0.00	0.00	0.82

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
163	118.00	117.90	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
164	117.90	117.80	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009















495	84.80	84.70	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
496	84.70	84.60	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
497	84.60	84.50	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
498	84.50	84.40	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
499	84.40	84.30	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
500	84.30	84.20	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
501	84.20	84.10	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
502	84.10	84.00	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
503	84.00	83.90	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
504	83.90	83.80	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
505	83.80	83.70	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
506	83.70	83.60	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
507	83.60	83.50	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
508	83.50	83.40	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
509	83.40	83.30	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
510	83.30	83.20	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
511	83.20	83.10	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
512	83.10	83.00	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
513	83.00	82.90	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
514	82.90	82.80	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
515	82.80	82.70	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
516	82.70	82.60	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
517	82.60	82.50	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
518	82.50	82.40	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
519	82.40	82.30	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
520	82.30	82.20	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009
521	82.20	82.10	0.05660	50.00	0.00857	0.14	0.43	15.51	660.24	1551.46	6.60	0.00	0.000	0.002	0.009

TOT						48.47			237028.22	556974.62											
AVG						0.00857		0.43	15.51												6.60
CUM								62.18													

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAT 1/da	CBOD SETT 1/da	ANBOD DECAT 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAT 1/da	ORGN SETT 1/da	NH3 DECAT 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAT 1/da	NCM DECAT 1/da	NCM SETT 1/da
163	117.900	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
164	117.800	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
165	117.700	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
166	117.600	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
167	117.500	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
168	117.400	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
169	117.300	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
170	117.200	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
171	117.100	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
172	117.000	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
173	116.900	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
174	116.800	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
175	116.700	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
176	116.600	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
177	116.500	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
178	116.400	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22













509	83.301	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
510	83.201	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
511	83.101	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
512	83.001	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
513	82.901	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
514	82.801	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
515	82.701	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
516	82.601	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
517	82.501	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
518	82.401	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
519	82.301	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
520	82.201	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22
521	82.101	9.56	1.76	0.06	0.22	0.00	0.99	0.99	0.99	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.22

20 DEG C RATE 0.07 0.00 1.16 0.00 0.00 0.00 0.00  
AVG 20 DEG C RATE 1.85 0.23 0.00 0.23

\* g/sq m/d \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
163	117.900	17.50	0.00	0.00	0.00	8.27	5.04	5.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83
164	117.800	17.50	0.00	0.00	0.00	8.21	5.05	5.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84
165	117.700	17.50	0.00	0.00	0.00	8.16	5.05	5.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85
166	117.600	17.50	0.00	0.00	0.00	8.12	5.06	5.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86
167	117.500	17.50	0.00	0.00	0.00	8.08	5.06	5.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87
168	117.400	17.50	0.00	0.00	0.00	8.06	5.06	5.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88
169	117.300	17.50	0.00	0.00	0.00	8.03	5.07	5.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89
170	117.200	17.50	0.00	0.00	0.00	8.02	5.07	5.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89
171	117.100	17.50	0.00	0.00	0.00	8.00	5.07	5.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90
172	117.000	17.50	0.00	0.00	0.00	7.99	5.08	5.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91
173	116.900	17.50	0.00	0.00	0.00	7.98	5.08	5.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91
174	116.800	17.50	0.00	0.00	0.00	7.97	5.08	5.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92
175	116.700	17.50	0.00	0.00	0.00	7.96	5.09	5.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92
176	116.600	17.50	0.00	0.00	0.00	7.96	5.09	5.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93
177	116.500	17.50	0.00	0.00	0.00	7.95	5.09	5.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93
178	116.400	17.50	0.00	0.00	0.00	7.95	5.09	5.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94
179	116.300	17.50	0.00	0.00	0.00	7.95	5.10	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94
180	116.200	17.50	0.00	0.00	0.00	7.94	5.10	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95
181	116.100	17.50	0.00	0.00	0.00	7.94	5.10	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95
182	116.000	17.50	0.00	0.00	0.00	7.94	5.10	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96
183	115.900	17.50	0.00	0.00	0.00	7.94	5.10	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96
184	115.800	17.50	0.00	0.00	0.00	7.93	5.11	5.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96
185	115.700	17.50	0.00	0.00	0.00	7.93	5.11	5.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96
186	115.600	17.50	0.00	0.00	0.00	7.93	5.11	5.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.97
187	115.500	17.50	0.00	0.00	0.00	7.93	5.11	5.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.97
188	115.400	17.50	0.00	0.00	0.00	7.93	5.11	5.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.97
189	115.300	17.50	0.00	0.00	0.00	7.93	5.11	5.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98
190	115.200	17.50	0.00	0.00	0.00	7.93	5.12	5.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98
191	115.100	17.50	0.00	0.00	0.00	7.93	5.12	5.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98
192	115.000	17.50	0.00	0.00	0.00	7.93	5.12	5.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98















\* CM-I = CHLORIDES  
 MG/L  
 \*\* g/cu m

CM-II = SULFATES  
 MG/L

NCM = NBOD  
 MG/L

FINAL REPORT BIG CREEK  
 REACH NO. 3 BIG CREEK, MITCHNER TO RKM 67.4

Big Creek - STREAM MODEL  
 Winter Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
522	UPR RCH	0.05660	17.50	0.00	0.00	0.00	7.92	5.16	5.16	0.00	0.00	0.00	0.00	0.00	0.00	1.01
585	WSTLD	0.02830	17.50	0.00	0.00	0.00	8.63	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.46

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
522	82.10	82.00	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
523	82.00	81.90	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
524	81.90	81.80	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
525	81.80	81.70	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
526	81.70	81.60	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
527	81.60	81.50	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
528	81.50	81.40	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
529	81.40	81.30	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
530	81.30	81.20	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
531	81.20	81.10	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
532	81.10	81.00	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
533	81.00	80.90	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
534	80.90	80.80	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
535	80.80	80.70	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
536	80.70	80.60	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
537	80.60	80.50	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
538	80.50	80.40	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
539	80.40	80.30	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
540	80.30	80.20	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
541	80.20	80.10	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
542	80.10	80.00	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
543	80.00	79.90	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
544	79.90	79.80	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
545	79.80	79.70	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
546	79.70	79.60	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
547	79.60	79.50	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
548	79.50	79.40	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
549	79.40	79.30	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
550	79.30	79.20	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
551	79.20	79.10	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011
552	79.10	79.00	0.05660	50.00	0.01136	0.10	0.38	13.26	498.17	1326.46	4.98	0.00	0.000	0.003	0.011







663	68.00	67.90	0.08490	66.67	0.01630	0.07	0.39	13.46	520.89	1346.33	5.21	0.00	0.000	0.004	0.016
664	67.90	67.80	0.08490	66.67	0.01630	0.07	0.39	13.46	520.89	1346.33	5.21	0.00	0.000	0.004	0.016
665	67.80	67.70	0.08490	66.67	0.01630	0.07	0.39	13.46	520.89	1346.33	5.21	0.00	0.000	0.004	0.016
666	67.70	67.60	0.08490	66.67	0.01630	0.07	0.39	13.46	520.89	1346.33	5.21	0.00	0.000	0.004	0.016
667	67.60	67.50	0.08490	66.67	0.01630	0.07	0.39	13.46	520.89	1346.33	5.21	0.00	0.000	0.004	0.016
668	67.50	67.40	0.08490	66.67	0.01630	0.07	0.39	13.46	520.89	1346.33	5.21	0.00	0.000	0.004	0.016

TOT						12.38			75139.41	196658.55					
AVG			0.01374				0.38	13.38				5.11			
CUM						74.56									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAy 1/da	CBOD SETT 1/da	ANBOD DECAy 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAy 1/da	ORGN SETT 1/da	NH3 DECAy 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAy 1/da	NCM DECAy 1/da	NCM SETT 1/da
522	82.000	9.56	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
523	81.900	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
524	81.800	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
525	81.700	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
526	81.600	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
527	81.500	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
528	81.400	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
529	81.300	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
530	81.200	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
531	81.100	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
532	81.000	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
533	80.900	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
534	80.800	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
535	80.700	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
536	80.600	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
537	80.500	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
538	80.400	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
539	80.300	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
540	80.200	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
541	80.100	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
542	80.000	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
543	79.900	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
544	79.800	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
545	79.700	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
546	79.600	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
547	79.500	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
548	79.400	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
549	79.300	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
550	79.200	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
551	79.100	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
552	79.000	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
553	78.900	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
554	78.800	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
555	78.700	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
556	78.600	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
557	78.500	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25
558	78.400	9.57	2.09	0.06	0.25	0.00	0.47	0.47	0.47	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.24	0.25





20 DEG C RATE 0.07 0.00 0.55 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.28  
 AVG 20 DEG C RATE 2.27 0.26 0.00 0.00 0.00 0.00 0.00 0.00 0.26

\* g/sq m/d \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
522	82.000	17.50	0.00	0.00	0.00	8.06	5.26	5.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04
523	81.900	17.50	0.00	0.00	0.00	8.17	5.37	5.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06
524	81.800	17.50	0.00	0.00	0.00	8.26	5.47	5.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08
525	81.700	17.49	0.00	0.00	0.00	8.33	5.57	5.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10
526	81.600	17.49	0.00	0.00	0.00	8.39	5.66	5.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12
527	81.500	17.49	0.00	0.00	0.00	8.44	5.75	5.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13
528	81.400	17.49	0.00	0.00	0.00	8.48	5.84	5.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.15
529	81.300	17.49	0.00	0.00	0.00	8.51	5.93	5.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
530	81.200	17.49	0.00	0.00	0.00	8.54	6.01	6.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.18
531	81.100	17.49	0.00	0.00	0.00	8.56	6.09	6.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.19
532	81.000	17.49	0.00	0.00	0.00	8.57	6.17	6.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.21
533	80.900	17.48	0.00	0.00	0.00	8.59	6.25	6.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.22
534	80.800	17.48	0.00	0.00	0.00	8.60	6.32	6.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23
535	80.700	17.48	0.00	0.00	0.00	8.60	6.39	6.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.25
536	80.600	17.48	0.00	0.00	0.00	8.61	6.46	6.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26
537	80.500	17.48	0.00	0.00	0.00	8.61	6.53	6.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27
538	80.400	17.48	0.00	0.00	0.00	8.62	6.59	6.59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28
539	80.300	17.48	0.00	0.00	0.00	8.62	6.66	6.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.29
540	80.200	17.47	0.00	0.00	0.00	8.62	6.72	6.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30
541	80.100	17.47	0.00	0.00	0.00	8.62	6.78	6.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.31
542	80.000	17.47	0.00	0.00	0.00	8.62	6.84	6.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32
543	79.900	17.47	0.00	0.00	0.00	8.62	6.89	6.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32
544	79.800	17.47	0.00	0.00	0.00	8.62	6.95	6.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.33
545	79.700	17.47	0.00	0.00	0.00	8.62	7.00	7.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.34
546	79.600	17.47	0.00	0.00	0.00	8.62	7.05	7.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.35
547	79.500	17.46	0.00	0.00	0.00	8.62	7.10	7.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.35
548	79.400	17.46	0.00	0.00	0.00	8.61	7.14	7.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.36
549	79.300	17.46	0.00	0.00	0.00	8.61	7.19	7.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.36
550	79.200	17.46	0.00	0.00	0.00	8.61	7.24	7.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.37
551	79.100	17.46	0.00	0.00	0.00	8.61	7.28	7.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.38
552	79.000	17.46	0.00	0.00	0.00	8.61	7.32	7.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.38
553	78.900	17.46	0.00	0.00	0.00	8.61	7.36	7.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.39
554	78.800	17.46	0.00	0.00	0.00	8.61	7.40	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.39
555	78.700	17.45	0.00	0.00	0.00	8.60	7.44	7.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.40
556	78.600	17.45	0.00	0.00	0.00	8.60	7.48	7.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.40
557	78.500	17.45	0.00	0.00	0.00	8.60	7.51	7.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.40
558	78.400	17.45	0.00	0.00	0.00	8.60	7.55	7.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.41
559	78.300	17.45	0.00	0.00	0.00	8.60	7.58	7.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.41
560	78.200	17.45	0.00	0.00	0.00	8.60	7.61	7.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.42
561	78.100	17.45	0.00	0.00	0.00	8.60	7.65	7.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.42
562	78.000	17.44	0.00	0.00	0.00	8.60	7.68	7.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.42
563	77.900	17.44	0.00	0.00	0.00	8.59	7.71	7.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.43
564	77.800	17.44	0.00	0.00	0.00	8.59	7.74	7.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.43





\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
669	UPR RCH	0.08490	17.30	0.00	0.00	0.00	8.67	8.34	8.34	0.00	0.00	0.00	0.00	0.00	0.00	1.43
EACH	INCR	0.0036	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
669	67.40	67.30	0.08853	63.94	0.00484	0.24	0.54	33.99	1829.56	3398.65	18.30	0.00	0.000	0.002	0.005
670	67.30	67.20	0.09215	61.42	0.00502	0.23	0.54	34.01	1835.61	3400.93	18.36	0.00	0.000	0.002	0.005
671	67.20	67.10	0.09578	59.09	0.00520	0.22	0.54	34.03	1841.63	3403.18	18.42	0.00	0.000	0.002	0.005
672	67.10	67.00	0.09941	56.94	0.00538	0.22	0.54	34.05	1847.62	3405.38	18.48	0.00	0.000	0.002	0.005
673	67.00	66.90	0.10303	54.93	0.00556	0.21	0.54	34.08	1853.58	3407.56	18.54	0.00	0.000	0.002	0.006
674	66.90	66.80	0.10666	53.07	0.00574	0.20	0.55	34.10	1859.51	3409.70	18.60	0.00	0.000	0.002	0.006
675	66.80	66.70	0.11028	51.32	0.00591	0.20	0.55	34.12	1865.42	3411.81	18.65	0.00	0.000	0.002	0.006
676	66.70	66.60	0.11391	49.69	0.00609	0.19	0.55	34.14	1871.30	3413.89	18.71	0.00	0.000	0.002	0.006
677	66.60	66.50	0.11754	48.15	0.00626	0.18	0.55	34.16	1877.15	3415.94	18.77	0.00	0.000	0.002	0.006
678	66.50	66.40	0.12116	46.71	0.00643	0.18	0.55	34.18	1882.99	3417.96	18.83	0.00	0.000	0.002	0.006
679	66.40	66.30	0.12479	45.36	0.00661	0.18	0.55	34.20	1888.80	3419.96	18.89	0.00	0.000	0.002	0.007
680	66.30	66.20	0.12842	44.08	0.00678	0.17	0.55	34.22	1894.59	3421.94	18.95	0.00	0.000	0.002	0.007
681	66.20	66.10	0.13204	42.86	0.00695	0.17	0.56	34.24	1900.36	3423.89	19.00	0.00	0.000	0.002	0.007
682	66.10	66.00	0.13567	41.72	0.00712	0.16	0.56	34.26	1906.11	3425.81	19.06	0.00	0.000	0.002	0.007
683	66.00	65.90	0.13930	40.63	0.00729	0.16	0.56	34.28	1911.84	3427.72	19.12	0.00	0.000	0.002	0.007
684	65.90	65.80	0.14292	39.60	0.00745	0.16	0.56	34.30	1917.55	3429.60	19.18	0.00	0.000	0.003	0.007
685	65.80	65.70	0.14655	38.62	0.00762	0.15	0.56	34.31	1923.24	3431.47	19.23	0.00	0.000	0.003	0.008
686	65.70	65.60	0.15018	37.69	0.00779	0.15	0.56	34.33	1928.92	3433.31	19.29	0.00	0.000	0.003	0.008
687	65.60	65.50	0.15380	36.80	0.00795	0.15	0.56	34.35	1934.58	3435.13	19.35	0.00	0.000	0.003	0.008
688	65.50	65.40	0.15743	35.95	0.00811	0.14	0.56	34.37	1940.23	3436.94	19.40	0.00	0.000	0.003	0.008
689	65.40	65.30	0.16105	35.14	0.00828	0.14	0.57	34.39	1945.86	3438.73	19.46	0.00	0.000	0.003	0.008
690	65.30	65.20	0.16468	34.37	0.00844	0.14	0.57	34.40	1951.48	3440.50	19.51	0.00	0.000	0.003	0.008
691	65.20	65.10	0.16831	33.63	0.00860	0.13	0.57	34.42	1957.08	3442.25	19.57	0.00	0.000	0.003	0.009
692	65.10	65.00	0.17193	32.92	0.00876	0.13	0.57	34.44	1962.66	3443.99	19.63	0.00	0.000	0.003	0.009
693	65.00	64.90	0.17556	32.24	0.00892	0.13	0.57	34.46	1968.24	3445.71	19.68	0.00	0.000	0.003	0.009
694	64.90	64.80	0.17919	31.59	0.00908	0.13	0.57	34.47	1973.80	3447.42	19.74	0.00	0.000	0.003	0.009
695	64.80	64.70	0.18281	30.96	0.00924	0.13	0.57	34.49	1979.35	3449.11	19.79	0.00	0.000	0.003	0.009
696	64.70	64.60	0.18644	30.36	0.00939	0.12	0.58	34.51	1984.88	3450.79	19.85	0.00	0.000	0.003	0.009
697	64.60	64.50	0.19007	29.78	0.00955	0.12	0.58	34.52	1990.40	3452.45	19.90	0.00	0.000	0.003	0.010
698	64.50	64.40	0.19369	29.22	0.00970	0.12	0.58	34.54	1995.92	3454.11	19.96	0.00	0.000	0.003	0.010
699	64.40	64.30	0.19732	28.68	0.00986	0.12	0.58	34.56	2001.42	3455.74	20.01	0.00	0.000	0.003	0.010
700	64.30	64.20	0.20094	28.17	0.01001	0.12	0.58	34.57	2006.91	3457.37	20.07	0.00	0.000	0.004	0.010
701	64.20	64.10	0.20457	27.67	0.01017	0.11	0.58	34.59	2012.38	3458.98	20.12	0.00	0.000	0.004	0.010
702	64.10	64.00	0.20820	27.19	0.01032	0.11	0.58	34.61	2017.85	3460.58	20.18	0.00	0.000	0.004	0.010
703	64.00	63.90	0.21182	26.72	0.01047	0.11	0.58	34.62	2023.31	3462.17	20.23	0.00	0.000	0.004	0.010
704	63.90	63.80	0.21545	26.27	0.01062	0.11	0.59	34.64	2028.76	3463.74	20.29	0.00	0.000	0.004	0.011



705	63.80	63.70	0.21908	25.84	0.01077	0.11	0.59	34.65	2034.19	3465.31	20.34	0.00	0.000	0.004	0.011
706	63.70	63.60	0.22270	25.42	0.01092	0.11	0.59	34.67	2039.62	3466.86	20.40	0.00	0.000	0.004	0.011
707	63.60	63.50	0.22633	25.01	0.01107	0.10	0.59	34.68	2045.04	3468.40	20.45	0.00	0.000	0.004	0.011
708	63.50	63.40	0.22996	24.61	0.01121	0.10	0.59	34.70	2050.45	3469.93	20.50	0.00	0.000	0.004	0.011
709	63.40	63.30	0.23358	24.23	0.01136	0.10	0.59	34.71	2055.85	3471.46	20.56	0.00	0.000	0.004	0.011
710	63.30	63.20	0.23721	23.86	0.01151	0.10	0.59	34.73	2061.24	3472.97	20.61	0.00	0.000	0.004	0.012
711	63.20	63.10	0.24083	23.50	0.01165	0.10	0.59	34.74	2066.63	3474.47	20.67	0.00	0.000	0.004	0.012
712	63.10	63.00	0.24446	23.15	0.01180	0.10	0.60	34.76	2072.00	3475.96	20.72	0.00	0.000	0.004	0.012
713	63.00	62.90	0.24809	22.81	0.01194	0.10	0.60	34.77	2077.37	3477.44	20.77	0.00	0.000	0.004	0.012
714	62.90	62.80	0.25171	22.49	0.01209	0.10	0.60	34.79	2082.73	3478.92	20.83	0.00	0.000	0.004	0.012
715	62.80	62.70	0.25534	22.17	0.01223	0.09	0.60	34.80	2088.08	3480.38	20.88	0.00	0.000	0.004	0.012
716	62.70	62.60	0.25897	21.86	0.01237	0.09	0.60	34.82	2093.42	3481.83	20.93	0.00	0.000	0.005	0.012
717	62.60	62.50	0.26259	21.55	0.01251	0.09	0.60	34.83	2098.76	3483.28	20.99	0.00	0.000	0.005	0.013
718	62.50	62.40	0.26622	21.26	0.01265	0.09	0.60	34.85	2104.09	3484.72	21.04	0.00	0.000	0.005	0.013
719	62.40	62.30	0.26985	20.97	0.01279	0.09	0.61	34.86	2109.41	3486.15	21.09	0.00	0.000	0.005	0.013
720	62.30	62.20	0.27347	20.70	0.01293	0.09	0.61	34.88	2114.73	3487.57	21.15	0.00	0.000	0.005	0.013
721	62.20	62.10	0.27710	20.43	0.01307	0.09	0.61	34.89	2120.03	3488.98	21.20	0.00	0.000	0.005	0.013
722	62.10	62.00	0.28073	20.16	0.01321	0.09	0.61	34.90	2125.33	3490.39	21.25	0.00	0.000	0.005	0.013
723	62.00	61.90	0.28435	19.90	0.01335	0.09	0.61	34.92	2130.63	3491.78	21.31	0.00	0.000	0.005	0.013
724	61.90	61.80	0.28798	19.65	0.01348	0.09	0.61	34.93	2135.92	3493.17	21.36	0.00	0.000	0.005	0.013
725	61.80	61.70	0.29160	19.41	0.01362	0.08	0.61	34.95	2141.20	3494.56	21.41	0.00	0.000	0.005	0.014
726	61.70	61.60	0.29523	19.17	0.01375	0.08	0.61	34.96	2146.47	3495.93	21.46	0.00	0.000	0.005	0.014
727	61.60	61.50	0.29886	18.94	0.01389	0.08	0.62	34.97	2151.74	3497.30	21.52	0.00	0.000	0.005	0.014
728	61.50	61.40	0.30248	18.71	0.01402	0.08	0.62	34.99	2157.01	3498.66	21.57	0.00	0.000	0.005	0.014
729	61.40	61.30	0.30611	18.49	0.01416	0.08	0.62	35.00	2162.26	3500.01	21.62	0.00	0.000	0.005	0.014
730	61.30	61.20	0.30974	18.27	0.01429	0.08	0.62	35.01	2167.51	3501.36	21.68	0.00	0.000	0.005	0.014
731	61.20	61.10	0.31336	18.06	0.01442	0.08	0.62	35.03	2172.76	3502.70	21.73	0.00	0.000	0.005	0.014
732	61.10	61.00	0.31699	17.86	0.01455	0.08	0.62	35.04	2178.00	3504.03	21.78	0.00	0.000	0.005	0.015
733	61.00	60.90	0.32062	17.65	0.01469	0.08	0.62	35.05	2183.24	3505.36	21.83	0.00	0.000	0.006	0.015
734	60.90	60.80	0.32424	17.46	0.01482	0.08	0.62	35.07	2188.46	3506.68	21.88	0.00	0.000	0.006	0.015
735	60.80	60.70	0.32787	17.26	0.01495	0.08	0.63	35.08	2193.69	3507.99	21.94	0.00	0.000	0.006	0.015
736	60.70	60.60	0.33149	17.07	0.01508	0.08	0.63	35.09	2198.91	3509.30	21.99	0.00	0.000	0.006	0.015
737	60.60	60.50	0.33512	16.89	0.01520	0.08	0.63	35.11	2204.12	3510.60	22.04	0.00	0.000	0.006	0.015
738	60.50	60.40	0.33875	16.71	0.01533	0.08	0.63	35.12	2209.33	3511.90	22.09	0.00	0.000	0.006	0.015
739	60.40	60.30	0.34237	16.53	0.01546	0.07	0.63	35.13	2214.53	3513.18	22.15	0.00	0.000	0.006	0.015
740	60.30	60.20	0.34600	16.36	0.01559	0.07	0.63	35.14	2219.73	3514.47	22.20	0.00	0.000	0.006	0.016
TOT															
AVG					0.00947		8.80		146105.36	249258.34					
CUM							83.36								

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECA 1/da	CBOD SETT 1/da	ANBOD DECA 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECA 1/da	ORGN SETT 1/da	NH3 DECA 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECA 1/da	NCM DECA 1/da	NCM SETT 1/da
669	67.300	9.60	1.29	0.06	0.17	0.00	0.44	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.17
670	67.200	9.60	1.29	0.06	0.17	0.00	0.44	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.17
671	67.100	9.60	1.29	0.06	0.17	0.00	0.44	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.17
672	67.000	9.60	1.29	0.06	0.17	0.00	0.44	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.17
673	66.900	9.60	1.29	0.06	0.17	0.00	0.44	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.17
674	66.800	9.60	1.29	0.06	0.17	0.00	0.44	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.17
675	66.700	9.60	1.30	0.06	0.17	0.00	0.44	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.17



731	61.100	9.60	1.33	0.06	0.15	0.00	0.44	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.15
732	61.000	9.60	1.33	0.06	0.15	0.00	0.44	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.15
733	60.900	9.60	1.33	0.06	0.15	0.00	0.44	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.15
734	60.800	9.60	1.33	0.06	0.15	0.00	0.44	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.15
735	60.700	9.60	1.33	0.06	0.15	0.00	0.44	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.15
736	60.600	9.60	1.33	0.06	0.15	0.00	0.44	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.15
737	60.500	9.60	1.33	0.06	0.15	0.00	0.44	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.15
738	60.400	9.60	1.33	0.06	0.15	0.00	0.44	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.15
739	60.300	9.60	1.33	0.06	0.15	0.00	0.44	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.15
740	60.200	9.60	1.33	0.06	0.15	0.00	0.44	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.15

20 DEG C RATE				0.07		0.00	0.52			0.00		0.00	0.00	0.00	0.00			0.00	0.16	
AVG 20 DEG C RATE	1.39				0.17					0.00										0.17

\* g/sq m/d                      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
669	67.300	17.30	0.00	0.00	0.00	8.34	8.13	8.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.38
670	67.200	17.30	0.00	0.00	0.00	8.12	7.95	7.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.34
671	67.100	17.30	0.00	0.00	0.00	7.96	7.78	7.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30
672	67.000	17.30	0.00	0.00	0.00	7.84	7.64	7.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27
673	66.900	17.30	0.00	0.00	0.00	7.76	7.51	7.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24
674	66.800	17.30	0.00	0.00	0.00	7.71	7.40	7.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.21
675	66.700	17.30	0.00	0.00	0.00	7.67	7.30	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.19
676	66.600	17.30	0.00	0.00	0.00	7.64	7.21	7.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.17
677	66.500	17.30	0.00	0.00	0.00	7.62	7.13	7.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.15
678	66.400	17.30	0.00	0.00	0.00	7.61	7.05	7.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13
679	66.300	17.30	0.00	0.00	0.00	7.61	6.98	6.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12
680	66.200	17.30	0.00	0.00	0.00	7.60	6.92	6.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.10
681	66.100	17.30	0.00	0.00	0.00	7.60	6.86	6.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
682	66.000	17.30	0.00	0.00	0.00	7.60	6.81	6.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.08
683	65.900	17.30	0.00	0.00	0.00	7.60	6.76	6.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.07
684	65.800	17.30	0.00	0.00	0.00	7.61	6.72	6.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06
685	65.700	17.30	0.00	0.00	0.00	7.61	6.68	6.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.05
686	65.600	17.30	0.00	0.00	0.00	7.62	6.64	6.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04
687	65.500	17.30	0.00	0.00	0.00	7.62	6.60	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04
688	65.400	17.30	0.00	0.00	0.00	7.63	6.57	6.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.03
689	65.300	17.30	0.00	0.00	0.00	7.63	6.54	6.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02
690	65.200	17.30	0.00	0.00	0.00	7.64	6.51	6.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02
691	65.100	17.30	0.00	0.00	0.00	7.64	6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.01
692	65.000	17.30	0.00	0.00	0.00	7.65	6.46	6.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.01
693	64.900	17.30	0.00	0.00	0.00	7.65	6.44	6.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
694	64.800	17.30	0.00	0.00	0.00	7.66	6.41	6.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
695	64.700	17.30	0.00	0.00	0.00	7.66	6.39	6.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
696	64.600	17.30	0.00	0.00	0.00	7.67	6.37	6.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.99
697	64.500	17.30	0.00	0.00	0.00	7.67	6.35	6.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.99
698	64.400	17.30	0.00	0.00	0.00	7.68	6.34	6.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98
699	64.300	17.30	0.00	0.00	0.00	7.69	6.32	6.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98
700	64.200	17.30	0.00	0.00	0.00	7.69	6.30	6.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98
701	64.100	17.30	0.00	0.00	0.00	7.70	6.29	6.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98

702	64.000	17.30	0.00	0.00	0.00	7.70	6.27	6.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.97
703	63.900	17.30	0.00	0.00	0.00	7.70	6.26	6.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.97
704	63.800	17.30	0.00	0.00	0.00	7.71	6.25	6.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.97
705	63.700	17.30	0.00	0.00	0.00	7.71	6.23	6.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96
706	63.600	17.30	0.00	0.00	0.00	7.72	6.22	6.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96
707	63.500	17.30	0.00	0.00	0.00	7.72	6.21	6.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96
708	63.400	17.30	0.00	0.00	0.00	7.73	6.20	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96
709	63.300	17.30	0.00	0.00	0.00	7.73	6.19	6.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.96
710	63.200	17.30	0.00	0.00	0.00	7.74	6.18	6.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95
711	63.100	17.30	0.00	0.00	0.00	7.74	6.17	6.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95
712	63.000	17.30	0.00	0.00	0.00	7.75	6.16	6.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95
713	62.900	17.30	0.00	0.00	0.00	7.75	6.15	6.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95
714	62.800	17.30	0.00	0.00	0.00	7.75	6.14	6.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95
715	62.700	17.30	0.00	0.00	0.00	7.76	6.13	6.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.95
716	62.600	17.30	0.00	0.00	0.00	7.76	6.12	6.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94
717	62.500	17.30	0.00	0.00	0.00	7.77	6.12	6.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94
718	62.400	17.30	0.00	0.00	0.00	7.77	6.11	6.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94
719	62.300	17.30	0.00	0.00	0.00	7.77	6.10	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94
720	62.200	17.30	0.00	0.00	0.00	7.78	6.09	6.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94
721	62.100	17.30	0.00	0.00	0.00	7.78	6.09	6.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94
722	62.000	17.30	0.00	0.00	0.00	7.79	6.08	6.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.94
723	61.900	17.30	0.00	0.00	0.00	7.79	6.07	6.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93
724	61.800	17.30	0.00	0.00	0.00	7.79	6.07	6.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93
725	61.700	17.30	0.00	0.00	0.00	7.80	6.06	6.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93
726	61.600	17.30	0.00	0.00	0.00	7.80	6.05	6.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93
727	61.500	17.30	0.00	0.00	0.00	7.80	6.05	6.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93
728	61.400	17.30	0.00	0.00	0.00	7.81	6.04	6.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93
729	61.300	17.30	0.00	0.00	0.00	7.81	6.03	6.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93
730	61.200	17.30	0.00	0.00	0.00	7.81	6.03	6.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93
731	61.100	17.30	0.00	0.00	0.00	7.82	6.02	6.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93
732	61.000	17.30	0.00	0.00	0.00	7.82	6.02	6.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92
733	60.900	17.30	0.00	0.00	0.00	7.82	6.01	6.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92
734	60.800	17.30	0.00	0.00	0.00	7.83	6.01	6.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92
735	60.700	17.30	0.00	0.00	0.00	7.83	6.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92
736	60.600	17.30	0.00	0.00	0.00	7.83	6.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92
737	60.500	17.30	0.00	0.00	0.00	7.84	5.99	5.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92
738	60.400	17.30	0.00	0.00	0.00	7.84	5.99	5.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92
739	60.300	17.30	0.00	0.00	0.00	7.84	5.98	5.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92
740	60.200	17.30	0.00	0.00	0.00	7.85	5.98	5.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92

\* CM-I = CHLORIDES  
MG/L

CM-II = SULFATES  
MG/L

NCM = NBOD  
MG/L

\*\* g/cu m

FINAL REPORT BIG CREEK  
REACH NO. 5 WEIR #6

Big Creek - STREAM MODEL  
Winter Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
741	UPR RCH	0.34600	17.30	0.00	0.00	0.00	7.85	5.98	5.98	0.00	0.00	0.00	0.00	0.00	0.00	0.92

EACH INCR 0.0036 17.30 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
741	60.20	60.10	0.34960	16.19	0.01958	0.06	0.56	31.87	1785.08	3186.88	17.85	0.00	0.000	0.007	0.020
TOT AVG CUM					0.01958	0.06	0.56	31.87	1785.08	3186.88	17.85				
						83.42									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECA 1/da	CBOD SETT 1/da	ANBOD DECA 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECA 1/da	ORGN SETT 1/da	NH3 DECA 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECA 1/da	NCM DECA 1/da	NCM SETT 1/da
741	60.100	9.60	1.60	0.06	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.17
20 DEG C RATE				0.07		0.00	0.00		0.00		0.00	0.00	0.00	0.00	0.00			0.00	0.16	
AVG 20 DEG C RATE			1.69		0.18					0.00										0.18

\* g/sq m/d      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
741	60.100	17.30	0.00	0.00	0.00	7.90	5.84	5.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89

\* CM-I = CHLORIDES MG/L      CM-II = SULFATES MG/L      NCM = NBOD MG/L

\*\* g/cu m

FINAL REPORT      BIG CREEK      Big Creek - STREAM MODEL  
 REACH NO. 6      BIG CREEK, WEIR #6 TO WEIR #5      Winter Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
742	UPR RCH	0.34960	17.30	0.00	0.00	0.00	7.90	5.84	5.84	0.00	0.00	0.00	0.00	0.00	0.00	0.89
EACH INCR		0.0036	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
760	WSTLD	0.02830	17.30	0.00	0.00	0.00	8.49	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.46

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
742	60.10	60.00	0.35323	16.02	0.01978	0.06	0.56	31.87	1786.10	3187.41	17.86	0.00	0.000	0.007	0.020
743	60.00	59.90	0.35685	15.86	0.01997	0.06	0.56	31.88	1787.11	3187.95	17.87	0.00	0.000	0.007	0.020
744	59.90	59.80	0.36048	15.70	0.02016	0.06	0.56	31.88	1788.11	3188.47	17.88	0.00	0.000	0.007	0.020
745	59.80	59.70	0.36410	15.55	0.02035	0.06	0.56	31.89	1789.11	3189.00	17.89	0.00	0.000	0.007	0.020
746	59.70	59.60	0.36773	15.39	0.02054	0.06	0.56	31.90	1790.10	3189.52	17.90	0.00	0.000	0.007	0.021
747	59.60	59.50	0.37136	15.24	0.02073	0.06	0.56	31.90	1791.08	3190.03	17.91	0.00	0.000	0.007	0.021
748	59.50	59.40	0.37498	15.09	0.02092	0.06	0.56	31.91	1792.05	3190.54	17.92	0.00	0.000	0.007	0.021
749	59.40	59.30	0.37861	14.95	0.02112	0.05	0.56	31.91	1793.01	3191.05	17.93	0.00	0.000	0.007	0.021
750	59.30	59.20	0.38223	14.81	0.02131	0.05	0.56	31.92	1793.97	3191.56	17.94	0.00	0.000	0.007	0.021
751	59.20	59.10	0.38586	14.67	0.02150	0.05	0.56	31.92	1794.92	3192.06	17.95	0.00	0.000	0.007	0.021
752	59.10	59.00	0.38949	14.53	0.02169	0.05	0.56	31.93	1795.86	3192.56	17.96	0.00	0.000	0.007	0.022
753	59.00	58.90	0.39311	14.40	0.02188	0.05	0.56	31.93	1796.80	3193.05	17.97	0.00	0.000	0.008	0.022
754	58.90	58.80	0.39674	14.27	0.02207	0.05	0.56	31.94	1797.73	3193.54	17.98	0.00	0.000	0.008	0.022
755	58.80	58.70	0.40036	14.14	0.02226	0.05	0.56	31.94	1798.65	3194.03	17.99	0.00	0.000	0.008	0.022
756	58.70	58.60	0.40399	14.01	0.02245	0.05	0.56	31.95	1799.57	3194.52	18.00	0.00	0.000	0.008	0.022
757	58.60	58.50	0.40762	13.89	0.02264	0.05	0.56	31.95	1800.48	3195.00	18.00	0.00	0.000	0.008	0.023
758	58.50	58.40	0.41124	13.76	0.02283	0.05	0.56	31.95	1801.39	3195.48	18.01	0.00	0.000	0.008	0.023
759	58.40	58.30	0.41487	13.64	0.02302	0.05	0.56	31.96	1802.28	3195.95	18.02	0.00	0.000	0.008	0.023
760	58.30	58.20	0.44680	19.00	0.02469	0.05	0.57	32.00	1809.93	3200.02	18.10	0.00	0.000	0.009	0.025
761	58.20	58.10	0.45042	18.85	0.02487	0.05	0.57	32.00	1810.78	3200.47	18.11	0.00	0.000	0.009	0.025
762	58.10	58.00	0.45405	18.70	0.02506	0.05	0.57	32.01	1811.61	3200.91	18.12	0.00	0.000	0.009	0.025
763	58.00	57.90	0.45767	18.55	0.02525	0.05	0.57	32.01	1812.44	3201.36	18.12	0.00	0.000	0.009	0.025
764	57.90	57.80	0.46130	18.40	0.02544	0.05	0.57	32.02	1813.27	3201.80	18.13	0.00	0.000	0.009	0.025
765	57.80	57.70	0.46493	18.26	0.02563	0.05	0.57	32.02	1814.09	3202.24	18.14	0.00	0.000	0.009	0.026
766	57.70	57.60	0.46855	18.12	0.02582	0.04	0.57	32.03	1814.91	3202.67	18.15	0.00	0.000	0.009	0.026
767	57.60	57.50	0.47218	17.98	0.02601	0.04	0.57	32.03	1815.72	3203.10	18.16	0.00	0.000	0.009	0.026
768	57.50	57.40	0.47580	17.84	0.02619	0.04	0.57	32.04	1816.52	3203.54	18.17	0.00	0.000	0.009	0.026
769	57.40	57.30	0.47943	17.71	0.02638	0.04	0.57	32.04	1817.32	3203.96	18.17	0.00	0.000	0.009	0.026
770	57.30	57.20	0.48306	17.58	0.02657	0.04	0.57	32.04	1818.12	3204.39	18.18	0.00	0.000	0.009	0.027
771	57.20	57.10	0.48668	17.44	0.02676	0.04	0.57	32.05	1818.91	3204.81	18.19	0.00	0.000	0.009	0.027
772	57.10	57.00	0.49031	17.32	0.02694	0.04	0.57	32.05	1819.70	3205.24	18.20	0.00	0.000	0.009	0.027
773	57.00	56.90	0.49393	17.19	0.02713	0.04	0.57	32.06	1820.48	3205.65	18.20	0.00	0.000	0.009	0.027
774	56.90	56.80	0.49756	17.06	0.02732	0.04	0.57	32.06	1821.26	3206.07	18.21	0.00	0.000	0.009	0.027
775	56.80	56.70	0.50119	16.94	0.02751	0.04	0.57	32.06	1822.03	3206.49	18.22	0.00	0.000	0.010	0.028
776	56.70	56.60	0.50481	16.82	0.02769	0.04	0.57	32.07	1822.80	3206.90	18.23	0.00	0.000	0.010	0.028
777	56.60	56.50	0.50844	16.70	0.02788	0.04	0.57	32.07	1823.57	3207.31	18.24	0.00	0.000	0.010	0.028
778	56.50	56.40	0.51206	16.58	0.02807	0.04	0.57	32.08	1824.33	3207.72	18.24	0.00	0.000	0.010	0.028
779	56.40	56.30	0.51569	16.46	0.02826	0.04	0.57	32.08	1825.09	3208.12	18.25	0.00	0.000	0.010	0.028
780	56.30	56.20	0.51932	16.35	0.02844	0.04	0.57	32.09	1825.84	3208.53	18.26	0.00	0.000	0.010	0.028
781	56.20	56.10	0.52294	16.24	0.02863	0.04	0.57	32.09	1826.59	3208.93	18.27	0.00	0.000	0.010	0.029
782	56.10	56.00	0.52657	16.12	0.02882	0.04	0.57	32.09	1827.33	3209.33	18.27	0.00	0.000	0.010	0.029
783	56.00	55.90	0.53020	16.01	0.02900	0.04	0.57	32.10	1828.07	3209.73	18.28	0.00	0.000	0.010	0.029
784	55.90	55.80	0.53382	15.90	0.02919	0.04	0.57	32.10	1828.81	3210.13	18.29	0.00	0.000	0.010	0.029
785	55.80	55.70	0.53745	15.80	0.02938	0.04	0.57	32.11	1829.54	3210.52	18.30	0.00	0.000	0.010	0.029
786	55.70	55.60	0.54107	15.69	0.02956	0.04	0.57	32.11	1830.27	3210.91	18.30	0.00	0.000	0.010	0.030
787	55.60	55.50	0.54470	15.59	0.02975	0.04	0.57	32.11	1830.99	3211.30	18.31	0.00	0.000	0.010	0.030
788	55.50	55.40	0.54833	15.48	0.02994	0.04	0.57	32.12	1831.72	3211.69	18.32	0.00	0.000	0.010	0.030
789	55.40	55.30	0.55195	15.38	0.03012	0.04	0.57	32.12	1832.43	3212.08	18.32	0.00	0.000	0.010	0.030

790	55.30	55.20	0.55558	15.28	0.03031	0.04	0.57	32.12	1833.15	3212.46	18.33	0.00	0.000	0.011	0.030
791	55.20	55.10	0.55920	15.18	0.03049	0.04	0.57	32.13	1833.86	3212.85	18.34	0.00	0.000	0.011	0.030
792	55.10	55.00	0.56283	15.08	0.03068	0.04	0.57	32.13	1834.56	3213.23	18.35	0.00	0.000	0.011	0.031
793	55.00	54.90	0.56646	14.99	0.03087	0.04	0.57	32.14	1835.27	3213.61	18.35	0.00	0.000	0.011	0.031
794	54.90	54.80	0.57008	14.89	0.03105	0.04	0.57	32.14	1835.97	3213.99	18.36	0.00	0.000	0.011	0.031
795	54.80	54.70	0.57371	14.80	0.03124	0.04	0.57	32.14	1836.66	3214.36	18.37	0.00	0.000	0.011	0.031
796	54.70	54.60	0.57733	14.71	0.03142	0.04	0.57	32.15	1837.35	3214.74	18.37	0.00	0.000	0.011	0.031
797	54.60	54.50	0.58096	14.61	0.03161	0.04	0.57	32.15	1838.04	3215.11	18.38	0.00	0.000	0.011	0.032
798	54.50	54.40	0.58459	14.52	0.03179	0.04	0.57	32.15	1838.73	3215.48	18.39	0.00	0.000	0.011	0.032
799	54.40	54.30	0.58821	14.43	0.03198	0.04	0.57	32.16	1839.41	3215.85	18.39	0.00	0.000	0.011	0.032
800	54.30	54.20	0.59184	14.35	0.03216	0.04	0.57	32.16	1840.09	3216.22	18.40	0.00	0.000	0.011	0.032
801	54.20	54.10	0.59547	14.26	0.03235	0.04	0.57	32.17	1840.77	3216.58	18.41	0.00	0.000	0.011	0.032
802	54.10	54.00	0.59909	14.17	0.03253	0.04	0.57	32.17	1841.44	3216.95	18.41	0.00	0.000	0.011	0.033
803	54.00	53.90	0.60272	14.09	0.03272	0.04	0.57	32.17	1842.11	3217.31	18.42	0.00	0.000	0.011	0.033
804	53.90	53.80	0.60634	14.00	0.03290	0.04	0.57	32.18	1842.78	3217.67	18.43	0.00	0.000	0.011	0.033
805	53.80	53.70	0.60997	13.92	0.03309	0.03	0.57	32.18	1843.44	3218.03	18.43	0.00	0.000	0.012	0.033
806	53.70	53.60	0.61360	13.84	0.03327	0.03	0.57	32.18	1844.10	3218.39	18.44	0.00	0.000	0.012	0.033
807	53.60	53.50	0.61722	13.76	0.03346	0.03	0.57	32.19	1844.76	3218.75	18.45	0.00	0.000	0.012	0.033
808	53.50	53.40	0.62085	13.67	0.03364	0.03	0.57	32.19	1845.41	3219.10	18.45	0.00	0.000	0.012	0.034
809	53.40	53.30	0.62447	13.60	0.03383	0.03	0.57	32.19	1846.06	3219.46	18.46	0.00	0.000	0.012	0.034
810	53.30	53.20	0.62810	13.52	0.03401	0.03	0.57	32.20	1846.71	3219.81	18.47	0.00	0.000	0.012	0.034
811	53.20	53.10	0.63173	13.44	0.03420	0.03	0.57	32.20	1847.36	3220.16	18.47	0.00	0.000	0.012	0.034
812	53.10	53.00	0.63535	13.36	0.03438	0.03	0.57	32.21	1848.00	3220.51	18.48	0.00	0.000	0.012	0.034
813	53.00	52.90	0.63898	13.29	0.03456	0.03	0.57	32.21	1848.64	3220.86	18.49	0.00	0.000	0.012	0.035
814	52.90	52.80	0.64260	13.21	0.03475	0.03	0.57	32.21	1849.27	3221.20	18.49	0.00	0.000	0.012	0.035
815	52.80	52.70	0.64623	13.14	0.03493	0.03	0.57	32.22	1849.91	3221.55	18.50	0.00	0.000	0.012	0.035
816	52.70	52.60	0.64986	13.06	0.03512	0.03	0.57	32.22	1850.54	3221.89	18.51	0.00	0.000	0.012	0.035
817	52.60	52.50	0.65348	12.99	0.03530	0.03	0.57	32.22	1851.17	3222.23	18.51	0.00	0.000	0.012	0.035
818	52.50	52.40	0.65711	12.92	0.03548	0.03	0.57	32.23	1851.79	3222.58	18.52	0.00	0.000	0.012	0.035
819	52.40	52.30	0.66074	12.85	0.03567	0.03	0.57	32.23	1852.42	3222.92	18.52	0.00	0.000	0.013	0.036
820	52.30	52.20	0.66436	12.78	0.03585	0.03	0.57	32.23	1853.04	3223.25	18.53	0.00	0.000	0.013	0.036
821	52.20	52.10	0.66799	12.71	0.03604	0.03	0.58	32.24	1853.66	3223.59	18.54	0.00	0.000	0.013	0.036
822	52.10	52.00	0.67161	12.64	0.03622	0.03	0.58	32.24	1854.27	3223.93	18.54	0.00	0.000	0.013	0.036
823	52.00	51.90	0.67524	12.57	0.03640	0.03	0.58	32.24	1854.88	3224.26	18.55	0.00	0.000	0.013	0.036
824	51.90	51.80	0.67887	12.51	0.03659	0.03	0.58	32.25	1855.49	3224.59	18.55	0.00	0.000	0.013	0.037
825	51.80	51.70	0.68249	12.44	0.03677	0.03	0.58	32.25	1856.10	3224.92	18.56	0.00	0.000	0.013	0.037
826	51.70	51.60	0.68612	12.37	0.03695	0.03	0.58	32.25	1856.71	3225.26	18.57	0.00	0.000	0.013	0.037
827	51.60	51.50	0.68974	12.31	0.03714	0.03	0.58	32.26	1857.31	3225.58	18.57	0.00	0.000	0.013	0.037
828	51.50	51.40	0.69337	12.24	0.03732	0.03	0.58	32.26	1857.91	3225.91	18.58	0.00	0.000	0.013	0.037
829	51.40	51.30	0.69700	12.18	0.03750	0.03	0.58	32.26	1858.51	3226.24	18.59	0.00	0.000	0.013	0.038
830	51.30	51.20	0.70062	12.12	0.03769	0.03	0.58	32.27	1859.10	3226.56	18.59	0.00	0.000	0.013	0.038
831	51.20	51.10	0.70425	12.06	0.03787	0.03	0.58	32.27	1859.69	3226.89	18.60	0.00	0.000	0.013	0.038
832	51.10	51.00	0.70787	11.99	0.03805	0.03	0.58	32.27	1860.28	3227.21	18.60	0.00	0.000	0.013	0.038
833	51.00	50.90	0.71150	11.93	0.03823	0.03	0.58	32.28	1860.87	3227.53	18.61	0.00	0.000	0.013	0.038

