

Jobos Bay (JOB) NERR Water Quality Metadata
January - December 2000
Latest Update: June 30, 2021

I. Data Set & Research Descriptors

1. Principal investigator(s) and contact persons

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2. Entry verification:

After retrieving and carefully cleaning the dataloggers, they are examined to detect any structural damage to the body or to the probes. The DO membrane is checked for ruptures and then replaced if needed. The turbidity probe is examined to assure that no obstruction affects the wiper and that the sensor is clean. Manipulation and observation are registered in the field log for each deployment respectively.

The YSI is connected to a Pentium II 400 MHz IBM compatible computer and the data are reviewed using the YSI computer program Ecowatch for Windows that accompanies the YSI 6000 datalogger. The file is uploaded in two formats, one in YSI PC6000 format and the other in Comma and "" Delimited format then the file is renamed to have a ".txt" extension. The YSI Ecowatch for Windows program is used to plot the data and delete the pre- and post deployment data that are not

in range of the other readings. The program is used to perform basic statistical analysis (i.e., min., max., mean, std. dev.). Data is initially reviewed using the Ecowatch graphing tool. Data for a month is compiled into one single Excel 97 data sheet for further examination to detect gross outliers, data recorded during instrument retrieval or caused by instrument failure.

Missing dates and times are checked before submitting the data to the Central Data Management Office. CDMO provided Excel 5.0 macros to assist in data reviewing and data editing. Data is opened into this program and empty or unrecorded data spaces are filled with periods. Columns are corrected for a specific format (correct size and the data have the correct number of decimal place holders as specified by the NERR CDMO), data and time readings are also checked and outliers are identified by this program. Outliers file is saved and printed for revision of each file. Missing data and explanatory reasons are recorded in the missing data section.

Data that was found to be out of the instrument range or normal parameters for each sampling station is removed from the file and a period is inserted to the cell(s). Explanations for changes in data are also included in the metadata. Data that were outside the "normal" range of water quality for a particular site is investigated for validity based on filed observation, QA/QC check, Ecowatch for Windows printouts, and the instrument diagnostics. The metadata form is submitted with the data to the CDMO. Data is stored in zip disks. Dr. Pedro Robles, Research Coordinator, is responsible for data management.

3. Research Objectives:

Three dataloggers are deployed at the Mar Negro area, the major component of Jobos Bay Estuarine Research Reserve, and are suspended from a pole at 0.3 meter from the bottom of the selected site. Only data from stations 9 and 10 will be submitted to the Central Data Management Office as part of the System-Wide Monitoring Program. Measurements are taken at thirty-minute intervals for approximately two-week periods. The sites are identified as representative of

areas within the reserve and comparable to the sites that may be receiving impact from human activities in the surroundings areas.

Station number nine (9), the impacted site, collects water quality data in a site associated with runoff from littoral and basin mangrove areas. This sampling station is closer to the Electric Power Thermoelectric Plant, which makes it subject to runoff and potential contamination spills from this industrial facility. Information compiled from historical environmental documents indicate that station nine (9) was used as a disposal site for the residues of the previously operating sugar mill operation, which might have been a high organic input to the sediments.

Station number ten (10), located in the mangrove lagoon area is the reference or unimpacted site.

4. Research methods:

The Estuarine Water Quality Monitoring began on December 20, 1995 at Station nine (9), February 1, 1996 at Station ten (10). At this time we are only performing long term water quality monitoring.

Before each YSI 6000 datalogger is deployed, calibration and maintenance is performed following the manufacturer's instruction (YSI Manual addendum 7/94, sections 3,4 and 7). Calibration standards are only required for pH, salinity, and turbidity, all other parameters are done as described in the manual. Buffer solutions for two-point calibration (pH 7 and pH 10) are purchased from a scientific supply house. Salinity is calibrated via a specific conductance standard 1000 $\mu\text{S}/\text{cm}$ and are purchased from a scientific supply house. This solution is also prepared in the laboratory of Department of Natural and Environmental Resources (DNER) utilizing KCl following specification of EPA methods.

The two-point turbidity calibration (as of January 01, 1997) was performed using a 0 NTU standard using lab grade DI water made at the DNER laboratory and 40 NTU standard purchased from a scientific supply house. We are now using (since Jan 01, 1997) a 200 NTU standard purchased from a scientific company. The dissolved oxygen membranes are replaced before deployment and are allowed to sit at least 24 hours prior to deployment.

The weather conditions and tide stage during deployment are recorded in the field observation log. Measurements of DO, pH, salinity, specific conductance, and temperature are taken with other calibrated field instruments to check the accuracy of the instrumentation.

Each YSI datalogger is tied with steel cable to a wrought iron galvanized pole, which is plunged into the sediments of each sampling area. Dataloggers are suspended from a pole at 0.3 meter from the bottom of the selected site. Every 30 minutes during the sampling period measurements are taken for date, time, temperature, specific conductance, salinity, dissolved oxygen saturation, dissolved oxygen concentration, depth, pH, and turbidity. Every two weeks the dataloggers are retrieved, uploaded, cleaned, inspected, and calibrated as noted previously. The datalogger is then ready to be deployed.

5. Site location and character:

The Jobos Bay National Estuarine Research Reserve (JOBNERR) is located on the southern coastal plain of the island of Puerto Rico, a reserve within the West Indies geographical area. JOBNERR is composed of two major areas: (1) Mar Negro, located on the western margin of the Bay, and (2) Cayos Caribe, a chain of 15 tear-shaped islets located to the southeast. The Mar Negro area comprises the bulk of the Reserve, and consists of mangrove forests and a complex system of lagoons and channels interspersed with salt and mud flats. Coral reefs and seagrass beds, with small beach deposits and upland areas fringe Cayos Caribe mangrove islands.

Station 9 is an impacted site and is located at the northeastern part of the Mar Negro unit. The sampling station is associated with the mangrove lagoon area and received the Thermoelectric Power Plant runoff - mudflats and areas adjacent. The tidal range varies from 12 in. to 14 in. in the vicinity of the monitoring station. No fresh water input in the vicinity of the station is probable. The salinity at the vicinity of the monitoring station varies from 0.0 ppt to 41.1 ppt. The station pole is located at 17° 56' 36.8" N and 66° 14'

18.5" W.

Station 10 is located in a mangrove lagoon not impacted from upland or marine activities. It provided a reference for comparison of the data obtained

in other stations, especially to the stations in Mar Negro lagoon environment.

The tidal range varies from 12 in. to 14 in. in the vicinity of the monitoring

station. No fresh water input in the vicinity of the station is probable. The

salinity at the vicinity of the monitoring station varies from 0.0 ppt to 41.7

ppt. The pole is located at 17° 56' 20.3" N and 66° 45' 26.7" W.

Data from stations 9 and 10 are the only one to be submitted to the CDMO.

Of five sondes we have, two will be permanently devoted to take reading from

these two sites, while other two will serve as replacement when sondes are taken

out of the water for data upload and maintenance. This will avoid data gaps for

station 9 and 10 between sonde maintenance procedures. Data collected by station

11 will not be submitted because of gaps that will result at sonde retrieval for

data uploading and maintenance. All monitoring is considered long term.

6. Data collection period:

Station nine (9) sampling with the YSI began on December 20, 1995.

Station ten (10) sampling with the YSI began on February 1, 1996.

7. Associated researchers and projects:

A plankton monitoring program covers various stations in the Bay. Stations

9 and 10 are sampling points of this program, which is conducted monthly. Personnel from the laboratory of Puerto Rico Environmental Quality Board have

identified plankton species.

