



Impairment Verification Monitoring

Dissolved Oxygen

Segment 2104 Nueces River above Frio River

Volume 1

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Texas Engineering Experiment Station
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**Impairment Verification Monitoring—Volume 1: Physical, and
Chemical Components**
Segment 2104 Nueces River above Frio River

Prepared for
Total Maximum Daily Load Program
Texas Commission on Environmental Quality
P.O. Box 13087, MC - 150
Austin, Texas 78711-3087

By
James S. Bonner, Ph.D., Principal Investigator
F.J. Kelly, M. Beaman and R. Wilkinson

Conrad Blucher Institute for Surveying and Science
Texas A&M University-Corpus Christi
6300 Ocean Drive
Corpus Christi, Texas 78412
Under Texas Engineering Experiment Station Project No. 32525-60880 CC
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Questions concerning this quality assurance project plan should be directed to:

Jim Bonner, Ph.D., P.E., Executive Director
Conrad Blucher Institute for Surveying and Science
Texas A&M University-Corpus Christi
6300 Ocean Drive
Corpus Christi, Texas 78412-5503
(361) 825-2646
bonner@cbi.tamucc.edu

EXECUTIVE SUMMARY

This report describes the water quality data collected on the Nueces River above Frio River (Segment 2104) during August 2002 through August 2004. It has been prepared for the Texas Commission on Environmental Quality (TCEQ) by the Conrad Blucher Institute for Surveying and Science (CBI) at Texas A&M University-Corpus Christi under an inter-agency contract between the TCEQ and the Texas Engineering Experiment Station. Nueces River above Frio River is a 105-mile freshwater stream in the Nueces River Basin that extends from the confluence of the Frio River in Live Oak County to Holland Dam in LaSalle County. Segment 2104 begins at Holland Dam in central La Salle County and flows for approximately 105 miles through McMullen County into western Live Oak County, to the confluence of the Frio River. The watershed is sparsely populated and typical of the South Texas Brush Country dominated by grasses, mesquite, prickly pear cacti, and other thorny shrubs. Nueces River above Frio River was included on the 1999 State of Texas Clean Water Act 303(d) list as impaired due to concentrations of dissolved oxygen below criteria associated with a high aquatic life use in the lower 25 miles of the segment surrounding SH 16.

Volume 1 presents the water quality data, including TCEQ water quality criteria, for 24-hr dissolved oxygen, pH, water temperature, conductivity, and nutrients. Basic statistics are provided for each water quality constituent by station and sampling type. Volume 2, prepared by project partner Ecological Communications Corporation (ECOMM 2004), describes the biological sampling and analyses conducted by ECOMM.

Water quality assessment has evolved since the 1999 305(b) Water Quality Inventory with the introduction of new methodologies. These include the development of hydrologically unique assessment units, use of the binomial approach for analysis, and the use of 24-hour dissolved oxygen measurements. None of the means of average and minimum values of 24-hour dissolved oxygen samples for any of the three sampling stations exceeded their respective TCEQ criteria. However, the number of 24-hour samples of dissolved oxygen collected thus far on Segment 2104 is not sufficient to make a determination of support of aquatic life use, and additional sampling will continue. Routine water samples collected exhibit nutrient levels well below established screening values.

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INTRODUCTION

Nueces River above Frio River (Segment 2104) is a 105-mile freshwater stream in the Nueces River Basin that extends from the confluence of the Frio River in Live Oak County to Holland Dam in LaSalle County (Figure 1). Segment 2104 begins at Holland Dam in central La Salle County and flows for approximately 105 miles through McMullen County into western Live Oak County, to the confluence of the Frio River. The watershed is sparsely populated and, as typical of the South Texas Brush Country, it dominated by grasses, mesquite, prickly pear cacti, and other thorny shrubs. The major land use in this watershed is agriculture (Figure 2).

The high aquatic life use in Nueces River above Frio River was identified as impaired in the 1999 and 2000 Water Quality Inventories (also known as the Clean Water Act Section 305(b) report). The assessment found that some dissolved oxygen concentration samples in the lower 25-mile portion of the stream surround SH 16 were lower than the criterion established to assure optimum conditions for high aquatic life. In 2000 the TCEQ determined that there was an insufficient number of 24-hour dissolved oxygen samples collected since 1999 to allow for a reassessment of standards attainment, and the TCEQ initiated a project to verify the impairment through the collection of additional physical, chemical, and biological data.

In 2001, TCEQ contracted the services of the South Texas Environmental Institute at Texas A&M University-Kingsville (TAMUK) to lead this effort, together with the Conrad Blucher Institute for Surveying and Science (CBI) at Texas A&M University-Corpus Christi and Ecological Communications Corporations (ECOMM) to design and implement a monitoring plan to verify the impairment and then take the necessary actions to restore uses where necessary. In September of 2003 CBI took over as the contract lead on the project under a contract between the TCEQ and the Texas Engineering Experiment Station (TEES) and continued the project operations on Segment 2104 in collaboration with ECOMM. The project team conducted sampling at three stations on Nueces River above Frio River during August 2002 through August 2004 to provide the TCEQ with additional 24-hour dissolved oxygen, physical and chemical analyses, and biological assessments. .

The information provided in this report is included in two volumes. Volume 1 describes the physical and chemical data and analyses for water quality on Segment 2104. The 24-hour dissolved oxygen results are presented in tabular and graphical formats and statistical summaries. Other measured constituents include pH, water temperature, conductivity, and nutrient data, for which basic statistics are provided by station and sampling type. Volume 2, prepared by ECOMM (2004), describes the biological sampling, data and analyses conducted by ECOMM for Nueces River above Frio River.

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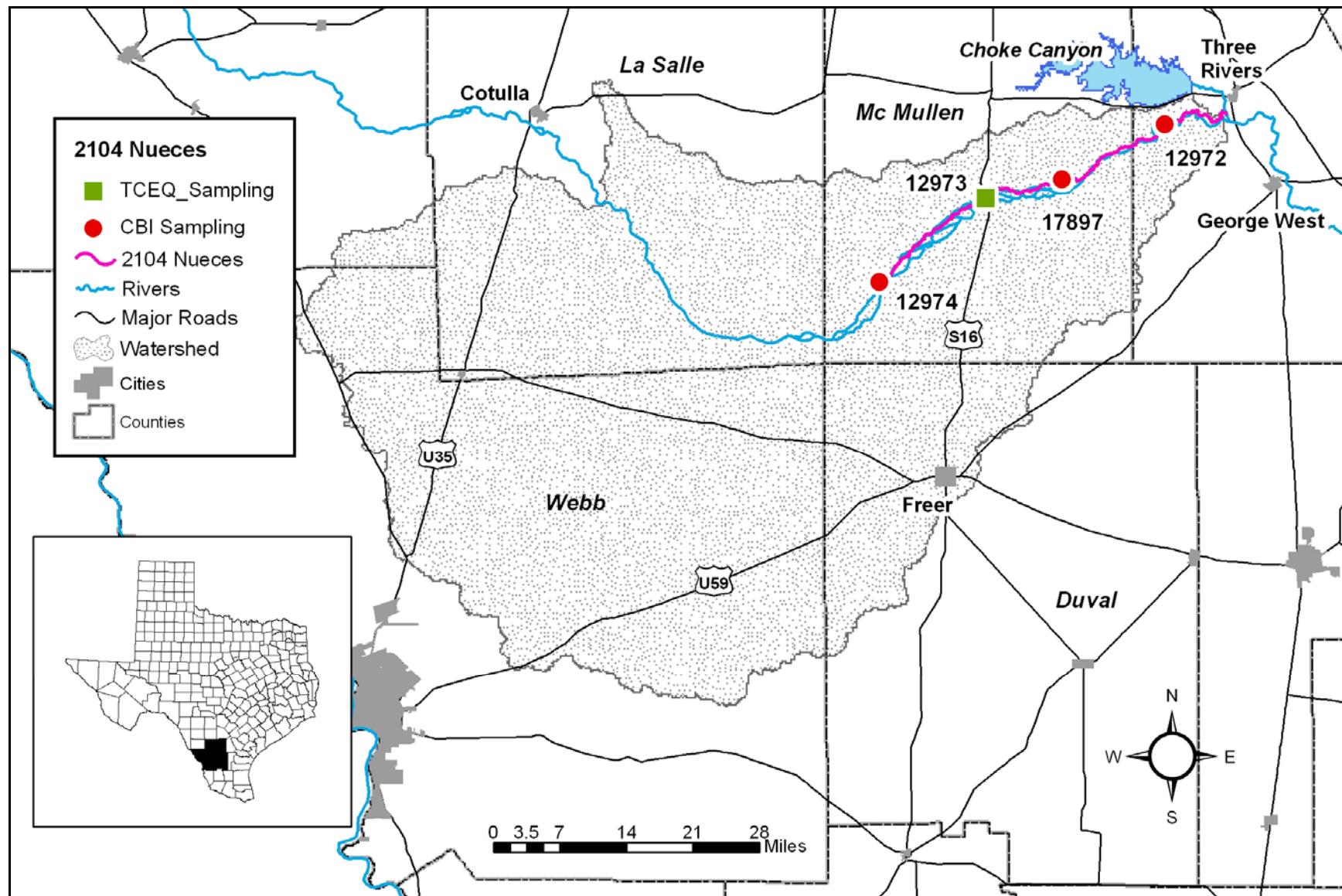


Figure 1. Map showing Station Locations in the Nueces River above Frio River.

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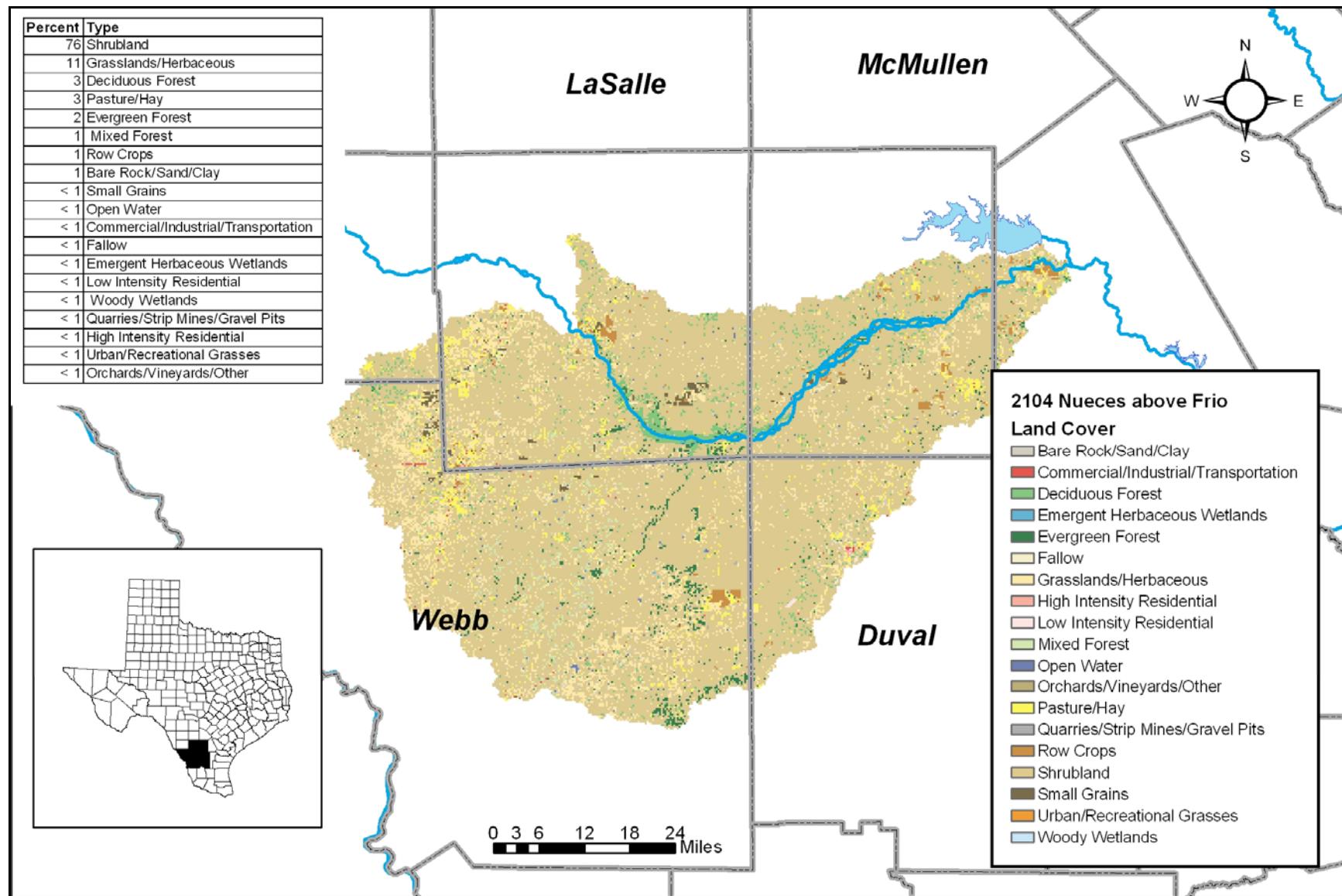


Figure 2. Land Use Map for Segment 2104 of the Nueces River above Frio River Watershed.

HISTORICAL REVIEW

The 1999 303(d) List included Nueces River above Frio River as partially supporting the aquatic life use due to depressed dissolved oxygen levels in the lower 25 miles of the stream. The contact recreation, public water supply and general uses were fully supported; fish consumption was not assessed due to insufficient data. A plot of all available historical grab samples of dissolved oxygen for the same period as the 2000 303(d) evaluation period (06/01/1994 - 05/31/1999) is shown in Figure 3. Of the 22 samples shown, two exceed the 5-mg/L criterion indicated by the heavy line. (Note: the number of historical samples in an assessment period can be greater than the number used for assessment because of assessment criteria.) The results of the assessment of samples for the 2002 Water Quality Inventories are given in Table 1. Table 2 lists all TCEQ Monitoring Stations on this segment, and Figures 4-6 are photographs of the three Monitoring Stations sampled by this project.

The Station specific uses and criteria for the Nueces River above Frio River, as identified in the 2002 Texas Surface Water Quality Standards (TNRCC 2002), are as follows:

- High Aquatic Life Use
- Contact Recreation Use
- General Use
- Fish Consumption Use
- Public Water Supply Use

Table 1. Assessment Samples for Segment 2104 Nueces River above Frio River for the 2002 Inventory (Developed from water quality data collected between March 1, 1996 and February 28, 2001.)

Rec	Segment ID	Year	Uses or Criteria	Method	Samples Taken	Exceeded	Percentage	Mean	Location
1	2104	2002	Aquatic Life Use	Dissolved Oxygen grab average	24	1			25 miles surrounding SH 16
2	2104	2002	Aquatic Life Use	Dissolved Oxygen grab minimum	24	0	0		25 miles surrounding SH 16
3	2104	2002	Aquatic Life Use	Dissolved Oxygen 24hr average	2	0	0		25 miles surrounding SH 16
4	2104	2002	Aquatic Life Use	Dissolved Oxygen 24hr minimum	2	0	0		25 miles surrounding SH 16

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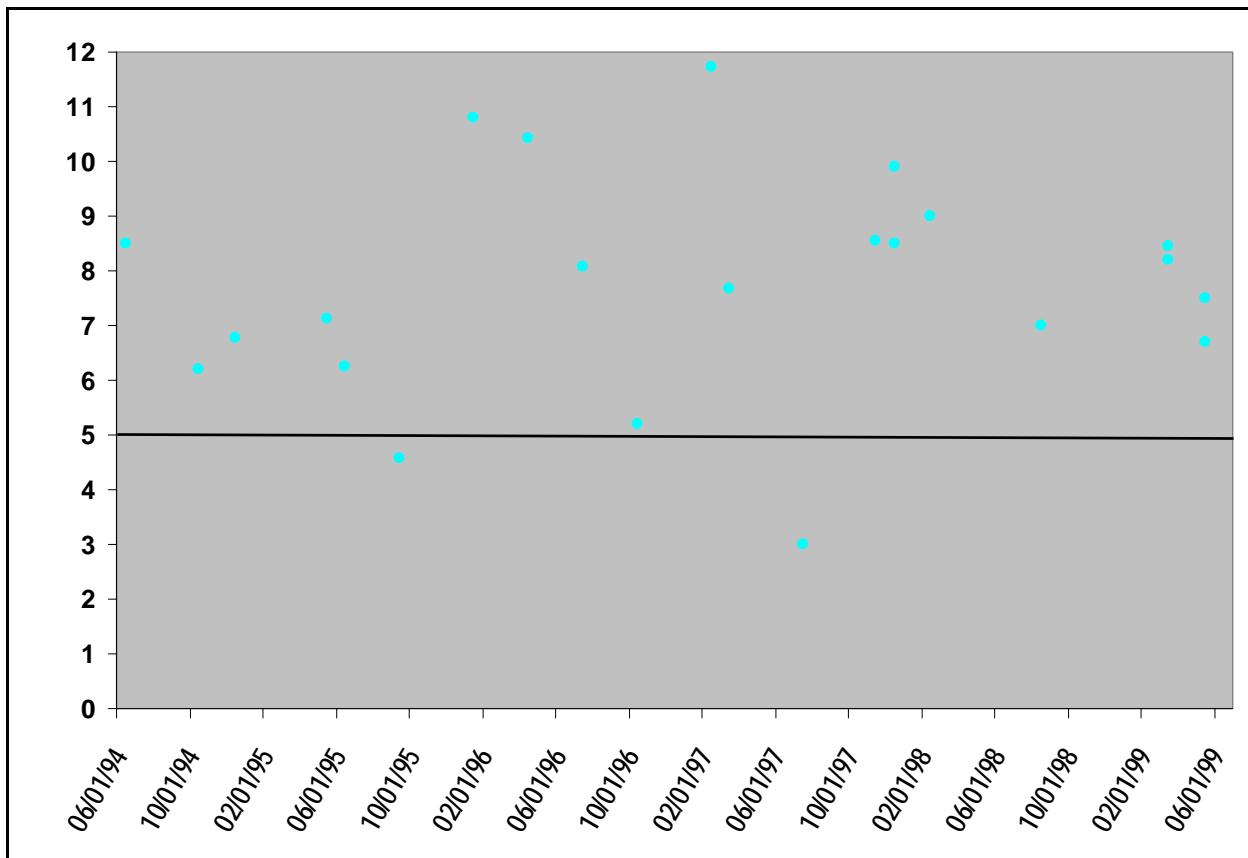


Figure 3. Plot of all available historical grab samples of dissolved oxygen for the period of the 2000 303(d) evaluation period (06/01/94 - 05/31/99). Heavy line indicates 5-mg/L exceedance limit.

Table 2. All TCEQ Monitoring Stations on Segment 2104. Green shading indicates Stations used in impairment verification monitoring. Photos for these 3 stations are indicated in the third column.

Station	Station Descriptions	Photograph
12972	NUECES RIVER BRIDGE ON COUNTY ROAD 1.2 MILES NORTH OF SIMMONS	Figure 4.
12973	NUECES RIVER AT SH 16 SOUTH OF TILDEN	
17897	NUECES RIVER APPROX. 13.9KM DOWNSTREAM OF SH 16 ON SMITH LEASE	Figure 6.
12974	NUECES RIVER AT FM 624	Figure 5.

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Figure 4. Station 12972.

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Figure 5. Station 12974.

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Figure 6. Station 17897.

PROBLEM DEFINITION

CBI led an effort for the TCEQ to assess the water quality in Nueces River above Frio River (Segment 2104). This segment was included on the 1999 and 2000 State of Texas Clean Water Act 303(d) lists as partially supporting the aquatic life use due to depressed concentrations of dissolved oxygen. The initial phase of the project required that the impairment first be verified through the collection of additional physical, chemical, and biological data to fill in the data gaps and determine what course of action, if any, needed to be taken to address the impairment. The additional data would result in one of four outcomes: 1) removal from the 303(d) List, 2) an evaluation of applicable water quality standards (aquatic life use impairments only), 3) establishing Total Maximum Daily Load (TMDL) for the given constituent and the impairment, or 4) collect additional data (Figure 7).

