TOTAL MAXIMUM DAILY LOAD (TMDL)

For TSS, Turbidity, and Siltation for the 15 Subsegments in the Vermilion River Basin

303(d) listed subsegments

Vermilion River 060801, 060802
Vermilion River Cutoff 060803
Intracoastal Waterway 060804
Bayou Petite Anse- headwaters 060901
Bayou Carlin (Delcambre Canal) 060902
Bayou Tigre 060903
Vermilion River 060904
New Iberia Southern Drainage Canal 060905
Lake Peigneur 060909
Boston Canal and Associated Canals 060910
Vermilion-Teche Basin 060911
Bayou Petite Anse 061101
Intracoastal Waterway 061102
Freshwater Bayou Canal 061103

US EPA Region 6

Final

May 3, 2001

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Executive Summary

Numerous stream segments in the Vermilion watershed are listed for sediment related issues on the 1999 court-ordered 303(d) list for Louisiana. Fifteen segments are listed as having impairments related to total suspended solids (TSS), three are listed as having general siltation limitations and four list turbidity as a cause of impairment. A watershed approach was used in developing this TMDL. This approach is most appropriate when addressing predominately nonpoint source issues such as sediment where inputs are distributed throughout the watershed. TSS loads that will allow compliance with state established turbidity guidelines, have been calculated from relationships established for each subsegment.

This sediment loading TMDL addresses the fifteen listed segments in the Vermilion watershed. The TMDL establishes a relationship between the three specific listings relating them all ultimately to the primary concern of sediment load. Target load estimates were developed from regression analysis relationships between turbidity and total suspended solids (TSS) measurements. TSS loads that will allow compliance with State established turbidity criterion for the watershed have been calculated from relationships established for each sub-basin in the watershed. This TMDL establishes that fluvial erosion processes in the watershed are by far the dominant contributor to these measured parameters. Therefore, this TMDL addresses inorganic suspended solids (i.e., soil and sediment particles from erosion or sediment resuspension) rather than organic suspended solids.

In the Vermilion River basin TMDL, water quality monitoring stations with historical water quality data were evaluated to establish site-specific relationships between turbidity and TSS. Mathematical expressions of this relationship were developed and used to calculate TSS values that if met, would allow compliance with the turbidity guideline in that watershed and reduce the potential for formation of bottom deposits. Because point source contribution of inorganic suspended solids were considered negligible, load allocations for nonpoint source contribution of TSS were set equal to the total allowable loads. An explicit margin of safety of 20% was also incorporated in this TMDL. Necessary reductions range from 0 to 90% with six subsegments requiring no reductions in order to meet the established targets. This is not unexpected, given that in previous analyses, these watersheds were found to be largely meeting the turbidity guidelines established in the Louisiana water quality standards.

1. Introduction

Section 303(d) of the Clean Water Act as amended by the Water Quality Act of 1987, and EPA's regulations at 40 CFR Part 130 require that each state identify those waters within its boundaries not meeting water quality standards. Section 303(d) of the Federal Clean Water Act further requires that states develop TMDL management plans for water bodies determined to be water quality limited. A TMDL documents the amount of a pollutant a water body can assimilate without violating the State's water quality standards. It also allocates that load capacity to known point sources and nonpoint sources. TMDLs are defined in 40 CFR Part 130 as the sum of the individual Waste Load Allocations (WLAs) for point sources and Load Allocations (LAs) for nonpoint sources, including a margin of safety and natural background conditions.

2. Study Area Description

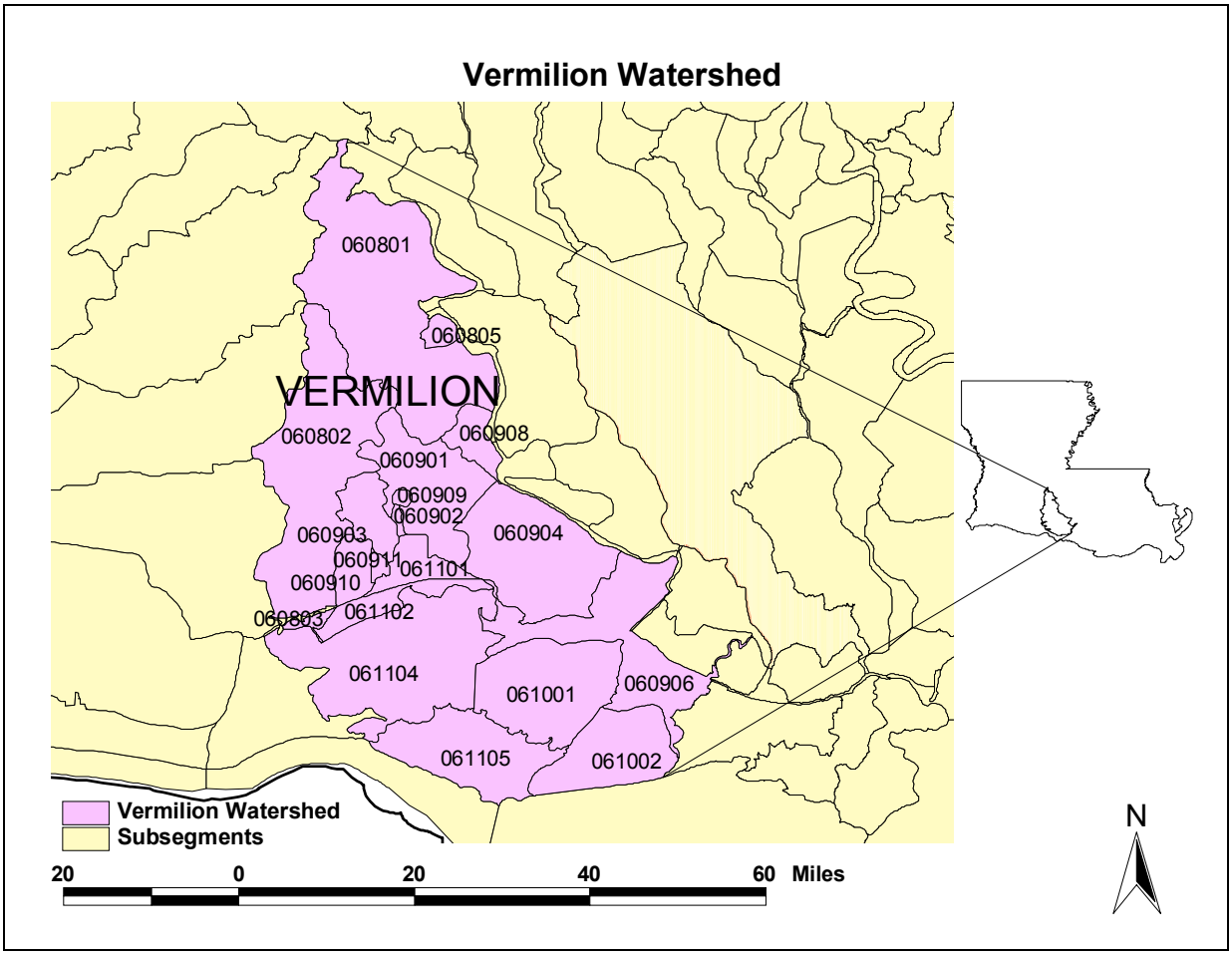
2.1 General Information

The Vermilion-Teche River encompasses the prairie region of the state and a section of the coastal zone. The Vermilion River is located in southwestern Louisiana in the Vermilion-Teche River Basin (Figure 1). The Vermilion-Teche River Basin is bounded on the north by the Red River Basin, on the east by the Atchafalaya Basin, on the west by the Mermentau River Basin and southward by the Gulf of Mexico. Land use in the Vermilion-Teche Basin is largely agriculture, the primary crops being soybeans, sugarcane and rice. The average annual rainfall in the vicinity of the Vermilion River is approximately 58.36 inches. The area is sparsely populated outside its small municipalities and land use is dominated by agriculture. Land uses for the Vermilion River watershed are summarized in Table 1.

Table 1. Land Use (km^2) in the Vermilion River Watershed

Coverage Type	Area km^2	Percent of Watershed
Cropland and Pasture	1792.69	40.1
Non forested Wetland	1228.29	27.5
Mixed Forest	824	18.4
Urban	222.7	5.0
Forested Wetland	209.13	4.7
Deciduous Forest	160.41	3.6
Other	21.39	0.5
Water	10.65	0.2
Evergreen Forest	0.57	0.0
TOTAL	4469.83	100.0

Figure 1. Map of Vermilion Watershed



2.2 Problem Statement

The segments shown in Table 2 were included on the 1999 court-ordered Louisiana 303(d) list as not fully supporting the water quality standard with TSS, siltation, and/or turbidity as the cause of nonsupport. These original assessments were based largely on the best professional judgment of Louisiana Department of Environmental Quality (LDEQ) regional coordinators, often without the benefit of quantitative data. It is believed that informal, qualitative visual observations, not quantitative data, were the basis for many of these listings.

Table 2. 1999 Court ordered listings for the Vermilion basin.

LDEQ Subsegment	Segment Description	Cause of Impairment
060801	Vermilion River	TSS
060802	Vermilion River	TSS
060803	Vermilion River Cutoff	TSS
060804	Intracoastal Waterway	TSS
060901	Bayou Petite Anse	TSS
060902	Bayou Carlin (Delcambre Canal)	TSS
060903	Bayou Tigre	TSS
060904	Vermilion River	TSS
060905[1]	New Iberia Southern Drainage Canal	Turbidity, TSS
060909	Lake Peigneur	TSS, siltation
060910	Boston Canal and Associated Canals	Turbidity, TSS, siltation
060911	Vermilion-Teche Basin	TSS
061101	Bayou Petite Anse	Turbidity, TSS, siltation
061102	Intracoastal Waterway	TSS
061103	Freshwater Bayou Canal	Turbidity, TSS

1 In the last State Triennial review subsegment 060905 was combined with subsegment 060904. The TMDL calculations for 060904 address this listing.

2.2.1 Turbidity and TSS

Turbidity is the measure of the optical property of water that causes light to be either scattered or absorbed. Turbidity may be influenced by a number of factors but is primarily affected by suspended matter such as clay, silt, plankton, or microscopic organisms (APHA, 1992). These constituents are the same components that would contribute to TSS. Although turbidity may be influenced by other factors, effects due to TSS will be captured in a turbidity measure. When evaluations were conducted, using available turbidity data, most of the waters listed for turbidity were found to be meeting the water quality guideline. These waters have been proposed for removal from the court-ordered 303(d) list by separate action (See 65 FR 32148, December 18, 2000). Any remaining turbidity listings are addressed in this TMDL.

The State of Louisiana has established acceptable numeric turbidity guidelines for many of its streams including the Mermentau River basin. The State has not established a numerical criterion for TSS. Given that there is no criterion for TSS in the Louisiana water quality standards and that there is a moderate to strong relationship between turbidity and TSS as evidenced by the correlation coefficients shown in Table 3, a listing under both parameters is considered here to be duplicative. A review of the origin of these listings also provides support for this argument. Turbidity listings on the court-ordered list almost always originated from the states 305(b) or 303(d) lists while siltation and TSS listed waters originated largely from the state's nonpoint source list. EPA believes that since this duplicity occurs regularly it supports the belief that these duplicate listings were likely attributable to different ways of expressing

the same concern of water impairment by different individuals charged with preparing 305(b) reports 303(d) lists or 319 assessments. Delisting has not been proposed for these segments in order to comply with the strictest interpretation of the consent decree. Independent evaluations have been performed to evaluate TSS as a separate listing.

2.2.2 Siltation

Numerous waters are included on the Louisiana court-ordered 303(d) list as impaired due to siltation. As with TSS, there are no numeric guidelines or criteria for siltation and there is little or no existing information available that would allow a direct evaluation of stream substrate conditions. Louisiana's water quality standards provide a link between suspended solids and bottom deposits, stating that floating, settleable, and suspended solids shall not be present in quantities sufficient to cause long-term bottom deposits. For siltation, a water column measure, or indicator, may be used as a quantitative expression of water quality impacts. A water column characteristic that has been widely used as an indicator of the potential for sediment accumulation in streambeds is suspended sediment (EPA, 1999). Siltation may be described as the effect created as suspended matter from the water column settles to the stream bottom. Water column data for TSS is available from the Louisiana water-quality monitoring network. In this TMDL, TSS is used as an indicator for siltation or bottom deposits resulting from inorganic sediment loads.

2.3 Water Quality Standards

Designated uses include: primary contact recreation; secondary contact recreation; propagation of fish and wildlife; subsegment 060801 and 060802 also have agriculture as a designated use.

Numeric criterion for turbidity may be found in the Louisiana Water Quality Standards at §1113.B.9. This reads:

"Turbidity

a) Turbidity other than that of natural origin shall not cause substantial visual contrast with the natural appearance of the waters of the state or impair any designated water use. Turbidity shall not significantly exceed background; background is defined as the natural condition of the water. Determination of background will be on a case-by-case-basis.

b) As a guideline, maximum turbidity levels, expressed as nephelometric turbidity units (NTU), are established and shall apply for the following named water bodies and major aquatic habitat types of the state:

i.) Red, Mermentau, Atachafalya, Mississippi, and Vermilion Rivers and Bayou Teche—150 NTU;
ii.) Estuarine lakes, bays, bayous, and canals—50 NTU;
iii.) Amite, Pearl, Ouachita, Sabine, Calcasieu, Tangipahoa, Tickfaw, and Techefuncte Rivers—50 NTU;
iv.) Freshwater lakes, reservoirs, and oxbows—25 NTU;

v.) Designated scenic streams and outstanding natural resource waters not specifically listed in Subsection B.9.b.i-iv of this Section—25 NTU;

vi.) For other state waters not included in Subsection Bl.9.bi-v of this Section, and in waterbody segments where natural background turbidity exceeds the values specified in these clauses, turbidity in NTU caused by any discharges shall be restricted to the appropriate background value plus 10 percent. This shall not apply to designated intermittent streams."

Narrative criteria related to the water quality characteristics for TSS and siltation are found at §1113.B.3. This reads:

> "Floating, Suspended, and Settleable Solids. There shall be no substances present in concentrations sufficient to produce distinctly visible solids or scum, nor shall there be any formation of long-term bottom deposits of slimes or sludge banks attributable to waste discharges from municipal, industrial, or other sources including agricultural practices, mining, dredging, and the exploration for and production of oil and natural gas. The administrative authority may exempt certain short-term activities permitted under Sections 402 or 404 and certified under Section 401 of the Clean Water Act, such as maintenance dredging of navigable waterways or other short-term activities determined by the state as necessary to accommodate to legitimate uses or emergencies or to protect the public health and welfare."

2.4 Target Determination

To develop a TMDL it is necessary to establish quantitative measures, or indicators, that can be used to establish the relationship between pollutant sources and their impact on water quality. Once an indicator has been selected, a target value for that indicator which distinguishes between the impaired and unimpaired state of the waterbody (e.g. 25 mg/l TSS, or no more than 1000 tons/year sediment yield on average) must be established (USEPA, 1999). Often indicators needed to establish a TMDL are specified as a water quality standard. For example, turbidity no greater than 150 nephelometric turbidity units (NTU) has been adopted as part of the States water quality standards. Often the water quality standard, as in the case with bottom-deposits, is established as a narrative with no associated numeric value. When such numeric values are not available, a target value must be developed for the selected indicator. Where such target values that are representative of the narrative standard are developed, the targets themselves are not water quality standards; rather, they are waterbody-specific numeric targets used by EPA to assess if a water body would be reasonably expected to be impaired based on the state's narrative standard. In this case the narrative standard addresses suspended solids and its relationship to formation of stream-bottom deposits but does not establish a numeric value for its evaluation.

EPA-developed target values or screening levels do not represent a water quality criterion or standard; rather, it is a numeric target used by EPA to assess if a water body would be reasonably expected to be impaired based on the state's no toxics in toxic amounts narrative criterion.

As previously stated, one method of establishing a TMDL target is to establish a relationship between two measured parameters, one of which has a numeric standard. These TMDLs have been developed using an established relationship between turbidity and TSS.

Where such functional relationships are used, they must be derived based on site-specific or comparable reference data.

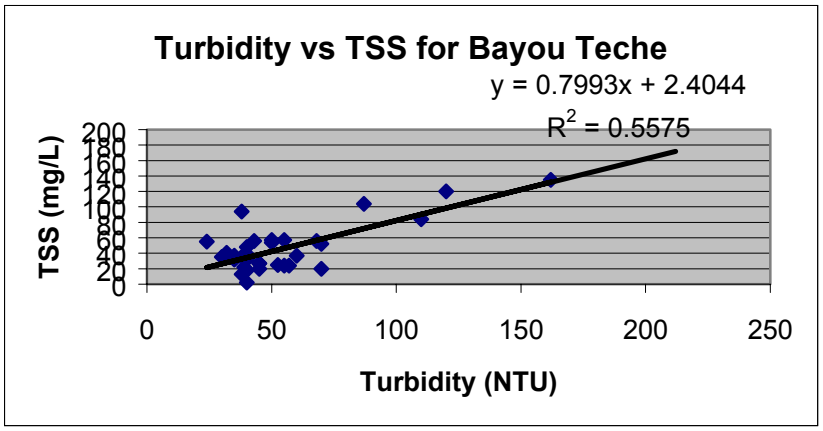
2.4.1 Establishing the relationship

In the Vermilion River basin, historical water quality data collected by LDEQ from established sub-basin monitoring stations from 1980 to present were evaluated using correlation and simple linear regression analyses to determine the subsegment relationship between turbidity and TSS. Additionally, scatter plots of TSS vs. turbidity, such as the one in Figure 2 were created. As can be seen, the plotted points of turbidity and TSS follow a discernable linear pattern in which TSS increases as turbidity increases. This was expected as indicated in our previous discussion of TSS and turbidity. The strength of this relationship is measured using the correlation coefficient (r). The correlation coefficient can be calculated by taking the square root of the coefficient of determination (R^2) from the regression analysis. As the value of r approaches one, the relationship is said to have a high correlation and thus a strong relationship. Taking the square root of the R^2 value of 0.56 shown in Figure 2 results in a correlation coefficient of 0.75 indicating there is a strong correlation or relationship between these two parameters. Consequently, a meaningful mathematical expression of this relationship may be established using simple linear regression.