8. Variable sequence, range of measurements, units, resolution and accuracy:

YSI 6000/6600 datalogger

Variable	Range of Measurements	Resolution	
Accuracy			
Date	1-12, 1-31, 00-99 (Mo,Day,Yr)	1 mo, 1 day, 1 yr	NA
Time	0-24, 0-60, 0-60 (Hr,Min,Sec)	1 hr, 1 min, 1 s	NA
Temp	-5 to 45 (c)	0.01 C	+/-
0.15C			
Sp COND	0-100 (mS/cm)	0.01mS/cm	+/-0.5%
Of			
reading + 0.001mS/Cm			

Salinity	0-70 Parts per thousand (ppt)	0.01 ppt	+/- 1%
of			
Reading or	0.1 ppt, (whichever is greater)		
DO	0-200 (% air saturation)	0.1% @air sat	+/-2%
@air			
Saturation			
DO	200-500 (% air saturation	0.1% @ air sat	+/- 6%
@			
Saturation			
DO	0-20 (mg/l)	0.01 mg/l	+/-
0.2mg/l			
DO	20-50 (mg/l)	0.01 mg/l	+/-
0.6mg/l			
Depth (shallow)	0-9.1 (m)	0.001m	+/-
0.018m			
PH	2-14 units	0.01 units	+/-
0.2units			
Turb	0-1000 NTU	0.1 NTU	+/- 5%
of			
Reading or	2 NTU (whichever is greater)		

Data columns are separated by tabs. Each file contains a two-line column header at the top of the page, which identifies measurements and units for each column.

9. Coded variable indicator and variable code definitions:

Site definitions: 09 = Station 9

Site definitions: 10 = Station 10

File definitions: site/month/year (ex: 090895.txt = Station 9 data from August of 1995).

10. Data anomalies:

January 2000

Station 09

DO data deleted due to problem with membrane and/or probe:

01/21/2000 16:00:00 - 01/25/2000 21:30:00

DO values deleted due to fouling of probe:

01/26/2000 14:30:00 - 01/27/2000 20:30:00

01/29/2000 02:30:00 - 13:00:00

High turbidity values (>1000), data were retained:

01/21/2000 21:00:00

01/28/2000 20:30:00

Station 10

Negative turbidity values, data were deleted:

01/21/2000 16:00:00 - 01/22/2000 09:30:00

01/22/2000 10:30:00 - 01/31/2000 15:00:00

01/31/2000 17:00:00 - 17:30:00

Zero turbidity values. Data were deleted.

01/31/2000 22:00:00

February 2000

Station 09

DO membrane punctured; data were deleted:

02/07/00 09:00:00 - 02/07 13:30:00

02/28/00 10:00:00 - 02/29/00 08:30:00

High turbidity values (>1000), data were retained:

02/27/2000 00:30:00

DO data deleted due to punctured membrane:

02/25/2000 09:00:00 - 02/28/2000 09:30:00

Suspect data due to fouling of the sonde. Data were retained:

02/15/2000 09:30:00 - 02/28/2000 09:30:00

Station 10

Negative turbidity. Data were deleted.

02/01/2000 09:00:00, 18:30:00, 19:30:00 - 21:30:00

02/02/2000 00:30:00 - 02:30:00

02/10/2000 16:00:00 - 02/16/2000 22:30:00

02/17/2000 02:00:00

02/17/2000 03:30:00 - 04:00:00

02/17/2000 05:30:00

02/17/2000 07:30:00 - 02/19/2000 01:00:00

02/19/2000 02:00:00

02/19/2000 03:30:00 - 20:30:00

02/19/2000 22:30:00

02/19/2000 23:30:00

02/20/2000 09:30:00

02/20/2000 10:30:00 - 02/20/2000 14:00:00

02/20/2000 15:00:00

02/20/2000 23:00:00 - 02/21/2000 01:00:00

02/21/2000 02:00:00 - 05:30:00

02/21/2000 07:30:00 - 12:00:00

02/22/2000 05:30:00

02/25/2000 05:30:00

02/26/2000 17:30:00

02/26/2000 19:30:00

High turbidity values (>1000), data were retained:

02/06/2000 14:00:00

02/23/2000 19:30:00

02/24/2000 12:00:00 - 02/28/2000 03:00:00

March

Station 9

No file. File was corrupted.

Station 10

DO data suspect 03/03/2000 16:00:00 - 03/31/2000 23:30:00 due to bad calibration; calibration solution had a higher salinity than normal, causing

higher output values from datalogger when deployed. Data were retained.

Negative and/or zero turbidity values. Data were deleted.

03/02/2000 16:00:00 - 03/03/2000 11:30:00
03/04/2000 10:30:00 - 16:00:00
03/04/2000 18:00:00 - 18:30:00
03/04/2000 21:00:00 - 21:30:00, 23:00:00
03/05/2000 10:00:00
03/05/2000 17:30:00 - 03/07/2000 07:00:00
03/07/2000 08:00:00 - 03/08/2000 09:00:00
03/08/2000 10:00:00 - 10:30:00
03/08/2000 12:30:00 - 15:30:00
03/08/2000 16:30:00 - 03/09/2000 07:00:00
03/09/2000 08:00:00 - 03/10/2000 10:30:00
03/10/2000 11:30:00 - 13:00:00
03/10/2000 17:00:00 - 17:30:00
03/10/2000 18:30:00 - 03/10/2000 20:30:00
03/10/2000 21:30:00 - 22:30:00, 23:30:00
03/11/2000 00:30:00 - 10:00:00
03/11/2000 11:00:00 - 13:00:00
03/11/2000 18:30:00 - 22:00:00
03/11/2000 23:00:00 - 03/12/2000 08:30:00
03/12/2000 09:30:00 - 11:00:00, 12:30:00
03/12/2000 19:30:00 - 03/13/2000 00:30:00
03/13/2000 01:30:00 - 10:30:00, 11:30:00, 13:30:00, 14:30:00 - 15:30:00
03/13/2000 17:00:00 - 22:00:00
03/14/2000 00:00:00, 03:00:00
03/14/2000 08:30:00 - 09:30:00, 11:00:00, 13:00:00, 18:30:00 - 21:30:00
03/14/2000 22:30:00 - 03/15/2000 04:00:00
03/15/2000 05:00:00 - 09:00:00
03/15/2000 10:00:00
03/15/2000 11:00:00 - 12:30:00
03/15/2000 19:30:00
03/18/2000 07:30:00
03/19/2000 12:30:00
03/19/2000 14:00:00
03/19/2000 21:00:00
03/20/2000 12:30:00
03/21/2000 02:00:00
03/21/2000 18:30:00
03/22/2000 03:30:00
03/22/2000 14:30:00
03/24/2000 01:30:00, 22:00:00, 23:30:00
03/25/2000 03:30:00 - 04:00:00
03/26/2000 16:00:00 - 03/26/2000 17:30:00
03/27/2000 01:30:00
03/30/2000 23:00:00 - 23:30:00
03/31/2000 00:30:00 - 01:00:00
03/31/2000 03:00:00
03/31/2000 07:00:00
03/31/2000 08:00:00
03/31/2000 09:30:00
High turbidity values, data retained.
03/21/2000 20:30:00
03/23/2000 16:00:00
03/24/2000 19:30:00
03/25/2000 01:30:00

03/26/2000 01:30:00

April 2000

Station 9

Salinity and Specific Conductivity data suspect 04/26/2000 16:00:00 - 04/30/2000

23:30:00 due to calibration problem. Calibration solution had a higher salinity

than normal, causing higher output values from datalogger when deployed. Data

were retained.

Station 10

DO data suspect 04/01/2000 00:00:00 - 04/30/2000 23:30:00 due to bad calibration; calibration solution had a higher salinity than normal, causing

higher output values from datalogger when deployed. Data were retained.