TOT 3.74 168230.38 295327.22  
AVG 0.02848 0.57 32.10 18.29  
CUM 87.16

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECATY 1/da	CBOD SETT 1/da	ANBOD DECATY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECATY 1/da	ORGN SETT 1/da	NH3 DECATY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECATY 1/da	NCM DECATY 1/da	NCM SETT 1/da
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802	54.000	17.30	0.00	0.00	0.00	7.94	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
803	53.900	17.30	0.00	0.00	0.00	7.94	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
804	53.800	17.30	0.00	0.00	0.00	7.95	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
805	53.700	17.30	0.00	0.00	0.00	7.95	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
806	53.600	17.30	0.00	0.00	0.00	7.95	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
807	53.500	17.30	0.00	0.00	0.00	7.96	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
808	53.400	17.30	0.00	0.00	0.00	7.96	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
809	53.300	17.30	0.00	0.00	0.00	7.96	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
810	53.200	17.30	0.00	0.00	0.00	7.97	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
811	53.100	17.30	0.00	0.00	0.00	7.97	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
812	53.000	17.30	0.00	0.00	0.00	7.97	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
813	52.900	17.30	0.00	0.00	0.00	7.98	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
814	52.800	17.30	0.00	0.00	0.00	7.98	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
815	52.700	17.30	0.00	0.00	0.00	7.98	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
816	52.600	17.30	0.00	0.00	0.00	7.99	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
817	52.500	17.30	0.00	0.00	0.00	7.99	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
818	52.400	17.30	0.00	0.00	0.00	7.99	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
819	52.300	17.30	0.00	0.00	0.00	8.00	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
820	52.200	17.30	0.00	0.00	0.00	8.00	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
821	52.100	17.30	0.00	0.00	0.00	8.00	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
822	52.000	17.30	0.00	0.00	0.00	8.01	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
823	51.900	17.30	0.00	0.00	0.00	8.01	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
824	51.800	17.30	0.00	0.00	0.00	8.01	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
825	51.700	17.30	0.00	0.00	0.00	8.02	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
826	51.600	17.30	0.00	0.00	0.00	8.02	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60
827	51.500	17.30	0.00	0.00	0.00	8.02	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60
828	51.400	17.30	0.00	0.00	0.00	8.03	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60
829	51.300	17.30	0.00	0.00	0.00	8.03	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60
830	51.200	17.30	0.00	0.00	0.00	8.03	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60
831	51.100	17.30	0.00	0.00	0.00	8.04	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60
832	51.000	17.30	0.00	0.00	0.00	8.04	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60
833	50.900	17.30	0.00	0.00	0.00	8.04	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60

\* CM-I = CHLORIDES  
MG/L

CM-II = SULFATES  
MG/L

NCM = NBOD  
MG/L

\*\* g/cu m

FINAL REPORT      BIG CREEK  
REACH NO. 7      WEIR #5

Big Creek - STREAM MODEL  
Winter Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
834	UPR RCH	0.71150	17.30	0.00	0.00	0.00	8.04	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.60
EACH	INCR	0.0036	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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

ELEM NO.	BEGIN DIST	ENDING DIST	FLOW	PCT EFF	ADVCTV VELO	TRAVEL TIME	DEPTH	WIDTH	VOLUME	SURFACE AREA	X-SECT AREA	TIDAL PRISM	TIDAL VELO	DISPRSN	MEAN VELO
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	km	km	cms	m/s	days	m	m	cu m	sq m	sq m	cu m	m/s	sq m/s	m/s	
834	50.90	50.80	0.71510	11.87	0.01261	0.09	1.76	32.28	5670.32	3227.85	56.70	0.00	0.000	0.011	0.013
TOT						0.09			5670.32	3227.85					
AVG					0.01261		1.76	32.28			56.70				
CUM						87.25									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECAT 1/da	CBOD SETT 1/da	ANBOD DECAT 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECAT 1/da	ORGN SETT 1/da	NH3 DECAT 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECAT 1/da	NCM DECAT 1/da	NCM SETT 1/da	
834	50.800	9.60	0.70	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05	
20 DEG C RATE				0.07		0.00	0.00		0.00		0.00	0.00	0.00	0.00	0.00			0.00	0.16		
AVG 20 DEG C RATE				0.73	0.06					0.00											0.06

\* g/sq m/d                      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
834	50.800	17.30	0.00	0.00	0.00	8.06	5.86	5.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59

\* CM-I = CHLORIDES MG/L                      CM-II = SULFATES MG/L                      NCM = NBOD MG/L  
 \*\* g/cu m

FINAL REPORT                      BIG CREEK                      Big Creek - STREAM MODEL  
 REACH NO. 8                      BIG CREEK, WEIR #5 TO WEIR #4                      Winter Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
835	UPR RCH	0.71510	17.30	0.00	0.00	0.00	8.06	5.86	5.86	0.00	0.00	0.00	0.00	0.00	0.00	0.59
EACH	INCR	0.0036	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
861	WSTLD	0.02830	17.30	0.00	0.00	0.00	8.49	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.46

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRS sq m/s	MEAN VELO m/s
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835	50.80	50.70	0.71873	11.81	0.01267	0.09	1.76	32.28	5671.28	3228.17	56.71	0.00	0.000	0.011	0.013
836	50.70	50.60	0.72235	11.75	0.01273	0.09	1.76	32.28	5672.24	3228.49	56.72	0.00	0.000	0.011	0.013
837	50.60	50.50	0.72598	11.69	0.01280	0.09	1.76	32.29	5673.19	3228.81	56.73	0.00	0.000	0.011	0.013
838	50.50	50.40	0.72960	11.64	0.01286	0.09	1.76	32.29	5674.14	3229.12	56.74	0.00	0.000	0.011	0.013
839	50.40	50.30	0.73323	11.58	0.01292	0.09	1.76	32.29	5675.08	3229.44	56.75	0.00	0.000	0.011	0.013
840	50.30	50.20	0.73685	11.52	0.01298	0.09	1.76	32.30	5676.03	3229.75	56.76	0.00	0.000	0.012	0.013
841	50.20	50.10	0.74048	11.47	0.01304	0.09	1.76	32.30	5676.97	3230.06	56.77	0.00	0.000	0.012	0.013
842	50.10	50.00	0.74411	11.41	0.01311	0.09	1.76	32.30	5677.90	3230.38	56.78	0.00	0.000	0.012	0.013
843	50.00	49.90	0.74773	11.35	0.01317	0.09	1.76	32.31	5678.83	3230.69	56.79	0.00	0.000	0.012	0.013
844	49.90	49.80	0.75136	11.30	0.01323	0.09	1.76	32.31	5679.76	3230.99	56.80	0.00	0.000	0.012	0.013
845	49.80	49.70	0.75498	11.25	0.01329	0.09	1.76	32.31	5680.69	3231.30	56.81	0.00	0.000	0.012	0.013
846	49.70	49.60	0.75861	11.19	0.01335	0.09	1.76	32.32	5681.61	3231.61	56.82	0.00	0.000	0.012	0.013
847	49.60	49.50	0.76223	11.14	0.01341	0.09	1.76	32.32	5682.53	3231.92	56.83	0.00	0.000	0.012	0.013
848	49.50	49.40	0.76586	11.09	0.01348	0.09	1.76	32.32	5683.44	3232.22	56.83	0.00	0.000	0.012	0.013
849	49.40	49.30	0.76948	11.03	0.01354	0.09	1.76	32.33	5684.35	3232.52	56.84	0.00	0.000	0.012	0.014
850	49.30	49.20	0.77311	10.98	0.01360	0.09	1.76	32.33	5685.26	3232.83	56.85	0.00	0.000	0.012	0.014
851	49.20	49.10	0.77674	10.93	0.01366	0.08	1.76	32.33	5686.17	3233.13	56.86	0.00	0.000	0.012	0.014
852	49.10	49.00	0.78036	10.88	0.01372	0.08	1.76	32.33	5687.07	3233.43	56.87	0.00	0.000	0.012	0.014
853	49.00	48.90	0.78399	10.83	0.01378	0.08	1.76	32.34	5687.97	3233.73	56.88	0.00	0.000	0.012	0.014
854	48.90	48.80	0.78761	10.78	0.01384	0.08	1.76	32.34	5688.86	3234.03	56.89	0.00	0.000	0.012	0.014
855	48.80	48.70	0.79124	10.73	0.01391	0.08	1.76	32.34	5689.76	3234.33	56.90	0.00	0.000	0.012	0.014
856	48.70	48.60	0.79486	10.68	0.01397	0.08	1.76	32.35	5690.65	3234.62	56.91	0.00	0.000	0.012	0.014
857	48.60	48.50	0.79849	10.63	0.01403	0.08	1.76	32.35	5691.53	3234.92	56.92	0.00	0.000	0.012	0.014
858	48.50	48.40	0.80211	10.58	0.01409	0.08	1.76	32.35	5692.42	3235.22	56.92	0.00	0.000	0.013	0.014
859	48.40	48.30	0.80574	10.54	0.01415	0.08	1.76	32.36	5693.30	3235.51	56.93	0.00	0.000	0.013	0.014
860	48.30	48.20	0.80937	10.49	0.01421	0.08	1.76	32.36	5694.18	3235.80	56.94	0.00	0.000	0.013	0.014
861	48.20	48.10	0.81299	13.46	0.01475	0.08	1.76	32.38	5701.78	3238.34	57.02	0.00	0.000	0.013	0.015
862	48.10	48.00	0.81492	13.40	0.01482	0.08	1.76	32.39	5702.63	3238.63	57.03	0.00	0.000	0.013	0.015
863	48.00	47.90	0.81854	13.34	0.01488	0.08	1.76	32.39	5703.47	3238.91	57.03	0.00	0.000	0.013	0.015
864	47.90	47.80	0.82217	13.28	0.01494	0.08	1.76	32.39	5704.32	3239.19	57.04	0.00	0.000	0.013	0.015
865	47.80	47.70	0.82579	13.23	0.01500	0.08	1.76	32.39	5705.16	3239.47	57.05	0.00	0.000	0.013	0.015
866	47.70	47.60	0.82942	13.17	0.01506	0.08	1.76	32.40	5706.00	3239.75	57.06	0.00	0.000	0.013	0.015
867	47.60	47.50	0.83304	13.12	0.01512	0.08	1.76	32.40	5706.83	3240.03	57.07	0.00	0.000	0.013	0.015
868	47.50	47.40	0.83667	13.06	0.01518	0.08	1.76	32.40	5707.67	3240.31	57.08	0.00	0.000	0.014	0.015
869	47.40	47.30	0.84030	13.01	0.01525	0.08	1.76	32.41	5708.50	3240.59	57.08	0.00	0.000	0.014	0.015
870	47.30	47.20	0.84392	12.95	0.01531	0.08	1.76	32.41	5709.33	3240.87	57.09	0.00	0.000	0.014	0.015
871	47.20	47.10	0.84755	12.90	0.01537	0.08	1.76	32.41	5710.15	3241.15	57.10	0.00	0.000	0.014	0.015
872	47.10	47.00	0.85117	12.85	0.01543	0.08	1.76	32.41	5710.97	3241.42	57.11	0.00	0.000	0.014	0.015
873	47.00	46.90	0.85480	12.79	0.01549	0.07	1.76	32.42	5711.79	3241.70	57.12	0.00	0.000	0.014	0.015
874	46.90	46.80	0.85842	12.74	0.01555	0.07	1.76	32.42	5712.61	3241.97	57.13	0.00	0.000	0.014	0.016
875	46.80	46.70	0.86205	12.69	0.01561	0.07	1.76	32.42	5713.43	3242.24	57.13	0.00	0.000	0.014	0.016
876	46.70	46.60	0.86567	12.64	0.01567	0.07	1.76	32.43	5714.24	3242.51	57.14	0.00	0.000	0.014	0.016
877	46.60	46.50	0.86930	12.59	0.01574	0.07	1.76	32.43	5715.05	3242.79	57.15	0.00	0.000	0.014	0.016
878	46.50	46.40	0.87293	12.54	0.01580	0.07	1.76	32.43	5715.86	3243.06	57.16	0.00	0.000	0.014	0.016
879	46.40	46.30	0.87655	12.49	0.01586	0.07	1.76	32.43	5716.66	3243.33	57.17	0.00	0.000	0.014	0.016
880	46.30	46.20	0.88018	12.44	0.01592	0.07	1.76	32.44	5717.47	3243.60	57.17	0.00	0.000	0.014	0.016
881	46.20	46.10	0.88380	12.39	0.01598	0.07	1.76	32.44	5718.27	3243.86	57.18	0.00	0.000	0.014	0.016
882	46.10	46.00	0.88743	12.34	0.01604	0.07	1.76	32.44	5719.06	3244.13	57.19	0.00	0.000	0.014	0.016
883	46.00	45.90	0.89105	12.29	0.01610	0.07	1.76	32.44	5719.86	3244.40	57.20	0.00	0.000	0.014	0.016
884	45.90	45.80	0.89468	12.24	0.01616	0.07	1.76	32.45	5720.65	3244.66	57.21	0.00	0.000	0.014	0.016
885	45.80	45.70	0.89830	12.19	0.01623	0.07	1.76	32.45	5721.45	3244.93	57.21	0.00	0.000	0.014	0.016
886	45.70	45.60	0.90193	12.15	0.01629	0.07	1.76	32.45	5722.23	3245.20	57.22	0.00	0.000	0.015	0.016
887	45.60	45.50	0.90556	12.10	0.01635	0.07	1.76	32.45	5723.02	3245.46	57.23	0.00	0.000	0.015	0.016
888	45.50	45.40	0.90918	12.05	0.01641	0.07	1.76	32.46	5723.80	3245.72	57.24	0.00	0.000	0.015	0.016
889	45.40	45.30	0.91281	12.01	0.01647	0.07	1.76	32.46	5724.59	3245.98	57.25	0.00	0.000	0.015	0.016

890	45.30	45.20	0.94643	11.96	0.01653	0.07	1.76	32.46	5725.37	3246.25	57.25	0.00	0.000	0.015	0.017
891	45.20	45.10	0.95006	11.92	0.01659	0.07	1.76	32.47	5726.14	3246.51	57.26	0.00	0.000	0.015	0.017
892	45.10	45.00	0.95368	11.87	0.01665	0.07	1.76	32.47	5726.92	3246.77	57.27	0.00	0.000	0.015	0.017
893	45.00	44.90	0.95731	11.82	0.01671	0.07	1.76	32.47	5727.69	3247.03	57.28	0.00	0.000	0.015	0.017
894	44.90	44.80	0.96093	11.78	0.01677	0.07	1.76	32.47	5728.46	3247.29	57.28	0.00	0.000	0.015	0.017
895	44.80	44.70	0.96456	11.74	0.01684	0.07	1.76	32.48	5729.23	3247.54	57.29	0.00	0.000	0.015	0.017
896	44.70	44.60	0.96819	11.69	0.01690	0.07	1.76	32.48	5730.00	3247.80	57.30	0.00	0.000	0.015	0.017
897	44.60	44.50	0.97181	11.65	0.01696	0.07	1.76	32.48	5730.76	3248.06	57.31	0.00	0.000	0.015	0.017
898	44.50	44.40	0.97544	11.61	0.01702	0.07	1.76	32.48	5731.52	3248.31	57.32	0.00	0.000	0.015	0.017
899	44.40	44.30	0.97906	11.56	0.01708	0.07	1.76	32.49	5732.28	3248.57	57.32	0.00	0.000	0.015	0.017
900	44.30	44.20	0.98269	11.52	0.01714	0.07	1.76	32.49	5733.04	3248.82	57.33	0.00	0.000	0.015	0.017
901	44.20	44.10	0.98631	11.48	0.01720	0.07	1.76	32.49	5733.79	3249.08	57.34	0.00	0.000	0.015	0.017
902	44.10	44.00	0.98994	11.44	0.01726	0.07	1.76	32.49	5734.55	3249.33	57.35	0.00	0.000	0.015	0.017
903	44.00	43.90	0.99357	11.39	0.01732	0.07	1.76	32.50	5735.30	3249.58	57.35	0.00	0.000	0.015	0.017
904	43.90	43.80	0.99719	11.35	0.01738	0.07	1.77	32.50	5736.05	3249.84	57.36	0.00	0.000	0.016	0.017
905	43.80	43.70	1.00082	11.31	0.01745	0.07	1.77	32.50	5736.80	3250.09	57.37	0.00	0.000	0.016	0.017
906	43.70	43.60	1.00444	11.27	0.01751	0.07	1.77	32.50	5737.54	3250.34	57.38	0.00	0.000	0.016	0.018
907	43.60	43.50	1.00807	11.23	0.01757	0.07	1.77	32.51	5738.28	3250.59	57.38	0.00	0.000	0.016	0.018
908	43.50	43.40	1.01169	11.19	0.01763	0.07	1.77	32.51	5739.03	3250.84	57.39	0.00	0.000	0.016	0.018
909	43.40	43.30	1.01532	11.15	0.01769	0.07	1.77	32.51	5739.76	3251.08	57.40	0.00	0.000	0.016	0.018
910	43.30	43.20	1.01894	11.11	0.01775	0.07	1.77	32.51	5740.50	3251.33	57.41	0.00	0.000	0.016	0.018
911	43.20	43.10	1.02257	11.07	0.01781	0.06	1.77	32.52	5741.24	3251.58	57.41	0.00	0.000	0.016	0.018
912	43.10	43.00	1.02619	11.03	0.01787	0.06	1.77	32.52	5741.97	3251.83	57.42	0.00	0.000	0.016	0.018
913	43.00	42.90	1.02982	10.99	0.01793	0.06	1.77	32.52	5742.70	3252.07	57.43	0.00	0.000	0.016	0.018
914	42.90	42.80	1.03345	10.95	0.01799	0.06	1.77	32.52	5743.43	3252.32	57.43	0.00	0.000	0.016	0.018
915	42.80	42.70	1.03707	10.92	0.01805	0.06	1.77	32.53	5744.16	3252.56	57.44	0.00	0.000	0.016	0.018
916	42.70	42.60	1.04070	10.88	0.01812	0.06	1.77	32.53	5744.88	3252.81	57.45	0.00	0.000	0.016	0.018
917	42.60	42.50	1.04432	10.84	0.01818	0.06	1.77	32.53	5745.61	3253.05	57.46	0.00	0.000	0.016	0.018
918	42.50	42.40	1.04795	10.80	0.01824	0.06	1.77	32.53	5746.33	3253.29	57.46	0.00	0.000	0.016	0.018
919	42.40	42.30	1.05157	10.76	0.01830	0.06	1.77	32.54	5747.05	3253.54	57.47	0.00	0.000	0.016	0.018
920	42.30	42.20	1.05520	10.73	0.01836	0.06	1.77	32.54	5747.77	3253.78	57.48	0.00	0.000	0.016	0.018
921	42.20	42.10	1.05882	10.69	0.01842	0.06	1.77	32.54	5748.48	3254.02	57.48	0.00	0.000	0.016	0.018
922	42.10	42.00	1.06245	10.65	0.01848	0.06	1.77	32.54	5749.20	3254.26	57.49	0.00	0.000	0.017	0.018
923	42.00	41.90	1.06608	10.62	0.01854	0.06	1.77	32.55	5749.91	3254.50	57.50	0.00	0.000	0.017	0.019
924	41.90	41.80	1.06970	10.58	0.01860	0.06	1.77	32.55	5750.62	3254.74	57.51	0.00	0.000	0.017	0.019
925	41.80	41.70	1.07333	10.55	0.01866	0.06	1.77	32.55	5751.33	3254.98	57.51	0.00	0.000	0.017	0.019
926	41.70	41.60	1.07695	10.51	0.01872	0.06	1.77	32.55	5752.04	3255.22	57.52	0.00	0.000	0.017	0.019
927	41.60	41.50	1.08058	10.48	0.01878	0.06	1.77	32.55	5752.74	3255.46	57.53	0.00	0.000	0.017	0.019
928	41.50	41.40	1.08420	10.44	0.01884	0.06	1.77	32.56	5753.44	3255.69	57.53	0.00	0.000	0.017	0.019
929	41.40	41.30	1.08783	10.41	0.01891	0.06	1.77	32.56	5754.15	3255.93	57.54	0.00	0.000	0.017	0.019
930	41.30	41.20	1.09145	10.37	0.01897	0.06	1.77	32.56	5754.85	3256.17	57.55	0.00	0.000	0.017	0.019
931	41.20	41.10	1.09508	10.34	0.01903	0.06	1.77	32.56	5755.54	3256.40	57.56	0.00	0.000	0.017	0.019
932	41.10	41.00	1.09871	10.30	0.01909	0.06	1.77	32.57	5756.24	3256.64	57.56	0.00	0.000	0.017	0.019
933	41.00	40.90	1.10233	10.27	0.01915	0.06	1.77	32.57	5756.94	3256.87	57.57	0.00	0.000	0.017	0.019
934	40.90	40.80	1.10596	10.24	0.01921	0.06	1.77	32.57	5757.63	3257.10	57.58	0.00	0.000	0.017	0.019
935	40.80	40.70	1.10958	10.20	0.01927	0.06	1.77	32.57	5758.32	3257.34	57.58	0.00	0.000	0.017	0.019
936	40.70	40.60	1.11321	10.17	0.01933	0.06	1.77	32.58	5759.01	3257.57	57.59	0.00	0.000	0.017	0.019
937	40.60	40.50	1.11683	10.14	0.01939	0.06	1.77	32.58	5759.70	3257.80	57.60	0.00	0.000	0.017	0.019
938	40.50	40.40	1.12046	10.10	0.01945	0.06	1.77	32.58	5760.38	3258.03	57.60	0.00	0.000	0.017	0.019
939	40.40	40.30	1.12408	10.07	0.01951	0.06	1.77	32.58	5761.07	3258.26	57.61	0.00	0.000	0.017	0.020
940	40.30	40.20	1.12771	10.04	0.01957	0.06	1.77	32.58	5761.75	3258.49	57.62	0.00	0.000	0.017	0.020
941	40.20	40.10	1.13133	10.01	0.01963	0.06	1.77	32.59	5762.43	3258.72	57.62	0.00	0.000	0.018	0.020
942	40.10	40.00	1.13496	9.97	0.01969	0.06	1.77	32.59	5763.11	3258.95	57.63	0.00	0.000	0.018	0.020
943	40.00	39.90	1.13859	9.94	0.01975	0.06	1.77	32.59	5763.79	3259.18	57.64	0.00	0.000	0.018	0.020
944	39.90	39.80	1.14221	9.91	0.01981	0.06	1.77	32.59	5764.46	3259.41	57.64	0.00	0.000	0.018	0.020

945	39.80	39.70	1.14584	9.88	0.01988	0.06	1.77	32.60	5765.14	3259.64	57.65	0.00	0.000	0.018	0.020
946	39.70	39.60	1.14946	9.85	0.01994	0.06	1.77	32.60	5765.81	3259.87	57.66	0.00	0.000	0.018	0.020
947	39.60	39.50	1.15309	9.82	0.02000	0.06	1.77	32.60	5766.48	3260.09	57.66	0.00	0.000	0.018	0.020
948	39.50	39.40	1.15671	9.79	0.02006	0.06	1.77	32.60	5767.15	3260.32	57.67	0.00	0.000	0.018	0.020
949	39.40	39.30	1.16034	9.76	0.02012	0.06	1.77	32.61	5767.82	3260.54	57.68	0.00	0.000	0.018	0.020
950	39.30	39.20	1.16396	9.73	0.02018	0.06	1.77	32.61	5768.49	3260.77	57.68	0.00	0.000	0.018	0.020
951	39.20	39.10	1.16759	9.70	0.02024	0.06	1.77	32.61	5769.15	3260.99	57.69	0.00	0.000	0.018	0.020
952	39.10	39.00	1.17122	9.67	0.02030	0.06	1.77	32.61	5769.82	3261.22	57.70	0.00	0.000	0.018	0.020
953	39.00	38.90	1.17484	9.64	0.02036	0.06	1.77	32.61	5770.48	3261.44	57.70	0.00	0.000	0.018	0.020
954	38.90	38.80	1.17847	9.61	0.02042	0.06	1.77	32.62	5771.14	3261.67	57.71	0.00	0.000	0.018	0.020
955	38.80	38.70	1.18209	9.58	0.02048	0.06	1.77	32.62	5771.80	3261.89	57.72	0.00	0.000	0.018	0.020
956	38.70	38.60	1.18572	9.55	0.02054	0.06	1.77	32.62	5772.46	3262.11	57.72	0.00	0.000	0.018	0.021
957	38.60	38.50	1.18934	9.52	0.02060	0.06	1.77	32.62	5773.11	3262.33	57.73	0.00	0.000	0.018	0.021
958	38.50	38.40	1.19297	9.49	0.02066	0.06	1.77	32.63	5773.77	3262.55	57.74	0.00	0.000	0.018	0.021
959	38.40	38.30	1.19659	9.46	0.02072	0.06	1.77	32.63	5774.42	3262.77	57.74	0.00	0.000	0.019	0.021
960	38.30	38.20	1.20022	9.43	0.02078	0.06	1.77	32.63	5775.07	3262.99	57.75	0.00	0.000	0.019	0.021
961	38.20	38.10	1.20384	9.40	0.02084	0.06	1.77	32.63	5775.72	3263.21	57.76	0.00	0.000	0.019	0.021
962	38.10	38.00	1.20747	9.37	0.02090	0.06	1.77	32.63	5776.37	3263.43	57.76	0.00	0.000	0.019	0.021
963	38.00	37.90	1.21110	9.35	0.02096	0.06	1.77	32.64	5777.02	3263.65	57.77	0.00	0.000	0.019	0.021
964	37.90	37.80	1.21472	9.32	0.02102	0.06	1.77	32.64	5777.66	3263.87	57.78	0.00	0.000	0.019	0.021
965	37.80	37.70	1.21835	9.29	0.02108	0.05	1.77	32.64	5778.31	3264.09	57.78	0.00	0.000	0.019	0.021
966	37.70	37.60	1.22197	9.26	0.02115	0.05	1.77	32.64	5778.95	3264.31	57.79	0.00	0.000	0.019	0.021
967	37.60	37.50	1.22560	9.24	0.02121	0.05	1.77	32.65	5779.59	3264.52	57.80	0.00	0.000	0.019	0.021

TOT 9.20 762203.06 431999.19  
 AVG 0.01673 1.76 32.48 57.31  
 CUM 96.45

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECA 1/da	CBOD SETT 1/da	ANBOD DECA 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECA 1/da	ORGN SETT 1/da	NH3 DECA 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECA 1/da	NCM DECA 1/da	NCM SETT 1/da
835	50.700	9.60	0.70	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
836	50.600	9.60	0.70	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
837	50.500	9.60	0.70	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
838	50.400	9.60	0.69	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
839	50.300	9.60	0.69	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
840	50.200	9.60	0.69	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
841	50.100	9.60	0.69	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
842	50.000	9.60	0.69	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
843	49.900	9.60	0.69	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
844	49.800	9.60	0.69	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
845	49.700	9.60	0.69	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
846	49.600	9.60	0.69	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
847	49.500	9.60	0.69	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
848	49.400	9.60	0.69	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
849	49.300	9.60	0.69	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
850	49.200	9.60	0.69	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
851	49.100	9.60	0.69	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
852	49.000	9.60	0.69	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
853	48.900	9.60	0.69	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
854	48.800	9.60	0.69	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05







965	37.700	9.60	0.69	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
966	37.600	9.60	0.69	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
967	37.500	9.60	0.69	0.06	0.05	0.00	0.67	0.67	0.67	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05

20 DEG C RATE				0.07		0.00	0.79			0.00		0.00	0.00	0.00	0.00			0.00	0.16	
AVG 20 DEG C RATE			0.73		0.06						0.00									0.06

\* g/sq m/d                      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
835	50.700	17.30	0.00	0.00	0.00	8.04	5.87	5.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59
836	50.600	17.30	0.00	0.00	0.00	8.03	5.88	5.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59
837	50.500	17.30	0.00	0.00	0.00	8.01	5.89	5.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.59
838	50.400	17.30	0.00	0.00	0.00	8.00	5.90	5.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60
839	50.300	17.30	0.00	0.00	0.00	7.99	5.91	5.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60
840	50.200	17.30	0.00	0.00	0.00	7.97	5.92	5.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60
841	50.100	17.30	0.00	0.00	0.00	7.96	5.93	5.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
842	50.000	17.30	0.00	0.00	0.00	7.95	5.94	5.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
843	49.900	17.30	0.00	0.00	0.00	7.94	5.95	5.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
844	49.800	17.30	0.00	0.00	0.00	7.93	5.96	5.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
845	49.700	17.30	0.00	0.00	0.00	7.92	5.97	5.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
846	49.600	17.30	0.00	0.00	0.00	7.92	5.98	5.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
847	49.500	17.30	0.00	0.00	0.00	7.91	5.99	5.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
848	49.400	17.30	0.00	0.00	0.00	7.90	6.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
849	49.300	17.30	0.00	0.00	0.00	7.89	6.01	6.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62
850	49.200	17.30	0.00	0.00	0.00	7.89	6.01	6.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
851	49.100	17.30	0.00	0.00	0.00	7.88	6.02	6.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
852	49.000	17.30	0.00	0.00	0.00	7.88	6.03	6.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
853	48.900	17.30	0.00	0.00	0.00	7.87	6.04	6.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
854	48.800	17.30	0.00	0.00	0.00	7.86	6.04	6.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
855	48.700	17.30	0.00	0.00	0.00	7.86	6.05	6.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63
856	48.600	17.30	0.00	0.00	0.00	7.86	6.06	6.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64
857	48.500	17.30	0.00	0.00	0.00	7.85	6.07	6.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64
858	48.400	17.30	0.00	0.00	0.00	7.85	6.07	6.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64
859	48.300	17.30	0.00	0.00	0.00	7.84	6.08	6.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64
860	48.200	17.30	0.00	0.00	0.00	7.84	6.09	6.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64
861	48.100	17.30	0.00	0.00	0.00	7.86	6.10	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64
862	48.000	17.30	0.00	0.00	0.00	7.85	6.11	6.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64
863	47.900	17.30	0.00	0.00	0.00	7.85	6.11	6.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64
864	47.800	17.30	0.00	0.00	0.00	7.84	6.12	6.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64
865	47.700	17.30	0.00	0.00	0.00	7.84	6.13	6.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64
866	47.600	17.30	0.00	0.00	0.00	7.84	6.13	6.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65
867	47.500	17.30	0.00	0.00	0.00	7.83	6.14	6.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65
868	47.400	17.30	0.00	0.00	0.00	7.83	6.14	6.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65
869	47.300	17.30	0.00	0.00	0.00	7.83	6.15	6.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65
870	47.200	17.30	0.00	0.00	0.00	7.82	6.15	6.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65
871	47.100	17.30	0.00	0.00	0.00	7.82	6.16	6.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65
872	47.000	17.30	0.00	0.00	0.00	7.82	6.16	6.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65
873	46.900	17.30	0.00	0.00	0.00	7.81	6.17	6.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65
874	46.800	17.30	0.00	0.00	0.00	7.81	6.17	6.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66



930	41.200	17.30	0.00	0.00	0.00	7.76	6.35	6.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
931	41.100	17.30	0.00	0.00	0.00	7.75	6.35	6.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
932	41.000	17.30	0.00	0.00	0.00	7.75	6.35	6.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
933	40.900	17.30	0.00	0.00	0.00	7.75	6.35	6.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
934	40.800	17.30	0.00	0.00	0.00	7.75	6.35	6.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
935	40.700	17.30	0.00	0.00	0.00	7.75	6.35	6.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
936	40.600	17.30	0.00	0.00	0.00	7.75	6.36	6.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
937	40.500	17.30	0.00	0.00	0.00	7.75	6.36	6.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69
938	40.400	17.30	0.00	0.00	0.00	7.75	6.36	6.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
939	40.300	17.30	0.00	0.00	0.00	7.75	6.36	6.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
940	40.200	17.30	0.00	0.00	0.00	7.75	6.36	6.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
941	40.100	17.30	0.00	0.00	0.00	7.75	6.36	6.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
942	40.000	17.30	0.00	0.00	0.00	7.75	6.37	6.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
943	39.900	17.30	0.00	0.00	0.00	7.75	6.37	6.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
944	39.800	17.30	0.00	0.00	0.00	7.75	6.37	6.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
945	39.700	17.30	0.00	0.00	0.00	7.75	6.37	6.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
946	39.600	17.30	0.00	0.00	0.00	7.75	6.37	6.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
947	39.500	17.30	0.00	0.00	0.00	7.75	6.37	6.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
948	39.400	17.30	0.00	0.00	0.00	7.75	6.37	6.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
949	39.300	17.30	0.00	0.00	0.00	7.75	6.38	6.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
950	39.200	17.30	0.00	0.00	0.00	7.75	6.38	6.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
951	39.100	17.30	0.00	0.00	0.00	7.75	6.38	6.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
952	39.000	17.30	0.00	0.00	0.00	7.75	6.38	6.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
953	38.900	17.30	0.00	0.00	0.00	7.75	6.38	6.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
954	38.800	17.30	0.00	0.00	0.00	7.75	6.38	6.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
955	38.700	17.30	0.00	0.00	0.00	7.75	6.38	6.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
956	38.600	17.30	0.00	0.00	0.00	7.75	6.39	6.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
957	38.500	17.30	0.00	0.00	0.00	7.75	6.39	6.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
958	38.400	17.30	0.00	0.00	0.00	7.75	6.39	6.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
959	38.300	17.30	0.00	0.00	0.00	7.75	6.39	6.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
960	38.200	17.30	0.00	0.00	0.00	7.75	6.39	6.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
961	38.100	17.30	0.00	0.00	0.00	7.75	6.39	6.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
962	38.000	17.30	0.00	0.00	0.00	7.75	6.39	6.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
963	37.900	17.30	0.00	0.00	0.00	7.75	6.39	6.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
964	37.800	17.30	0.00	0.00	0.00	7.75	6.39	6.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
965	37.700	17.30	0.00	0.00	0.00	7.75	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
966	37.600	17.30	0.00	0.00	0.00	7.75	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70
967	37.500	17.30	0.00	0.00	0.00	7.75	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.70

\* CM-I = CHLORIDES  
MG/L

CM-II = SULFATES  
MG/L

NCM = NBOD  
MG/L

\*\* g/cu m

FINAL REPORT BIG CREEK  
REACH NO. 9 WEIR #4

Big Creek - STREAM MODEL  
Winter Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
968	UPR RCH	1.22560	17.30	0.00	0.00	0.00	7.75	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.70
EACH	INCR	0.0036	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
968	37.50	37.40	1.22920	9.21	0.02127	0.05	1.77	32.65	5780.23	3264.74	57.80	0.00	0.000	0.019	0.021
TOT AVG CUM					0.02127	0.05	1.77	32.65	5780.23	3264.74	57.80				

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECA 1/da	CBOD SETT 1/da	ANBOD DECA 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECA 1/da	ORGN SETT 1/da	NH3 DECA 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECA 1/da	NCM DECA 1/da	NCM SETT 1/da
968	37.400	9.60	0.69	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
20 DEG C RATE AVG				0.07		0.00	0.00			0.00		0.00	0.00	0.00	0.00			0.00	0.16	0.06

\* g/sq m/d                      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
968	37.400	17.30	0.00	0.00	0.00	7.77	6.34	6.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.69

\* CM-I = CHLORIDES MG/L                      CM-II = SULFATES MG/L                      NCM = NBOD MG/L  
 \*\* g/cu m

FINAL REPORT                      BIG CREEK                      Big Creek - STREAM MODEL  
 REACH NO. 10                      BIG CREEK, WEIR #4 TO WEIR #3                      Winter Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
969	UPR RCH	1.22920	17.30	0.00	0.00	0.00	7.77	6.34	6.34	0.00	0.00	0.00	0.00	0.00	0.00	0.69
EACH	INCR	0.0037	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1014	WSTLD	0.02830	17.30	0.00	0.00	0.00	8.49	6.74	6.74	0.00	0.00	0.00	0.00	0.00	0.00	0.07

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
969	37.40	37.30	1.23288	9.18	0.01692	0.07	1.77	41.15	7285.87	4114.96	72.86	0.00	0.000	0.015	0.017
970	37.30	37.20	1.23657	9.15	0.01697	0.07	1.77	41.15	7286.58	4115.18	72.87	0.00	0.000	0.015	0.017
971	37.20	37.10	1.24025	9.13	0.01702	0.07	1.77	41.15	7287.30	4115.40	72.87	0.00	0.000	0.015	0.017
972	37.10	37.00	1.24394	9.10	0.01707	0.07	1.77	41.16	7288.01	4115.61	72.88	0.00	0.000	0.015	0.017
973	37.00	36.90	1.24762	9.07	0.01712	0.07	1.77	41.16	7288.72	4115.83	72.89	0.00	0.000	0.015	0.017
974	36.90	36.80	1.25131	9.05	0.01717	0.07	1.77	41.16	7289.43	4116.05	72.89	0.00	0.000	0.015	0.017
975	36.80	36.70	1.25499	9.02	0.01721	0.07	1.77	41.16	7290.13	4116.27	72.90	0.00	0.000	0.015	0.017
976	36.70	36.60	1.25868	8.99	0.01726	0.07	1.77	41.16	7290.84	4116.48	72.91	0.00	0.000	0.015	0.017
977	36.60	36.50	1.26237	8.97	0.01731	0.07	1.77	41.17	7291.54	4116.70	72.92	0.00	0.000	0.015	0.017
978	36.50	36.40	1.26605	8.94	0.01736	0.07	1.77	41.17	7292.24	4116.91	72.92	0.00	0.000	0.016	0.017
979	36.40	36.30	1.26974	8.92	0.01741	0.07	1.77	41.17	7292.95	4117.13	72.93	0.00	0.000	0.016	0.017
980	36.30	36.20	1.27342	8.89	0.01746	0.07	1.77	41.17	7293.64	4117.34	72.94	0.00	0.000	0.016	0.017
981	36.20	36.10	1.27711	8.86	0.01751	0.07	1.77	41.18	7294.34	4117.56	72.94	0.00	0.000	0.016	0.018
982	36.10	36.00	1.28079	8.84	0.01756	0.07	1.77	41.18	7295.04	4117.77	72.95	0.00	0.000	0.016	0.018
983	36.00	35.90	1.28448	8.81	0.01761	0.07	1.77	41.18	7295.73	4117.98	72.96	0.00	0.000	0.016	0.018
984	35.90	35.80	1.28816	8.79	0.01765	0.07	1.77	41.18	7296.42	4118.20	72.96	0.00	0.000	0.016	0.018
985	35.80	35.70	1.29185	8.76	0.01770	0.07	1.77	41.18	7297.12	4118.41	72.97	0.00	0.000	0.016	0.018
986	35.70	35.60	1.29553	8.74	0.01775	0.07	1.77	41.19	7297.81	4118.62	72.98	0.00	0.000	0.016	0.018
987	35.60	35.50	1.29922	8.71	0.01780	0.07	1.77	41.19	7298.49	4118.83	72.98	0.00	0.000	0.016	0.018
988	35.50	35.40	1.30290	8.69	0.01785	0.06	1.77	41.19	7299.18	4119.04	72.99	0.00	0.000	0.016	0.018
989	35.40	35.30	1.30659	8.66	0.01790	0.06	1.77	41.19	7299.87	4119.25	73.00	0.00	0.000	0.016	0.018
990	35.30	35.20	1.31027	8.64	0.01795	0.06	1.77	41.19	7300.55	4119.46	73.01	0.00	0.000	0.016	0.018
991	35.20	35.10	1.31396	8.62	0.01800	0.06	1.77	41.20	7301.23	4119.67	73.01	0.00	0.000	0.016	0.018
992	35.10	35.00	1.31764	8.59	0.01805	0.06	1.77	41.20	7301.92	4119.88	73.02	0.00	0.000	0.016	0.018
993	35.00	34.90	1.32133	8.57	0.01809	0.06	1.77	41.20	7302.59	4120.09	73.03	0.00	0.000	0.016	0.018
994	34.90	34.80	1.32501	8.54	0.01814	0.06	1.77	41.20	7303.27	4120.30	73.03	0.00	0.000	0.016	0.018
995	34.80	34.70	1.32870	8.52	0.01819	0.06	1.77	41.21	7303.95	4120.51	73.04	0.00	0.000	0.016	0.018
996	34.70	34.60	1.33238	8.50	0.01824	0.06	1.77	41.21	7304.63	4120.72	73.05	0.00	0.000	0.016	0.018
997	34.60	34.50	1.33607	8.47	0.01829	0.06	1.77	41.21	7305.30	4120.92	73.05	0.00	0.000	0.016	0.018
998	34.50	34.40	1.33976	8.45	0.01834	0.06	1.77	41.21	7305.97	4121.13	73.06	0.00	0.000	0.016	0.018
999	34.40	34.30	1.34344	8.43	0.01839	0.06	1.77	41.21	7306.64	4121.34	73.07	0.00	0.000	0.016	0.018
1000	34.30	34.20	1.34713	8.40	0.01844	0.06	1.77	41.22	7307.31	4121.54	73.07	0.00	0.000	0.017	0.018
1001	34.20	34.10	1.35081	8.38	0.01848	0.06	1.77	41.22	7307.98	4121.75	73.08	0.00	0.000	0.017	0.018
1002	34.10	34.00	1.35450	8.36	0.01853	0.06	1.77	41.22	7308.65	4121.95	73.09	0.00	0.000	0.017	0.019
1003	34.00	33.90	1.35818	8.33	0.01858	0.06	1.77	41.22	7309.31	4122.16	73.09	0.00	0.000	0.017	0.019
1004	33.90	33.80	1.36187	8.31	0.01863	0.06	1.77	41.22	7309.98	4122.36	73.10	0.00	0.000	0.017	0.019
1005	33.80	33.70	1.36555	8.29	0.01868	0.06	1.77	41.23	7310.64	4122.57	73.11	0.00	0.000	0.017	0.019
1006	33.70	33.60	1.36924	8.27	0.01873	0.06	1.77	41.23	7311.30	4122.77	73.11	0.00	0.000	0.017	0.019
1007	33.60	33.50	1.37292	8.25	0.01878	0.06	1.77	41.23	7311.96	4122.97	73.12	0.00	0.000	0.017	0.019
1008	33.50	33.40	1.37661	8.22	0.01883	0.06	1.77	41.23	7312.62	4123.18	73.13	0.00	0.000	0.017	0.019
1009	33.40	33.30	1.38029	8.20	0.01887	0.06	1.77	41.23	7313.28	4123.38	73.13	0.00	0.000	0.017	0.019
1010	33.30	33.20	1.38398	8.18	0.01892	0.06	1.77	41.24	7313.93	4123.58	73.14	0.00	0.000	0.017	0.019
1011	33.20	33.10	1.38766	8.16	0.01897	0.06	1.77	41.24	7314.59	4123.78	73.15	0.00	0.000	0.017	0.019
1012	33.10	33.00	1.39135	8.14	0.01902	0.06	1.77	41.24	7315.24	4123.98	73.15	0.00	0.000	0.017	0.019
1013	33.00	32.90	1.39503	8.11	0.01907	0.06	1.77	41.24	7315.89	4124.18	73.16	0.00	0.000	0.017	0.019
1014	32.90	32.80	1.42702	9.92	0.01949	0.06	1.77	41.26	7321.50	4125.91	73.21	0.00	0.000	0.017	0.019
1015	32.80	32.70	1.43070	9.89	0.01954	0.06	1.77	41.26	7322.14	4126.11	73.22	0.00	0.000	0.018	0.020
1016	32.70	32.60	1.43439	9.86	0.01959	0.06	1.77	41.26	7322.78	4126.31	73.23	0.00	0.000	0.018	0.020
1017	32.60	32.50	1.43807	9.84	0.01964	0.06	1.77	41.27	7323.41	4126.50	73.23	0.00	0.000	0.018	0.020