A simple linear regression analysis can be used to determine the mathematical equation that represents the relationship between TSS and turbidity. This equation can then be used to predict the TSS value when the turbidity value is known. As mentioned above, a scatter plot can be created to graphically show the relationship between the two parameters by plotting the observed TSS values against the observed turbidity values. Adding the "best fit line" through the points on the graph provides a visually representation of the mathematical equation from the regression analysis and the observed data points. The mathematical equation represented by this "best fit line" can be used to predict a value of y for a given value of x. This line is expressed mathematically by the general formula, $y = b(x) + c$, where y is the predicted value of the dependent variable (TSS in this case), x is the known or observed value of the independent variable (turbidity in this case), b is the slope of the line and c is a constant. This segment specific formula can then used to calculate a TSS concentration, in mg/L, for a given turbidity value.

The strength of the linear relationship is measured by the coefficient of determination (R^2) calculated during the regression analysis (Zar, 1996). Therefore, the R^2 value is the percentage of the total variation in y (TSS) that is explained or accounted for by the fitted regression (x). Therefore, using the example above, 56% of the variation in TSS is accounted for by turbidity with the remaining 44% of variation in TSS being unexplained. Applying the formula for the line in Figure 2, a target TSS concentration may be calculated by substituting the appropriate turbidity guideline (150 NTU) for x and solving the equation for y. The resulting value is the associated TSS value (mg/L) that would allow for compliance with the turbidity guideline (NTU).

Figure 2. Typical Turbidity vs. TSS scatter plot for Bayou des Cannes.



Using the process described above, coefficient and regression analyses were run for each of the listed subsegments producing separate regression equations. All of the equations were statistically significant at an alpha level of ≤ 0.009, except for subsegment 060903 which was significant at an alpha level of 0.05 (Table 3). From these equations, target TSS values were calculated for each of the listed subsegments in the Vermilion watershed. To address the issue of uncertainty each calculated target value has been reduced by 20%. Values shown in Table 3 reflect this reduction. This will be used as an explicit margin of safety.

2.5 TSS Sources

Two primary sources of TSS and sediment are erosional processes in the watershed and resuspension of bottom deposits to the water column. Particulate matter resulting from the weathering of host rock is delivered to stream channels through various erosional processes, including sheetwash, gully and rill erosion, wind, landslides, dry ravel, and human excavation. Additionally, sediments are often produced as a result of stream channel and bank erosion and channel disturbance. Movement of eroded sediments downslope from their points of origin into stream channels and through stream systems is influenced by multiple interacting factors. Eroded sediments are often trapped on hillslopes and stored in and alongside stream channels (US EPA, 1999). During high flow events stored sediment become mobilized and suspend in the water column. As the flow decreases the suspended solids settle downstream. Settled suspended solids (bottom sediment) can become resuspended in the water column during times of increased stream flow and by wind and wave action in shallow lakes.

Table 3. Target calculations for the Vermilion watershed.

Sub-Basin Number	Segment Description	Turbidity Guideline (NTU)	TSS Guideline (mg/L)	Current Ambient TSS (mg/l)	Correlation Coefficient (r)	p-value
060801	Vermilion River[a]	150	103	77	0.78	<0.001
060802	Vermilion River[a]	150	103	87	0.47	<0.001
060803	Vermilion River Cutoff [sa] (E)	50	47	82	0.97	<0.001
060804	Intracoastal Waterway [sa] (E)	50	43	96	0.92	<0.001
060901	Bayou Petite Anse [sa] (E)	50	30	59	0.74	0.009
060902	Bayou Carlin (Delcambre Canal) [sa] (E)	50	39	57	0.60	<0.001
060903	Bayou Tigre [sa] (E)	50	39	36	0.61	0.05
060904	Vermilion River [sa] (E)	50	56	102	0.97	<0.001
060905	New Iberia Southern Drainage Canal [sa] (E)	50	56	102	0.97	<0.001
060909	Lake Peigneur [sa]	25	22	41	0.96	<0.001
060910	Boston Canal and Associated Canals [sa] (E)	50	63	136	0.97	<0.001
060911	Dugas Canal [sa] (E)	50	50	50	0.82	0.002
061101	Bayou Petite Anse [sa] (E)	50	49	56	0.96	<0.001
061102	Intracoastal Waterway [sa] (E)	50	52	68	0.96	<0.001
061103	Freshwater Bayou Canal [sa] (E)	50	37	442	0.98	<0.001

a – multiple year annual data
sa – semi-annual data (June – December 1998)
E - estuarine

2.5.1 Nonpoint Sources

The most significant source of TSS and sediment in this watershed is suspended solids in wet weather runoff. Much of this sediment load comes from upland areas of the watershed that have developed more agricultural uses. Land use analysis shows that 40% of the land in the upland area is in cropland or pasture. Sediment load in the lower portions of the watershed, where the predominant land use type is marsh, is a result of inputs from the upland uses and wave and wind action that causes this material to be re-suspended.

2.5.2 Point Sources

Point sources do not represent a significant source of TSS as defined in this TMDL. Point sources discharge primarily organic TSS, which does not contribute to habitat impairment resulting from sedimentation. Because the point sources are minor contributors and discharges

of organic suspended solids from point sources are already addressed by LDEQ through their permitting of point sources to maintain water quality standards for DO, the wasteload allocations for point source contributions were set to zero. This TMDL only addresses the landform contribution of TSS/sediment and does not address the insignificant point source contributions.

3. TMDL Load Calculations

3.1 Calculation of Loads

Load allocations are calculated by first calculating the allowable load as expressed by the TSS target value. This is accomplished by the formula:

Load (lbs/day) = Flow (mgd) * TSS concentration (mg/l) * 8.34

where 8.34 is a constant for unit conversions and TSS target and ambient concentration is taken directly from Table 3. The resulting values are shown in Table 4.

The flow at the outfall of each subsegment was calculated based on the area of the subsegment and a rate that predicts the flow per square mile of area. USGS stations were used as appropriate to the drainage area under consideration (USGS, 1997). The segment relationships are graphically represented in Appendix B.

3.2 Total Maximum Daily Load

This TMDL is expressed in terms of percent reduction needed to achieve the target TSS load for the listed subsegments. The TSS percent reductions are expressed in Table 4.

Table 4. Calculation of Target Allocations and Current Condition Loads

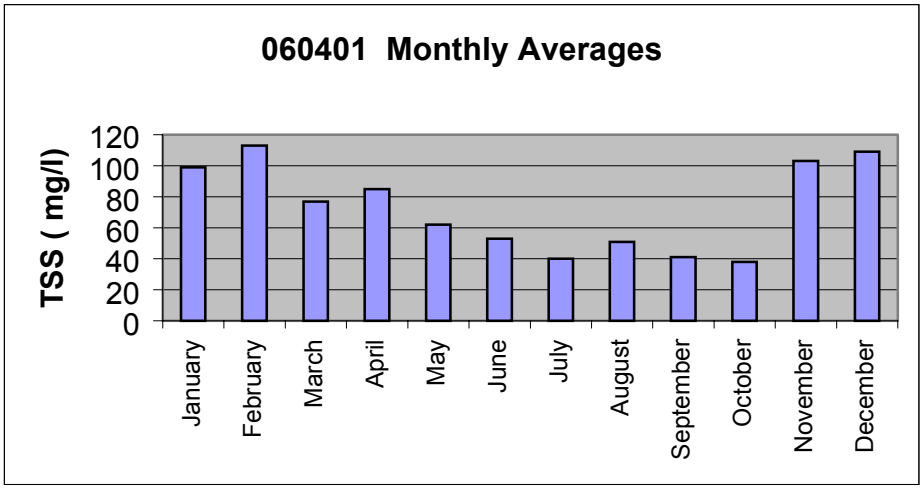
Sub-segment Number	Stream Description	Flow (mgd)	TMDL Loading (lbs/day)	Ambient Stream Loading (lbs/day)	MOS (lbs/day)	Percent Reduction
60801	Vermilion River	1097	1180218	722769	236044	0%
60802	Vermilion River	1509	1623473	1208166	324695	0%
60803	Vermilion River Cutoff (E)	1515	745471	1263510	149094	41%
60804	Intracoastal Waterway (E)	4	1768	3203	354	45%
60901	Bayou Petite Anse (E)	127	39190	62492	7838	37%
60902	Bayou Carlin (Delcambre Canal) (E)	6	2402	3603	480	33%
60903	Bayou Tigre (E)	42	17164	12610	3433	0%
60904	Vermilion River (E)	179	105993	152272	21199	30%
60905*	New Iberia Southern Drainage (E)					
60909	Lake Peigneur	3	701	1026	140	32%
60910	Boston Canal and Associated Canals (E)	29	18865	32893	3773	43%
60911	Dugas Canal (E)	5	2585	2085	517	0%
61101	Bayou Petite Anse (E)	214	108870	99947	21774	0%
61102	Intracoastal Waterway (E)	37	20983	20983	4197	0%
61103	Freshwater Bayou (E) Canal	128	49106	471844	9821	90%

** In the last State Triennial review subsegment 060905 was combined with subsegment 060904. The TMDL calculations for 060904 address this listing*

3.3 Seasonal Variation

Section 303(d)(1) requires that all TMDLs be "established at a level necessary to implement the applicable water quality standard with seasonal variations". Seasonal variability was considered in calculating the current condition TSS values. A review of the data shows that, in general, values greater than the target values are more likely to occur in the months of February through May. Because of this uneven distribution of exceedances it was determined that a simple arithmetic mean was not appropriate for establishing the current condition. First, to determine if there was a critical period, the data for a subsegment was segregated into months for which a monthly mean value was calculated. The monthly mean was then compared to the target TSS value. The four months with the greatest average were then averaged to get an estimation of the current ambient condition. For example, in the chart below the months of November through February are the highest four months. The average was taken of all data from these months to represent the current condition. This approach addresses the critical period for TSS loading.

Figure 3. Monthly means for subsegment 060401.



3.4 Margin of Safety

The Clean Water Act requires that each TMDL be established with a margin of safety (MOS). This requirement for a MOS is intended to account for uncertainty in available data or in the actual effect controls will have on the loading reductions and receiving water quality. A MOS may be expressed explicitly as unallocated assimilative capacity or implicitly through conservative analytical assumptions used in establishing the TMDL. The MOS is not intended to compensate for failure to consider known sources. An explicit MOS of 20% is expressed in this TMDL.

4. Reasonable Assurance and Other Relevant Information

LDEQ receives federal funding under the Clean Water Act Section 319(h) Nonpoint Source program. The Louisiana Nonpoint Source Management Plan identifies that the LDEQ will continue to work cooperatively with the federal, state and local partners that assist them in implementation of statewide educational programs and watershed protection and restoration projects to restore the designated uses of waterbodies. The Management Plan also identifies the State's goal to address nonpoint sources of pollution in the Mermentau/Vermilion basin by the end on of 2007. It is anticipated that the state will evaluate if actions have been successful in restoring designated uses in the Mermentau/Vermilion by the end of 2008.

LDEQ utilizes funds under Section 106 of the federal Clean Water Act and under the authority of the Louisiana Environmental Quality Act to operate an established program for permitting, enforcement and monitoring the quality of the state's surface waters. The LDEQ Surveillance Section collects surface water samples at various locations, utilizing appropriate sampling methods and procedures for ensuring the quality of the data collected. The objectives of the surface-water monitoring program are to determine the quality of the state's surface

waters, to develop a long-term database for water quality trend analysis, and to monitor the effectiveness of pollution controls. The data obtained through the surface-water monitoring program is used to develop the state's biennial 305(b) report (*Water Quality Inventory*) and the 303(d) list of impaired waters. This information is also utilized in establishing priorities for the LDEQ nonpoint source program.

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 established by the time the first priority basins are 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 establishment 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. The Vermilion-Teche River Basin will be sampled again in 2003.

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.)

5. Public Participation

When EPA establishes a TMDL, 40 C.F.R. § 130.7(d)(2) requires EPA to publicly notice and seek comment concerning the TMDL. Pursuant to an October 1, 1999, Court Order, EPA prepared this TMDL. After submission of this TMDL to the Court, EPA commenced preparation of a notice seeking comments, information and data from the general and affected public. Comments and additional information were submitted during the public comment period and this Court Ordered TMDL was revised accordingly. EPA has transmitted this revised TMDL to the Court, and to the Louisiana Department of Environmental Quality (LDEQ) for incorporation into LDEQ's current water quality management plan.

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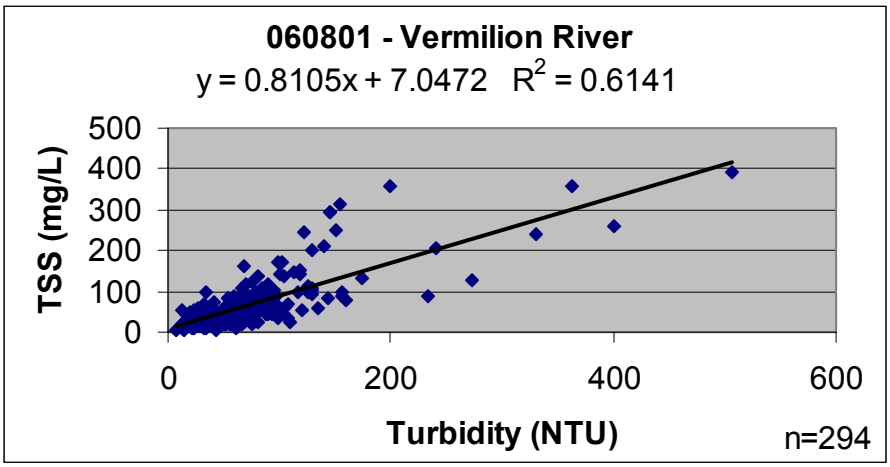
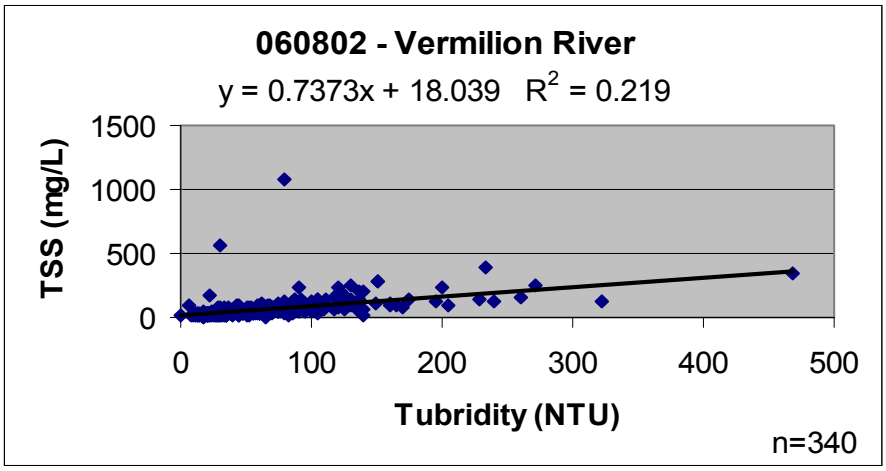
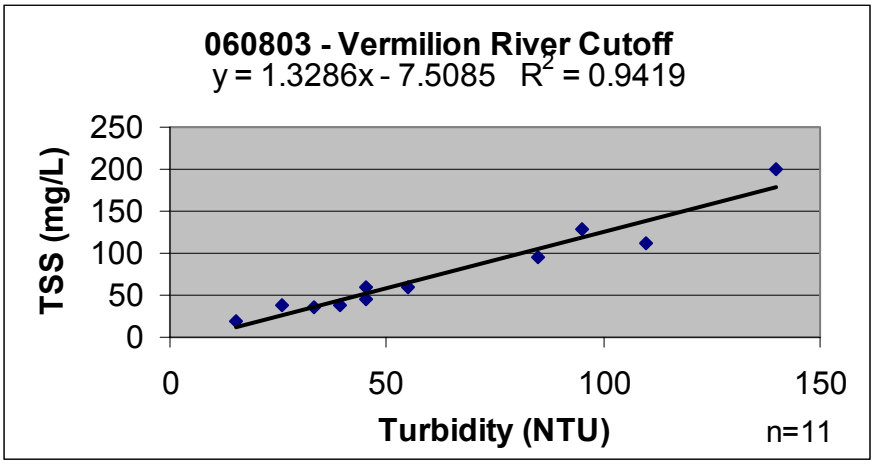
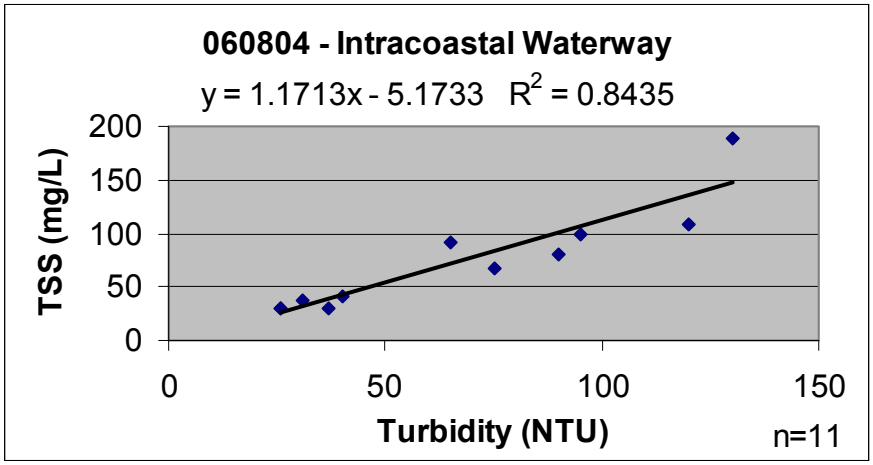
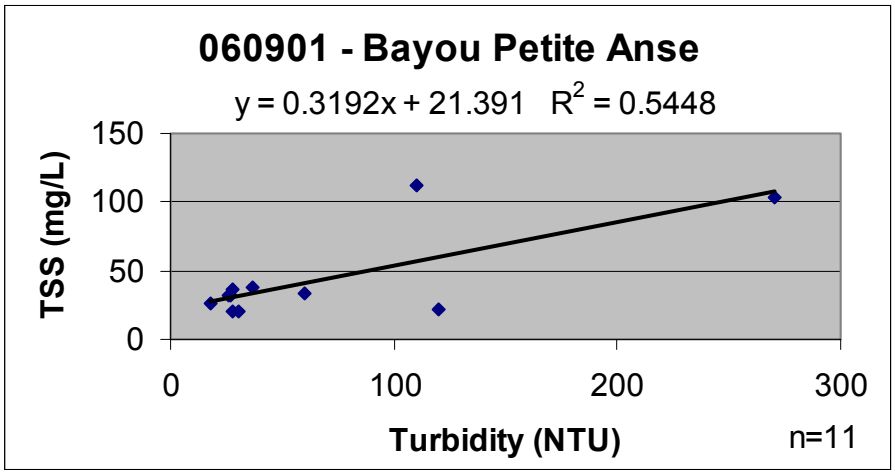
APPENDIX A Scatter plots for each regression analysis
including regression equation and R^2 value