Bad DO membrane; DO data were deleted:

04/19/2000 20:30:00 - 04/24/2000 08:30:00

Negative and/or zero turbidity values. Data were deleted.

04/26/2000 16:00:00 - 04/30/2000 23:30:00

Zero turbidity values. Data were deleted.

04/01/2000 01:30:00

04/01/2000 03:00:00

04/01/2000 04:00:00

04/01/2000 05:00:00 - 05:30:00

04/01/2000 06:30:00 - 07:00:00

04/01/2000 22:30:00 - 23:30:00

04/02/2000 00:30:00

04/02/2000 01:30:00

04/02/2000 02:30:00

04/02/2000 03:30:00

04/02/2000 06:00:00

04/02/2000 07:00:00

04/02/2000 08:00:00 - 08:30:00

04/02/2000 21:30:00

04/02/2000 23:00:00

04/03/2000 03:00:00

04/03/2000 05:30:00

04/03/2000 07:00:00

04/03/2000 09:00:00

04/03/2000 10:30:00 - 11:30:00

04/03/2000 12:30:00

04/03/2000 20:00:00 - 20:30:00

04/03/2000 21:30:00 - 22:00:00

04/03/2000 23:30:00

04/04/2000 00:30:00

04/04/2000 01:30:00 - 02:00:00

04/04/2000 22:30:00

04/05/2000 00:30:00

04/05/2000 03:00:00

04/05/2000 08:30:00

04/05/2000 10:00:00

04/05/2000 18:30:00 - 19:00:00
04/05/2000 20:00:00 - 04/06/2000 02:00:00
04/06/2000 03:00:00 - 03:30:00
04/07/2000 00:00:00
04/07/2000 01:30:00
04/07/2000 04:00:00
04/08/2000 00:00:00
04/08/2000 01:00:00
04/08/2000 22:30:00 - 23:00:00
04/09/2000 03:30:00
04/09/2000 05:30:00
04/10/2000 06:00:00
04/12/2000 03:00:00
04/12/2000 04:30:00
04/12/2000 06:30:00 - 07:00:00
04/26/2000 16:30:00
04/27/2000 10:30:00
04/27/2000 11:30:00
04/27/2000 12:30:00
04/27/2000 14:30:00
04/28/2000 12:30:00
04/28/2000 14:00:00
04/28/2000 14:30:00
04/29/2000 12:30:00
04/29/2000 14:30:00
04/29/2000 16:30:00 - 17:00:00
04/30/2000 12:30:00
Negative turbidity values. Data were deleted.
04/26/2000 16:00:00
04/26/2000 17:00:00 - 04/27/2000 10:00:00
04/27/2000 11:00:00
04/27/2000 12:00:00
04/27/2000 13:00:00 - 14:00:00
04/27/2000 15:00:00 - 04/28/2000 12:00:00
04/28/2000 13:00:00 - 13:30:00
04/28/2000 15:00:00 - 04/29/2000 12:00:00
04/29/2000 13:00:00 - 13:30:00
04/29/2000 14:00:00
04/29/2000 15:00:00 - 16:00:00
04/29/2000 17:30:00 - 04/30/2000 12:00:00
04/30/2000 13:00:00 - 23:30:00

May 2000

Station 09

Salinity and Specific Conductivity data suspect 05/01/2000 00:00:00 -
05/15/2000
09:00:00 due to calibration problem. Calibration solution had a higher
salinity
than normal, causing higher output values from datalogger when deployed.
Data
were retained.

DO data deleted due to problem with membrane and/or probe:

05/06/2000 05:30:00 - 05/15/2000 09:00:00

High turbidity values (>1000):

05/11/2000 17:30:00, data were deleted

05/14/2000 05:30:00 (986 NTU), data were retained

Station 10

DO data suspect 05/01/2000 00:00:00 - 05/15/2000 08:30:00 due to bad calibration; calibration solution had a higher salinity than normal, causing

higher output values from datalogger when deployed. Data were retained.

Turbidity spike (1048 NTU) 05/13/200 22:00. Data retained.

Zero turbidity values, bad data fouling. Data were deleted.

05/03/2000 23:00:00

05/04/2000 16:30:00

05/04/2000 17:30:00

05/04/2000 18:30:00 - 19:00:00

05/04/2000 20:00:00

05/05/2000 06:00:00

05/05/2000 07:00:00 - 10:30:00

05/05/2000 12:30:00

05/05/2000 16:30:00 - 17:00:00

05/05/2000 18:00:00 - 19:00:00

05/05/2000 23:00:00

05/06/2000 02:30:00

05/06/2000 03:30:00

05/06/2000 05:00:00

05/06/2000 22:00:00

Negative turbidity values. Data were deleted.

05/01/2000 00:00:00 - 05/03/2000 22:30:00, bad data due to fouling

05/03/2000 23:30:00 - 05/04/2000 15:30:00

05/04/2000 17:00:00

05/04/2000 18:00:00

05/04/2000 19:30:00

05/04/2000 20:30:00 - 05/05/2001 05:30:00

05/05/2000 06:30:00

05/09/2000 05:30:00

05/09/2000 21:30:00

05/14/2000 05:00:00

05/15/2000 02:00:00

05/25/2000 16:00:00 - 05/31/2000 23:30:00, bad data bad calibration

Punctured DO membrane, data were deleted:

05/25/2000 16:00:00 - 05/31/2000 23:30:00

June 2000

Station 09

DO deleted due to fouling of membrane:

06/18/2000 03:30:00 - 06/28/2000 10:30:00

High turbidity values (algal debris), data were deleted.

06/03/2000 11:30:00

06/03/2000 13:30:00

06/03/2000 23:00:00

06/05/2000 17:00:00 - 19:00:00
06/06/2000 06:00:00
06/06/2000 19:30:00 - 23:00:00
06/07/2000 00:00:00 - 02:30:00
06/07/2000 04:30:00 - 06:00:00
06/07/2000 07:00:00
06/07/2000 08:30:00 - 09:00:00
06/07/2000 13:30:00
06/29/2000 07:00:00
06/30/2000 16:00:00

Station 10

DO data deleted due to punctured membrane:

06/01/2000 00:00:00 - 06/12/2000 09:00:00

Negative turbidity values. Data were deleted.

06/01/2000 00:00:00 - 06/06/2000 10:00:00

06/06/2000 11:00:00

06/11/2000 18:30:00 - 19:30:00

06/11/2000 21:30:00

06/14/2000 16:00:00 - 06/17/2000 14:30:00

06/17/2000 16:30:00 - 06/19/2000 15:30:00

06/19/2000 17:00:00

06/19/2000 18:00:00 - 06/20/2000 16:00:00

06/20/2000 17:30:00 - 18:00:00

06/20/2000 21:00:00 - 23:00:00

06/21/2000 00:00:00 - 10:30:00, 20:30:00 - 22:00:00

06/22/2000 01:00:00, 02:00:00 - 07:30:00, 13:30:00, 21:30 - 22:30:00

06/22/2000 23:30:00 - 06/23/2000 00:00:00

06/23/2000 01:00:00 - 10:00:00, 12:30:00 - 13:30:00

06/24/2000 06:00:00 - 12:00:00, 13:00:00 - 13:30:00, 22:00:00 - 23:30:00

06/25/2000 01:00:00 - 04:30:00, 05:30:00 - 13:00:00, 21:30:00 - 22:30:00

06/25/2000 23:30:00 - 06/26/2000 09:30:00

06/27/2000 00:30:00 - 02:00:00

06/29/2000 19:30:00 - 22:00:00

06/29/2000 23:30:00 - 06/30/2000 03:00

06/30/2000 04:00:00 - 07:00:00, 08:00, 09:30:00 - 10:30:00, 11:30:00, 22:00:00

High turbidity values (>1000), data were retained:

06/30/2000 11:00:00

06/30/2000 21:30:00

July 2000

Station 09

DO%, DO mg/L: deleted data: punctured membrane

07/27/2000 23:30:00 - 07/31/2000 23:30:00

Turbidity outliers, high values, data deleted.