1018	32.50	32.40	1.44176	9.81	0.01969	0.06	1.77	41.27	7324.05	4126.70	73.24	0.00	0.000	0.018	0.020
1019	32.40	32.30	1.44545	9.79	0.01973	0.06	1.77	41.27	7324.69	4126.89	73.25	0.00	0.000	0.018	0.020
1020	32.30	32.20	1.44913	9.76	0.01978	0.06	1.77	41.27	7325.32	4127.09	73.25	0.00	0.000	0.018	0.020
1021	32.20	32.10	1.45282	9.74	0.01983	0.06	1.78	41.27	7325.95	4127.28	73.26	0.00	0.000	0.018	0.020
1022	32.10	32.00	1.45650	9.72	0.01988	0.06	1.78	41.27	7326.58	4127.48	73.27	0.00	0.000	0.018	0.020
1023	32.00	31.90	1.46019	9.69	0.01993	0.06	1.78	41.28	7327.21	4127.67	73.27	0.00	0.000	0.018	0.020
1024	31.90	31.80	1.46387	9.67	0.01998	0.06	1.78	41.28	7327.84	4127.87	73.28	0.00	0.000	0.018	0.020
1025	31.80	31.70	1.46756	9.64	0.02003	0.06	1.78	41.28	7328.47	4128.06	73.28	0.00	0.000	0.018	0.020
1026	31.70	31.60	1.47124	9.62	0.02007	0.06	1.78	41.28	7329.09	4128.25	73.29	0.00	0.000	0.018	0.020
1027	31.60	31.50	1.47493	9.59	0.02012	0.06	1.78	41.28	7329.72	4128.45	73.30	0.00	0.000	0.018	0.020
1028	31.50	31.40	1.47861	9.57	0.02017	0.06	1.78	41.29	7330.34	4128.64	73.30	0.00	0.000	0.018	0.020
1029	31.40	31.30	1.48230	9.55	0.02022	0.06	1.78	41.29	7330.97	4128.83	73.31	0.00	0.000	0.018	0.020

TOT 3.83 445770.12 251421.73  
AVG 0.01843 1.77 41.22 73.08  
CUM 100.34

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

ELEM NO.	ENDING DIST	SAT D.O.	REAER RATE	CBOD DECA	CBOD SETT	ANBOD DECA	BKGD SOD	FULL SOD	CORR SOD	ORGN DECA	ORGN SETT	NH3 DECA	NH3 SRCE	DENIT RATE	PO4 SRCE	ALG PROD	MAC PROD	COLI DECA	NCM DECA	NCM SETT
		mg/L	1/da	1/da	1/da	1/da	*	*	*	1/da	1/da	1/da	*	1/da	*	**	**	1/da	1/da	1/da
969	37.300	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
970	37.200	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
971	37.100	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
972	37.000	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
973	36.900	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
974	36.800	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
975	36.700	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
976	36.600	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
977	36.500	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
978	36.400	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
979	36.300	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
980	36.200	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
981	36.100	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
982	36.000	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
983	35.900	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
984	35.800	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
985	35.700	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
986	35.600	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
987	35.500	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
988	35.400	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
989	35.300	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
990	35.200	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
991	35.100	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
992	35.000	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
993	34.900	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
994	34.800	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
995	34.700	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
996	34.600	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
997	34.500	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
998	34.400	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
999	34.300	9.60	0.69	0.06	0.05	0.00	0.62	0.62	0.62	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05







REACH NO. 11 WEIR #3

Winter Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
1030	UPR RCH	1.48230	17.30	0.00	0.00	0.00	7.92	6.35	6.35	0.00	0.00	0.00	0.00	0.00	0.00	0.49
EACH	INCR	0.0036	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
1030	31.30	31.20	1.48590	9.52	0.02027	0.06	1.78	41.29	7331.57	4129.02	73.32	0.00	0.000	0.018	0.020
TOT						0.06			7331.57	4129.02					
AVG					0.02027		1.78	41.29			73.32				
CUM						100.39									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECATY 1/da	CBOD SETT 1/da	ANBOD DECATY 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECATY 1/da	ORGN SETT 1/da	NH3 DECATY 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECATY 1/da	NCM DECATY 1/da	NCM SETT 1/da
1030	31.200	9.60	0.69	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
	20 DEG C RATE			0.07		0.00	0.00			0.00		0.00	0.00	0.00	0.00			0.00	0.16	
	AVG 20 DEG C RATE		0.73		0.06					0.00										0.06

\* g/sq m/d      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
1030	31.200	17.30	0.00	0.00	0.00	7.94	6.29	6.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49

\* CM-I = CHLORIDES MG/L      CM-II = SULFATES MG/L      NCM = NBOD MG/L  
 \*\* g/cu m

FINAL REPORT BIG CREEK  
 REACH NO. 12 BIG CREEK, WEIR #3 TO WEIR #2

Big Creek - STREAM MODEL  
 Winter Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
1031	UPR RCH	1.48590	17.30	0.00	0.00	0.00	7.94	6.29	6.29	0.00	0.00	0.00	0.00	0.00	0.00	0.49
EACH	INCR	0.0036	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1043	WSTLD	0.00350	17.30	0.00	0.00	0.00	2.00	69.00	69.00	0.00	0.00	0.00	0.00	0.00	0.00	64.50

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
1031	31.20	31.10	1.48948	9.50	0.02031	0.06	1.78	41.29	7332.18	4129.21	73.32	0.00	0.000	0.018	0.020
1032	31.10	31.00	1.49307	9.48	0.02036	0.06	1.78	41.29	7332.78	4129.39	73.33	0.00	0.000	0.018	0.020
1033	31.00	30.90	1.49665	9.45	0.02041	0.06	1.78	41.30	7333.38	4129.58	73.33	0.00	0.000	0.018	0.020
1034	30.90	30.80	1.50024	9.43	0.02046	0.06	1.78	41.30	7333.98	4129.76	73.34	0.00	0.000	0.018	0.020
1035	30.80	30.70	1.50383	9.41	0.02050	0.06	1.78	41.30	7334.58	4129.95	73.35	0.00	0.000	0.018	0.021
1036	30.70	30.60	1.50741	9.39	0.02055	0.06	1.78	41.30	7335.18	4130.13	73.35	0.00	0.000	0.018	0.021
1037	30.60	30.50	1.51100	9.36	0.02060	0.06	1.78	41.30	7335.78	4130.32	73.36	0.00	0.000	0.018	0.021
1038	30.50	30.40	1.51458	9.34	0.02064	0.06	1.78	41.31	7336.37	4130.50	73.36	0.00	0.000	0.019	0.021
1039	30.40	30.30	1.51817	9.32	0.02069	0.06	1.78	41.31	7336.97	4130.68	73.37	0.00	0.000	0.019	0.021
1040	30.30	30.20	1.52175	9.30	0.02074	0.06	1.78	41.31	7337.56	4130.87	73.38	0.00	0.000	0.019	0.021
1041	30.20	30.10	1.52534	9.28	0.02079	0.06	1.78	41.31	7338.15	4131.05	73.38	0.00	0.000	0.019	0.021
1042	30.10	30.00	1.52893	9.25	0.02083	0.06	1.78	41.31	7338.75	4131.23	73.39	0.00	0.000	0.019	0.021
1043	30.00	29.90	1.53601	9.44	0.02093	0.06	1.78	41.32	7339.91	4131.59	73.40	0.00	0.000	0.019	0.021
1044	29.90	29.80	1.53960	9.42	0.02097	0.06	1.78	41.32	7340.50	4131.78	73.40	0.00	0.000	0.019	0.021
1045	29.80	29.70	1.54318	9.40	0.02102	0.06	1.78	41.32	7341.09	4131.96	73.41	0.00	0.000	0.019	0.021
1046	29.70	29.60	1.54677	9.37	0.02107	0.05	1.78	41.32	7341.67	4132.14	73.42	0.00	0.000	0.019	0.021
1047	29.60	29.50	1.55035	9.35	0.02112	0.05	1.78	41.32	7342.26	4132.32	73.42	0.00	0.000	0.019	0.021
1048	29.50	29.40	1.55394	9.33	0.02116	0.05	1.78	41.33	7342.84	4132.50	73.43	0.00	0.000	0.019	0.021
1049	29.40	29.30	1.55753	9.31	0.02121	0.05	1.78	41.33	7343.43	4132.68	73.43	0.00	0.000	0.019	0.021
1050	29.30	29.20	1.56111	9.29	0.02126	0.05	1.78	41.33	7344.01	4132.86	73.44	0.00	0.000	0.019	0.021
1051	29.20	29.10	1.56470	9.27	0.02130	0.05	1.78	41.33	7344.59	4133.04	73.45	0.00	0.000	0.019	0.021
1052	29.10	29.00	1.56828	9.25	0.02135	0.05	1.78	41.33	7345.17	4133.22	73.45	0.00	0.000	0.019	0.021
1053	29.00	28.90	1.57187	9.22	0.02140	0.05	1.78	41.33	7345.75	4133.40	73.46	0.00	0.000	0.019	0.021
1054	28.90	28.80	1.57545	9.20	0.02145	0.05	1.78	41.34	7346.33	4133.58	73.46	0.00	0.000	0.019	0.021
1055	28.80	28.70	1.57904	9.18	0.02149	0.05	1.78	41.34	7346.91	4133.76	73.47	0.00	0.000	0.019	0.021
1056	28.70	28.60	1.58263	9.16	0.02154	0.05	1.78	41.34	7347.48	4133.94	73.47	0.00	0.000	0.019	0.022
1057	28.60	28.50	1.58621	9.14	0.02159	0.05	1.78	41.34	7348.06	4134.11	73.48	0.00	0.000	0.019	0.022
1058	28.50	28.40	1.58980	9.12	0.02163	0.05	1.78	41.34	7348.63	4134.29	73.49	0.00	0.000	0.019	0.022
1059	28.40	28.30	1.59338	9.10	0.02168	0.05	1.78	41.34	7349.21	4134.47	73.49	0.00	0.000	0.019	0.022
1060	28.30	28.20	1.59697	9.08	0.02173	0.05	1.78	41.35	7349.78	4134.65	73.50	0.00	0.000	0.020	0.022
1061	28.20	28.10	1.60055	9.06	0.02178	0.05	1.78	41.35	7350.35	4134.82	73.50	0.00	0.000	0.020	0.022
1062	28.10	28.00	1.60414	9.04	0.02182	0.05	1.78	41.35	7350.92	4135.00	73.51	0.00	0.000	0.020	0.022
1063	28.00	27.90	1.60773	9.02	0.02187	0.05	1.78	41.35	7351.49	4135.18	73.51	0.00	0.000	0.020	0.022
1064	27.90	27.80	1.61131	9.00	0.02192	0.05	1.78	41.35	7352.06	4135.35	73.52	0.00	0.000	0.020	0.022
1065	27.80	27.70	1.61490	8.98	0.02196	0.05	1.78	41.36	7352.63	4135.53	73.53	0.00	0.000	0.020	0.022
1066	27.70	27.60	1.61848	8.96	0.02201	0.05	1.78	41.36	7353.19	4135.70	73.53	0.00	0.000	0.020	0.022
1067	27.60	27.50	1.62207	8.94	0.02206	0.05	1.78	41.36	7353.76	4135.88	73.54	0.00	0.000	0.020	0.022
1068	27.50	27.40	1.62565	8.92	0.02210	0.05	1.78	41.36	7354.32	4136.05	73.54	0.00	0.000	0.020	0.022
1069	27.40	27.30	1.62924	8.90	0.02215	0.05	1.78	41.36	7354.89	4136.23	73.55	0.00	0.000	0.020	0.022

1070	27.30	27.20	1.63283	8.88	0.02220	0.05	1.78	41.36	7355.45	4136.40	73.55	0.00	0.000	0.020	0.022
1071	27.20	27.10	1.63641	8.86	0.02225	0.05	1.78	41.37	7356.01	4136.58	73.56	0.00	0.000	0.020	0.022
1072	27.10	27.00	1.64000	8.84	0.02229	0.05	1.78	41.37	7356.57	4136.75	73.57	0.00	0.000	0.020	0.022
1073	27.00	26.90	1.64358	8.82	0.02234	0.05	1.78	41.37	7357.13	4136.92	73.57	0.00	0.000	0.020	0.022
1074	26.90	26.80	1.64717	8.80	0.02239	0.05	1.78	41.37	7357.69	4137.10	73.58	0.00	0.000	0.020	0.022
1075	26.80	26.70	1.65075	8.78	0.02243	0.05	1.78	41.37	7358.25	4137.27	73.58	0.00	0.000	0.020	0.022
1076	26.70	26.60	1.65434	8.76	0.02248	0.05	1.78	41.37	7358.81	4137.44	73.59	0.00	0.000	0.020	0.022
1077	26.60	26.50	1.65793	8.75	0.02253	0.05	1.78	41.38	7359.36	4137.62	73.59	0.00	0.000	0.020	0.023
1078	26.50	26.40	1.66151	8.73	0.02258	0.05	1.78	41.38	7359.92	4137.79	73.60	0.00	0.000	0.020	0.023
1079	26.40	26.30	1.66510	8.71	0.02262	0.05	1.78	41.38	7360.47	4137.96	73.60	0.00	0.000	0.020	0.023
1080	26.30	26.20	1.66868	8.69	0.02267	0.05	1.78	41.38	7361.03	4138.13	73.61	0.00	0.000	0.020	0.023
1081	26.20	26.10	1.67227	8.67	0.02272	0.05	1.78	41.38	7361.58	4138.30	73.62	0.00	0.000	0.020	0.023
1082	26.10	26.00	1.67585	8.65	0.02276	0.05	1.78	41.38	7362.13	4138.47	73.62	0.00	0.000	0.020	0.023
1083	26.00	25.90	1.67944	8.63	0.02281	0.05	1.78	41.39	7362.68	4138.64	73.63	0.00	0.000	0.020	0.023
1084	25.90	25.80	1.68303	8.62	0.02286	0.05	1.78	41.39	7363.23	4138.81	73.63	0.00	0.000	0.021	0.023
1085	25.80	25.70	1.68661	8.60	0.02290	0.05	1.78	41.39	7363.78	4138.98	73.64	0.00	0.000	0.021	0.023
1086	25.70	25.60	1.69020	8.58	0.02295	0.05	1.78	41.39	7364.33	4139.15	73.64	0.00	0.000	0.021	0.023
1087	25.60	25.50	1.69378	8.56	0.02300	0.05	1.78	41.39	7364.88	4139.33	73.65	0.00	0.000	0.021	0.023
1088	25.50	25.40	1.69737	8.54	0.02305	0.05	1.78	41.39	7365.42	4139.49	73.65	0.00	0.000	0.021	0.023
1089	25.40	25.30	1.70095	8.52	0.02309	0.05	1.78	41.40	7365.97	4139.66	73.66	0.00	0.000	0.021	0.023
1090	25.30	25.20	1.70454	8.51	0.02314	0.05	1.78	41.40	7366.51	4139.83	73.67	0.00	0.000	0.021	0.023
1091	25.20	25.10	1.70812	8.49	0.02319	0.05	1.78	41.40	7367.06	4140.00	73.67	0.00	0.000	0.021	0.023
1092	25.10	25.00	1.71171	8.47	0.02323	0.05	1.78	41.40	7367.60	4140.17	73.68	0.00	0.000	0.021	0.023
1093	25.00	24.90	1.71530	8.45	0.02328	0.05	1.78	41.40	7368.14	4140.34	73.68	0.00	0.000	0.021	0.023
1094	24.90	24.80	1.71888	8.44	0.02333	0.05	1.78	41.41	7368.68	4140.51	73.69	0.00	0.000	0.021	0.023
1095	24.80	24.70	1.72247	8.42	0.02337	0.05	1.78	41.41	7369.22	4140.67	73.69	0.00	0.000	0.021	0.023
1096	24.70	24.60	1.72605	8.40	0.02342	0.05	1.78	41.41	7369.76	4140.84	73.70	0.00	0.000	0.021	0.023
1097	24.60	24.50	1.72964	8.38	0.02347	0.05	1.78	41.41	7370.30	4141.01	73.70	0.00	0.000	0.021	0.023
1098	24.50	24.40	1.73322	8.37	0.02351	0.05	1.78	41.41	7370.84	4141.18	73.71	0.00	0.000	0.021	0.024
1099	24.40	24.30	1.73681	8.35	0.02356	0.05	1.78	41.41	7371.38	4141.34	73.71	0.00	0.000	0.021	0.024
1100	24.30	24.20	1.74040	8.33	0.02361	0.05	1.78	41.42	7371.91	4141.51	73.72	0.00	0.000	0.021	0.024
1101	24.20	24.10	1.74398	8.31	0.02366	0.05	1.78	41.42	7372.45	4141.68	73.72	0.00	0.000	0.021	0.024
1102	24.10	24.00	1.74757	8.30	0.02370	0.05	1.78	41.42	7372.98	4141.84	73.73	0.00	0.000	0.021	0.024
1103	24.00	23.90	1.75115	8.28	0.02375	0.05	1.78	41.42	7373.52	4142.01	73.74	0.00	0.000	0.021	0.024
1104	23.90	23.80	1.75474	8.26	0.02380	0.05	1.78	41.42	7374.05	4142.17	73.74	0.00	0.000	0.021	0.024
1105	23.80	23.70	1.75832	8.25	0.02384	0.05	1.78	41.42	7374.58	4142.34	73.75	0.00	0.000	0.021	0.024
1106	23.70	23.60	1.76191	8.23	0.02389	0.05	1.78	41.43	7375.11	4142.50	73.75	0.00	0.000	0.021	0.024
1107	23.60	23.50	1.76550	8.21	0.02394	0.05	1.78	41.43	7375.64	4142.67	73.76	0.00	0.000	0.022	0.024
1108	23.50	23.40	1.76908	8.20	0.02398	0.05	1.78	41.43	7376.17	4142.83	73.76	0.00	0.000	0.022	0.024
1109	23.40	23.30	1.77267	8.18	0.02403	0.05	1.78	41.43	7376.70	4143.00	73.77	0.00	0.000	0.022	0.024
1110	23.30	23.20	1.77625	8.16	0.02408	0.05	1.78	41.43	7377.23	4143.16	73.77	0.00	0.000	0.022	0.024
1111	23.20	23.10	1.77984	8.15	0.02412	0.05	1.78	41.43	7377.76	4143.32	73.78	0.00	0.000	0.022	0.024
1112	23.10	23.00	1.78342	8.13	0.02417	0.05	1.78	41.43	7378.28	4143.49	73.78	0.00	0.000	0.022	0.024
1113	23.00	22.90	1.78701	8.11	0.02422	0.05	1.78	41.44	7378.81	4143.65	73.79	0.00	0.000	0.022	0.024
1114	22.90	22.80	1.79060	8.10	0.02427	0.05	1.78	41.44	7379.33	4143.81	73.79	0.00	0.000	0.022	0.024
1115	22.80	22.70	1.79418	8.08	0.02431	0.05	1.78	41.44	7379.86	4143.98	73.80	0.00	0.000	0.022	0.024
1116	22.70	22.60	1.79777	8.07	0.02436	0.05	1.78	41.44	7380.38	4144.14	73.80	0.00	0.000	0.022	0.024
1117	22.60	22.50	1.80135	8.05	0.02441	0.05	1.78	41.44	7380.90	4144.30	73.81	0.00	0.000	0.022	0.024
1118	22.50	22.40	1.80494	8.03	0.02445	0.05	1.78	41.44	7381.42	4144.46	73.81	0.00	0.000	0.022	0.024
1119	22.40	22.30	1.80852	8.02	0.02450	0.05	1.78	41.45	7381.94	4144.63	73.82	0.00	0.000	0.022	0.024
1120	22.30	22.20	1.81211	8.00	0.02455	0.05	1.78	41.45	7382.46	4144.79	73.82	0.00	0.000	0.022	0.025
1121	22.20	22.10	1.81570	7.99	0.02459	0.05	1.78	41.45	7382.98	4144.95	73.83	0.00	0.000	0.022	0.025

TOT						4.70			669615.50	376496.59					
AVG					0.02240		1.78	41.37			73.58				







1084	25.800	17.30	0.00	0.00	0.00	7.91	6.47	6.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51
1085	25.700	17.30	0.00	0.00	0.00	7.91	6.47	6.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51
1086	25.600	17.30	0.00	0.00	0.00	7.91	6.47	6.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
1087	25.500	17.30	0.00	0.00	0.00	7.91	6.47	6.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
1088	25.400	17.30	0.00	0.00	0.00	7.91	6.47	6.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
1089	25.300	17.30	0.00	0.00	0.00	7.91	6.47	6.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
1090	25.200	17.30	0.00	0.00	0.00	7.91	6.47	6.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
1091	25.100	17.30	0.00	0.00	0.00	7.91	6.47	6.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
1092	25.000	17.30	0.00	0.00	0.00	7.91	6.47	6.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
1093	24.900	17.30	0.00	0.00	0.00	7.91	6.47	6.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
1094	24.800	17.30	0.00	0.00	0.00	7.91	6.47	6.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
1095	24.700	17.30	0.00	0.00	0.00	7.91	6.47	6.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
1096	24.600	17.30	0.00	0.00	0.00	7.91	6.47	6.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49
1097	24.500	17.30	0.00	0.00	0.00	7.91	6.47	6.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
1098	24.400	17.30	0.00	0.00	0.00	7.91	6.47	6.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
1099	24.300	17.30	0.00	0.00	0.00	7.91	6.47	6.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
1100	24.200	17.30	0.00	0.00	0.00	7.91	6.47	6.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
1101	24.100	17.30	0.00	0.00	0.00	7.91	6.47	6.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
1102	24.000	17.30	0.00	0.00	0.00	7.91	6.47	6.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
1103	23.900	17.30	0.00	0.00	0.00	7.91	6.47	6.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
1104	23.800	17.30	0.00	0.00	0.00	7.91	6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47
1105	23.700	17.30	0.00	0.00	0.00	7.91	6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47
1106	23.600	17.30	0.00	0.00	0.00	7.91	6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47
1107	23.500	17.30	0.00	0.00	0.00	7.91	6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47
1108	23.400	17.30	0.00	0.00	0.00	7.91	6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47
1109	23.300	17.30	0.00	0.00	0.00	7.91	6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47
1110	23.200	17.30	0.00	0.00	0.00	7.91	6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47
1111	23.100	17.30	0.00	0.00	0.00	7.91	6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47
1112	23.000	17.30	0.00	0.00	0.00	7.91	6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
1113	22.900	17.30	0.00	0.00	0.00	7.92	6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
1114	22.800	17.30	0.00	0.00	0.00	7.92	6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
1115	22.700	17.30	0.00	0.00	0.00	7.92	6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
1116	22.600	17.30	0.00	0.00	0.00	7.92	6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
1117	22.500	17.30	0.00	0.00	0.00	7.92	6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
1118	22.400	17.30	0.00	0.00	0.00	7.92	6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
1119	22.300	17.30	0.00	0.00	0.00	7.92	6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46
1120	22.200	17.30	0.00	0.00	0.00	7.92	6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45
1121	22.100	17.30	0.00	0.00	0.00	7.92	6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45

\* CM-I = CHLORIDES  
MG/L

CM-II = SULFATES  
MG/L

NCM = NBOD  
MG/L

\*\* g/cu m

FINAL REPORT BIG CREEK  
REACH NO. 13 WEIR #2

Big Creek - STREAM MODEL  
Winter Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
1122	UPR RCH	1.81570	17.30	0.00	0.00	0.00	7.92	6.48	6.48	0.00	0.00	0.00	0.00	0.00	0.00	0.45
EACH	INCR	0.0036	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
1122	22.10	22.00	1.81930	7.97	0.02464	0.05	1.78	41.45	7383.50	4145.11	73.84	0.00	0.000	0.022	0.025
TOT AVG CUM					0.02464	0.05	1.78	41.45	7383.50	4145.11	73.84				

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECA 1/da	CBOD SETT 1/da	ANBOD DECA 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECA 1/da	ORGN SETT 1/da	NH3 DECA 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECA 1/da	NCM DECA 1/da	NCM SETT 1/da
1122	22.000	9.60	0.69	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
20 DEG C RATE AVG				0.07		0.00	0.00			0.00		0.00	0.00	0.00	0.00			0.00	0.16	0.06

\* g/sq m/d                      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
1122	22.000	17.30	0.00	0.00	0.00	7.93	6.43	6.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45

\* CM-I = CHLORIDES MG/L                      CM-II = SULFATES MG/L                      NCM = NBOD MG/L

\*\* g/cu m

FINAL REPORT                      BIG CREEK                      Big Creek - STREAM MODEL  
 REACH NO. 14                      BIG CREEK, WEIR #2 TO WEIR #1                      Winter Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
1123	UPR RCH	1.81930	17.30	0.00	0.00	0.00	7.93	6.43	6.43	0.00	0.00	0.00	0.00	0.00	0.00	0.45
EACH	INCR	0.0036	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1128	WSTLD	0.02830	17.30	0.00	0.00	0.00	8.49	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.46
1204	WSTLD	0.02830	17.30	0.00	0.00	0.00	8.49	6.40	6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.46

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
1123	22.00	21.90	1.82290	7.95	0.02469	0.05	1.78	41.45	7384.02	4145.27	73.84	0.00	0.000	0.022	0.025
1124	21.90	21.80	1.82650	7.94	0.02473	0.05	1.78	41.45	7384.54	4145.43	73.85	0.00	0.000	0.022	0.025
1125	21.80	21.70	1.83011	7.92	0.02478	0.05	1.78	41.46	7385.06	4145.60	73.85	0.00	0.000	0.022	0.025
1126	21.70	21.60	1.83371	7.91	0.02483	0.05	1.78	41.46	7385.58	4145.76	73.86	0.00	0.000	0.022	0.025
1127	21.60	21.50	1.83732	7.89	0.02488	0.05	1.78	41.46	7386.10	4145.92	73.86	0.00	0.000	0.022	0.025
1128	21.50	21.40	1.86922	9.27	0.02529	0.05	1.78	41.47	7390.64	4147.33	73.91	0.00	0.000	0.023	0.025
1129	21.40	21.30	1.87283	9.25	0.02534	0.05	1.78	41.47	7391.15	4147.49	73.91	0.00	0.000	0.023	0.025
1130	21.30	21.20	1.87643	9.24	0.02539	0.05	1.78	41.48	7391.66	4147.65	73.92	0.00	0.000	0.023	0.025
1131	21.20	21.10	1.88003	9.22	0.02543	0.05	1.78	41.48	7392.17	4147.81	73.92	0.00	0.000	0.023	0.025
1132	21.10	21.00	1.88364	9.20	0.02548	0.05	1.78	41.48	7392.67	4147.97	73.93	0.00	0.000	0.023	0.025
1133	21.00	20.90	1.88724	9.18	0.02553	0.05	1.78	41.48	7393.18	4148.12	73.93	0.00	0.000	0.023	0.026
1134	20.90	20.80	1.89085	9.17	0.02557	0.05	1.78	41.48	7393.69	4148.28	73.94	0.00	0.000	0.023	0.026
1135	20.80	20.70	1.89445	9.15	0.02562	0.05	1.78	41.48	7394.19	4148.44	73.94	0.00	0.000	0.023	0.026
1136	20.70	20.60	1.89805	9.13	0.02567	0.05	1.78	41.49	7394.70	4148.60	73.95	0.00	0.000	0.023	0.026
1137	20.60	20.50	1.90166	9.11	0.02571	0.05	1.78	41.49	7395.20	4148.75	73.95	0.00	0.000	0.023	0.026
1138	20.50	20.40	1.90526	9.10	0.02576	0.04	1.78	41.49	7395.71	4148.91	73.96	0.00	0.000	0.023	0.026
1139	20.40	20.30	1.90887	9.08	0.02581	0.04	1.78	41.49	7396.21	4149.07	73.96	0.00	0.000	0.023	0.026
1140	20.30	20.20	1.91247	9.06	0.02586	0.04	1.78	41.49	7396.71	4149.22	73.97	0.00	0.000	0.023	0.026
1141	20.20	20.10	1.91608	9.04	0.02590	0.04	1.78	41.49	7397.21	4149.38	73.97	0.00	0.000	0.023	0.026
1142	20.10	20.00	1.91968	9.03	0.02595	0.04	1.78	41.50	7397.71	4149.53	73.98	0.00	0.000	0.023	0.026
1143	20.00	19.90	1.92328	9.01	0.02600	0.04	1.78	41.50	7398.21	4149.69	73.98	0.00	0.000	0.023	0.026
1144	19.90	19.80	1.92689	8.99	0.02604	0.04	1.78	41.50	7398.71	4149.85	73.99	0.00	0.000	0.023	0.026
1145	19.80	19.70	1.93049	8.98	0.02609	0.04	1.78	41.50	7399.21	4150.00	73.99	0.00	0.000	0.023	0.026
1146	19.70	19.60	1.93410	8.96	0.02614	0.04	1.78	41.50	7399.70	4150.16	74.00	0.00	0.000	0.024	0.026
1147	19.60	19.50	1.93770	8.94	0.02618	0.04	1.78	41.50	7400.20	4150.31	74.00	0.00	0.000	0.024	0.026
1148	19.50	19.40	1.94130	8.93	0.02623	0.04	1.78	41.50	7400.70	4150.46	74.01	0.00	0.000	0.024	0.026
1149	19.40	19.30	1.94491	8.91	0.02628	0.04	1.78	41.51	7401.19	4150.62	74.01	0.00	0.000	0.024	0.026
1150	19.30	19.20	1.94851	8.89	0.02633	0.04	1.78	41.51	7401.69	4150.77	74.02	0.00	0.000	0.024	0.026
1151	19.20	19.10	1.95212	8.88	0.02637	0.04	1.78	41.51	7402.18	4150.93	74.02	0.00	0.000	0.024	0.026
1152	19.10	19.00	1.95572	8.86	0.02642	0.04	1.78	41.51	7402.67	4151.08	74.03	0.00	0.000	0.024	0.026
1153	19.00	18.90	1.95933	8.84	0.02647	0.04	1.78	41.51	7403.17	4151.24	74.03	0.00	0.000	0.024	0.026
1154	18.90	18.80	1.96293	8.83	0.02651	0.04	1.78	41.51	7403.66	4151.39	74.04	0.00	0.000	0.024	0.027
1155	18.80	18.70	1.96653	8.81	0.02656	0.04	1.78	41.52	7404.15	4151.54	74.04	0.00	0.000	0.024	0.027
1156	18.70	18.60	1.97014	8.80	0.02661	0.04	1.78	41.52	7404.64	4151.69	74.05	0.00	0.000	0.024	0.027
1157	18.60	18.50	1.97374	8.78	0.02665	0.04	1.78	41.52	7405.13	4151.85	74.05	0.00	0.000	0.024	0.027
1158	18.50	18.40	1.97735	8.76	0.02670	0.04	1.78	41.52	7405.62	4152.00	74.06	0.00	0.000	0.024	0.027
1159	18.40	18.30	1.98095	8.75	0.02675	0.04	1.78	41.52	7406.11	4152.15	74.06	0.00	0.000	0.024	0.027
1160	18.30	18.20	1.98455	8.73	0.02679	0.04	1.78	41.52	7406.59	4152.30	74.07	0.00	0.000	0.024	0.027
1161	18.20	18.10	1.98816	8.72	0.02684	0.04	1.78	41.52	7407.08	4152.46	74.07	0.00	0.000	0.024	0.027
1162	18.10	18.00	1.99176	8.70	0.02689	0.04	1.78	41.53	7407.57	4152.61	74.08	0.00	0.000	0.024	0.027
1163	18.00	17.90	1.99537	8.69	0.02694	0.04	1.78	41.53	7408.05	4152.76	74.08	0.00	0.000	0.024	0.027
1164	17.90	17.80	1.99897	8.67	0.02698	0.04	1.78	41.53	7408.54	4152.91	74.09	0.00	0.000	0.024	0.027
1165	17.80	17.70	2.00258	8.65	0.02703	0.04	1.78	41.53	7409.02	4153.06	74.09	0.00	0.000	0.024	0.027
1166	17.70	17.60	2.00618	8.64	0.02708	0.04	1.78	41.53	7409.51	4153.21	74.10	0.00	0.000	0.024	0.027
1167	17.60	17.50	2.00978	8.62	0.02712	0.04	1.78	41.53	7409.99	4153.36	74.10	0.00	0.000	0.024	0.027
1168	17.50	17.40	2.01339	8.61	0.02717	0.04	1.78	41.54	7410.47	4153.51	74.10	0.00	0.000	0.024	0.027
1169	17.40	17.30	2.01699	8.59	0.02722	0.04	1.78	41.54	7410.95	4153.67	74.11	0.00	0.000	0.025	0.027
1170	17.30	17.20	2.02060	8.58	0.02726	0.04	1.78	41.54	7411.44	4153.82	74.11	0.00	0.000	0.025	0.027

1171	17.20	17.10	2.02420	8.56	0.02731	0.04	1.78	41.54	7411.92	4153.97	74.12	0.00	0.000	0.025	0.027
1172	17.10	17.00	2.02780	8.55	0.02736	0.04	1.78	41.54	7412.40	4154.12	74.12	0.00	0.000	0.025	0.027
1173	17.00	16.90	2.03141	8.53	0.02740	0.04	1.78	41.54	7412.87	4154.26	74.13	0.00	0.000	0.025	0.027
1174	16.90	16.80	2.03501	8.52	0.02745	0.04	1.78	41.54	7413.35	4154.41	74.13	0.00	0.000	0.025	0.027
1175	16.80	16.70	2.03862	8.50	0.02750	0.04	1.78	41.55	7413.83	4154.56	74.14	0.00	0.000	0.025	0.027
1176	16.70	16.60	2.04222	8.49	0.02754	0.04	1.78	41.55	7414.31	4154.71	74.14	0.00	0.000	0.025	0.028
1177	16.60	16.50	2.04583	8.47	0.02759	0.04	1.78	41.55	7414.79	4154.86	74.15	0.00	0.000	0.025	0.028
1178	16.50	16.40	2.04943	8.46	0.02764	0.04	1.78	41.55	7415.26	4155.01	74.15	0.00	0.000	0.025	0.028
1179	16.40	16.30	2.05303	8.44	0.02768	0.04	1.78	41.55	7415.74	4155.16	74.16	0.00	0.000	0.025	0.028
1180	16.30	16.20	2.05664	8.43	0.02773	0.04	1.78	41.55	7416.21	4155.31	74.16	0.00	0.000	0.025	0.028
1181	16.20	16.10	2.06024	8.41	0.02778	0.04	1.78	41.55	7416.68	4155.46	74.17	0.00	0.000	0.025	0.028
1182	16.10	16.00	2.06385	8.40	0.02783	0.04	1.78	41.56	7417.16	4155.60	74.17	0.00	0.000	0.025	0.028
1183	16.00	15.90	2.06745	8.38	0.02787	0.04	1.78	41.56	7417.63	4155.75	74.18	0.00	0.000	0.025	0.028
1184	15.90	15.80	2.07105	8.37	0.02792	0.04	1.78	41.56	7418.10	4155.90	74.18	0.00	0.000	0.025	0.028
1185	15.80	15.70	2.07466	8.35	0.02797	0.04	1.79	41.56	7418.58	4156.05	74.19	0.00	0.000	0.025	0.028
1186	15.70	15.60	2.07826	8.34	0.02801	0.04	1.79	41.56	7419.05	4156.19	74.19	0.00	0.000	0.025	0.028
1187	15.60	15.50	2.08187	8.32	0.02806	0.04	1.79	41.56	7419.52	4156.34	74.20	0.00	0.000	0.025	0.028
1188	15.50	15.40	2.08547	8.31	0.02811	0.04	1.79	41.56	7419.99	4156.49	74.20	0.00	0.000	0.025	0.028
1189	15.40	15.30	2.08908	8.30	0.02815	0.04	1.79	41.57	7420.46	4156.63	74.20	0.00	0.000	0.025	0.028
1190	15.30	15.20	2.09268	8.28	0.02820	0.04	1.79	41.57	7420.92	4156.78	74.21	0.00	0.000	0.025	0.028
1191	15.20	15.10	2.09628	8.27	0.02825	0.04	1.79	41.57	7421.39	4156.93	74.21	0.00	0.000	0.025	0.028
1192	15.10	15.00	2.09989	8.25	0.02829	0.04	1.79	41.57	7421.86	4157.07	74.22	0.00	0.000	0.025	0.028
1193	15.00	14.90	2.10349	8.24	0.02834	0.04	1.79	41.57	7422.33	4157.22	74.22	0.00	0.000	0.026	0.028
1194	14.90	14.80	2.10710	8.22	0.02839	0.04	1.79	41.57	7422.79	4157.36	74.23	0.00	0.000	0.026	0.028
1195	14.80	14.70	2.11070	8.21	0.02843	0.04	1.79	41.58	7423.26	4157.51	74.23	0.00	0.000	0.026	0.028
1196	14.70	14.60	2.11430	8.20	0.02848	0.04	1.79	41.58	7423.72	4157.65	74.24	0.00	0.000	0.026	0.028
1197	14.60	14.50	2.11791	8.18	0.02853	0.04	1.79	41.58	7424.19	4157.80	74.24	0.00	0.000	0.026	0.029
1198	14.50	14.40	2.12151	8.17	0.02857	0.04	1.79	41.58	7424.65	4157.94	74.25	0.00	0.000	0.026	0.029
1199	14.40	14.30	2.12512	8.15	0.02862	0.04	1.79	41.58	7425.11	4158.09	74.25	0.00	0.000	0.026	0.029
1200	14.30	14.20	2.12872	8.14	0.02867	0.04	1.79	41.58	7425.58	4158.23	74.26	0.00	0.000	0.026	0.029
1201	14.20	14.10	2.13233	8.13	0.02871	0.04	1.79	41.58	7426.04	4158.38	74.26	0.00	0.000	0.026	0.029
1202	14.10	14.00	2.13593	8.11	0.02876	0.04	1.79	41.59	7426.50	4158.52	74.26	0.00	0.000	0.026	0.029
1203	14.00	13.90	2.13953	8.10	0.02881	0.04	1.79	41.59	7426.96	4158.67	74.27	0.00	0.000	0.026	0.029
1204	13.90	13.80	2.17144	9.28	0.02922	0.04	1.79	41.60	7431.01	4159.94	74.31	0.00	0.000	0.026	0.029
1205	13.80	13.70	2.17504	9.27	0.02927	0.04	1.79	41.60	7431.47	4160.08	74.31	0.00	0.000	0.026	0.029
1206	13.70	13.60	2.17865	9.25	0.02931	0.04	1.79	41.60	7431.92	4160.22	74.32	0.00	0.000	0.026	0.029
1207	13.60	13.50	2.18225	9.24	0.02936	0.04	1.79	41.60	7432.38	4160.36	74.32	0.00	0.000	0.026	0.029
1208	13.50	13.40	2.18585	9.22	0.02941	0.04	1.79	41.61	7432.83	4160.50	74.33	0.00	0.000	0.027	0.029
1209	13.40	13.30	2.18946	9.21	0.02945	0.04	1.79	41.61	7433.28	4160.65	74.33	0.00	0.000	0.027	0.029
1210	13.30	13.20	2.19306	9.19	0.02950	0.04	1.79	41.61	7433.73	4160.79	74.34	0.00	0.000	0.027	0.030
1211	13.20	13.10	2.19667	9.18	0.02955	0.04	1.79	41.61	7434.18	4160.93	74.34	0.00	0.000	0.027	0.030
1212	13.10	13.00	2.20027	9.16	0.02959	0.04	1.79	41.61	7434.64	4161.07	74.35	0.00	0.000	0.027	0.030
1213	13.00	12.90	2.20388	9.15	0.02964	0.04	1.79	41.61	7435.09	4161.21	74.35	0.00	0.000	0.027	0.030
1214	12.90	12.80	2.20748	9.13	0.02969	0.04	1.79	41.61	7435.54	4161.35	74.36	0.00	0.000	0.027	0.030
1215	12.80	12.70	2.21108	9.12	0.02973	0.04	1.79	41.61	7435.98	4161.49	74.36	0.00	0.000	0.027	0.030
1216	12.70	12.60	2.21469	9.10	0.02978	0.04	1.79	41.62	7436.43	4161.63	74.36	0.00	0.000	0.027	0.030
1217	12.60	12.50	2.21829	9.09	0.02983	0.04	1.79	41.62	7436.88	4161.77	74.37	0.00	0.000	0.027	0.030
1218	12.50	12.40	2.22190	9.07	0.02987	0.04	1.79	41.62	7437.33	4161.91	74.37	0.00	0.000	0.027	0.030
1219	12.40	12.30	2.22550	9.06	0.02992	0.04	1.79	41.62	7437.78	4162.05	74.38	0.00	0.000	0.027	0.030
1220	12.30	12.20	2.22910	9.04	0.02997	0.04	1.79	41.62	7438.22	4162.19	74.38	0.00	0.000	0.027	0.030
1221	12.20	12.10	2.23271	9.03	0.03001	0.04	1.79	41.62	7438.67	4162.33	74.39	0.00	0.000	0.027	0.030
1222	12.10	12.00	2.23631	9.01	0.03006	0.04	1.79	41.62	7439.12	4162.47	74.39	0.00	0.000	0.027	0.030
1223	12.00	11.90	2.23992	9.00	0.03011	0.04	1.79	41.63	7439.56	4162.61	74.40	0.00	0.000	0.027	0.030
1224	11.90	11.80	2.24352	8.99	0.03015	0.04	1.79	41.63	7440.00	4162.75	74.40	0.00	0.000	0.027	0.030
1225	11.80	11.70	2.24713	8.97	0.03020	0.04	1.79	41.63	7440.45	4162.89	74.40	0.00	0.000	0.027	0.030

1226	11.70	11.60	2.25073	8.96	0.03025	0.04	1.79	41.63	7440.89	4163.03	74.41	0.00	0.000	0.027	0.030
1227	11.60	11.50	2.25433	8.94	0.03029	0.04	1.79	41.63	7441.33	4163.17	74.41	0.00	0.000	0.027	0.030
1228	11.50	11.40	2.25794	8.93	0.03034	0.04	1.79	41.63	7441.78	4163.31	74.42	0.00	0.000	0.027	0.030
1229	11.40	11.30	2.26154	8.91	0.03039	0.04	1.79	41.63	7442.22	4163.45	74.42	0.00	0.000	0.027	0.030
1230	11.30	11.20	2.26515	8.90	0.03043	0.04	1.79	41.64	7442.66	4163.58	74.43	0.00	0.000	0.027	0.030
1231	11.20	11.10	2.26875	8.89	0.03048	0.04	1.79	41.64	7443.10	4163.72	74.43	0.00	0.000	0.027	0.030
1232	11.10	11.00	2.27235	8.87	0.03053	0.04	1.79	41.64	7443.54	4163.86	74.44	0.00	0.000	0.028	0.031
1233	11.00	10.90	2.27596	8.86	0.03057	0.04	1.79	41.64	7443.98	4164.00	74.44	0.00	0.000	0.028	0.031
1234	10.90	10.80	2.27956	8.84	0.03062	0.04	1.79	41.64	7444.42	4164.14	74.44	0.00	0.000	0.028	0.031
1235	10.80	10.70	2.28317	8.83	0.03067	0.04	1.79	41.64	7444.86	4164.27	74.45	0.00	0.000	0.028	0.031
1236	10.70	10.60	2.28677	8.82	0.03071	0.04	1.79	41.64	7445.30	4164.41	74.45	0.00	0.000	0.028	0.031
1237	10.60	10.50	2.29038	8.80	0.03076	0.04	1.79	41.65	7445.73	4164.55	74.46	0.00	0.000	0.028	0.031
1238	10.50	10.40	2.29398	8.79	0.03081	0.04	1.79	41.65	7446.17	4164.68	74.46	0.00	0.000	0.028	0.031
1239	10.40	10.30	2.29758	8.77	0.03085	0.04	1.79	41.65	7446.61	4164.82	74.47	0.00	0.000	0.028	0.031
1240	10.30	10.20	2.30119	8.76	0.03090	0.04	1.79	41.65	7447.04	4164.96	74.47	0.00	0.000	0.028	0.031
1241	10.20	10.10	2.30479	8.75	0.03095	0.04	1.79	41.65	7447.48	4165.09	74.47	0.00	0.000	0.028	0.031
1242	10.10	10.00	2.30840	8.73	0.03099	0.04	1.79	41.65	7447.91	4165.23	74.48	0.00	0.000	0.028	0.031
1243	10.00	9.90	2.31200	8.72	0.03104	0.04	1.79	41.65	7448.35	4165.37	74.48	0.00	0.000	0.028	0.031
1244	9.90	9.80	2.31560	8.71	0.03109	0.04	1.79	41.66	7448.78	4165.50	74.49	0.00	0.000	0.028	0.031
1245	9.80	9.70	2.31921	8.69	0.03113	0.04	1.79	41.66	7449.21	4165.64	74.49	0.00	0.000	0.028	0.031
1246	9.70	9.60	2.32281	8.68	0.03118	0.04	1.79	41.66	7449.65	4165.78	74.50	0.00	0.000	0.028	0.031
1247	9.60	9.50	2.32642	8.67	0.03123	0.04	1.79	41.66	7450.08	4165.91	74.50	0.00	0.000	0.028	0.031
1248	9.50	9.40	2.33002	8.65	0.03127	0.04	1.79	41.66	7450.51	4166.05	74.51	0.00	0.000	0.028	0.031
1249	9.40	9.30	2.33363	8.64	0.03132	0.04	1.79	41.66	7450.94	4166.18	74.51	0.00	0.000	0.028	0.031
1250	9.30	9.20	2.33723	8.63	0.03137	0.04	1.79	41.66	7451.37	4166.32	74.51	0.00	0.000	0.028	0.031
1251	9.20	9.10	2.34083	8.61	0.03141	0.04	1.79	41.66	7451.80	4166.45	74.52	0.00	0.000	0.028	0.031
1252	9.10	9.00	2.34444	8.60	0.03146	0.04	1.79	41.67	7452.23	4166.59	74.52	0.00	0.000	0.028	0.031
1253	9.00	8.90	2.34804	8.59	0.03151	0.04	1.79	41.67	7452.66	4166.72	74.53	0.00	0.000	0.028	0.032
1254	8.90	8.80	2.35165	8.57	0.03155	0.04	1.79	41.67	7453.09	4166.86	74.53	0.00	0.000	0.028	0.032
1255	8.80	8.70	2.35525	8.56	0.03160	0.04	1.79	41.67	7453.52	4166.99	74.54	0.00	0.000	0.029	0.032
1256	8.70	8.60	2.35886	8.55	0.03165	0.04	1.79	41.67	7453.95	4167.12	74.54	0.00	0.000	0.029	0.032
1257	8.60	8.50	2.36246	8.53	0.03169	0.04	1.79	41.67	7454.37	4167.26	74.54	0.00	0.000	0.029	0.032
1258	8.50	8.40	2.36606	8.52	0.03174	0.04	1.79	41.67	7454.80	4167.39	74.55	0.00	0.000	0.029	0.032
1259	8.40	8.30	2.36967	8.51	0.03179	0.04	1.79	41.68	7455.23	4167.53	74.55	0.00	0.000	0.029	0.032
1260	8.30	8.20	2.37327	8.49	0.03183	0.04	1.79	41.68	7455.65	4167.66	74.56	0.00	0.000	0.029	0.032
1261	8.20	8.10	2.37688	8.48	0.03188	0.04	1.79	41.68	7456.08	4167.79	74.56	0.00	0.000	0.029	0.032
1262	8.10	8.00	2.38048	8.47	0.03192	0.04	1.79	41.68	7456.50	4167.93	74.57	0.00	0.000	0.029	0.032
1263	8.00	7.90	2.38408	8.46	0.03197	0.04	1.79	41.68	7456.93	4168.06	74.57	0.00	0.000	0.029	0.032
1264	7.90	7.80	2.38769	8.44	0.03202	0.04	1.79	41.68	7457.35	4168.19	74.57	0.00	0.000	0.029	0.032
1265	7.80	7.70	2.39129	8.43	0.03206	0.04	1.79	41.68	7457.78	4168.33	74.58	0.00	0.000	0.029	0.032
1266	7.70	7.60	2.39490	8.42	0.03211	0.04	1.79	41.68	7458.20	4168.46	74.58	0.00	0.000	0.029	0.032
1267	7.60	7.50	2.39850	8.41	0.03216	0.04	1.79	41.69	7458.62	4168.59	74.59	0.00	0.000	0.029	0.032
1268	7.50	7.40	2.40211	8.39	0.03220	0.04	1.79	41.69	7459.04	4168.72	74.59	0.00	0.000	0.029	0.032
1269	7.40	7.30	2.40571	8.38	0.03225	0.04	1.79	41.69	7459.46	4168.86	74.59	0.00	0.000	0.029	0.032
1270	7.30	7.20	2.40931	8.37	0.03230	0.04	1.79	41.69	7459.89	4168.99	74.60	0.00	0.000	0.029	0.032
1271	7.20	7.10	2.41292	8.36	0.03234	0.04	1.79	41.69	7460.31	4169.12	74.60	0.00	0.000	0.029	0.032
1272	7.10	7.00	2.41652	8.34	0.03239	0.04	1.79	41.69	7460.73	4169.25	74.61	0.00	0.000	0.029	0.032
1273	7.00	6.90	2.42013	8.33	0.03244	0.04	1.79	41.69	7461.15	4169.39	74.61	0.00	0.000	0.029	0.032
1274	6.90	6.80	2.42373	8.32	0.03248	0.04	1.79	41.70	7461.56	4169.52	74.62	0.00	0.000	0.029	0.032
1275	6.80	6.70	2.42733	8.31	0.03253	0.04	1.79	41.70	7461.98	4169.65	74.62	0.00	0.000	0.029	0.033
1276	6.70	6.60	2.43094	8.29	0.03258	0.04	1.79	41.70	7462.40	4169.78	74.62	0.00	0.000	0.029	0.033
1277	6.60	6.50	2.43454	8.28	0.03262	0.04	1.79	41.70	7462.82	4169.91	74.63	0.00	0.000	0.029	0.033
1278	6.50	6.40	2.43815	8.27	0.03267	0.04	1.79	41.70	7463.24	4170.04	74.63	0.00	0.000	0.029	0.033
1279	6.40	6.30	2.44175	8.26	0.03272	0.04	1.79	41.70	7463.65	4170.17	74.64	0.00	0.000	0.030	0.033
1280	6.30	6.20	2.44536	8.24	0.03276	0.04	1.79	41.70	7464.07	4170.30	74.64	0.00	0.000	0.030	0.033