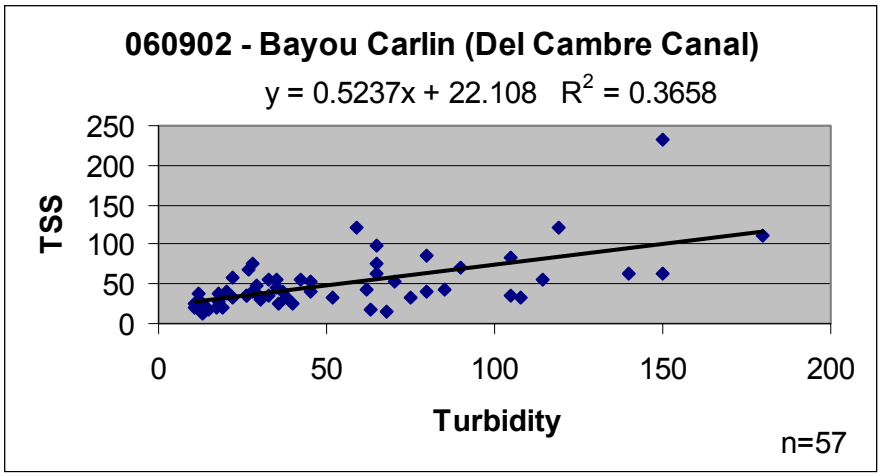

060801 - Vermilion River
y = 0.8105x + 7.0472 R2 = 0.6141
TSS (mg/L)
500
400
300
200
100
0
0
200
400
600
Turbidity (NTU)
n=294

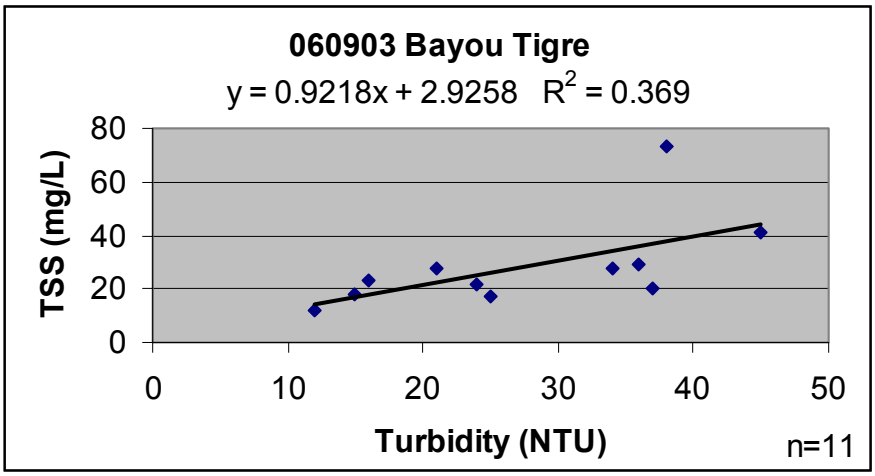

060802 - Vermilion River
y = 0.7373x + 18.039 R2 = 0.219
TSS (mg/L)
1500
1000
500
0
0
100
200
300
400
500
Tubridity (NTU)
n=340

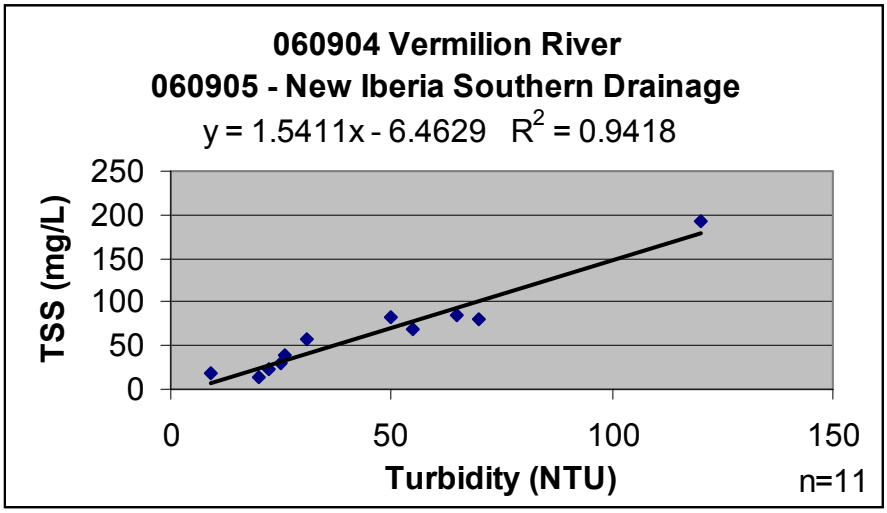

060803 - Vermilion River Cutoff
y = 1.3286x - 7.5085 R2 = 0.9419
TSS (mg/L)
250
200
150
100
50
0
0
50
100
150
Turbidity (NTU)
n=11

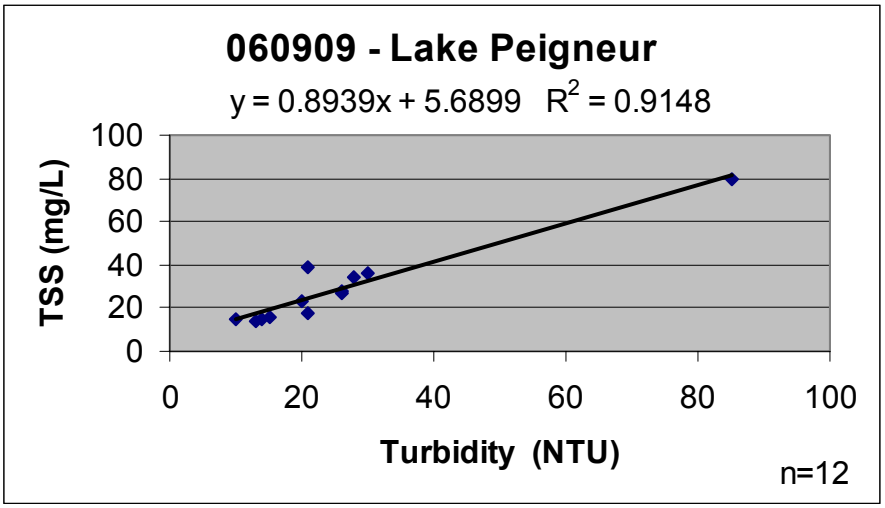

060804 - Intracoastal Waterway
y = 1.1713x - 5.1733 R2 = 0.8435
TSS (mg/L)
200
150
100
50
0
0
50
100
150
Turbidity (NTU)
n=11

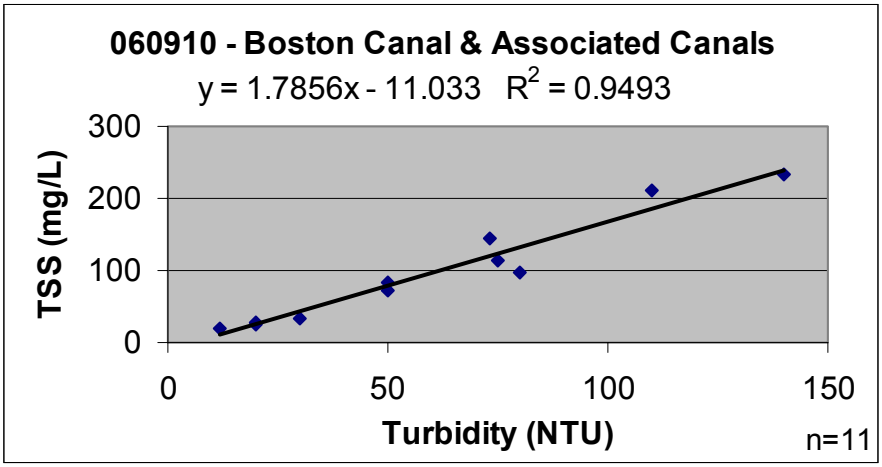

060901 - Bayou Petite Anse
y = 0.3192x + 21.391 R2 = 0.5448
TSS (mg/L)
150
100
50
0
0
100
200
300
Turbidity (NTU)
n=11

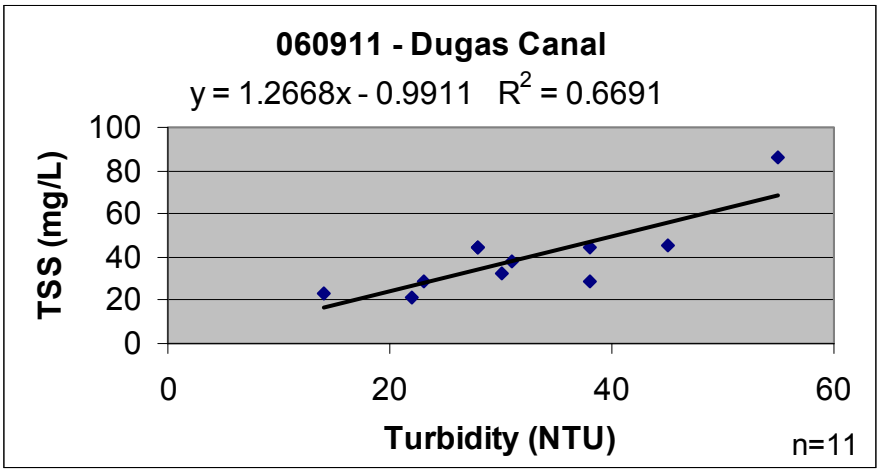

060902 - Bayou Carlin (Del Cambre Canal)
y = 0.5237x + 22.108 R2 = 0.3658
TSS
250
200
150
100
50
0
0
50
100
150
200
Turbidity
n=57

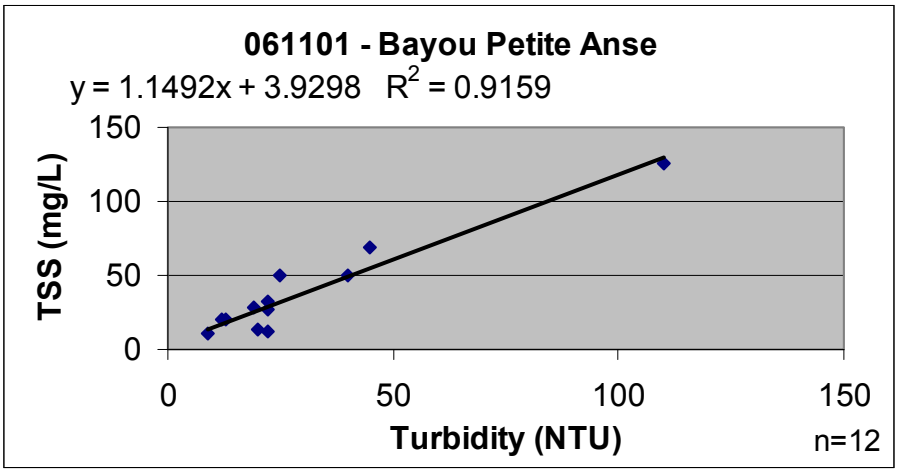

060903 Bayou Tigre
y = 0.9218x + 2.9258 R2 = 0.369
TSS (mg/L)
80
60
40
20
0
0
10
20
30
40
50
Turbidity (NTU)
n=11


060904 Vermilion River
060905 - New Iberia Southern Drainage
y = 1.5411x - 6.4629 R2 = 0.9418
TSS (mg/L)
250
200
150
100
50
0
0
50
100
150
Turbidity (NTU)
n=11


060909 - Lake Peigneur
y = 0.8939x + 5.6899 R2 = 0.9148
TSS (mg/L)
100
80
60
40
20
0
0
20
40
60
80
100
Turbidity (NTU)
n=12


060910 - Boston Canal & Associated Canals
y = 1.7856x - 11.033 R2 = 0.9493
TSS (mg/L)
300
200
100
0
0
50
100
150
Turbidity (NTU)
n=11


060911 - Dugas Canal
y = 1.2668x - 0.9911 R2 = 0.6691
TSS (mg/L)
100
80
60
40
20
0
0
20
40
60
Turbidity (NTU)
n=11


061101 - Bayou Petite Anse
y = 1.1492x + 3.9298 R2 = 0.9159
TSS (mg/L)
150
100
50
0
0
50
100
150
Turbidity (NTU)
n=12

APPENDIX B Flow calculation methodology

seg	area	rate	flow(cfs)	seg	area	rate	flow(cfs)	seg	area	rate	flow(cfs)	Flow at Seg end cfs	MGD
060901	110.87	1.769	196.129									196	127
				060909	3.06	1.769	5.41314					5	3
				060902	2.62	1.769	4.63478					10	6
								060903	36.38	1.769	64.3562	64	42
				060911	4.46	1.769	7.88974					8	5
061101	30.12	1.769	53.2823									332	214
xxxxxxxxx													
trans in			1131.1										
060801	320.37	1.769	566.735									1698	1097
trans in			206.63									1904	1231
060802	243.27	1.769	430.345									2335	1509
060803	5.51	1.769	9.74719									2345	1515
xxxxxxxxx													
direct discharge													
060804	3.19	1.769	5.64311									6	4
060904	156.48	1.769	276.813									277	179
060910	24.93	1.769	44.1012									44	29
061102	32.03	1.769	56.6611									57	37
061103	112.09	1.769	198.287									198	128

The flow at the outfall of each subsegment was calculated based on the area of the subsegment and a rate that predicts the flow per square mile of area. Six stations were used to establish the rates and calibrate the flows at the observed stations. ***The stations were used as appropriate to the drainage area under consideration.*** This method uses the gage flow to be a composite of the base flow of the steam, the rainfall runoff on the drainage area above that point, the distributaries, the withdrawals from the stream, the point discharges, and return flow of the withdrawals from the stream. Six stations were used to prepare the subsegment flows for basins 5 and 6. The stations were 08012000 on Bayou Nezpique; 08010000 on Bayou Des Cannes; 07382500 on Bayou Courtableau; 07383500 on Bayou Des Glaises; 07385500 on Bayou Teche, Arnaudville; 07385700 on Bayou Teche, Keystone. The subsegment relationships are graphically represented in the table presented above. An Ishikawa type diagram was used to represent the tributary system of the basin in a spreadsheet format. Each row of the spreadsheet represents one subsegment, or a subsegment transfer flow. The subsegment number for the row will be listed in one of three columns. The far left column has the subsegments that represent the main stem of the stream, flowing from the top of the page down. Tributary subsegments are listed in the second or third column with the label "Subseg". The point that the tributary flows into the main stem is represented by a horizontal line under the segment number extending to the left and intersecting with the column one vertical line (which represents the main stem). Multiple subsegments on a tributary will be depicted with a vertical in the "Subseg" column, with horizontal lines tying into it. The lowest tributary subsegment that flows into the main stem will have a horizontal line under the segment number extending to the left and intersecting with the column one vertical line. A tributary to a tributary will be shown in the third column labeled "Subseg". For readability, the subsegment number has been repeated in the last column on the right. To obtain the average flow at the outflow of a segment, find the subsegment number in the far right column. The column to the left will be the flow in MGD, the column to the left of that will be the flow in CFS.

APPENDIX C: Ambient Monitoring Data

SUBSEGMENT	SITE	SITE NAME	DATE	TURB	TSS
060801	0002	Vermilion River near Breaux Bridge, LA	3/7/78	63	76
060801	0002	Vermilion River near Breaux Bridge, LA	4/10/78	34	20
060801	0002	Vermilion River near Breaux Bridge, LA	5/8/78	255	672
060801	0002	Vermilion River near Breaux Bridge, LA	6/12/78	77	44
060801	0002	Vermilion River near Breaux Bridge, LA	7/10/78	18	46
060801	0002	Vermilion River near Breaux Bridge, LA	8/14/78	45	56
060801	0002	Vermilion River near Breaux Bridge, LA	9/11/78	145	354
060801	0002	Vermilion River near Breaux Bridge, LA	10/9/78	43	64
060801	0002	Vermilion River near Breaux Bridge, LA	11/13/78	17	38
060801	0002	Vermilion River near Breaux Bridge, LA	12/11/78	78	160
060801	0002	Vermilion River near Breaux Bridge, LA	1/8/79	86	212
060801	0002	Vermilion River near Breaux Bridge, LA	2/12/79	73	0
060801	0002	Vermilion River near Breaux Bridge, LA	3/12/79	93	176
060801	0002	Vermilion River near Breaux Bridge, LA	4/16/79	90	46
060801	0002	Vermilion River near Breaux Bridge, LA	5/14/79	58	0
060801	0002	Vermilion River near Breaux Bridge, LA	6/11/79	42	34
060801	0002	Vermilion River near Breaux Bridge, LA	7/9/79	160	0
060801	0002	Vermilion River near Breaux Bridge, LA	8/13/79	0	0
060801	0002	Vermilion River near Breaux Bridge, LA	9/10/79	42	0
060801	0002	Vermilion River near Breaux Bridge, LA	10/9/79	27	56
060801	0002	Vermilion River near Breaux Bridge, LA	11/5/79	34	30
060801	0002	Vermilion River near Breaux Bridge, LA	12/11/79	31	34
060801	0002	Vermilion River near Breaux Bridge, LA	1/14/80	125	112
060801	0002	Vermilion River near Breaux Bridge, LA	2/11/80	125	0
060801	0002	Vermilion River near Breaux Bridge, LA	3/11/80	59	90
060801	0002	Vermilion River near Breaux Bridge, LA	4/14/80	140	210
060801	0002	Vermilion River near Breaux Bridge, LA	5/12/80	47	28
060801	0002	Vermilion River near Breaux Bridge, LA	6/9/80	0	0
060801	0002	Vermilion River near Breaux Bridge, LA	8/11/80	0	0
060801	0002	Vermilion River near Breaux Bridge, LA	9/15/80	23	44
060801	0002	Vermilion River near Breaux Bridge, LA	10/13/80	53	82
060801	0002	Vermilion River near Breaux Bridge, LA	11/18/80	145	292
060801	0002	Vermilion River near Breaux Bridge, LA	12/8/80	40	46
060801	0002	Vermilion River near Breaux Bridge, LA	1/12/81	30	50
060801	0002	Vermilion River near Breaux Bridge, LA	3/9/81	100	144
060801	0002	Vermilion River near Breaux Bridge, LA	4/14/81	57	62
060801	0002	Vermilion River near Breaux Bridge, LA	5/11/81	155	312
060801	0002	Vermilion River near Breaux Bridge, LA	6/8/81	130	200
060801	0002	Vermilion River near Breaux Bridge, LA	7/14/81	77	78
060801	0002	Vermilion River near Breaux Bridge, LA	8/10/81	25	32
060801	0002	Vermilion River near Breaux Bridge, LA	9/15/81	33	48
060801	0002	Vermilion River near Breaux Bridge, LA	10/13/81	19	48
060801	0002	Vermilion River near Breaux Bridge, LA	12/14/81	57	72
060801	0002	Vermilion River near Breaux Bridge, LA	2/9/82	93	48
060801	0002	Vermilion River near Breaux Bridge, LA	3/9/82	72	42
060801	0002	Vermilion River near Breaux Bridge, LA	4/12/82	96	104
060801	0002	Vermilion River near Breaux Bridge, LA	5/10/82	150	250