ASSESSMENT METHODOLOGY

The 2002 305(b) Water Quality Inventory implemented several changes to the guidance for assessing surface waters (Sullivan et al. 2004). These changes were incorporated into the assessment methodologies for this project:

- **Dissolved oxygen monitoring.** The 1999 and 2000 Water Quality Inventories determined that aquatic life uses on segment 2104 were impaired primarily based on instantaneous grab samples. This type of sample presents only a small snapshot of the existing water quality conditions. The 2002 Assessment Guidance (TNRCC 2002) specified that impairment determinations requiring restorative actions could only be made using 24-hour composite data, which gives a more accurate representation of the aquatic life uses for the stream. Data collection efforts thus focused on the use of data logging equipment to obtain the correct type data to make reliable use attainment determinations.
- **Development of Assessment Units.** The 2002 Water Quality Inventory also included the use of hydrologically similar portions of entire segments to characterize better the extent of specific use impairment. This approach combines data from several nearby stations to increase the data quantity and, thus, the certainty with respect to the results. Previous assessments considered data from the entire water body to be representative of ambient conditions. Only the Assessment Unit consisting of the 25 miles surrounding SH 16 was involved in the impairment verification for 2002 Water Quality Inventory of Segment 2104 (Table 3).
- **Binomial Approach.** The 305(b) Water Quality Assessment has incorporated the binomial approach, a statistically-based method for the determination of impairment using varying exceedance percentages based upon the number of samples collected. The binomial approach results in a Type I statistical error that is significantly smaller than that of the previous approach of using a single percent exceedance.

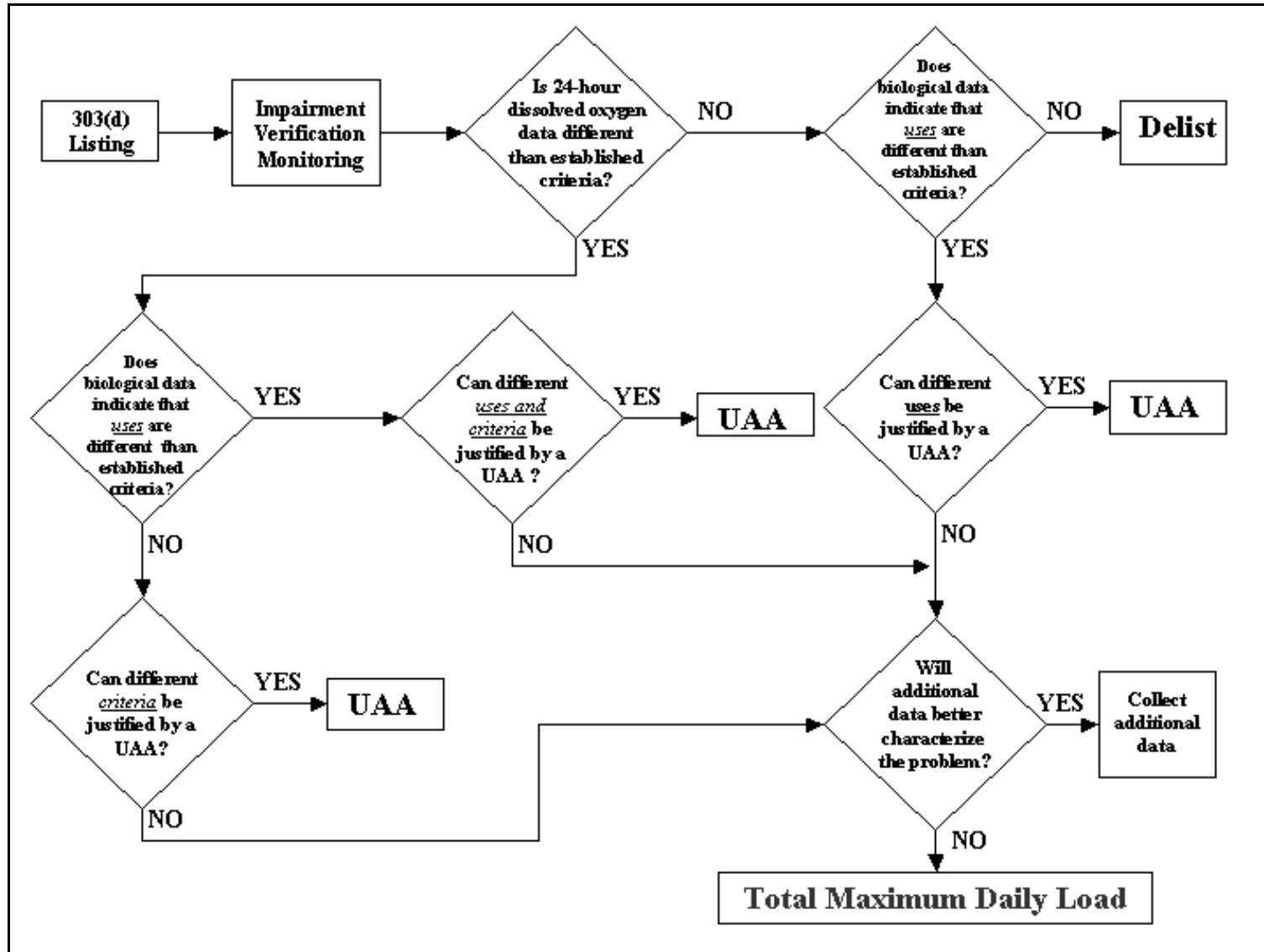


Figure 7. Conceptual Decision Framework

Table 3. Nueces River above Frio River Aquatic Life Assessment Summary

Segment	Station ID	TMDL Station	TCEQ Station	Assessment Unit Number	Assessment Unit Description	Bacteria Support Status	Aquatic Life Support Status	24hr DO Avg Criteria	24hr DO Min Criteria
2104	12972	X	X	2104_01	25 miles surrounding SH 16	FS	FS	5 mg/L	3 mg/L
	12973		X			FS	PS		
	17897	X	X			FS	FS		
	12974	X	X			FS	FS		

QAPP Development

In order to ensure that data collected under this project were scientifically valid and legally defensible, a Quality Assurance Project Plan (QAPP) was developed by CBI. This process ensured that all data submitted to the TCEQ have been collected and analyzed in a way that defines its reliability and, therefore, can be used in TMDL development, stream standards modifications, permit decisions, and water quality assessments.

Monitoring Plan Development

In accordance with the QAPP guidelines a monitoring plan was developed by CBI to provide the additional water quality data and information identified in the Historical Data Review as necessary to meet the project objectives. The data collected and assessed for this project included physical, chemical, biological, and hydrological parameters. The collection of these data was coordinated with the appropriate Clean River Partners and TCEQ Regional Offices. The monitoring plan was prepared in accordance with the guidelines established by TCEQ in the Surface Water Quality Monitoring Procedures Manual (TCEQ 2003). The monitoring plan identified the monitoring locations, the monitoring frequency, and the criteria for monitoring and data collection. The monitoring plan also identified the types of samples to be collected, the methods used to gather all data, and the parameters analyzed. Locations of the monitoring stations were determined using Global Positioning System (GPS) coordinates. The monitoring plan listed in detail the equipment and supplies necessary to carry out the monitoring effort.

Data Requirements

Data collected on Nueces River above Frio River met requirements for several different outcomes: de-listing of the segment, standards adjustment, or establishing a TMDL. The primary goal in data collection was to ensure that enough data were collected over the critical sampling period to adequately assess, and, if necessary, re-classify the uses for Nueces River above Frio River.

Station Selection

Several factors were considered when sampling stations (Table 2) were selected for impairment verification:

- Accessibility
- Data history
- Water availability
- Repetitiveness

- Geographic location.

Physical/Chemical Sample Collection

Parameters measured at each sampling station are listed in Table 4. In-stream, multi-probe, data loggers measured dissolved oxygen, temperature, pH, and conductivity over a 24-hour period. Flow and stream cross-sections were also measured to estimate loading of various chemical constituents. Samples were collected for laboratory analysis during each station visit. Analyses of these samples included routine TCEQ water monitoring constituents. All sampling procedures were included in the QAPP.

Biological Sample Collection

Biological data were collected on the segment during three separate events. Nekton, benthic, and habitat data were collected during each of these sampling events in accordance with the TCEQ Receiving Waters Assessment Procedures Manual (TNRCC 1999). These data were collected primarily to support a use reclassification, if necessary. Volume 2 presents all biological results and analyses.

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Table 4. Parameters Measured.

PARAMETER	UNITS	METHOD TYPE	METHOD	STORET Code	AWRL	PRECISION of laboratory duplicates (RPD)	ACCURACY of matrix spikes % Recovery	AWRL Calibration Standard % Recovery	Laboratory Performing Analysis
pH	pH. units	Multi parameter probe	EPA 150.1 and TCEQ SOP	00400	NA	10	NA	NA	Field
DO	mg/L	Multi parameter probe	EPA 360.1 and TCEQ SOP	00300	NA	10	NA	NA	Field
DO 24-hr min.	mg/L	Multi parameter probe	EPA 360.1 and TCEQ SOP	89855	NA	10	NA	NA	Field
DO 24-hr max.	mg/L	Multi parameter probe	EPA 360.1 and TCEQ SOP	89856	NA	10	NA	NA	Field
DO 24-hr avg.	mg/L	Multi parameter probe	EPA 360.1 and TCEQ SOP	89857	NA	10	NA	NA	Field
DO number of meas.	mg/L	Multi parameter probe	EPA 360.1 and TCEQ SOP	89858	NA	10	NA	NA	Field
Conductivity	uS/cm	Multi parameter probe	EPA 120.1 and TCEQ SOP	00094	NA	10	NA	NA	Field
Temperature	°Celsius	Multi parameter probe	EPA 170.1 and TCEQ SOP	00010	NA	10	NA	NA	Field
Secchi Depth	meters	Secchi disc	TCEQ SOP	00078	NA	20	NA	NA	Field
Days since last significant rainfall	days		TCEQ SOP	72053	NA	NA	NA	NA	Field
Flow	cfs		TCEQ SOP and ADCP	00061	NA	NA	NA	NA	Field
Flow Severity	1-no flow, 2-low,		TCEQ SOP	01351	NA	NA	NA	NA	Field

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PARAMETER	UNITS	METHOD TYPE	METHOD	STORET Code	AWRL	PRECISION of laboratory duplicates (RPD)	ACCURACY of matrix spikes % Recovery	AWRL Calibration Standard % Recovery	Laboratory Performing Analysis
						(RPD)	% Recovery		
	<i>3-normal, 4-flood, 5-high, 6-dry</i>								
TSS	mg/L	gravimetric	EPA 160.2	00530	4.0	20	NA	NA	SATL
TOC	mg/L	combustion-infrared	SM 5310B	00680					SATL
Alkalinity	mg/L	titrimetric	EPA 310.1	00410	10	10	80-120	NA	SATL
Sulfate	mg/L	turbidimetric	EPA 375.4	00945	10	10	80-120	75-125	SATL
Chloride	mg/L	titrimetric	SM 4500	00940	10	10	80-120	75-125	SATL
Ammonia-N	mg/L	titrimetric	EPA 350.2	00610	0.06	10	80-120	75-125	SATL
O-phosphate-P	mg/L	colorimetric	EPA 365.2	00671	0.04	10	80-120	75-125	SATL
Nitrate/nitrite-N	mg/L	spectro-photometer	EPA 353.3	00631	0.04	10	80-120	75-125	SATL
Total Phosphorus	mg/L	colorimetric	EPA 365.2	00665	0.04	10	80-120	75-125	SATL
Total Nitrogen Kjeldahl	mg/L	ion selective electrode	EPA 351.3	00625	0.2	10	80-120	75-125	SATL
Chlorophyll-A	ug/L	colorimetric	SM 10200-H	32211	5.0	20	NA	75-125	SATL
Pheophytin-A	ug/L	colorimetric	SM 10200-H	32218	3.0	20	NA	75-125	SATL
CBOD	mg/L	incubation	EPA 405.1	00307	2.0	10	N/A	N/A	SATL

SATL: San Antonio Testing Laboratory\

AWRL: Ambient Water Reporting Limit

RESULTS

Only one Assessment Unit, covering the 25 miles surrounding SH 16, was applicable for impairment verification. During the period August 2002 through August 2004, the verification monitoring effort utilized three stations (Table 2). Stations 17897 and 12974 have 12 sampling events each, and Station 12972 have 11. The 24-hour, dissolved-oxygen average values (Table 5) are plotted against the TCEQ standard of 5 mg/L for high aquatic life use (Figures 8, 9 and 10). For each station, the mean value of the average dissolved oxygen values (Table 5) is well above 5 mg/L (Figure 11.). Similarly, for the 24-hour minimum values at each station, the means (Table 6) are well above the TCEQ standard of 3 mg/L (Figure 111, 12 and 13). Statistics for the non-critical field and laboratory parameters are presented in Tables 7 and 8, respectively.

Table 5. Statistics for 24-hour DO average values.

Assessment Unit	Station Identification	Number of Samples	Mean Value	Standard Deviation	Maximum Value	Minimum Value
2104_01	12972	11	6.84	1.62	10.91	5.35
	17897	12	6.40	1.33	9.88	5.12
	12974	12	5.73	1.84	10.03	3.01

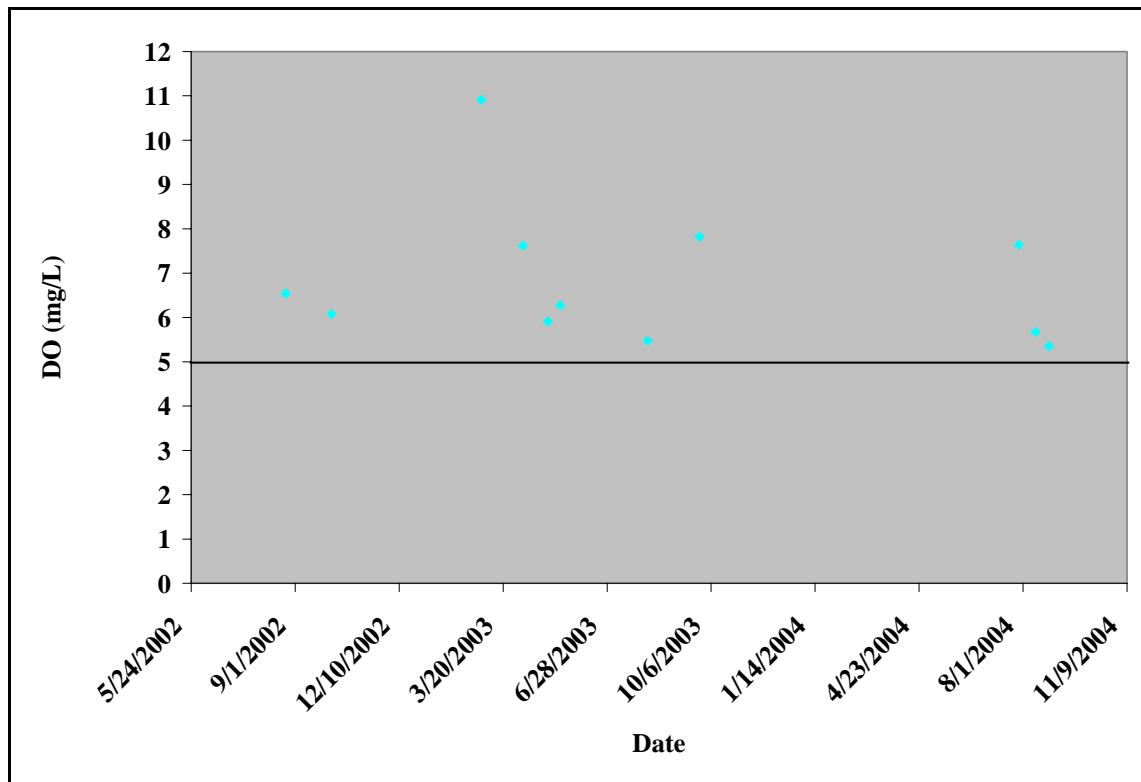


Figure 8. Plot of average 24-hour DO measurements at Stations 12972.

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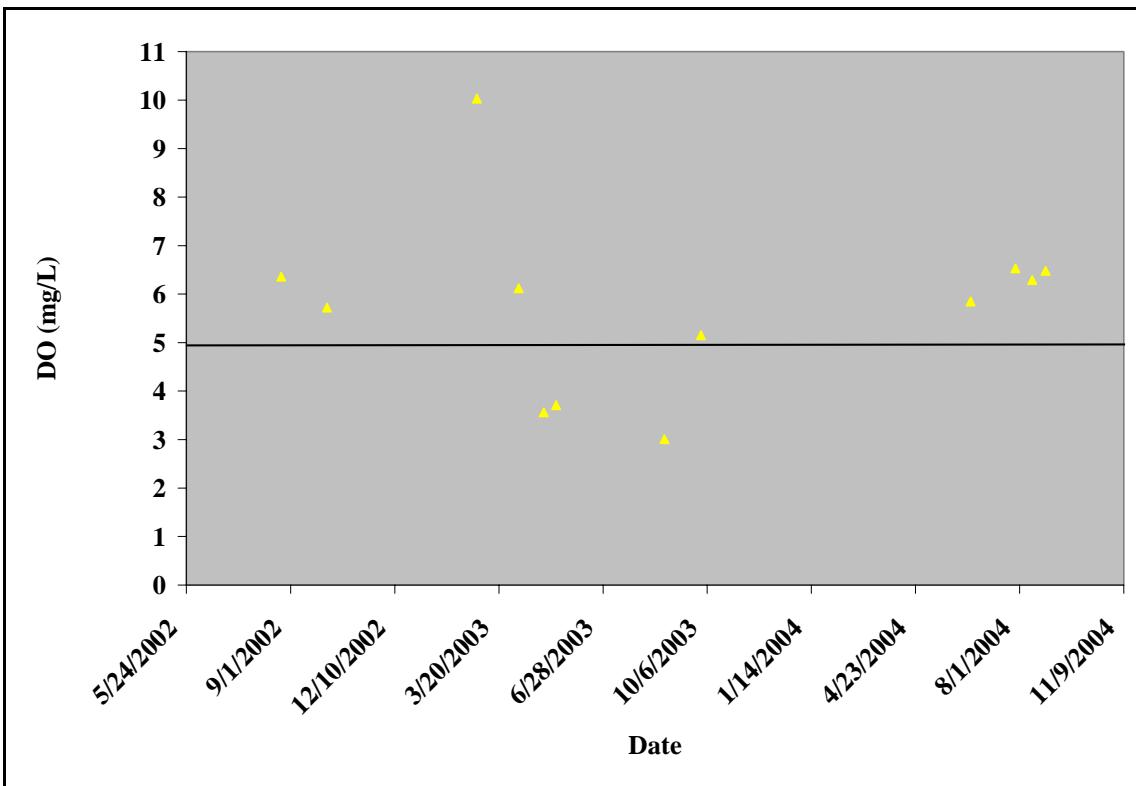


Figure 9. Plot of average 24-hour DO measurements at Stations 12974.