1281	6.20	6.10	2.44896	8.23	0.03281	0.04	1.79	41.70	7464.49	4170.44	74.64	0.00	0.000	0.030	0.033
1282	6.10	6.00	2.45256	8.22	0.03285	0.04	1.79	41.71	7464.90	4170.57	74.65	0.00	0.000	0.030	0.033
1283	6.00	5.90	2.45617	8.21	0.03290	0.04	1.79	41.71	7465.32	4170.70	74.65	0.00	0.000	0.030	0.033
1284	5.90	5.80	2.45977	8.20	0.03295	0.04	1.79	41.71	7465.73	4170.83	74.66	0.00	0.000	0.030	0.033
1285	5.80	5.70	2.46338	8.18	0.03299	0.04	1.79	41.71	7466.14	4170.96	74.66	0.00	0.000	0.030	0.033
1286	5.70	5.60	2.46698	8.17	0.03304	0.04	1.79	41.71	7466.56	4171.09	74.67	0.00	0.000	0.030	0.033
1287	5.60	5.50	2.47058	8.16	0.03309	0.03	1.79	41.71	7466.97	4171.22	74.67	0.00	0.000	0.030	0.033
1288	5.50	5.40	2.47419	8.15	0.03313	0.03	1.79	41.71	7467.38	4171.35	74.67	0.00	0.000	0.030	0.033
1289	5.40	5.30	2.47779	8.14	0.03318	0.03	1.79	41.71	7467.79	4171.48	74.68	0.00	0.000	0.030	0.033
1290	5.30	5.20	2.48140	8.12	0.03323	0.03	1.79	41.72	7468.21	4171.61	74.68	0.00	0.000	0.030	0.033
1291	5.20	5.10	2.48500	8.11	0.03327	0.03	1.79	41.72	7468.62	4171.73	74.69	0.00	0.000	0.030	0.033
1292	5.10	5.00	2.48861	8.10	0.03332	0.03	1.79	41.72	7469.03	4171.86	74.69	0.00	0.000	0.030	0.033

TOT 6.79 1263098.12 707136.56  
AVG 0.02898 1.79 41.60 74.30  
CUM 111.93

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

ELEM NO.	ENDING DIST	SAT D.O.	REAER RATE	CBOD DECA	CBOD SETT	ANBOD DECA	BKGD SOD	FULL SOD	CORR SOD	ORGN DECA	ORGN SETT	NH3 DECA	NH3 SRCE	DENIT RATE	PO4 SRCE	ALG PROD	MAC PROD	COLI DECA	NCM DECA	NCM SETT
		mg/L	1/da	1/da	1/da	1/da	*	*	*	1/da	1/da	1/da	*	1/da	*	**	**	1/da	1/da	1/da
1123	21.900	9.60	0.69	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1124	21.800	9.60	0.69	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1125	21.700	9.60	0.69	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1126	21.600	9.60	0.69	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1127	21.500	9.60	0.69	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1128	21.400	9.60	0.69	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1129	21.300	9.60	0.69	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1130	21.200	9.60	0.69	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1131	21.100	9.60	0.69	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1132	21.000	9.60	0.69	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1133	20.900	9.60	0.69	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1134	20.800	9.60	0.69	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1135	20.700	9.60	0.69	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1136	20.600	9.60	0.69	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1137	20.500	9.60	0.69	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1138	20.400	9.60	0.69	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1139	20.300	9.60	0.69	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1140	20.200	9.60	0.69	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1141	20.100	9.60	0.69	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1142	20.000	9.60	0.68	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1143	19.900	9.60	0.68	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1144	19.800	9.60	0.68	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1145	19.700	9.60	0.68	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1146	19.600	9.60	0.68	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1147	19.500	9.60	0.68	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1148	19.400	9.60	0.68	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1149	19.300	9.60	0.68	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1150	19.200	9.60	0.68	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1151	19.100	9.60	0.68	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1152	19.000	9.60	0.68	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
1153	18.900	9.60	0.68	0.06	0.05	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05















\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
1293	UPR RCH	2.48861	17.30	0.00	0.00	0.00	7.82	6.08	6.08	0.00	0.00	0.00	0.00	0.00	0.00	0.65
EACH	INCR	0.0036	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
1293	5.00	4.90	2.49221	8.09	0.03337	0.03	1.79	41.72	7469.44	4171.99	74.69	0.00	0.000	0.030	0.033
TOT						0.03			7469.44	4171.99					
AVG					0.03337		1.79	41.72			74.69				
CUM						111.96									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECA 1/da	CBOD SETT 1/da	ANBOD DECA 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECA 1/da	ORGN SETT 1/da	NH3 DECA 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECA 1/da	NCM DECA 1/da	NCM SETT 1/da
1293	4.900	9.60	0.68	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.05
	20 DEG C RATE			0.07		0.00	0.00			0.00		0.00	0.00	0.00	0.00				0.16	
	AVG 20 DEG C RATE		0.72		0.06					0.00										0.06

\* g/sq m/d                      \*\* mg/L/day

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

ELEM NO.	ENDING DIST	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	TOTN mg/L	PHOS mg/L	CHL A µg/L	MACRO **	COLI #/100mL	NCM *
1293	4.900	17.30	0.00	0.00	0.00	7.83	6.05	6.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64

\* CM-I = CHLORIDES MG/L                      CM-II = SULFATES MG/L                      NCM = NBOD MG/L

\*\* g/cu m

FINAL REPORT            BIG CREEK  
REACH NO. 16            BIG CREEK,WEIR#1 TO BOEUF RVR

Big Creek - STREAM MODEL  
Winter Projection Model

\*\*\*\*\* REACH INPUTS \*\*\*\*\*

ELEM NO.	TYPE	FLOW cms	TEMP DEG C	SALN PPT	CM-I *	CM-II *	DO mg/L	BOD mg/L	EBOD mg/L	ORGN mg/L	NH3 mg/L	NO3+2 mg/L	PHOS mg/L	CHL A µg/L	COLI #/100mL	NCM *
1294	UPR RCH	2.49221	17.30	0.00	0.00	0.00	7.83	6.05	6.05	0.00	0.00	0.00	0.00	0.00	0.00	0.64
EACH	INCR	0.0037	17.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00

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

ELEM NO.	BEGIN DIST km	ENDING DIST km	FLOW cms	PCT EFF	ADVCTV VELO m/s	TRAVEL TIME days	DEPTH m	WIDTH m	VOLUME cu m	SURFACE AREA sq m	X-SECT AREA sq m	TIDAL PRISM cu m	TIDAL VELO m/s	DISPRSN sq m/s	MEAN VELO m/s
1294	4.90	4.80	2.49591	8.08	0.06719	0.02	0.89	41.72	3714.95	4172.12	37.15	0.00	0.000	0.034	0.067
1295	4.80	4.70	2.49961	8.07	0.06728	0.02	0.89	41.72	3715.25	4172.26	37.15	0.00	0.000	0.034	0.067
1296	4.70	4.60	2.50331	8.05	0.06737	0.02	0.89	41.72	3715.55	4172.39	37.16	0.00	0.000	0.034	0.067
1297	4.60	4.50	2.50701	8.04	0.06747	0.02	0.89	41.73	3715.85	4172.52	37.16	0.00	0.000	0.034	0.067
1298	4.50	4.40	2.51071	8.03	0.06756	0.02	0.89	41.73	3716.15	4172.65	37.16	0.00	0.000	0.034	0.068
1299	4.40	4.30	2.51441	8.02	0.06766	0.02	0.89	41.73	3716.45	4172.78	37.16	0.00	0.000	0.034	0.068
1300	4.30	4.20	2.51811	8.01	0.06775	0.02	0.89	41.73	3716.75	4172.92	37.17	0.00	0.000	0.034	0.068
1301	4.20	4.10	2.52181	7.99	0.06784	0.02	0.89	41.73	3717.05	4173.05	37.17	0.00	0.000	0.034	0.068
1302	4.10	4.00	2.52551	7.98	0.06794	0.02	0.89	41.73	3717.35	4173.18	37.17	0.00	0.000	0.034	0.068
1303	4.00	3.90	2.52921	7.97	0.06803	0.02	0.89	41.73	3717.65	4173.31	37.18	0.00	0.000	0.034	0.068
1304	3.90	3.80	2.53291	7.96	0.06813	0.02	0.89	41.73	3717.95	4173.44	37.18	0.00	0.000	0.034	0.068
1305	3.80	3.70	2.53661	7.95	0.06822	0.02	0.89	41.74	3718.24	4173.57	37.18	0.00	0.000	0.034	0.068
1306	3.70	3.60	2.54031	7.94	0.06831	0.02	0.89	41.74	3718.54	4173.70	37.19	0.00	0.000	0.034	0.068
1307	3.60	3.50	2.54401	7.92	0.06841	0.02	0.89	41.74	3718.84	4173.83	37.19	0.00	0.000	0.035	0.068
1308	3.50	3.40	2.54771	7.91	0.06850	0.02	0.89	41.74	3719.14	4173.96	37.19	0.00	0.000	0.035	0.069
1309	3.40	3.30	2.55141	7.90	0.06860	0.02	0.89	41.74	3719.43	4174.09	37.19	0.00	0.000	0.035	0.069
1310	3.30	3.20	2.55511	7.89	0.06869	0.02	0.89	41.74	3719.73	4174.22	37.20	0.00	0.000	0.035	0.069
1311	3.20	3.10	2.55881	7.88	0.06878	0.02	0.89	41.74	3720.02	4174.35	37.20	0.00	0.000	0.035	0.069
1312	3.10	3.00	2.56251	7.87	0.06888	0.02	0.89	41.74	3720.32	4174.48	37.20	0.00	0.000	0.035	0.069
1313	3.00	2.90	2.56621	7.86	0.06897	0.02	0.89	41.75	3720.61	4174.61	37.21	0.00	0.000	0.035	0.069
1314	2.90	2.80	2.56991	7.84	0.06907	0.02	0.89	41.75	3720.91	4174.74	37.21	0.00	0.000	0.035	0.069
1315	2.80	2.70	2.57361	7.83	0.06916	0.02	0.89	41.75	3721.20	4174.87	37.21	0.00	0.000	0.035	0.069
1316	2.70	2.60	2.57731	7.82	0.06925	0.02	0.89	41.75	3721.50	4175.00	37.21	0.00	0.000	0.035	0.069
1317	2.60	2.50	2.58101	7.81	0.06935	0.02	0.89	41.75	3721.79	4175.13	37.22	0.00	0.000	0.035	0.069
1318	2.50	2.40	2.58471	7.80	0.06944	0.02	0.89	41.75	3722.09	4175.26	37.22	0.00	0.000	0.035	0.069
1319	2.40	2.30	2.58841	7.79	0.06954	0.02	0.89	41.75	3722.38	4175.39	37.22	0.00	0.000	0.035	0.070
1320	2.30	2.20	2.59211	7.78	0.06963	0.02	0.89	41.76	3722.67	4175.52	37.23	0.00	0.000	0.035	0.070
1321	2.20	2.10	2.59581	7.77	0.06972	0.02	0.89	41.76	3722.97	4175.65	37.23	0.00	0.000	0.035	0.070
1322	2.10	2.00	2.59951	7.76	0.06982	0.02	0.89	41.76	3723.26	4175.77	37.23	0.00	0.000	0.035	0.070
1323	2.00	1.90	2.60321	7.74	0.06991	0.02	0.89	41.76	3723.55	4175.90	37.24	0.00	0.000	0.035	0.070
1324	1.90	1.80	2.60691	7.73	0.07001	0.02	0.89	41.76	3723.84	4176.03	37.24	0.00	0.000	0.035	0.070
1325	1.80	1.70	2.61061	7.72	0.07010	0.02	0.89	41.76	3724.13	4176.16	37.24	0.00	0.000	0.035	0.070
1326	1.70	1.60	2.61431	7.71	0.07019	0.02	0.89	41.76	3724.42	4176.29	37.24	0.00	0.000	0.035	0.070
1327	1.60	1.50	2.61801	7.70	0.07029	0.02	0.89	41.76	3724.71	4176.42	37.25	0.00	0.000	0.036	0.070
1328	1.50	1.40	2.62171	7.69	0.07038	0.02	0.89	41.77	3725.00	4176.54	37.25	0.00	0.000	0.036	0.070
1329	1.40	1.30	2.62541	7.68	0.07048	0.02	0.89	41.77	3725.29	4176.67	37.25	0.00	0.000	0.036	0.070
1330	1.30	1.20	2.62911	7.67	0.07057	0.02	0.89	41.77	3725.58	4176.80	37.26	0.00	0.000	0.036	0.071
1331	1.20	1.10	2.63281	7.66	0.07066	0.02	0.89	41.77	3725.87	4176.92	37.26	0.00	0.000	0.036	0.071
1332	1.10	1.00	2.63651	7.65	0.07076	0.02	0.89	41.77	3726.16	4177.05	37.26	0.00	0.000	0.036	0.071
1333	1.00	0.90	2.64021	7.64	0.07085	0.02	0.89	41.77	3726.45	4177.18	37.26	0.00	0.000	0.036	0.071
1334	0.90	0.80	2.64391	7.63	0.07094	0.02	0.89	41.77	3726.74	4177.31	37.27	0.00	0.000	0.036	0.071
1335	0.80	0.70	2.64761	7.61	0.07104	0.02	0.89	41.77	3727.03	4177.43	37.27	0.00	0.000	0.036	0.071

1336	0.70	0.60	2.65131	7.60	0.07113	0.02	0.89	41.78	3727.32	4177.56	37.27	0.00	0.000	0.036	0.071
1337	0.60	0.50	2.65501	7.59	0.07123	0.02	0.89	41.78	3727.60	4177.69	37.28	0.00	0.000	0.036	0.071
1338	0.50	0.40	2.65871	7.58	0.07132	0.02	0.89	41.78	3727.89	4177.81	37.28	0.00	0.000	0.036	0.071
1339	0.40	0.30	2.66241	7.57	0.07141	0.02	0.89	41.78	3728.18	4177.94	37.28	0.00	0.000	0.036	0.071
1340	0.30	0.20	2.66611	7.56	0.07151	0.02	0.89	41.78	3728.47	4178.06	37.28	0.00	0.000	0.036	0.072
1341	0.20	0.10	2.66981	7.55	0.07160	0.02	0.89	41.78	3728.75	4178.19	37.29	0.00	0.000	0.036	0.072
1342	0.10	0.00	2.67351	7.54	0.07169	0.02	0.89	41.78	3729.04	4178.32	37.29	0.00	0.000	0.036	0.072
TOT						0.82			182380.59	204587.06					
AVG					0.06942		0.89	41.75			37.22				
CUM						112.78									

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

ELEM NO.	ENDING DIST	SAT D.O. mg/L	REAER RATE 1/da	CBOD DECA 1/da	CBOD SETT 1/da	ANBOD DECA 1/da	BKGD SOD *	FULL SOD *	CORR SOD *	ORGN DECA 1/da	ORGN SETT 1/da	NH3 DECA 1/da	NH3 SRCE *	DENIT RATE 1/da	PO4 SRCE *	ALG PROD **	MAC PROD **	COLI DECA 1/da	NCM DECA 1/da	NCM SETT 1/da
1294	4.800	9.60	1.73	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1295	4.700	9.60	1.73	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1296	4.600	9.60	1.73	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1297	4.500	9.60	1.73	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1298	4.400	9.60	1.73	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1299	4.300	9.60	1.73	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1300	4.200	9.60	1.73	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1301	4.100	9.60	1.74	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1302	4.000	9.60	1.74	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1303	3.900	9.60	1.74	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1304	3.800	9.60	1.74	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1305	3.700	9.60	1.74	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1306	3.600	9.60	1.74	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1307	3.500	9.60	1.74	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1308	3.400	9.60	1.75	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1309	3.300	9.60	1.75	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1310	3.200	9.60	1.75	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1311	3.100	9.60	1.75	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1312	3.000	9.60	1.75	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1313	2.900	9.60	1.75	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1314	2.800	9.60	1.75	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1315	2.700	9.60	1.75	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1316	2.600	9.60	1.76	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1317	2.500	9.60	1.76	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1318	2.400	9.60	1.76	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1319	2.300	9.60	1.76	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1320	2.200	9.60	1.76	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1321	2.100	9.60	1.76	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1322	2.000	9.60	1.76	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1323	1.900	9.60	1.77	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1324	1.800	9.60	1.77	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1325	1.700	9.60	1.77	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1326	1.600	9.60	1.77	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1327	1.500	9.60	1.77	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1328	1.400	9.60	1.77	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11
1329	1.300	9.60	1.77	0.06	0.11	0.00	0.69	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	2.80	0.00	0.00	0.13	0.11



1324	1.800	17.30	0.00	0.00	0.00	8.23	6.08	6.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55
1325	1.700	17.30	0.00	0.00	0.00	8.24	6.08	6.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55
1326	1.600	17.30	0.00	0.00	0.00	8.25	6.08	6.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55
1327	1.500	17.30	0.00	0.00	0.00	8.25	6.08	6.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54
1328	1.400	17.30	0.00	0.00	0.00	8.26	6.08	6.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54
1329	1.300	17.30	0.00	0.00	0.00	8.27	6.08	6.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54
1330	1.200	17.30	0.00	0.00	0.00	8.28	6.08	6.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54
1331	1.100	17.30	0.00	0.00	0.00	8.28	6.09	6.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53
1332	1.000	17.30	0.00	0.00	0.00	8.29	6.09	6.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53
1333	0.900	17.30	0.00	0.00	0.00	8.30	6.09	6.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53
1334	0.800	17.30	0.00	0.00	0.00	8.30	6.09	6.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53
1335	0.700	17.30	0.00	0.00	0.00	8.31	6.09	6.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52
1336	0.600	17.30	0.00	0.00	0.00	8.31	6.09	6.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52
1337	0.500	17.30	0.00	0.00	0.00	8.32	6.09	6.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52
1338	0.400	17.30	0.00	0.00	0.00	8.33	6.09	6.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52
1339	0.300	17.30	0.00	0.00	0.00	8.33	6.09	6.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52
1340	0.200	17.30	0.00	0.00	0.00	8.34	6.09	6.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51
1341	0.100	17.30	0.00	0.00	0.00	8.34	6.09	6.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51
1342	0.000	17.30	0.00	0.00	0.00	8.35	6.10	6.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51

\* CM-I = CHLORIDES  
MG/L

CM-II = SULFATES  
MG/L

NCM = NBOD  
MG/L

\*\* g/cu m

STREAM SUMMARY  
BIG CREEK

Big Creek - STREAM MODEL  
Winter Projection Model

TRAVEL TIME = 112.78 DAYS

MAXIMUM EFFLUENT = 66.67 PERCENT

FLOW = 0.02830 TO 2.67351 cms

DISPERSION = 0.0016 TO 0.0363 sq m/s

VELOCITY = 0.00484 TO 0.07169 m/s

DEPTH = 0.31 TO 1.79 m

WIDTH = 6.62 TO 41.78 m

BOD DECAY = 0.06 TO 0.06 per day

NH3 DECAY = 0.00 TO 0.00 per day

SDMNT OXYGEN DMND= 0.00 TO 1.05 g/sq m/d

NH3 SOURCE = 0.00 TO 0.00 g/sq m/d

REAERATION = 0.68 TO 3.00 per day

BOD SETTLING = 0.05 TO 0.30 per day

ORGN DECAY = 0.00 TO 0.00 per day

ORGN SETTLING = 0.00 TO 0.00 per day

TEMPERATURE = 17.30 TO 17.50 deg C

DISSOLVED OXYGEN = 7.60 TO 8.68 mg/L

.....EXECUTION COMPLETED



## Appendix B6

### Projection Model Development

#### **Winter projection model justifications**

# Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 3, Program Constants			
Description of Constant	Value	Result	Source/Justification
Maximum iteration limit	200.0		Standard
Plot type	3.0	Creates line printer plots for WQ parameters.	For reporting purposes.
Final report type	1.0	Report for all reach and stream summaries.	For reporting purposes.
Special report type	3.0		Hydraulic parameters
BOD oxygen uptake rate	1.0	Indicates model inputs are in ultimate BOD.	Modeler's Preference
KL Minimum	0.7	Minimum KL to be used.	The minimum KL of 2.3 ft/day converted to 0.70 m/day.
NCM Oxygen uptake rate	1.0	Indicates model inputs are in ultimate BOD.	Modeler's Preference
Inhibition control value	3.0	Inhibits all decay rates except SOD for low DO.	Standard LA modeling procedure.
Dispersion equation	1.0	Set the dispersion eq. to E=a.	Let model determine the advective dispersion based on velocities and Manning's coefficients.
Ocean exchange ratio	0.0	Set 0% tidal exchange at lower boundary.	This was done to allow dispersion in the model but not to force the bottom element through the boundary conditions.
Hydraulic calculation method	2.0	Sets the Hydraulic calc. to width and depth coef.	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.
Settled rate units.	1.0	Sets the settled rate to a velocity (m/day).	By making the settling rate a velocity the rate becomes dependent upon the depth. Due to the depths in this waterbody, it was felt that this method would be a more appropriate representation of the actual conditions.
Algae oxygen prod	0.050	Sets the net oxygen production per chlorophyll a	Recommended model default value.
Effective BOD due to Algae	0.0	Sets the effect that decaying algae will have on BOD.	Algal processes are not normally included in Louisiana's projection runs.

## Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 4, Temperature Correction Constants		
Description of Coefficient	Value	Source/Justification
No theta's were manually inputed.		This version of LAQUAL 4.12 had the Lousiana standard theta's built into its programming.

## Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 RKM 118	Width Coef "A"	Unitless	3.926	Value based on the flow to width relationship from a hydraulic station at the LA Highway 134 bridge.
		Width Exp "B"	Unitless	0.570	"
		Width Const "C"	Meter	6.100	Value determined via calibration.
		Depth Coef "D"	Unitless	0.344	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 134 bridge.
		Depth Exp "E"	Unitless	0.905	"
		Depth Const "F"	Meter	0.3	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
2	BIG CREEK, RKM 100 TO MITCHNER	Width Coef "A"	Unitless	3.926	Value based on the flow to width relationship from a hydraulic station at the LA Highway 134 bridge.
		Width Exp "B"	Unitless	0.570	"
		Width Const "C"	Meter	14.750	Value determined via calibration.
		Depth Coef "D"	Unitless	0.344	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 134 bridge.
		Depth Exp "E"	Unitless	0.905	"
		Depth Const "F"	Meter	0.4	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
3	BIG CREEK, MITCHNER TO RKM 67.4	Width Coef "A"	Unitless	3.926	Value based on the flow to width relationship from a hydraulic station at the LA Highway 134 bridge.
		Width Exp "B"	Unitless	0.570	"
		Width Const "C"	Meter	12.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.344	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 134 bridge.
		Depth Exp "E"	Unitless	0.905	"
		Depth Const "F"	Meter	0.35	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
4	BIG CREEK, RKM 67.4 TO WEIR #6	Width Coef "A"	Unitless	3.926	Value based on the flow to width relationship from a hydraulic station at the LA Highway 134 bridge.
		Width Exp "B"	Unitless	0.570	"
		Width Const "C"	Meter	33.000	Value determined via calibration.
		Depth Coef "D"	Unitless	0.344	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 134 bridge.
		Depth Exp "E"	Unitless	0.905	"
		Depth Const "F"	Meter	0.5	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.

# Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
5	WEIR #6	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	30.000	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	0.42	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
6	BIG CREEK, RKM 67.4 TO WEIR #6	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	30.000	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	0.42	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
7	WEIR #5	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	30.000	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
8	BIG CREEK, WEIR #5 TO WEIR #4	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	30.000	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.

# Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
9	WEIR #4	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	30.000	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
10	BIG CREEK, WEIR #4 TO WEIR #3	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	38.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
11	WEIR #3	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	38.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
12	BIG CREEK, WEIR #3 TO WEIR #2	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	38.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.

# Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 9, Advective Hydraulic Coefficients					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
13	WEIR #2	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	38.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
14	BIG CREEK, WEIR #2 TO WEIR #1	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	38.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
15	WEIR #1	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	38.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	1.6	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.
16	BIG CREEK, WEIR#1 TO BOEUF RVR	Width Coef "A"	Unitless	2.500	Value based on the flow to width relationship from a hydraulic station at the LA Highway 135 bridge.
		Width Exp "B"	Unitless	0.277	"
		Width Const "C"	Meter	38.500	Value determined via calibration.
		Depth Coef "D"	Unitless	0.165	Value based on the flow to depth relationship from a hydraulic station at the LA Highway 135 bridge.
		Depth Exp "E"	Unitless	0.156	"
		Depth Const "F"	Meter	0.7	Value determined via calibration.
		Mannings - N	Unitless	0.03	Value determined by considering the typical bottom material to be silt.

# Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 10, Dispersive Hydraulic Coefficients					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
					Allowed the model to calculate it's own dispersion coefficients from the velocities and Manning's numbers.



## Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 11, INITIAL CONDITIONS					
Reach #	REACH DESCRIPTION	Initial Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 RKM 118	Temperature	°Celcius	17.5	Seasonal ninety percentile Temperature values from LADEQ station # 0328 @ Big Creek east of Rayville. 1993 - 1998 dataset
		Dissolved O <sub>2</sub>	mg/l	8.61	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs.
2	BIG CREEK, RKM 100 TO MITCHNER	Temperature	°Celcius	17.5	Seasonal ninety percentile Temperature values from LADEQ station # 0328 @ Big Creek east of Rayville. 1993 - 1998 dataset
		Dissolved O <sub>2</sub>	mg/l	8.61	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs.
3	BIG CREEK, MITCHNER TO RKM 67.4	Temperature	°Celcius	17.5	Seasonal ninety percentile Temperature values from LADEQ station # 0328 @ Big Creek east of Rayville. 1993 - 1998 dataset
		Dissolved O <sub>2</sub>	mg/l	8.61	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs.
4	BIG CREEK, RKM 67.4 TO WEIR #6	Temperature	°Celcius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	8.64	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs.
5	WEIR #6	Temperature	°Celcius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	8.64	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs.
6	BIG CREEK, WEIR #6 TO WEIR #5	Temperature	°Celcius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	8.64	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs.
7	WEIR #5	Temperature	°Celcius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	8.64	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs.
8	BIG CREEK, WEIR #5 TO WEIR #4	Temperature	°Celcius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	8.64	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs.
9	WEIR #4	Temperature	°Celcius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	8.64	Ninety percent of Dissolved Oxygen saturation at projection temperature.

## Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 11, INITIAL CONDITIONS					
Reach #	REACH DESCRIPTION	Initial Parameter	Units	Value	Source/Justification
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs.
10	BIG CREEK, WEIR #4 TO WEIR #3	Temperature	°Celsius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	8.64	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs.
11	WEIR #3	Temperature	°Celsius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	8.64	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs.
12	BIG CREEK, WEIR #3 TO WEIR #2	Temperature	°Celsius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	8.64	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs.
13	WEIR #2	Temperature	°Celsius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	8.64	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs.
14	BIG CREEK, WEIR #2 TO WEIR #1	Temperature	°Celsius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	8.64	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs.
15	WEIR #1	Temperature	°Celsius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	8.64	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs.
16	BIG CREEK, WEIR #1 TO BOEUF RVR	Temperature	°Celsius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		Dissolved O <sub>2</sub>	mg/l	8.64	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs.

# Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 RKM 118	K <sub>2</sub> option	Unitless	15	The velocity and depths are within the range of the Louisiana Equations limits
		Oxygen Transfer coef.	m/day	0.7	The minimum KL of 2.3 ft/day converted to 0.70 m/day.
		Background SOD	g/m <sup>2</sup> -day	1.23	80 % reduction in man-made non-point loading.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
2	BIG CREEK, RKM 100 TO MITCHNER	K <sub>2</sub> option	Unitless	15	The velocity and depths are within the range of the Louisiana Equations limits
		Oxygen Transfer coef.	m/day	0.7	The minimum KL of 2.3 ft/day converted to 0.70 m/day.
		Background SOD	g/m <sup>2</sup> -day	1.16	80 % reduction in man-made non-point loading.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
3	BIG CREEK, MITCHNER TO RKM 67.4	K <sub>2</sub> option	Unitless	15	The velocity and depths are within the range of the Louisiana Equations limits
		Oxygen Transfer coef.	m/day	0.7	The minimum KL of 2.3 ft/day converted to 0.70 m/day.
		Background SOD	g/m <sup>2</sup> -day	0.55	35 % reduction in man-made non-point loading.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
4	BIG CREEK, RKM 67.4 TO WEIR #6	K <sub>2</sub> option	Unitless	15	The velocity and depths are within the range of the Louisiana Equations limits
		Oxygen Transfer coef.	m/day	0.7	The minimum KL of 2.3 ft/day converted to 0.70 m/day.
		Background SOD	g/m <sup>2</sup> -day	0.52	35 % reduction in man-made non-point loading.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
5	WEIR #6	K <sub>2</sub> option	Unitless	15	The velocity and depths are within the range of the Louisiana Equations limits
		Oxygen Transfer coef.	m/day	0.7	The minimum KL of 2.3 ft/day converted to 0.70 m/day.
		Background SOD	g/m <sup>2</sup> -day	0.00	BPJ. Did not apply benthic loading in one element weir reaches.
		Aerobic BOD decay	1/day	0.07	Average of sites 05-MR-10,11,12,13.
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
6	BIG CREEK, WEIR #6 TO WEIR #5	K <sub>2</sub> option	Unitless	15	The velocity and depths are within the range of the Louisiana Equations limits
		Oxygen Transfer coef.	m/day	0.7	The minimum KL of 2.3 ft/day converted to 0.70 m/day.
		Background SOD	g/m <sup>2</sup> -day	0.82	35 % reduction in man-made non-point loading.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
7	WEIR #5	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.29	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for seasonal average water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey data from the climate station in Shreveport. The 10 meter velocity was adjusted to 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.00	BPJ. Did not apply benthic loading in one element weir reaches.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.

# Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
8	BIG CREEK, WEIR #5 TO WEIR #4	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.29	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for seasonal average water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date from the climate station in Shreveport. The 10 meter velocity was adjusted to 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.79	35 % reduction in man-made non-point loading.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
9	WEIR #4	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.29	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for seasonal average water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date from the climate station in Shreveport. The 10 meter velocity was adjusted to 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.00	BPJ. Did not apply benthic loading in one element weir reaches.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
10	BIG CREEK, WEIR #4 TO WEIR #3	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.29	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for seasonal average water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date from the climate station in Shreveport. The 10 meter velocity was adjusted to 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.73	35 % reduction in man-made non-point loading.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.

# Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
11	WEIR #3	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.29	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for seasonal average water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date from the climate station in Shreveport. The 10 meter velocity was adjusted to 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.00	BPJ. Did not apply benthic loading in one element weir reaches.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
12	BIG CREEK, WEIR #3 TO WEIR #2	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.29	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for seasonal average water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date from the climate station in Shreveport. The 10 meter velocity was adjusted to 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.76	35 % reduction in man-made non-point loading.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
13	WEIR #2	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.29	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for seasonal average water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date from the climate station in Shreveport. The 10 meter velocity was adjusted to 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.00	BPJ. Did not apply benthic loading in one element weir reaches.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.

# Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 12, Reaeration, Sediment Oxygen Demand and BOD Coeff.					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
14	BIG CREEK, WEIR #2 TO WEIR #1	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.29	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for seasonal average water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date from the climate station in Shreveport. The 10 meter velocity was adjusted to 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.92	35 % reduction in man-made non-point loading.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
15	WEIR #1	K <sub>2</sub> option	Unitless	20	The velocity and depths are not within the range of the Louisiana Equations limits. The minimum KL equation was used.
		Oxygen Transfer coef.	m/day	1.29	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for seasonal average water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date from the climate station in Shreveport. The 10 meter velocity was adjusted to 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.00	BPJ. Did not apply benthic loading in one element weir reaches.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.
16	BIG CREEK, WEIR #1 TO BOEUF RVR	K <sub>2</sub> option	Unitless	15	The velocity and depths are within the range of the Louisiana Equations limits.
		Oxygen Transfer coef.	m/day	0.70	The minimum KL of 2.3 ft/day converted to 0.70 m/day. This value was adjusted for survey date water surface wind velocities. The equation used to make this adjustment is Equation (3-23), page 122, Rates, Constants, and Kinetics Formulations in Surface Water Quality Modeling (2nd edition). The wind velocity used was the measured velocity at 10 meters for the survey date from the climate station in Shreveport. The 10 meter velocity was adjusted to 0.1 meter height for use on the equation listed above.
		Background SOD	g/m <sup>2</sup> -day	0.82	35 % reduction in man-made non-point loading.
		Aerobic BOD decay	1/day	0.07	Average of sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
		BOD Settling rate	m/day	0.1	Per the "Waste Load Evaluation Methodology" of Texas, page D-14.

# Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 13, Nitrogen and Phosphorus					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
	Not needed, used NBOD as NCM.				

# Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 15, Coliform and Nonconservative Coefficients					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 RKM 118	NCM Decay	1/day	0.28	Average of sites 10-14, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
2	BIG CREEK, RKM 100 TO MITCHNER	NCM Decay	1/day	0.28	Average of sites 10-14, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
3	BIG CREEK, MITCHNER TO RKM 67.4	NCM Decay	1/day	0.28	Average of sites 10-14, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
4	BIG CREEK, RKM 67.4 TO WEIR #6	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
5	WEIR #6	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
6	BIG CREEK, WEIR #6 TO WEIR #5	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
7	WEIR #5	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
8	BIG CREEK, WEIR #5 TO WEIR #4	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.



# Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 15, Coliform and Nonconservative Coefficients					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
9	WEIR #4	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
10	BIG CREEK, WEIR #4 TO WEIR #3	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
11	WEIR #3	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
12	BIG CREEK, WEIR #3 TO WEIR #2	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
13	WEIR #2	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
14	BIG CREEK, WEIR #2 TO WEIR #1	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
15	WEIR #1	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.
16	BIG CREEK, WEIR #1 TO BOEUF RVR	NCM Decay	1/day	0.16	Average of sites 1-9, from the September 20,1999 stream survey.
		NCM Settling Rate	m/day	0.1	Based on the Org.-N settling rate in Texas's "Waste load Evaluation Methology", Coefficient Determination, Paragraph #4.

## Big Creek 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	BIG CREEK, RKM 134.2 RKM 118	Incremental Inflow	m <sup>3</sup> /s	0.0000	Based on the USGS 7Q10 estimated flow at Hwy 80, it was determined that the incremental flow within this reach would be negligible.
		Temperature	°Celcius	17.5	Seasonal ninety percentile Temperature values from LADEQ station # 0328 @ Big Creek east of Rayville. 1993 - 1998 dataset
2	BIG CREEK, RKM 100 TO MITCHNER	Incremental Inflow	m <sup>3</sup> /s	0.0000	Based on the USGS 7Q10 estimated flow at Hwy 80, it was determined that the incremental flow within this reach would be negligible.
		Temperature	°Celcius	17.5	Seasonal ninety percentile Temperature values from LADEQ station # 0328 @ Big Creek east of Rayville. 1993 - 1998 dataset
3	BIG CREEK, MITCHNER TO RKM 67.4	Incremental Inflow	m <sup>3</sup> /s	0.0000	Based on the USGS 7Q10 estimated flow at Hwy 80, it was determined that the incremental flow within this reach would be negligible.
		Temperature	°Celcius	17.5	Seasonal ninety percentile Temperature values from LADEQ station # 0328 @ Big Creek east of Rayville. 1993 - 1998 dataset
4	BIG CREEK, RKM 67.4 TO WEIR #6	Incremental Inflow	m <sup>3</sup> /s	0.2611	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {1.0cfs x six tributaries, 1.0 cfs x one headwater and the one dischargers estimated flow} from the estimated winter season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celcius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
5	WEIR #6	Incremental Inflow	m <sup>3</sup> /s	0.0036	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {1.0cfs x six tributaries, 1.0 cfs x one headwater and the one dischargers estimated flow} from the estimated winter season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celcius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
6	BIG CREEK, WEIR #6 TO WEIR #5	Incremental Inflow	m <sup>3</sup> /s	0.3336	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {1.0cfs x six tributaries, 1.0 cfs x one headwater and the one dischargers estimated flow} from the estimated winter season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celcius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
7	WEIR #5	Incremental Inflow	m <sup>3</sup> /s	0.0036	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {1.0cfs x six tributaries, 1.0 cfs x one headwater and the one dischargers estimated flow} from the estimated winter season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celcius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.

## Big Creek 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
8	BIG CREEK, WEIR #5 TO WEIR #4	Incremental Inflow	m <sup>3</sup> /s	0.4822	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {1.0cfs x six tributaries, 1.0 cfs x one headwater and the one dischargers estimated flow} from the estimated winter season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
9	WEIR #4	Incremental Inflow	m <sup>3</sup> /s	0.0036	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {1.0cfs x six tributaries, 1.0 cfs x one headwater and the one dischargers estimated flow} from the estimated winter season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
10	BIG CREEK, WEIR #4 TO WEIR #3	Incremental Inflow	m <sup>3</sup> /s	0.2248	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {1.0cfs x six tributaries, 1.0 cfs x one headwater and the one dischargers estimated flow} from the estimated winter season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
11	WEIR #3	Incremental Inflow	m <sup>3</sup> /s	0.0036	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {1.0cfs x six tributaries, 1.0 cfs x one headwater and the one dischargers estimated flow} from the estimated winter season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
12	BIG CREEK, WEIR #3 TO WEIR #2	Incremental Inflow	m <sup>3</sup> /s	0.3263	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {1.0cfs x six tributaries, 1.0 cfs x one headwater and the one dischargers estimated flow} from the estimated winter season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celsius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.

## Big Creek 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
13	WEIR #2	Incremental Inflow	m <sup>3</sup> /s	0.0036	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {1.0cfs x six tributaries, 1.0 cfs x one headwater and the one dischargers estimated flow} from the estimated winter season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celcius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
14	BIG CREEK, WEIR #2 TO WEIR #1	Incremental Inflow	m <sup>3</sup> /s	0.6127	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {1.0cfs x six tributaries, 1.0 cfs x one headwater and the one dischargers estimated flow} from the estimated winter season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celcius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
15	WEIR #1	Incremental Inflow	m <sup>3</sup> /s	0.0036	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {1.0cfs x six tributaries, 1.0 cfs x one headwater and the one dischargers estimated flow} from the estimated winter season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celcius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
16	BIG CREEK, WEIR #1 TO BOEUF RVR	Incremental Inflow	m <sup>3</sup> /s	0.1813	Reach length X 0.378 cfs/kilometer. Determined by subtracting the {1.0cfs x six tributaries, 1.0 cfs x one headwater and the one dischargers estimated flow} from the estimated winter season 7Q10 flow at Hwy 135. This differential flow was then divided by the stream length between Rkm 67.4 and Hwy 135 in kilometers. It is LADEQ's assumption that this flow is incremental flow from the surrounding areas interflow and from shallow groundwater aquifers.
		Temperature	°Celcius	17.3	Seasonal ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.

# Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 17, Incremental Data for DO, BOD, Nitrogen					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1-16	Big Creek, Hwy 879 to confluence with the Boeuf River	Dissolved O <sub>2</sub>	mg/l	0	Assumed groundwater inflow to be anaerobic.
		BOD	mg/l	0	No data was available to determine these values. Assumed groundwater inflow to be void BOD loading. Any loading that may be entering the stream from this source will be simulated with the projected non-point loads not associated with flows.

## Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 18, Incremental Data for Phosphorus, Chlorophyll, Coliform, and Nonconservatives					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1-16	Big Creek, Hwy 879 to confluence with the Boeuf River	NCM	mg/l	0	No data was available to determine these values. Assumed groundwater inflow to be void NCM loading. Any loading that may be entering the stream from this source will be simulated with the calibrated non-point loads not associated with flows.

# Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 19, Nonpoint Source Data					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 RKM 118	BOD	kg/day	45	75 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	21	75 % reduction in man-made non-point loading.
2	BIG CREEK, RKM 100 TO MITCHNER	BOD	kg/day	347	75 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	110	75 % reduction in man-made non-point loading.
3	BIG CREEK, MITCHNER TO RKM 67.4	BOD	kg/day	198	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	53	35 % reduction in man-made non-point loading.
4	BIG CREEK, RKM 67.4 TO WEIR #6	BOD	kg/day	326	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	60	35 % reduction in man-made non-point loading.
5	WEIR #6	BOD	kg/day	0	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	0	35 % reduction in man-made non-point loading.
6	BIG CREEK, WEIR #6 TO WEIR #5	BOD	kg/day	400	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	43	35 % reduction in man-made non-point loading.
7	WEIR #5	BOD	kg/day	0	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	0	35 % reduction in man-made non-point loading.
8	BIG CREEK, WEIR #5 TO WEIR #4	BOD	kg/day	846	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	132	35 % reduction in man-made non-point loading.
9	WEIR #4	BOD	kg/day	0	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	0	35 % reduction in man-made non-point loading.
10	BIG CREEK, WEIR #4 TO WEIR #3	BOD	kg/day	448	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	37	35 % reduction in man-made non-point loading.
11	WEIR #3	BOD	kg/day	0	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	0	35 % reduction in man-made non-point loading.
12	BIG CREEK, WEIR #3 TO WEIR #2	BOD	kg/day	682	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	53	35 % reduction in man-made non-point loading.
13	WEIR #2	BOD	kg/day	0	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	0	35 % reduction in man-made non-point loading.
14	BIG CREEK, WEIR #2 TO WEIR #1	BOD	kg/day	1163	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	202	35 % reduction in man-made non-point loading.
15	WEIR #1	BOD	kg/day	0	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	0	35 % reduction in man-made non-point loading.
16	BIG CREEK, WEIR #1 TO BOEUF RVR	BOD	kg/day	291	35 % reduction in man-made non-point loading.
		Nonconservative matl.	kg/day	4	35 % reduction in man-made non-point loading.

# Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 20, Headwater Data for Flow, Temperature, Salinity, and Conservatives					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 RKM 118	Element # of input		1	Big Creek
		Headwater name		Big Creek	
		Headwater flow	cms	0.0283	LDEQ's LTP winter default value of 1.0 cfs.
		Temperature	°Celcius	17.50	Winter seasonal ninety percentile Temperature values from LADEQ station # 0328 @ Big Creek east of Rayville. 1993 - 1998 dataset



## Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 21, Headwater Data for DO, BOD, and Nitrogen					
Reach #	NAME	Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 RKM 118	Element # of input		1	Big Creek
		Dissolved O <sub>2</sub>	mg/l	8.63	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		BOD	mg/l	8.87	Measured parameter value from Site 15 during Sept. 1999 survey.

## Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 22, Headwater Data for Phosphorus, Chlorophyll, Coliform, and Nonconservatives					
Reach #	NAME	Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 RKM 118	Element # of input		1	Big Creek
		NCM	mg/l	3.41	Measured parameter value from Site 15 during Sept. 1999 survey.

## Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 24, Wastewater Data for Flow, Temperature, Salinity, and Conservatives					
Reach #	REACH DESCRIPTION	Parameter	Units	Value	Source/Justification
1	BIG CREEK, RKM 134.2 to RKM 118	Element # of input		162	
		Wasteload description		Tributary, Little Colewa Creek 1	
		Wasteload inflow	cms	0.0283	LDEQ's LTP winter default value of 1.0 cfs.
		Temperature	°Celcius	17.5	Winter season ninety percentile Temperature values from LADEQ station # 0328 @ Big Creek east of Rayville. 1993 - 1998 dataset
3	BIG CREEK, MITCHNER TO RKM 67.4	Element # of input		585	
		Wasteload description		Tributary, Little Colewa Creek 2	
		Wasteload inflow	cms	0.0283	LDEQ's LTP winter default value of 1.0 cfs.
		Temperature	°Celcius	17.5	Winter season ninety percentile Temperature values from LADEQ station # 0328 @ Big Creek east of Rayville. 1993 - 1998 dataset
6	BIG CREEK, WEIR #6 TO WEIR #5	Element # of input		760	
		Wasteload description		Tributary, Cypress Creek	
		Wasteload inflow	cms	0.0283	LDEQ's LTP winter default value of 1.0 cfs.
		Temperature	°Celcius	17.3	Winter season ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
8	BIG CREEK, WEIR #5 TO WEIR #4	Element # of input		861	
		Wasteload description		Tributary, Cow Bayou	
		Wasteload inflow	cms	0.0283	LDEQ's LTP winter default value of 1.0 cfs.
		Temperature	°Celcius	17.3	Winter season ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
10	BIG CREEK, WEIR #4 TO WEIR #3	Element # of input		1014	
		Wasteload description		Tributary, Bee Bayou	
		Wasteload inflow	cms	0.0283	LDEQ's LTP winter default value of 1.0 cfs.
		Temperature	°Celcius	17.3	Winter season ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
12	BIG CREEK, WEIR #3 TO WEIR #2	Element # of input		1043	
		Wasteload description		Town of Mangham	
		Wasteload inflow	cms	0.0035	Flow used was the design flow x 1.25 from the permit application. Equals a 20% margin of safety.
		Temperature	°Celcius	17.3	Winter season ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.

## Big Creek Water Quality Winter Projection Model Input Description

DATA TYPE 24, Wastewater Data for Flow, Temperature, Salinity, and Conservatives					
14	BIG CREEK, WEIR #2 TO WEIR #1	Element # of input		1128	
		Wasteload description		Tributary, Turkey Creek	
		Wasteload inflow	cms	0.0283	LDEQ's LTP winter default value of 1.0 cfs.
		Temperature	°Celcius	17.3	Winter season ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
14	BIG CREEK, WEIR #2 TO WEIR #1	Element # of input		1204	
		Wasteload description		Tributary, Little Creek	
		Wasteload inflow	cms	0.0283	LDEQ's LTP winter default value of 1.0 cfs.
		Temperature	°Celcius	17.3	Winter season ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.

# Big Creek 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
1	BIG CREEK, RKM 134.2 to RKM 118	Element # of input		162	
		Wasteload description		Tributary, Little Colewa Creek 1	
		Dissolved O <sub>2</sub>	mg/l	8.63	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		BOD	mg/l	6.4	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.
3	BIG CREEK, MITCHNER TO RKM 67.4	Element # of input		585	
		Wasteload description		Tributary, Little Colewa Creek 2	
		Dissolved O <sub>2</sub>	mg/l	8.63	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		BOD	mg/l	6.4	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.
6	BIG CREEK, WEIR #6 TO WEIR #5	Element # of input		760	
		Wasteload description		Tributary, Cypress Creek	
		Dissolved O <sub>2</sub>	mg/l	8.49	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		BOD	mg/l	6.4	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.
8	BIG CREEK, WEIR #5 TO WEIR #4	Element # of input		861	
		Wasteload description		Tributary, Cow Bayou	
		Dissolved O <sub>2</sub>	mg/l	8.49	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		BOD	mg/l	6.4	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.
10	BIG CREEK, WEIR #4 TO WEIR #3	Element # of input		1014	
		Wasteload description		Tributary, Bee Bayou	
		Dissolved O <sub>2</sub>	mg/l	8.49	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		BOD	mg/l	6.74	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.
12	BIG CREEK, WEIR #3 TO WEIR #2	Element # of input		1043	
		Wasteload description		Town of Mangham	
		Dissolved O <sub>2</sub>	mg/l	2	BPJ
		BOD	mg/l	69	Permit limits: 30 mg/l (BOD5) x 2.3.
14	BIG CREEK, WEIR #2 TO WEIR #1	Element # of input		1128	
		Wasteload description		Tributary, Turkey Creek	
		Dissolved O <sub>2</sub>	mg/l	8.49	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		BOD	mg/l	6.4	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.

# Big Creek 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
14	BIG CREEK, WEIR #2 TO WEIR #1	Element # of input		1204	
		Wasteload description		Tributary, Little Creek	
		Dissolved O <sub>2</sub>	mg/l	8.49	Ninety percent of Dissolved Oxygen saturation at projection temperature.
		BOD	mg/l	6.4	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.

# Big Creek 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
1	BIG CREEK, RKM 134.2 to RKM 118	Element # of input		162	
		Wasteload description		Tributary, Little Colewa Creek 1	
		NCM	mg/l	0.46	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.
3	BIG CREEK, MITCHNER TO RKM 67.4	Element # of input		585	
		Wasteload description		Tributary, Little Colewa Creek 2	
		NCM	mg/l	0.46	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.
6	BIG CREEK, WEIR #6 TO WEIR #5	Element # of input		760	
		Wasteload description		Tributary, Cypress Creek	
		NCM	mg/l	0.46	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.
8	BIG CREEK, WEIR #5 TO WEIR #4	Element # of input		861	
		Wasteload description		Tributary, Cow Bayou	
		NCM	mg/l	0.46	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.
10	BIG CREEK, WEIR #4 TO WEIR #3	Element # of input		1014	
		Wasteload description		Tributary, Bee Bayou	
		NCM	mg/l	0.07	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.
12	BIG CREEK, WEIR #3 TO WEIR #2	Element # of input		1043	
		Wasteload description		Town of Mangham	
		NCM	mg/l	64.5	Permit limits: 15 mg/l (BOD5) x 4.3.
14	BIG CREEK, WEIR #2 TO WEIR #1	Element # of input		1128	
		Wasteload description		Tributary, Turkey Creek	
		NCM	mg/l	0.46	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.
14	BIG CREEK, WEIR #2 TO WEIR #1	Element # of input		1204	
		Wasteload description		Tributary, Little Creek	
		NCM	mg/l	0.46	The calibration concentrations were used as backgrnd values, thus the % reduction of man-made loads was negligible.

# Mermentau River Water Quality Calibration Model Input Description

DATA TYPE 27, Lower Boundary Conditions					
Reach #	NAME	Parameter	Units	Value	Source/Justification
3	Mermentau River, river km 4.0 to 0.0	Temperature	°Celcius	17.3	Ninety percentile Temperature values from LADEQ station # 0069 @ Big Creek near Winnsboro, Louisiana. 1995 - 1999 dataset.
		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		0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		Dissolved O <sub>2</sub>	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.
		Org.- N	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		NH <sub>3</sub> -N	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		NO <sub>2+3</sub> -N	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.
		Chlorophyll a	ug/l	0	Algal processes are not normally included in Louisiana's projection runs.
		NCM	mg/l	0	Not required by the model if the Ocean Exchange Ratio is set to zero.

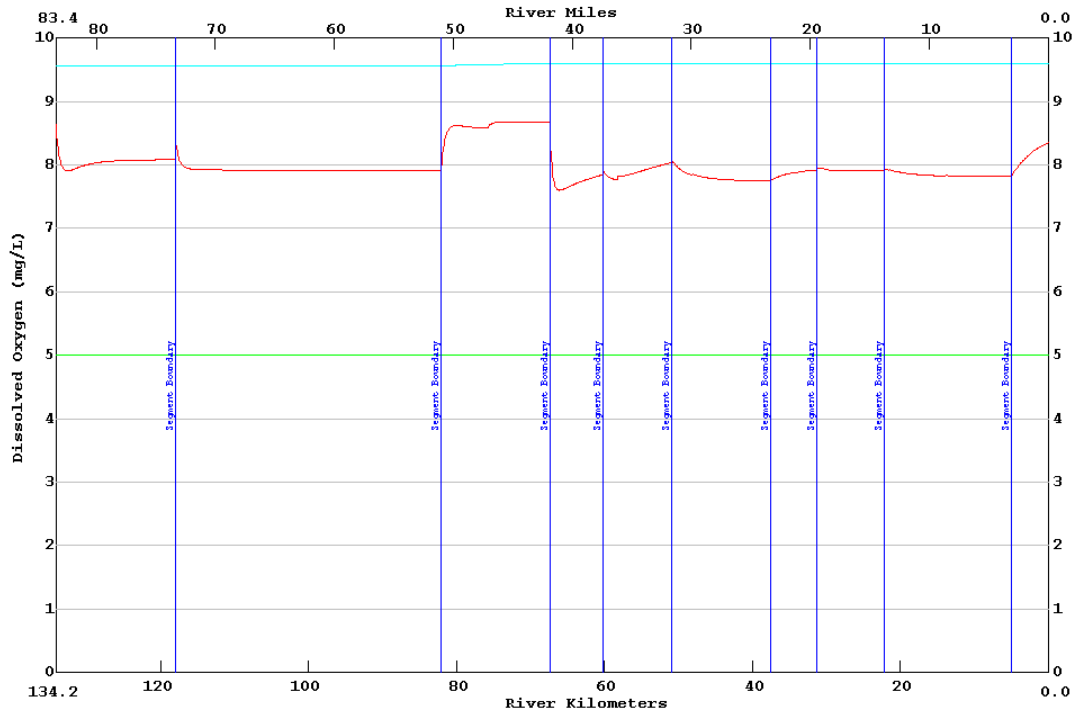


## Appendix B7

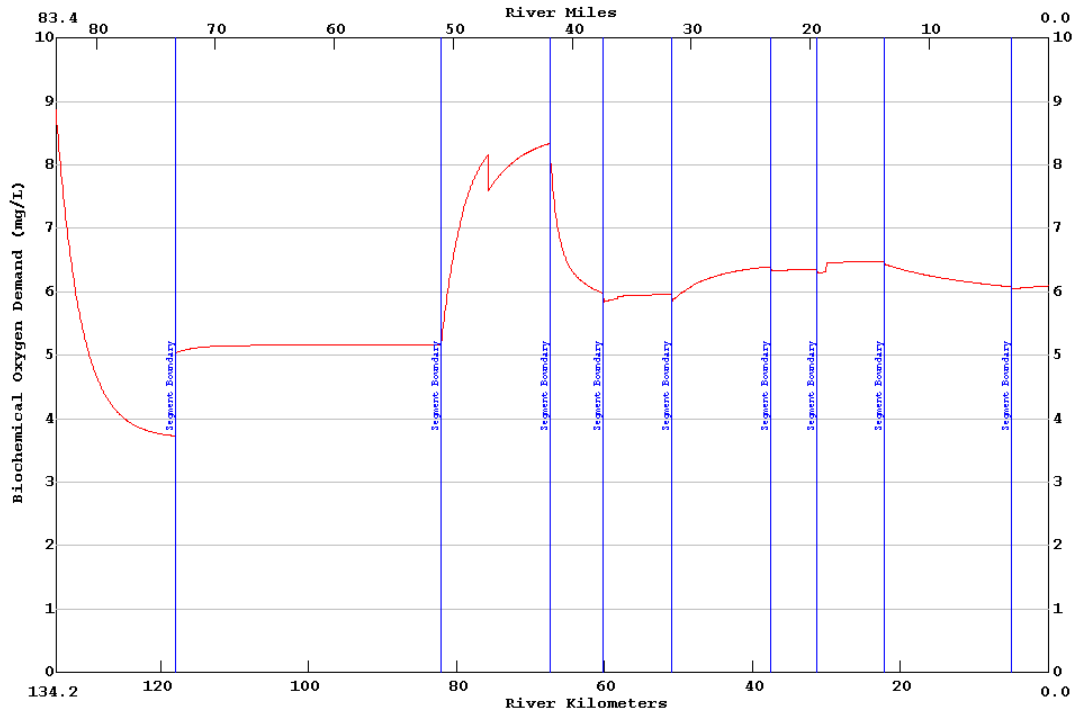
### Projection Model Development

#### **Winter projection output graphs**

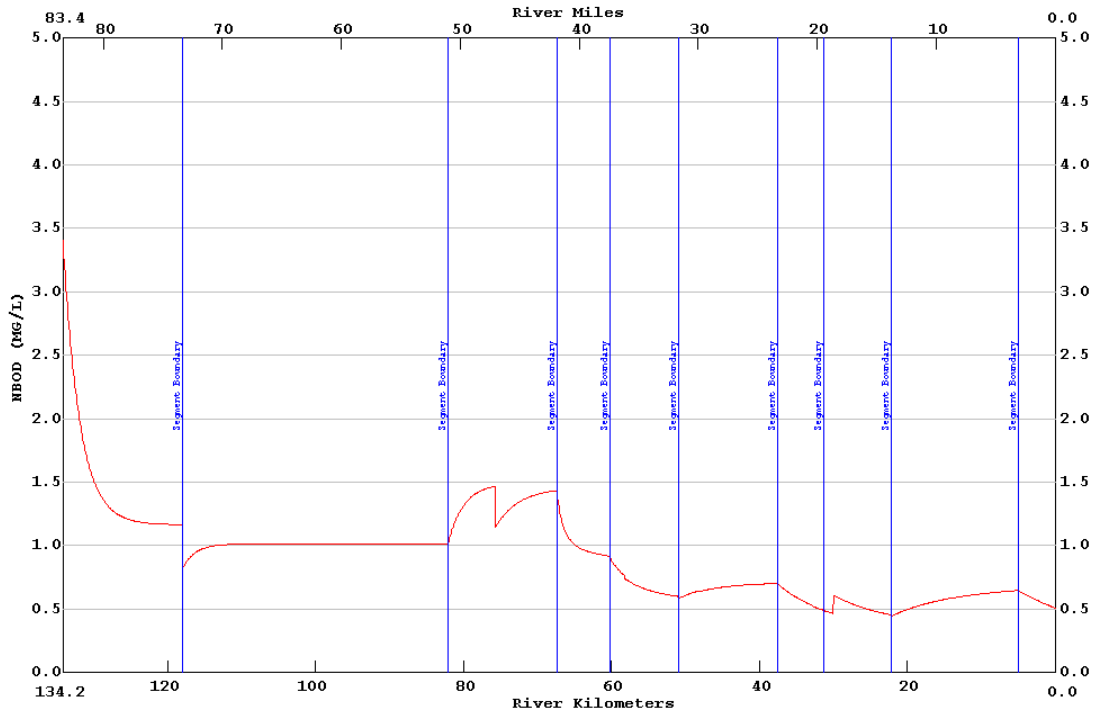
LA-QUAL Version 4.12 Run at 08:45 on 05/01/2001 File D:\laqual1\bigcrkwrproj3.txt  
 Winter Projection Model min= 7.60 max= 8.68  
 :MAINSTEM



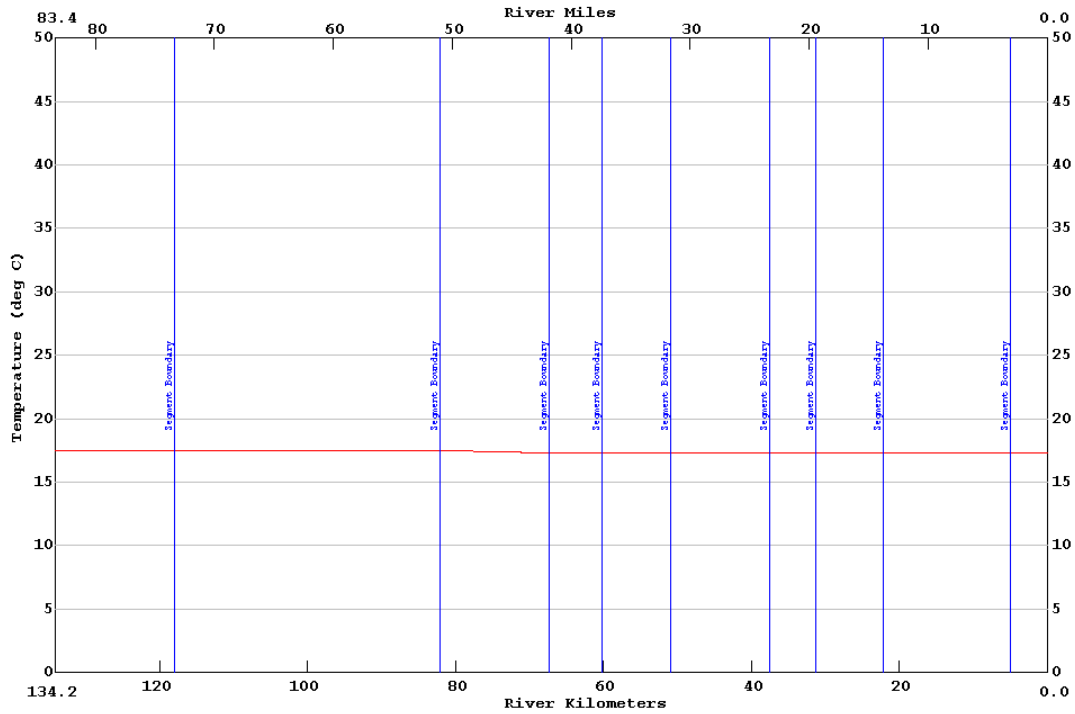
LA-QUAL Version 4.12 Run at 08:45 on 05/01/2001 File D:\laqual1\bigcrkwrproj3.txt  
 Winter Projection Model min= 3.73 max= 8.87  
 :MAINSTEM



LA-QUAL Version 4.12 Run at 08:45 on 05/01/2001 File D:\laqual1\bigcrkwrproj3.txt  
 Winter Projection Model min= 0.45 max= 3.41  
 :MAINSTEM



LA-QUAL Version 4.12 Run at 08:45 on 05/01/2001 File D:\laqual1\bigcrkwrproj3.txt  
 Winter Projection Model min= 17.30 max= 17.50  
 :MAINSTEM



## Appendix B8

### Projection Model Development

#### **Critical temperature DO Saturation calculations**

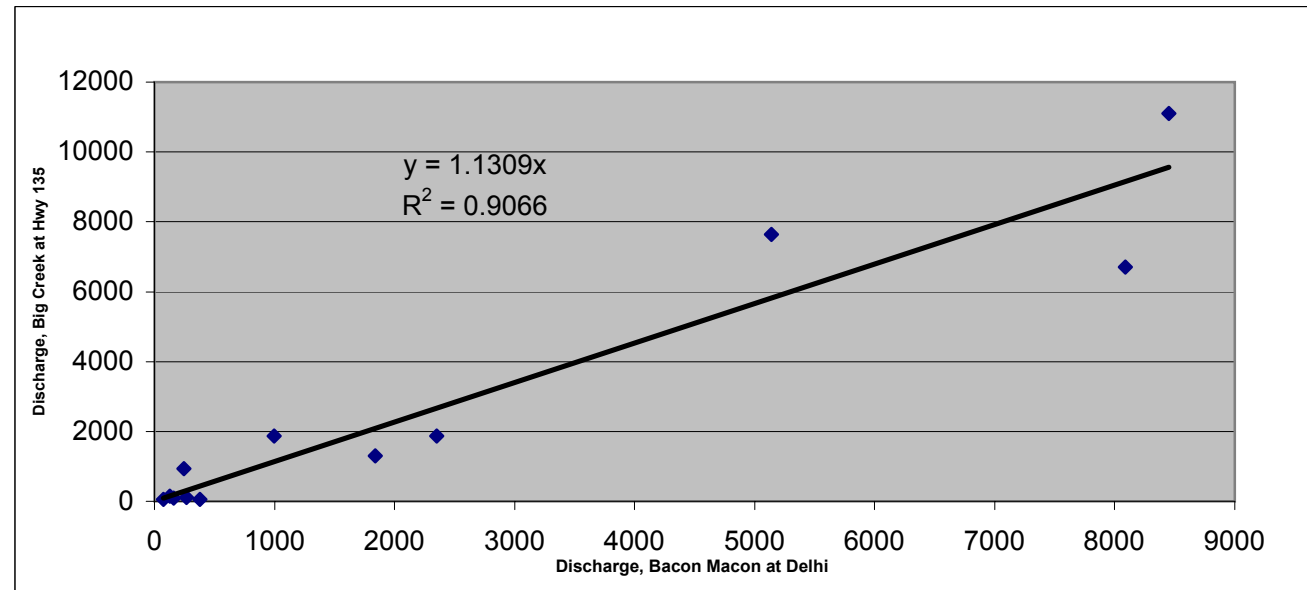


## Appendix B9

### Projection Model Development

#### **Projection flow determinations**

Date	Discharge, Big Creek at Hwy 135	Water Surface Elevation	Width	Depth	X-section Area	Discharge at B Macon at Delhi
	<i>cfs</i>	<i>Feet</i>	<i>Feet</i>	<i>Feet</i>	<i>ft2</i>	<i>cfs</i>
8/21/1991	99	2.72	138.85	5.88	816	159
11/19/1991	46	2.71	138.7	5.88	816	379
3/16/1993	940	3.56	151.55	6.21	941	245
1/20/1994	1870	8.1	178.75	9.42	1684	999
10/24/2000	20.22	2.59	137.8	5.82	802	
4/12/1995	1300	4.68	158.25	6.99	1106	1840
8/11/1995	50	2.71	138.7	5.88	816	77
5/9/2000	150.8	3.98	153.75	6.5	999	126
5/19/1994	108	5.11	160.55	7.34	1178	269
2/8/1991	1860	13.46				2350
4/19/1991	7640	17.65				5140
5/4/1991	11100	22.31				8450
5/8/1991	6700	23.8				8090



COE data
DEQ measurements

Note: The 10/24/00 measurement was made below Weir #1 and assumed to be identical to the flow at the Hwy 135 bridge, for the purposes of determining the geometric coefficients and exponents. The survey measured flow was not used because the survey crew did not take a tape down measurement.

**Cross Check from Big Crk at Mangham.**

$(19-0.1)/(67.4-27.1) = A$	$(27.1-12.9) \times A$	= Calculated 7Q10 at Hwy 135 bridge.
0.469	25.66	

Location	Rkm	Annual 7Q10
Near Hwy 80 USGS station	67.4	0.1
Hwy 15 - USGS station	27.1	19
Hwy 135 - DEQ & COE station	12.9	Est value = 24.88

This cross check compares the estimated value from the correlation to the B. Macon station at Delhi to the calculated value based on the partial record station at Hwy 15 in Mangham. This relationship was important because the station at Hwy 15 and Hwy 80 were partial record stations and did not have seasonal 7Q10 values. Using the relationship to the B. Macon station at Delhi we can use its seasonal 7Q10 values to estimate values for Big Creek at Hwy 135. The calculated 25.69 cfs value is within 3% of the estimated value and is slightly more conservative than the estimated value thus the estimated seasonal 7Q10 values should be valid.

**Estimated Seasonal 7Q10 values to be used in projection models:**

Season	7Q10 B.Macon @ Delhi	Est. 7Q10 on Big Creek @Hwy 135 via equation in graph
Annual	22.00	24.88
Summer	18.96	21.44
Winter	68.00	76.90

**Big Creek - Summer Projection flow determinations:**

Reach Description	Reach #	Tributaries/ Dischargers	Start Km	End Km	Notes	Flow sources (cfs)				Subtotal	Drainage Area (sq. miles)				Subtotal
						Increm. D.A.	Dischargers	Tributaries	Headwaters		Increm. D.A.	Dischargers	Tributaries	Headwaters	
Rkm 134.2 to Rkm 100	1	Little Colewa Crk 1	134.20	118.00	(1)	0.000		0.10	0.10	0.200	12.66		16.62	6.21	35.49
Rkm 100 to Mitchner rd	2		118.00	82.10	(1)	0.000				0.000	91.39				91.39
Michner rd to Rkm 67.4	3	Little Colewa Crk 2	82.10	67.40	(1)	0.000		0.10		0.100	29.07		41.87		70.94
Rkm 67.4 to Weir #6	4		67.40	60.20	(2)	2.723				2.723	16.29				16.29
Weir #6	5		60.20	60.10	(2)	0.038				0.038					
Weir #6 to Weir #5	6	Cypress Crk	60.10	50.90	(2)	3.480		0.10		3.580	9.20		35.87		45.07
Weir #5	7		50.90	50.80	(2)	0.038				0.038					
Weir #5 to Weir #4	8	Cow Bayou	50.80	37.50	(2)	5.031		0.10		5.131	23.27		10.81		34.08
Weir #4	9		37.50	37.40	(2)	0.038				0.038					
Weir #4 to Weir #3	10	Bee Bayou	37.40	31.20	(2)	2.345		0.10		2.445	11.01		42.26		53.27
Weir #3	11		31.20	31.10	(2)	0.038				0.038					
Weir #3 to Weir #2	12	Town of Mangham	31.10	22.10	(3)	3.404	0.125			3.529	9.03				9.03
Weir #2	13		22.10	22.00	(2)	0.038				0.038					
Weir #2 to Weir #1	14	Turkey Crk / Little Crk	22.00	5.10	(2)	6.393		0.10		6.493	42.58		145.39		187.97
Weir #1	15		5.10	5.00	(2)	0.038				0.038					
Weir #1 to confluence with Boeuf Riv	16		5.00	0.00	(2)	1.891				1.891	2.00				2.00
						25.49	0.125	0.60	0.10	26.320	246.50		292.82	6.21	545.53

Hwy 135, 7Q10 flow minus the tributaries and dischargers = Incremental flow = **20.6** cfs

Incremental flow divided by linear kilometers to Rkm 5: **0.378** cfs/linear kilometer = R<sub>IF</sub>

Reach Description	Reach #	Tributaries/ Dischargers	Start Km	End Km	Notes	Flow sources (cms)				Subtotal
						Increm. D.A.	Dischargers	Tributaries	Headwaters	
Rkm 120 to Hwy 2 (Rkm 118)	1	Little Colewa Crk 1	134.20	100.00	(4)	0.0000		0.0028	0.0028	0.0057
Hwy 2 to Mitchner rd	2		100.00	82.10	(4)	0.0000				0.0000
Michner rd to Rkm 67.4	3	Little Colewa Crk 2	82.10	67.40	(4)	0.0000		0.0028		0.0028
Rkm 67.4 to Weir #6	4		67.40	60.20	(4)	0.0771				0.0771
Weir #6	5		60.20	60.10	(4)	0.0011				0.0011
Weir #6 to Weir #5	6	Cypress Crk	60.10	50.90	(4)	0.0986		0.0028		0.1014
Weir #5	7		50.90	50.80	(4)	0.0011				0.0011
Weir #5 to Weir #4	8	Cow Bayou	50.80	37.50	(4)	0.1425		0.0028		0.1453
Weir #4	9		37.50	37.40	(4)	0.0011				0.0011
Weir #4 to Weir #3	10	Bee Bayou	37.40	31.20	(4)	0.0664		0.0028		0.0692
Weir #3	11		31.20	31.10	(4)	0.0011				0.0011
Weir #3 to Weir #2	12	Town of Mangham	31.10	22.10	(4)	0.0964	0.0035			0.1000
Weir #2	13		22.10	22.00	(4)	0.0011				0.0011
Weir #2 to Weir #1	14	Turkey Crk / Little Crk	22.00	5.10	(4)	0.1810		0.0028		0.1839
Weir #1	15		5.10	5.00	(4)	0.0011				0.0011
Weir #1 to confluence with Boeuf Riv	16		5.00	0.00	(4)	0.0536				0.0536
						0.7220	0.0035	0.0170	0.0028	0.7454

- Notes:
- (1) Incremental flow during critical conditions is negligible for this reach. Tributary and Headwater flows set to the LTP standard 0.1 cfs for winter conditions.
  - (2) Tributary flow were set to the LTP standard 0.1 cfs for winter conditions. Incremental flow derived by multiplying the linear stream kilometers by the R<sub>IF</sub> ratio.
  - (3) Dischargers flow was determined from the anticipated flow for the facility then adjusted for MOS. Incremental flow derived by multiplying the linear stream kilometers by the R<sub>IF</sub> ratio.
  - (4) Flow converted from cfs to cms by multiplying the cfs by 0.02832.



**Big Creek - Winter Projection flow determinations:**

Reach Description	Reach #	Tributaries/ Dischargers	Start Km	End Km	Notes	Flow sources (cfs)				Subtotal	Drainage Area (sq. miles)				Subtotal
						Increm. D.A.	Dischargers	Tributaries	Headwaters		Increm. D.A.	Dischargers	Tributaries	Headwaters	
Rkm 134.2 to Rkm 100	1	Little Colewa Crk 1	134.20	118.00	(1)	0.000		1.00	1.00	2.000	12.66		16.62	6.21	35.49
Rkm 100 to Mitchner rd	2		118.00	82.10	(1)	0.000				0.000	91.39				91.39
Mitchner rd to Rkm 67.4	3	Little Colewa Crk 2	82.10	67.40	(1)	0.000		1.00		1.000	29.07		41.87		70.94
Rkm 67.4 to Weir #6	4		67.40	60.20	(2)	9.218				9.218	16.29				16.29
Weir #6	5		60.20	60.10	(2)	0.128				0.128					
Weir #6 to Weir #5	6	Cypress Crk	60.10	50.90	(2)	11.779		1.00		12.779	9.20		35.87		45.07
Weir #5	7		50.90	50.80	(2)	0.128				0.128					
Weir #5 to Weir #4	8	Cow Bayou	50.80	37.50	(2)	17.028		1.00		18.028	23.27		10.81		34.08
Weir #4	9		37.50	37.40	(2)	0.128				0.128					
Weir #4 to Weir #3	10	Bee Bayou	37.40	31.20	(2)	7.938		1.00		8.938	11.01		42.26		53.27
Weir #3	11		31.20	31.10	(2)	0.128				0.128					
Weir #3 to Weir #2	12	Town of Mangham	31.10	22.10	(3)	11.522	0.125			11.647	9.03				9.03
Weir #2	13		22.10	22.00	(2)	0.128				0.128					
Weir #2 to Weir #1	14	Turkey Crk / Little Crk	22.00	5.10	(2)	21.637		1.00		22.637	42.58		145.39		187.97
Weir #1	15		5.10	5.00	(2)	0.128				0.128					
Weir #1 to confluence with Boeuf Riv	16		5.00	0.00	(2)	6.401				6.401	2.00				2.00
						86.29	0.125	6.00	1.00	93.416	246.50		292.82	6.21	545.53

Hwy 135, 7Q10 flow minus the tributaries and dischargers = Incremental flow = **69.8** cfs

Incremental flow divided by linear kilometers to Rkm 5: **1.280** cfs/linear kilometer = **R<sub>IF</sub>**

Reach Description	Reach #	Tributaries/ Dischargers	Start Km	End Km	Notes	Flow sources (cms)				Subtotal
						Increm. D.A.	Dischargers	Tributaries	Headwaters	
Rkm 120 to Hwy 2 (Rkm 118)	1	Little Colewa Crk 1	134.20	100.00	(4)	0.0000		0.0283	0.0283	0.0566
Hwy 2 to Mitchner rd	2		100.00	82.10	(4)	0.0000				0.0000
Mitchner rd to Rkm 67.4	3	Little Colewa Crk 2	82.10	67.40	(4)	0.0000		0.0283		0.0283
Rkm 67.4 to Weir #6	4		67.40	60.20	(4)	0.2611				0.2611
Weir #6	5		60.20	60.10	(4)	0.0036				0.0036
Weir #6 to Weir #5	6	Cypress Crk	60.10	50.90	(4)	0.3336		0.0283		0.3619
Weir #5	7		50.90	50.80	(4)	0.0036				0.0036
Weir #5 to Weir #4	8	Cow Bayou	50.80	37.50	(4)	0.4822		0.0283		0.5105
Weir #4	9		37.50	37.40	(4)	0.0036				0.0036
Weir #4 to Weir #3	10	Bee Bayou	37.40	31.20	(4)	0.2248		0.0283		0.2531
Weir #3	11		31.20	31.10	(4)	0.0036				0.0036
Weir #3 to Weir #2	12	Town of Mangham	31.10	22.10	(4)	0.3263	0.0035			0.3299
Weir #2	13		22.10	22.00	(4)	0.0036				0.0036
Weir #2 to Weir #1	14	Turkey Crk / Little Crk	22.00	5.10	(4)	0.6127		0.0283		0.6411
Weir #1	15		5.10	5.00	(4)	0.0036				0.0036
Weir #1 to confluence with Boeuf Riv	16		5.00	0.00	(4)	0.1813				0.1813
						2.4437	0.0035	0.1699	0.0283	2.6455

- Notes: (1) Incremental flow during critical conditions is negligible for this reach. Tributary and Headwater flows set to the LTP standard 1 cfs for winter conditions.  
 (2) Tributary flow were set to the LTP standard 1 cfs for winter conditions. Incremental flow derived by multiplying the linear stream kilometers by the R<sub>IF</sub> ratio.  
 (3) Dischargers flow was determined from the anticipated flow for the facility then adjusted for MOS. Incremental flow derived by multiplying the linear stream kilometers by the R<sub>IF</sub> ratio.  
 (4) Flow converted from cfs to cms by multiplying the cfs by 0.02832.

## Appendix C

### Survey Data Measurements and Analysis Results

## Appendix C1

### Survey Data Measurements and Analysis Results

#### Overview of survey water quality data

**Water quality insitu and lab data from the September, 1999 survey on Big Creek:**

Site #	Site Description	River Kilometer	Waterbody description	Collection date	Collection Time	Sample Depth (m)	Field pH	Field Temp. (C)	Field DO (mg/l)	Field Conductivity (umhos)	TSS (mg/l)	TDS (mg/l)	Hardness (mg/l)	Specific Conductance (umhos)	Color (PCU)	Chloride (mg/l)	Sulfate (mg/l)	NOx (mg/l)	Total Phosphorus (mg/l)
1	Upstream of confluence with Bouef River	0.5	Mainstem	9/20/1999	15:50	1	8.01	26.97	8.06	702	32	643.9	256	1092	12	207	18.9	0.04	0.17
2	Below 1st weir, upstream of confluence	5	Mainstem	9/20/1999	14:00	0.5	7.45	26.19	7.24	1152	37	699.8	264	1147	12	222	19.3	0.03	0.18
3	Located at Hwy 135 bridge	12.7	Mainstem	9/21/1999	8:10	1	7.75	25.6	7.75	1214	35	1400.2	277	1207	11	236	62	0.04	0.17
4	Located at Kline Road bridge	22.8	Mainstem	9/21/1999	9:00	1	7.62	24.74	8.75	834	11	494.1	242	826	12	118	23.3	0.04	0.15
5	Located at Hwy 132 bridge NE of Mangham	30.2	Mainstem	9/21/1999	9:30	1	7.59	24.66	7.69	854	20	504	241	850	12	123	42.5	0.04	0.15
6	Big Creek at Hwy 856 bridge	40	Mainstem	9/21/1999	8:35	1	7.64	25.23	7.18	689	27	404.1	226	684	15	80.4	33.7	0.04	0.12
7	Big Creek @ weir downstream of Burke Road	49.9	Mainstem	9/21/1999	9:20	1	7.93	24.94	6.97	590	35	370	213	581	14	52.8	35.9	0.04	0.15
8	Big Creek below weir 6	58.9	Mainstem	9/20/1999	15:45	1	7.72	25.28	7.32	658	37	414	221	687	20	88.2	32	0.04	0.19
9	Big Creek at Hwy 854 bridge (Burn Rd.)	70.7	Mainstem	9/21/1999	12:35	1	7.34	24.06	7.47	401	48	262	157	403	12	31.4	25.4	0.03	0.16
10	Big Creek @ Mitchner Rd. downstream of b	80.5	Mainstem	9/21/1999	11:01	1	8.05	22.65	5.56	310	44	202	96.8	571	30	38.6	15.7	0.04	0.27
11	Big Creek @ Wade Road on upstream side	89.7	Mainstem	9/21/1999	10:00	1	8	23.61	3.5	318	84	192.1	101	318	27	38.6	15.8	0.04	0.26
12	Located at Hwy 588 on upstream side	106.8	Mainstem	9/21/1999	10:10	1	9.52	21.16	4.49	646	6	410	173	663	22	125	21.6	0.05	0.15
13	Located at Hwy 2 on upstream side of bridge	116	Mainstem	9/20/1999	17:10	1	7.79	24.18	6.08	892	30	342.1	268	872	20	145	10.5	0.03	0.13
14	Located at Hwy 587 on upstream side of bridge	126	Mainstem	9/21/1999	9:30	surface	7.63	19.74	3.61	1093	12	616.7	336	1106	25	190	21.5	0.09	0.14
15	Located at Hwy 879 on downstream side	132	Mainstem	9/21/1999	8:55	1	7.99	22.35	5.24	913	168	383	324	899	25	128	14.7	0.04	0.23
16	Boeuf River, upstream of the confluence	0	Boeuf R.	9/20/1999	15:20	1	8.27	30.05	9.82	519	164	336	118	499	25	91.9	5.5	0.03	0.19
18	Located on Big Creek Road downstream	21.2	Trib	9/21/1999	12:00	mid	7.44	20.8	9.43	948	12	493.1	300	951	12	127	7.2	0.08	0.15
19	Town of Mangham Sewage Pond	30.8	Discharge	9/20/1999	15:30	near	7.7	26.51	5.05	609	8	402	175	604	45	44.6	11.2	0.85	1.79
20	Bee Bayou at Minnow Farm Road off of Hwy	32.2	Trib	9/21/1999	13:00	0.5	7.8	21.52	11	487	4	256	202	480	12	29.4	12.3	0.06	0.14
<b>Average for sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15</b>							<b>7.87</b>	<b>24.1</b>	<b>6.46</b>	<b>751.07</b>	<b>41.73</b>	<b>489.20</b>	<b>226.39</b>	<b>793.73</b>	<b>17.93</b>	<b>121.60</b>	<b>26.19</b>	<b>0.04</b>	<b>0.17</b>

Mainstem - Big Creek  
Tributaries or discharger

**Water quality insitu and lab data from the**

Site #	Site Description	TKN (mg/l)	Est. UNBOD (mg/l)	Est. NBOD decay rate (1/day)	TKN, duplicate (mg/l)	TOC (mg/l)	Est. UCBOD (mg/l)	Est. CBOD decay rate (1/day)	NH3-N (mg/l)	Sodium (mg/l)	Corrected Chlorophyll a (ug/l)
1	Upstream of confluence with Bouef River	0.25	0.43	0.14	0.34	3.1	6.95	0.08	0.1	138.6	22.03
2	Below 1st weir, upstream of confluence	0.43	0.74	0.17		2.9	6.85	0.08	0.1	144.3	19.15
3	Located at Hwy 135 bridge	0.35	0.60	0.15		3	6.90	0.08	0.1	85.2	16.47
4	Located at Kline Road bridge	0.2	0.34	0.13		3.9	7.39	0.07	0.1	85.2	13.13
5	Located at Hwy 132 bridge NE of Mangham	0.22	0.38	0.13		3.8	7.33	0.07	0.1	79.6	19.14
6	Big Creek at Hwy 856 bridge	0.42	0.72	0.16		4.6	7.79	0.07	0.1	50.7	17.01
7	Big Creek @ weir downstream of Burke Road	0.37	0.64	0.16		4.3	7.62	0.07	0.1	36	10.57
8	Big Creek below weir 6	0.57	0.98	0.19		3.8	7.33	0.07	0.1	50.8	34.12
9	Big Creek at Hwy 854 bridge (Burn Rd.)	0.66	1.14	0.21		4.5	7.73	0.07	0.1	19.6	11.94
10	Big Creek @ Mitchner Rd. downstream of b	0.92	1.58	0.27		6.3	8.87	0.06	0.1	20.2	8.16
11	Big Creek @ Wade Road on upstream side	1.39	2.39	0.43		5.9	8.60	0.06	0.11	20.6	28.48
12	Located at Hwy 588 on upstream side	0.68	1.17	0.21		7.5	9.71	0.05	0.11	60	4.97
13	Located at Hwy 2 on upstream side of bridge	0.81	1.39	0.24		6	8.67	0.06	0.12	70.3	20.69
14	Located at Hwy 587 on upstream side of bridge	0.86	1.48	0.25	0.86	2.1	6.44	0.10	0.11	93.7	12.16
15	Located at Hwy 879 on downstream side	1.98	3.41	0.78		6.3	8.87	0.06	0.12	65.5	53.69
16	Boeuf River, upstream of the confluence	1.44	2.48	0.45		8.3	10.32	0.05	0.1	51.7	46.41
18	Located on Big Creek Road downstream	0.27	0.46	0.14		2	6.40	0.10	0.1	85.4	2.15
19	Town of Mangham Sewage Pond	6.79	11.69	95.60		15.7	18.12	0.04	5.4	48.2	58.05
20	Bee Bayou at Minnow Farm Road off of Hwy	0.04	0.07	0.11		2.7	6.74	0.09	0.1	24.5	2.3
<b>Average for sites 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,18,19,20</b>		<b>0.67</b>	<b>1.16</b>	<b>0.24</b>	<b>0.60</b>	<b>4.53</b>	<b>7.80</b>	<b>0.07</b>	<b>0.10</b>	<b>68.02</b>	<b>19.45</b>

Mainstem - Big Creek  
Tributaries or discharger

<b>0.28</b>	:Average of sites 10-14
<b>0.16</b>	:Average of sites 1-9

## Appendix C2

### Survey Data Measurements and Analysis Results

#### **Survey cross-sections and discharge sheets**























































## Appendix C3

### Survey Data Measurements and Analysis Results

#### Survey field notes

## Big Creek Survey Field Notes

09/20/99

Brignac, Champagne, Espey, Andrus

*Site 5 – Hwy 132*

- 1115hrs – set out continuous monitor YSI 6920 SN 98E0645AA to start logging at 1400hrs for 1.75 days.

*Site 8 upper -*

- 1245 hrs. - Deployed continuous monitor YSI 6920 SN 99D0508A to start logging at 1400hrs for 1.75 days
- Set out Light Meter at 1230 hrs.

*Site 8 below weir 6*

- Drogue study was done – no flow was measured with AquaCount  
Deployed at 1528hrs:

Drogue #	feet from LDB
A	10
B	25
C	40
D	60

- A – traveled 49.7ft. in 12 min (got stuck on bank)
- B – traveled 62.8 ft. in 15 min.
- C – traveled 100 ft. in 12 min
- D – traveled 56.6 ft. in 15 min.

- 1330 hrs. - Deployed continuous monitor YSI 6920 SN 99D0508AB to start logging at 1400 hrs for 1.75 days.
- Water Quality taken at 1545hrs
- Insitu readings taken with YSI 600XL SN – 99E0156AA

Temp	25.28	Cond.	658.00
pH	7.72	pHmv	-58.1
DO	7.32	DO%	91.6
DOc	40.0		

*Site 13 – Hwy 2*

- Water Quality taken at 1710hrs
- Insitu readings taken with YSI 600XL SN – 99E0156AA

Temp	24.18	Cond.	892.00	DOc	39.0
pH	7.79	pHmv	-62.8		
DO	6.08	DO%	74.7		



**Greenwood, LaFleur, Lee,**

*Sites 27 and 28 – Little Colewa Creek on Redwing Lane*

- NO FLOW – NO DATA COLLECTED

*Site 15 – Big Creek at Hwy 879*

- continuous monitor was deployed on wrong waterbody
- site 15 was dry therefore monitor was not set out again
- monitor was removed at 1635hrs.

*Site 23 – Little Colewa Creek*

- 1740hrs – NO FLOW

**Nolan, Baldwin, Burrell**

*Site 2 – below weir 1 (approx. 5km)*

- weather – sunny, winds from NE @ 10mph, temp 91F
- Hard sandy bottom
- 167ft across
- avg. depth ~ 0.9ft.
- Water quality samples taken at 1400hrs
- Insitu readings taken with Hydrolab Scout II; tag # 320-05-003802

Temp 26.19	Cond 1152
DO 7.24	pH 7.45
Depth 0.5ft	Bat 12.4 volts

*Site 16 – Boeuf River (just upstream of confluence with Big Creek)*

- weather – sunny, winds NE ~ 5mph, temp ~94F
- very soft/silty bottom
- 110ft. across
- average depth ~1.0 ft.
- Water quality samples taken at 1520hrs
- GPS taken at 1520hrs
- Insitu readings taken with Hydrolab Scout II; tag # 320-05-003802

Temp 30.05	Cond. 519
DO 9.82	pH 8.27
Batt 12.3v	Depth 1.0ft.

- Discharge measurement attempted with Price AA and wading rod
- 0 revolutions in 40 sec
- Drogue study attempted – moved < 14 ft. in 140 seconds

*Site 1 – Big Creek (just above confluence with Boeuf River)*

- weather – sunny, very few clouds, winds – NE at 5mph, temp – 94F
- Water quality taken at 1550hrs at 1 meter
- GPS taken at 1555hrs
- Insitu measurements taken at 1550 with Hydrolab Scout II tag # 320-05-003802

	1 meter	2 meter
Temp	26.97	24.86
Cond	702	1090
DO	8.06	6.14
pH	8.01	7.94
Batt.	12.4v	12.4v

*Site 21 – Cow Bayou*

- Cow Bayou was found to be dry on 9-20-99 by Jeff Baker, therefore, no data was taken at that site.

*Site 24 – Hurricane Creek*

- Hurricane Creek was found to be pooled on 9-20-99 by Jeff Baker, therefore, no data was taken at that site.

*Site 25 – Rising Slough*

- Rising Slough was found to have no velocity by Jeff Baker on 9-20-99, therefore, no data was taken.