060801	0002	Vermilion River near Breaux Bridge, LA	6/13/82	23	46
060801	0002	Vermilion River near Breaux Bridge, LA	7/12/82	62	72
060801	0002	Vermilion River near Breaux Bridge, LA	8/9/82	64	88
060801	0002	Vermilion River near Breaux Bridge, LA	9/13/82	40	46
060801	0002	Vermilion River near Breaux Bridge, LA	10/11/82	16	14
060801	0002	Vermilion River near Breaux Bridge, LA	11/15/82	24	16
060801	0002	Vermilion River near Breaux Bridge, LA	12/13/82	28	16
060801	0002	Vermilion River near Breaux Bridge, LA	1/10/83	52	20
060801	0002	Vermilion River near Breaux Bridge, LA	2/7/83	97	88
060801	0002	Vermilion River near Breaux Bridge, LA	3/15/83	71	48
060801	0002	Vermilion River near Breaux Bridge, LA	4/11/83	130	92
060801	0002	Vermilion River near Breaux Bridge, LA	5/9/83	50	52
060801	0002	Vermilion River near Breaux Bridge, LA	6/13/83	70	50
060801	0002	Vermilion River near Breaux Bridge, LA	8/8/83	110	24
060801	0002	Vermilion River near Breaux Bridge, LA	9/12/83	36	26
060801	0002	Vermilion River near Breaux Bridge, LA	10/11/83	23	26
060801	0002	Vermilion River near Breaux Bridge, LA	11/14/83	44	26
060801	0002	Vermilion River near Breaux Bridge, LA	12/12/83	400	260
060801	0002	Vermilion River near Breaux Bridge, LA	1/9/84	60	24
060801	0002	Vermilion River near Breaux Bridge, LA	2/13/84	507	390
060801	0002	Vermilion River near Breaux Bridge, LA	3/13/84	68	40
060801	0002	Vermilion River near Breaux Bridge, LA	4/10/84	88	46
060801	0002	Vermilion River near Breaux Bridge, LA	5/15/84	51	30
060801	0002	Vermilion River near Breaux Bridge, LA	6/12/84	160	80
060801	0002	Vermilion River near Breaux Bridge, LA	7/9/84	99	32
060801	0002	Vermilion River near Breaux Bridge, LA	8/14/84	0	62
060801	0002	Vermilion River near Breaux Bridge, LA	9/11/84	35	42
060801	0002	Vermilion River near Breaux Bridge, LA	10/8/84	46	38
060801	0002	Vermilion River near Breaux Bridge, LA	11/14/84	33	12
060801	0002	Vermilion River near Breaux Bridge, LA	12/12/84	75	22
060801	0002	Vermilion River near Breaux Bridge, LA	1/15/85	21	10
060801	0002	Vermilion River near Breaux Bridge, LA	2/11/85	363	360
060801	0002	Vermilion River near Breaux Bridge, LA	3/12/85	68	26
060801	0002	Vermilion River near Breaux Bridge, LA	4/9/85	56	20
060801	0002	Vermilion River near Breaux Bridge, LA	5/14/85	43.5	36
060801	0002	Vermilion River near Breaux Bridge, LA	6/10/85	93	42
060801	0002	Vermilion River near Breaux Bridge, LA	7/9/85	47	32
060801	0002	Vermilion River near Breaux Bridge, LA	8/12/85	48	22
060801	0002	Vermilion River near Breaux Bridge, LA	9/9/85	76	34
060801	0002	Vermilion River near Breaux Bridge, LA	10/15/85	83	78
060801	0002	Vermilion River near Breaux Bridge, LA	11/18/85	15	6
060801	0002	Vermilion River near Breaux Bridge, LA	12/10/85	47	14
060801	0002	Vermilion River near Breaux Bridge, LA	1/14/86	108	32
060801	0002	Vermilion River near Breaux Bridge, LA	2/18/86	49	26
060801	0002	Vermilion River near Breaux Bridge, LA	3/18/86	56	22
060801	0002	Vermilion River near Breaux Bridge, LA	4/15/86	28	36
060801	0002	Vermilion River near Breaux Bridge, LA	5/13/86	67	38
060801	0002	Vermilion River near Breaux Bridge, LA	7/14/86	43.5	22
060801	0002	Vermilion River near Breaux Bridge, LA	8/12/86	240	204

060801	0002	Vermilion River near Breaux Bridge, LA	9/9/86	18	26
060801	0002	Vermilion River near Breaux Bridge, LA	10/14/86	51	50
060801	0002	Vermilion River near Breaux Bridge, LA	11/17/86	41	28
060801	0002	Vermilion River near Breaux Bridge, LA	12/9/86	40	22
060801	0002	Vermilion River near Breaux Bridge, LA	1/13/87	44	6
060801	0002	Vermilion River near Breaux Bridge, LA	2/17/87	80	76
060801	0002	Vermilion River near Breaux Bridge, LA	3/10/87	61	12
060801	0002	Vermilion River near Breaux Bridge, LA	4/14/87	40	32
060801	0002	Vermilion River near Breaux Bridge, LA	5/11/87	62	72
060801	0002	Vermilion River near Breaux Bridge, LA	6/9/87	32	50
060801	0002	Vermilion River near Breaux Bridge, LA	7/14/87	119	154
060801	0002	Vermilion River near Breaux Bridge, LA	8/11/87	102	172
060801	0002	Vermilion River near Breaux Bridge, LA	9/15/87	22	36
060801	0002	Vermilion River near Breaux Bridge, LA	10/13/87	12.5	21
060801	0002	Vermilion River near Breaux Bridge, LA	11/16/87	13	20
060801	0002	Vermilion River near Breaux Bridge, LA	12/15/87	50	56
060801	0002	Vermilion River near Breaux Bridge, LA	1/12/88	60	52
060801	0002	Vermilion River near Breaux Bridge, LA	2/9/88	55	24
060801	0002	Vermilion River near Breaux Bridge, LA	3/15/88	76	32
060801	0002	Vermilion River near Breaux Bridge, LA	4/11/88	67	20
060801	0002	Vermilion River near Breaux Bridge, LA	5/9/88	31	28
060801	0002	Vermilion River near Breaux Bridge, LA	6/13/88	0	0
060801	0002	Vermilion River near Breaux Bridge, LA	7/11/88	60	66
060801	0002	Vermilion River near Breaux Bridge, LA	8/9/88	33	70
060801	0002	Vermilion River near Breaux Bridge, LA	9/13/88	28	26
060801	0002	Vermilion River near Breaux Bridge, LA	10/11/88	66	108
060801	0002	Vermilion River near Breaux Bridge, LA	11/15/88	22	20
060801	0002	Vermilion River near Breaux Bridge, LA	12/13/88	73	88
060801	0002	Vermilion River near Breaux Bridge, LA	1/10/89	64	42
060801	0002	Vermilion River near Breaux Bridge, LA	2/14/89	34	12
060801	0002	Vermilion River near Breaux Bridge, LA	3/14/89	56	30
060801	0002	Vermilion River near Breaux Bridge, LA	4/11/89	51	44
060801	0002	Vermilion River near Breaux Bridge, LA	5/9/89	135	60
060801	0002	Vermilion River near Breaux Bridge, LA	6/13/89	50	18
060801	0002	Vermilion River near Breaux Bridge, LA	7/11/89	33	22
060801	0002	Vermilion River near Breaux Bridge, LA	8/15/89	48	50
060801	0002	Vermilion River near Breaux Bridge, LA	9/12/89	28	30
060801	0002	Vermilion River near Breaux Bridge, LA	10/10/89	29	26
060801	0002	Vermilion River near Breaux Bridge, LA	11/14/89	24	10
060801	0002	Vermilion River near Breaux Bridge, LA	12/12/89	119	144
060801	0002	Vermilion River near Breaux Bridge, LA	1/9/90	60	38
060801	0002	Vermilion River near Breaux Bridge, LA	2/13/90	75	46
060801	0002	Vermilion River near Breaux Bridge, LA	3/13/90	43	34
060801	0002	Vermilion River near Breaux Bridge, LA	4/10/90	51	48
060801	0002	Vermilion River near Breaux Bridge, LA	5/15/90	69	44
060801	0002	Vermilion River near Breaux Bridge, LA	6/11/90	68	50
060801	0002	Vermilion River near Breaux Bridge, LA	7/9/90	54	46
060801	0002	Vermilion River near Breaux Bridge, LA	8/14/90	26	45
060801	0002	Vermilion River near Breaux Bridge, LA	9/11/90	20	24

060801	0002	Vermilion River near Breaux Bridge, LA	10/16/90	20	24
060801	0002	Vermilion River near Breaux Bridge, LA	11/14/90	24	28
060801	0002	Vermilion River near Breaux Bridge, LA	12/11/90	45	34
060801	0002	Vermilion River near Breaux Bridge, LA	1/14/91	78	56
060801	0002	Vermilion River near Breaux Bridge, LA	3/11/91	51	32
060801	0002	Vermilion River near Breaux Bridge, LA	5/13/91	72	56
060801	0002	Vermilion River near Breaux Bridge, LA	7/15/91	43	34
060801	0002	Vermilion River near Breaux Bridge, LA	9/9/91	60	72
060801	0002	Vermilion River near Breaux Bridge, LA	11/18/91	31	15
060801	0002	Vermilion River near Breaux Bridge, LA	1/6/92	32	28
060801	0002	Vermilion River near Breaux Bridge, LA	3/9/92	78	76
060801	0002	Vermilion River near Breaux Bridge, LA	5/11/92	34	30
060801	0002	Vermilion River near Breaux Bridge, LA	7/14/92	23	14
060801	0002	Vermilion River near Breaux Bridge, LA	9/15/92	6.8	6
060801	0002	Vermilion River near Breaux Bridge, LA	11/16/92	62	24
060801	0002	Vermilion River near Breaux Bridge, LA	1/11/93	68	47
060801	0002	Vermilion River near Breaux Bridge, LA	3/9/93	60	18
060801	0002	Vermilion River near Breaux Bridge, LA	5/10/93	45	18
060801	0002	Vermilion River near Breaux Bridge, LA	7/12/93	34	29
060801	0002	Vermilion River near Breaux Bridge, LA	9/13/93	20	21
060801	0002	Vermilion River near Breaux Bridge, LA	11/16/93	123	244
060801	0002	Vermilion River near Breaux Bridge, LA	1/11/94	33	13
060801	0002	Vermilion River near Breaux Bridge, LA	3/14/94	75	26
060801	0002	Vermilion River near Breaux Bridge, LA	5/10/94	100	47
060801	0002	Vermilion River near Breaux Bridge, LA	7/12/94	114	148
060801	0002	Vermilion River near Breaux Bridge, LA	9/15/94	29	36
060801	0002	Vermilion River near Breaux Bridge, LA	11/15/94	19	17
060801	0002	Vermilion River near Breaux Bridge, LA	1/10/95	80	24
060801	0002	Vermilion River near Breaux Bridge, LA	3/14/95	80	138
060801	0002	Vermilion River near Breaux Bridge, LA	5/8/95	28	25
060801	0002	Vermilion River near Breaux Bridge, LA	7/10/95	62	62
060801	0002	Vermilion River near Breaux Bridge, LA	9/11/95	20	35
060801	0002	Vermilion River near Breaux Bridge, LA	11/14/95	30	15
060801	0002	Vermilion River near Breaux Bridge, LA	1/8/96	80	55
060801	0002	Vermilion River near Breaux Bridge, LA	3/11/96	38	54
060801	0002	Vermilion River near Breaux Bridge, LA	5/13/96	45	41
060801	0002	Vermilion River near Breaux Bridge, LA	7/8/96	34	58
060801	0002	Vermilion River near Breaux Bridge, LA	9/9/96	34	36
060801	0002	Vermilion River near Breaux Bridge, LA	11/18/96	27	33
060801	0002	Vermilion River near Breaux Bridge, LA	1/6/97	40	23
060801	0002	Vermilion River near Breaux Bridge, LA	3/10/97	40	30
060801	0002	Vermilion River near Breaux Bridge, LA	5/12/97	45	19
060801	0002	Vermilion River near Breaux Bridge, LA	7/14/97	95	93.9
060801	0002	Vermilion River near Breaux Bridge, LA	9/8/97	27	36
060801	0002	Vermilion River near Breaux Bridge, LA	11/17/97	31	22
060801	0002	Vermilion River near Breaux Bridge, LA	1/12/98	64	26
060801	0002	Vermilion River near Breaux Bridge, LA	3/9/98	75	32
060801	0002	Vermilion River near Breaux Bridge, LA	5/11/98	50	38
060801	0045	Vermilion River near Lafayette, LA	1/1/63	65	0

060801	0045	Vermilion River near Lafayette, LA	2/1/63	50	0
060801	0045	Vermilion River near Lafayette, LA	3/1/63	80	0
060801	0045	Vermilion River near Lafayette, LA	4/1/63	60	0
060801	0045	Vermilion River near Lafayette, LA	5/1/63	29	0
060801	0045	Vermilion River near Lafayette, LA	6/1/63	30	0
060801	0045	Vermilion River near Lafayette, LA	7/1/63	38	0
060801	0045	Vermilion River near Lafayette, LA	8/1/63	55	0
060801	0045	Vermilion River near Lafayette, LA	9/1/63	25	0
060801	0045	Vermilion River near Lafayette, LA	10/1/63	35	0
060801	0045	Vermilion River near Lafayette, LA	11/1/63	30	0
060801	0045	Vermilion River near Lafayette, LA	12/1/63	75	0
060801	0045	Vermilion River near Lafayette, LA	1/1/64	103	0
060801	0045	Vermilion River near Lafayette, LA	2/1/64	55	0
060801	0045	Vermilion River near Lafayette, LA	3/1/64	280	0
060801	0045	Vermilion River near Lafayette, LA	4/1/64	140	0
060801	0045	Vermilion River near Lafayette, LA	5/1/64	43	0
060801	0045	Vermilion River near Lafayette, LA	6/1/64	110	0
060801	0045	Vermilion River near Lafayette, LA	7/1/64	100	0
060801	0045	Vermilion River near Lafayette, LA	8/1/64	45	0
060801	0045	Vermilion River near Lafayette, LA	9/1/64	48	0
060801	0045	Vermilion River near Lafayette, LA	10/1/64	82	0
060801	0045	Vermilion River near Lafayette, LA	11/1/64	40	0
060801	0045	Vermilion River near Lafayette, LA	12/1/64	130	0
060801	0045	Vermilion River near Lafayette, LA	1/1/65	52	0
060801	0045	Vermilion River near Lafayette, LA	2/1/65	55	0
060801	0045	Vermilion River near Lafayette, LA	3/1/65	100	0
060801	0045	Vermilion River near Lafayette, LA	4/1/65	60	0
060801	0045	Vermilion River near Lafayette, LA	5/1/65	60	0
060801	0045	Vermilion River near Lafayette, LA	6/1/65	85	0
060801	0045	Vermilion River near Lafayette, LA	7/1/65	30	0
060801	0045	Vermilion River near Lafayette, LA	8/1/65	35	0
060801	0045	Vermilion River near Lafayette, LA	9/1/65	33	0
060801	0045	Vermilion River near Lafayette, LA	10/1/65	37	0
060801	0045	Vermilion River near Lafayette, LA	11/1/65	40	0
060801	0045	Vermilion River near Lafayette, LA	12/1/65	45	0
060801	0045	Vermilion River near Lafayette, LA	1/1/66	100	0
060801	0045	Vermilion River near Lafayette, LA	2/1/66	50	0
060801	0045	Vermilion River near Lafayette, LA	3/1/66	65	0
060801	0045	Vermilion River near Lafayette, LA	4/1/66	88	0
060801	0045	Vermilion River near Lafayette, LA	5/1/66	53	122
060801	0045	Vermilion River near Lafayette, LA	6/1/66	65	32
060801	0045	Vermilion River near Lafayette, LA	7/1/66	48	36
060801	0045	Vermilion River near Lafayette, LA	8/1/66	500	506
060801	0045	Vermilion River near Lafayette, LA	9/1/66	0	32
060801	0045	Vermilion River near Lafayette, LA	10/1/66	75	16
060801	0045	Vermilion River near Lafayette, LA	11/1/66	51	62
060801	0045	Vermilion River near Lafayette, LA	12/1/66	65	110
060801	0045	Vermilion River near Lafayette, LA	1/1/67	95	106
060801	0045	Vermilion River near Lafayette, LA	2/1/67	200	264