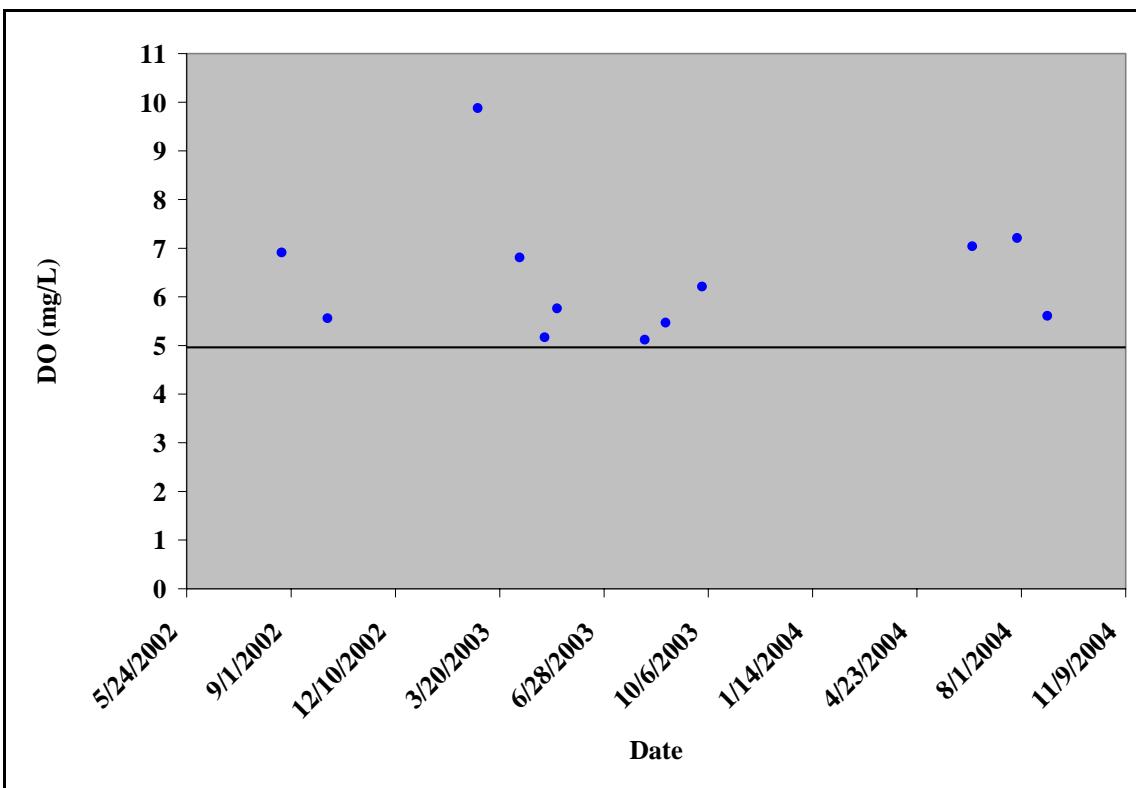


Figure 10. Plot of average 24-hour DO measurements at Station 17897 (Assessment Unit 1)

Table 6. Statistics for 24-hour DO Minimum Values

Assessment Unit	Station Identification	Number of Samples	Mean Value	Standard Deviation	Maximum Value	Minimum Value
2104_01	12972	11	6.49	1.50	10.17	5.10
	17897	12	5.90	1.46	9.56	4.12
	12974	12	5.34	2.16	9.80	1.94

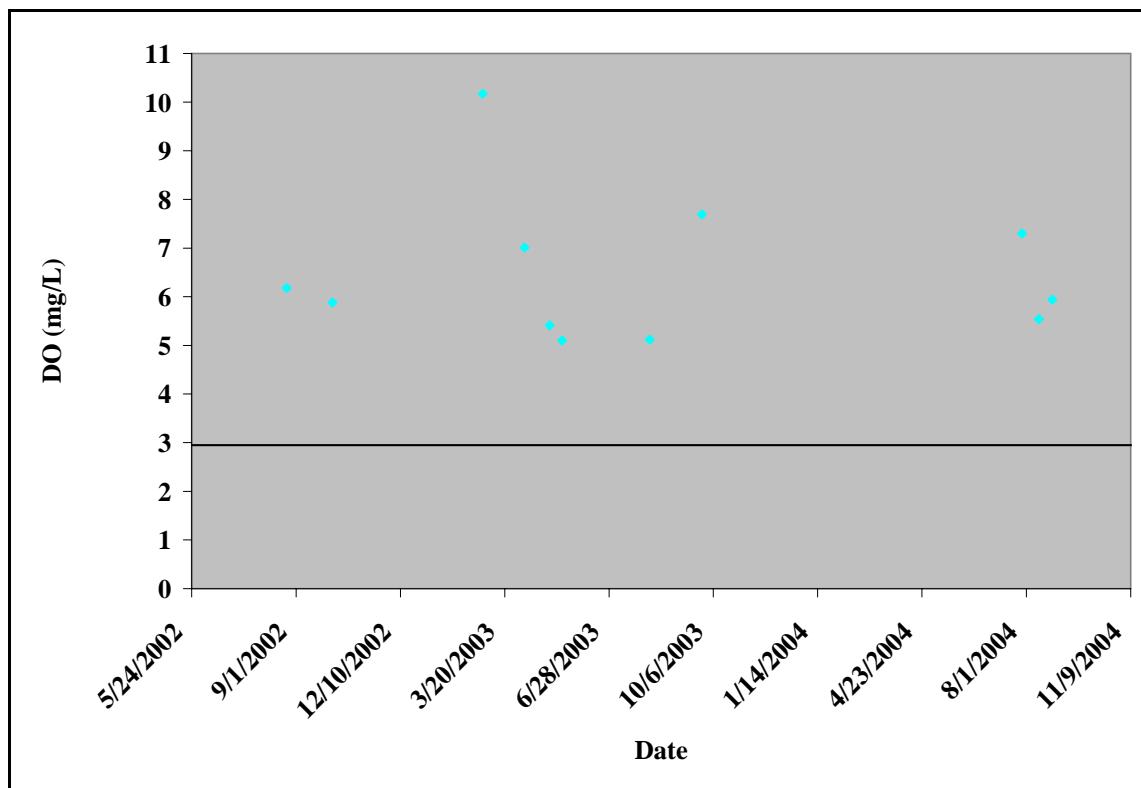


Figure 11. Plot of Minimum 24-hour DO values at Station 12972.

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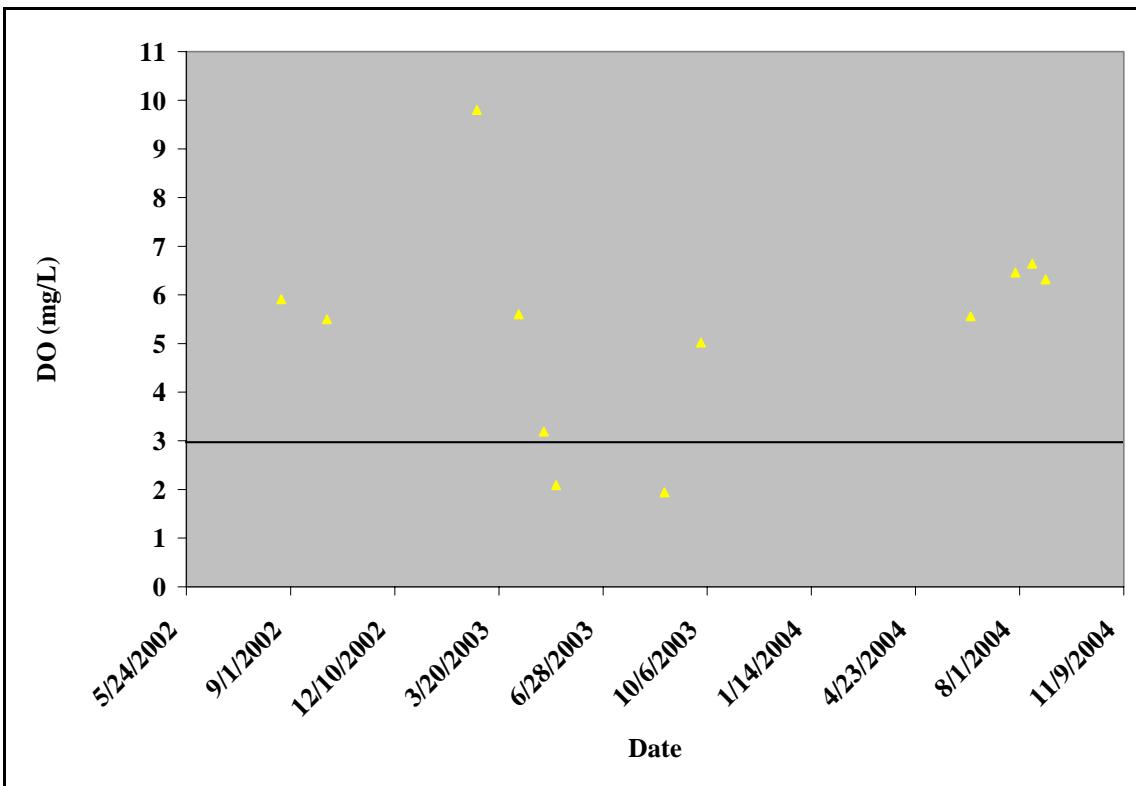


Figure 12. Plot of Minimum 24-hour DO values at Station 12974

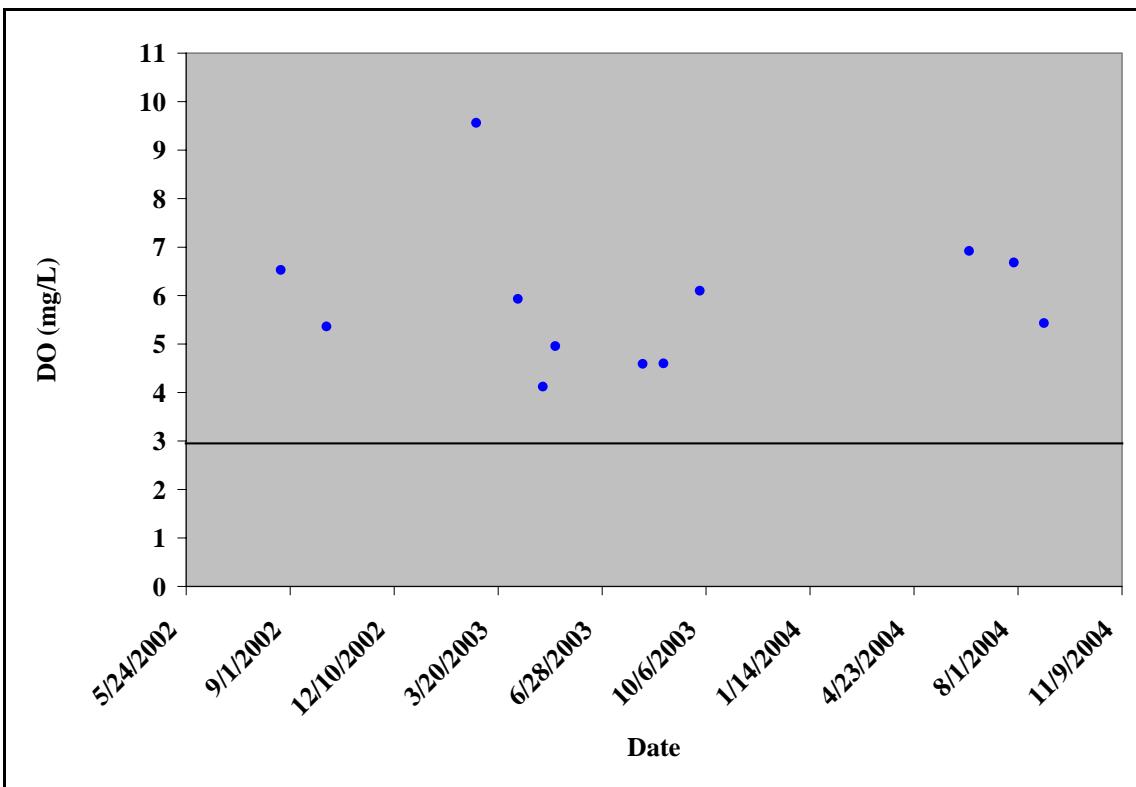


Figure 13. Plot of Minimum 24-hour DO values at Station 17897 (Assessment Unit 1)

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Table 7. Statistics for non-critical field parameters

Station Identification	Parameters	Number of Samples	Mean Value	Standard Deviation	Maximum Value	Minimum Value
12972	Temp (Celsius)	12	26.36	5.70	32.41	11.43
17897	Temp (Celsius)	13	26.17	5.47	31.30	10.87
12974	Temp (Celsius)	13	26.11	5.19	30.14	10.06
12972	pH	10	7.78	0.40	8.10	6.77
17897	pH	13	7.83	0.19	8.14	7.55
12974	pH	13	7.83	0.28	8.19	7.43
12972	Spot DO (mg/L)	11	6.91	1.61	10.96	5.58
17897	Spot DO (mg/L)	13	6.48	1.59	10.04	4.13
12974	Spot DO (mg/L)	12	5.75	1.92	10.08	2.09
12972	Specific Conductivity (microsiemens/cm)	10	1157.30	1416.27	5104.00	438.00
17897	Specific Conductivity (microsiemens/cm)	11	930.91	883.74	3542.00	419.00
12974	Specific Conductivity (microsiemens/cm)	11	605.55	157.68	827.00	381.00
12972	24hr DO Max (mg/L)	11	7.47	1.69	11.79	5.84
17897	24hr DO Max (mg/L)	12	7.13	1.36	10.30	5.76
12974	24hr DO Max (mg/L)	12	6.58	2.24	13.08	4.16
12972	Flow (cfs)	11	136.75	157.08	409.00	1.00
17897	Flow (cfs)	13	106.82	153.67	508.47	1.00
12974	Flow (cfs)	12	131.11	195.54	676.03	1.00

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Table 8. Statistics for laboratory parameters

Station Identification	Parameter	Number of Samples	Mean Value	Standard Deviation	Maximum Value	Minimum Value
12972	Alkalinity (mg/L)	11	173.92	101.48	460.08	68.60
17897	Alkalinity (mg/L)	12	148.19	40.53	258.15	106.00
12974	Alkalinity (mg/L)	12	145.96	61.41	276.87	16.55
12972	Chloride (mg/L)	11	140.24	132.49	484.61	9.78
17897	Chloride (mg/L)	12	197.67	294.70	1105.00	33.99
12974	Chloride (mg/L)	12	92.19	57.83	193.00	24.57
12972	Sulfate (mg/L)	10	46.01	42.86	152.95	7.20
17897	Sulfate (mg/L)	11	44.68	34.25	128.50	7.20
12974	Sulfate (mg/L)	11	34.43	22.73	82.08	6.14
12972	TSS (mg/L)	3	108.00	7.00	115.00	101.00
17897	TSS (mg/L)	4	186.00	112.74	311.00	51.00
12974	TSS (mg/L)	4	495.00	508.78	1212.00	72.00
12972	Ammonia (mg/L)	10	0.62	0.49	1.00	0.03
17897	Ammonia (mg/L)	11	0.58	0.49	1.00	0.03
12974	Ammonia (mg/L)	11	0.58	0.49	1.00	0.03
12972	Phosphate (mg/L)	9	0.15	0.13	0.41	0.01
17897	Phosphate (mg/L)	10	0.16	0.12	0.33	0.01
12974	Phosphate (mg/L)	10	0.18	0.16	0.52	0.01
12972	Orthophosphate (mg/L)	11	0.25	0.53	1.84	0.01
17897	Orthophosphate (mg/L)	12	0.08	0.05	0.15	0.02
12974	Orthophosphate (mg/L)	12	0.12	0.16	0.60	0.01
12972	TKN (mg/L)	9	0.73	0.42	1.00	0.05
17897	TKN (mg/L)	10	0.67	0.45	1.00	0.05
12974	TKN (mg/L)	10	0.67	0.45	1.00	0.05
12972	TOC (mg/L)	11	6.29	3.41	11.96	1.90
17897	TOC (mg/L)	12	7.11	4.05	13.20	2.03
12974	TOC (mg/L)	12	7.18	3.45	13.40	1.91
12972	Chlorophyll A (ug/L)	11	0.81	0.97	3.20	0.25
17897	Chlorophyll A (ug/L)	12	1.71	2.21	7.22	0.25
12974	Chlorophyll A (ug/L)	12	1.77	2.85	10.00	0.25
12972	Phenophytin A (ug/L)	11	2.98	5.17	17.00	0.25
17897	Phenophytin A (ug/L)	12	0.83	0.80	2.60	0.25
12974	Phenophytin A (ug/L)	12	12.69	37.36	131.00	0.25
12972	Nitrate/Nitrite (mg/L)	11	0.53	0.76	2.10	0.53
17897	Nitrate/Nitrite (mg/L)	12	0.31	0.55	2.00	0.01
12974	Nitrate/Nitrite (mg/L)	12	0.27	0.55	2.00	0.01

DISCUSSION

Water quality assessment has improved dramatically with the introduction of new analytical techniques and methodologies. This includes the development of hydrologically similar portions of a segment (Assessment Units), the use of the binomial approach for analysis, and the use of 24-hour dissolved oxygen measurements. The most significant improvement directly related to data collected on Segment 2104 is the use of 24-hour dissolved-oxygen averages in place of the historically used instantaneous measurements. The 24-hour average gives a more accurate representation of the true health of the stream in relation to dissolved-oxygen levels. In addition the use of this parameter allows for a more realistic comparison to the 24-hour criterion.

Data collected by CBI thus far on Nueces River above Frio River indicated a limited degree of impairment due to depressed levels of dissolved oxygen in the water. The three exceedances of the average at Station 12972 during 2003 may warrant additional investigation. Means of average and minimum values of 24-hour dissolved oxygen samples for all three of the sampling stations were well above their respective TCEQ criteria. Based upon this information, remediation of low dissolved oxygen in Segment 2104 would not be recommended at the present time. Development of any sort of corrective action would require the collection of additional data which could better define any potential problems within the segment.

REFERENCES

ECOMM (2004) Impairment Verification Monitoring—Volume 2: Biological and Habitat Components, Segment 2104 Nueces River above Frio River.

Sullivan, A., M. Beaman, F.J. Kelly, V. Palma and J. Walther, 2004: Impairment verification monitoring in eleven Texas water bodies: Step 1 for the development of successful and cost effective TMDLs. In: Proceedings of the Water Environment Federation 77th Annual Conference, October 2-6, 2004, New Orleans, LA.

TCEQ (2003) Surface Water Quality Monitoring Procedures, Volume 1: Physical and Chemical Monitoring Methods for Water, Sediment, and Tissue; RG 415; Austin, Texas.

TNRCC (1999) Receiving Water Assessment Procedures Manual, Water Quality Division, Surface Water Quality Monitoring Program; GI-253; June 1999; Austin, Texas.

TNRCC (2000) Texas State 1999 305(b) Water Quality Inventory; Austin, Texas.

TNRCC (2000) State of Texas Clean Water Act Section 303(d) List; SFR 58/59; Austin, Texas.

TNRCC (2002) Guidance for Assessing Texas Surface and Finished Drinking Water Quality Data, Austin, Texas.

ACKNOWLEDGEMENTS

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**Appendix A
Fact Sheets**

Nueces River Above Frio River

Segment: 2104 Nueces River Basin

Basin number:	21
Basin group:	E
Water body description:	From the confluence of the Frio River in Live Oak County to Holland Dam in LaSalle County
Water body classification:	Classified
Water body type:	Freshwater Stream
Water body length / area:	105 Miles
Water body uses:	Aquatic Life Use, Contact Recreation Use, General Use, Fish Consumption Use, Public Water Supply Use

Standards Not Met in Previous Years				
Assessment Area	Use	Support Status	Parameter	Category
25 miles surrounding SH 16	Aquatic Life Use	Partially Supporting	depressed dissolved oxygen	5c

Parameters Removed from the 2000 303(d) List: pH

Additional Information: The contact recreation, public water supply, and general uses are fully supported. The fish consumption use was not assessed.