*Site 26 – Little Hurricane Creek*

- Little Hurricane Creek was found to have no velocity on 9-20-99 by Kirk Manuel and Guy LaFleur, therefore no data was taken at this site

**9/20/99**

**Masden, Everett, Fontenot, Morris**

*Site 19- Town of Mangham Sewage Pond*

- 1500- In-Situ water quality measurement on lab data sheet
- Collected with Hydrolab Serial #22317
- Water Quality samples collected
- V-notch weir 3.5”

*Site 13- Big Creek at Hwy. 2*

- Continuous Monitor placed on south side of the bridge at 1310.
- Weather- partly cloudy
- In-Situ water quality measurements  
pH- 7.72           Temp.-28.22  
DO- 7.52           Sp. Cond.- 882

**9/21/99**

**Brignac, Champagne, Andrus**

*Site 15 – Big Creek at Cook Road Bridge*

- Deployed continuous monitor – YSI 6600 tag# - 320-05-010526 at 0850hrs.
- weather – raining and cold
- Water quality taken at 0855hrs
- Insitu readings taken with YSI 600XL SN – 99E0156AA

pH 7.99           DO 5.24  
DO% 61.4       DOc 35.9  
Cond. 913.0     pHmv -72.3  
Temp 22.35

*Site 11 – Big Creek at Wade Road*

- Tapedown – 18.32
- Weather – partly cloudy and cool
- Water quality taken at 1000hrs.
- Insitu readings taken with YSI 600XL SN 99E0156AA

pH 8.00           Temp 23.61  
pHmv -79.0       Cond 318.00  
DO 3.50           DOc 42.0  
DO% 45.2

*Site 10 – Big Creek at Mitchner Road*

- Tapedown – 19.95
- Weather – partly cloudy,cool
- Discharge measurement taken at 1100hrs
- Water quality taken at 1101hrs
- Insitu readings taken with YSI 600XL SN 99E0156AB

pH 8.05           Temp 22.65           DOc 45.1  
pHmv -83.3       Cond 310.00  
DO 5.56           DO% 64.7

*Site 9 – Big Creek at Hwy 854 Bridge*

- Tapedown – 23.00
- Weather – partly cloudy, cool
- NO FLOW
- Water quality taken at 1235hrs
- Insitu readings taken with YSI 600XL SN 99E0156AB

pH 7.34          Temp 24.06

pHmv -43.3      Cond 401.00

DO 7.47          DO% 89.0

DOc 50.2

*Site 22 – Cypress Creek*

- Cypress Creek was found to have no velocity on 9-21-99 by Fred Lee, David Greenwood and Guy LaFleur, therefore, no data was taken

*Site 14 – Big Creek at Hwy 587*

- NO FLOW
- Water quality was taken at 0930hrs
- Insitu readings taken with YSI 600XL SN 99E0156AB

pH 7.63          Temp 19.74

DO 3.61          DO% 39.6

Cond 1093

- Total depth of water was one foot

*Site 12 – Big Creek at Hwy 588*

- NO FLOW
- Water quality taken at 1010hrs
- Insitu readings taken at 1 foot depth with YSI 600XL SN 99E0156AB

pH 9.52          Temp 21.16

DO 4.49          DO% 50.6

Cond 646

- Total depth of water was 2 feet.

**Nolan, Burrell, Baldwin**

*Site 6 – Big Creek at Hwy 856 Bridge*

- Weather – cloudy, cool
- Tapedown – 18.44
- Drogue study attempted – drogue moved <14 ft. in 140 seconds. Flow meter (Price AA) – no revolutions in 40 seconds.
- Water quality samples taken at 0835hrs at 1 meter depth
- GPS site
- Insitu readings taken with Hydrolab Scout II tag # 320-05-003802

	1meter	2meters	2.25 meters
pH	7.64	7.65	7.53
temp	25..23	25..23	24..36
Cond	689	890	703
DO	7.8	6.72	2.26
Batt	12.2v	12.2v	12.2v

*Site 7 – Big Creek below weir at Burke Road Bridge*

- NO FLOW
- Weather – cloudy, cool, breezy
- Trickle flow over weir
- Drogue study attempted; Pygmy meter - no revolutions in 40 seconds
- GPS site
- Water quality samples taken at 0920hrs at 1 foot depth
- InSitu readings taken with the Hydrolab Scout II tag # 320-05-003802

Temp	24.94	Cond	590
pH	7.93	DO	6.97
Batt.	12.2v		

- Cross sections taken 361 feet below weir at Burke Road Bridge at 1200hrs

*Site 7 – Big Creek above weir at Burke Road Bridge*

- Tapedown – 23.91 feet
- Insitu taken at 1130hrs with Hydrolab Scout II tag# 320-05-003802

pH	7.68	Temp	25.61
Cond	589	DO	6.93
Batt.	12.3v		

*Site 20 – Bee Bayou at Hwy 856*

- Tapedown – 22.15
- Weather – cloudy, cool, breezy
- GPS site at bridge
- Water quality taken at 1300hrs at 1 foot depth
- Insitu readings taken with Hydrolab Scout II tag # 320-05-003802

pH	7.80	Temp	21.52
Cond	487	DO	11.03
Batt	12.2v		

***Cross Sections***

- Cross sections done between sites 6 and 7
- Sites were named 1B, 2B, 3B, 4B
- All sites were GPSed except 2B; a radio link could not be established; Site 2B is approximately half way between 1B and 3B.

**09/21/99**

**Masden, Everett, Fontenot, Morris**

*Site 3- Big Creek at Hwy. 135 bridge*

- 1030 no visible flow
- Cloudy and windy
- In-Situ water quality measurements on lab data sheet collected with Hydrolab # 22317
- 1030 water quality samples taken

*Site 4- Big Creek at Kline Road bridge*

- 0930 windy and cloudy
- In-Situ water quality measurement with Hydrolab # 22317  
pH- 7.59                      Batt- 12.0  
DO- 7.69  
Temp- 24.66
- No visible flow

*Site 5- Big Creek at Hwy. 132 bridge*

- Cloudy and windy
- 1130 In-Situ water quality taken with Hydrolab # 22317
- Measurement on lab data sheet.
- Water quality samples taken
- No visible flow

*Site 17- Little Creek bridge on LA 516*

- Cloudy and windy
- No In-Situ water quality taken
- No water quality samples taken
- No visible flow

*Site 18- Pine Creek at Big Creek road*

- 1400 clear and windy
- In-Situ water quality measurements taken with Hydrolab # 22317
  - pH- 7.44           Temp.- 20.80
  - DO- 9.43           Batt.- 12.0
  - Cond. 948
- Stream discharge taken

**09/22/99**

**Brignac, Champagne**

*Site 8 – McManus Road at weir 6*

- Picked up both monitors and light meter at 0830hrs

*Site 2 – Big Creek just below weir 1*

- Discharge taken at 1015hrs and ended at 1135hrs
- Weather – sunny, clear, mild temp

***Cross Sections***

- Big Creek below weir 1 to confluence with Boeuf River
- 9A ~ 104ft. across
- 10A ~ 132ft. across
- 11A ~ 153ft. across
- 12A ~ 114ft. across; no GPS data available for this site – no radio link could be established
- 13A ~ 140ft. across (just above confluence with Boeuf River)

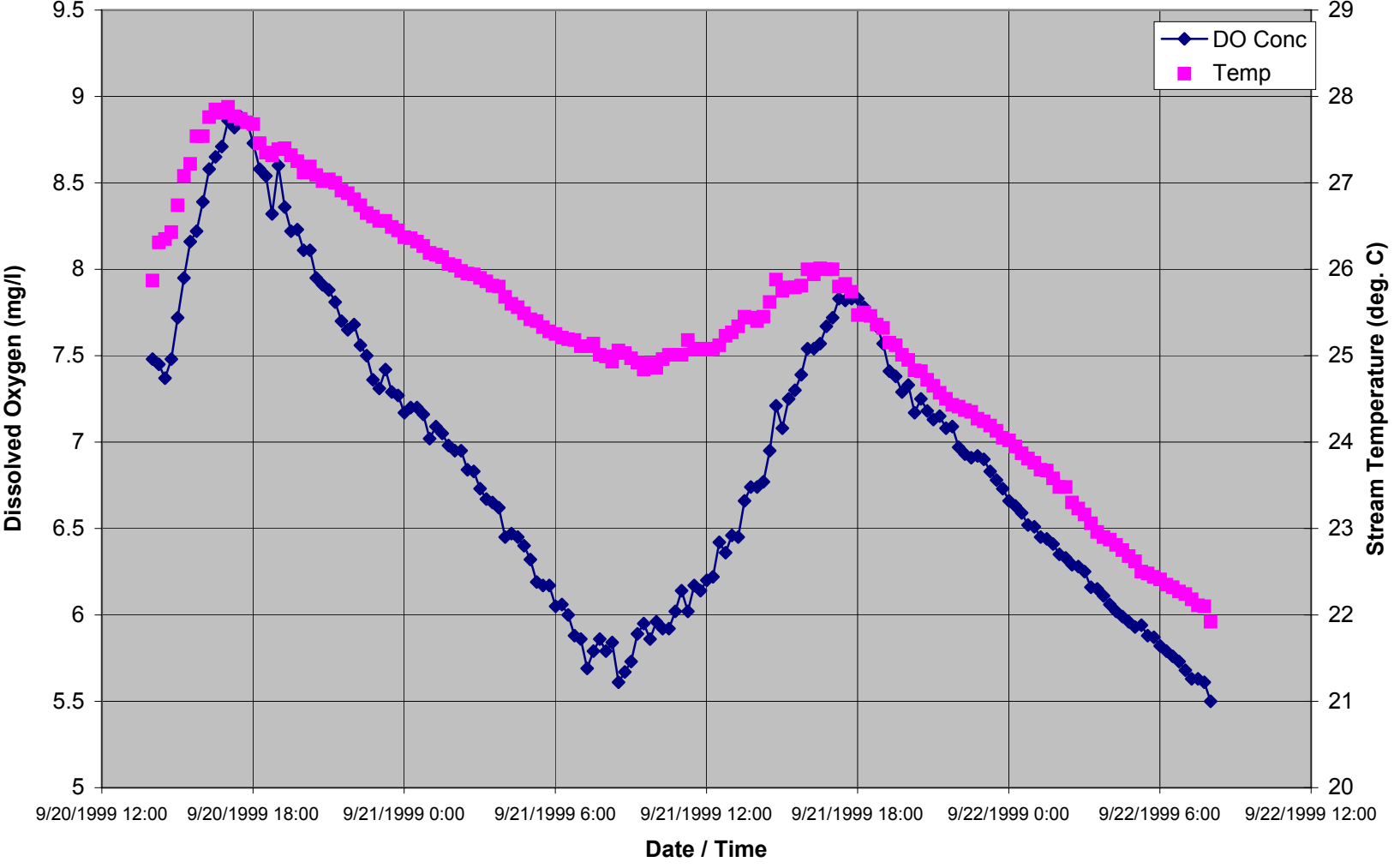
## Appendix C4

### Survey Data Measurements and Analysis Results

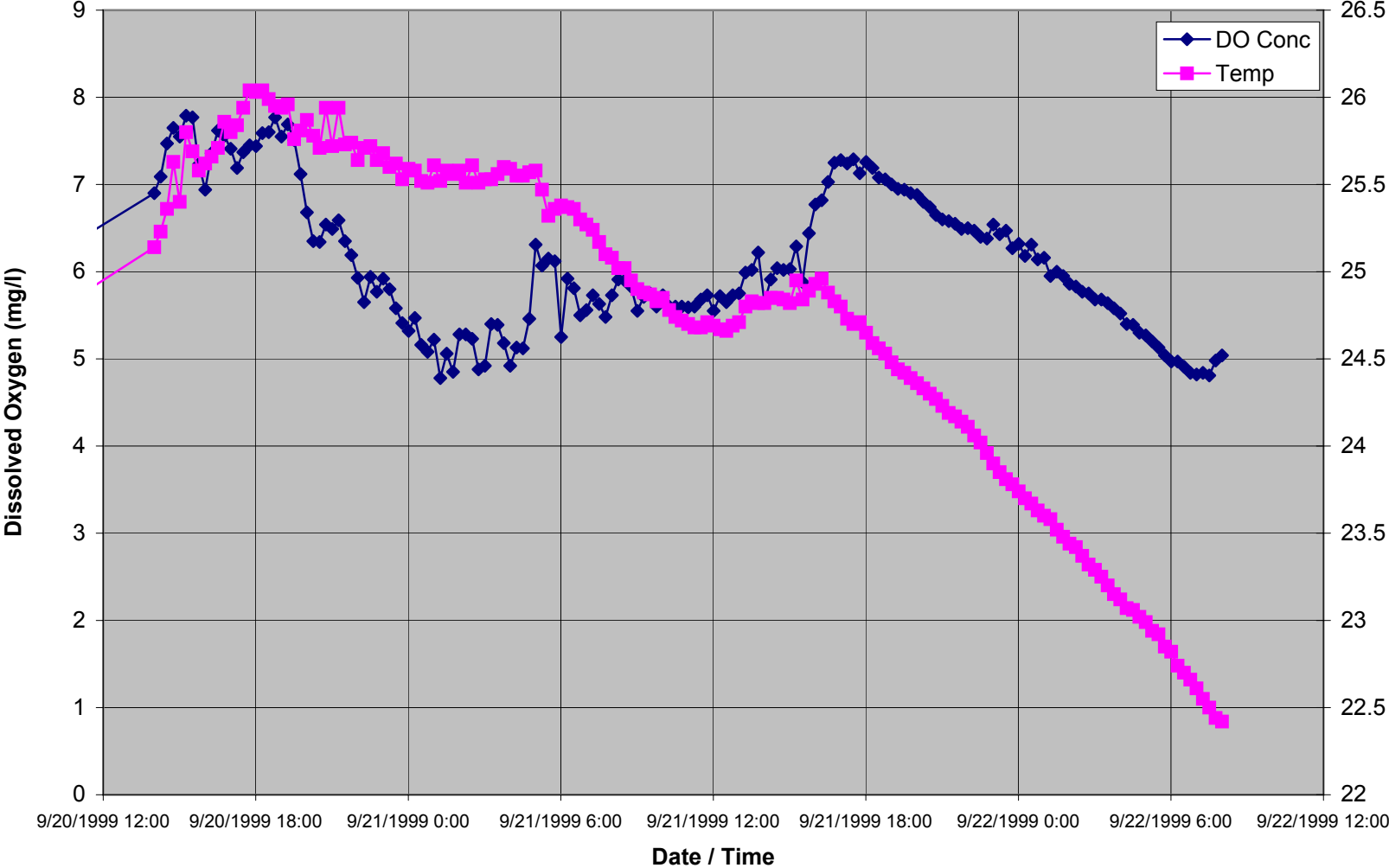
#### **Continuous monitor graphs**



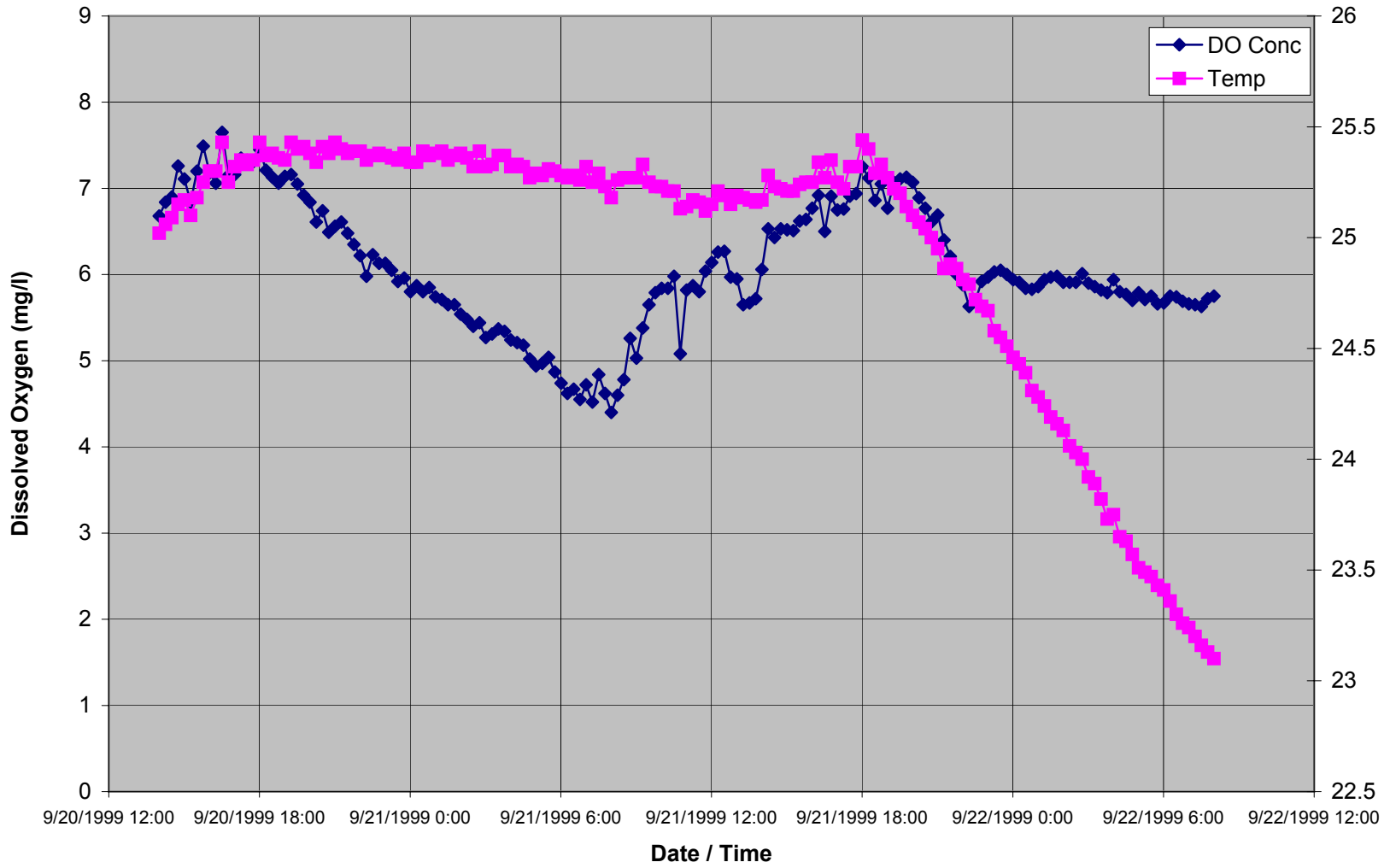
Big Creek, Site 2, below 1st weir  
Continous monitor data



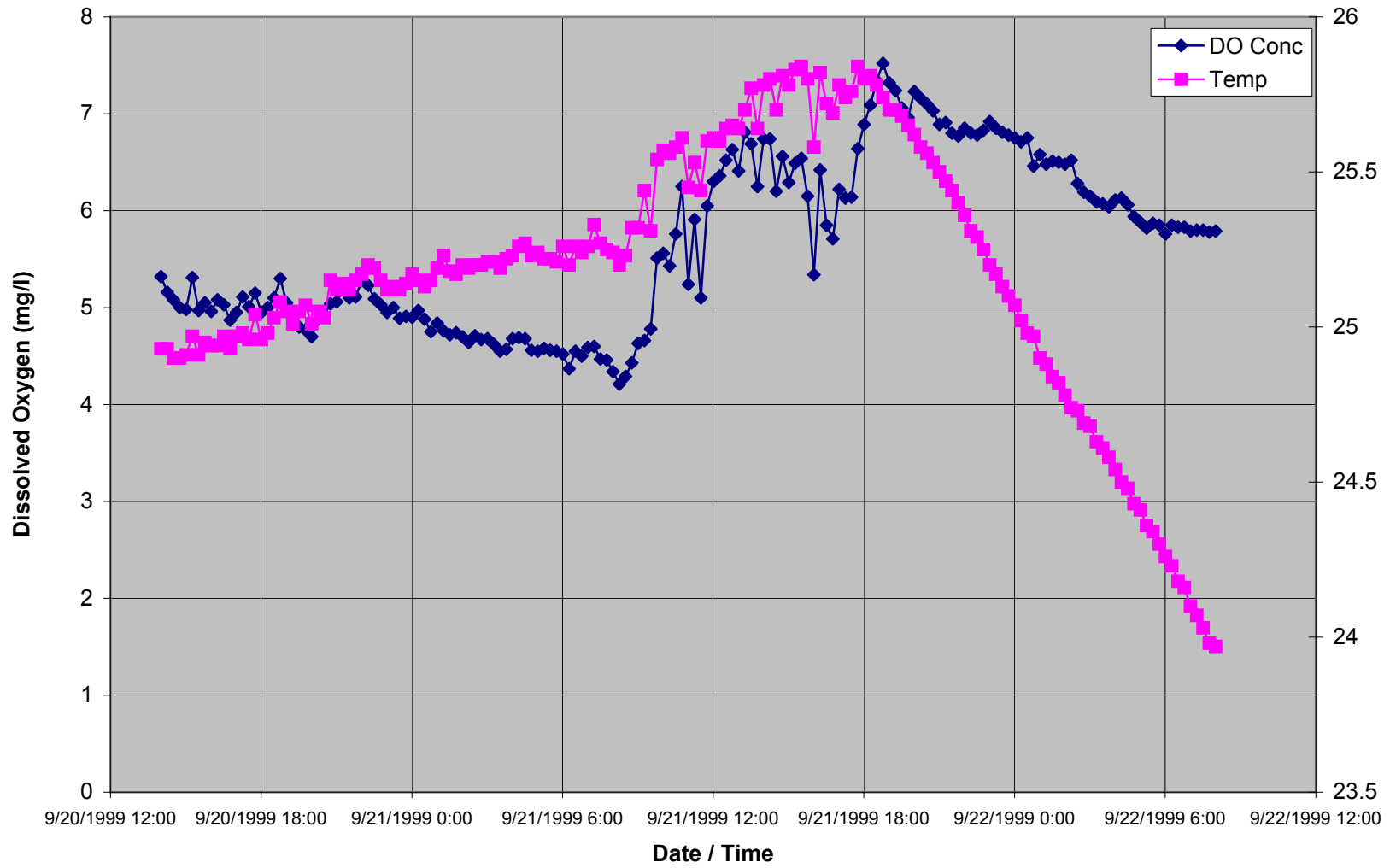
**Big Creek, Site 5**  
**Continous monitor data**



### Big Creek, Site 8, below weir



Big Creek, Site 8, above weir  
Continuous monitor data



## Appendix D

### Historical and Ambient Data

## Appendix D1

### Historical and Ambient Data

#### **BOD calculation worksheets**

Survey Stream and date:

**Big Creek 5/10/2000**

Calculated CBOD (Note 2)		Days from analysis start date:														k rate (1/day)	UCBOD (mg/l)	Lag time (days)	Sum of errors squared	
Item No.	Sample No.	0	0	0	1	5	8	11	15	20	25	29	35	40	49					60
1	Big Creek Survey Site 1				0.37	2.75	3.80	4.44	5.95	5.94	6.64	7.29	8.08	9.10	9.32	9.88	0.05	10.09	0.00	1.92
2	Big Creek Survey Site 13				0.30	2.69	4.25	5.56	7.29	8.15	9.69	10.66	11.86	13.33	14.25	15.00	0.04	16.44	1.75	1.95
3	Big Creek Survey Site 3				0.40	2.46	3.03	3.85	5.12	5.07	6.24	6.70	7.67	7.90	8.85	9.01	0.04	9.66	0.00	1.13
4	Big Creek Survey Site 7				0.50	2.39	3.86	4.67	5.90	6.32	7.46	7.93	8.57	9.64	9.92	10.34	0.05	10.86	0.00	0.75
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				

Calculated NBOD (Note 1)		Days from analysis start date:														k rate (1/day)	UNBOD (mg/l)	Lag time (days)	Sum of errors squared	
Item No.	Sample No.	0	0	0	1	5	8	11	15	20	25	29	35	40	49					60
1	Big Creek Survey Site 1				0.23	0.05	1.10	1.46	1.05	2.06	2.06	2.01	1.92	1.60	1.78	1.92	0.25	1.84	4.91	0.70
2	Big Creek Survey Site 13				0.00	0.41	1.65	2.74	2.51	3.15	3.11	3.24	3.34	2.97	3.15	3.70	0.20	3.26	4.28	0.56
3	Big Creek Survey Site 3				0.00	0.14	1.37	1.55	1.28	2.33	2.06	2.10	1.83	2.10	1.65	2.19	0.25	1.99	4.57	0.74
4	Big Creek Survey Site 7				0.00	0.41	1.14	1.33	1.10	1.78	1.74	1.97	1.83	1.46	1.78	2.06	0.13	1.83	2.58	0.44
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				

Note 1 - Calculated by multiplying the measured (NO<sub>2</sub> +NO<sub>3</sub> as nitrogen) minus the day zero (NO<sub>2</sub> +NO<sub>3</sub> as nitrogen) by 4.57.

Note 2 - Determined by subtracting the calculated NBOD from the measured total BOD.

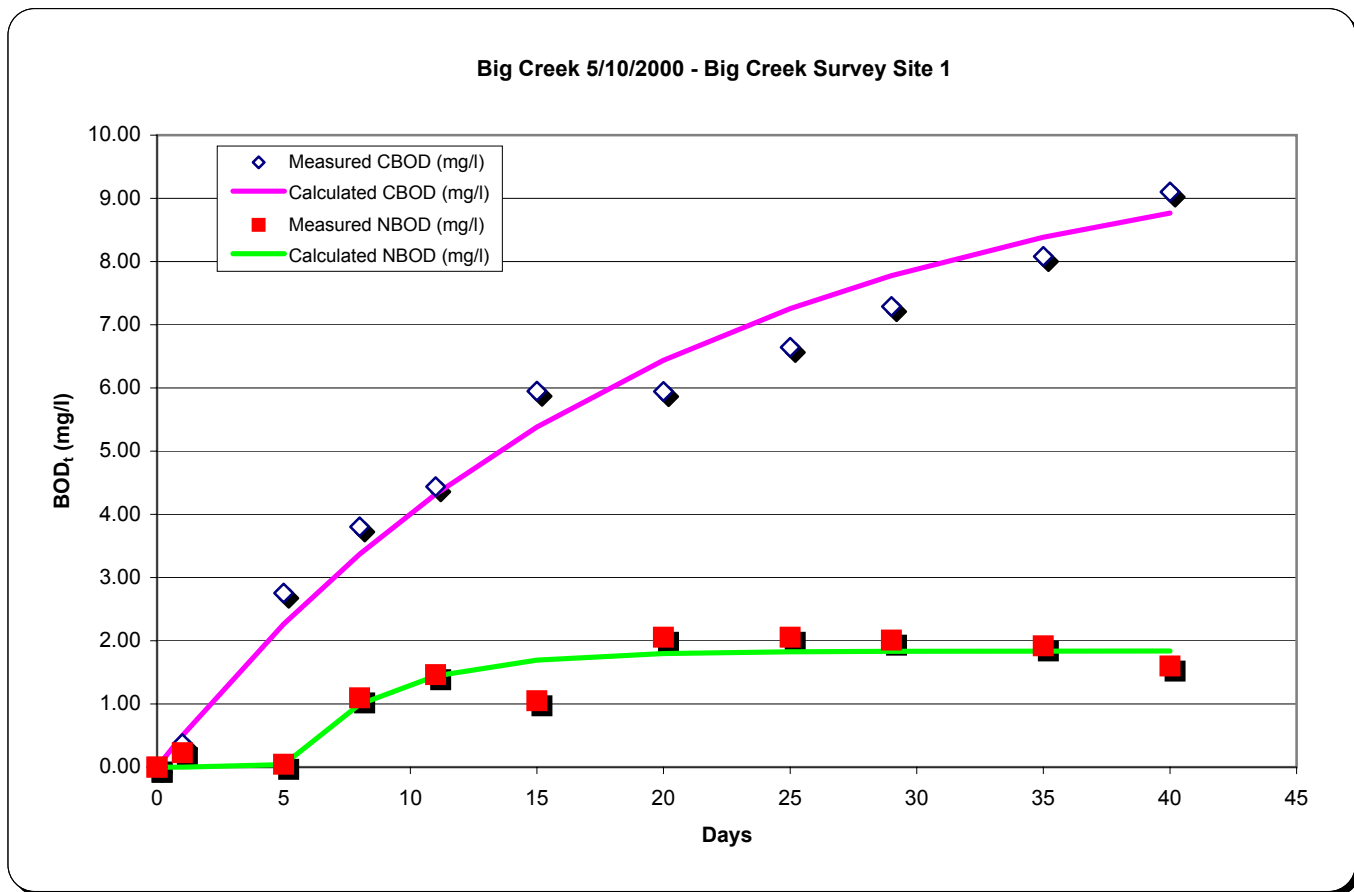




**BOD Analysis of the for:**

**Big Creek 5/10/2000 - Big Creek Survey Site 1**

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		0.46					
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
1	0.6	0.51	0.23	0.37	0.00	0.50	
5	2.8	0.47	0.05	2.75	0.04	2.26	
8	4.9	0.7	1.10	3.80	1.00	3.37	
11	5.9	0.78	1.46	4.44	1.44	4.32	
15	7	0.69	1.05	5.95	1.69	5.38	
20	8	0.91	2.06	5.94	1.80	6.44	
25	8.7	0.91	2.06	6.64	1.83	7.26	
29	9.3	0.9	2.01	7.29	1.83	7.78	
35	10	0.88	1.92	8.08	1.84	8.38	
40	10.7	0.81	1.60	9.10	1.84	8.77	
49	11.1	0.85	1.78	9.32	1.84	9.25	
60	11.8	0.88	1.92	9.88	1.84	9.61	
					1.84	10.09	UBOD (mg/l)
					0.25	0.05	k rate (1/day)
					4.91	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<sub>2</sub> + NO<sub>3</sub> as nitrogen) at time in "Days" column.

Note 4 - Calculated by multiplying the measured (NO<sub>2</sub> +NO<sub>3</sub> as nitrogen) minus the day zero (NO<sub>2</sub> +NO<sub>3</sub> 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.

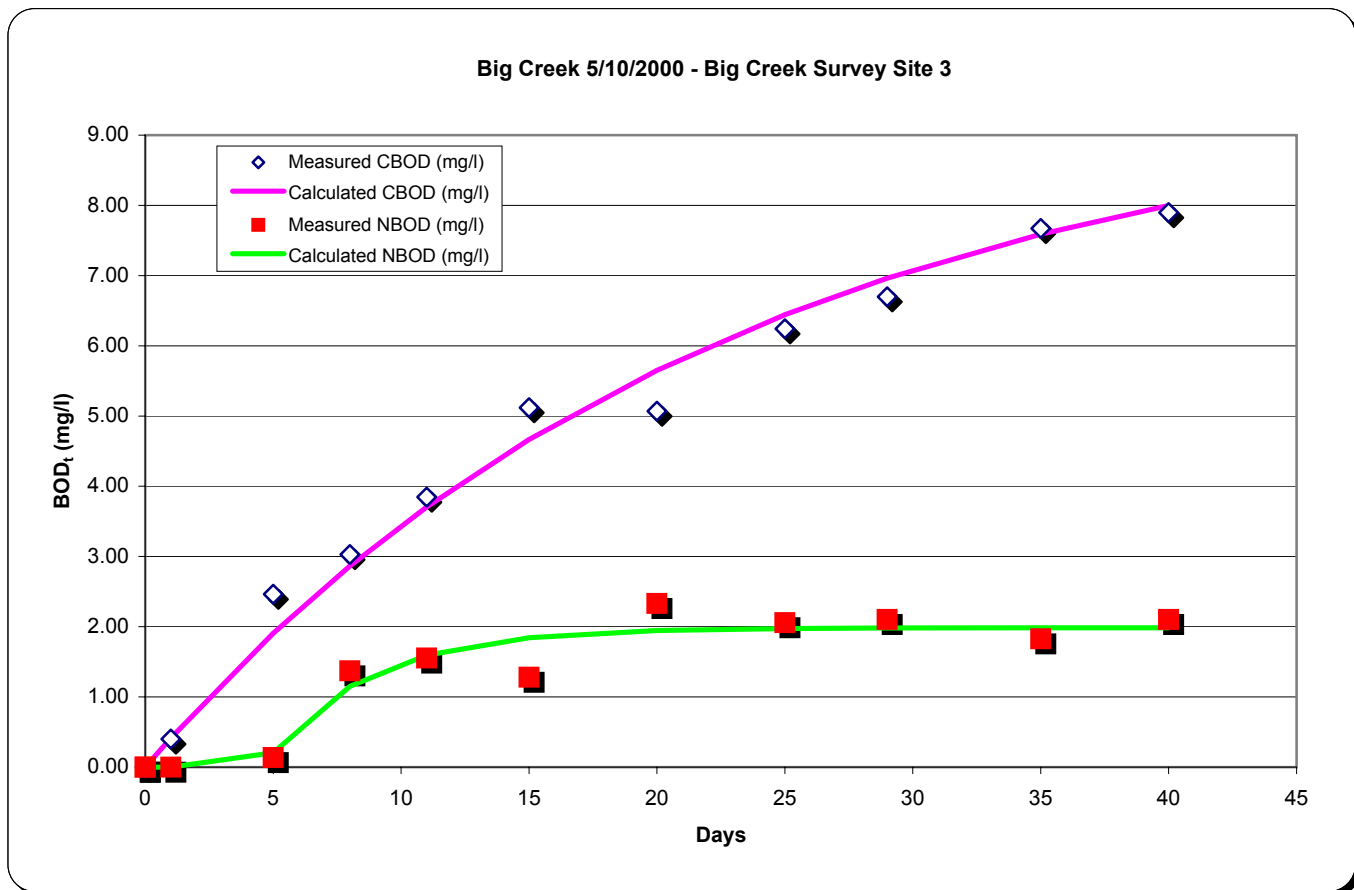
Note 7 - Calculated from the formula {CBODt=UCBOD[1-e-(k(t-lag))]} using the listed values of UCBOD, k decay rate and lag time.

**BOD Analysis of the for:**

**Big Creek 5/10/2000 - Big Creek Survey Site 3**

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		0.61				
0	0.00	0.00			0.00	0.00
0	0.00	0.00			0.00	0.00
1	0.4	0.61	0.00	0.40	0.00	0.42
5	2.6	0.64	0.14	2.46	0.20	1.91
8	4.4	0.91	1.37	3.03	1.15	2.86
11	5.4	0.95	1.55	3.85	1.59	3.70
15	6.4	0.89	1.28	5.12	1.84	4.67
20	7.4	1.12	2.33	5.07	1.95	5.65
25	8.3	1.06	2.06	6.24	1.97	6.44
29	8.8	1.07	2.10	6.70	1.98	6.96
35	9.5	1.01	1.83	7.67	1.98	7.59
40	10	1.07	2.10	7.90	1.99	8.00
49	10.5	0.97	1.65	8.85	1.99	8.54
60	11.2	1.09	2.19	9.01	1.99	8.97
					1.99	9.66
					0.25	0.04
					4.57	0.00

		<b>UBOD (mg/l)</b>
		<b>k rate (1/day)</b>
		<b>Lag time (days)</b>



Note 1 - Days from the BOD test start date.

Note 2 - Measured total BOD at time in "Days" column.

Note 3 - Measured (NO<sub>2</sub> + NO<sub>3</sub> as nitrogen) at time in "Days" column.

Note 4 - Calculated by multiplying the measured (NO<sub>2</sub> +NO<sub>3</sub> as nitrogen) minus the day zero (NO<sub>2</sub> +NO<sub>3</sub> as nitrogen) by 4.57.

Note 5 - Determined by subtracting the calculated NBOD from the measured total BOD.

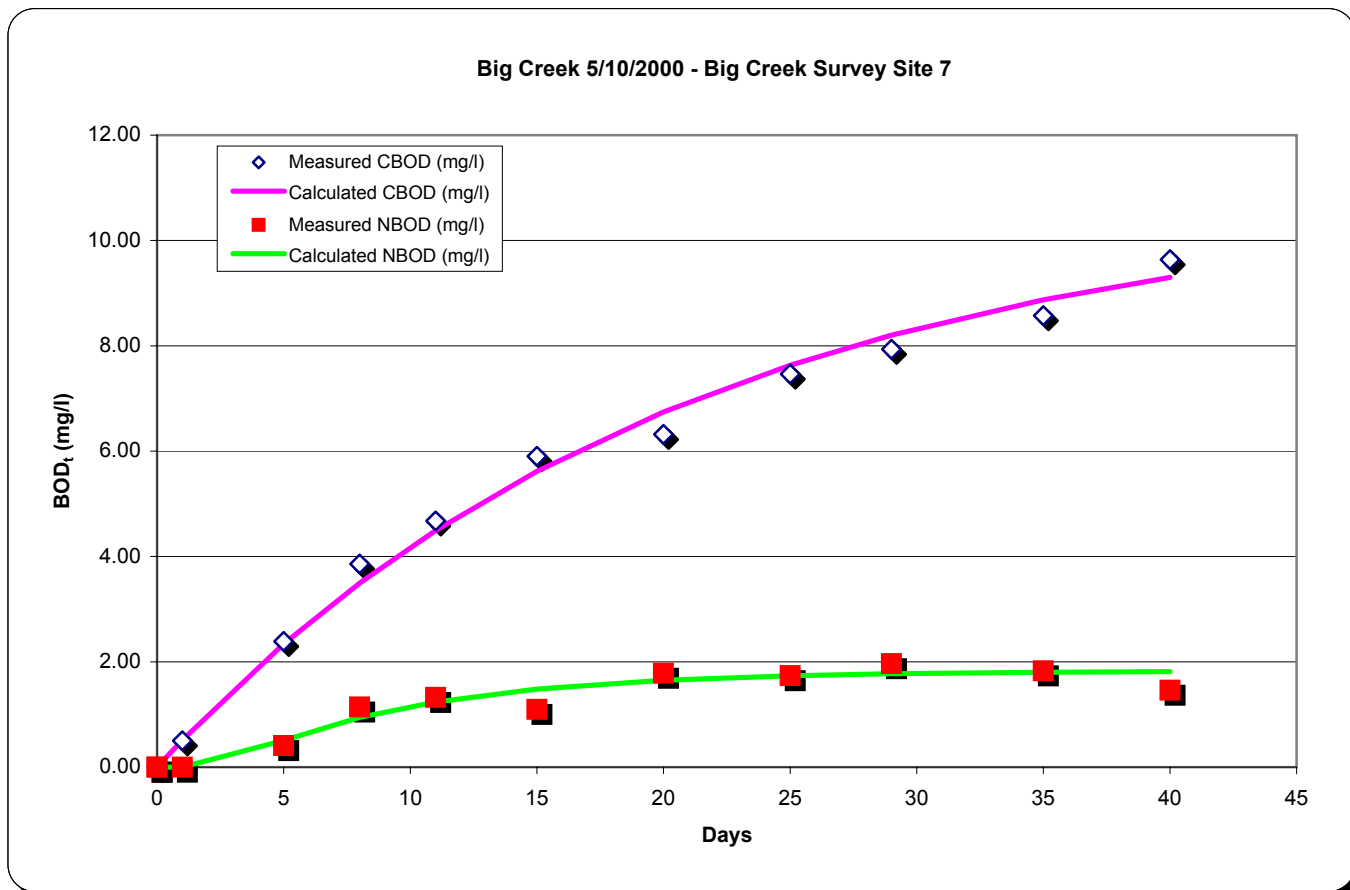
Note 6 - Calculated from the formula {NBODt=UNBOD[1-e-(k(t-lag))]} using the listed values of UNBOD, k decay rate and lag time.

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.

**BOD Analysis of the for:**

**Big Creek 5/10/2000 - Big Creek Survey Site 7**

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		0.49					
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
1	0.5	0.45	0.00	0.50	0.00	0.51	
5	2.8	0.58	0.41	2.39	0.51	2.34	
8	5	0.74	1.14	3.86	0.95	3.49	
11	6	0.78	1.33	4.67	1.24	4.49	
15	7	0.73	1.10	5.90	1.48	5.62	
20	8.1	0.88	1.78	6.32	1.65	6.75	
25	9.2	0.87	1.74	7.46	1.74	7.63	
29	9.9	0.92	1.97	7.93	1.77	8.20	
35	10.4	0.89	1.83	8.57	1.80	8.87	
40	11.1	0.81	1.46	9.64	1.81	9.30	
49	11.7	0.88	1.78	9.92	1.82	9.85	
60	12.4	0.94	2.06	10.34	1.82	10.27	
					1.83	10.86	UBOD (mg/l)
					0.13	0.05	k rate (1/day)
					2.58	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<sub>2</sub> + NO<sub>3</sub> as nitrogen) at time in "Days" column.

Note 4 - Calculated by multiplying the measured (NO<sub>2</sub> +NO<sub>3</sub> as nitrogen) minus the day zero (NO<sub>2</sub> +NO<sub>3</sub> as nitrogen) by 4.57.

Note 5 - Determined by subtracting the calculated NBOD from the measured total BOD.

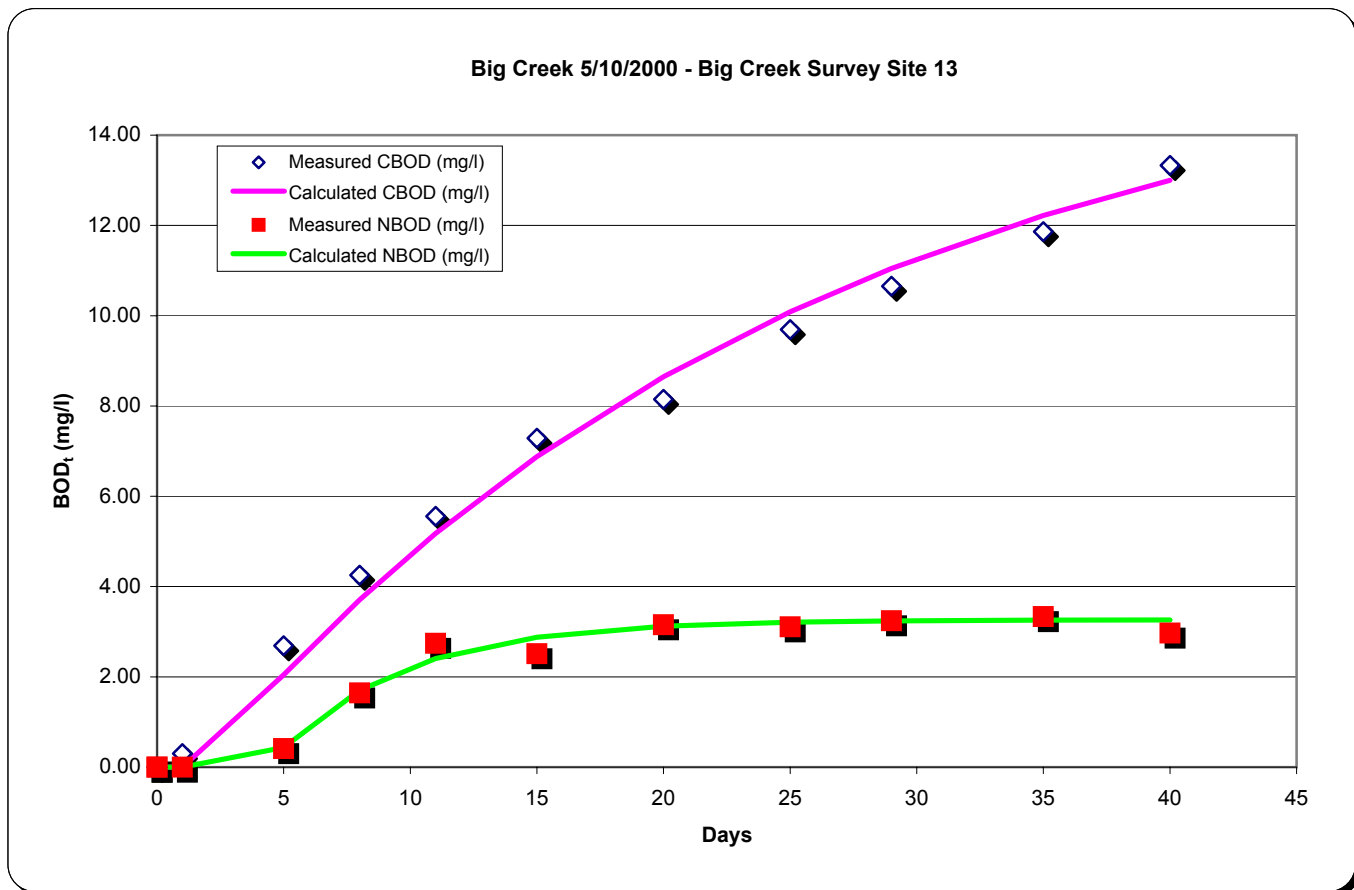
Note 6 - Calculated from the formula {NBODt=UNBOD[1-e-(k(t-lag))]} using the listed values of UNBOD, k decay rate and lag time.

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.

**BOD Analysis of the for:**

**Big Creek 5/10/2000 - Big Creek Survey Site 13**

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		0.15					
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
1	0.3	0.15	0.00	0.30	0.00	0.00	
5	3.1	0.24	0.41	2.69	0.44	2.05	
8	5.90	0.51	1.65	4.25	1.71	3.71	
11	8.30	0.75	2.74	5.56	2.41	5.18	
15	9.80	0.7	2.51	7.29	2.88	6.88	
20	11.30	0.84	3.15	8.15	3.12	8.65	
25	12.80	0.83	3.11	9.69	3.21	10.09	
29	13.90	0.86	3.24	10.66	3.24	11.05	
35	15.20	0.88	3.34	11.86	3.26	12.22	
40	16.30	0.8	2.97	13.33	3.26	13.00	
49	17.40	0.84	3.15	14.25	3.26	14.06	
60	18.70	0.96	3.70	15.00	3.26	14.92	
					3.26	16.44	UBOD (mg/l)
					0.20	0.04	k rate (1/day)
					4.28	1.75	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<sub>2</sub> + NO<sub>3</sub> as nitrogen) at time in "Days" column.

Note 4 - Calculated by multiplying the measured (NO<sub>2</sub> +NO<sub>3</sub> as nitrogen) minus the day zero (NO<sub>2</sub> +NO<sub>3</sub> 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.



Survey Stream and date:

Big Creek 5/17/2000

Calculated CBOD (Note 2)		Days from analysis start date:															k rate (1/day)	UCBOD (mg/l)	Lag time (days)	Sum of errors squared
Item No.	Sample No.	0	0	0	2	5	9	15	20	26	30	35	40	50	55	61				
1	Big Creek Survey Site 1				0.90	2.60	3.81	4.74	5.21	5.54	6.63	6.82	7.13	7.96	7.89	8.01	0.06	8.13	0.00	1.48
2	Big Creek Survey Site 13				1.50	3.50	5.81	7.11	8.23	9.97	11.46	12.53	13.41	15.33	15.84	15.95	0.04	17.59	0.00	3.55
3	Big Creek Survey Site 3				1.30	3.00	4.42	5.41	6.18	6.93	7.67	7.89	8.30	8.89	9.19	9.13	0.06	9.21	0.00	1.13
4	Big Creek Survey Site 7				2.21	6.40	7.85	9.66	10.94	11.75	12.78	13.35	14.06	14.77	14.98	15.06	0.08	14.71	0.00	5.60
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				

Calculated NBOD (Note 1)		Days from analysis start date:															k rate (1/day)	UNBOD (mg/l)	Lag time (days)	Sum of errors squared
Item No.	Sample No.	0	0	0	2	5	9	15	20	26	30	35	40	50	55	61				
1	Big Creek Survey Site 1				0.00	0.00	0.09	0.46	0.69	0.96	0.37	0.78	0.87	0.64	0.91	1.19	0.07	0.93	6.47	0.38
2	Big Creek Survey Site 13				0.00	0.00	1.69	2.79	3.47	3.43	3.24	3.47	3.79	3.47	3.56	4.25	0.14	3.70	4.91	0.59
3	Big Creek Survey Site 3				0.00	0.00	0.18	0.69	0.82	0.87	0.73	1.01	1.10	1.01	1.01	1.37	0.06	1.17	5.00	0.16
4	Big Creek Survey Site 7				0.09	0.00	0.05	0.14	0.96	1.55	1.42	1.65	1.74	1.83	1.92	2.24	0.09	2.00	13.90	0.18
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				

Note 1 - Calculated by multiplying the measured (NO<sub>2</sub> +NO<sub>3</sub> as nitrogen) minus the day zero (NO<sub>2</sub> +NO<sub>3</sub> as nitrogen) by 4.57.