060801	0045	Vermilion River near Lafayette, LA	3/1/67	88	92
060801	0045	Vermilion River near Lafayette, LA	4/1/67	140	196
060801	0045	Vermilion River near Lafayette, LA	5/1/67	370	312
060801	0045	Vermilion River near Lafayette, LA	6/1/67	360	328
060801	0045	Vermilion River near Lafayette, LA	7/1/67	115	98
060801	0045	Vermilion River near Lafayette, LA	8/1/67	130	108
060801	0045	Vermilion River near Lafayette, LA	9/1/67	65	52
060801	0045	Vermilion River near Lafayette, LA	10/1/67	170	166
060801	0045	Vermilion River near Lafayette, LA	11/1/67	58	46
060801	0045	Vermilion River near Lafayette, LA	12/1/67	45	72
060801	0045	Vermilion River near Lafayette, LA	1/1/68	95	84
060801	0045	Vermilion River near Lafayette, LA	2/1/68	55	56
060801	0045	Vermilion River near Lafayette, LA	3/1/68	52	64
060801	0045	Vermilion River near Lafayette, LA	4/1/68	50	72
060801	0045	Vermilion River near Lafayette, LA	5/1/68	70	50
060801	0045	Vermilion River near Lafayette, LA	6/1/68	55	212
060801	0045	Vermilion River near Lafayette, LA	7/1/68	30	50
060801	0045	Vermilion River near Lafayette, LA	8/1/68	35	46
060801	0045	Vermilion River near Lafayette, LA	9/1/68	30	132
060801	0045	Vermilion River near Lafayette, LA	10/1/68	75	26
060801	0045	Vermilion River near Lafayette, LA	11/1/68	230	18
060801	0045	Vermilion River near Lafayette, LA	12/1/68	135	112
060801	0045	Vermilion River near Lafayette, LA	3/7/78	98	104
060801	0045	Vermilion River near Lafayette, LA	4/8/78	53	40
060801	0045	Vermilion River near Lafayette, LA	5/8/78	64	44
060801	0045	Vermilion River near Lafayette, LA	6/12/78	82	134
060801	0045	Vermilion River near Lafayette, LA	7/10/78	11	32
060801	0045	Vermilion River near Lafayette, LA	8/15/78	12	28
060801	0045	Vermilion River near Lafayette, LA	9/11/78	70	184
060801	0045	Vermilion River near Lafayette, LA	10/9/78	10	8
060801	0045	Vermilion River near Lafayette, LA	11/13/78	15	26
060801	0045	Vermilion River near Lafayette, LA	12/11/78	0	0
060801	0045	Vermilion River near Lafayette, LA	1/8/79	60	106
060801	0045	Vermilion River near Lafayette, LA	2/12/79	78	0
060801	0045	Vermilion River near Lafayette, LA	3/12/79	65	146
060801	0045	Vermilion River near Lafayette, LA	4/16/79	63	50
060801	0045	Vermilion River near Lafayette, LA	5/14/79	0	0
060801	0045	Vermilion River near Lafayette, LA	6/11/79	63	84
060801	0045	Vermilion River near Lafayette, LA	7/9/79	34	0
060801	0045	Vermilion River near Lafayette, LA	8/13/79	0	0
060801	0045	Vermilion River near Lafayette, LA	9/10/79	330	0
060801	0045	Vermilion River near Lafayette, LA	10/9/79	40	92
060801	0045	Vermilion River near Lafayette, LA	11/5/79	62	0
060801	0045	Vermilion River near Lafayette, LA	12/11/79	44	0
060801	0045	Vermilion River near Lafayette, LA	1/14/80	24	0
060801	0045	Vermilion River near Lafayette, LA	2/11/80	125	100
060801	0045	Vermilion River near Lafayette, LA	3/11/80	70	120
060801	0045	Vermilion River near Lafayette, LA	4/14/80	105	136
060801	0045	Vermilion River near Lafayette, LA	5/12/80	54	52

060801	0045	Vermilion River near Lafayette, LA	6/9/80	0	40
060801	0045	Vermilion River near Lafayette, LA	8/11/80	0	0
060801	0045	Vermilion River near Lafayette, LA	9/15/80	6	0
060801	0045	Vermilion River near Lafayette, LA	10/13/80	23	28
060801	0045	Vermilion River near Lafayette, LA	11/18/80	26	0
060801	0045	Vermilion River near Lafayette, LA	12/8/80	53	82
060801	0045	Vermilion River near Lafayette, LA	1/13/81	37	46
060801	0045	Vermilion River near Lafayette, LA	3/9/81	175	134
060801	0045	Vermilion River near Lafayette, LA	4/14/81	42	32
060801	0045	Vermilion River near Lafayette, LA	5/11/81	145	292
060801	0045	Vermilion River near Lafayette, LA	6/8/81	200	360
060801	0045	Vermilion River near Lafayette, LA	7/14/81	69	84
060801	0045	Vermilion River near Lafayette, LA	8/10/81	35	52
060801	0045	Vermilion River near Lafayette, LA	9/14/81	12	54
060801	0045	Vermilion River near Lafayette, LA	10/13/81	16	42
060801	0045	Vermilion River near Lafayette, LA	12/14/81	23	54
060801	0045	Vermilion River near Lafayette, LA	2/9/82	90	104
060801	0045	Vermilion River near Lafayette, LA	3/9/82	72	84
060801	0045	Vermilion River near Lafayette, LA	4/12/82	71	86
060801	0045	Vermilion River near Lafayette, LA	5/10/82	64	44
060801	0045	Vermilion River near Lafayette, LA	6/13/82	13	22
060801	0045	Vermilion River near Lafayette, LA	7/12/82	41	52
060801	0045	Vermilion River near Lafayette, LA	8/9/82	79	96
060801	0045	Vermilion River near Lafayette, LA	9/13/82	69	160
060801	0045	Vermilion River near Lafayette, LA	10/11/82	21	36
060801	0045	Vermilion River near Lafayette, LA	11/15/82	35	96
060801	0045	Vermilion River near Lafayette, LA	12/14/82	27	60
060801	0045	Vermilion River near Lafayette, LA	1/11/83	49	20
060801	0045	Vermilion River near Lafayette, LA	2/8/83	90	94
060801	0045	Vermilion River near Lafayette, LA	3/14/83	88	76
060801	0045	Vermilion River near Lafayette, LA	4/11/83	130	108
060801	0045	Vermilion River near Lafayette, LA	5/9/83	64	52
060801	0045	Vermilion River near Lafayette, LA	6/13/83	64	48
060801	0045	Vermilion River near Lafayette, LA	8/8/83	130	104
060801	0045	Vermilion River near Lafayette, LA	9/12/83	66	74
060801	0045	Vermilion River near Lafayette, LA	10/11/83	38	30
060801	0045	Vermilion River near Lafayette, LA	11/15/83	48	48
060801	0045	Vermilion River near Lafayette, LA	12/12/83	330	240
060801	0045	Vermilion River near Lafayette, LA	1/9/84	60	30
060801	0045	Vermilion River near Lafayette, LA	2/13/84	273	128
060801	0045	Vermilion River near Lafayette, LA	3/12/84	156	96
060801	0045	Vermilion River near Lafayette, LA	4/10/84	156	88
060801	0045	Vermilion River near Lafayette, LA	5/15/84	62	44
060801	0045	Vermilion River near Lafayette, LA	6/12/84	234	88
060801	0045	Vermilion River near Lafayette, LA	7/9/84	120	54
060801	0045	Vermilion River near Lafayette, LA	8/14/84	0	0
060801	0045	Vermilion River near Lafayette, LA	9/11/84	44	28
060801	0045	Vermilion River near Lafayette, LA	10/8/84	60	36
060801	0045	Vermilion River near Lafayette, LA	11/13/84	28	26

060801	0045	Vermilion River near Lafayette, LA	12/10/84	90	42
060801	0045	Vermilion River near Lafayette, LA	1/14/85	51	32
060801	0045	Vermilion River near Lafayette, LA	3/11/85	88	56
060801	0045	Vermilion River near Lafayette, LA	4/8/85	96	64
060801	0045	Vermilion River near Lafayette, LA	5/13/85	105	58
060801	0045	Vermilion River near Lafayette, LA	6/11/85	108	68
060801	0045	Vermilion River near Lafayette, LA	7/8/85	85	60
060801	0045	Vermilion River near Lafayette, LA	8/13/85	68	46
060801	0045	Vermilion River near Lafayette, LA	9/9/85	80	50
060801	0045	Vermilion River near Lafayette, LA	10/15/85	116	96
060801	0045	Vermilion River near Lafayette, LA	11/19/85	13	10
060801	0045	Vermilion River near Lafayette, LA	12/9/85	64	18
060801	0045	Vermilion River near Lafayette, LA	1/13/86	104	60
060801	0045	Vermilion River near Lafayette, LA	2/17/86	67	24
060801	0045	Vermilion River near Lafayette, LA	3/17/86	54	32
060801	0045	Vermilion River near Lafayette, LA	4/14/86	28	28
060801	0045	Vermilion River near Lafayette, LA	5/13/86	99	62
060801	0045	Vermilion River near Lafayette, LA	7/15/86	54	38
060801	0045	Vermilion River near Lafayette, LA	8/11/86	50	40
060801	0045	Vermilion River near Lafayette, LA	9/8/86	25	36
060801	0045	Vermilion River near Lafayette, LA	10/14/86	34	54
060801	0045	Vermilion River near Lafayette, LA	11/18/86	62	46
060801	0045	Vermilion River near Lafayette, LA	12/8/86	38	56
060801	0045	Vermilion River near Lafayette, LA	1/12/87	39	30
060801	0045	Vermilion River near Lafayette, LA	2/16/87	52	66
060801	0045	Vermilion River near Lafayette, LA	3/9/87	47	34
060801	0045	Vermilion River near Lafayette, LA	4/13/87	52	46
060801	0045	Vermilion River near Lafayette, LA	5/11/87	42	54
060801	0045	Vermilion River near Lafayette, LA	6/8/87	30	38
060801	0045	Vermilion River near Lafayette, LA	7/14/87	64	34
060801	0045	Vermilion River near Lafayette, LA	8/10/87	37	54
060801	0045	Vermilion River near Lafayette, LA	9/14/87	21	32
060801	0045	Vermilion River near Lafayette, LA	10/12/87	23	44
060801	0045	Vermilion River near Lafayette, LA	11/17/87	21	38
060801	0045	Vermilion River near Lafayette, LA	12/14/87	50	40
060801	0045	Vermilion River near Lafayette, LA	1/11/88	55	48
060801	0045	Vermilion River near Lafayette, LA	2/8/88	75	125
060801	0045	Vermilion River near Lafayette, LA	3/14/88	62	48
060801	0045	Vermilion River near Lafayette, LA	4/11/88	85	108
060801	0045	Vermilion River near Lafayette, LA	5/9/88	37	48
060801	0045	Vermilion River near Lafayette, LA	6/13/88	0	0
060801	0045	Vermilion River near Lafayette, LA	7/11/88	36	52
060801	0045	Vermilion River near Lafayette, LA	8/9/88	42	72
060801	0045	Vermilion River near Lafayette, LA	9/13/88	31	36
060801	0045	Vermilion River near Lafayette, LA	10/11/88	98.8	170
060801	0045	Vermilion River near Lafayette, LA	11/15/88	24	22
060801	0045	Vermilion River near Lafayette, LA	12/13/88	90	116
060801	0045	Vermilion River near Lafayette, LA	1/10/89	42	52
060801	0045	Vermilion River near Lafayette, LA	2/14/89	33	46

060801	0045	Vermilion River near Lafayette, LA	3/14/89	54	40
060801	0045	Vermilion River near Lafayette, LA	4/11/89	57	62
060801	0045	Vermilion River near Lafayette, LA	5/9/89	144	84
060801	0045	Vermilion River near Lafayette, LA	6/13/89	41	20
060801	0045	Vermilion River near Lafayette, LA	7/11/89	32	30
060801	0045	Vermilion River near Lafayette, LA	8/15/89	35	40
060801	0045	Vermilion River near Lafayette, LA	9/12/89	27	34
060801	0045	Vermilion River near Lafayette, LA	10/10/89	24	26
060801	0045	Vermilion River near Lafayette, LA	11/14/89	25	14
060801	0045	Vermilion River near Lafayette, LA	12/12/89	68	76
060801	0045	Vermilion River near Lafayette, LA	1/9/90	70	60
060801	0045	Vermilion River near Lafayette, LA	2/13/90	70	54
060801	0045	Vermilion River near Lafayette, LA	3/13/90	33	28
060801	0045	Vermilion River near Lafayette, LA	4/10/90	50	36
060801	0045	Vermilion River near Lafayette, LA	5/15/90	56	24
060801	0045	Vermilion River near Lafayette, LA	6/11/90	68	0
060801	0045	Vermilion River near Lafayette, LA	7/9/90	56	69
060801	0045	Vermilion River near Lafayette, LA	8/14/90	14	17
060801	0045	Vermilion River near Lafayette, LA	9/11/90	18	18
060801	0045	Vermilion River near Lafayette, LA	10/16/90	18	17
060801	0045	Vermilion River near Lafayette, LA	11/14/90	26	32
060801	0045	Vermilion River near Lafayette, LA	12/11/90	95	72
060801	0045	Vermilion River near Lafayette, LA	6/24/98	32	35
060801	0045	Vermilion River near Lafayette, LA	7/15/98	50	59
060801	0045	Vermilion River near Lafayette, LA	7/29/98	40	43
060801	0045	Vermilion River near Lafayette, LA	8/12/98	35	36
060801	0045	Vermilion River near Lafayette, LA	8/26/98	60	84
060801	0045	Vermilion River near Lafayette, LA	9/9/98	55	80
060801	0045	Vermilion River near Lafayette, LA	9/23/98	37	64
060801	0045	Vermilion River near Lafayette, LA	10/14/98	36	42
060801	0045	Vermilion River near Lafayette, LA	10/28/98	60	43
060801	0045	Vermilion River near Lafayette, LA	11/10/98	45	45
060801	0045	Vermilion River near Lafayette, LA	12/15/98	20	37
060801	0680	Ruth Canal	6/17/98	45	49
060801	0680	Ruth Canal	7/8/98	50	33
060801	0680	Ruth Canal	7/22/98	60	62
060801	0680	Ruth Canal	8/5/98	50	55
060801	0680	Ruth Canal	8/19/98	45	47.5
060801	0680	Ruth Canal	9/2/98	39	53
060801	0680	Ruth Canal	9/16/98	33	14
060801	0680	Ruth Canal	10/7/98	60	52
060801	0680	Ruth Canal	11/5/98	45	40
060801	0680	Ruth Canal	11/18/98	120	86
060801	0680	Ruth Canal	12/2/98	45	49
060802	0001	Vermilion River at Perry, LA	6/1/58	105	0
060802	0001	Vermilion River at Perry, LA	7/1/58	57	0
060802	0001	Vermilion River at Perry, LA	8/1/58	49	0
060802	0001	Vermilion River at Perry, LA	9/1/58	38	0
060802	0001	Vermilion River at Perry, LA	11/1/58	25	0

060802	0001	Vermilion River at Perry, LA	12/1/58	30	0
060802	0001	Vermilion River at Perry, LA	1/1/59	850	0
060802	0001	Vermilion River at Perry, LA	2/1/59	158	0
060802	0001	Vermilion River at Perry, LA	3/1/59	165	0
060802	0001	Vermilion River at Perry, LA	4/1/59	90	0
060802	0001	Vermilion River at Perry, LA	5/1/59	85	0
060802	0001	Vermilion River at Perry, LA	6/1/59	47	0
060802	0001	Vermilion River at Perry, LA	7/1/59	37	0
060802	0001	Vermilion River at Perry, LA	8/1/59	50	0
060802	0001	Vermilion River at Perry, LA	9/1/59	35	0
060802	0001	Vermilion River at Perry, LA	10/1/59	30	0
060802	0001	Vermilion River at Perry, LA	11/1/59	90	0
060802	0001	Vermilion River at Perry, LA	1/1/60	130	0
060802	0001	Vermilion River at Perry, LA	2/1/60	165	0
060802	0001	Vermilion River at Perry, LA	3/1/60	110	0
060802	0001	Vermilion River at Perry, LA	4/1/60	55	0
060802	0001	Vermilion River at Perry, LA	5/1/60	55	0
060802	0001	Vermilion River at Perry, LA	6/1/60	45	0
060802	0001	Vermilion River at Perry, LA	7/1/60	30	0
060802	0001	Vermilion River at Perry, LA	8/1/60	50	0
060802	0001	Vermilion River at Perry, LA	9/1/60	45	0
060802	0001	Vermilion River at Perry, LA	10/1/60	35	0
060802	0001	Vermilion River at Perry, LA	11/1/60	50	0
060802	0001	Vermilion River at Perry, LA	12/1/60	38	0
060802	0001	Vermilion River at Perry, LA	1/1/61	140	0
060802	0001	Vermilion River at Perry, LA	3/1/61	55	0
060802	0001	Vermilion River at Perry, LA	4/1/61	225	0
060802	0001	Vermilion River at Perry, LA	5/1/61	210	0
060802	0001	Vermilion River at Perry, LA	6/1/61	55	0
060802	0001	Vermilion River at Perry, LA	7/1/61	52	0
060802	0001	Vermilion River at Perry, LA	8/1/61	65	0
060802	0001	Vermilion River at Perry, LA	9/1/61	40	0
060802	0001	Vermilion River at Perry, LA	10/1/61	75	0
060802	0001	Vermilion River at Perry, LA	11/1/61	45	0
060802	0001	Vermilion River at Perry, LA	12/1/61	30	0
060802	0001	Vermilion River at Perry, LA	1/1/62	65	0
060802	0001	Vermilion River at Perry, LA	2/1/62	80	0
060802	0001	Vermilion River at Perry, LA	3/1/62	150	0
060802	0001	Vermilion River at Perry, LA	4/1/62	300	0
060802	0001	Vermilion River at Perry, LA	5/1/62	185	0
060802	0001	Vermilion River at Perry, LA	6/1/62	230	0
060802	0001	Vermilion River at Perry, LA	7/1/62	85	0
060802	0001	Vermilion River at Perry, LA	8/1/62	120	0
060802	0001	Vermilion River at Perry, LA	9/1/62	75	0
060802	0001	Vermilion River at Perry, LA	10/1/62	100	0
060802	0001	Vermilion River at Perry, LA	11/1/62	47	0
060802	0001	Vermilion River at Perry, LA	12/1/62	56	0
060802	0001	Vermilion River at Perry, LA	1/1/63	142	0
060802	0001	Vermilion River at Perry, LA	2/1/63	150	0