This segment was identified on the 2000 303(d) List as partially supporting the aquatic life use due to depressed dissolved oxygen. Because an insufficient number of 24-hour dissolved oxygen values were available in 2002 to determine if the criterion is supported, this segment will be identified as not meeting the standard for dissolved oxygen until sufficient 24-hour measurements are available to demonstrate support of the criterion.

2002 Concerns:			
Assessment Area	Use or Concern	Concern Status	Description of Concern
25 miles surrounding SH 16	Public Water Supply Concern	Concern	chloride
25 miles surrounding SH 16	Public Water Supply Concern	Concern	total dissolved solids
Remainder of segment	Public Water Supply Concern	Concern	chloride
Remainder of segment	Public Water Supply Concern	Concern	total dissolved solids

Monitoring sites used:		
Assessment Area	Station ID	Station Description
25 miles surrounding SH 16	12973	NUECES RIVER AT SH 16 SOUTH OF TILDEN

Segment ID: 2104

Water body name: Nueces River Above Frio River

Freshwater Stream	Nueces River Basin	Total size:	105	Miles		
Assessment Method	Status of Use Support or Concern	Location	Location size	# of samples	# of exceedances	Mean

Aquatic Life Use

Dissolved Oxygen grab average	No Concern	25 miles surrounding SH 16	25	24	1	
Dissolved Oxygen grab minimum	Fully Supporting	25 miles surrounding SH 16	25	24	0	
Dissolved Oxygen 24hr average	Not Assessed	25 miles surrounding SH 16	25	2	0	
Dissolved Oxygen 24hr minimum	Not Assessed	25 miles surrounding SH 16	25	2	0	
Acute Metals in water	No Concern-Limited Data	25 miles surrounding SH 16	25	9	0	
Chronic Metals in water	No Concern-Limited Data	25 miles surrounding SH 16	25	9		
Overall Aquatic Life Use	Fully Supporting	25 miles surrounding SH 16	25			
Overall Aquatic Life Use	Not Assessed	Remainder of segment	80			

Contact Recreation Use

E. coli single sample	No Concern-Limited Data	25 miles surrounding SH 16	25	6	0	
E. coli geometric mean	No Concern-Limited Data	25 miles surrounding SH 16	25	6		67.4
Fecal coliform single sample	Fully Supporting	25 miles surrounding SH 16	25	13	1	
Fecal coliform geometric mean	Fully Supporting	25 miles surrounding SH 16	25	13		74.6
Overall Recreation Use	Fully Supporting	25 miles surrounding SH 16	25			
Overall Recreation Use	Not Assessed	Remainder of segment	80			

General Use

Water Temperature	Fully Supporting	25 miles surrounding SH 16	25	30	0	
pH	Fully Supporting	25 miles surrounding SH 16	25	26	2	
Chloride	Fully Supporting	25 miles surrounding SH 16	25	30		473.3

Segment ID: 2104**Water body name:** Nueces River Above Frio River

Freshwater Stream	Nueces River Basin	Total size:	105	Miles
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Assessment Method	Status of Use Support or Concern	Location	Location size	# of samples	# of exceedances	Mean
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General Use (continued)

Chloride	Fully Supporting	Remainder of segment	80	30		473.3
Sulfate	Fully Supporting	25 miles surrounding SH 16	25	30		94.6
Sulfate	Fully Supporting	Remainder of segment	80	30		94.6
Total Dissolved Solids	Fully Supporting	25 miles surrounding SH 16	25	35		1,120.28
Total Dissolved Solids	Fully Supporting	Remainder of segment	80	35		1,120.28
Overall General Use	Fully Supporting	25 miles surrounding SH 16	25			
Overall General Use	Fully Supporting	Remainder of segment	80			

Fish Consumption Use

Human Health Criteria Metals	No Concern-Limited Data	25 miles surrounding SH 16	25	9		
Overall Fish Consumption Use	Not Assessed	25 miles surrounding SH 16	25			
Overall Fish Consumption Use	Not Assessed	Remainder of segment	80			

Public Water Supply Use

Finished Water: Running Avg	Fully Supporting	25 miles surrounding SH 16	25			
Surface Water: Long-term average Metals	No Concern-Limited Data	25 miles surrounding SH 16	25	9		
Surface Water: Long-term average Nitrate+Nitrite Nitrogen	Fully Supporting	25 miles surrounding SH 16	25	30		0.27
Surface Water: Running average Metals	No Concern-Limited Data	25 miles surrounding SH 16	25	9		
Surface Water: Running average Nitrate+Nitrite Nitrogen	Fully Supporting	25 miles surrounding SH 16	25	30	0	
Overall Public Water Supply Use	Fully Supporting	25 miles surrounding SH 16	25			
Overall Public Water Supply Use	Fully Supporting	Remainder of segment	80			

Segment ID: 2104**Water body name:** Nueces River Above Frio River

Freshwater Stream	Nueces River Basin	Total size:	105	Miles		
Assessment Method	Status of Use Support or Concern	Location	Location size	# of samples	# of exceedances	Mean

Overall Use Support

	Fully Supporting Fully Supporting	25 miles surrounding SH 16 Remainder of segment	25 80			
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Nutrient Enrichment Concern

Ammonia Nitrogen	No Concern	25 miles surrounding SH 16	25	30	0	
Nitrite + Nitrate Nitrogen	No Concern	25 miles surrounding SH 16	25	30	0	
Orthophosphorus	No Concern	25 miles surrounding SH 16	25	28	0	
Total Phosphorus	No Concern	25 miles surrounding SH 16	25	21	0	
Overall Nutrient Enrichment Concerns	No Concern	25 miles surrounding SH 16	25			
Overall Nutrient Enrichment Concerns	Not Assessed	Remainder of segment	80			

Algal Growth Concern

Chlorophyll a Chlorophyll a	No Concern Not Assessed	25 miles surrounding SH 16 Remainder of segment	25 80	21	3	
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Sediment Contaminants Concern

Overall Sediment Contaminant Concerns	Not Assessed	25 miles surrounding SH 16	25			
Overall Sediment Contaminant Concerns	Not Assessed	Remainder of segment	80			

Fish Tissue Contaminants Concern

Overall Fish Tissue Contaminant Concerns	Not Assessed	25 miles surrounding SH 16	25			
Overall Fish Tissue Contaminant Concerns	Not Assessed	Remainder of segment	80			

Segment ID: 2104

Water body name: Nueces River Above Frio River

Freshwater Stream		Nueces River Basin	Total size:	105	Miles	
Assessment Method	Status of Use Support or Concern	Location	Location size	# of samples	# of exceedances	Mean
Public Water Supply Concern						
Finished Water: Chloride	No Concern	25 miles surrounding SH 16	25			
Finished Water: Chloride	No Concern	Remainder of segment	80			
Finished Water: Sulfate	No Concern	25 miles surrounding SH 16	25			
Finished Water: Sulfate	No Concern	Remainder of segment	80			
Finished Water: Total Dissolved Solids	No Concern	25 miles surrounding SH 16	25			
Finished Water: Total Dissolved Solids	No Concern	Remainder of segment	80			
Finished Water: MTBE	No Concern	25 miles surrounding SH 16	25			
Finished Water: MTBE	No Concern	Remainder of segment	80			
Finished Water: Perchlorate	Not Assessed	25 miles surrounding SH 16	25			
Finished Water: Perchlorate	Not Assessed	Remainder of segment	80			
Finished Water: Overall	No Concern	25 miles surrounding SH 16	25			
Finished Water: Overall	No Concern	Remainder of segment	80			
Surface Water: Chloride	Concern	25 miles surrounding SH 16	25	30		473.3
Surface Water: Chloride	Concern	Remainder of segment	80	30		473.3
Surface Water: Sulfate	No Concern	25 miles surrounding SH 16	25	30		94.6
Surface Water: Sulfate	No Concern	Remainder of segment	80	30		94.6
Surface Water: Total Dissolved Solids	Concern	25 miles surrounding SH 16	25	35		1,120.28
Surface Water: Total Dissolved Solids	Concern	Remainder of segment	80	35		1,120.28
Surface Water: Overall	Concern	25 miles surrounding SH 16	25			
Surface Water: Overall	Concern	Remainder of segment	80			
Overall Public Water Supply Concerns	Concern	25 miles surrounding SH 16	25			

Segment ID: 2104**Water body name:** Nueces River Above Frio River

Freshwater Stream	Nueces River Basin	Total size:	105	Miles		
Assessment Method	Status of Use Support or Concern	Location	Location size	# of samples	# of exceedances	Mean

Public Water Supply Concern (continued)

Overall Public Water Supply Concerns	Concern	Remainder of segment	80			
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Narrative Criteria Concern

Overall Narrative Criteria Concerns	No Concern	25 miles surrounding SH 16	25			
Overall Narrative Criteria Concerns	No Concern	Remainder of segment	80			

Overall Secondary Concern

	Concern	25 miles surrounding SH 16	25			
	Concern	Remainder of segment	80			

Impairment Verification Monitoring—Volume 1: Physical, and Chemical Components
Segment 2104 Nueces River above Frio River

Appendix B
Raw Data

Stationid	Enddate	STORETCODE	DESCRIPTION	GTLT	VALUE
12974	10/6/2002	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		27.38
12972	8/6/2003	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		32.08
12974	4/8/2003	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		23.33
12972	10/6/2002	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		25.51
17897	5/1/2003	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		25.48
17897	7/27/2004	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		29.27
12974	7/27/2004	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		29.2
17897	10/6/2002	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		27.37
17897	8/6/2003	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		31.3
12974	6/15/2004	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		28.54
17897	6/15/2004	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		28.23
12972	7/27/2004	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		29.01
12972	8/26/2003	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		32.41
12974	5/1/2003	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		25.33
12972	9/24/2003	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		24.55
12972	4/8/2003	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		20.9
12974	8/6/2003	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		30.14
12974	9/29/2003	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		24.98
17897	4/8/2003	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		21.52
17897	9/29/2003	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		25.1
12974	2/27/2003	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		10.06
17897	8/12/2004	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		28.7
12974	8/25/2004	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		27.7
17897	2/27/2003	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		10.87
17897	8/26/2004	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		28.36
12972	2/27/2003	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		11.43
17897	8/26/2003	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		30.91
17897	8/22/2002	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		30.17
12972	5/14/2003	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		27.77
12974	8/26/2003	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		28.07
12972	8/22/2002	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		30.08
12974	5/14/2003	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		26.85
12974	8/22/2002	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		29.19
17897	5/14/2003	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		22.87
12972	8/25/2004	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		28.59
12974	8/12/2004	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		28.71
12972	5/1/2003	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		25.88
12972	8/12/2004	00010	TEMPERATURE, WATER (DEGREES CENTIGRADE)		28.05
17897	5/14/2003	00061	FLOW STREAM, INSTANTANEOUS (CUBIC FEET PER SEC)		2.553
17897	5/1/2003	00061	FLOW STREAM, INSTANTANEOUS (CUBIC FEET PER SEC)		9.47
17897	8/6/2003	00061	FLOW STREAM, INSTANTANEOUS (CUBIC FEET PER SEC)		9.36
12974	5/1/2003	00061	FLOW STREAM, INSTANTANEOUS (CUBIC FEET PER SEC)		18
12974	8/26/2003	00061	FLOW STREAM, INSTANTANEOUS (CUBIC FEET PER SEC)		1.7
17897	8/26/2003	00061	FLOW STREAM, INSTANTANEOUS (CUBIC FEET PER SEC)		1.7
17897	10/6/2002	00061	FLOW STREAM, INSTANTANEOUS (CUBIC FEET PER SEC)		45
12974	6/15/2004	00061	FLOW STREAM, INSTANTANEOUS (CUBIC FEET PER SEC)		676.03
12972	8/22/2002	00061	FLOW STREAM, INSTANTANEOUS (CUBIC FEET PER SEC)		1
12974	8/22/2002	00061	FLOW STREAM, INSTANTANEOUS (CUBIC FEET PER SEC)		1
12974	2/27/2003	00061	FLOW STREAM, INSTANTANEOUS (CUBIC FEET PER SEC)		58
17897	8/22/2002	00061	FLOW STREAM, INSTANTANEOUS (CUBIC FEET PER SEC)		1
17897	6/15/2004	00061	FLOW STREAM, INSTANTANEOUS (CUBIC FEET PER SEC)		508.47
12974	10/6/2002	00061	FLOW STREAM, INSTANTANEOUS (CUBIC FEET PER SEC)		45
17897	9/29/2003	00061	FLOW STREAM, INSTANTANEOUS (CUBIC FEET PER SEC)		46.149
12974	9/29/2003	00061	FLOW STREAM, INSTANTANEOUS (CUBIC FEET PER SEC)		59.591
12972	10/6/2002	00061	FLOW STREAM, INSTANTANEOUS (CUBIC FEET PER SEC)		45
12972	8/25/2004	00078	TRANSPARENCY, SECCHI DISC (METERS)	<	0.5
12972	9/24/2003	00078	TRANSPARENCY, SECCHI DISC (METERS)	<	0.2
12974	8/25/2004	00078	TRANSPARENCY, SECCHI DISC (METERS)	<	0.5
12972	8/12/2004	00078	TRANSPARENCY, SECCHI DISC (METERS)	<	0.5
17897	8/26/2003	00078	TRANSPARENCY, SECCHI DISC (METERS)		0.83

17897	8/26/2004	00078	TRANSPARENCY, SECCHI DISC (METERS)	<	0.5
17897	8/12/2004	00078	TRANSPARENCY, SECCHI DISC (METERS)	<	0.5
12974	8/26/2003	00078	TRANSPARENCY, SECCHI DISC (METERS)		0.3
12972	7/27/2004	00078	TRANSPARENCY, SECCHI DISC (METERS)	<	0.5
12974	9/29/2003	00078	TRANSPARENCY, SECCHI DISC (METERS)	<	0.25
17897	7/27/2004	00078	TRANSPARENCY, SECCHI DISC (METERS)	<	0.5
12972	8/6/2003	00078	TRANSPARENCY, SECCHI DISC (METERS)		0.25
12974	7/27/2004	00078	TRANSPARENCY, SECCHI DISC (METERS)	<	0.5
17897	8/6/2003	00078	TRANSPARENCY, SECCHI DISC (METERS)		0.5
12974	8/6/2003	00078	TRANSPARENCY, SECCHI DISC (METERS)		0.5
17897	9/29/2003	00078	TRANSPARENCY, SECCHI DISC (METERS)	<	0.25
12974	8/12/2004	00078	TRANSPARENCY, SECCHI DISC (METERS)	<	0.5
12974	10/6/2002	00078	TRANSPARENCY, SECCHI DISC (METERS)	<	1
12974	4/8/2003	00078	TRANSPARENCY, SECCHI DISC (METERS)		0.5
12972	2/27/2003	00078	TRANSPARENCY, SECCHI DISC (METERS)	<	1
17897	4/8/2003	00078	TRANSPARENCY, SECCHI DISC (METERS)		0.5
12974	5/1/2003	00078	TRANSPARENCY, SECCHI DISC (METERS)		1.4
12972	8/22/2002	00078	TRANSPARENCY, SECCHI DISC (METERS)		0.2
12972	4/8/2003	00078	TRANSPARENCY, SECCHI DISC (METERS)	<	0.5
17897	8/22/2002	00078	TRANSPARENCY, SECCHI DISC (METERS)		0.19
12972	8/26/2003	00078	TRANSPARENCY, SECCHI DISC (METERS)		0.3
17897	2/27/2003	00078	TRANSPARENCY, SECCHI DISC (METERS)	<	1
12974	8/22/2002	00078	TRANSPARENCY, SECCHI DISC (METERS)		0.1
12974	2/27/2003	00078	TRANSPARENCY, SECCHI DISC (METERS)	<	0.5
17897	10/6/2002	00078	TRANSPARENCY, SECCHI DISC (METERS)		1
12972	5/14/2003	00078	TRANSPARENCY, SECCHI DISC (METERS)	>	0.5
17897	5/14/2003	00078	TRANSPARENCY, SECCHI DISC (METERS)		0.5
12972	10/6/2002	00078	TRANSPARENCY, SECCHI DISC (METERS)	<	1
12974	5/14/2003	00078	TRANSPARENCY, SECCHI DISC (METERS)		0.5
17897	9/29/2003	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		719
12972	8/12/2004	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		600
12972	7/27/2004	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		592
17897	7/27/2004	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		3542
12974	9/29/2003	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		827
17897	4/8/2003	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		705
12972	10/6/2002	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		605
12972	8/22/2002	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		474
17897	8/12/2004	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		592
12974	8/22/2002	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		457
12974	8/12/2004	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		655
17897	10/6/2002	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		709
12974	7/27/2004	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		686
12974	8/26/2003	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		5.32
12972	8/25/2004	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		592
12974	5/14/2003	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		759
12972	9/24/2003	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		733
17897	6/15/2004	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		496
12972	5/14/2003	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		1375
17897	8/26/2003	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		729
17897	5/14/2003	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		995
12974	4/8/2003	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		690
17897	8/26/2004	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		447
12974	8/6/2003	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		381
12974	6/15/2004	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		442
17897	5/1/2003	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		887
12972	2/27/2003	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		5104
12972	8/6/2003	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		438
12974	8/25/2004	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		450
12972	5/1/2003	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		1060
17897	8/6/2003	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		419
12974	5/1/2003	00094	SPECIFIC CONDUCTANCE, FIELD (UMHOS/CM @ 25C)		782