07/02/2000 00:30:00 - 01:00:00

07/21/2000 20:30:00

07/25/2000 21:00:00

07/25/2000 22:00:00

07/25/2000 23:00:00 - 07/26/2000 06:00:00

07/26/2000 07:30:00

07/26/2000 10:00:00 - 11:00:00

07/26/2000 19:30:00 - 20:00:00
07/26/2000 21:00:00 - 21:30:00
07/27/2000 00:00:00
07/27/2000 01:30:00 - 02:00:00
07/27/2000 03:00:00
07/27/2000 04:00:00
07/27/2000 05:00:00
07/27/2000 06:00:00 - 07:30:00
07/27/2000 08:30:00 - 09:00:00
07/27/2000 10:30:00
07/27/2000 16:30:00 - 17:00:00
07/27/2000 18:00:00
07/27/2000 20:30:00 - 21:30:00
07/27/2000 22:30:00 - 07/28/2000 08:30:00
07/28/2000 09:30:00 - 12:30:00
07/28/2000 14:00:00 - 15:00:00
07/28/2000 16:30:00 - 18:30:00
07/28/2000 20:00:00 - 23:00:00
07/29/2000 00:00:00 - 01:00:00
07/29/2000 02:00:00 - 06:30:00
07/29/2000 07:30:00 - 09:30:00
07/29/2000 10:30:00
07/29/2000 11:30:00 - 14:30:00
07/29/2000 15:30:00 - 22:30:00
07/30/2000 01:00:00
07/30/2000 02:00:00
07/30/2000 03:30:00 - 10:30:00
07/30/2000 11:30:00 - 13:30:00
07/30/2000 15:00:00 - 15:30:00
07/30/2000 16:30:00
07/30/2000 17:30:00
07/30/2000 18:30:00 - 19:30:00
07/31/2000 00:00:00
07/31/2000 01:00:00 - 01:30:00
07/31/2000 03:00:00 - 03:30:00
07/31/2000 04:30:00
07/31/2000 05:30:00 - 07:00:00
07/31/2000 08:00:00 - 09:00:00
07/31/2000 10:00:00 - 11:00:00
07/31/2000 13:00:00 - 13:30:00
07/31/2000 15:30:00 - 16:00:00
07/31/2000 17:00:00 - 19:00:00
07/31/2000 20:00:00 - 21:00:00
07/31/2000 23:00:00 - 23:30:00

Station 10

High turbidity values (>1000), data were retained

07/01/2000 14:30:00
07/01/2000 18:00:00 - 18:30:00
07/02/2000 08:00:00
07/03/2000 03:00:00
07/03/2000 10:30:00
07/03/2000 12:30:00
07/03/2000 16:30:00 - 17:30:00

07/03/2000 19:00:00 - 19:30:00
07/03/2000 22:00:00
07/04/2000 03:30:00 - 04:00:00
07/04/2000 05:00:00
07/04/2000 07:00:00
07/04/2000 08:30:00
07/04/2000 09:30:00 - 10:00:00
07/04/2000 11:00:00
07/04/2000 15:00:00 - 16:00:00
07/04/2000 17:30:00 - 07/05/2000 03:30:00
07/05/2000 05:00:00 - 09:30:00

Negative turbidity values, data were deleted.

07/01/2000 15:30:00 - 17:30:00
07/02/2000 07:30:00
07/02/2000 08:30:00 - 11:00:00
07/02/2000 12:00:00 - 14:30:00
07/02/2000 15:30:00 - 16:30:00
07/02/2000 17:30:00 - 18:30:00
07/02/2000 19:30:00 - 21:30:00
07/02/2000 22:30:00 - 07/03/2000 00:00:00
07/03/2000 01:00:00 - 02:30:00, 03:30:00 - 04:30:00
07/03/2000 13:00:00 - 16:00:00
07/03/2000 18:00:00 - 18:30:00
07/03/2000 20:00:00 - 21:30:00
07/03/2000 22:30:00
07/04/2000 04:30:00
07/04/2000 05:30:00
07/04/2000 08:00:00
07/04/2000 12:00:00 - 14:30:00
07/04/2000 16:30:00 - 17:00:00
07/05/2000 04:00:00 - 04:30:00
07/10/2000 16:00:00 - 07/11/2000 20:30:00
07/11/2000 21:30:00 - 07/15/2000 16:30:00
07/15/2000 19:00:00 - 07/16/2000 18:30:00
07/16/2000 19:30:00 - 07/17/2000 18:30:00
07/17/2000 20:30:00 - 07/18/2000 20:00:00
07/18/2000 21:00:00
07/18/2000 22:00:00 - 07/19/2000 19:30:00
07/19/2000 20:30:00
07/19/2000 21:30:00 - 07/31/2000 23:30:00

August 2000

Station 9

Turbidity data deleted 08/01/2000 00:00:00 - 08/02/2000 08:30:00 due to bad

probe. No probe available for deployment 08/29/2000 13:00:00 - 08/31/2000 23:30:00.

Station 10

No anomalies

September 2000

Station 09

High turbidity values (>1000), data were retained:

09/08/2000 23:00:00

Negative turbidity values, data deleted:

09/01/2000 00:00:00 - 09/02/2000 10:30:00

09/02/2000 11:30:00 - 09/05/2000 19:00:00

09/05/2000 20:30:00 - 09/06/2000 10:30:00

09/06/2000 12:00:00 - 09/07/2000 19:00:00

09/07/2000 20:00:00 - 09/08/2000 07:30:00

09/08/2000 08:30:00 - 09:00:00

09/08/2000 10:00:00

09/08/2000 11:30:00 - 14:30:00

09/08/2000 15:30:00 - 21:00:00

09/08/2000 22:00:00 - 22:30:00

09/09/2000 00:30:00

09/09/2000 02:00:00 - 02:30:00

09/09/2000 10:30:00

09/09/2000 21:30:00

09/10/2000 08:30:00

09/10/2000 21:30:00

09/11/2000 00:00:00

09/15/2000 16:00:00 - 09/17 15:00:00

All data deleted due to stolen datalogger out of water:

09/17/2000 15:30:00 - 09/30/2000 23:30:00

Station 10

No data due to calibration error and/or fouling of membrane:

09/15/2000 16:00:00 - 09/30/2000 23:30:00

October 2000

Station 09

All data deleted due to stolen datalogger out of water:

10/01/2000 00:00:00 - 10/06/2000 12:00:00

Negative depth data were deleted:

10/06/2000 12:30:00 - 10/15/2000 16:00:00, bad data due to calibration error

Negative turbidity data due to problems with probe were deleted:

10/06/2000 12:30:00 - 10/09/2000 08:30:00

10/09/2000 10:00:00

10/09/2000 11:00:00

10/09/2000 12:30:00 - 13:30:00

Station 10

DO data deleted due to fouling of probe:

10/01/2000 00:00:00 - 10/02/2000 09:00:00

Negative and/or zero turbidity values were deleted:

10/01/2000 00:00:00 - 01:30:00

10/01/2000 04:00:00 - 05:00:00

10/01/2000 22:00:00

10/01/2000 23:30:00

10/02/2000 00:00:00

10/02/2000 04:30:00

10/02/2000 08:30:00 - 09:00:00
10/13/2000 14:30:00
10/17/2000 14:30:00
10/17/2000 18:30:00
10/18/2000 16:00:00 - 16:30:00
10/18/2000 18:30:00
10/18/2000 01:30:00
10/19/2000 15:00:00
10/19/2000 16:30:00 - 17:00:00
10/19/2000 19:00:00
10/20/2000 16:00:00 - 19:00:00
10/20/2000 20:30:00
10/20/2000 21:30:00 - 22:00:00
10/21/2000 14:00:00
10/21/2000 17:30:00 - 18:00:00
10/21/2000 19:00:00 - 19:30:00
10/21/2000 21:00:00
10/21/2000 22:30:00 - 10/22/2000 00:00:00
10/22/2000 06:00:00
10/22/2000 14:30:00
10/22/2000 18:30:00
10/22/2000 20:00:00 - 22:30:00
10/22/2000 23:30:00
10/23/2000 00:00:00
10/23/2000 01:00:00
10/23/2000 02:30:00
10/23/2000 13:30:00
10/23/2000 18:00:00
10/23/2000 19:30:00 - 20:00:00
10/23/2000 22:00:00
10/24/2000 04:30:00
10/24/2000 17:00:00
10/27/2000 16:00:00
10/27/2000 20:00:00 - 10/28/2000 00:30:00
10/28/2000 01:30:00 - 05:00:00
10/28/2000 06:00:00 - 06:30:00
10/28/2000 12:00:00 - 13:00:00
10/28/2000 14:00:00
10/28/2000 15:00:00
10/28/2000 18:30:00
10/28/2000 19:30:00 - 21:30:00
10/28/2000 23:00:00
10/29/2000 02:30:00
10/29/2000 04:00:00 - 05:00:00
10/29/2000 07:00:00
10/29/2000 11:00:00
10/29/2000 12:00:00 - 13:00:00
10/29/2000 14:00:00
10/29/2000 15:00:00
10/29/2000 16:30:00
10/29/2000 19:00:00 - 20:00:00
10/29/2000 21:00:00 - 22:30:00
10/30/2000 00:00:00 - 01:30:00
10/30/2000 02:30:00 - 04:00:00

10/30/2000 05:00:00 - 06:30:00
10/30/2000 07:30:00
10/30/2000 11:30:00 - 13:30:00
10/30/2000 14:30:00 - 19:30:00
10/30/2000 20:30:00 - 21:30:00
10/30/2000 22:30:00
10/31/2000 00:00:00
10/31/2000 11:00:00 - 12:00:00
10/31/2000 13:00:00 - 14:30:00
10/31/2000 15:30:00 - 16:30:00
10/31/2000 17:30:00 - 18:00:00
10/31/2000 19:00:00 - 21:00:00

November 2000

Station 09

Turbidity outlier data deleted:

11/25/2000 11:30:00

Station 10

Turbidity outliers (>1000), data were deleted:

11/13/2000 17:30:00 - 18:30:00, 20:30:00 - 22:30:00, 23:30:00

11/14/2000 00:00:00, 01:30:00, 03:30:00 - 04:00:00, 06:30:00

Sonde out of water; data deleted:

11/13/2000 10:30:00 - 13:30:00

Negative turbidity values, data were deleted:

11/01/2000 00:30:00

11/01/2000 14:00:00

11/01/2000 19:00:00 - 21:30:00

11/01/2000 22:30:00 - 23:30:00

11/02/2000 01:00:00

11/02/2000 18:30:00

11/02/2000 20:00:00

11/02/2000 21:00:00 - 22:30:00

11/03/2000 00:00:00

11/03/2000 01:00:00 - 02:00:00

11/03/2000 03:30:00 - 04:30:00

11/03/2000 06:30:00 - 07:00:00

11/03/2000 09:00:00

11/03/2000 10:00:00 - 13:00:00

11/03/2000 14:00:00 - 15:30:00

11/03/2000 16:30:00 - 17:00:00

11/03/2000 18:00:00

11/03/2000 19:30:00 - 23:30:00

11/04/2000 00:00:00 - 01:00:00

11/04/2000 02:00:00 - 02:30:00

11/04/2000 05:00:00

11/04/2000 07:00:00 - 10:30:00

11/04/2000 11:30:00

11/04/2000 18:30:00 - 22:00:00

11/04/2000 23:00:00

11/05/2000 00:00:00

11/05/2000 01:00:00 - 03:00:00

11/05/2000 04:30:00, 06:30:00

11/05/2000 07:30:00 - 08:00:00
11/05/2000 09:30:00 - 13:30:00
11/05/2000 14:30:00
11/05/2000 15:30:00
11/05/2000 16:30:00
11/05/2000 18:00:00
11/05/2000 19:00:00 - 20:00:00
11/05/2000 21:00:00 - 22:00:00
11/06/2000 00:30:00 - 02:00:00
11/06/2000 03:00:00
11/06/2000 04:00:00
11/06/2000 05:00:00
11/06/2000 06:00:00 - 07:30:00
11/06/2000 08:30:00 - 09:30:00
11/06/2000 10:30:00 - 11:30:00
11/06/2000 12:30:00 - 13:00:00
11/06/2000 15:00:00
11/06/2000 17:00:00
11/06/2000 18:00:00
11/06/2000 19:30:00 - 23:30:00
11/07/2000 00:00:00 - 00:30:00
11/07/2000 01:30:00
11/07/2000 02:30:00
11/07/2000 03:30:00 - 04:00:00
11/07/2000 05:00:00 - 05:30:00
11/07/2000 06:30:00 - 09:00:00
11/07/2000 10:00:00 - 12:30:00
11/07/2000 13:30:00
11/07/2000 14:30:00
11/07/2000 18:00:00 - 21:00:00
11/07/2000 22:00:00 - 23:30:00
11/08/2000 00:00:00 - 02:00:00
11/08/2000 03:00:00 - 06:30:00
11/08/2000 07:30:00 - 12:00:00
11/08/2000 13:00:00 - 14:00:00
11/08/2000 15:30:00
11/08/2000 16:30:00 - 17:00:00
11/08/2000 19:00:00 - 23:30:00
11/09/2000 00:00:00 - 00:30:00
11/09/2000 01:30:00 - 10:00:00
11/09/2000 11:00:00 - 12:00:00
11/09/2000 13:00:00 - 15:00:00
11/09/2000 18:30:00 - 19:00:00
11/09/2000 20:00:00
11/09/2000 21:30:00 - 22:00:00
11/09/2000 23:00:00
11/10/2000 02:30:00 - 03:00:00
11/10/2000 04:30:00 - 05:00:00
11/10/2000 06:30:00 - 09:30:00
11/10/2000 10:30:00 - 15:00:00
11/10/2000 16:30:00 - 21:30:00
11/10/2000 22:30:00 - 23:30:00
11/11/2000 00:00:00 - 04:00:00
11/11/2000 05:00:00 - 05:30:00