060802	0001	Vermilion River at Perry, LA	3/1/63	140	0
060802	0001	Vermilion River at Perry, LA	4/1/63	45	0
060802	0001	Vermilion River at Perry, LA	5/1/63	230	0
060802	0001	Vermilion River at Perry, LA	6/1/63	130	0
060802	0001	Vermilion River at Perry, LA	7/1/63	38	0
060802	0001	Vermilion River at Perry, LA	8/1/63	180	0
060802	0001	Vermilion River at Perry, LA	9/1/63	85	0
060802	0001	Vermilion River at Perry, LA	10/1/63	30	0
060802	0001	Vermilion River at Perry, LA	11/1/63	60	0
060802	0001	Vermilion River at Perry, LA	12/1/63	110	0
060802	0001	Vermilion River at Perry, LA	1/1/64	250	0
060802	0001	Vermilion River at Perry, LA	2/1/64	130	0
060802	0001	Vermilion River at Perry, LA	3/1/64	105	0
060802	0001	Vermilion River at Perry, LA	4/1/64	32	0
060802	0001	Vermilion River at Perry, LA	5/1/64	125	0
060802	0001	Vermilion River at Perry, LA	6/1/64	180	0
060802	0001	Vermilion River at Perry, LA	7/1/64	33	0
060802	0001	Vermilion River at Perry, LA	8/1/64	35	0
060802	0001	Vermilion River at Perry, LA	9/1/64	30	0
060802	0001	Vermilion River at Perry, LA	10/1/64	55	0
060802	0001	Vermilion River at Perry, LA	11/1/64	54	0
060802	0001	Vermilion River at Perry, LA	12/1/64	75	0
060802	0001	Vermilion River at Perry, LA	1/1/65	60	0
060802	0001	Vermilion River at Perry, LA	2/1/65	170	0
060802	0001	Vermilion River at Perry, LA	3/1/65	270	0
060802	0001	Vermilion River at Perry, LA	4/1/65	95	0
060802	0001	Vermilion River at Perry, LA	5/1/65	65	0
060802	0001	Vermilion River at Perry, LA	6/1/65	400	0
060802	0001	Vermilion River at Perry, LA	7/1/65	60	0
060802	0001	Vermilion River at Perry, LA	8/1/65	200	0
060802	0001	Vermilion River at Perry, LA	9/1/65	40	0
060802	0001	Vermilion River at Perry, LA	10/1/65	34	0
060802	0001	Vermilion River at Perry, LA	11/1/65	30	0
060802	0001	Vermilion River at Perry, LA	12/1/65	70	0
060802	0001	Vermilion River at Perry, LA	1/1/66	130	0
060802	0001	Vermilion River at Perry, LA	2/1/66	150	0
060802	0001	Vermilion River at Perry, LA	3/1/66	120	0
060802	0001	Vermilion River at Perry, LA	4/1/66	120	0
060802	0001	Vermilion River at Perry, LA	5/1/66	45	68
060802	0001	Vermilion River at Perry, LA	6/1/66	125	128
060802	0001	Vermilion River at Perry, LA	7/1/66	95	76
060802	0001	Vermilion River at Perry, LA	8/1/66	110	80
060802	0001	Vermilion River at Perry, LA	9/1/66	0	32
060802	0001	Vermilion River at Perry, LA	10/1/66	40	24
060802	0001	Vermilion River at Perry, LA	11/1/66	130	128
060802	0001	Vermilion River at Perry, LA	12/1/66	120	72
060802	0001	Vermilion River at Perry, LA	1/1/67	47	52
060802	0001	Vermilion River at Perry, LA	2/1/67	180	124
060802	0001	Vermilion River at Perry, LA	3/1/67	200	162

060802	0001	Vermilion River at Perry, LA	4/1/67	200	170
060802	0001	Vermilion River at Perry, LA	5/1/67	65	50
060802	0001	Vermilion River at Perry, LA	6/1/67	450	410
060802	0001	Vermilion River at Perry, LA	7/1/67	250	178
060802	0001	Vermilion River at Perry, LA	8/1/67	145	80
060802	0001	Vermilion River at Perry, LA	9/1/67	85	104
060802	0001	Vermilion River at Perry, LA	10/1/67	70	86
060802	0001	Vermilion River at Perry, LA	11/1/67	88	80
060802	0001	Vermilion River at Perry, LA	12/1/67	35	0
060802	0001	Vermilion River at Perry, LA	1/1/68	160	198
060802	0001	Vermilion River at Perry, LA	2/1/68	70	114
060802	0001	Vermilion River at Perry, LA	3/1/68	200	872
060802	0001	Vermilion River at Perry, LA	4/1/68	105	84
060802	0001	Vermilion River at Perry, LA	5/1/68	160	114
060802	0001	Vermilion River at Perry, LA	6/1/68	230	10
060802	0001	Vermilion River at Perry, LA	7/1/68	170	172
060802	0001	Vermilion River at Perry, LA	8/1/68	30	94
060802	0001	Vermilion River at Perry, LA	9/1/68	30	80
060802	0001	Vermilion River at Perry, LA	10/1/68	50	44
060802	0001	Vermilion River at Perry, LA	11/1/68	85	44
060802	0001	Vermilion River at Perry, LA	12/1/68	350	280
060802	0001	Vermilion River at Perry, LA	1/1/69	160	174
060802	0001	Vermilion River at Perry, LA	2/1/69	110	76
060802	0001	Vermilion River at Perry, LA	3/1/69	132	122
060802	0001	Vermilion River at Perry, LA	4/1/69	90	0
060802	0001	Vermilion River at Perry, LA	5/1/69	150	0
060802	0001	Vermilion River at Perry, LA	6/1/69	75	2
060802	0001	Vermilion River at Perry, LA	7/1/69	220	226
060802	0001	Vermilion River at Perry, LA	8/1/69	130	0
060802	0001	Vermilion River at Perry, LA	9/1/69	65	22
060802	0001	Vermilion River at Perry, LA	10/1/69	60	60
060802	0001	Vermilion River at Perry, LA	11/1/69	120	102
060802	0001	Vermilion River at Perry, LA	12/1/69	130	56
060802	0001	Vermilion River at Perry, LA	1/1/70	100	84
060802	0001	Vermilion River at Perry, LA	2/1/70	30	150
060802	0001	Vermilion River at Perry, LA	3/1/70	30	378
060802	0001	Vermilion River at Perry, LA	6/1/70	95	74
060802	0001	Vermilion River at Perry, LA	7/1/70	50	56
060802	0001	Vermilion River at Perry, LA	8/1/70	130	90
060802	0001	Vermilion River at Perry, LA	9/1/70	40	38
060802	0001	Vermilion River at Perry, LA	10/1/70	55	72
060802	0001	Vermilion River at Perry, LA	11/1/70	135	0
060802	0001	Vermilion River at Perry, LA	12/1/70	97	80
060802	0001	Vermilion River at Perry, LA	1/1/71	180	64
060802	0001	Vermilion River at Perry, LA	2/1/71	163	72
060802	0001	Vermilion River at Perry, LA	3/1/71	180	102
060802	0001	Vermilion River at Perry, LA	4/1/71	280	172
060802	0001	Vermilion River at Perry, LA	6/1/71	70	158
060802	0001	Vermilion River at Perry, LA	7/1/71	40	66

060802	0001	Vermilion River at Perry, LA	8/1/71	65	182
060802	0001	Vermilion River at Perry, LA	9/1/71	43	128
060802	0001	Vermilion River at Perry, LA	10/1/71	7	122
060802	0001	Vermilion River at Perry, LA	11/1/71	15	54
060802	0001	Vermilion River at Perry, LA	12/1/71	45	52
060802	0001	Vermilion River at Perry, LA	1/1/72	50	4
060802	0001	Vermilion River at Perry, LA	2/1/72	45	44
060802	0001	Vermilion River at Perry, LA	3/1/72	90	164
060802	0001	Vermilion River at Perry, LA	4/1/72	75	34
060802	0001	Vermilion River at Perry, LA	5/1/72	10	86
060802	0001	Vermilion River at Perry, LA	6/1/72	70	100
060802	0001	Vermilion River at Perry, LA	7/1/72	50	55
060802	0001	Vermilion River at Perry, LA	9/1/72	65	122
060802	0001	Vermilion River at Perry, LA	10/1/72	7	92
060802	0001	Vermilion River at Perry, LA	11/1/72	70	64
060802	0001	Vermilion River at Perry, LA	12/1/72	85	82
060802	0001	Vermilion River at Perry, LA	1/1/73	65	14
060802	0001	Vermilion River at Perry, LA	2/1/73	95	25
060802	0001	Vermilion River at Perry, LA	3/1/73	55	12
060802	0001	Vermilion River at Perry, LA	4/1/73	50	82
060802	0001	Vermilion River at Perry, LA	5/1/73	170	320
060802	0001	Vermilion River at Perry, LA	6/1/73	110	144
060802	0001	Vermilion River at Perry, LA	7/1/73	100	74
060802	0001	Vermilion River at Perry, LA	8/1/73	40	92
060802	0001	Vermilion River at Perry, LA	9/1/73	100	264
060802	0001	Vermilion River at Perry, LA	10/1/73	28	54
060802	0001	Vermilion River at Perry, LA	11/1/73	72	146
060802	0001	Vermilion River at Perry, LA	12/1/73	52	64
060802	0001	Vermilion River at Perry, LA	1/1/74	57	42
060802	0001	Vermilion River at Perry, LA	2/1/74	93	200
060802	0001	Vermilion River at Perry, LA	3/1/74	58	122
060802	0001	Vermilion River at Perry, LA	4/1/74	100	0
060802	0001	Vermilion River at Perry, LA	5/1/74	105	0
060802	0001	Vermilion River at Perry, LA	6/1/74	56	140
060802	0001	Vermilion River at Perry, LA	8/1/74	43	68
060802	0001	Vermilion River at Perry, LA	9/1/74	45	58
060802	0001	Vermilion River at Perry, LA	10/1/74	48	78
060802	0001	Vermilion River at Perry, LA	11/1/74	24	32
060802	0001	Vermilion River at Perry, LA	12/1/74	72	128
060802	0001	Vermilion River at Perry, LA	1/8/75	67	270
060802	0001	Vermilion River at Perry, LA	2/12/75	64	86
060802	0001	Vermilion River at Perry, LA	3/14/75	58	1000
060802	0001	Vermilion River at Perry, LA	4/9/75	175	230
060802	0001	Vermilion River at Perry, LA	5/9/75	125	176
060802	0001	Vermilion River at Perry, LA	6/9/75	86	106
060802	0001	Vermilion River at Perry, LA	7/9/75	93	108
060802	0001	Vermilion River at Perry, LA	8/7/75	83	102
060802	0001	Vermilion River at Perry, LA	9/1/75	70	62
060802	0001	Vermilion River at Perry, LA	10/1/75	76	82

060802	0001	Vermilion River at Perry, LA	11/4/75	67	82
060802	0001	Vermilion River at Perry, LA	12/9/75	92	140
060802	0001	Vermilion River at Perry, LA	1/9/76	95	106
060802	0001	Vermilion River at Perry, LA	2/3/76	105	146
060802	0001	Vermilion River at Perry, LA	3/8/76	95	130
060802	0001	Vermilion River at Perry, LA	4/8/76	100	116
060802	0001	Vermilion River at Perry, LA	6/8/76	125	240
060802	0001	Vermilion River at Perry, LA	7/6/76	69	98
060802	0001	Vermilion River at Perry, LA	8/6/76	44	56
060802	0001	Vermilion River at Perry, LA	9/10/76	45	110
060802	0001	Vermilion River at Perry, LA	10/5/76	18	22
060802	0001	Vermilion River at Perry, LA	11/8/76	33	24
060802	0001	Vermilion River at Perry, LA	12/13/76	80	110
060802	0001	Vermilion River at Perry, LA	1/7/77	82	140
060802	0001	Vermilion River at Perry, LA	2/1/77	72	104
060802	0001	Vermilion River at Perry, LA	3/8/77	0	200
060802	0001	Vermilion River at Perry, LA	4/7/77	85	82
060802	0001	Vermilion River at Perry, LA	5/3/77	43	88
060802	0001	Vermilion River at Perry, LA	6/7/77	220	400
060802	0001	Vermilion River at Perry, LA	7/11/77	110	128
060802	0001	Vermilion River at Perry, LA	8/15/77	60	76
060802	0001	Vermilion River at Perry, LA	9/8/77	43	10
060802	0001	Vermilion River at Perry, LA	10/4/77	11	20
060802	0001	Vermilion River at Perry, LA	11/7/77	58	80
060802	0001	Vermilion River at Perry, LA	12/8/77	65	88
060802	0001	Vermilion River at Perry, LA	1/10/78	95	200
060802	0001	Vermilion River at Perry, LA	3/7/78	68	114
060802	0001	Vermilion River at Perry, LA	4/10/78	300	136
060802	0001	Vermilion River at Perry, LA	5/8/78	44	44
060802	0001	Vermilion River at Perry, LA	6/12/78	105	196
060802	0001	Vermilion River at Perry, LA	7/10/78	78	132
060802	0001	Vermilion River at Perry, LA	8/14/78	9	38
060802	0001	Vermilion River at Perry, LA	9/11/78	63	94
060802	0001	Vermilion River at Perry, LA	10/9/78	42	54
060802	0001	Vermilion River at Perry, LA	11/3/78	10	22
060802	0001	Vermilion River at Perry, LA	12/11/78	140	212
060802	0001	Vermilion River at Perry, LA	1/8/79	97	182
060802	0001	Vermilion River at Perry, LA	2/12/79	86	120
060802	0001	Vermilion River at Perry, LA	3/12/79	715	164
060802	0001	Vermilion River at Perry, LA	4/16/79	240	132
060802	0001	Vermilion River at Perry, LA	5/14/79	58	0
060802	0001	Vermilion River at Perry, LA	6/11/79	74	94
060802	0001	Vermilion River at Perry, LA	7/9/79	67	0
060802	0001	Vermilion River at Perry, LA	8/13/79	0	0
060802	0001	Vermilion River at Perry, LA	9/10/79	33	0
060802	0001	Vermilion River at Perry, LA	10/9/79	42	84
060802	0001	Vermilion River at Perry, LA	11/5/79	45	58
060802	0001	Vermilion River at Perry, LA	12/11/79	47	78
060802	0001	Vermilion River at Perry, LA	1/14/80	140	198

060802	0001	Vermilion River at Perry, LA	2/11/80	80	92
060802	0001	Vermilion River at Perry, LA	3/11/80	88	134
060802	0001	Vermilion River at Perry, LA	4/14/80	150	282
060802	0001	Vermilion River at Perry, LA	5/12/80	72	58
060802	0001	Vermilion River at Perry, LA	6/9/80	0	58
060802	0001	Vermilion River at Perry, LA	8/11/80	0	0
060802	0001	Vermilion River at Perry, LA	9/15/80	0.5	10
060802	0001	Vermilion River at Perry, LA	10/13/80	20	30
060802	0001	Vermilion River at Perry, LA	11/18/80	28	80
060802	0001	Vermilion River at Perry, LA	12/8/80	63	86
060802	0001	Vermilion River at Perry, LA	1/13/81	67	90
060802	0001	Vermilion River at Perry, LA	3/9/81	39	62
060802	0001	Vermilion River at Perry, LA	4/14/81	92	96
060802	0001	Vermilion River at Perry, LA	5/11/81	83	70
060802	0001	Vermilion River at Perry, LA	6/8/81	150	276
060802	0001	Vermilion River at Perry, LA	7/14/81	67	78
060802	0001	Vermilion River at Perry, LA	8/10/81	25	20
060802	0001	Vermilion River at Perry, LA	9/14/81	52	72
060802	0001	Vermilion River at Perry, LA	10/13/81	43	86
060802	0001	Vermilion River at Perry, LA	12/14/81	90	238
060802	0001	Vermilion River at Perry, LA	2/9/82	130	256
060802	0001	Vermilion River at Perry, LA	3/9/82	91	74
060802	0001	Vermilion River at Perry, LA	4/12/82	120	92
060802	0001	Vermilion River at Perry, LA	5/10/82	120	144
060802	0001	Vermilion River at Perry, LA	6/13/82	60	68
060802	0001	Vermilion River at Perry, LA	7/12/82	54	52
060802	0001	Vermilion River at Perry, LA	8/9/82	59	88
060802	0001	Vermilion River at Perry, LA	9/13/82	29	36
060802	0001	Vermilion River at Perry, LA	10/11/82	26	28
060802	0001	Vermilion River at Perry, LA	11/15/82	18	36
060802	0001	Vermilion River at Perry, LA	12/14/82	34	54
060802	0001	Vermilion River at Perry, LA	1/11/83	60	78
060802	0001	Vermilion River at Perry, LA	2/8/83	100	132
060802	0001	Vermilion River at Perry, LA	3/14/83	87	64
060802	0001	Vermilion River at Perry, LA	4/11/83	110	58
060802	0001	Vermilion River at Perry, LA	5/9/83	65	68
060802	0001	Vermilion River at Perry, LA	6/13/83	48	34
060802	0001	Vermilion River at Perry, LA	8/8/83	165	86
060802	0001	Vermilion River at Perry, LA	9/12/83	74	54
060802	0001	Vermilion River at Perry, LA	10/10/83	62	38
060802	0001	Vermilion River at Perry, LA	11/14/83	12	14
060802	0001	Vermilion River at Perry, LA	12/12/83	260	150
060802	0001	Vermilion River at Perry, LA	1/9/84	228	140
060802	0001	Vermilion River at Perry, LA	2/13/84	468	340
060802	0001	Vermilion River at Perry, LA	3/12/84	195	120
060802	0001	Vermilion River at Perry, LA	4/9/84	175	140
060802	0001	Vermilion River at Perry, LA	5/14/84	48	30
060802	0001	Vermilion River at Perry, LA	6/11/84	136	60
060802	0001	Vermilion River at Perry, LA	7/9/84	85	32

060802	0001	Vermilion River at Perry, LA	8/13/84	0	29
060802	0001	Vermilion River at Perry, LA	9/10/84	26	32
060802	0001	Vermilion River at Perry, LA	10/8/84	76	44
060802	0001	Vermilion River at Perry, LA	11/13/84	30	28
060802	0001	Vermilion River at Perry, LA	12/10/84	170	84
060802	0001	Vermilion River at Perry, LA	1/14/85	130	92
060802	0001	Vermilion River at Perry, LA	2/12/85	272	250
060802	0001	Vermilion River at Perry, LA	3/11/85	90	50
060802	0001	Vermilion River at Perry, LA	4/8/85	136	52
060802	0001	Vermilion River at Perry, LA	5/13/85	204	100
060802	0001	Vermilion River at Perry, LA	6/11/85	20	25
060802	0001	Vermilion River at Perry, LA	7/8/85	60	52
060802	0001	Vermilion River at Perry, LA	8/13/85	67	46
060802	0001	Vermilion River at Perry, LA	9/9/85	48	28
060802	0001	Vermilion River at Perry, LA	10/15/85	47	26
060802	0001	Vermilion River at Perry, LA	11/19/85	31	34
060802	0001	Vermilion River at Perry, LA	12/9/85	78	66
060802	0001	Vermilion River at Perry, LA	1/13/86	137	134
060802	0001	Vermilion River at Perry, LA	2/17/86	108	64
060802	0001	Vermilion River at Perry, LA	3/17/86	50	46
060802	0001	Vermilion River at Perry, LA	4/14/86	28	32
060802	0001	Vermilion River at Perry, LA	5/13/86	117	62
060802	0001	Vermilion River at Perry, LA	7/15/86	60	34
060802	0001	Vermilion River at Perry, LA	8/11/86	26	24
060802	0001	Vermilion River at Perry, LA	9/8/86	36	54
060802	0001	Vermilion River at Perry, LA	10/14/86	27	22
060802	0001	Vermilion River at Perry, LA	11/18/86	32	20
060802	0001	Vermilion River at Perry, LA	12/8/86	46.5	62
060802	0001	Vermilion River at Perry, LA	1/12/87	51	42
060802	0001	Vermilion River at Perry, LA	2/15/87	120	232
060802	0001	Vermilion River at Perry, LA	3/9/87	65	34
060802	0001	Vermilion River at Perry, LA	4/13/87	64	52
060802	0001	Vermilion River at Perry, LA	5/11/87	62	76
060802	0001	Vermilion River at Perry, LA	6/8/87	82	42
060802	0001	Vermilion River at Perry, LA	7/14/87	66	62
060802	0001	Vermilion River at Perry, LA	8/10/87	21	29
060802	0001	Vermilion River at Perry, LA	9/14/87	17	27
060802	0001	Vermilion River at Perry, LA	10/12/87	12.5	24
060802	0001	Vermilion River at Perry, LA	11/17/87	11	26
060802	0001	Vermilion River at Perry, LA	12/14/87	45	62
060802	0001	Vermilion River at Perry, LA	1/11/88	95	108
060802	0001	Vermilion River at Perry, LA	2/8/88	75	68
060802	0001	Vermilion River at Perry, LA	3/14/88	68	68
060802	0001	Vermilion River at Perry, LA	4/11/88	119	88
060802	0001	Vermilion River at Perry, LA	5/9/88	37	30
060802	0001	Vermilion River at Perry, LA	6/13/88	31	60
060802	0001	Vermilion River at Perry, LA	7/11/88	65	74
060802	0001	Vermilion River at Perry, LA	8/9/88	31	60
060802	0001	Vermilion River at Perry, LA	9/13/88	29	34