12974	2/27/2003	00300	OXYGEN, DISSOLVED (MG/L)		10.08
12972	8/12/2004	00300	OXYGEN, DISSOLVED (MG/L)		5.59
12974	8/22/2002	00300	OXYGEN, DISSOLVED (MG/L)		6.18
12972	8/25/2004	00300	OXYGEN, DISSOLVED (MG/L)		5.78
17897	8/26/2004	00300	OXYGEN, DISSOLVED (MG/L)		5.67
12974	8/12/2004	00300	OXYGEN, DISSOLVED (MG/L)		6.91
12972	2/27/2003	00300	OXYGEN, DISSOLVED (MG/L)		10.96
12972	8/22/2002	00300	OXYGEN, DISSOLVED (MG/L)		6.6
12974	8/25/2004	00300	OXYGEN, DISSOLVED (MG/L)		6.51
12974	4/8/2003	00300	OXYGEN, DISSOLVED (MG/L)		5.78
17897	2/27/2003	00300	OXYGEN, DISSOLVED (MG/L)		10.04
12972	9/24/2003	00300	OXYGEN, DISSOLVED (MG/L)		7.69
12972	5/14/2003	00300	OXYGEN, DISSOLVED (MG/L)		6.12
17897	8/26/2003	00300	OXYGEN, DISSOLVED (MG/L)		6.53
17897	5/14/2003	00300	OXYGEN, DISSOLVED (MG/L)		5.54
12974	8/26/2003	00300	OXYGEN, DISSOLVED (MG/L)		2.09
12972	5/1/2003	00300	OXYGEN, DISSOLVED (MG/L)		5.58
12972	8/6/2003	00300	OXYGEN, DISSOLVED (MG/L)		5.98
17897	5/1/2003	00300	OXYGEN, DISSOLVED (MG/L)		4.13
17897	8/6/2003	00300	OXYGEN, DISSOLVED (MG/L)		5.36
12974	6/15/2004	00300	OXYGEN, DISSOLVED (MG/L)		5.93
12974	8/6/2003	00300	OXYGEN, DISSOLVED (MG/L)		4.63
12972	7/27/2004	00300	OXYGEN, DISSOLVED (MG/L)		8.02
12974	9/29/2003	00300	OXYGEN, DISSOLVED (MG/L)		5.16
17897	4/8/2003	00300	OXYGEN, DISSOLVED (MG/L)		6.03
17897	9/29/2003	00300	OXYGEN, DISSOLVED (MG/L)		6.3
12972	4/8/2003	00300	OXYGEN, DISSOLVED (MG/L)		7.66
12974	10/6/2002	00300	OXYGEN, DISSOLVED (MG/L)		5.53
17897	10/6/2002	00300	OXYGEN, DISSOLVED (MG/L)		5.53
17897	6/15/2004	00300	OXYGEN, DISSOLVED (MG/L)		7
12972	10/6/2002	00300	OXYGEN, DISSOLVED (MG/L)		6.06
12974	7/27/2004	00300	OXYGEN, DISSOLVED (MG/L)		6.49
17897	7/27/2004	00300	OXYGEN, DISSOLVED (MG/L)		8.75
17897	8/22/2002	00300	OXYGEN, DISSOLVED (MG/L)		6.83
12974	5/1/2003	00300	OXYGEN, DISSOLVED (MG/L)		3.71
12972	8/12/2004	00307	BIOCHEM OXY DEM,INHIB, DISS(MG/L,5DAY-20C, CBOD)		4.8
12972	9/24/2003	00307	BIOCHEM OXY DEM,INHIB, DISS(MG/L,5DAY-20C, CBOD)	<	2
17897	8/22/2002	00307	BIOCHEM OXY DEM,INHIB, DISS(MG/L,5DAY-20C, CBOD)	<	2
12974	9/29/2003	00307	BIOCHEM OXY DEM,INHIB, DISS(MG/L,5DAY-20C, CBOD)	<	2
17897	9/29/2003	00307	BIOCHEM OXY DEM,INHIB, DISS(MG/L,5DAY-20C, CBOD)	<	2
12974	8/22/2002	00307	BIOCHEM OXY DEM,INHIB, DISS(MG/L,5DAY-20C, CBOD)	<	2
12972	8/22/2002	00307	BIOCHEM OXY DEM,INHIB, DISS(MG/L,5DAY-20C, CBOD)	<	2
12974	8/12/2004	00307	BIOCHEM OXY DEM,INHIB, DISS(MG/L,5DAY-20C, CBOD)	<	2
17897	8/12/2004	00307	BIOCHEM OXY DEM,INHIB, DISS(MG/L,5DAY-20C, CBOD)		4.05
12972	8/26/2003	00400	PH (STANDARD UNITS)		6.77
12974	8/12/2004	00400	PH (STANDARD UNITS)		8.17
17897	8/6/2003	00400	PH (STANDARD UNITS)		7.88
12972	4/8/2003	00400	PH (STANDARD UNITS)		8.06
12974	8/6/2003	00400	PH (STANDARD UNITS)		7.77
12974	6/15/2004	00400	PH (STANDARD UNITS)		8.19
12974	2/27/2003	00400	PH (STANDARD UNITS)		7.9
17897	8/26/2003	00400	PH (STANDARD UNITS)		7.65
17897	4/8/2003	00400	PH (STANDARD UNITS)		7.72
12974	7/27/2004	00400	PH (STANDARD UNITS)		8.08
12974	8/26/2003	00400	PH (STANDARD UNITS)		7.48
17897	7/27/2004	00400	PH (STANDARD UNITS)		7.91
12974	8/25/2004	00400	PH (STANDARD UNITS)		7.47
17897	8/26/2004	00400	PH (STANDARD UNITS)		7.55
12972	5/1/2003	00400	PH (STANDARD UNITS)		7.68
12974	10/6/2002	00400	PH (STANDARD UNITS)		8.09
17897	2/27/2003	00400	PH (STANDARD UNITS)		8.14

17897	10/6/2002	00400	PH (STANDARD UNITS)		7.61
17897	8/22/2002	00400	PH (STANDARD UNITS)		7.86
17897	5/1/2003	00400	PH (STANDARD UNITS)		7.71
12972	2/27/2003	00400	PH (STANDARD UNITS)		8.08
12974	9/29/2003	00400	PH (STANDARD UNITS)		7.92
12972	5/14/2003	00400	PH (STANDARD UNITS)		7.62
17897	9/29/2003	00400	PH (STANDARD UNITS)		7.95
12972	8/25/2004	00400	PH (STANDARD UNITS)		8.03
12972	8/22/2002	00400	PH (STANDARD UNITS)		7.78
12972	8/6/2003	00400	PH (STANDARD UNITS)		7.76
12974	4/8/2003	00400	PH (STANDARD UNITS)		7.72
12972	7/27/2004	00400	PH (STANDARD UNITS)		8.1
12974	8/22/2002	00400	PH (STANDARD UNITS)		8.07
12974	5/14/2003	00400	PH (STANDARD UNITS)		7.43
17897	6/15/2004	00400	PH (STANDARD UNITS)		8.07
17897	8/12/2004	00400	PH (STANDARD UNITS)		8.08
12972	8/12/2004	00400	PH (STANDARD UNITS)		7.96
12974	5/1/2003	00400	PH (STANDARD UNITS)		7.55
17897	5/14/2003	00400	PH (STANDARD UNITS)		7.71
12972	5/1/2003	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		170.26
12972	9/24/2003	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		108
12974	10/6/2002	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		83.41
17897	8/6/2003	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		145
17897	5/1/2003	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		117.33
17897	6/15/2004	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		106
12972	2/27/2003	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		117.95
17897	2/27/2003	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		140.87
12974	6/15/2004	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		148
12972	4/8/2003	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		174.17
17897	8/26/2004	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		112
12972	8/6/2003	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		145.23
17897	4/8/2003	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		152.22
12974	4/8/2003	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		152.54
12974	7/27/2004	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		162
17897	9/29/2003	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		120
12974	8/22/2002	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		186
12974	9/29/2003	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		148
12972	5/14/2003	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		196.84
12974	8/6/2003	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		140.62
12974	5/1/2003	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		16.55
12972	8/22/2002	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		158
12974	8/26/2003	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		159.48
12972	7/27/2004	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		170
17897	8/22/2002	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		164
12972	8/26/2003	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		460.08
17897	5/14/2003	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		258.15
12972	8/25/2004	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		144
17897	8/26/2003	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		166.11
17897	10/6/2002	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		132.54
12974	8/25/2004	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		112
12972	10/6/2002	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		68.6
12974	5/14/2003	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		276.87
12974	2/27/2003	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		166.08
17897	7/27/2004	00410	ALKALINITY, TOTAL (MG/L AS CACO3)		164
17897	7/27/2004	00530	TOTAL SUSPENDED SOLIDS (MG/I)		145
12972	8/25/2004	00530	TOTAL SUSPENDED SOLIDS (MG/I)		108
17897	8/26/2004	00530	TOTAL SUSPENDED SOLIDS (MG/I)		311
12974	8/25/2004	00530	TOTAL SUSPENDED SOLIDS (MG/I)		1212
12972	7/27/2004	00530	TOTAL SUSPENDED SOLIDS (MG/I)		101
17897	9/29/2003	00530	TOTAL SUSPENDED SOLIDS (MG/I)		51
12972	9/24/2003	00530	TOTAL SUSPENDED SOLIDS (MG/I)		115

12974	9/29/2003	00530	TOTAL SUSPENDED SOLIDS (MG/L)		72
17897	6/15/2004	00530	TOTAL SUSPENDED SOLIDS (MG/L)		237
12974	7/27/2004	00530	TOTAL SUSPENDED SOLIDS (MG/L)		206
12974	6/15/2004	00530	TOTAL SUSPENDED SOLIDS (MG/L)		490
12972	8/25/2004	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	0.03
17897	8/6/2003	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	1
12972	4/8/2003	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	1
12972	5/14/2003	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	1
17897	4/8/2003	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	1
12974	9/29/2003	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	1
12974	8/26/2003	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	1
17897	5/1/2003	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	1
17897	5/14/2003	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	1
12974	5/1/2003	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	1
12974	5/14/2003	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	1
17897	9/29/2003	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	1
12974	8/6/2003	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	1
12972	9/24/2003	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	1
12972	5/1/2003	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	1
12974	6/15/2004	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	0.03
12972	8/26/2003	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	1
12974	7/27/2004	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	0.03
17897	8/26/2004	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	0.03
12974	8/22/2002	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	0.1
12972	2/27/2003	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)		0.08
17897	8/26/2003	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	1
12974	4/8/2003	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	1
12972	8/22/2002	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	0.1
17897	2/27/2003	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)		0.15
12972	8/6/2003	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	1
17897	7/27/2004	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	0.03
17897	8/22/2002	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	0.1
12974	2/27/2003	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)		0.16
17897	6/15/2004	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	0.03
12974	8/25/2004	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	0.03
12972	7/27/2004	00610	NITROGEN, AMMONIA, TOTAL (MG/L AS N)	<	0.03
12974	5/14/2003	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	1
12974	8/25/2004	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	0.05
12972	5/1/2003	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	1
12974	9/29/2003	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	1
12974	8/6/2003	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	1
17897	5/14/2003	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	1
12972	8/26/2003	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	1
12972	8/6/2003	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	1
12974	7/27/2004	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	0.05
17897	7/27/2004	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	0.05
17897	8/22/2002	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	0.5
12974	5/1/2003	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	1
17897	5/1/2003	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	1
12972	5/14/2003	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	1
12972	7/27/2004	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	0.05
12974	4/8/2003	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	1
12974	6/15/2004	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	0.05
17897	8/6/2003	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	1
12972	8/25/2004	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	0.05
17897	4/8/2003	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	1
17897	8/26/2004	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	0.05
12974	8/26/2003	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	1
17897	8/26/2003	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	1
12974	8/22/2002	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	0.5
17897	9/29/2003	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	1

12972	8/22/2002	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	0.5
12972	4/8/2003	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	1
17897	6/15/2004	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	0.05
12972	9/24/2003	00625	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	<	1
12974	9/29/2003	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)	<	0.1
17897	8/22/2002	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)	<	2
12972	7/27/2004	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)		0.194
17897	5/14/2003	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)		0.49
17897	7/27/2004	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)		0.149
12974	5/1/2003	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)		0.04
12974	8/6/2003	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)		0.03
12974	2/27/2003	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)		0.31
12972	5/14/2003	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)		0.45
12974	8/26/2003	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)	<	0.01
12972	8/26/2003	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)	<	0.01
12972	8/22/2002	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)	<	2
12974	8/22/2002	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)	<	2
17897	8/6/2003	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)		0.01
12974	4/8/2003	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)	<	0.11
12972	8/25/2004	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)	<	0.05
17897	8/26/2003	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)	<	0.01
17897	4/8/2003	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)		0.21
12972	2/27/2003	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)		0.31
12974	6/15/2004	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)	<	0.05
12972	8/6/2003	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)		0.14
12972	4/8/2003	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)		0.21
17897	10/6/2002	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)		0.31
17897	2/27/2003	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)		0.31
12974	7/27/2004	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)		0.072
12972	5/1/2003	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)		0.05
12972	10/6/2002	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)		0.32
17897	9/29/2003	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)	<	0.1
12974	5/14/2003	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)	<	0.01
12974	8/25/2004	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)		0.25
17897	8/26/2004	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)		0.09
17897	6/15/2004	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)	<	0.05
17897	5/1/2003	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)		0.04
12974	10/6/2002	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)		0.31
12972	9/24/2003	00631	NITRITE PLUS NITRATE, DISS 1 DET. (MG/L AS N)		2.1
12972	8/26/2003	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)		0.252
12974	8/6/2003	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)		0.249
12974	8/26/2003	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)		0.16
17897	8/6/2003	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)		0.186
12972	8/6/2003	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)		0.235
17897	8/26/2003	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)		0.126
12974	4/8/2003	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)		0.048
12972	7/27/2004	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)		0.16
12972	8/22/2002	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)	<	0.1
12974	8/22/2002	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)	<	0.1
17897	7/27/2004	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)		0.204
17897	8/22/2002	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)	<	0.1
12974	8/25/2004	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)		0.516
12974	7/27/2004	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)		0.165
17897	8/26/2004	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)		0.332
17897	6/15/2004	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)		0.318
12972	5/14/2003	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)	<	0.01
12972	8/25/2004	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)		0.102
17897	4/8/2003	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)		0.056
12974	6/15/2004	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)		0.278
12972	5/1/2003	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)	<	0.01
12972	4/8/2003	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)		0.037

12972	9/24/2003	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)		0.41
12974	5/1/2003	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)	<	0.01
17897	5/1/2003	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)	<	0.01
17897	5/14/2003	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)	<	0.01
17897	9/29/2003	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)		0.223
12974	9/29/2003	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)		0.28
12974	5/14/2003	00665	PHOSPHORUS, TOTAL, WET METHOD (MG/L AS P)	<	0.01
17897	8/26/2003	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.07
12974	9/29/2003	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.139
12972	7/27/2004	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.124
12972	8/26/2003	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.12
17897	7/27/2004	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.079
17897	6/15/2004	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.108
12974	8/25/2004	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.598
12974	6/15/2004	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.066
12974	7/27/2004	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.148
17897	8/26/2004	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.149
12972	8/25/2004	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.014
12972	9/24/2003	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.23
17897	9/29/2003	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.111
17897	2/27/2003	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.04
12974	8/6/2003	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.11
17897	8/22/2002	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)	<	0.1
12974	5/14/2003	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.01
12972	10/6/2002	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.07
12974	5/1/2003	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.02
17897	10/6/2002	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.06
12974	8/22/2002	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)	<	0.1
17897	5/14/2003	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.02
12972	5/14/2003	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		1.84
12972	2/27/2003	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.01
12972	5/1/2003	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.03
12974	4/8/2003	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.045
17897	5/1/2003	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.02
17897	4/8/2003	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.038
12972	4/8/2003	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.028
12974	10/6/2002	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.04
12972	8/22/2002	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)	<	0.1
12974	2/27/2003	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)	<	0.01
12974	8/26/2003	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.11
12972	8/6/2003	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.16
17897	8/6/2003	00671	PHOSPHORUS, DISSOLVED ORTHOPHOSPHORUS(MG/L AS P)		0.15
17897	9/29/2003	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		8.7
17897	7/27/2004	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		13.2
12974	9/29/2003	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		10.6
12972	7/27/2004	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		7.3
17897	2/27/2003	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		4.22
12974	5/14/2003	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		7.78
12972	2/27/2003	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		7.21
17897	8/26/2004	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		12.3
12974	6/15/2004	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		7.6
12972	9/24/2003	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		10.2
17897	8/26/2003	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		12.57
17897	5/14/2003	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		4.03
17897	4/8/2003	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		2.3
12972	8/26/2003	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		11.96
17897	8/6/2003	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		7.72
17897	5/1/2003	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		4.09
12974	8/26/2003	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		7
12972	8/25/2004	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		7.2
12974	5/1/2003	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		8.54

12972	5/1/2003	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		3.81
12972	5/14/2003	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		1.98
12972	8/22/2002	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		2.23
17897	6/15/2004	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		9.1
17897	8/22/2002	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		2.03
12972	8/6/2003	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		8.52
12974	8/25/2004	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		13.4
12974	7/27/2004	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		9.5
17897	10/6/2002	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		5.06
12972	10/6/2002	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		6.93
12974	8/22/2002	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		1.91
12974	4/8/2003	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		2
12974	2/27/2003	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		2.953
12972	4/8/2003	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		1.9
12974	8/6/2003	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		7.82
12974	10/6/2002	00680	CARBON, TOTAL ORGANIC (MG/L AS C)		7.10667
12972	4/8/2003	00940	CHLORIDE (MG/L AS CL)		162.27
12972	8/22/2002	00940	CHLORIDE (MG/L AS CL)		29.6
17897	7/27/2004	00940	CHLORIDE (MG/L AS CL)		1105
12974	6/15/2004	00940	CHLORIDE (MG/L AS CL)		39
17897	4/8/2003	00940	CHLORIDE (MG/L AS CL)		121.95
17897	8/22/2002	00940	CHLORIDE (MG/L AS CL)		44.7
12974	8/22/2002	00940	CHLORIDE (MG/L AS CL)		42.9
12972	8/25/2004	00940	CHLORIDE (MG/L AS CL)		71
12974	2/27/2003	00940	CHLORIDE (MG/L AS CL)		148.16
12972	10/6/2002	00940	CHLORIDE (MG/L AS CL)		111.52
12974	10/6/2002	00940	CHLORIDE (MG/L AS CL)		143.06
17897	6/15/2004	00940	CHLORIDE (MG/L AS CL)		81
12972	7/27/2004	00940	CHLORIDE (MG/L AS CL)		71
12972	2/27/2003	00940	CHLORIDE (MG/L AS CL)		484.61
17897	8/26/2004	00940	CHLORIDE (MG/L AS CL)		61
17897	10/6/2002	00940	CHLORIDE (MG/L AS CL)		136.03
12974	7/27/2004	00940	CHLORIDE (MG/L AS CL)		107
17897	2/27/2003	00940	CHLORIDE (MG/L AS CL)		294.3
12974	8/25/2004	00940	CHLORIDE (MG/L AS CL)		67
12974	9/29/2003	00940	CHLORIDE (MG/L AS CL)		193
17897	8/26/2003	00940	CHLORIDE (MG/L AS CL)		120.8
12972	8/26/2003	00940	CHLORIDE (MG/L AS CL)		162.88
12974	8/26/2003	00940	CHLORIDE (MG/L AS CL)		49.39
12972	8/6/2003	00940	CHLORIDE (MG/L AS CL)		44.53
17897	8/6/2003	00940	CHLORIDE (MG/L AS CL)		33.99
12974	8/6/2003	00940	CHLORIDE (MG/L AS CL)		26.53
12974	5/1/2003	00940	CHLORIDE (MG/L AS CL)		152.41
12972	5/14/2003	00940	CHLORIDE (MG/L AS CL)		9.78
17897	5/14/2003	00940	CHLORIDE (MG/L AS CL)		48.82
17897	9/29/2003	00940	CHLORIDE (MG/L AS CL)		154
12974	5/14/2003	00940	CHLORIDE (MG/L AS CL)		24.57
12972	5/1/2003	00940	CHLORIDE (MG/L AS CL)		213.48
12972	9/24/2003	00940	CHLORIDE (MG/L AS CL)		182
12974	4/8/2003	00940	CHLORIDE (MG/L AS CL)		113.31
17897	5/1/2003	00940	CHLORIDE (MG/L AS CL)		170.44
17897	2/27/2003	00945	SULFATE (MG/L AS SO4)		65.44
17897	8/26/2004	00945	SULFATE (MG/L AS SO4)		28.4
12974	5/14/2003	00945	SULFATE (MG/L AS SO4)		6.14
12974	8/25/2004	00945	SULFATE (MG/L AS SO4)		28.7
17897	5/1/2003	00945	SULFATE (MG/L AS SO4)		71.63
12972	2/27/2003	00945	SULFATE (MG/L AS SO4)		152.95
12974	8/6/2003	00945	SULFATE (MG/L AS SO4)	<	7.2
17897	5/14/2003	00945	SULFATE (MG/L AS SO4)		36.15
17897	7/27/2004	00945	SULFATE (MG/L AS SO4)		128.5
12974	8/22/2002	00945	SULFATE (MG/L AS SO4)		33.9