11/11/2000 06:30:00 - 07:30:00
11/11/2000 08:30:00 - 09:00:00
11/11/2000 10:00:00 - 14:30:00
11/11/2000 16:00:00
11/11/2000 17:30:00 - 18:30:00
11/11/2000 20:00:00
11/11/2000 21:30:00 - 23:30:00
11/12/2000 01:00:00
11/12/2000 02:00:00
11/12/2000 03:00:00
11/12/2000 04:00:00
11/12/2000 05:30:00
11/12/2000 07:00:00
11/12/2000 08:00:00 - 14:30:00
11/12/2000 17:30:00
11/12/2000 19:00:00 - 20:00:00
11/12/2000 21:00:00 - 23:30:00
11/13/2000 00:30:00 - 02:00:00
11/13/2000 03:30:00 - 04:00:00
11/13/2000 05:00:00 - 05:30:00
11/13/2000 07:00:00
11/13/2000 09:30:00 - 10:00:00
11/14/2000 10:30:00 - 15:30:00
11/14/2000 16:30:00 - 17:00:00
11/14/2000 18:00:00 - 23:30:00
11/15/2000 00:30:00 - 02:00:00, 04:30:00 - 05:00:00
11/15/2000 06:00:00 - 06:30:00
11/15/2000 07:30:00 - 11/16/2000 03:30:00
11/16/2000 05:00:00 - 05:30:00, 07:00:00 - 07:30:00, 09:30:00
11/16/2000 11:00:00 - 11/17/2000 05:30:00
11/17/2000 06:30:00 - 07:00:00, 08:00:00
11/17/2000 09:00:00 - 09:30:00
11/17/2000 10:30:00 - 16:00:00
11/17/2000 17:00:00 - 11/18/2000 01:00:00
11/18/2000 02:00:00 - 07:00:00
11/18/2000 08:00:00 - 12:30:00
11/18/2000 13:30:00 - 18:00:00
11/18/2000 19:00:00
11/18/2000 20:00:00
11/18/2000 21:00:00 - 23:30:00
11/19/2000 00:00:00 - 00:30:00
11/19/2000 01:30:00 - 10:30:00
11/19/2000 11:30:00 - 15:30:00
11/19/2000 16:30:00 - 22:00:00
11/19/2000 23:00:00 - 23:30:00
11/20/2000 00:00:00
11/20/2000 01:00:00 - 12:00:00
11/20/2000 13:00:00 - 23:30:00
11/21/2000 00:00:00 - 00:30:00
11/21/2000 01:30:00 - 02:00:00
11/21/2000 03:00:00 - 09:30:00
11/21/2000 10:30:00 - 13:00:00
11/21/2000 14:00:00
11/21/2000 15:00:00 - 20:30:00

11/21/2000 21:30:00, 22:30:00
11/22/2000 00:30:00 - 02:30:00
11/22/2000 03:30:00 - 07:00:00
11/22/2000 08:00:00
11/22/2000 11:30:00 - 13:30:00
11/22/2000 16:00:00 - 16:30:00
11/22/2000 17:30:00 - 18:00:00
11/23/2000 02:00:00
11/23/2000 05:00:00
11/23/2000 07:00:00
11/23/2000 09:00:00
11/23/2000 17:00:00
11/23/2000 18:30:00
11/23/2000 21:00:00
11/24/2000 01:00:00 - 03:30:00
11/24/2000 04:30:00 - 05:30:00
11/24/2000 06:30:00 - 07:00:00
11/24/2000 15:00:00
11/24/2000 18:00:00
11/24/2000 21:00:00 - 23:30:00
11/25/2000 00:30:00
11/25/2000 04:00:00 - 05:00:00
11/25/2000 06:30:00 - 07:30:00
11/25/2000 12:00:00
11/25/2000 16:30:00
11/26/2000 00:30:00
11/26/2000 03:00:00 - 04:00:00, 05:00:00
11/26/2000 06:30:00 - 13:00:00
11/26/2000 14:00:00 - 15:00:00
11/26/2000 21:30:00
11/26/2000 23:00:00
11/27/2000 02:30:00 - 05:30:00
11/27/2000 06:30:00
11/27/2000 07:30:00
11/27/2000 08:30:00
11/27/2000 09:30:00
11/27/2000 10:30:00 - 13:30:00
11/27/2000 15:30:00
11/27/2000 18:30:00
11/27/2000 19:30:00 - 11/28/2000 10:30:00
11/28/2000 11:30:00 - 12:00:00
11/28/2000 13:30:00
11/28/2000 14:30:00 - 17:30:00
11/28/2000 19:30:00 - 11/29/2000 09:00:00
11/29/2000 14:00:00, 15:00:00
11/30/2000 20:00:00
11/30/2000 21:30:00

December 2000

Station 09

No pH data, broken sensor

12/26/2000 08:30:00 - 12/27/2000 03:30:00

High turbidity values (>1000), data were retained:

12/02/2000 15:00:00

Bad SpCond and salinity data due to possible fouling, all data were deleted:

12/04/2000 03:00:00 - 12/04/2000 08:30:00

SpCond and salinity data deleted due to possible fouling:

12/08/2000 03:30:00 - 12/14/2000 05:30:00

Negative and/or zero turbidity values, data were deleted.

12/04/2000 09:00:00 - 09:30:00

12/04/2000 16:00:00

12/05/2000 06:30:00 - 07:00:00

12/07/2000 04:00:00 - 05:00:00

12/08/2000 00:30:00

12/08/2000 02:30:00

12/08/2000 03:30:00 - 06:00:00

12/08/2000 09:00:00

12/09/2000 05:30:00 - 06:00:00

12/10/2000 08:00:00 - 08:30:00

12/11/2000 06:00:00 - 06:30:00

12/12/2000 07:30:00

12/12/2000 08:30:00

12/20/2000 04:00:00, 05:00:00

12/20/2000 06:00:00

12/20/2000 08:00:00 - 08:30:00

12/20/2000 22:00:00

12/20/2000 23:00:00

12/21/2000 00:00:00

12/21/2000 01:00:00

12/21/2000 08:00:00 - 08:30:00

12/23/2000 05:30:00

12/23/2000 06:30:00

12/23/2000 07:30:00

12/24/2000 07:00:00 - 07:30:00

12/24/2000 12:00:00, 13:30:00

12/25/2000 06:00:00

12/25/2000 07:00:00 - 09:30:00

12/25/2000 10:30:00

12/25/2000 11:30:00

12/27/2000 09:30:00 - 12:30:00

12/27/2000 14:30:00 - 15:00:00

12/27/2000 22:30:00 - 12/28/2000 01:30:00

12/28/2000 03:30:00

12/28/2000 05:00:00 - 06:30:00

12/28/2000 07:30:00 - 08:00:00

12/28/2000 09:00:00 - 11:30:00

12/28/2000 13:00:00 - 13:30:00

12/28/2000 19:00:00 - 19:30:00

12/28/2000 20:30:00 - 21:00:00

12/28/2000 23:00:00 - 12/29/2000 00:30:00

12/29/2000 01:30:00 - 02:00:00

12/29/2000 03:30:00 - 06:30:00

12/29/2000 07:30:00

12/29/2000 08:30:00 - 14:00:00

12/29/2000 20:30:00 - 12/30/2000 01:00:00

12/30/2000 02:00:00 - 02:30:00
12/30/2000 04:00:00 - 04:30:00
12/30/2000 05:30:00 - 07:00:00
12/30/2000 08:00:00 - 15:30:00
12/30/2000 21:30:00 - 12/31/2000 10:00:00
12/31/2000 11:30:00 - 13:30:00
12/31/2000 14:30:00 - 16:00:00

Station 10

pH data deleted due to sensor failure:

12/04/2000 09:30:00 - 12/26/2000 09:00:00

12/26/2000 13:30:00 - 12/27/2000 03:00:00

Specific Conductivity and salinity data deleted due to fouling of membrane:

12/08/2000 03:30:00 - 12/14/2000 05:30:00

The following negative and/or zero turbidity values were deleted:

12/01/2000 01:30:00, 03:00:00, 07:30:00 - 08:00:00, 11:00:00, 21:00:00, 22:30:00

12/02/2000 00:30:00 - 01:00:00

12/02/2000 02:00:00 - 03:00:00

12/02/2000 04:00:00

12/02/2000 05:00:00

12/02/2000 18:30:00

12/02/2000 20:30:00

12/02/2000 21:30:00

12/02/2000 22:30:00

12/03/2000 02:00:00

12/03/2000 03:30:00 - 07:30:00

12/03/2000 08:30:00 - 09:00:00

12/03/2000 10:30:00 - 11:00:00

12/03/2000 12:00:00 - 21:30:00

12/03/2000 23:00:00

12/04/2000 01:00:00 - 06:00:00

12/04/2000 07:30:00 - 08:00:00, 09:30:00, 16:00:00

12/05/2000 04:30:00 - 05:00:00

12/05/2000 06:30:00 - 07:00:00

12/07/2000 04:00:00 - 05:00:00

12/08/2000 00:30:00

12/08/2000 02:30:00

12/08/2000 03:30:00 - 06:00:00

12/08/2000 09:00:00

12/09/2000 05:30:00 - 06:00:00

12/10/2000 08:30:00 - 09:00:00

12/11/2000 06:00:00 - 06:30:00

12/12/2000 08:30:00

12/16/2000 16:30:00, 19:00:00

12/20/2000 04:00:00

12/20/2000 05:00:00

12/20/2000 06:00:00

12/20/2000 08:00:00 - 08:30:00

12/20/2000 23:00:00

12/21/2000 00:00:00

12/21/2000 08:00:00 - 08:30:00

12/23/2000 05:30:00, 06:30:00, 07:30:00

12/24/2000 07:00:00 - 07:30:00
12/24/2000 12:00:00, 13:00:00 - 13:30:00
12/25/2000 03:00:00
12/25/2000 06:00:00
12/25/2000 07:00:00 - 09:30:00
12/25/2000 10:30:00
12/25/2000 11:30:00
12/26/2000 09:00:00
12/27/2000 09:00:00 - 12:00:00, 13:00:00 - 17:30:00
12/27/2000 18:30:00 - 20:00:00
12/27/2000 21:00:00 - 12/29/2000 04:00:00
12/29/2000 05:00:00 - 14:00:00
12/29/2000 15:00:00 - 16:00:00
12/29/2000 17:00:00 - 17:30:00, 18:30:00 - 19:30:00
12/29/2000 20:30:00 - 12/30/2000 02:00:00
12/30/2000 03:00:00 - 04:00:00, 05:00:00 - 09:00:00
12/30/2000 10:00:00 - 14:30:00
12/30/2000 15:30:00
12/30/2000 22:30:00 - 12/31/2000 05:00:00
12/31/2000 06:00:00
12/31/2000 07:00:00 - 10:30:00
12/31/2000 12:00:00 - 13:30:00
12/31/2000 14:30:00
12/31/2000 15:30:00 - 16:00:00
12/31/2000 17:00:00 - 19:30:00
12/31/2000 20:30:00
12/31/2000 21:30:00 - 23:30:00

11. Missing data:
January 2000

Station 09

DO data deleted due to problem with membrane and/or probe:

01/21/2000 16:00:00 - 01/25/2000 21:30:00

DO values deleted due to fouling of probe:

01/26/2000 14:30:00 - 01/27/2000 20:30:00

01/29/2000 02:30:00 - 13:00:00

No data due to programming error: 01/01/00 00:00:00 - 01/19/00 08:00:00.

No data due to sonde maintenance: 01/19/00 08:30:00 - 01/21/00 15:30:00.

Station 10

01/01/00 00:00:00 - 01/21/00 15:30:00, no sonde deployed due to maintenance.

Negative turbidity values, data were deleted:

01/21/2000 16:00:00 - 01/22/2000 09:30:00

01/22/2000 10:30:00 - 01/31/2000 15:00:00

01/31/2000 17:00:00 - 17:30:00

Zero turbidity values. Data were deleted.

01/31/2000 22:00:00

February 2000

Station 09

No data due to punctured DO membrane:

02/07/2000 09:00:00 - 02/07/2000 13:30:00

02/28/2000 10:00:00 - 02/29/2000 08:30:00

Sonde servicing:

02/07/00 14:00:00 - 02/10/00 15:30:00

02/29/00 09:00:00 - 02/29/00 23:30:00

DO data deleted due to punctured membrane:

02/25/2000 09:00:00 - 02/28/2000 09:30:00

Station 10

Negative turbidity. Data were deleted.

02/01/2000 09:00:00, 18:30:00, 19:30:00 - 21:30:00

02/02/2000 00:30:00 - 02:30:00

02/10/2000 16:00:00 - 02/16/2000 22:30:00

02/17/2000 02:00:00

02/17/2000 03:30:00 - 04:00:00

02/17/2000 05:30:00

02/17/2000 07:30:00 - 02/19/2000 01:00:00

02/19/2000 02:00:00

02/19/2000 03:30:00 - 20:30:00

02/19/2000 22:30:00

02/19/2000 23:30:00

02/20/2000 09:30:00

02/20/2000 10:30:00 - 14:00:00

02/20/2000 15:00:00

02/20/2000 23:00:00 - 02/21/2000 01:00:00

02/21/2000 02:00:00 - 05:30:00

02/21/2000 07:30:00 - 12:00:00

02/22/2000 05:30:00

02/25/2000 05:30:00

02/26/2000 17:30:00

02/26/2000 19:30:00

No data: maintenance

02/07/2000 09:30:00 - 02/10/2000 15:30:00

02/28/2000 10:30:00 - 02/29/2000 23:30:00

March 2000

Station 09

No file, corrupted file.

Station 10

No data: maintenance

03/01/2000 00:00:00 - 03/02/2000 15:30:00

03/27/2000 09:30:00 - 03/30/2000 15:30:00

Negative and/or zero turbidity values. Data were deleted.

03/02/2000 16:00:00 - 03/03/2000 11:30:00

03/04/2000 10:30:00 - 16:00:00

03/04/2000 18:00:00 - 18:30:00

03/04/2000 21:00:00 - 21:30:00, 23:00:00

03/05/2000 10:00:00

03/05/2000 17:30:00 - 03/07/2000 07:00:00

03/07/2000 08:00:00 - 03/08/2000 09:00:00
03/08/2000 10:00:00 - 10:30:00
03/08/2000 12:30:00 - 15:30:00
03/08/2000 16:30:00 - 03/09/2000 07:00:00
03/09/2000 08:00:00 - 03/10/2000 10:30:00
03/10/2000 11:30:00 - 13:00:00
03/10/2000 17:00:00 - 17:30:00
03/10/2000 18:30:00 - 20:30:00
03/10/2000 21:30:00 - 22:30:00, 23:30:00
03/11/2000 00:30:00 - 10:00:00
03/11/2000 11:00:00 - 13:00:00
03/11/2000 18:30:00 - 22:00:00
03/11/2000 23:00:00 - 03/12/2000 08:30:00
03/12/2000 09:30:00 - 11:00:00, 12:30:00
03/12/2000 19:30:00 - 03/13/2000 00:30:00
03/13/2000 01:30:00 - 10:30:00
03/13/2000 11:30:00
03/13/2000 13:30:00
03/13/2000 14:30:00 - 15:30:00
03/13/2000 17:00:00 - 22:00:00
03/14/2000 00:00:00, 03:00:00
03/14/2000 08:30:00 - 09:30:00
03/14/2000 11:00:00
03/14/2000 13:00:00
03/14/2000 18:30:00 - 21:30:00
03/14/2000 22:30:00 - 03/15/2000 04:00:00
03/15/2000 05:00:00 - 09:00:00
03/15/2000 10:00:00
03/15/2000 11:00:00 - 12:30:00
03/15/2000 19:30:00
03/18/2000 07:30:00
03/19/2000 12:30:00
03/19/2000 14:00:00
03/19/2000 21:00:00
03/20/2000 12:30:00
03/21/2000 02:00:00
03/21/2000 18:30:00
03/22/2000 03:30:00
03/22/2000 14:30:00
03/24/2000 01:30:00, 22:00:00, 23:30:00
03/25/2000 03:30:00 - 04:00:00
03/26/2000 16:00:00 - 17:30:00
03/27/2000 01:30:00
03/30/2000 23:00:00 - 23:30:00
03/31/2000 00:30:00 - 01:00:00
03/31/2000 03:00:00
03/31/2000 07:00:00
03/31/2000 08:00:00
03/31/2000 09:30:00

April 2000

Station 09

No data 04/01/2000 00:00:00 - 04/23/2000 07:30:00, due to the corrupted March deployment file.