060802	0001	Vermilion River at Perry, LA	10/11/88	36	30
060802	0001	Vermilion River at Perry, LA	11/15/88	30	15
060802	0001	Vermilion River at Perry, LA	12/13/88	124	184
060802	0001	Vermilion River at Perry, LA	1/10/89	38	40
060802	0001	Vermilion River at Perry, LA	2/14/89	42	44
060802	0001	Vermilion River at Perry, LA	3/14/89	85	96
060802	0001	Vermilion River at Perry, LA	4/11/89	96	50
060802	0001	Vermilion River at Perry, LA	5/9/89	57	34
060802	0001	Vermilion River at Perry, LA	6/13/89	44	18
060802	0001	Vermilion River at Perry, LA	7/11/89	31	26
060802	0001	Vermilion River at Perry, LA	8/15/89	29	18
060802	0001	Vermilion River at Perry, LA	9/12/89	27	36
060802	0001	Vermilion River at Perry, LA	10/10/89	21	24
060802	0001	Vermilion River at Perry, LA	11/14/89	18	14
060802	0001	Vermilion River at Perry, LA	12/12/89	87.5	84
060802	0001	Vermilion River at Perry, LA	1/9/90	70	70
060802	0001	Vermilion River at Perry, LA	2/13/90	65	66
060802	0001	Vermilion River at Perry, LA	3/13/90	30	16
060802	0001	Vermilion River at Perry, LA	4/10/90	68	65
060802	0001	Vermilion River at Perry, LA	5/15/90	126	60
060802	0001	Vermilion River at Perry, LA	6/11/90	111	86
060802	0001	Vermilion River at Perry, LA	7/9/90	84	94
060802	0001	Vermilion River at Perry, LA	8/14/90	19	37
060802	0001	Vermilion River at Perry, LA	9/11/90	18	19
060802	0001	Vermilion River at Perry, LA	10/16/90	16	22
060802	0001	Vermilion River at Perry, LA	11/14/90	20	25
060802	0001	Vermilion River at Perry, LA	12/11/90	70	66
060802	0001	Vermilion River at Perry, LA	1/14/91	78	84
060802	0001	Vermilion River at Perry, LA	2/4/91	105	142
060802	0001	Vermilion River at Perry, LA	3/11/91	51	40
060802	0001	Vermilion River at Perry, LA	4/15/91	234	392
060802	0001	Vermilion River at Perry, LA	5/13/91	64	44
060802	0001	Vermilion River at Perry, LA	6/10/91	39	34
060802	0001	Vermilion River at Perry, LA	7/15/91	35	32
060802	0001	Vermilion River at Perry, LA	8/12/91	68	92
060802	0001	Vermilion River at Perry, LA	9/9/91	50	38
060802	0001	Vermilion River at Perry, LA	10/14/91	14	22
060802	0001	Vermilion River at Perry, LA	11/18/91	27	42
060802	0001	Vermilion River at Perry, LA	12/9/91	74	46
060802	0001	Vermilion River at Perry, LA	1/6/92	34	26
060802	0001	Vermilion River at Perry, LA	2/10/92	136	200
060802	0001	Vermilion River at Perry, LA	3/9/92	59	38
060802	0001	Vermilion River at Perry, LA	4/6/92	120	74
060802	0001	Vermilion River at Perry, LA	5/11/92	35	24
060802	0001	Vermilion River at Perry, LA	6/15/92	76	72
060802	0001	Vermilion River at Perry, LA	7/13/92	139	18
060802	0001	Vermilion River at Perry, LA	8/10/92	28	30
060802	0001	Vermilion River at Perry, LA	9/14/92	7.1	96
060802	0001	Vermilion River at Perry, LA	10/12/92	22	28

060802	0001	Vermilion River at Perry, LA	11/16/92	64	34
060802	0001	Vermilion River at Perry, LA	12/14/92	74	78
060802	0001	Vermilion River at Perry, LA	1/11/93	88	91
060802	0001	Vermilion River at Perry, LA	2/8/93	50	76
060802	0001	Vermilion River at Perry, LA	3/8/93	70	55
060802	0001	Vermilion River at Perry, LA	4/12/93	111	148
060802	0001	Vermilion River at Perry, LA	5/10/93	53	22
060802	0001	Vermilion River at Perry, LA	6/14/93	27	25
060802	0001	Vermilion River at Perry, LA	7/12/93	31	36
060802	0001	Vermilion River at Perry, LA	8/9/93	26	27
060802	0001	Vermilion River at Perry, LA	9/13/93	14	15
060802	0001	Vermilion River at Perry, LA	10/11/93	21	21
060802	0001	Vermilion River at Perry, LA	11/15/93	86	126
060802	0001	Vermilion River at Perry, LA	12/13/93	70	62
060802	0001	Vermilion River at Perry, LA	1/10/94	60	33
060802	0001	Vermilion River at Perry, LA	2/7/94	70	40
060802	0001	Vermilion River at Perry, LA	3/14/94	80	46
060802	0001	Vermilion River at Perry, LA	4/11/94	65	27
060802	0001	Vermilion River at Perry, LA	5/9/94	105	36
060802	0001	Vermilion River at Perry, LA	6/13/94	102	72
060802	0001	Vermilion River at Perry, LA	7/11/94	68	60
060802	0001	Vermilion River at Perry, LA	8/8/94	60	90
060802	0001	Vermilion River at Perry, LA	9/12/94	34	33
060802	0001	Vermilion River at Perry, LA	10/10/94	27	49
060802	0001	Vermilion River at Perry, LA	11/14/94	20	25
060802	0001	Vermilion River at Perry, LA	12/12/94	80	128
060802	0001	Vermilion River at Perry, LA	1/9/95	120	122
060802	0001	Vermilion River at Perry, LA	2/13/95	160	95
060802	0001	Vermilion River at Perry, LA	3/13/95	130	120
060802	0001	Vermilion River at Perry, LA	4/3/95	75	44
060802	0001	Vermilion River at Perry, LA	5/8/95	35	22
060802	0001	Vermilion River at Perry, LA	6/12/95	45	26
060802	0001	Vermilion River at Perry, LA	7/10/95	40.8	37
060802	0001	Vermilion River at Perry, LA	8/14/95	45	55
060802	0001	Vermilion River at Perry, LA	9/11/95	11	16
060802	0001	Vermilion River at Perry, LA	10/10/95	36	76
060802	0001	Vermilion River at Perry, LA	11/14/95	45	94
060802	0001	Vermilion River at Perry, LA	12/11/95	23	176
060802	0001	Vermilion River at Perry, LA	1/9/96	48	26
060802	0001	Vermilion River at Perry, LA	2/12/96	80	1080
060802	0001	Vermilion River at Perry, LA	3/11/96	52	34
060802	0001	Vermilion River at Perry, LA	4/8/96	75	116
060802	0001	Vermilion River at Perry, LA	5/14/96	39	13
060802	0001	Vermilion River at Perry, LA	6/10/96	30	566
060802	0001	Vermilion River at Perry, LA	7/9/96	33	68
060802	0001	Vermilion River at Perry, LA	8/12/96	83	12
060802	0001	Vermilion River at Perry, LA	9/10/96	35	62
060802	0001	Vermilion River at Perry, LA	10/14/96	33	32
060802	0001	Vermilion River at Perry, LA	11/19/96	27	25

060802	0001	Vermilion River at Perry, LA	12/9/96	35	29
060802	0001	Vermilion River at Perry, LA	1/7/97	50	64
060802	0001	Vermilion River at Perry, LA	2/17/97	92.5	134
060802	0001	Vermilion River at Perry, LA	3/11/97	30	76
060802	0001	Vermilion River at Perry, LA	4/14/97	88	98
060802	0001	Vermilion River at Perry, LA	5/13/97	160	102
060802	0001	Vermilion River at Perry, LA	6/9/97	149	108
060802	0001	Vermilion River at Perry, LA	7/15/97	70	30
060802	0001	Vermilion River at Perry, LA	8/12/97	50	40
060802	0001	Vermilion River at Perry, LA	9/9/97	27	17.5
060802	0001	Vermilion River at Perry, LA	10/13/97	25	30.9
060802	0001	Vermilion River at Perry, LA	11/18/97	65	56
060802	0001	Vermilion River at Perry, LA	12/8/97	240	130
060802	0001	Vermilion River at Perry, LA	1/13/98	323	123
060802	0001	Vermilion River at Perry, LA	2/9/98	55	58
060802	0001	Vermilion River at Perry, LA	3/10/98	130	146
060802	0001	Vermilion River at Perry, LA	4/13/98	65	4
060802	0001	Vermilion River at Perry, LA	5/12/98	65	20
060802	0001	Vermilion River at Perry, LA	6/8/98	32	38
060802	0001	Vermilion River at Perry, LA	7/13/98	39	34
060802	0001	Vermilion River at Perry, LA	8/10/98	21	25
060802	0001	Vermilion River at Perry, LA	9/14/98	45	30
060802	0001	Vermilion River at Perry, LA	10/12/98	55	50
060802	0001	Vermilion River at Perry, LA	11/16/98	55	49
060802	0001	Vermilion River at Perry, LA	12/14/98	50	33
060802	0001	Vermilion River at Perry, LA	1/12/99	110	84
060802	0001	Vermilion River at Perry, LA	2/9/99	60	36
060802	0001	Vermilion River at Perry, LA	3/9/99	55	34
060802	0001	Vermilion River at Perry, LA	4/13/99	120	88
060802	0001	Vermilion River at Perry, LA	5/11/99	200	238
060802	0001	Vermilion River at Perry, LA	6/15/99	65	34
060802	0001	Vermilion River at Perry, LA	7/13/99	100	68
060802	0001	Vermilion River at Perry, LA	8/10/99	39	30
060802	0001	Vermilion River at Perry, LA	9/14/99	23	20.5
060802	0001	Vermilion River at Perry, LA	10/12/99	19	19.3
060802	0001	Vermilion River at Perry, LA	11/16/99	32	48
060802	0001	Vermilion River at Perry, LA	12/7/99	20	23.5
060802	0001	Vermilion River at Perry, LA	1/11/00	45	55.2
060802	0001	Vermilion River at Perry, LA	2/8/00	8.4	11.2
060802	0001	Vermilion River at Perry, LA	3/14/00	39	60.5
060802	0001	Vermilion River at Perry, LA	4/11/00	140	66
060802	0001	Vermilion River at Perry, LA	5/9/00	85	60
060802	0001	Vermilion River at Perry, LA	6/13/00	38	35
060802	0001	Vermilion River at Perry, LA	7/11/00	65	40
060802	0001	Vermilion River at Perry, LA	8/8/00	26	38
060802	0001	Vermilion River at Perry, LA	9/12/00	65	58.7
060802	0314	Vermilion River south of Lafayette, LA	1/14/91	117	158
060802	0314	Vermilion River south of Lafayette, LA	2/4/91	60	42
060802	0314	Vermilion River south of Lafayette, LA	3/11/91	57	50

060802	0314	Vermilion River south of Lafayette, LA	4/15/91	54	78
060802	0314	Vermilion River south of Lafayette, LA	5/13/91	78	98
060802	0314	Vermilion River south of Lafayette, LA	6/7/91	19	28
060802	0314	Vermilion River south of Lafayette, LA	7/15/91	34	16
060802	0314	Vermilion River south of Lafayette, LA	8/12/91	42	58
060802	0314	Vermilion River south of Lafayette, LA	9/9/91	60	72
060802	0314	Vermilion River south of Lafayette, LA	10/14/91	10	16
060802	0314	Vermilion River south of Lafayette, LA	11/18/91	28	22
060802	0314	Vermilion River south of Lafayette, LA	12/9/91	43	33
060802	0314	Vermilion River south of Lafayette, LA	1/6/92	35	25
060802	0314	Vermilion River south of Lafayette, LA	2/10/92	72	64
060802	0314	Vermilion River south of Lafayette, LA	3/9/92	80	56
060802	0314	Vermilion River south of Lafayette, LA	4/6/92	39	24
060802	0314	Vermilion River south of Lafayette, LA	5/11/92	30	32
060802	0314	Vermilion River south of Lafayette, LA	6/15/92	105	140
060802	0314	Vermilion River south of Lafayette, LA	7/14/92	18	13
060802	0314	Vermilion River south of Lafayette, LA	8/10/92	28	26
060802	0314	Vermilion River south of Lafayette, LA	9/14/92	15	32
060802	0314	Vermilion River south of Lafayette, LA	10/12/92	34	49
060802	0314	Vermilion River south of Lafayette, LA	11/16/92	55.5	52
060802	0314	Vermilion River south of Lafayette, LA	12/14/92	87.5	52
060802	0314	Vermilion River south of Lafayette, LA	1/11/93	72	78
060802	0314	Vermilion River south of Lafayette, LA	2/8/93	36	32
060802	0314	Vermilion River south of Lafayette, LA	3/9/93	65	44
060802	0314	Vermilion River south of Lafayette, LA	4/12/93	70	80
060802	0314	Vermilion River south of Lafayette, LA	5/10/93	50	22
060802	0314	Vermilion River south of Lafayette, LA	6/14/93	21	28
060802	0314	Vermilion River south of Lafayette, LA	7/12/93	36	44
060802	0314	Vermilion River south of Lafayette, LA	8/9/93	28	29
060802	0314	Vermilion River south of Lafayette, LA	9/13/93	19	13
060802	0314	Vermilion River south of Lafayette, LA	10/11/93	31	35
060802	0314	Vermilion River south of Lafayette, LA	11/16/93	53	55
060802	0314	Vermilion River south of Lafayette, LA	12/13/93	60	40
060802	0314	Vermilion River south of Lafayette, LA	1/11/94	38	28
060802	0314	Vermilion River south of Lafayette, LA	2/7/94	90	42
060802	0314	Vermilion River south of Lafayette, LA	3/14/94	90	74
060802	0314	Vermilion River south of Lafayette, LA	4/11/94	65	32
060802	0314	Vermilion River south of Lafayette, LA	5/10/94	95	42
060802	0314	Vermilion River south of Lafayette, LA	6/13/94	78	80
060802	0314	Vermilion River south of Lafayette, LA	7/12/94	80	78
060802	0314	Vermilion River south of Lafayette, LA	8/8/94	35	23
060802	0314	Vermilion River south of Lafayette, LA	9/15/94	27	26
060802	0314	Vermilion River south of Lafayette, LA	10/10/94	24	46
060802	0314	Vermilion River south of Lafayette, LA	11/15/94	22	20
060802	0314	Vermilion River south of Lafayette, LA	12/12/94	24	21
060802	0314	Vermilion River south of Lafayette, LA	1/10/95	80	36
060802	0314	Vermilion River south of Lafayette, LA	2/13/95	45	21
060802	0314	Vermilion River south of Lafayette, LA	3/14/95	75	52
060802	0314	Vermilion River south of Lafayette, LA	4/3/95	80	54

060802	0314	Vermilion River south of Lafayette, LA	5/8/95	36	28
060802	0314	Vermilion River south of Lafayette, LA	6/12/95	50	45
060802	0314	Vermilion River south of Lafayette, LA	7/10/95	87.5	80
060802	0314	Vermilion River south of Lafayette, LA	8/14/95	30	50
060802	0314	Vermilion River south of Lafayette, LA	9/11/95	18	40
060802	0314	Vermilion River south of Lafayette, LA	10/10/95	37	54
060802	0314	Vermilion River south of Lafayette, LA	11/14/95	28	60
060802	0314	Vermilion River south of Lafayette, LA	12/11/95	18	5
060802	0314	Vermilion River south of Lafayette, LA	1/8/96	60	35
060802	0314	Vermilion River south of Lafayette, LA	2/12/96	55	35
060802	0314	Vermilion River south of Lafayette, LA	3/11/96	55	62
060802	0314	Vermilion River south of Lafayette, LA	4/8/96	90	114
060802	0314	Vermilion River south of Lafayette, LA	5/13/96	42	61
060802	0314	Vermilion River south of Lafayette, LA	6/10/96	36	30
060802	0314	Vermilion River south of Lafayette, LA	7/8/96	12	24
060802	0314	Vermilion River south of Lafayette, LA	8/13/96	35	22
060802	0314	Vermilion River south of Lafayette, LA	9/9/96	32	38
060802	0314	Vermilion River south of Lafayette, LA	10/14/96	28	31.3
060802	0314	Vermilion River south of Lafayette, LA	11/18/96	20	16
060802	0314	Vermilion River south of Lafayette, LA	12/9/96	46	51
060802	0314	Vermilion River south of Lafayette, LA	1/6/97	40	31
060802	0314	Vermilion River south of Lafayette, LA	2/17/97	80	80
060802	0314	Vermilion River south of Lafayette, LA	3/10/97	62.5	109
060802	0314	Vermilion River south of Lafayette, LA	4/14/97	34	80
060802	0314	Vermilion River south of Lafayette, LA	5/12/97	48	46
060802	0314	Vermilion River south of Lafayette, LA	6/9/97	55	36
060802	0314	Vermilion River south of Lafayette, LA	7/14/97	70	64
060802	0314	Vermilion River south of Lafayette, LA	8/11/97	37	46
060802	0314	Vermilion River south of Lafayette, LA	9/8/97	21	12
060802	0314	Vermilion River south of Lafayette, LA	10/13/97	13	15.5
060802	0314	Vermilion River south of Lafayette, LA	11/17/97	36	26
060802	0314	Vermilion River south of Lafayette, LA	12/8/97	60	30
060802	0314	Vermilion River south of Lafayette, LA	1/12/98	123	204
060802	0314	Vermilion River south of Lafayette, LA	2/9/98	38	26
060802	0314	Vermilion River south of Lafayette, LA	3/9/98	100	50
060802	0314	Vermilion River south of Lafayette, LA	4/13/98	90	78
060802	0314	Vermilion River south of Lafayette, LA	5/11/98	45	41
060802	0677	Vermilion River North of Intracoastal City, LA	6/17/98	45	47
060802	0677	Vermilion River North of Intracoastal City, LA	7/8/98	70	70
060802	0677	Vermilion River North of Intracoastal City, LA	7/22/98	85	84
060802	0677	Vermilion River North of Intracoastal City, LA	8/5/98	28	24
060802	0677	Vermilion River North of Intracoastal City, LA	8/19/98	70	72
060802	0677	Vermilion River North of Intracoastal City, LA	9/2/98	28	31
060802	0677	Vermilion River North of Intracoastal City, LA	9/16/98	21	13
060802	0677	Vermilion River North of Intracoastal City, LA	10/7/98	110	84
060802	0677	Vermilion River North of Intracoastal City, LA	10/21/98	34	41
060802	0677	Vermilion River North of Intracoastal City, LA	11/5/98	55	59
060802	0677	Vermilion River North of Intracoastal City, LA	11/17/98	80	88
060803	0678	Vermilion River Cutoff	6/17/98	45	60