12972	5/14/2003	00945	SULFATE (MG/L AS SO4)		11.84
12974	6/15/2004	00945	SULFATE (MG/L AS SO4)		36.7
17897	8/22/2002	00945	SULFATE (MG/L AS SO4)		31.3
12972	9/24/2003	00945	SULFATE (MG/L AS SO4)		35
17897	4/8/2003	00945	SULFATE (MG/L AS SO4)		51.82
12974	7/27/2004	00945	SULFATE (MG/L AS SO4)		41.9
12974	5/1/2003	00945	SULFATE (MG/L AS SO4)		82.08
12974	9/29/2003	00945	SULFATE (MG/L AS SO4)		36
17897	9/29/2003	00945	SULFATE (MG/L AS SO4)		30
12972	4/8/2003	00945	SULFATE (MG/L AS SO4)		58.93
12974	8/26/2003	00945	SULFATE (MG/L AS SO4)	<	7.2
12972	8/6/2003	00945	SULFATE (MG/L AS SO4)	<	7.2
12974	2/27/2003	00945	SULFATE (MG/L AS SO4)		43.7
12972	7/27/2004	00945	SULFATE (MG/L AS SO4)		38.2
12972	5/1/2003	00945	SULFATE (MG/L AS SO4)		72.73
12974	4/8/2003	00945	SULFATE (MG/L AS SO4)		55.2
12972	8/25/2004	00945	SULFATE (MG/L AS SO4)		42.2
12972	8/22/2002	00945	SULFATE (MG/L AS SO4)		15.8
17897	8/6/2003	00945	SULFATE (MG/L AS SO4)	<	7.2
17897	6/15/2004	00945	SULFATE (MG/L AS SO4)		30.4
17897	8/26/2003	00945	SULFATE (MG/L AS SO4)		10.66
12972	8/26/2003	00945	SULFATE (MG/L AS SO4)		25.28
12972	9/24/2003	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		4
12972	8/6/2003	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		3
12974	6/15/2004	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		5
12974	8/12/2004	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		3
17897	2/27/2003	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		5
17897	8/22/2002	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		4
12974	8/25/2004	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		5
12974	8/26/2003	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		2
12972	8/26/2003	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		2
12974	8/22/2002	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		4
17897	8/26/2003	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		2
12972	7/27/2004	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		3
12972	8/12/2004	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		3
17897	8/6/2003	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		3
17897	8/12/2004	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		3
12972	8/22/2002	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		4
17897	7/27/2004	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		3
12974	4/8/2003	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		3
12972	8/25/2004	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		5
12974	5/14/2003	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		2
17897	6/15/2004	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		5
12972	5/14/2003	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		2
17897	5/14/2003	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		2
12972	5/1/2003	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		3
12974	9/29/2003	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		5
12974	5/1/2003	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		3
12974	8/6/2003	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		3
17897	4/8/2003	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		3
12972	4/8/2003	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		3
17897	9/29/2003	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		5
12974	10/6/2002	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		5
12974	7/27/2004	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		3
17897	10/6/2002	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		5
12972	10/6/2002	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		5
12972	2/27/2003	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		5
17897	5/1/2003	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		3
12974	2/27/2003	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		5
17897	8/26/2004	01351	FLOW:1=No Flow,2=Low,3=Normal,4=Flood,5=High,6=D		5
12972	2/27/2003	31616	FECAL COLIFORM, MEMBR FILTER,M-FC BROTH, #/100ML		4.29

17897	2/27/2003	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH, #/100ML		92.86
17897	9/29/2003	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH, #/100ML		216
17897	8/22/2002	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH, #/100ML	<	1
12974	4/8/2003	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH, #/100ML		138
12974	8/22/2002	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH, #/100ML	<	1
12972	8/22/2002	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH, #/100ML	<	1
17897	5/14/2003	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH, #/100ML		10
12974	5/14/2003	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH, #/100ML		16
12972	4/8/2003	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH, #/100ML		182
17897	4/8/2003	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH, #/100ML		116
12972	5/14/2003	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH, #/100ML		13
12972	9/24/2003	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH, #/100ML		450
12974	9/29/2003	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH, #/100ML		164
12974	2/27/2003	31616	FECAL COLIFORM,MEMBR FILTER,M-FC BROTH, #/100ML		21.43
12972	9/24/2003	31648	E. COLI, MTEC, MF, #/100 ML		390
12974	7/27/2004	31648	E. COLI, MTEC, MF, #/100 ML		104
12974	6/15/2004	31648	E. COLI, MTEC, MF, #/100 ML		1000
17897	7/27/2004	31648	E. COLI, MTEC, MF, #/100 ML		168
17897	9/29/2003	31648	E. COLI, MTEC, MF, #/100 ML		196
17897	6/15/2004	31648	E. COLI, MTEC, MF, #/100 ML		260
12972	7/27/2004	31648	E. COLI, MTEC, MF, #/100 ML		28
12974	9/29/2003	31648	E. COLI, MTEC, MF, #/100 ML		100
17897	4/8/2003	31699	E. COLI, COLILERT, IDEXX METHOD, MPN/100ML		19.9
12974	5/14/2003	31699	E. COLI, COLILERT, IDEXX METHOD, MPN/100ML		14.8
17897	5/1/2003	31699	E. COLI, COLILERT, IDEXX METHOD, MPN/100ML		35
12972	8/22/2002	31699	E. COLI, COLILERT, IDEXX METHOD, MPN/100ML		21.6
17897	8/22/2002	31699	E. COLI, COLILERT, IDEXX METHOD, MPN/100ML		45
12972	4/8/2003	31699	E. COLI, COLILERT, IDEXX METHOD, MPN/100ML		79.8
12972	5/1/2003	31699	E. COLI, COLILERT, IDEXX METHOD, MPN/100ML		160.7
17897	2/27/2003	31699	E. COLI, COLILERT, IDEXX METHOD, MPN/100ML		125.9
12974	2/27/2003	31699	E. COLI, COLILERT, IDEXX METHOD, MPN/100ML		41.9
12974	4/8/2003	31699	E. COLI, COLILERT, IDEXX METHOD, MPN/100ML		14.3
12974	5/1/2003	31699	E. COLI, COLILERT, IDEXX METHOD, MPN/100ML		43.2
12972	5/14/2003	31699	E. COLI, COLILERT, IDEXX METHOD, MPN/100ML		12
17897	5/14/2003	31699	E. COLI, COLILERT, IDEXX METHOD, MPN/100ML		120.1
12974	8/22/2002	31699	E. COLI, COLILERT, IDEXX METHOD, MPN/100ML		13.5
12972	10/6/2002	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	0.25
17897	6/15/2004	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH		2.14
12974	8/25/2004	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH		10
12974	2/27/2003	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	0.25
17897	8/22/2002	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	2
12974	9/29/2003	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	1
17897	8/6/2003	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	0.25
12974	7/27/2004	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH		3.7
12974	10/6/2002	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	0.25
12974	8/26/2003	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	0.25
12972	5/1/2003	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	0.25
12972	5/14/2003	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	0.25
12972	9/24/2003	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	1
12974	8/6/2003	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	0.25
12972	8/6/2003	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	0.25
12974	8/22/2002	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH		2.1
12972	8/26/2003	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	0.25
17897	8/26/2003	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	0.25
12972	8/25/2004	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH		1
17897	5/14/2003	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	0.25
17897	5/1/2003	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	0.25
17897	10/6/2002	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	0.25
17897	7/27/2004	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH		3.2
17897	9/29/2003	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH		7.217
12972	2/27/2003	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	0.25

12972	4/8/2003	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	0.25
12972	8/22/2002	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	2
12974	4/8/2003	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	0.25
12974	5/1/2003	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	0.25
12972	7/27/2004	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH		3.2
17897	8/26/2004	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH		4.2
12974	6/15/2004	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH		2.67
17897	2/27/2003	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	0.25
17897	4/8/2003	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	0.25
12974	5/14/2003	32211	CHLOROPHYLL-A UG/L SPECTROPHOTOMETRIC ACID. METH	<	0.25
12972	9/24/2003	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.		17
12974	6/15/2004	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.		1.44
17897	5/14/2003	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	<	0.25
17897	4/8/2003	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	<	0.25
12972	8/25/2004	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.		5.3
12974	5/1/2003	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	<	0.25
12972	10/6/2002	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	<	0.25
17897	8/26/2004	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.		1.3
17897	8/22/2002	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.		2.6
17897	6/15/2004	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.		1.6
17897	10/6/2002	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	<	0.25
12972	5/14/2003	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	<	0.25
17897	8/6/2003	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	<	0.25
12974	10/6/2002	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	<	0.25
12972	8/22/2002	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.		2.2
12972	4/8/2003	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	<	0.25
12974	4/8/2003	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	<	0.25
17897	8/26/2003	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	<	0.25
12974	8/25/2004	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.		131
12974	9/29/2003	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.		8.437
17897	5/1/2003	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	<	0.25
12974	2/27/2003	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	<	0.25
17897	7/27/2004	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.		1.7
17897	2/27/2003	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	<	0.25
12972	2/27/2003	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	<	0.25
12974	8/26/2003	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	<	0.25
17897	9/29/2003	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	<	1
12972	7/27/2004	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.		6.5
12974	8/22/2002	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.		4
12974	8/6/2003	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	<	0.25
12972	5/1/2003	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	<	0.25
12972	8/6/2003	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	<	0.25
12974	5/14/2003	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	<	0.25
12972	8/26/2003	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.	<	0.25
12974	7/27/2004	32218	PHEOPHYTIN-A UG/L SPECTROPHOTOMETRIC ACID. METH.		5.6
12972	9/24/2003	72052	STREAMBED SLOPE (FT/FT)	>	7
17897	8/11/2004	72052	STREAMBED SLOPE (FT/FT)		0.003
12974	8/10/2004	72052	STREAMBED SLOPE (FT/FT)		0.002
12972	8/10/2004	72052	STREAMBED SLOPE (FT/FT)		0.004
12974	9/30/2003	72052	STREAMBED SLOPE (FT/FT)		0.002
17897	9/29/2003	72052	STREAMBED SLOPE (FT/FT)		0.003
12972	9/23/2003	72052	STREAMBED SLOPE (FT/FT)		0.004
12972	8/25/2004	72053	DAYS SINCE PRECIPITATION EVENT (DAYS)	<	7
12972	2/27/2003	72053	DAYS SINCE PRECIPITATION EVENT (DAYS)	>	3
12974	8/26/2003	72053	DAYS SINCE PRECIPITATION EVENT (DAYS)	>	14
17897	10/6/2002	72053	DAYS SINCE PRECIPITATION EVENT (DAYS)		1
12974	6/15/2004	72053	DAYS SINCE PRECIPITATION EVENT (DAYS)	>	7
17897	8/6/2003	72053	DAYS SINCE PRECIPITATION EVENT (DAYS)	>	14
12974	5/14/2003	72053	DAYS SINCE PRECIPITATION EVENT (DAYS)	>	31
12972	5/14/2003	72053	DAYS SINCE PRECIPITATION EVENT (DAYS)	>	31
12972	8/6/2003	72053	DAYS SINCE PRECIPITATION EVENT (DAYS)	>	14

12972	10/6/2002	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	<	1
12974	8/6/2003	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	>	14
12972	8/12/2004	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	>	14
12974	7/27/2004	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	>	14
12972	8/26/2003	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	>	14
12974	5/1/2003	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	>	14
12974	8/25/2004	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	<	7
12974	10/6/2002	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	<	1
17897	5/1/2003	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	>	14
12974	4/8/2003	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	>	7
17897	7/27/2004	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	>	14
17897	8/12/2004	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	>	14
17897	4/8/2003	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	>	7
17897	2/27/2003	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	>	3
12972	7/27/2004	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	>	14
12974	8/12/2004	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	>	14
12972	4/8/2003	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	>	7
17897	5/14/2003	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	>	31
17897	8/26/2003	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	>	14
17897	8/26/2004	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	<	7
12972	5/1/2003	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	>	14
12974	2/27/2003	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	>	3
17897	6/15/2004	72053	DAY SINCE PRECIPITATION EVENT (DAYS)	>	7
12972	9/24/2003	74069	STREAM FLOW ESTIMATE (CFS)		409
12972	8/12/2004	74069	STREAM FLOW ESTIMATE (CFS)		153
17897	4/8/2003	74069	STREAM FLOW ESTIMATE (CFS)		37
17897	7/27/2004	74069	STREAM FLOW ESTIMATE (CFS)		321
12972	5/1/2003	74069	STREAM FLOW ESTIMATE (CFS)		9.5
17897	2/27/2003	74069	STREAM FLOW ESTIMATE (CFS)		59
17897	8/12/2004	74069	STREAM FLOW ESTIMATE (CFS)		160
12974	4/8/2003	74069	STREAM FLOW ESTIMATE (CFS)		38
12972	8/25/2004	74069	STREAM FLOW ESTIMATE (CFS)		150
12972	4/8/2003	74069	STREAM FLOW ESTIMATE (CFS)		39
12972	7/27/2004	74069	STREAM FLOW ESTIMATE (CFS)		333
12974	8/12/2004	74069	STREAM FLOW ESTIMATE (CFS)		173
12972	2/27/2003	74069	STREAM FLOW ESTIMATE (CFS)		353
12974	8/25/2004	74069	STREAM FLOW ESTIMATE (CFS)		198
12972	8/26/2003	74069	STREAM FLOW ESTIMATE (CFS)		1.7
12972	5/14/2003	74069	STREAM FLOW ESTIMATE (CFS)		10
12974	5/14/2003	74069	STREAM FLOW ESTIMATE (CFS)		5
12974	7/27/2004	74069	STREAM FLOW ESTIMATE (CFS)		300
17897	8/26/2004	74069	STREAM FLOW ESTIMATE (CFS)		188
17897	9/29/2003	84159	AVERAGE PERCENTAGE INSTREAM COVER		11
12974	9/30/2003	84159	AVERAGE PERCENTAGE INSTREAM COVER		13
17897	8/11/2004	84159	AVERAGE PERCENTAGE INSTREAM COVER		8
12974	8/10/2004	84159	AVERAGE PERCENTAGE INSTREAM COVER		11
12972	9/23/2003	84159	AVERAGE PERCENTAGE INSTREAM COVER		8
12972	8/10/2004	84159	AVERAGE PERCENTAGE INSTREAM COVER		6
12972	8/10/2004	84161	STREAM ORDER		
17897	9/29/2003	84161	STREAM ORDER		
12972	9/23/2003	84161	STREAM ORDER		
12974	9/30/2003	84161	STREAM ORDER		
12974	8/10/2004	84161	STREAM ORDER		
17897	8/11/2004	84161	STREAM ORDER		
12972	8/10/2004	89832	NUMBER OF LATERAL TRANSECTS MADE		5
12974	8/10/2004	89832	NUMBER OF LATERAL TRANSECTS MADE		6
17897	9/29/2003	89832	NUMBER OF LATERAL TRANSECTS MADE		5
12972	9/23/2003	89832	NUMBER OF LATERAL TRANSECTS MADE		5
12974	9/30/2003	89832	NUMBER OF LATERAL TRANSECTS MADE		6
17897	8/11/2004	89832	NUMBER OF LATERAL TRANSECTS MADE		5
12974	5/1/2003	89835	FLOW MTH 1=Gage Station 2=Elec 3=Mech 4=Weir/Flu		1

12972	8/26/2003	89835	FLOW MTH 1=Gage Station 2=Elec 3=Mech 4=Weir/Flu		1
12974	8/22/2002	89835	FLOW MTH 1=Gage Station 2=Elec 3=Mech 4=Weir/Flu		1
12974	10/6/2002	89835	FLOW MTH 1=Gage Station 2=Elec 3=Mech 4=Weir/Flu		1
17897	8/6/2003	89835	FLOW MTH 1=Gage Station 2=Elec 3=Mech 4=Weir/Flu		2
17897	8/26/2003	89835	FLOW MTH 1=Gage Station 2=Elec 3=Mech 4=Weir/Flu		1
12972	8/22/2002	89835	FLOW MTH 1=Gage Station 2=Elec 3=Mech 4=Weir/Flu		1
12974	2/27/2003	89835	FLOW MTH 1=Gage Station 2=Elec 3=Mech 4=Weir/Flu		1
12972	5/1/2003	89835	FLOW MTH 1=Gage Station 2=Elec 3=Mech 4=Weir/Flu		1
12974	9/29/2003	89835	FLOW MTH 1=Gage Station 2=Elec 3=Mech 4=Weir/Flu		2
17897	8/22/2002	89835	FLOW MTH 1=Gage Station 2=Elec 3=Mech 4=Weir/Flu		1
17897	9/29/2003	89835	FLOW MTH 1=Gage Station 2=Elec 3=Mech 4=Weir/Flu		2
17897	5/14/2003	89835	FLOW MTH 1=Gage Station 2=Elec 3=Mech 4=Weir/Flu		2
12974	8/26/2003	89835	FLOW MTH 1=Gage Station 2=Elec 3=Mech 4=Weir/Flu		1
17897	5/1/2003	89835	FLOW MTH 1=Gage Station 2=Elec 3=Mech 4=Weir/Flu		2
17897	10/6/2002	89835	FLOW MTH 1=Gage Station 2=Elec 3=Mech 4=Weir/Flu		1
12972	10/6/2002	89835	FLOW MTH 1=Gage Station 2=Elec 3=Mech 4=Weir/Flu		1
12972	9/23/2003	89839	TOTAL NUMBER OF STREAM BENDS		2
17897	8/11/2004	89839	TOTAL NUMBER OF STREAM BENDS		1
12974	8/10/2004	89839	TOTAL NUMBER OF STREAM BENDS		4
12974	9/30/2003	89839	TOTAL NUMBER OF STREAM BENDS		3
17897	9/29/2003	89839	TOTAL NUMBER OF STREAM BENDS		1
12972	8/10/2004	89839	TOTAL NUMBER OF STREAM BENDS		2
12972	9/23/2003	89840	NUMBER OF WELL DEFINED STREAM BENDS		2
17897	9/29/2003	89840	NUMBER OF WELL DEFINED STREAM BENDS		0
12974	9/30/2003	89840	NUMBER OF WELL DEFINED STREAM BENDS		2
12972	8/10/2004	89840	NUMBER OF WELL DEFINED STREAM BENDS		1
12974	8/10/2004	89840	NUMBER OF WELL DEFINED STREAM BENDS		1
17897	8/11/2004	89840	NUMBER OF WELL DEFINED STREAM BENDS		0
12974	9/30/2003	89841	NUMBER OF MODERATELY DEFINED STREAM BENDS		1
17897	9/29/2003	89841	NUMBER OF MODERATELY DEFINED STREAM BENDS		0
12972	8/10/2004	89841	NUMBER OF MODERATELY DEFINED STREAM BENDS		1
12972	9/23/2003	89841	NUMBER OF MODERATELY DEFINED STREAM BENDS		0
17897	8/11/2004	89841	NUMBER OF MODERATELY DEFINED STREAM BENDS		1
12974	8/10/2004	89841	NUMBER OF MODERATELY DEFINED STREAM BENDS		2
17897	9/29/2003	89842	NUMBER OF POORLY DEFINED STREAM BENDS		1
12974	9/30/2003	89842	NUMBER OF POORLY DEFINED STREAM BENDS		0
12972	9/23/2003	89842	NUMBER OF POORLY DEFINED STREAM BENDS		0
12972	8/10/2004	89842	NUMBER OF POORLY DEFINED STREAM BENDS		0
12974	8/10/2004	89842	NUMBER OF POORLY DEFINED STREAM BENDS		1
17897	8/11/2004	89842	NUMBER OF POORLY DEFINED STREAM BENDS		0
12974	9/30/2003	89843	TOTAL NUMBER OF RIFFLES		0
12974	8/10/2004	89843	TOTAL NUMBER OF RIFFLES		0
12972	8/10/2004	89843	TOTAL NUMBER OF RIFFLES		0
17897	9/29/2003	89843	TOTAL NUMBER OF RIFFLES		1
12972	9/23/2003	89843	TOTAL NUMBER OF RIFFLES		0
17897	8/11/2004	89843	TOTAL NUMBER OF RIFFLES		1
12972	9/23/2003	89844	DOMINANT SUBSTRATE TYPE		4
12974	9/30/2003	89844	DOMINANT SUBSTRATE TYPE		2
17897	9/29/2003	89844	DOMINANT SUBSTRATE TYPE		4
12974	8/10/2004	89844	DOMINANT SUBSTRATE TYPE		2
12972	8/10/2004	89844	DOMINANT SUBSTRATE TYPE		4
17897	8/11/2004	89844	DOMINANT SUBSTRATE TYPE		2
12974	9/30/2003	89845	AVERAGE PERCENT OF SUBSTRATE GRAVEL SIZE OR LARG		0
12974	8/10/2004	89845	AVERAGE PERCENT OF SUBSTRATE GRAVEL SIZE OR LARG		0
12972	9/23/2003	89845	AVERAGE PERCENT OF SUBSTRATE GRAVEL SIZE OR LARG		62
12972	8/10/2004	89845	AVERAGE PERCENT OF SUBSTRATE GRAVEL SIZE OR LARG		40
17897	8/11/2004	89845	AVERAGE PERCENT OF SUBSTRATE GRAVEL SIZE OR LARG		35
17897	9/29/2003	89845	AVERAGE PERCENT OF SUBSTRATE GRAVEL SIZE OR LARG		39
12972	8/10/2004	89846	AVERAGE STREAM BANK EROSION (%)		93
12972	9/23/2003	89846	AVERAGE STREAM BANK EROSION (%)		90
12974	8/10/2004	89846	AVERAGE STREAM BANK EROSION (%)		90