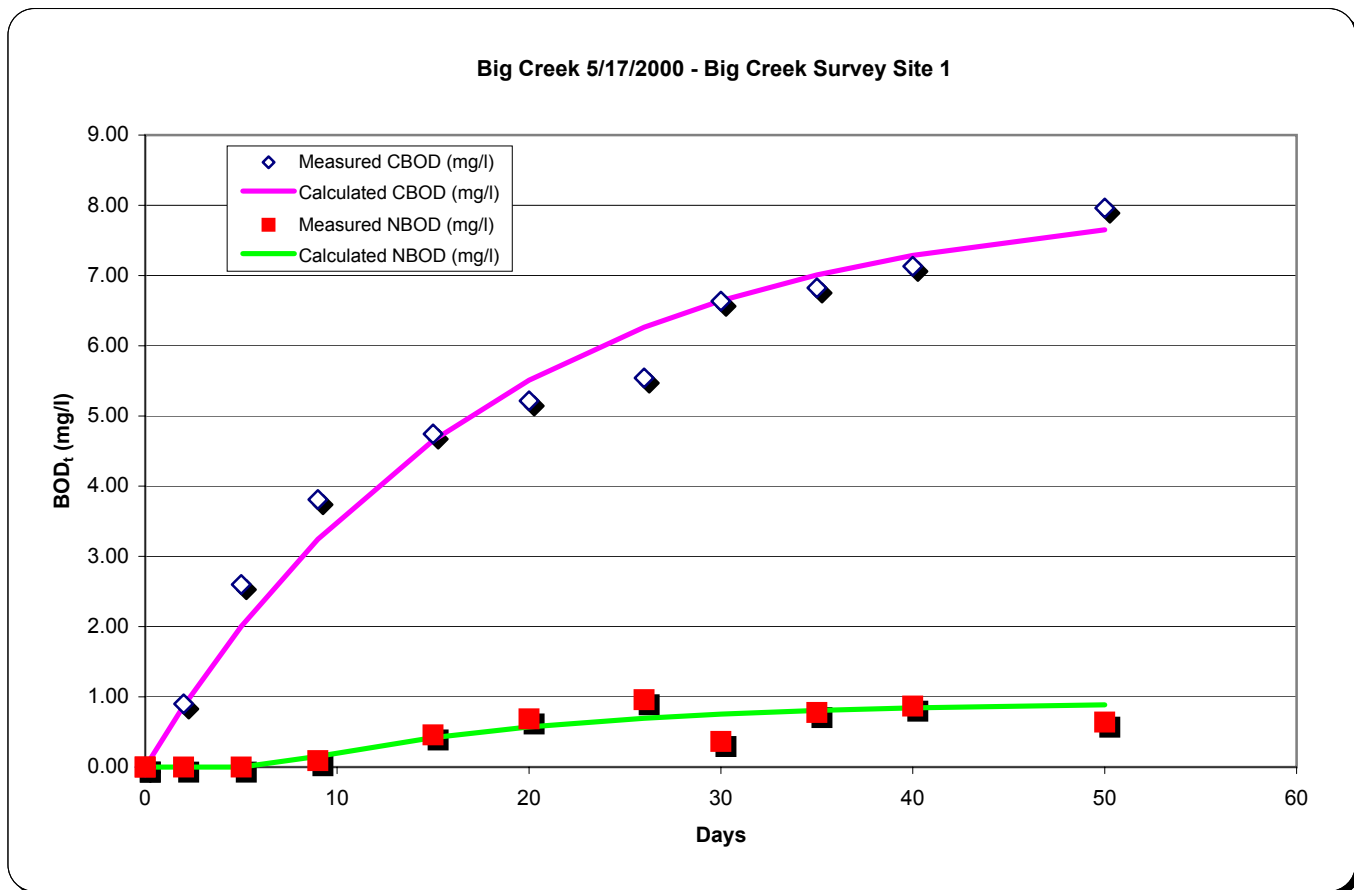
Note 2 - Determined by subtracting the calculated NBOD from the measured total BOD.

**BOD Analysis of the for:**

**Big Creek 5/17/2000 - Big Creek Survey Site 1**

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		0.55				
0	0.00	0.00			0.00	0.00
0	0.00	0.00			0.00	0.00
2	0.9	0.44	0.00	0.90	0.00	0.87
5	2.6	0.55	0.00	2.60	0.00	2.00
9	3.9	0.57	0.09	3.81	0.15	3.24
15	5.2	0.65	0.46	4.74	0.42	4.65
20	5.9	0.7	0.69	5.21	0.57	5.51
26	6.5	0.76	0.96	5.54	0.70	6.26
30	7	0.63	0.37	6.63	0.75	6.64
35	7.6	0.72	0.78	6.82	0.81	7.01
40	8	0.74	0.87	7.13	0.84	7.29
50	8.6	0.69	0.64	7.96	0.89	7.65
55	8.8	0.75	0.91	7.89	0.90	7.77
61	9.2	0.81	1.19	8.01	0.91	7.87

0.93	8.13	UBOD (mg/l)
0.07	0.06	k rate (1/day)
6.47	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<sub>2</sub> + NO<sub>3</sub> as nitrogen) at time in "Days" column.

Note 4 - Calculated by multiplying the measured (NO<sub>2</sub> +NO<sub>3</sub> as nitrogen) minus the day zero (NO<sub>2</sub> +NO<sub>3</sub> as nitrogen) by 4.57.

Note 5 - Determined by subtracting the calculated NBOD from the measured total BOD.

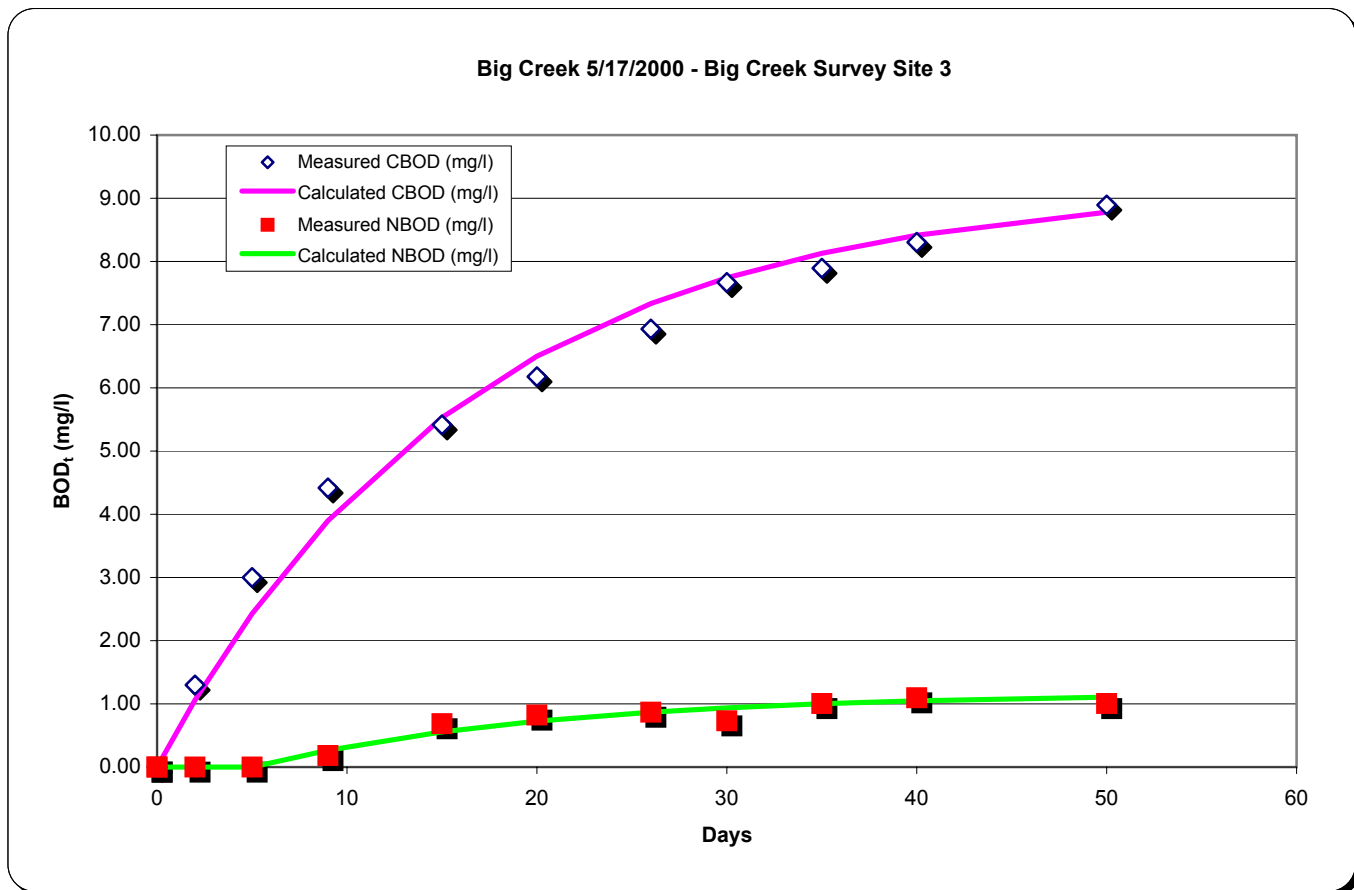
Note 6 - Calculated from the formula {NBODt=UNBOD[1-e-(k(t-lag))]} using the listed values of UNBOD, k decay rate and lag time.

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.

**BOD Analysis of the for:**

**Big Creek 5/17/2000 - Big Creek Survey Site 3**

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		0.25					
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
2	1.3	0.22	0.00	1.30	0.00	1.06	
5	3	0.23	0.00	3.00	0.00	2.43	
9	4.6	0.29	0.18	4.42	0.27	3.90	
15	6.1	0.4	0.69	5.41	0.56	5.53	
20	7	0.43	0.82	6.18	0.73	6.50	
26	7.8	0.44	0.87	6.93	0.87	7.33	
30	8.4	0.41	0.73	7.67	0.94	7.74	
35	8.9	0.47	1.01	7.89	1.00	8.13	
40	9.4	0.49	1.10	8.30	1.05	8.42	
50	9.9	0.47	1.01	8.89	1.11	8.78	
55	10.2	0.47	1.01	9.19	1.12	8.89	
61	10.5	0.55	1.37	9.13	1.14	8.99	
					1.17	9.21	UBOD (mg/l)
					0.06	0.06	k rate (1/day)
					5.00	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<sub>2</sub> + NO<sub>3</sub> as nitrogen) at time in "Days" column.

Note 4 - Calculated by multiplying the measured (NO<sub>2</sub> +NO<sub>3</sub> as nitrogen) minus the day zero (NO<sub>2</sub> +NO<sub>3</sub> as nitrogen) by 4.57.

Note 5 - Determined by subtracting the calculated NBOD from the measured total BOD.

Note 6 - Calculated from the formula {NBOD<sub>t</sub>=UNBOD[1-e<sup>-(k(t-lag))</sup>]}

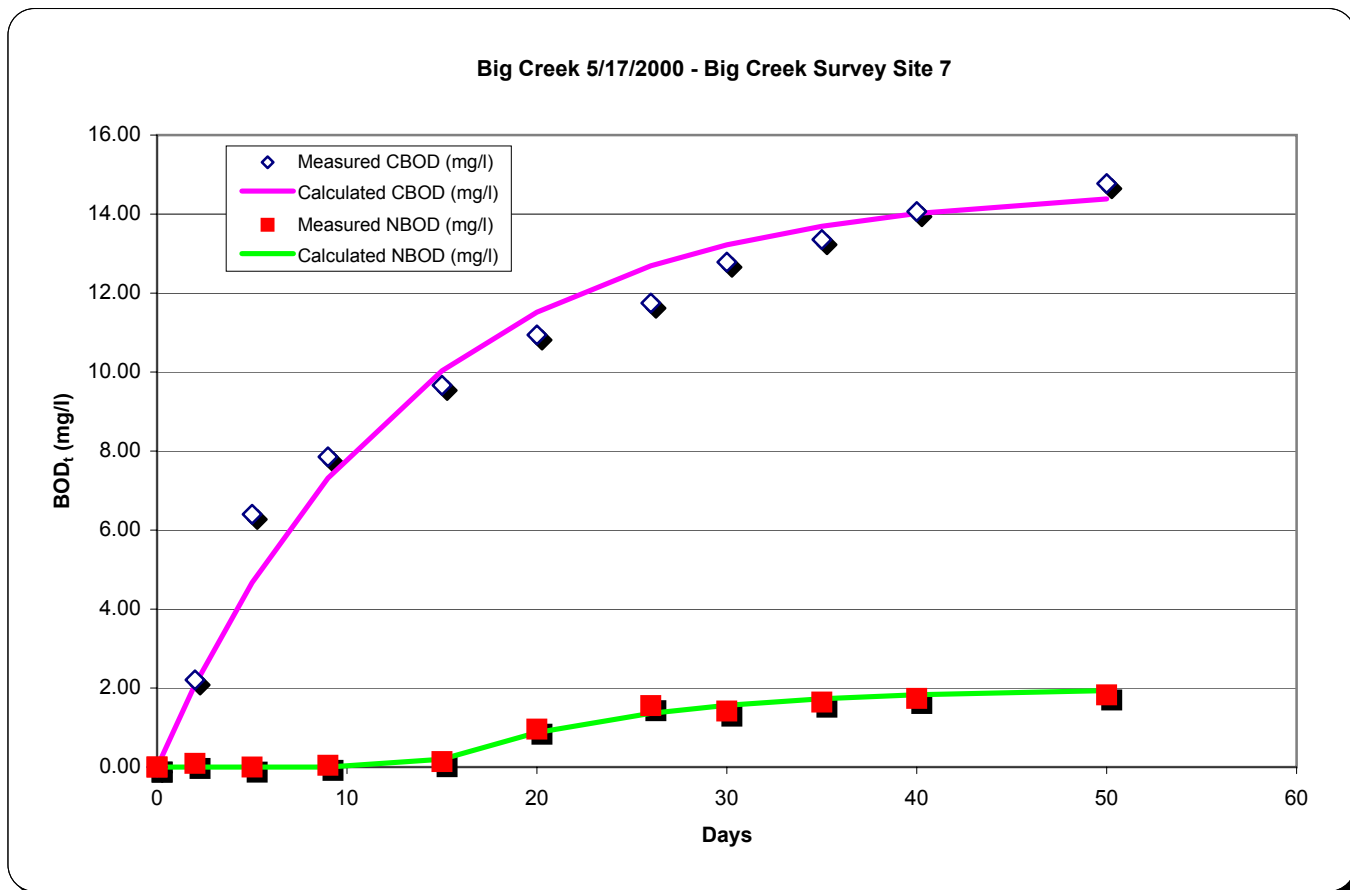
Note 7 - Calculated from the formula {CBOD<sub>t</sub>=UCBOD[1-e<sup>-(k(t-lag))</sup>]}



**BOD Analysis of the for:**

**Big Creek 5/17/2000 - Big Creek Survey Site 7**

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		0.02					
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
2	2.3	0.04	0.09	2.21	0.00	2.08	
5	6.4	0.02	0.00	6.40	0.00	4.67	
9	7.9	0.03	0.05	7.85	0.00	7.31	
15	9.8	0.05	0.14	9.66	0.20	10.03	
20	11.9	0.23	0.96	10.94	0.88	11.52	
26	13.3	0.36	1.55	11.75	1.36	12.69	
30	14.2	0.33	1.42	12.78	1.56	13.22	
35	15	0.38	1.65	13.35	1.73	13.69	
40	15.8	0.4	1.74	14.06	1.83	14.01	
50	16.6	0.42	1.83	14.77	1.93	14.38	
55	16.9	0.44	1.92	14.98	1.96	14.49	
61	17.3	0.51	2.24	15.06	1.98	14.57	
					2.00	14.71	UBOD (mg/l)
					0.09	0.08	k rate (1/day)
					13.90	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<sub>2</sub> + NO<sub>3</sub> as nitrogen) at time in "Days" column.

Note 4 - Calculated by multiplying the measured (NO<sub>2</sub> +NO<sub>3</sub> as nitrogen) minus the day zero (NO<sub>2</sub> +NO<sub>3</sub> as nitrogen) by 4.57.

Note 5 - Determined by subtracting the calculated NBOD from the measured total BOD.

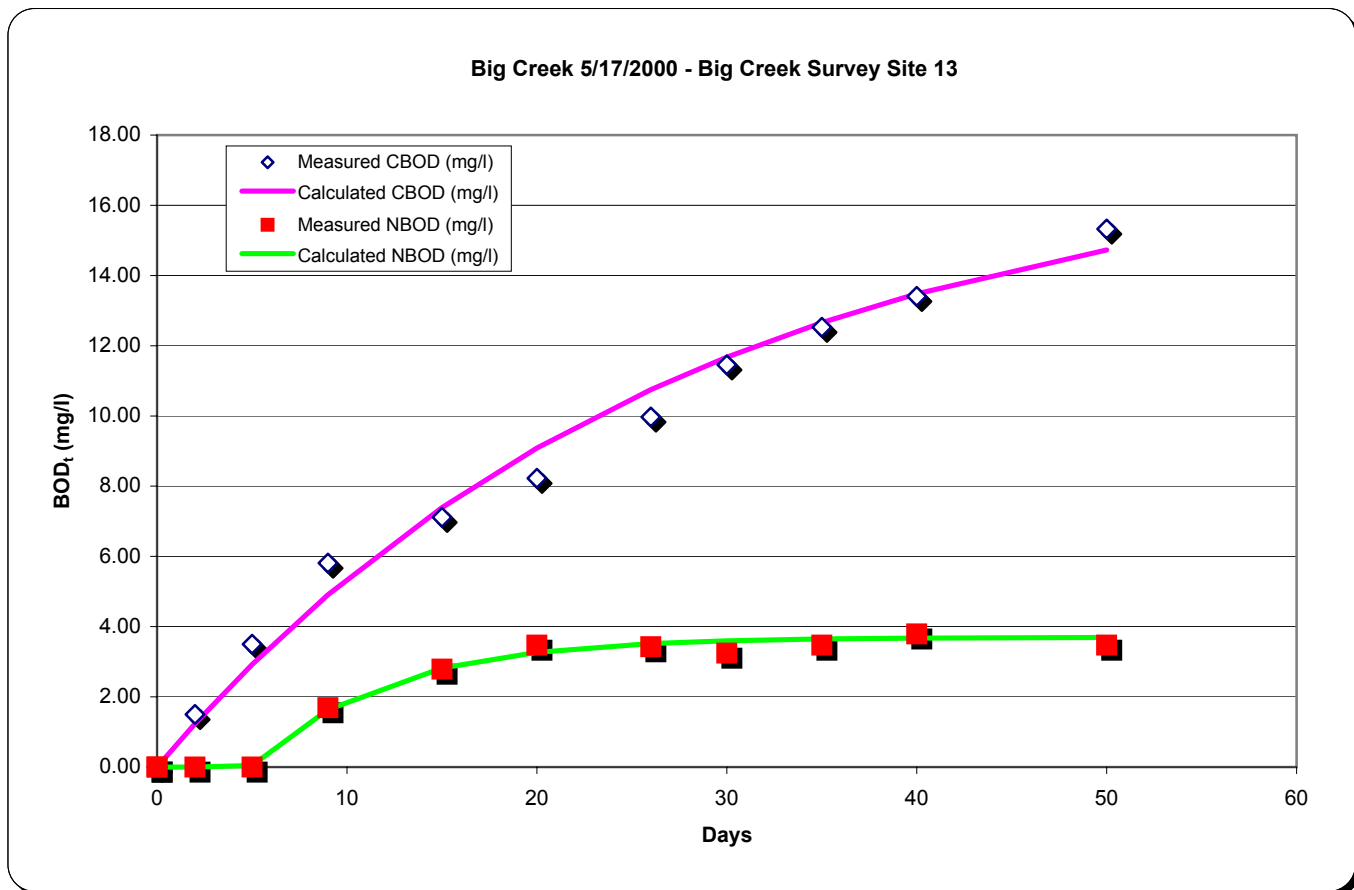
Note 6 - Calculated from the formula {NBODt=UNBOD[1-e-(k(t-lag))]} using the listed values of UNBOD, k decay rate and lag time.

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.

**BOD Analysis of the for:**

**Big Creek 5/17/2000 - Big Creek Survey Site 13**

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		0.07					
0	0.00	0.00			0.00	0.00	
0	0.00	0.00			0.00	0.00	
2	1.5	0.07	0.00	1.50	0.00	1.23	
5	3.5	0.07	0.00	3.50	0.05	2.92	
9	7.5	0.44	1.69	5.81	1.63	4.91	
15	9.90	0.68	2.79	7.11	2.82	7.39	
20	11.70	0.83	3.47	8.23	3.27	9.09	
26	13.40	0.82	3.43	9.97	3.52	10.75	
30	14.70	0.78	3.24	11.46	3.60	11.68	
35	16.00	0.83	3.47	12.53	3.65	12.66	
40	17.20	0.9	3.79	13.41	3.67	13.48	
50	18.80	0.83	3.47	15.33	3.69	14.73	
55	19.40	0.85	3.56	15.84	3.70	15.20	
61	20.20	1	4.25	15.95	3.70	15.67	
					3.70	17.59	UBOD (mg/l)
					0.14	0.04	k rate (1/day)
					4.91	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<sub>2</sub> + NO<sub>3</sub> as nitrogen) at time in "Days" column.

Note 4 - Calculated by multiplying the measured (NO<sub>2</sub> +NO<sub>3</sub> as nitrogen) minus the day zero (NO<sub>2</sub> +NO<sub>3</sub> 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.

## Appendix D2

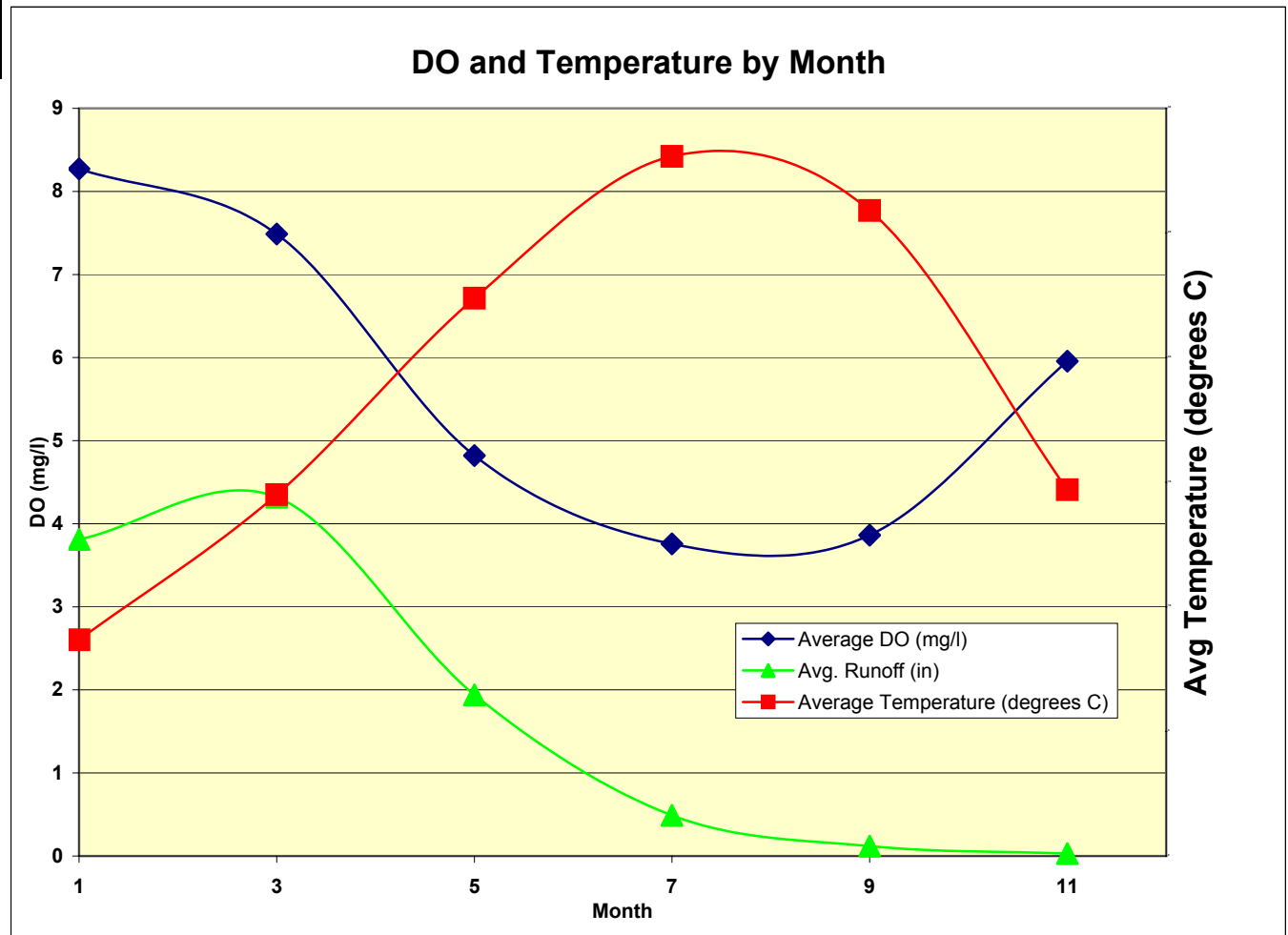
### Historical and Ambient Data

#### **Critical period determinations**

The Average Dissolved Oxygen and Temperature determinations from the LDEQ WQ station 0328, for a period of 1991-1998.

Month	Avg. Runoff (in)	Average DO (mg/l)	Average Temperature (degrees C)
1	3.81	8.27	8.68
3	4.32	7.49	14.50
5	1.94	4.82	22.38
7	0.49	3.76	28.07
9	0.12	3.86	25.90
11	0.03	5.96	14.70

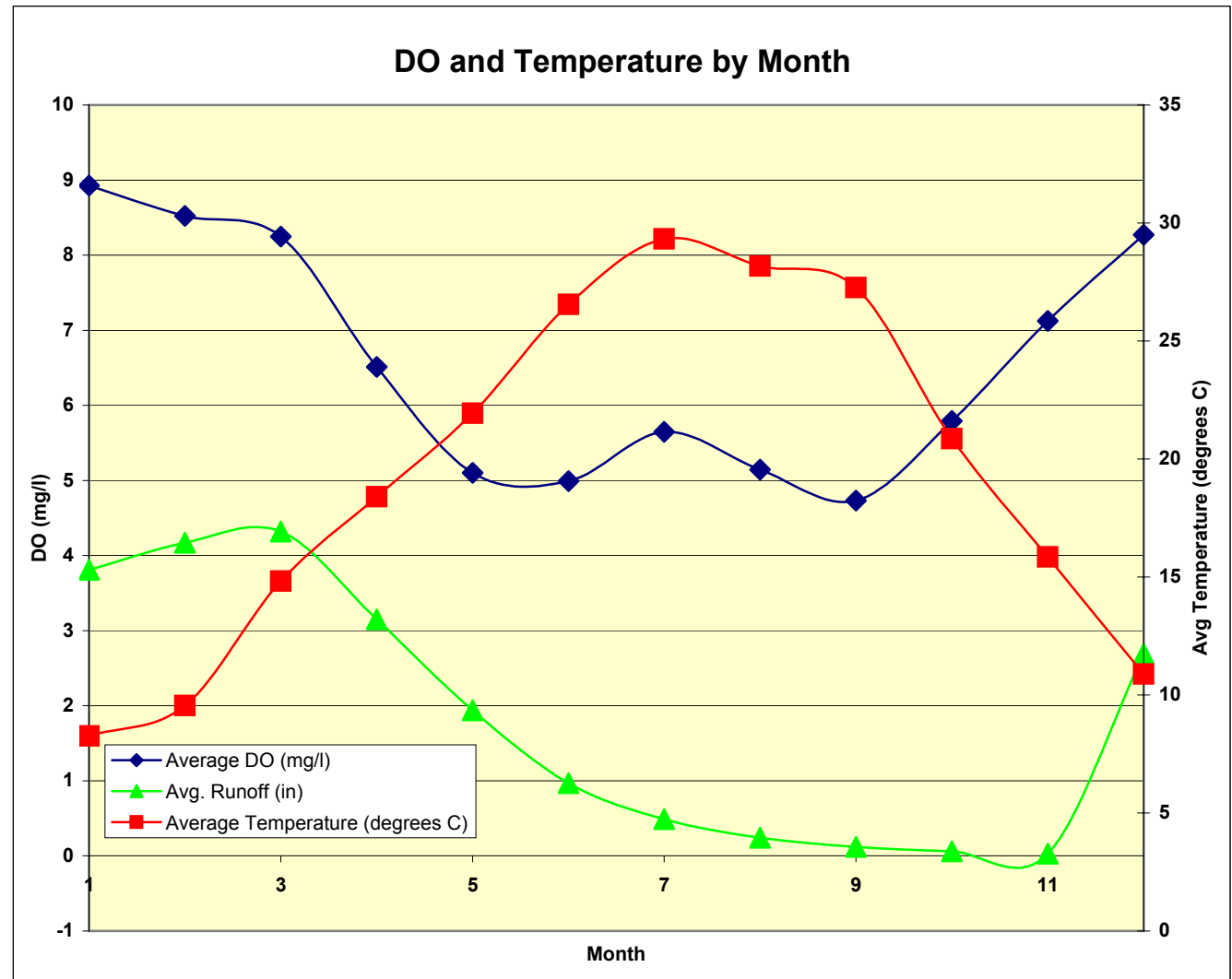
Average runoff numbers were obtained from the Southern Regional Climate Center for the LA Northeast Division.



The Average Dissolved Oxygen and Temperature determinations from the LDEQ WQ station 0069, for a period of 1978-1999.

Month	Avg. Runoff (in)	Average DO (mg/l)	Average Temperature (degrees C)
1	3.81	8.93	8.26
2	4.17	8.52	9.55
3	4.32	8.25	14.82
4	3.15	6.51	18.40
5	1.94	5.10	21.94
6	0.97	4.99	26.55
7	0.49	5.65	29.33
8	0.24	5.14	28.17
9	0.12	4.73	27.27
10	0.06	5.79	20.86
11	0.03	7.12	15.85
12	2.69	8.27	10.89

Average runoff numbers were obtained from the Southern Regional Climate Center for the LA Northeast Division.



## Appendix D3

### Historical and Ambient Data

**Typical stream cross-sections at flow measurement sites:**

## Appendix D4

### Historical and Ambient Data

#### **Hydrologic parameter determinations**

### ESTIMATION OF STREAM GEOMETRIC COEFFICIENTS, EXPONENTS, AND CONSTANTS FOR LAQUAL, QUALTX, AND LACOLEE

- Proceed as follows:
1. Cut and paste date, discharge, width, and depth data into the green area. Area and velocity will be calculated. If you have width and area data and need to calculate depth, the formula will be used.
  2. Type the site name, 7Q10, and max/min information in the orange areas. The max/min flow rate is needed to set the range of the best fit curve. The 7Q10 may be entered if you want a 7Q10 curve.
  3. Select solver from the tools drop-down menu. "Set target cell" to one of the purple boxes to select optimization routine. You can do a least squares or an absolute value optimization.
  4. Make sure "equal to" is set to "min".
  5. Set "by changing cells" to the blue cells for the parameter in question (depth, width, or velocity).
  6. Click on solve to generate best fit curve and the appropriate values of A-H. You can optimize any or all of the values of A-H, as needed. For constant depth or width with flow, don't set the target cell.
  7. The depth, width, and velocity charts will display the input data, the best fit curve, and the 7Q10 bar.

Input the stream name / location: **Big Creek, Hwy 135**

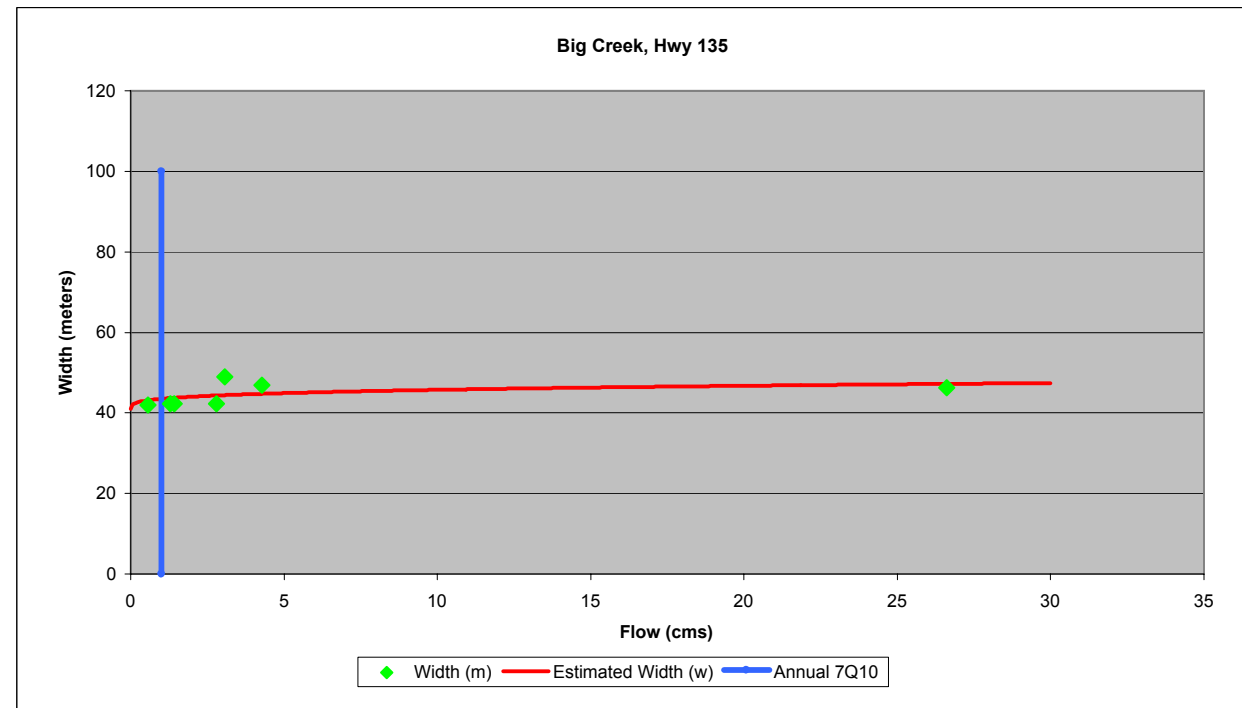
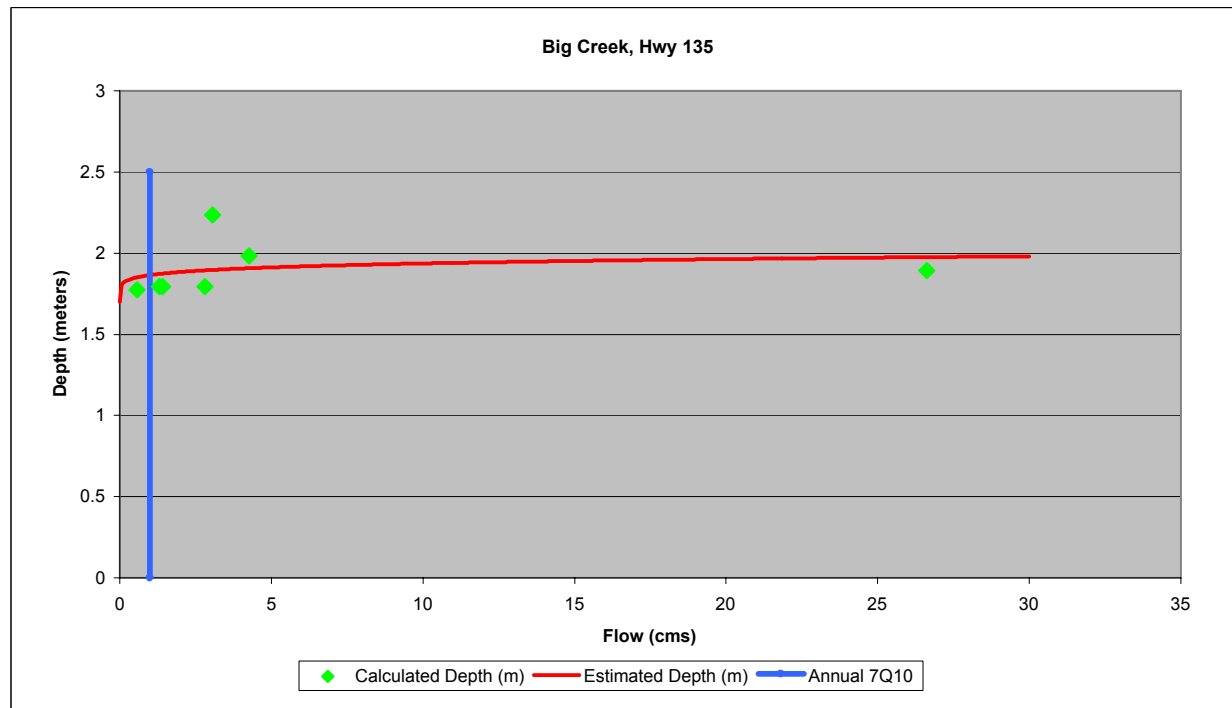
Sum of Diff. Depth squared	Sum of Diff. Width squared	Sum of diff. Velocity squared
<b>0.16</b>	<b>35.55</b>	<b>0.00</b>

Input the minimum flow rate to be plotted: **0** cms  
 Input the maximum flow rate to be plotted: **30** cms  
 Input the 7Q10 flow rate to be plotted: **0** cms

Input the maximum depth to be plotted: **2.5** m  
 Input the maximum width to be plotted: **100** m  
 Input the maximum velocity to be plotted: **0** mps

Input values:

Measure-ment No.	Date	Discharge (cms)	Width (m)	Calculated Depth (m)	Area (m <sup>2</sup> )	Calculated Velocity (mps)	No. of Sections	Measure-ment Rated	Depth coeff. "D"	Depth exp. "E"	Depth const. "F"	Width coeff. "A"	Width exp. "B"	Width const. "C"	Velocity coeff. "G"	Velocity exp. "H"	Estimated Depth (m)	Estimated Width (w)	Estimated Velocity (u)	Diff. depth squared (m <sup>2</sup> )	Diff. width squared (m <sup>2</sup> )	Diff. velocity squared
1	08/21/91	2.8029574	42.319415	1.7921365	75.84217	0.0369578			0.1650924	0.156	1.700	2.5003106	0.277	41.000	0.011	1.008	1.894	44.327	0.031	0.010	4.03233	0.00003
2	11/19/91	1.3023843	42.273697	1.7921365	75.760237	0.0171909			0.1650924	0.156	1.700	2.5003106	0.277	41.000	0.011	1.008	1.872	43.690	0.015	0.006	2.00694	0.00001
3	03/16/93	26.613939	46.190186	1.8927156	87.424887	0.3044206			0.1650924	0.156	1.700	2.5003106	0.277	41.000	0.011	1.008	1.975	47.211	0.304	0.007	1.04227	0.00000
4	10/24/00	0.5724828	42.00	1.7738494	74.500595	0.0076843			0.1650924	0.156	1.700	2.5003106	0.277	41.000	0.011	1.008	1.851	43.142	0.006	0.006	1.30560	0.00000
5	08/11/95	1.4156351	42.273697	1.7921365	75.760237	0.0186857			0.1650924	0.156	1.700	2.5003106	0.277	41.000	0.011	1.008	1.874	43.753	0.016	0.007	2.18919	0.00001
6	05/09/00	4.2695554	46.860713	1.9811033	92.835915	0.0459903			0.1650924	0.156	1.700	2.5003106	0.277	41.000	0.011	1.008	1.907	44.739	0.048	0.005	4.50020	0.00000
7	05/19/94	3.0577718	48.933252	2.2371228	109.4697	0.0279326			0.1650924	0.156	1.700	2.5003106	0.277	41.000	0.011	1.008	1.897	44.409	0.034	0.116	20.47120	0.00004





## ESTIMATION OF STREAM GEOMETRIC COEFFICIENTS, EXPONENTS, AND CONSTANTS FOR LAQUAL, QUALTX, AND LACOLEE

- Proceed as follows:
1. Cut and paste date, discharge, width, and depth data into the green area. Area and velocity will be calculated. If you have width and area data and need to calculate
  2. Type the site name, 7Q10, and max/min information in the orange areas. The max/min flow rate is needed to set the range of the best fit curve. The 7Q10 may be
  3. Select solver from the tools drop-down menu. "Set target cell" to one of the purple boxes to select optimization routine. You can do a least squares or an absolute value
  4. Make sure "equal to" is set to "min".
  5. Set "by changing cells" to the blue cells for the parameter in question (depth, width, or velocity).
  6. Click on solve to generate best fit curve and the appropriate values of A-H. You can optimize any or all of the values of A-H, as needed. For constant depth or width with
  7. The depth, width, and velocity charts will display the input data, the best fit curve, and the 7Q10 bar.

Input the stream name / location: Big Creek, Hwy 134

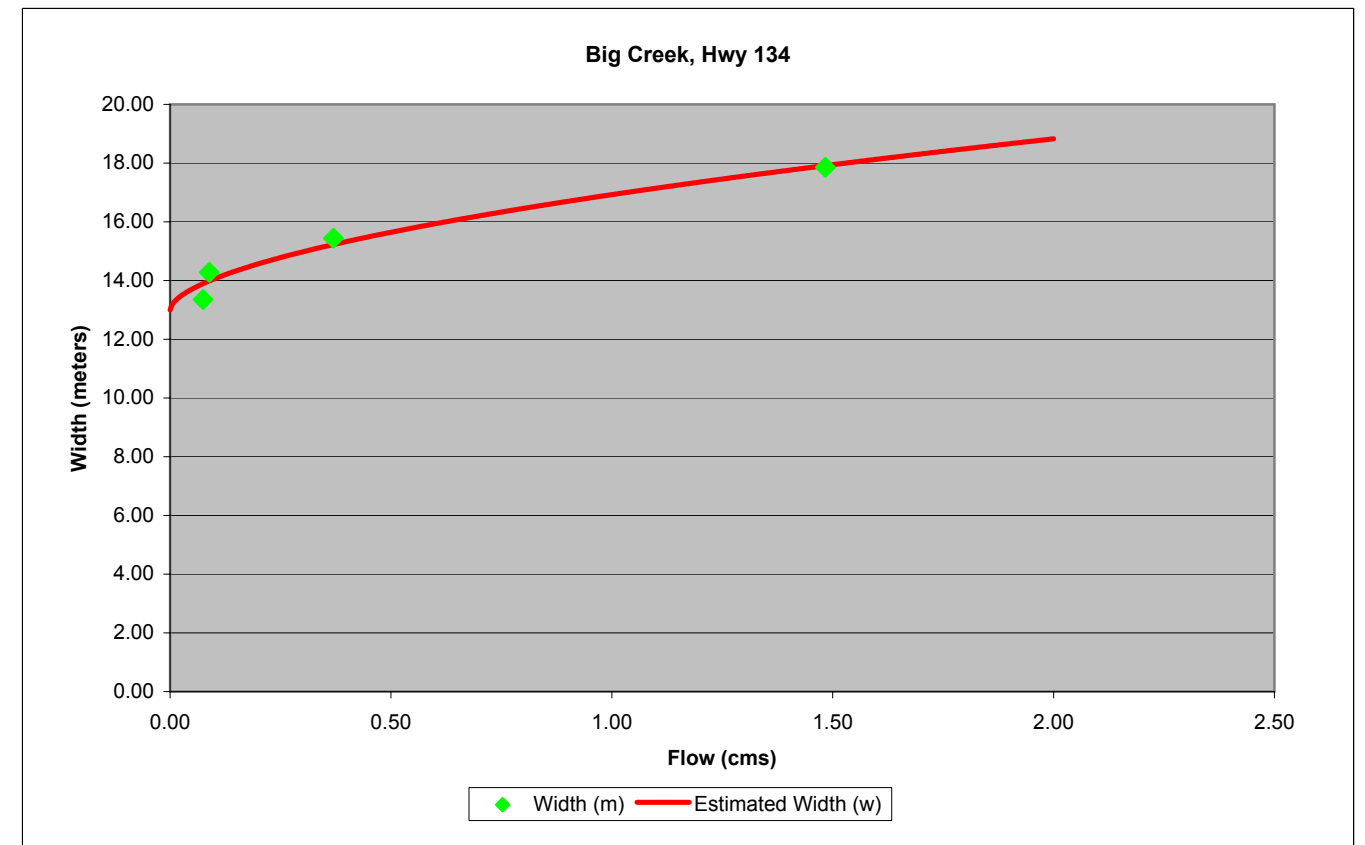
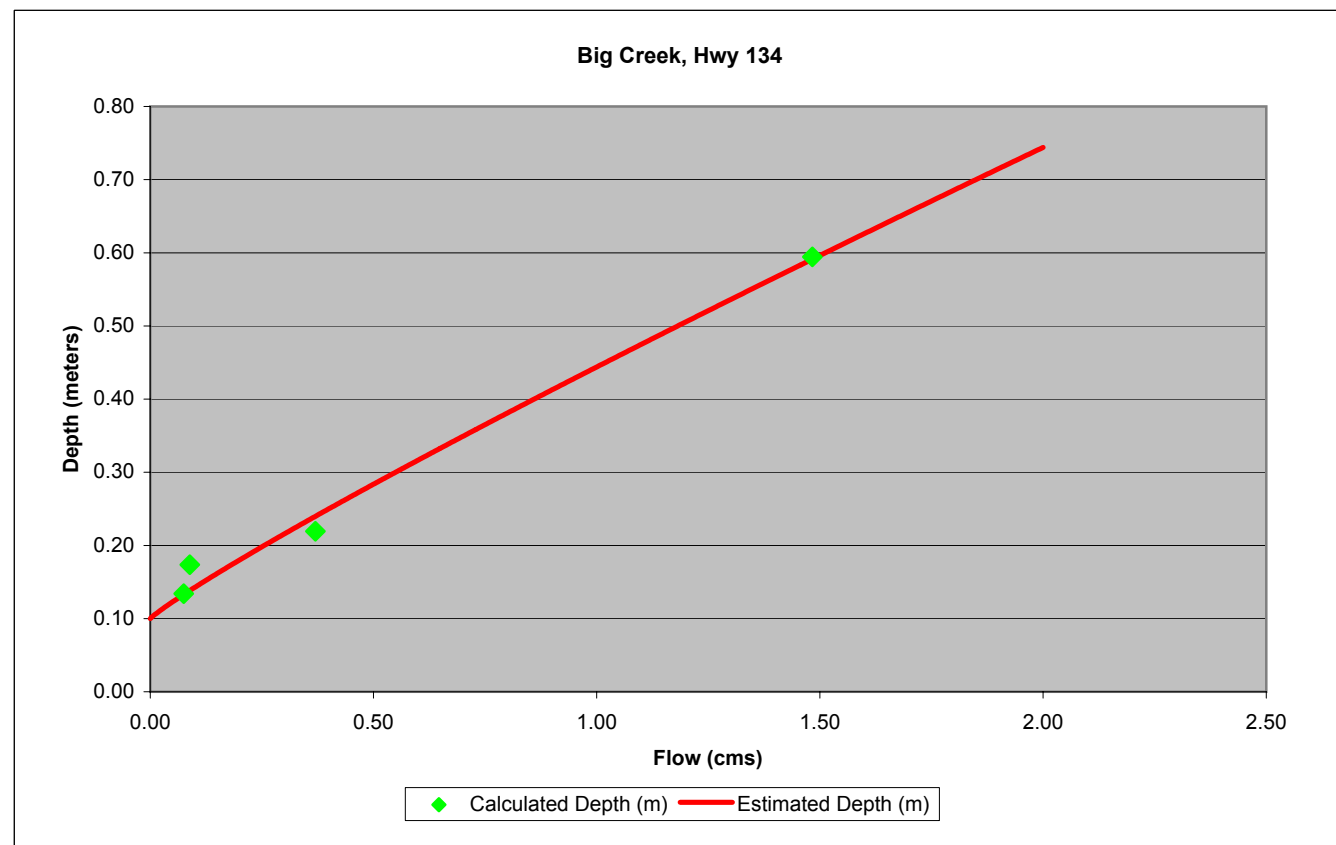
Input the minimum flow rate to be plotted: 0 cms  
 Input the maximum flow rate to be plotted: 2 cms  
 Input the 7Q10 flow rate to be plotted: 1 cms

Input the maximum depth to be plotted: 1 m  
 Input the maximum width to be plotted: 20 m  
 Input the maximum velocity to be plotted: 0.2 mps

Sum of Diff. Depth squared	Sum of Diff. Width squared	Sum of diff. Velocity squared
<b>0.00</b>	<b>0.43</b>	<b>0.00</b>

Input values:

Measurement No.	Date	Discharge (cms)	Width (m)	Calculated Depth (m)	Area (m <sup>2</sup> )	Calculated Velocity (mps)	No. of Sections	Measurement Rated	Depth coeff. "D"	Depth exp. "E"	Depth const. "F"	Width coeff. "A"	Width exp. "B"	Width const. "C"	Velocity coeff. "G"	Velocity exp. "H"	Estimated Depth (m)	Estimated Width (w)	Estimated Velocity (u)	Diff. depth squared (m <sup>2</sup> )	Diff. width squared (m <sup>2</sup> )	Diff. velocity squared
1	09/21/99	0.07	13.35	0.13	1.790253	0.042			0.343914	0.905113	0.1	3.925958	0.569696	13	0.12581	0.387112	0.132879	13.89584	0.046097	1.5E-06	0.29839	0.00002
2	12/06/00	0.09	14.28	0.17	2.480687	0.036			0.343914	0.905113	0.1	3.925958	0.569696	13	0.12581	0.387112	0.138357	13.98709	0.049237	0.001251	0.08532	0.00018
3	01/09/01	0.37	15.44	0.22	3.387657	0.109			0.343914	0.905113	0.1	3.925958	0.569696	13	0.12581	0.387112	0.239757	15.22738	0.085596	0.000413	0.04410	0.00055
4	05/08/00	1.48	17.86	0.59	10.61499	0.140			0.343914	0.905113	0.1	3.925958	0.569696	13	0.12581	0.387112	0.591397	17.91467	0.146555	8.61E-06	0.00294	0.00005



## Appendix E

### Recommended TMDL



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

Modeled stream or water body:

Big Creek in Ouachita basin - 080603

Shaded cells are input values for calculations.