060803	0678	Vermilion River Cutoff	7/8/98	55	60
060803	0678	Vermilion River Cutoff	7/22/98	45	46
060803	0678	Vermilion River Cutoff	8/5/98	15	18.5
060803	0678	Vermilion River Cutoff	8/19/98	33	36
060803	0678	Vermilion River Cutoff	9/2/98	26	38
060803	0678	Vermilion River Cutoff	9/16/98	39	37
060803	0678	Vermilion River Cutoff	10/7/98	95	128
060803	0678	Vermilion River Cutoff	10/21/98	85	96
060803	0678	Vermilion River Cutoff	11/5/98	110	112
060803	0678	Vermilion River Cutoff	11/17/98	140	200
060804	0679	Intracoastal Waterway	6/17/98	31	38
060804	0679	Intracoastal Waterway	7/8/98	120	108
060804	0679	Intracoastal Waterway	7/22/98	90	80
060804	0679	Intracoastal Waterway	8/5/98	26	29
060804	0679	Intracoastal Waterway	8/19/98	37	30
060804	0679	Intracoastal Waterway	9/2/98	26	30
060804	0679	Intracoastal Waterway	9/16/98	40	41
060804	0679	Intracoastal Waterway	10/7/98	65	92
060804	0679	Intracoastal Waterway	10/21/98	75	68
060804	0679	Intracoastal Waterway	11/5/98	95	100
060804	0679	Intracoastal Waterway	11/17/98	130	188
060901	0681	Bayou Petite Anse	6/24/98	28	36
060901	0681	Bayou Petite Anse	7/15/98	110	112
060901	0681	Bayou Petite Anse	7/29/98	270	104
060901	0681	Bayou Petite Anse	8/12/98	26	32
060901	0681	Bayou Petite Anse	8/26/98	120	22
060901	0681	Bayou Petite Anse	9/9/98	18	26
060901	0681	Bayou Petite Anse	9/23/98	28	21
060901	0681	Bayou Petite Anse	10/14/98	60	33
060901	0681	Bayou Petite Anse	10/28/98	27	32
060901	0681	Bayou Petite Anse	11/24/98	30	20
060901	0681	Bayou Petite Anse	12/9/98	37	38
060902	0315	Delcambre Canal east of Abbeville, LA	1/14/91	114	56
060902	0315	Delcambre Canal east of Abbeville, LA	3/11/91	90	70
060902	0315	Delcambre Canal east of Abbeville, LA	5/13/91	59	120
060902	0315	Delcambre Canal east of Abbeville, LA	7/15/91	68	16
060902	0315	Delcambre Canal east of Abbeville, LA	9/9/91	45	52
060902	0315	Delcambre Canal east of Abbeville, LA	11/18/91	11	25
060902	0315	Delcambre Canal east of Abbeville, LA	1/6/92	28	40
060902	0315	Delcambre Canal east of Abbeville, LA	3/9/92	70	52
060902	0315	Delcambre Canal east of Abbeville, LA	5/11/92	62	44
060902	0315	Delcambre Canal east of Abbeville, LA	7/13/92	26	36
060902	0315	Delcambre Canal east of Abbeville, LA	9/14/92	37	40
060902	0315	Delcambre Canal east of Abbeville, LA	11/16/92	29	38
060902	0315	Delcambre Canal east of Abbeville, LA	1/11/93	105	84
060902	0315	Delcambre Canal east of Abbeville, LA	3/8/93	85	42
060902	0315	Delcambre Canal east of Abbeville, LA	5/10/93	108	34
060902	0315	Delcambre Canal east of Abbeville, LA	7/12/93	40	25
060902	0315	Delcambre Canal east of Abbeville, LA	9/13/93	27	67

060902	0315	Delcambre Canal east of Abbeville, LA	11/15/93	42	56
060902	0315	Delcambre Canal east of Abbeville, LA	1/10/94	52	34
060902	0315	Delcambre Canal east of Abbeville, LA	3/14/94	80	40
060902	0315	Delcambre Canal east of Abbeville, LA	5/9/94	105	36
060902	0315	Delcambre Canal east of Abbeville, LA	7/11/94	63	17
060902	0315	Delcambre Canal east of Abbeville, LA	9/12/94	80	85
060902	0315	Delcambre Canal east of Abbeville, LA	11/14/94	13	14
060902	0315	Delcambre Canal east of Abbeville, LA	1/9/95	17	19
060902	0315	Delcambre Canal east of Abbeville, LA	3/13/95	65	64
060902	0315	Delcambre Canal east of Abbeville, LA	5/8/95	150	62
060902	0315	Delcambre Canal east of Abbeville, LA	7/10/95	28	76
060902	0315	Delcambre Canal east of Abbeville, LA	9/11/95	11	20
060902	0315	Delcambre Canal east of Abbeville, LA	1/9/96	150	232
060902	0315	Delcambre Canal east of Abbeville, LA	3/12/96	29	48
060902	0315	Delcambre Canal east of Abbeville, LA	5/14/96	12	38
060902	0315	Delcambre Canal east of Abbeville, LA	7/8/96	22	58
060902	0315	Delcambre Canal east of Abbeville, LA	9/10/96	20	39
060902	0315	Delcambre Canal east of Abbeville, LA	11/19/96	36	24.5
060902	0315	Delcambre Canal east of Abbeville, LA	1/6/97	45	40
060902	0315	Delcambre Canal east of Abbeville, LA	3/11/97	75	33
060902	0315	Delcambre Canal east of Abbeville, LA	5/13/97	30.5	30
060902	0315	Delcambre Canal east of Abbeville, LA	7/15/97	140	64
060902	0315	Delcambre Canal east of Abbeville, LA	9/9/97	13	12
060902	0315	Delcambre Canal east of Abbeville, LA	11/17/97	35	46
060902	0315	Delcambre Canal east of Abbeville, LA	1/13/98	119	120
060902	0315	Delcambre Canal east of Abbeville, LA	3/10/98	180	110
060902	0315	Delcambre Canal east of Abbeville, LA	5/12/98	65	76
060902	0315	Delcambre Canal east of Abbeville, LA	6/24/98	33	55
060902	0315	Delcambre Canal east of Abbeville, LA	7/15/98	35	56
060902	0315	Delcambre Canal east of Abbeville, LA	7/21/98	22	34
060902	0315	Delcambre Canal east of Abbeville, LA	7/29/98	20	40
060902	0315	Delcambre Canal east of Abbeville, LA	8/12/98	15	18
060902	0315	Delcambre Canal east of Abbeville, LA	8/26/98	18	27
060902	0315	Delcambre Canal east of Abbeville, LA	9/9/98	13	25
060902	0315	Delcambre Canal east of Abbeville, LA	9/23/98	26	35
060902	0315	Delcambre Canal east of Abbeville, LA	10/14/98	33	36
060902	0315	Delcambre Canal east of Abbeville, LA	10/28/98	19	21
060902	0315	Delcambre Canal east of Abbeville, LA	11/16/98	38	34
060902	0315	Delcambre Canal east of Abbeville, LA	11/24/98	18	37
060902	0315	Delcambre Canal east of Abbeville, LA	12/9/98	65	98
060903	0682	Bayou Tigre	6/24/98	21	28
060903	0682	Bayou Tigre	7/15/98	24	22
060903	0682	Bayou Tigre	7/29/98	16	23
060903	0682	Bayou Tigre	8/12/98	15	18
060903	0682	Bayou Tigre	8/26/98	36	29
060903	0682	Bayou Tigre	9/9/98	38	73
060903	0682	Bayou Tigre	9/23/98	12	12
060903	0682	Bayou Tigre	10/14/98	37	20.5
060903	0682	Bayou Tigre	10/28/98	25	17

060903	0682	Bayou Tigre	11/24/98	34	28
060903	0682	Bayou Tigre	12/9/98	45	41
060904	0683	New Iberia Southern Drainage Canal	6/23/98	20	14
060904	0683	New Iberia Southern Drainage Canal	7/28/98	55	68
060904	0683	New Iberia Southern Drainage Canal	8/11/98	25	30
060904	0683	New Iberia Southern Drainage Canal	8/25/98	22	22
060904	0683	New Iberia Southern Drainage Canal	9/8/98	31	58
060904	0683	New Iberia Southern Drainage Canal	9/15/98	9.2	18
060904	0683	New Iberia Southern Drainage Canal	9/22/98	26	39
060904	0683	New Iberia Southern Drainage Canal	10/13/98	50	82
060904	0683	New Iberia Southern Drainage Canal	10/27/98	65	86
060904	0683	New Iberia Southern Drainage Canal	11/23/98	70	80
060904	0683	New Iberia Southern Drainage Canal	12/8/98	120	192
060909	0688	Lake Peigneur	6/24/98	26	28
060909	0688	Lake Peigneur	7/15/98	28	34
060909	0688	Lake Peigneur	7/29/98	85	80
060909	0688	Lake Peigneur	8/12/98	20	23
060909	0688	Lake Peigneur	8/26/98	21	18
060909	0688	Lake Peigneur	9/9/98	21	39
060909	0688	Lake Peigneur	9/23/98	30	36
060909	0688	Lake Peigneur	10/14/98	15	15.5
060909	0688	Lake Peigneur	10/28/98	10	15
060909	0688	Lake Peigneur	11/10/98	14	15
060909	0688	Lake Peigneur	11/24/98	13	14
060909	0688	Lake Peigneur	12/9/98	26	27
060911	0690	Dugas Canal by Tiger Lagoon Oil and Gas Field	6/24/98	23	29
060911	0690	Dugas Canal by Tiger Lagoon Oil and Gas Field	7/15/98	55	86
060911	0690	Dugas Canal by Tiger Lagoon Oil and Gas Field	7/29/98	28	44
060911	0690	Dugas Canal by Tiger Lagoon Oil and Gas Field	8/12/98	31	38
060911	0690	Dugas Canal by Tiger Lagoon Oil and Gas Field	8/26/98	28	44
060911	0690	Dugas Canal by Tiger Lagoon Oil and Gas Field	9/9/98	14	23
060911	0690	Dugas Canal by Tiger Lagoon Oil and Gas Field	9/23/98	22	21
060911	0690	Dugas Canal by Tiger Lagoon Oil and Gas Field	10/14/98	38	29
060911	0690	Dugas Canal by Tiger Lagoon Oil and Gas Field	10/28/98	30	32
060911	0690	Dugas Canal by Tiger Lagoon Oil and Gas Field	11/24/98	38	44
060911	0690	Dugas Canal by Tiger Lagoon Oil and Gas Field	12/9/98	45	45
061001	0691	West Cote Blanche Bay	6/16/98	65	62
061001	0691	West Cote Blanche Bay	7/7/98	0	51
061001	0691	West Cote Blanche Bay	7/21/98	65	80
061001	0691	West Cote Blanche Bay	8/4/98	24	23
061001	0691	West Cote Blanche Bay	8/18/98	40	54
061001	0691	West Cote Blanche Bay	9/1/98	23	27
061001	0691	West Cote Blanche Bay	9/15/98	43	59
061001	0691	West Cote Blanche Bay	10/6/98	130	202
061001	0691	West Cote Blanche Bay	10/20/98	65	81
061001	0691	West Cote Blanche Bay	12/1/98	50	31.5
061002	0692	East Cote Blanche Bay	6/16/98	50	52
061002	0692	East Cote Blanche Bay	7/7/98	0	74
061002	0692	East Cote Blanche Bay	7/21/98	19	21

061002	0692	East Cote Blanche Bay	8/4/98	7.4	5
061002	0692	East Cote Blanche Bay	8/18/98	9.5	7
061002	0692	East Cote Blanche Bay	9/1/98	8	12
061002	0692	East Cote Blanche Bay	9/15/98	14	14
061002	0692	East Cote Blanche Bay	10/6/98	50	66
061002	0692	East Cote Blanche Bay	10/20/98	16	25
061002	0692	East Cote Blanche Bay	11/4/98	22	51
061002	0692	East Cote Blanche Bay	11/17/98	14	25
061002	0692	East Cote Blanche Bay	12/1/98	11	13
061101	0693	Bayou Petite Anse	6/23/98	22	12
061101	0693	Bayou Petite Anse	7/28/98	25	50
061101	0693	Bayou Petite Anse	8/11/98	13	20
061101	0693	Bayou Petite Anse	8/25/98	8.8	11
061101	0693	Bayou Petite Anse	9/8/98	12	20.5
061101	0693	Bayou Petite Anse	9/15/98	22	32
061101	0693	Bayou Petite Anse	9/22/98	19	28
061101	0693	Bayou Petite Anse	10/13/98	40	50
061101	0693	Bayou Petite Anse	10/27/98	22	27
061101	0693	Bayou Petite Anse	11/9/98	20	14
061101	0693	Bayou Petite Anse	11/23/98	45	69
061101	0693	Bayou Petite Anse	12/8/98	110	126
061102	0684	New Iberia So. Drainage Canal nr Intracoast.Waterway	6/23/98	14	12
061102	0684	New Iberia So. Drainage Canal nr Intracoast. Waterway	7/28/98	60	64
061102	0684	New Iberia So. Drainage Canal nr Intracoast.Waterway	8/11/98	21	24
061102	0684	New Iberia So. Drainage Canal nr Intracoast.Waterway	8/25/98	7.5	9
061102	0684	New Iberia So. Drainage Canal nr Intracoast.Waterway	9/8/98	8.4	15
061102	0684	New Iberia So. Drainage Canal nr Intracoast. Waterway	9/15/98	11	18
061102	0684	New Iberia So. Drainage Canal nr Intracoast. Waterway	9/22/98	14	21
061102	0684	New Iberia So. Drainage Canal nr Intracoast. Waterway	10/13/98	27	28
061102	0684	New Iberia So. Drainage Canal nr Intracoast. Waterway	10/27/98	19	29
061102	0684	New Iberia So. Drainage Canal nr Intracoast. Waterway	11/9/98	39	50
061102	0684	New Iberia So. Drainage Canal nr Intracoast. Waterway	11/23/98	55	107
061102	0684	New Iberia So. Drainage Canal nr Intracoast. Waterway	12/8/98	85	110
061102	0689	Boston Canal	6/17/98	110	211
061102	0689	Boston Canal	7/8/98	50	71
061102	0689	Boston Canal	7/22/98	50	82
061102	0689	Boston Canal	8/5/98	20	24
061102	0689	Boston Canal	8/19/98	12	19
061102	0689	Boston Canal	9/2/98	20	28.6
061102	0689	Boston Canal	9/16/98	30	33.5
061102	0689	Boston Canal	10/7/98	73	144
061102	0689	Boston Canal	10/21/98	80	98
061102	0689	Boston Canal	11/5/98	75	114
061102	0689	Boston Canal	11/17/98	140	232
061102	0694	Intracoastal Waterway South of Avery Island, LA	6/23/98	24	24
061102	0694	Intracoastal Waterway South of Avery Island, LA	7/28/98	45	52
061102	0694	Intracoastal Waterway South of Avery Island, LA	8/11/98	50	84
061102	0694	Intracoastal Waterway South of Avery Island, LA	8/25/98	16	25
061102	0694	Intracoastal Waterway South of Avery Island, LA	9/8/98	45	87.5

061102	0694	Intracoastal Waterway South of Avery Island, LA	9/15/98	15	21
061102	0694	Intracoastal Waterway South of Avery Island, LA	9/22/98	11	18
061102	0694	Intracoastal Waterway South of Avery Island, LA	10/13/98	55	68
061102	0694	Intracoastal Waterway South of Avery Island, LA	10/27/98	29	34
061102	0694	Intracoastal Waterway South of Avery Island, LA	11/9/98	40	53
061102	0694	Intracoastal Waterway South of Avery Island, LA	11/23/98	55	68
061102	0694	Intracoastal Waterway South of Avery Island, LA	12/8/98	120	156
061103	0695	Freshwater Bayou Canal	6/24/98	200	280
061103	0695	Freshwater Bayou Canal	7/15/98	700	970
061103	0695	Freshwater Bayou Canal	7/29/98	350	516
061103	0695	Freshwater Bayou Canal	8/12/98	50	66
061103	0695	Freshwater Bayou Canal	8/26/98	380	572
061103	0695	Freshwater Bayou Canal	9/9/98	220	352
061103	0695	Freshwater Bayou Canal	9/23/98	85	111
061103	0695	Freshwater Bayou Canal	10/14/98	195	164
061103	0695	Freshwater Bayou Canal	10/28/98	225	330
061103	0695	Freshwater Bayou Canal	11/10/98	140	116
061103	0695	Freshwater Bayou Canal	11/24/98	170	218
061103	0695	Freshwater Bayou Canal	12/9/98	200	248