12974	9/30/2003	89846	AVERAGE STREAM BANK EROSION (%)			95
17897	9/29/2003	89846	AVERAGE STREAM BANK EROSION (%)			93
17897	8/11/2004	89846	AVERAGE STREAM BANK EROSION (%)			94
12974	8/10/2004	89847	AVERAGE STREAM BANK SLOPE (DEGREES)			37
12972	9/23/2003	89847	AVERAGE STREAM BANK SLOPE (DEGREES)			58
17897	8/11/2004	89847	AVERAGE STREAM BANK SLOPE (DEGREES)			47
12972	8/10/2004	89847	AVERAGE STREAM BANK SLOPE (DEGREES)			39
17897	9/29/2003	89847	AVERAGE STREAM BANK SLOPE (DEGREES)			46
12974	9/30/2003	89847	AVERAGE STREAM BANK SLOPE (DEGREES)			54
12972	8/10/2004	89849	AVERAGE PERCENT TREES AS RIPARIAN VEGETATION			9
12972	9/23/2003	89849	AVERAGE PERCENT TREES AS RIPARIAN VEGETATION			15
17897	8/11/2004	89849	AVERAGE PERCENT TREES AS RIPARIAN VEGETATION			10
17897	9/29/2003	89849	AVERAGE PERCENT TREES AS RIPARIAN VEGETATION			7
12974	8/10/2004	89849	AVERAGE PERCENT TREES AS RIPARIAN VEGETATION			21
12974	9/30/2003	89849	AVERAGE PERCENT TREES AS RIPARIAN VEGETATION			14
17897	9/29/2003	89850	AVERAGE PERCENT SHRUBS AS RIPARIAN VEGETATION			0
12972	9/23/2003	89850	AVERAGE PERCENT SHRUBS AS RIPARIAN VEGETATION			11
12974	8/10/2004	89850	AVERAGE PERCENT SHRUBS AS RIPARIAN VEGETATION			10
12974	9/30/2003	89850	AVERAGE PERCENT SHRUBS AS RIPARIAN VEGETATION			8
12972	8/10/2004	89850	AVERAGE PERCENT SHRUBS AS RIPARIAN VEGETATION			7
17897	8/11/2004	89850	AVERAGE PERCENT SHRUBS AS RIPARIAN VEGETATION			0
12974	9/30/2003	89851	AVERAGE PERCENT GRASS AS RIPARIAN VEGETATION			54
17897	8/11/2004	89851	AVERAGE PERCENT GRASS AS RIPARIAN VEGETATION			15
12972	9/23/2003	89851	AVERAGE PERCENT GRASS AS RIPARIAN VEGETATION			52
12972	8/10/2004	89851	AVERAGE PERCENT GRASS AS RIPARIAN VEGETATION			16
17897	9/29/2003	89851	AVERAGE PERCENT GRASS AS RIPARIAN VEGETATION			76
12974	8/10/2004	89851	AVERAGE PERCENT GRASS AS RIPARIAN VEGETATION			5
12974	9/30/2003	89853	AVERAGE PERCENT OTHER AS RIPARIAN VEGETATION			24
12974	8/10/2004	89853	AVERAGE PERCENT OTHER AS RIPARIAN VEGETATION			64
17897	8/11/2004	89853	AVERAGE PERCENT OTHER AS RIPARIAN VEGETATION			75
12972	8/10/2004	89853	AVERAGE PERCENT OTHER AS RIPARIAN VEGETATION			68
17897	9/29/2003	89853	AVERAGE PERCENT OTHER AS RIPARIAN VEGETATION			17
12972	9/23/2003	89853	AVERAGE PERCENT OTHER AS RIPARIAN VEGETATION			22
12974	8/10/2004	89854	AVERAGE PERCENTAGE OF TREE CANOPY COVERAGE			70
12972	9/23/2003	89854	AVERAGE PERCENTAGE OF TREE CANOPY COVERAGE			44
17897	9/29/2003	89854	AVERAGE PERCENTAGE OF TREE CANOPY COVERAGE			28
12974	9/30/2003	89854	AVERAGE PERCENTAGE OF TREE CANOPY COVERAGE			71
12972	8/10/2004	89854	AVERAGE PERCENTAGE OF TREE CANOPY COVERAGE			46
17897	8/11/2004	89854	AVERAGE PERCENTAGE OF TREE CANOPY COVERAGE			39
12972	8/23/2002	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA			6.18
12972	8/6/2003	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA			5.12
12972	8/13/2004	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA			5.54
17897	8/26/2004	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA			5.43
12972	2/27/2003	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA			10.17
17897	4/8/2003	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA			5.93
12972	7/28/2004	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA			7.3
17897	9/30/2003	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA			6.1
12974	5/14/2003	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA			2.09
12974	10/6/2002	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA			5.5
12972	10/6/2002	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA			5.88
17897	10/6/2002	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA			5.36
17897	7/28/2004	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA			6.68
12974	8/26/2004	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA			6.32
17897	8/6/2003	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA			4.59
12972	9/25/2003	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA			7.69
17897	8/23/2002	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA			6.53
12972	5/2/2003	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA			5.41
12972	8/26/2004	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA			5.94
17897	5/2/2003	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA			4.12
12974	8/26/2003	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA			1.94
17897	6/15/2004	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA			6.92

12972	4/8/2003	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA		7.01
17897	8/26/2003	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA		4.6
17897	2/27/2003	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA		9.56
12974	5/2/2003	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA		3.19
17897	5/14/2003	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA		4.96
12974	8/23/2002	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA		5.91
12972	5/14/2003	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA		5.1
12974	2/27/2003	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA		9.8
12974	9/30/2003	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA		5.02
12974	7/28/2004	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA		6.46
12974	6/15/2004	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA		5.56
12974	4/8/2003	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA		5.6
12974	8/13/2004	89855	DISSOLVED OXYGEN, 24-HOUR MIN. (MG/L) MIN. 4 MEA		6.64
12974	7/28/2004	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		6.58
17897	8/26/2004	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		5.84
17897	9/30/2003	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		6.31
12974	9/30/2003	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		5.51
12972	8/26/2004	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		6.19
12972	2/27/2003	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		11.79
17897	5/2/2003	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		6.42
12972	8/23/2002	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		7.1
12972	5/2/2003	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		6.68
17897	5/14/2003	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		6.88
12974	6/15/2004	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		6.13
12974	10/6/2002	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		5.91
12974	4/8/2003	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		6.47
17897	10/6/2002	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		5.78
12974	8/26/2004	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		6.97
17897	6/15/2004	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		7.83
12972	5/14/2003	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		7.85
12974	5/14/2003	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		5.55
12974	5/2/2003	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		4.16
17897	2/27/2003	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		10.3
17897	7/28/2004	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		8.75
12972	4/8/2003	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		8.31
12974	2/27/2003	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		13.08
17897	8/6/2003	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		5.76
17897	8/26/2003	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		6.61
12972	9/25/2003	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		7.97
12974	8/23/2002	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		6.8
17897	4/8/2003	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		7.5
12974	8/13/2004	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		7.11
12972	8/6/2003	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		5.99
12974	8/26/2003	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		4.69
12972	7/28/2004	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		8.03
17897	8/23/2002	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		7.52
12972	10/6/2002	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		6.39
12972	8/13/2004	89856	DISSOLVED OXYGEN, 24-HOUR MAX. (MG/L) MIN. 4 MEA		5.84
12974	4/8/2003	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		6.12
17897	8/26/2003	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		5.47
12974	2/27/2003	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		10.03
12974	6/15/2004	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		5.85
12972	8/6/2003	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		5.47
12972	8/26/2004	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		5.35
17897	5/2/2003	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		5.17
12974	9/30/2003	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		5.15
12972	10/6/2002	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		6.08
12972	5/14/2003	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		6.27
12974	5/14/2003	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		3.71
12972	9/25/2003	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		7.82
17897	6/15/2004	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		7.04

17897	7/28/2004	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		7.21
12972	4/8/2003	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		7.62
17897	8/23/2002	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		6.91
12974	8/26/2003	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		3.01
17897	5/14/2003	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		5.76
12972	5/2/2003	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		5.91
12974	8/13/2004	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		6.29
12974	8/23/2002	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		6.36
17897	8/6/2003	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		5.12
17897	4/8/2003	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		6.81
17897	9/30/2003	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		6.21
17897	8/26/2004	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		5.61
12972	8/13/2004	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		5.67
12972	8/23/2002	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		6.54
12974	10/6/2002	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		5.72
12974	8/26/2004	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		6.48
12974	7/28/2004	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		6.53
17897	10/6/2002	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		5.56
12974	5/2/2003	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		3.56
12972	2/27/2003	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		10.91
12972	7/28/2004	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		7.64
17897	2/27/2003	89857	DISSOLVED OXYGEN, 24-HOUR AVG. (MG/L) MIN. 4 MEA		9.88
17897	6/15/2004	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12972	8/23/2002	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
17897	4/8/2003	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12972	9/25/2003	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12972	5/14/2003	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
17897	7/28/2004	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12972	2/27/2003	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
17897	8/23/2002	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12974	8/23/2002	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
17897	5/14/2003	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12974	5/2/2003	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12974	8/26/2003	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
17897	9/30/2003	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12972	8/26/2004	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12972	10/6/2002	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
17897	2/27/2003	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12974	2/27/2003	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12974	4/8/2003	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
17897	10/6/2002	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12972	5/2/2003	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12974	5/14/2003	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12972	7/28/2004	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12972	4/8/2003	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
17897	8/6/2003	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12974	8/26/2004	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12974	6/15/2004	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
17897	8/26/2004	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12974	10/6/2002	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
17897	8/26/2003	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12972	8/6/2003	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12974	9/30/2003	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12974	8/13/2004	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12972	8/13/2004	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12974	7/28/2004	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		94
17897	5/2/2003	89858	DISSOLVED OXYGEN, # OF MEASUREMENTS IN 24-HRS		96
12972	8/10/2004	89859	DRAINAGE AREA ABOVE MOST DOWNSTREAM TRANSECT (KM)		22463
12972	9/23/2003	89859	DRAINAGE AREA ABOVE MOST DOWNSTREAM TRANSECT (KM)		22463
12974	8/10/2004	89859	DRAINAGE AREA ABOVE MOST DOWNSTREAM TRANSECT (KM)		20555
17897	9/29/2003	89859	DRAINAGE AREA ABOVE MOST DOWNSTREAM TRANSECT (KM)		21885

12974	9/30/2003	89859	DRAINAGE AREA ABOVE MOST DOWNSTREAM TRANSECT (KM)		20555
17897	8/11/2004	89859	DRAINAGE AREA ABOVE MOST DOWNSTREAM TRANSECT (KM)		21885
17897	9/29/2003	89860	LENGTH OF STREAM EVALUATED (KM)		0.3
12972	8/10/2004	89860	LENGTH OF STREAM EVALUATED (KM)		0.25
12974	9/30/2003	89860	LENGTH OF STREAM EVALUATED (KM)		0.45
17897	8/11/2004	89860	LENGTH OF STREAM EVALUATED (KM)		0.3
12974	8/10/2004	89860	LENGTH OF STREAM EVALUATED (KM)		0.45
12972	9/23/2003	89860	LENGTH OF STREAM EVALUATED (KM)		0.25
12972	9/23/2003	89861	AVERAGE STREAM WIDTH (METERS)		11.6
17897	8/11/2004	89861	AVERAGE STREAM WIDTH (METERS)		12
12974	8/10/2004	89861	AVERAGE STREAM WIDTH (METERS)		10
17897	9/29/2003	89861	AVERAGE STREAM WIDTH (METERS)		12.7
12974	9/30/2003	89861	AVERAGE STREAM WIDTH (METERS)		11.9
12972	8/10/2004	89861	AVERAGE STREAM WIDTH (METERS)		10.4
12974	8/10/2004	89862	AVERAGE STREAM DEPTH (METERS)	>	1
17897	8/11/2004	89862	AVERAGE STREAM DEPTH (METERS)		1
17897	9/29/2003	89862	AVERAGE STREAM DEPTH (METERS)		1
12972	9/23/2003	89862	AVERAGE STREAM DEPTH (METERS)		0.88
12974	9/30/2003	89862	AVERAGE STREAM DEPTH (METERS)		1.19
12972	8/10/2004	89862	AVERAGE STREAM DEPTH (METERS)		0.84
12972	8/10/2004	89864	MAXIMUM POOL WIDTH (METERS)		12.5
17897	8/11/2004	89864	MAXIMUM POOL WIDTH (METERS)		17
12972	9/23/2003	89864	MAXIMUM POOL WIDTH (METERS)		15
12974	9/30/2003	89864	MAXIMUM POOL WIDTH (METERS)		15
17897	9/29/2003	89864	MAXIMUM POOL WIDTH (METERS)		19
12974	8/10/2004	89864	MAXIMUM POOL WIDTH (METERS)		15
12974	9/30/2003	89865	MAXIMUM POOL DEPTH (METERS)	>	2.5
12972	8/10/2004	89865	MAXIMUM POOL DEPTH (METERS)	>	1.5
17897	8/11/2004	89865	MAXIMUM POOL DEPTH (METERS)	>	2.5
12974	8/10/2004	89865	MAXIMUM POOL DEPTH (METERS)	>	2.5
12972	9/23/2003	89865	MAXIMUM POOL DEPTH (METERS)		1.5
17897	9/29/2003	89865	MAXIMUM POOL DEPTH (METERS)	>	2.5
17897	9/29/2003	89866	AVERAGE WIDTH OF NATURAL RIPARIAN VEGETATION (M)	>	20
12974	9/30/2003	89866	AVERAGE WIDTH OF NATURAL RIPARIAN VEGETATION (M)	>	20
12974	8/10/2004	89866	AVERAGE WIDTH OF NATURAL RIPARIAN VEGETATION (M)	>	20
17897	8/11/2004	89866	AVERAGE WIDTH OF NATURAL RIPARIAN VEGETATION (M)	>	20
12972	9/23/2003	89866	AVERAGE WIDTH OF NATURAL RIPARIAN VEGETATION (M)	>	20
12972	8/10/2004	89866	AVERAGE WIDTH OF NATURAL RIPARIAN VEGETATION (M)	>	20
12974	9/30/2003	89867	AESTHETICS (1=WILD 2=NAT. 3=COMM. 4=OFF.)		2
12972	8/10/2004	89867	AESTHETICS (1=WILD 2=NAT. 3=COMM. 4=OFF.)		2
17897	9/29/2003	89867	AESTHETICS (1=WILD 2=NAT. 3=COMM. 4=OFF.)		2
17897	8/11/2004	89867	AESTHETICS (1=WILD 2=NAT. 3=COMM. 4=OFF.)		2
12972	9/23/2003	89867	AESTHETICS (1=WILD 2=NAT. 3=COMM. 4=OFF.)		2
12974	8/10/2004	89867	AESTHETICS (1=WILD 2=NAT. 3=COMM. 4=OFF.)		3
12972	9/23/2003	89899	#IND/1=SUBSAMPLE,2=SQFT,3=SQMTR,4=TOTAL KICKNET		1
17897	9/29/2003	89899	#IND/1=SUBSAMPLE,2=SQFT,3=SQMTR,4=TOTAL KICKNET		1
17897	8/11/2004	89899	#IND/1=SUBSAMPLE,2=SQFT,3=SQMTR,4=TOTAL KICKNET		1
12972	8/10/2004	89899	#IND/1=SUBSAMPLE,2=SQFT,3=SQMTR,4=TOTAL KICKNET		1
12974	9/30/2003	89899	#IND/1=SUBSAMPLE,2=SQFT,3=SQMTR,4=TOTAL KICKNET		1
12974	8/10/2004	89899	#IND/1=SUBSAMPLE,2=SQFT,3=SQMTR,4=TOTAL KICKNET		1
12974	8/10/2004	89905	DEBRIS/SHORELINE SAMPLING EFFORT, MINUTES PICKED		35
17897	8/11/2004	89905	DEBRIS/SHORELINE SAMPLING EFFORT, MINUTES PICKED		0
12972	9/23/2003	89905	DEBRIS/SHORELINE SAMPLING EFFORT, MINUTES PICKED		30
17897	9/29/2003	89905	DEBRIS/SHORELINE SAMPLING EFFORT, MINUTES PICKED		0
12972	8/10/2004	89905	DEBRIS/SHORELINE SAMPLING EFFORT, MINUTES PICKED		45
12974	9/30/2003	89905	DEBRIS/SHORELINE SAMPLING EFFORT, MINUTES PICKED		35
12974	9/30/2003	89906	NUMBER OF INDIV. IN BENTHIC RBA SUBSAMPLE (#IND)		98
17897	9/29/2003	89906	NUMBER OF INDIV. IN BENTHIC RBA SUBSAMPLE (#IND)		104
12974	8/10/2004	89906	NUMBER OF INDIV. IN BENTHIC RBA SUBSAMPLE (#IND)		122
12972	9/23/2003	89906	NUMBER OF INDIV. IN BENTHIC RBA SUBSAMPLE (#IND)		105
17897	8/11/2004	89906	NUMBER OF INDIV. IN BENTHIC RBA SUBSAMPLE (#IND)		130