Values to be used in the projection models.

Reach Number and Description	Calibration Model Values					Projection Model Equivalents							Projected Model Loads				Margin of Safety Loads									
	Non-Point UCBOB	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 UCBOB	Non-Point UNBOD	SOD @ 20°C	Non-Point UCBOB 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 UCBOB MOS Loads	Non-Point UNBOD MOS Loads	Adjusted SOD MOS @ Proj. temp	Adjusted Total MOS @ Proj. temp
	gm O <sub>2</sub> / [(m <sup>3</sup> )(day)]	gm O <sub>2</sub> / [(m <sup>3</sup> )(day)]	gm O <sub>2</sub> / [(m <sup>3</sup> )(day)]	gm O <sub>2</sub> / [(m <sup>3</sup> )(day)]	Kilo-meters	gm O <sub>2</sub> / [(m <sup>3</sup> )(day)]	%	gm O <sub>2</sub> / [(m <sup>3</sup> )(day)]	Meters	(degrees Celcius)	%	gm O <sub>2</sub> / [(m <sup>3</sup> )(day)]	gm O <sub>2</sub> / [(m <sup>3</sup> )(day)]	gm O <sub>2</sub> / [(m <sup>3</sup> )(day)]	gm O <sub>2</sub> / [(m <sup>3</sup> )(day)]	(kg/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	
BIG CREEK, RKM 134.2 RKM 118	0.925	0.438	2.70	4.063	16.20	1.00	0%	1.00	6.24	28.40	75.0%	1.77	1.85	0.421	0.200	1.23	43	20	211	273.79	9	6	2	1	10	13
BIG CREEK, RKM 100 TO MITCHNER	1.425	0.451	2.65	4.526	35.90	1.00	0%	1.00	14.95	28.40	75.0%	1.88	1.98	0.623	0.197	1.16	335	106	1056	1496.09	53	31	17	5	52	74
BIG CREEK, MITCHNER TO RKM 67.4	1.182	0.317	0.65	2.148	14.70	1.00	0%	1.00	12.74	28.40	35.0%	1.75	1.83	1.006	0.270	0.55	188	51	176	414.86	16	5	9	2	8	19
BIG CREEK, RKM 67.4 TO WEIR #6	1.570	0.290	0.62	2.479	7.20	1.00	0%	1.00	33.82	31.10	35.0%	1.96	2.07	1.309	0.242	0.52	319	59	253	631.10	26	7	16	3	13	33
WEIR #6	0.000	0.000	0.00	0.000	0.10	1.00	0%	1.00	31.42	31.10	35.0%	0.00	0.00													
BIG CREEK, WEIR #6 TO WEIR #5	1.653	0.177	1.00	2.830	9.20	1.00	0%	1.00	31.61	31.10	35.0%	2.19	2.32	1.356	0.145	0.82	394	42	480	916.51	38	14	22	2	27	52
WEIR #5	0.000	0.000	0.00	0.000	0.10	1.00	0%	1.00	31.77	31.10	35.0%	0.00	0.00													
BIG CREEK, WEIR #5 TO WEIR #4	2.465	0.386	1.00	3.851	13.30	1.00	0%	1.00	31.93	31.10	35.0%	2.85	3.06	1.958	0.306	0.79	832	130	679	1640.25	87	23	56	9	46	110
WEIR #4	0.000	0.000	0.00	0.000	0.10	1.00	0%	1.00	32.07	31.10	35.0%	0.00	0.00													
BIG CREEK, WEIR #4 TO WEIR #3	2.206	0.181	0.90	3.287	6.10	1.00	0%	1.00	40.63	31.10	35.0%	2.49	2.65	1.780	0.146	0.73	441	36	362	839.21	41	11	27	2	23	52
WEIR #3	0.000	0.000	0.00	0.000	0.10	1.00	0%	1.00	40.69	31.10	35.0%	0.00	0.00													
BIG CREEK, WEIR #3 TO WEIR #2	2.251	0.174	0.95	3.375	9.10	1.00	0%	1.00	40.76	31.10	35.0%	2.54	2.72	1.811	0.140	0.76	672	52	570	1293.98	64	18	42	3	36	82
WEIR #2	0.000	0.000	0.00	0.000	0.10	1.00	0%	1.00	40.83	31.10	35.0%	0.00	0.00													
BIG CREEK, WEIR #2 TO WEIR #1	2.055	0.357	1.15	3.562	17.00	1.00	0%	1.00	40.94	31.10	35.0%	2.67	2.85	1.645	0.286	0.92	1145	199	1288	2631.94	129	42	74	13	84	171
WEIR #1	0.000	0.000	0.00	0.000	0.10	1.00	0%	1.00	41.04	31.10	35.0%	0.00	0.00													
BIG CREEK, WEIR #1 TO BOEUF RVR	1.728	0.025	1.00	2.753	4.90	1.00	0%	1.00	41.07	31.10	35.0%	2.14	2.27	1.422	0.020	0.82	286	4	333	623.56	25	9	16	0	19	35
<b>Sub-Total</b>												22.23					4654	699	5409	10761	487		282	41	317	640

Notes: Note 1, Data was calculated in and brought from the Calibration worksheet dataset.

Note 2,  $J = [(1 - H) \times (D - F) + F]$

Note 3,  $K = [(J - F) / (1 - MOS)] + F$

Note 4,  $Q = E \times G \times N \times 1.065^{(I-20)}$

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

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

**EXPLICIT MARGINS:**

MARGIN OF SAFETY (MOS) (%) = [MOG + MOU] = **10%**



**Summer TMDL calculations and Projection model calculations for Incremental loads:**

**Big Creek in Ouachita basin - 080603**

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

Reach Description and #	Calibration Load determinations:										Percentage Reduction calculations:			Projection Model Input determinations:				Projection Model Input determinations:				
	Projection Flow (cms)	Calb. UCBOC conc. (mg/l)	Unadjusted UCBOC (kg/day)	Calb. UNBOD conc. (mg/l)	Unadjusted UNBOD (kg/day)	Background Conc. UCBOC (mg/l)	Background Conc. UNBOD (mg/l)	Background % Reduction	Background Load UCBOC (kg/day)	Background Load UNBOD (kg/day)	Actual % Reduction of Man Made Loads	Incem. UCBOC Load Adjusted For % Reduction (LA load)	Incem. UNBOD Load Adjusted For % Reduction (LA load)	Incem. UCBOC Adjusted for MOS (kg/day) (1)	Incem. UNBOD Adjusted for MOS (kg/day) (1)	Projection UCBOC conc. (mg/l)	Projection UNBOD conc. (mg/l)	Proj. UCBOC 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	
BIG CREEK, RKM 134.2 RKM 118		0.00		0.00		0.00	0.00	0%		0.00	75%											
BIG CREEK, RKM 100 TO MITCHNER		0.00		0.00		0.00	0.00	0%		0.00	75%											
BIG CREEK, MITCHNER TO RKM 67.4		0.00		0.00		0.00	0.00	0%		0.00	35%											
BIG CREEK, RKM 67.4 TO WEIR #6	0.0771	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
WEIR #6	0.0011	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
BIG CREEK, WEIR #6 TO WEIR #5	0.0986	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
WEIR #5	0.0011	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
BIG CREEK, WEIR #5 TO WEIR #4	0.1425	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
WEIR #4	0.0011	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
BIG CREEK, WEIR #4 TO WEIR #3	0.0664	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
WEIR #3	0.0011	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
BIG CREEK, WEIR #3 TO WEIR #2	0.0964	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
WEIR #2	0.0011	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
BIG CREEK, WEIR #2 TO WEIR #1	0.1810	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
WEIR #1	0.0011	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
BIG CREEK, WEIR #1 TO BOEUF RVR	0.0536	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
<b>Sub-Total benthic loading</b>																						

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) (%) = **10%**



## Summer TMDL Summary:

### Big Creek in Ouachita basin - 080603

Calculation of the Oxygen Demand TMDL - Kilograms per day			
Load description	WLA (kg/day)	LA (kg/day)	MOS Load (kg/day)
Point Source loads	404		101
Headwater / Tributary loads		15	0
Benthic loads		10,121	640
Incremental Loads		0	0
<b>SUB-TOTAL</b>	<b>404</b>	<b>10,136</b>	<b>741</b>
<b>TMDL = WLA + LA + MOS</b>			
		<b>11,281 kg/day</b>	

Calculation of the Oxygen Demand TMDL - Pounds per day			
Load description	WLA (lbs/day) (1)	LA (lbs/day) (1)	MOS Load (lbs/day) (1)
Point Source loads	891		223
Headwater / Tributary loads		33	0
Benthic loads		22,317	1,411
Incremental Loads		0	0
<b>SUB-TOTAL</b>	<b>891</b>	<b>22,350</b>	<b>1,634</b>
<b>TMDL = WLA + LA + MOS</b>			
		<b>24,875 lbs/day</b>	

**Notes:**

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

Calculation of the Oxygen Demand TMDL - Kilograms per day			
Load description	WLA (kg/day)	LA (kg/day)	MOS Load (kg/day)
Point Source loads	404		101
Natural Nonpoint Loads		4,373	
Manmade Nonpoint Loads		5,763	640
<b>SUB-TOTAL</b>	<b>404</b>	<b>10,136</b>	<b>741</b>
<b>TMDL = WLA + LA + MOS</b>			
		<b>11,281 lbs/day</b>	

Calculation of the Oxygen Demand TMDL - Pounds per day			
Load description	WLA (lbs/day)	LA (lbs/day)	MOS Load (lbs/day)
Point Source loads	891		223
Natural Nonpoint Loads		9,642	
Manmade Nonpoint Loads		12,708	1,411
<b>SUB-TOTAL</b>	<b>891</b>	<b>22,350</b>	<b>1,634</b>
<b>TMDL = WLA + LA + MOS</b>			
		<b>24,875 lbs/day</b>	



Winter Projection, Non-Point Benthic Load Input:

Modeled stream or water body: **Big Creek in Ouachita basin - 080603**

Shaded cells are input values for calculations.

Values to be used in the projection models.

Reach Number and Description	Calibration Model Values					Projection Model Equivalents							Projected Model Loads							
	Non-Point UCBOB	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 UCBOB	Non-Point UNBOD	SOD @ 20°C	Non-Point UCBOB INPUTS	Non-Point UNBOD INPUTS	SOD load @ Proj. temp.	Total Projection Benthic Load (LA+MOS)
	gm O <sub>2</sub> / [(m <sup>2</sup> )(day)]	gm O <sub>2</sub> / [(m <sup>2</sup> )(day)]	gm O <sub>2</sub> / [(m <sup>2</sup> )(day)]	gm O <sub>2</sub> / [(m <sup>2</sup> )(day)]	Kilo-meters	gm O <sub>2</sub> / [(m <sup>2</sup> )(day)]	%	gm O <sub>2</sub> / [(m <sup>2</sup> )(day)]	Meters	(degrees Celcius)	%	gm O <sub>2</sub> / [(m <sup>2</sup> )(day)]	gm O <sub>2</sub> / [(m <sup>2</sup> )(day)]	gm O <sub>2</sub> / [(m <sup>2</sup> )(day)]	gm O <sub>2</sub> / [(m <sup>2</sup> )(day)]	gm O <sub>2</sub> / [(m <sup>2</sup> )(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	
BIG CREEK, RKM 134.2 RKM 118	0.925	0.438	2.70	4.063	16.20	1.00	0%	1.00	6.62	17.40	75.0%	1.77	1.85	0.421	0.200	1.23	45	21	112	178.57
BIG CREEK, RKM 100 TO MITCHNER	1.425	0.451	2.65	4.526	35.90	1.00	0%	1.00	15.51	17.40	75.0%	1.88	1.98	0.623	0.197	1.16	347	110	548	1004.75
BIG CREEK, MITCHNER TO RKM 67.4	1.182	0.317	0.65	2.148	14.70	1.00	0%	1.00	13.38	18.20	35.0%	1.75	1.83	1.006	0.270	0.55	198	53	97	348.14
BIG CREEK, RKM 67.4 TO WEIR #6	1.570	0.290	0.62	2.479	7.20	1.00	0%	1.00	34.62	18.20	35.0%	1.96	2.07	1.309	0.242	0.52	326	60	115	501.77
WEIR #6	0.000	0.000	0.00	0.000	0.10	1.00	0%	1.00	31.87	18.20	35.0%	0.00	0.00							
BIG CREEK, WEIR #6 TO WEIR #5	1.653	0.177	1.00	2.830	9.20	1.00	0%	1.00	32.10	18.20	35.0%	2.19	2.32	1.356	0.145	0.82	400	43	216	659.62
WEIR #5	0.000	0.000	0.00	0.000	0.10	1.00	0%	1.00	32.28	18.20	35.0%	0.00	0.00							
BIG CREEK, WEIR #5 TO WEIR #4	2.465	0.386	1.00	3.851	13.30	1.00	0%	1.00	32.48	18.20	35.0%	2.85	3.06	1.958	0.306	0.79	846	132	306	1284.54
WEIR #4	0.000	0.000	0.00	0.000	0.10	1.00	0%	1.00	32.65	18.20	35.0%	0.00	0.00							
BIG CREEK, WEIR #4 TO WEIR #3	2.206	0.181	0.90	3.287	6.10	1.00	0%	1.00	41.22	18.20	35.0%	2.49	2.65	1.780	0.146	0.73	448	37	163	647.12
WEIR #3	0.000	0.000	0.00	0.000	0.10	1.00	0%	1.00	41.29	18.20	35.0%	0.00	0.00							
BIG CREEK, WEIR #3 TO WEIR #2	2.251	0.174	0.95	3.375	9.10	1.00	0%	1.00	41.37	18.20	35.0%	2.54	2.72	1.811	0.140	0.76	682	53	257	991.39
WEIR #2	0.000	0.000	0.00	0.000	0.10	1.00	0%	1.00	41.45	18.20	35.0%	0.00	0.00							
BIG CREEK, WEIR #2 TO WEIR #1	2.055	0.357	1.15	3.562	17.00	1.00	0%	1.00	41.60	18.20	35.0%	2.67	2.85	1.645	0.286	0.92	1163	202	581	1946.18
WEIR #1	0.000	0.000	0.00	0.000	0.10	1.00	0%	1.00	41.72	18.20	35.0%	0.00	0.00							
BIG CREEK, WEIR #1 TO BOEUF RVR	1.728	0.025	1.00	2.753	4.90	1.00	0%	1.00	41.75	18.20	35.0%	2.14	2.27	1.422	0.020	0.82	291	4	150	445.46
Sub-Total												22.23					4746	715	2546	8008.00

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

EXPLICIT MARGINS:

MARGIN OF SAFETY (MOS) (%) = [MOG + MOU] = **10%**





**Winter TMDL calculations and Projection model calculations for Incremental loads:**

**Big Creek in Ouachita basin - 080603**

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

Reach Description and #	Calibration Load determinations:										Percentage Reduction calculations:			Projection Model Input determinations:				Projection Model Input determinations:				
	Projection Flow (cms)	Calb. UCBOC conc. (mg/l)	Unadjusted UCBOC (kg/day)	Calb. UNBOD conc. (mg/l)	Unadjusted UNBOD (kg/day)	Background Conc. UCBOC (mg/l)	Background Conc. UNBOD (mg/l)	Background % Reduction	Background Load UCBOC (kg/day)	Background Load UNBOD (kg/day)	Actual % Reduction of Man Made Loads	Incem. UCBOC Load Adjusted For % Reduction (LA load)	Incem. UNBOD Load Adjusted For % Reduction (LA load)	Incem. UCBOC Adjusted for MOS (kg/day) (1)	Incem. UNBOD Adjusted for MOS (kg/day) (1)	Projection UCBOC conc. (mg/l)	Projection UNBOD conc. (mg/l)	Proj. UCBOC 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	
BIG CREEK, RKM 134.2 RKM 118		0.00		0.00		0.00	0.00	0%		0.00	75%											
BIG CREEK, RKM 100 TO MITCHNER		0.00		0.00		0.00	0.00	0%		0.00	75%											
BIG CREEK, MITCHNER TO RKM 67.4		0.00		0.00		0.00	0.00	0%		0.00	35%											
BIG CREEK, RKM 67.4 TO WEIR #6	0.2611	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
WEIR #6	0.0036	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
BIG CREEK, WEIR #6 TO WEIR #5	0.3336	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
WEIR #5	0.0036	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
BIG CREEK, WEIR #5 TO WEIR #4	0.4822	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
WEIR #4	0.0036	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
BIG CREEK, WEIR #4 TO WEIR #3	0.2248	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
WEIR #3	0.0036	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
BIG CREEK, WEIR #3 TO WEIR #2	0.3263	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
WEIR #2	0.0036	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
BIG CREEK, WEIR #2 TO WEIR #1	0.6127	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
WEIR #1	0.0036	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
BIG CREEK, WEIR #1 TO BOEUF RVR	0.1813	0.00	0.00	0.00	0.00	0.00	0.00	0%	0.00	0.00	35%	0.00	0.00	0	0	0.00	0.00	0	0	0	0	
<b>Sub-Total benthic loading</b>									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) (%) = **10%**

## Winter TMDL Summary:

### Big Creek in Ouachita basin - 080603

Calculation of the Oxygen Demand TMDL - Kilograms per day			
Load description	WLA (kg/day)	LA (kg/day)	MOS Load (kg/day)
Point Source loads	404		101
Headwater / Tributary loads		147	0
Benthic loads		7,530	478
Incremental Loads		0	0
<b>SUB-TOTAL</b>	<b>404</b>	<b>7,677</b>	<b>579</b>
<b>TMDL = WLA + LA + MOS</b>			
		<b>8,660 kg/day</b>	

**Notes:**

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

Calculation of the Oxygen Demand TMDL - Pounds per day			
Load description	WLA (lbs/day) (1)	LA (lbs/day) (1)	MOS Load (lbs/day) (1)
Point Source loads	891		223
Headwater / Tributary loads		324	0
Benthic loads		16,604	1,054
Incremental Loads		0	0
<b>SUB-TOTAL</b>	<b>891</b>	<b>16,928</b>	<b>1,277</b>
<b>TMDL = WLA + LA + MOS</b>			
		<b>19,096 lbs/day</b>	

Calculation of the Oxygen Demand TMDL - Kilograms per day			
Load description	WLA (kg/day)	LA (kg/day)	MOS Load (kg/day)
Point Source loads	404		101
Natural Nonpoint Loads		3,377	
Manmade Nonpoint Loads		4,300	478
<b>SUB-TOTAL</b>	<b>404</b>	<b>7,677</b>	<b>579</b>
<b>TMDL = WLA + LA + MOS</b>			
		<b>8,660 lbs/day</b>	










Calculation of the Oxygen Demand TMDL - Pounds per day			
Load description	WLA (lbs/day)	LA (lbs/day)	MOS Load (lbs/day)
Point Source loads	891		223
Natural Nonpoint Loads		7,447	
Manmade Nonpoint Loads		9,481	1,054
<b>SUB-TOTAL</b>	<b>891</b>	<b>16,928</b>	<b>1,277</b>
<b>TMDL = WLA + LA + MOS</b>			
		<b>19,096 lbs/day</b>	

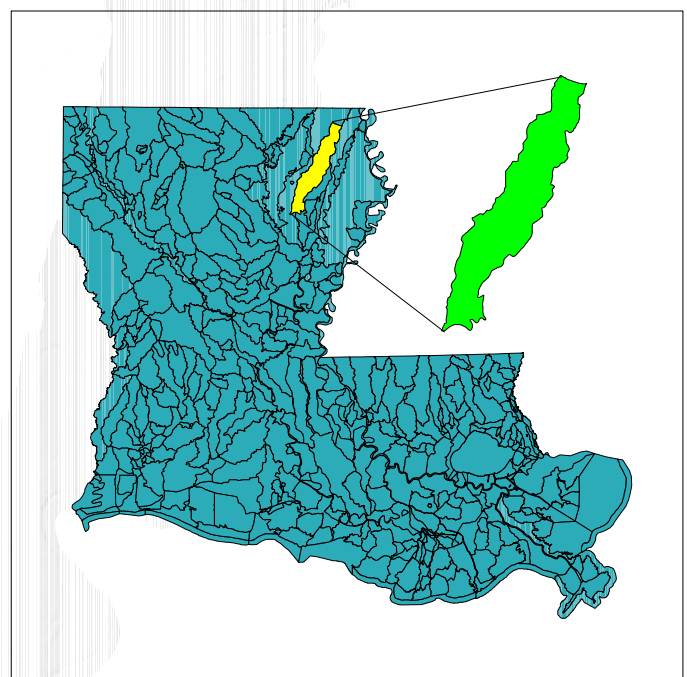
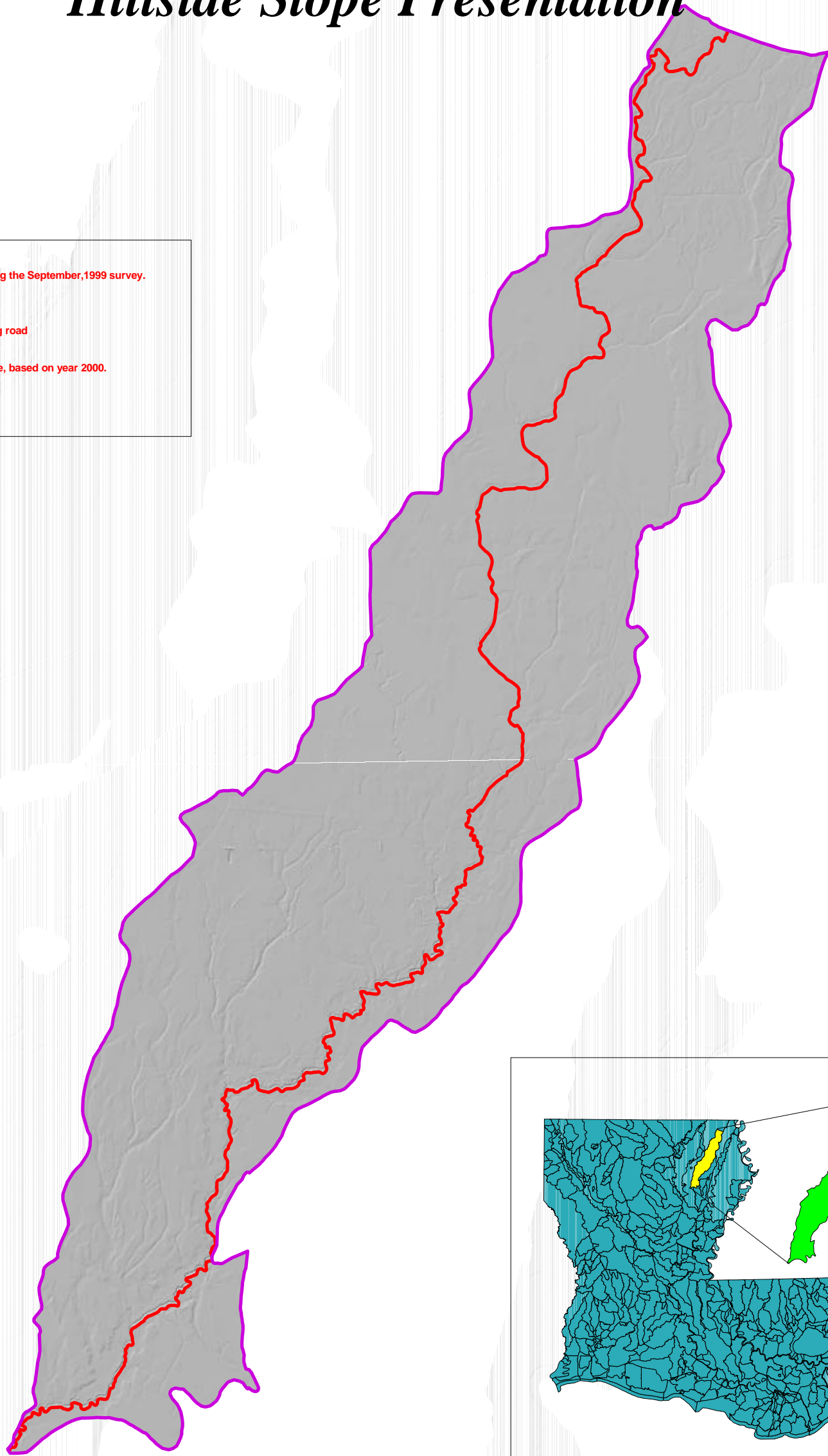
## Appendix F

### Maps and Diagrams

# Big Creek, Subsegment 080903, Ouachita Basin Hillside Slope Presentation



-  Weirs/dams located during the September, 1999 survey.
- La-streetmap.shp
-  Highway
-  Primary road
-  Secondary and connecting road
-  Local road
-  Access road
-  Subsegment boundary line, based on year 2000.
-  Five Kilometer tick marks
-  One Kilometer tick marks



Environmental Technology Division  
 Map No. 200103007, April 2001  
 Base Map: Basin Subsegment lines are from LDEQ's 2000 determinations  
 Hillside view generated from the National Elevation Dataset.  
 Projection: UTM Zone 15 NAD 1983

LDEQ Disclaimer:  
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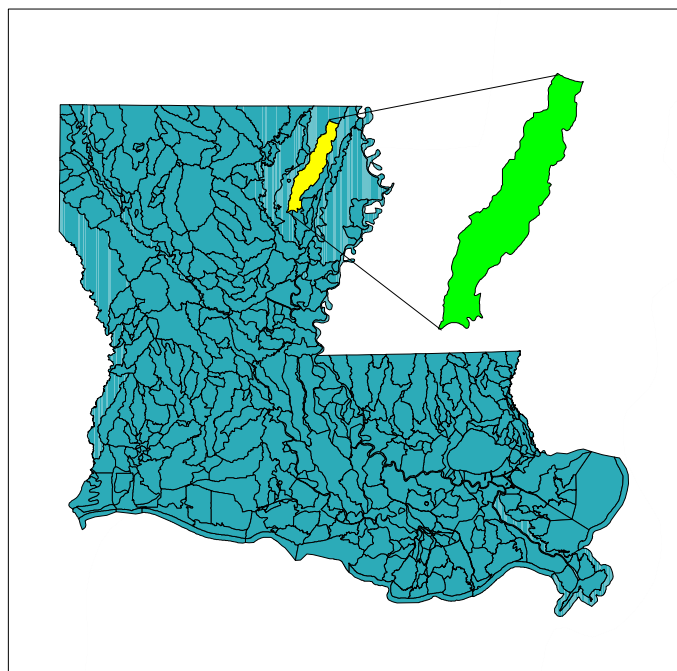
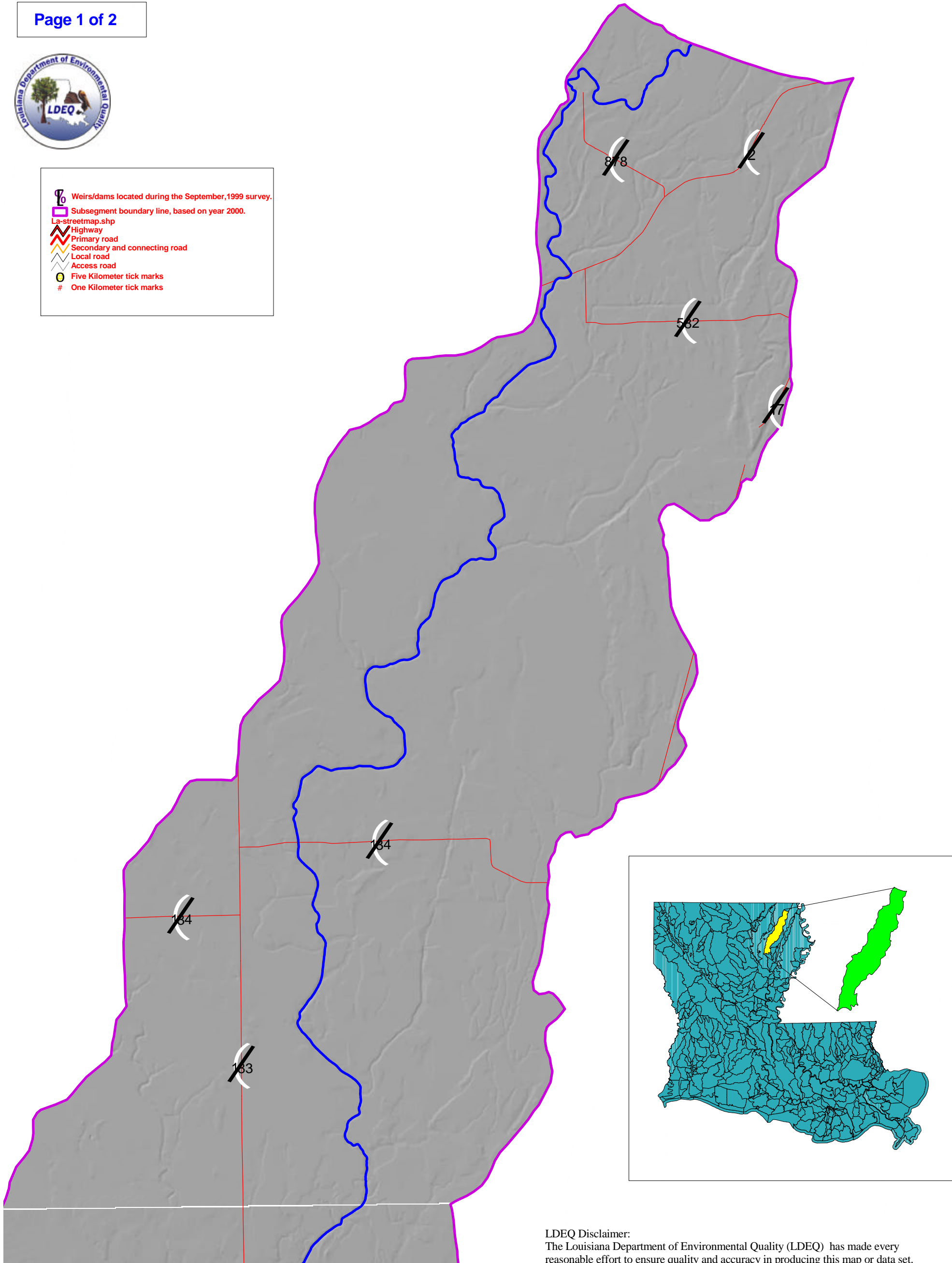




# Big Creek, Subsegment 080903, Ouachita Basin, Upper section, Hillside Slope Presentation

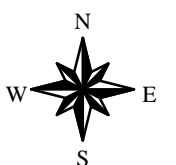


-  Weirs/dams located during the September, 1999 survey.
-  Subsegment boundary line, based on year 2000.
-  La-streetmap.shp
-  Highway
-  Primary road
-  Secondary and connecting road
-  Local road
-  Access road
-  Five Kilometer tick marks
-  One Kilometer tick marks














Environmental Technology Division  
 Map No. 200103007, April 2001  
 Base Map: Basin Subsegment lines are from LDEQ's 2000 determinations  
 Hillside view generated from the National Elevation Dataset.  
 Projection: UTM Zone 15 NAD 1983

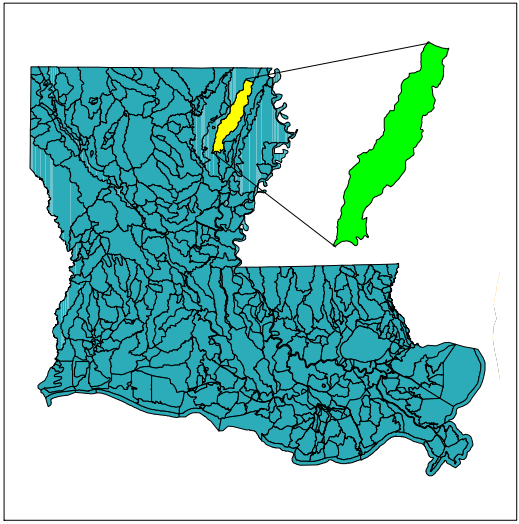
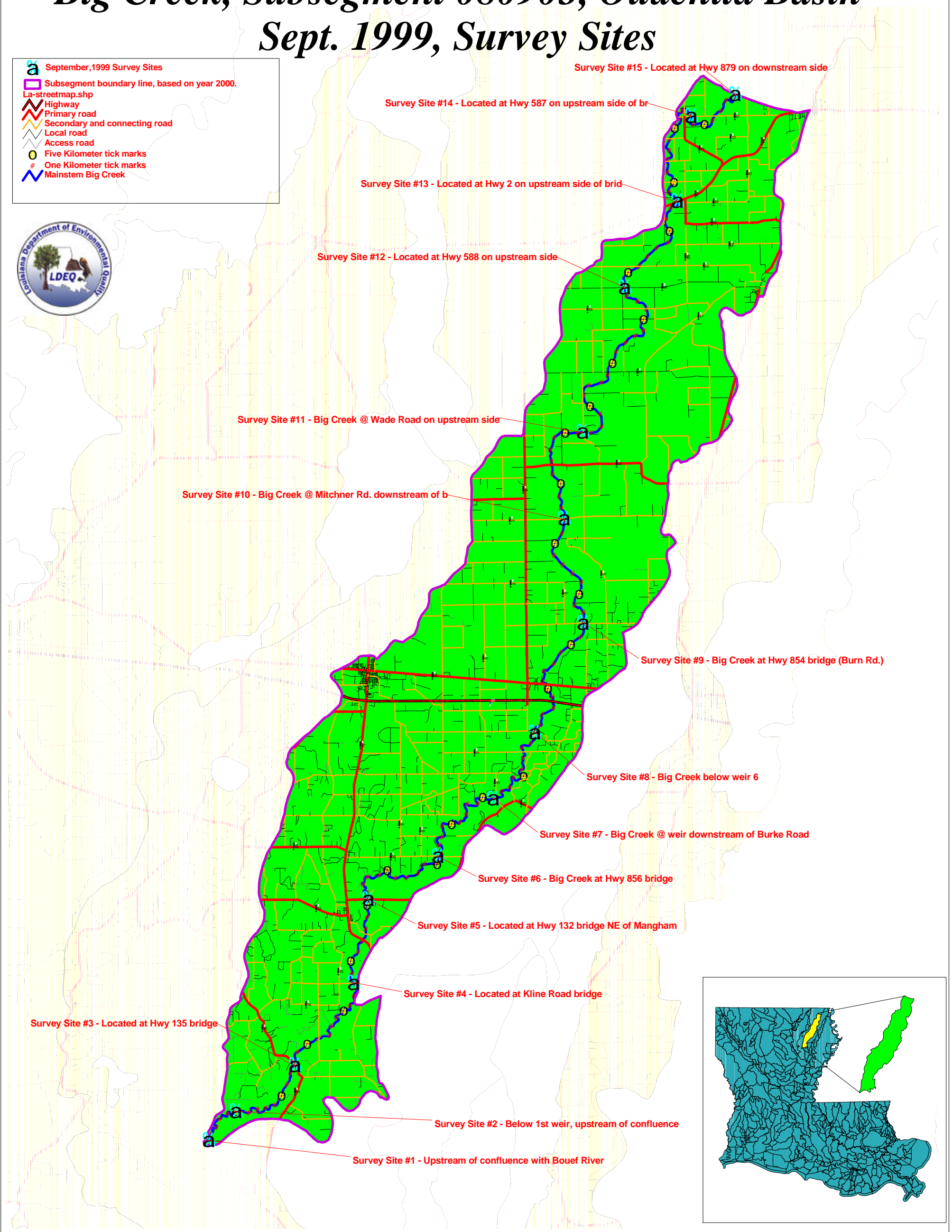
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# Big Creek, Subsegment 080903, Ouachita Basin

## Sept. 1999, Survey Sites

-  September, 1999 Survey Sites
-  Subsegment boundary line, based on year 2000.
-  La-streetmap.shp
-  Highway
-  Primary road
-  Secondary and connecting road
-  Local road
-  Access road
-  Five Kilometer tick marks
-  One Kilometer tick marks
-  Mainstem Big Creek



Environmental Technology Division  
 Map No. 200103005, April 2001  
 Base Map: Basin Subsegment lines are from LDEQ's 2000 determinations.  
 Roads based on ESRI's Streetmap software.  
 Sites determined by LDEQ personnel with GPS.  
 Projection: UTM Zone 15 NAD 1927











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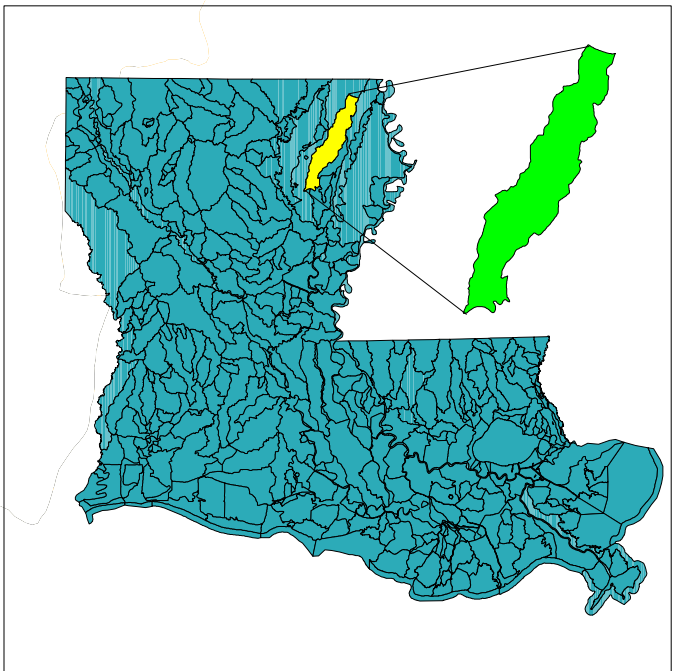
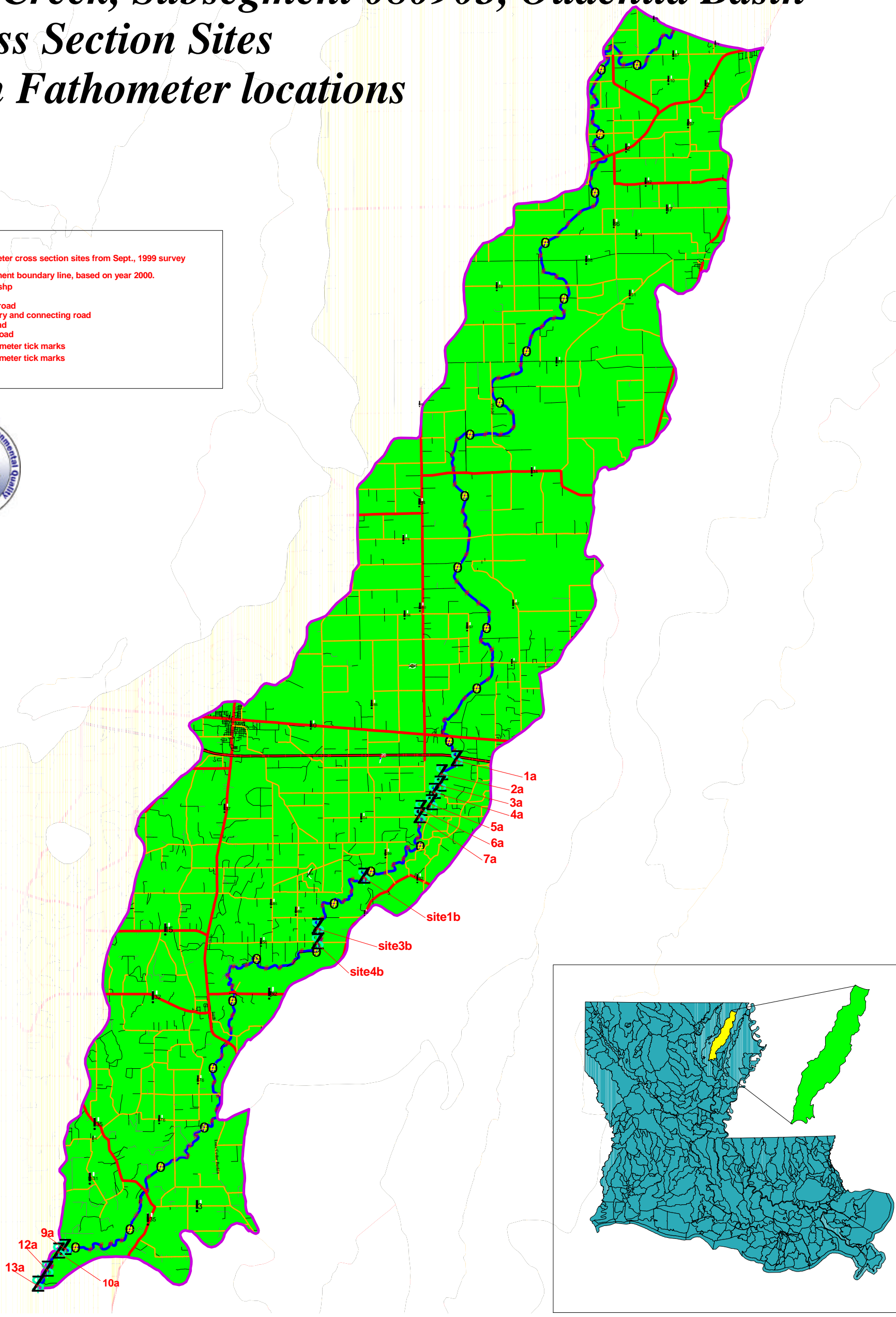






# Big Creek, Subsegment 080903, Ouachita Basin Cross Section Sites with Fathometer locations

-  Fathometer cross section sites from Sept., 1999 survey
-  Subsegment boundary line, based on year 2000.
-  La-streetmap.shp
-  Highway
-  Primary road
-  Secondary and connecting road
-  Local road
-  Access road
-  Five Kilometer tick marks
-  One Kilometer tick marks



Environmental Technology Division  
 Map No. 200103006, April 2001  
 Base Map: Basin Subsegment lines are from LDEQ's 2000 determinations  
 Roads based on ESRI's Streetmap software.  
 Cross Section locations determined by LDEQ personnel with GPS equipment.  
 Projection: UTM Zone 15 NAD 1927

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