12972	8/10/2004	89906	NUMBER OF INDIV. IN BENTHIC RBA SUBSAMPLE (#IND)		100
12972	9/23/2003	89941	NET LENGTH (METERS)		5.49
12972	8/10/2004	89941	NET LENGTH (METERS)		5.49
12974	9/30/2003	89941	NET LENGTH (METERS)		5.49
17897	8/11/2004	89941	NET LENGTH (METERS)		5.49
12974	8/10/2004	89941	NET LENGTH (METERS)		5.49
17897	9/29/2003	89941	NET LENGTH (METERS)		5.49
12972	8/10/2004	89943	ELECTROFISHING METHOD 1BOAT2BACKPACK3TOTEARGE		2
12974	8/10/2004	89943	ELECTROFISHING METHOD 1BOAT2BACKPACK3TOTEARGE		2
17897	8/11/2004	89943	ELECTROFISHING METHOD 1BOAT2BACKPACK3TOTEARGE		2
12972	9/23/2003	89943	ELECTROFISHING METHOD 1BOAT2BACKPACK3TOTEARGE		2
17897	9/29/2003	89943	ELECTROFISHING METHOD 1BOAT2BACKPACK3TOTEARGE		2
12974	9/30/2003	89943	ELECTROFISHING METHOD 1BOAT2BACKPACK3TOTEARGE		1
12972	9/23/2003	89944	ELECTROFISH EFFORT, DURATION OF SHOCKING (SEC)	>	900
17897	9/29/2003	89944	ELECTROFISH EFFORT, DURATION OF SHOCKING (SEC)	>	899
17897	8/11/2004	89944	ELECTROFISH EFFORT, DURATION OF SHOCKING (SEC)	>	899
12972	8/10/2004	89944	ELECTROFISH EFFORT, DURATION OF SHOCKING (SEC)	>	899
12974	8/10/2004	89944	ELECTROFISH EFFORT, DURATION OF SHOCKING (SEC)	>	899
12974	9/30/2003	89944	ELECTROFISH EFFORT, DURATION OF SHOCKING (SEC)	>	900
17897	9/29/2003	89946	MESH SIZE, ANY NET OR SIEVE, AVERAGE BAR (CM)		0.3175
17897	8/11/2004	89946	MESH SIZE, ANY NET OR SIEVE, AVERAGE BAR (CM)		0.3175
12972	9/23/2003	89946	MESH SIZE, ANY NET OR SIEVE, AVERAGE BAR (CM)		0.3175
12972	8/10/2004	89946	MESH SIZE, ANY NET OR SIEVE, AVERAGE BAR (CM)		0.3175
12974	8/10/2004	89946	MESH SIZE, ANY NET OR SIEVE, AVERAGE BAR (CM)		0.3175
12974	9/30/2003	89946	MESH SIZE, ANY NET OR SIEVE, AVERAGE BAR (CM)		0.3175
17897	9/29/2003	89948	COMBINED LENGTH OF SEINE HAULS (METERS)	>	5
12972	8/10/2004	89948	COMBINED LENGTH OF SEINE HAULS (METERS)	>	5
12974	8/10/2004	89948	COMBINED LENGTH OF SEINE HAULS (METERS)	>	5
17897	8/11/2004	89948	COMBINED LENGTH OF SEINE HAULS (METERS)	>	5
12972	9/23/2003	89948	COMBINED LENGTH OF SEINE HAULS (METERS)	>	5
12974	9/30/2003	89948	COMBINED LENGTH OF SEINE HAULS (METERS)	>	5
17897	9/29/2003	89950	BENTHIC SAMPLER (1=SURB,2=EKM,3=KICK,4=PET,5=H-D		3
17897	8/11/2004	89950	BENTHIC SAMPLER (1=SURB,2=EKM,3=KICK,4=PET,5=H-D		3
12974	9/30/2003	89950	BENTHIC SAMPLER (1=SURB,2=EKM,3=KICK,4=PET,5=H-D		3
12972	9/23/2003	89950	BENTHIC SAMPLER (1=SURB,2=EKM,3=KICK,4=PET,5=H-D		3
12974	8/10/2004	89950	BENTHIC SAMPLER (1=SURB,2=EKM,3=KICK,4=PET,5=H-D		3
12972	8/10/2004	89950	BENTHIC SAMPLER (1=SURB,2=EKM,3=KICK,4=PET,5=H-D		3
17897	8/11/2004	89961	ECOREGION (TEXAS ECOREGION CODE)		31
12974	9/30/2003	89961	ECOREGION (TEXAS ECOREGION CODE)		31
12974	8/10/2004	89961	ECOREGION (TEXAS ECOREGION CODE)		31
12972	8/10/2004	89961	ECOREGION (TEXAS ECOREGION CODE)		31
17897	9/29/2003	89961	ECOREGION (TEXAS ECOREGION CODE)		31
12972	9/23/2003	89961	ECOREGION (TEXAS ECOREGION CODE)		31
12972	8/10/2004	89976	AREA SEINED (SQ METERS)	>	330
17897	8/11/2004	89976	AREA SEINED (SQ METERS)	>	330
12972	9/23/2003	89976	AREA SEINED (SQ METERS)	>	330
12974	9/30/2003	89976	AREA SEINED (SQ METERS)		330
12974	8/10/2004	89976	AREA SEINED (SQ METERS)		330
17897	9/29/2003	89976	AREA SEINED (SQ METERS)	>	330
17897	9/29/2003	90007	HILSENHOFF BIOTIC INDEX		4.36
12972	8/10/2004	90007	HILSENHOFF BIOTIC INDEX		4.02
17897	8/11/2004	90007	HILSENHOFF BIOTIC INDEX		4.18
12974	9/30/2003	90007	HILSENHOFF BIOTIC INDEX		7.49
12972	9/23/2003	90007	HILSENHOFF BIOTIC INDEX		5.85
12974	8/10/2004	90007	HILSENHOFF BIOTIC INDEX		5.19
12972	8/10/2004	90008	EPT INDEX		5
12974	9/30/2003	90008	EPT INDEX		1
12972	9/23/2003	90008	EPT INDEX		3
17897	8/11/2004	90008	EPT INDEX		7
17897	9/29/2003	90008	EPT INDEX		7
12974	8/10/2004	90008	EPT INDEX		2

12972	9/23/2003	90009	NUMBER OF BENTHIC FUNCTIONAL FEEDING GROUPS		5
12972	8/10/2004	90009	NUMBER OF BENTHIC FUNCTIONAL FEEDING GROUPS		4
12974	8/10/2004	90009	NUMBER OF BENTHIC FUNCTIONAL FEEDING GROUPS		5
12974	9/30/2003	90009	NUMBER OF BENTHIC FUNCTIONAL FEEDING GROUPS		4
17897	9/29/2003	90009	NUMBER OF BENTHIC FUNCTIONAL FEEDING GROUPS		4
17897	8/11/2004	90009	NUMBER OF BENTHIC FUNCTIONAL FEEDING GROUPS		5
12972	9/23/2003	90010	DOMINANT BENTHIC FUNC FEEDING GRP, % OF COMMUNIT		63.6
17897	8/11/2004	90010	DOMINANT BENTHIC FUNC FEEDING GRP, % OF COMMUNIT		40.8
12974	8/10/2004	90010	DOMINANT BENTHIC FUNC FEEDING GRP, % OF COMMUNIT		34.3
17897	9/29/2003	90010	DOMINANT BENTHIC FUNC FEEDING GRP, % OF COMMUNIT		63.6
12972	8/10/2004	90010	DOMINANT BENTHIC FUNC FEEDING GRP, % OF COMMUNIT		33.16
12974	9/30/2003	90010	DOMINANT BENTHIC FUNC FEEDING GRP, % OF COMMUNIT		63.6
12974	8/10/2004	90025	BENTHIC GATHERERS (% OF COMMUNITY)		34.3
12974	9/30/2003	90025	BENTHIC GATHERERS (% OF COMMUNITY)		29.6
12972	8/10/2004	90025	BENTHIC GATHERERS (% OF COMMUNITY)		33.1
12972	9/23/2003	90025	BENTHIC GATHERERS (% OF COMMUNITY)		48.4
17897	9/29/2003	90025	BENTHIC GATHERERS (% OF COMMUNITY)		49.5
17897	8/11/2004	90025	BENTHIC GATHERERS (% OF COMMUNITY)		32.2
12972	9/23/2003	90030	BENTHIC FILTERERS (% OF COMMUNITY)		2.2
17897	8/11/2004	90030	BENTHIC FILTERERS (% OF COMMUNITY)		40.8
17897	9/29/2003	90030	BENTHIC FILTERERS (% OF COMMUNITY)		18.3
12972	8/10/2004	90030	BENTHIC FILTERERS (% OF COMMUNITY)		21.7
12974	9/30/2003	90030	BENTHIC FILTERERS (% OF COMMUNITY)		0
12974	8/10/2004	90030	BENTHIC FILTERERS (% OF COMMUNITY)		4.1
12974	8/10/2004	90035	BENTHIC SHREDDERS (% OF COMMUNITY)		19.1
12974	9/30/2003	90035	BENTHIC SHREDDERS (% OF COMMUNITY)		29.1
12972	9/23/2003	90035	BENTHIC SHREDDERS (% OF COMMUNITY)		1
17897	8/11/2004	90035	BENTHIC SHREDDERS (% OF COMMUNITY)		0.3
12972	8/10/2004	90035	BENTHIC SHREDDERS (% OF COMMUNITY)		0
17897	9/29/2003	90035	BENTHIC SHREDDERS (% OF COMMUNITY)		0
12972	9/23/2003	90036	BENTHIC PREDATORS (% OF COMMUNITY)		11.7
17897	8/11/2004	90036	BENTHIC PREDATORS (% OF COMMUNITY)		5.6
17897	9/29/2003	90036	BENTHIC PREDATORS (% OF COMMUNITY)		1.9
12974	8/10/2004	90036	BENTHIC PREDATORS (% OF COMMUNITY)		22.1
12974	9/30/2003	90036	BENTHIC PREDATORS (% OF COMMUNITY)		14.3
12972	8/10/2004	90036	BENTHIC PREDATORS (% OF COMMUNITY)		16.7
12974	9/30/2003	90042	PERCENT DOMINANT TAXON, BENTHOS		39
12974	8/10/2004	90042	PERCENT DOMINANT TAXON, BENTHOS		22.1
12972	9/23/2003	90042	PERCENT DOMINANT TAXON, BENTHOS		30.2
17897	8/11/2004	90042	PERCENT DOMINANT TAXON, BENTHOS		40.8
12972	8/10/2004	90042	PERCENT DOMINANT TAXON, BENTHOS		39
17897	9/29/2003	90042	PERCENT DOMINANT TAXON, BENTHOS		30.2
17897	9/29/2003	90050	RATIO OF INTOLERANT TO TOLERANT TAXA, BENTHOS		4.1
12972	8/10/2004	90050	RATIO OF INTOLERANT TO TOLERANT TAXA, BENTHOS		2.7
17897	8/11/2004	90050	RATIO OF INTOLERANT TO TOLERANT TAXA, BENTHOS		4.45
12974	9/30/2003	90050	RATIO OF INTOLERANT TO TOLERANT TAXA, BENTHOS		0.14
12972	9/23/2003	90050	RATIO OF INTOLERANT TO TOLERANT TAXA, BENTHOS		0.96
12974	8/10/2004	90050	RATIO OF INTOLERANT TO TOLERANT TAXA, BENTHOS		0.9
17897	8/11/2004	90052	NUMBER OF NON-INSECT TAXA		2
12974	9/30/2003	90052	NUMBER OF NON-INSECT TAXA		3
12974	8/10/2004	90052	NUMBER OF NON-INSECT TAXA		3
17897	9/29/2003	90052	NUMBER OF NON-INSECT TAXA		1
12972	8/10/2004	90052	NUMBER OF NON-INSECT TAXA		0
12972	9/23/2003	90052	NUMBER OF NON-INSECT TAXA		3
12972	9/23/2003	90054	PERCENT OF TOTAL NUMBER AS ELMIDAE		0
12972	8/10/2004	90054	PERCENT OF TOTAL NUMBER AS ELMIDAE		18
17897	8/11/2004	90054	PERCENT OF TOTAL NUMBER AS ELMIDAE		7.7
12974	9/30/2003	90054	PERCENT OF TOTAL NUMBER AS ELMIDAE		0
12974	8/10/2004	90054	PERCENT OF TOTAL NUMBER AS ELMIDAE		0
17897	9/29/2003	90054	PERCENT OF TOTAL NUMBER AS ELMIDAE		6.6
12972	8/10/2004	92266	TRICHOPTERA		33.3

17897	8/11/2004	92266	TRICHOPTERA		94.7
17897	9/29/2003	92266	TRICHOPTERA		100
12974	9/30/2003	92266	TRICHOPTERA		
12972	9/23/2003	92266	TRICHOPTERA		
12974	8/10/2004	92266	TRICHOPTERA		
17897	8/11/2004	92491	CHIRONOMIDAE		0
12972	9/23/2003	92491	CHIRONOMIDAE		3.77
12972	8/10/2004	92491	CHIRONOMIDAE		2
12974	9/30/2003	92491	CHIRONOMIDAE		0
17897	9/29/2003	92491	CHIRONOMIDAE		0
12974	8/10/2004	92491	CHIRONOMIDAE		0
17897	9/29/2003	98003	NUMBER OF SPECIES, FISH		11
12972	8/10/2004	98003	NUMBER OF SPECIES, FISH		11
17897	8/11/2004	98003	NUMBER OF SPECIES, FISH		14
12974	9/30/2003	98003	NUMBER OF SPECIES, FISH		2
12972	9/23/2003	98003	NUMBER OF SPECIES, FISH		11
12974	8/10/2004	98003	NUMBER OF SPECIES, FISH		9
17897	8/11/2004	98004	TOTAL NUMBER OF DARTER SPECIES		1
12974	8/10/2004	98004	TOTAL NUMBER OF DARTER SPECIES		0
12974	9/30/2003	98004	TOTAL NUMBER OF DARTER SPECIES		0
12972	9/23/2003	98004	TOTAL NUMBER OF DARTER SPECIES		0
17897	9/29/2003	98004	TOTAL NUMBER OF DARTER SPECIES		0
12972	8/10/2004	98004	TOTAL NUMBER OF DARTER SPECIES		0
12972	9/23/2003	98008	TOTAL NUMBER OF SUNFISH SPECIES		5
17897	9/29/2003	98008	TOTAL NUMBER OF SUNFISH SPECIES		4
17897	8/11/2004	98008	TOTAL NUMBER OF SUNFISH SPECIES		3
12972	8/10/2004	98008	TOTAL NUMBER OF SUNFISH SPECIES		3
12974	8/10/2004	98008	TOTAL NUMBER OF SUNFISH SPECIES		4
12974	9/30/2003	98008	TOTAL NUMBER OF SUNFISH SPECIES		1
12974	8/10/2004	98009	TOTAL NUMBER OF SUCKER SPECIES		0
12972	8/10/2004	98009	TOTAL NUMBER OF SUCKER SPECIES		0
17897	9/29/2003	98009	TOTAL NUMBER OF SUCKER SPECIES		0
12974	9/30/2003	98009	TOTAL NUMBER OF SUCKER SPECIES		0
17897	8/11/2004	98009	TOTAL NUMBER OF SUCKER SPECIES		1
12972	9/23/2003	98009	TOTAL NUMBER OF SUCKER SPECIES		0
12974	8/10/2004	98010	TOTAL NUMBER OF INTOLERANT SPECIES, FISH		0
12972	9/23/2003	98010	TOTAL NUMBER OF INTOLERANT SPECIES, FISH		0
17897	9/29/2003	98010	TOTAL NUMBER OF INTOLERANT SPECIES, FISH		0
12974	9/30/2003	98010	TOTAL NUMBER OF INTOLERANT SPECIES, FISH		0
17897	8/11/2004	98010	TOTAL NUMBER OF INTOLERANT SPECIES, FISH		0
12972	8/10/2004	98010	TOTAL NUMBER OF INTOLERANT SPECIES, FISH		0
17897	8/11/2004	98016	PERCENT OF INDIVIDUALS AS TOLERANTS, FISH		73.8
12972	8/10/2004	98016	PERCENT OF INDIVIDUALS AS TOLERANTS, FISH		73.6
12974	9/30/2003	98016	PERCENT OF INDIVIDUALS AS TOLERANTS, FISH		100
12972	9/23/2003	98016	PERCENT OF INDIVIDUALS AS TOLERANTS, FISH		78.7
12974	8/10/2004	98016	PERCENT OF INDIVIDUALS AS TOLERANTS, FISH		76.2
17897	9/29/2003	98016	PERCENT OF INDIVIDUALS AS TOLERANTS, FISH		89.8
17897	8/11/2004	98017	PERCENT OF INDIVIDUALS AS OMNIVORES, FISH		38.3
12972	8/10/2004	98017	PERCENT OF INDIVIDUALS AS OMNIVORES, FISH		5.37
12974	9/30/2003	98017	PERCENT OF INDIVIDUALS AS OMNIVORES, FISH		0
12974	8/10/2004	98017	PERCENT OF INDIVIDUALS AS OMNIVORES, FISH		4.76
17897	9/29/2003	98017	PERCENT OF INDIVIDUALS AS OMNIVORES, FISH		9.4
12972	9/23/2003	98017	PERCENT OF INDIVIDUALS AS OMNIVORES, FISH		13.1
17897	9/29/2003	98021	PERCENT OF INDIVIDUALS AS INSECTIVORES, FISH		88.7
12974	8/10/2004	98021	PERCENT OF INDIVIDUALS AS INSECTIVORES, FISH		52.4
12972	8/10/2004	98021	PERCENT OF INDIVIDUALS AS INSECTIVORES, FISH		92.6
12974	9/30/2003	98021	PERCENT OF INDIVIDUALS AS INSECTIVORES, FISH		100
17897	8/11/2004	98021	PERCENT OF INDIVIDUALS AS INSECTIVORES, FISH		58.3
12972	9/23/2003	98021	PERCENT OF INDIVIDUALS AS INSECTIVORES, FISH		60.7
12974	8/10/2004	98022	PERCENT OF INDIVIDUALS AS PISCIVORES, FISH		42.9
12974	9/30/2003	98022	PERCENT OF INDIVIDUALS AS PISCIVORES, FISH		0

17897	8/11/2004	98022	PERCENT OF INDIVIDUALS AS PISCIVORES, FISH		3.3
17897	9/29/2003	98022	PERCENT OF INDIVIDUALS AS PISCIVORES, FISH		1.9
12972	8/10/2004	98022	PERCENT OF INDIVIDUALS AS PISCIVORES, FISH		2.1
12972	9/23/2003	98022	PERCENT OF INDIVIDUALS AS PISCIVORES, FISH		26.2
12974	8/10/2004	98023	TOTAL NUMBER OF INDIVIDUALS IN SAMPLE, FISH		21
12972	8/10/2004	98023	TOTAL NUMBER OF INDIVIDUALS IN SAMPLE, FISH		242
17897	9/29/2003	98023	TOTAL NUMBER OF INDIVIDUALS IN SAMPLE, FISH		266
12974	9/30/2003	98023	TOTAL NUMBER OF INDIVIDUALS IN SAMPLE, FISH		6
17897	8/11/2004	98023	TOTAL NUMBER OF INDIVIDUALS IN SAMPLE, FISH		120
12972	9/23/2003	98023	TOTAL NUMBER OF INDIVIDUALS IN SAMPLE, FISH		66
17897	8/11/2004	98024	PERCENT OF INDIVIDUALS AS HYBRIDS		0.82
17897	8/11/2004	98024	PERCENT OF INDIVIDUALS AS HYBRIDS		0.82
17897	9/29/2003	98024	PERCENT OF INDIVIDUALS AS HYBRIDS		0
17897	9/29/2003	98024	PERCENT OF INDIVIDUALS AS HYBRIDS		0
12974	9/30/2003	98024	PERCENT OF INDIVIDUALS AS HYBRIDS		0
12974	9/30/2003	98024	PERCENT OF INDIVIDUALS AS HYBRIDS		0
12972	9/23/2003	98024	PERCENT OF INDIVIDUALS AS HYBRIDS		0
12972	9/23/2003	98024	PERCENT OF INDIVIDUALS AS HYBRIDS		0
12972	8/10/2004	98024	PERCENT OF INDIVIDUALS AS HYBRIDS		0
12972	8/10/2004	98024	PERCENT OF INDIVIDUALS AS HYBRIDS		0
12974	8/10/2004	98024	PERCENT OF INDIVIDUALS AS HYBRIDS		4.76
12974	8/10/2004	98024	PERCENT OF INDIVIDUALS AS HYBRIDS		4.76
17897	9/29/2003	98030	PERCENT OF INDIVIDUALS WITH DISEASE OR ANOMALY		0
12972	8/10/2004	98030	PERCENT OF INDIVIDUALS WITH DISEASE OR ANOMALY		0
12972	9/23/2003	98030	PERCENT OF INDIVIDUALS WITH DISEASE OR ANOMALY		0
12974	9/30/2003	98030	PERCENT OF INDIVIDUALS WITH DISEASE OR ANOMALY		0
12974	8/10/2004	98030	PERCENT OF INDIVIDUALS WITH DISEASE OR ANOMALY		0
17897	8/11/2004	98030	PERCENT OF INDIVIDUALS WITH DISEASE OR ANOMALY		0