No data due to maintenance:

04/23/2000 08:00:00 - 04/26/2000 15:30:00

Station 10

Bad DO membrane; DO data were deleted:

04/19/2000 20:30:00 - 04/24/2000 08:30:00

Zero turbidity values. Data were deleted.

04/01/2000 01:30:00

04/01/2000 03:00:00

04/01/2000 04:00:00

04/01/2000 05:00:00 - 05:30:00

04/01/2000 06:30:00 - 07:00:00

04/01/2000 22:30:00 - 23:30:00

04/02/2000 00:30:00

04/02/2000 01:30:00

04/02/2000 02:30:00

04/02/2000 03:30:00

04/02/2000 06:00:00

04/02/2000 07:00:00

04/02/2000 08:00:00 - 08:30:00

04/02/2000 21:30:00

04/02/2000 23:00:00

04/03/2000 03:00:00

04/03/2000 05:30:00

04/03/2000 07:00:00

04/03/2000 09:00:00

04/03/2000 10:30:00 - 11:30:00

04/03/2000 12:30:00

04/03/2000 20:00:00 - 20:30:00

04/03/2000 21:30:00 - 22:00:00

04/03/2000 23:30:00

04/04/2000 00:30:00

04/04/2000 01:30:00 - 02:00:00

04/04/2000 22:30:00

04/05/2000 00:30:00

04/05/2000 03:00:00

04/05/2000 08:30:00

04/05/2000 10:00:00

04/05/2000 18:30:00 - 19:00:00

04/05/2000 20:00:00 - 04/06/2000 02:00:00

04/06/2000 03:00:00 - 03:30:00

04/07/2000 00:00:00

04/07/2000 01:30:00

04/07/2000 04:00:00

04/08/2000 00:00:00

04/08/2000 01:00:00

04/08/2000 22:30:00 - 23:00:00

04/09/2000 03:30:00

04/09/2000 05:30:00

04/10/2000 06:00:00

04/12/2000 03:00:00
04/12/2000 04:30:00
04/12/2000 06:30:00 - 07:00:00
04/26/2000 16:30:00
04/27/2000 10:30:00
04/27/2000 11:30:00
04/27/2000 12:30:00
04/27/2000 14:30:00
04/28/2000 12:30:00
04/28/2000 14:00:00
04/28/2000 14:30:00
04/29/2000 12:30:00
04/29/2000 14:30:00
04/29/2000 16:30:00 - 17:00:00
04/30/2000 12:30:00

Negative turbidity values. Data were deleted.

04/26/2000 16:00:00
04/26/2000 17:00:00 - 04/27/2000 10:00:00
04/27/2000 11:00:00
04/27/2000 12:00:00
04/27/2000 13:00:00 - 14:00:00
04/27/2000 15:00:00 - 04/28/2000 12:00:00
04/28/2000 13:00:00 - 13:30:00
04/28/2000 15:00:00 - 04/29/2000 12:00:00
04/29/2000 13:00:00 - 13:30:00
04/29/2000 14:00:00
04/29/2000 15:00:00 - 16:00:00
04/29/2000 17:30:00 - 04/30/2000 12:00:00
04/30/2000 13:00:00 - 23:30:00

No data due to sonde maintenance

04/24/2000 09:00:00 - 04/26/2000 15:30:00

Negative and/or zero turbidity values. Data were deleted.

04/26/2000 16:00:00 - 04/30/2000 23:30:00

May 2000

Station 09

DO data deleted due to problem with membrane and/or probe:

05/06/2000 05:30:00 - 05/15/2000 09:00:00

Turbidity outlier (>1000) deleted:

05/11/2000 17:30:00

No data due to sonde maintenance:

05/15/2000 09:30:00 - 05/25/2000 15:30:00

Data suspect 05/30/2000 22:00:00 - 05/30/2000 23:30:00, therefore
all data
were deleted.

Station 10

No data: sonde calibration

05/15/2000 09:00:00 - 05/25/2000 15:30:00

Zero turbidity values were deleted:

05/03/2000 23:00:00

05/04/2000 16:30:00

05/04/2000 17:30:00
05/04/2000 18:30:00 - 19:00:00
05/04/2000 20:00:00
05/05/2000 06:00:00
05/05/2000 07:00:00 - 10:30:00
05/05/2000 12:30:00
05/05/2000 16:30:00 - 17:00:00
05/05/2000 18:00:00 - 19:00:00
05/05/2000 23:00:00
05/06/2000 02:30:00
05/06/2000 03:30:00
05/06/2000 05:00:00
05/06/2000 22:00:00
Negative turbidity values
05/01/2000 00:00:00 - 05/03/2000 22:30:00, bad data due to fouling
05/03/2000 23:30:00 - 05/04/2000 15:30:00
05/04/2000 17:00:00
05/04/2000 18:00:00
05/04/2000 19:30:00
05/04/2000 20:30:00 - 05/05/2001 05:30:00
05/05/2000 06:30:00
05/09/2000 05:30:00
05/09/2000 21:30:00
05/14/2000 05:00:00
05/15/2000 02:00:00
05/25/2000 16:00:00 - 05/31/2000 23:30:00, bad data bad calibration
Punctured DO membrane, data were deleted:
05/25/2000 16:00:00 - 05/31/2000 23:30:00

June 2000

Station 09

DO deleted due to fouling of membrane:

06/18/2000 03:30:00 - 06/28/2000 10:30:00

No data: sonde maintenance

06/12/2000 09:30:00 - 06/14/2000 15:30:00

High turbidity values (algal debris), data were deleted.

06/03/2000 11:30:00
06/03/2000 13:30:00
06/03/2000 23:00:00
06/05/2000 17:00:00 - 19:00:00
06/06/2000 06:00:00
06/06/2000 19:30:00 - 23:00:00
06/07/2000 00:00:00 - 02:30:00
06/07/2000 04:30:00 - 06:00:00
06/07/2000 07:00:00
06/07/2000 08:30:00 - 09:00:00
06/07/2000 13:30:00
06/29/2000 07:00:00
06/30/2000 16:00:00

Station 10

DO data deleted due to punctured membrane:
06/01/2000 00:00:00 - 06/12/2000 09:00:00
No data due to maintenance
06/12/2000 09:30:00 - 06/14/2000 15:30:00
Negative turbidity values. Data were deleted.
06/01/2000 00:00:00 - 06/06/2000 10:00:00
06/06/2000 11:00:00
06/11/2000 18:30:00 - 19:30:00
06/11/2000 21:30:00
06/14/2000 16:00:00 - 06/17/2000 14:30:00
06/17/2000 16:30:00 - 06/19/2000 15:30:00
06/19/2000 17:00:00
06/19/2000 18:00:00 - 06/20/2000 16:00:00
06/20/2000 17:30:00 - 18:00:00
06/20/2000 21:00:00 - 23:00:00
06/21/2000 00:00:00 - 10:30:00
06/21/2000 20:30:00 - 22:00:00
06/22/2000 01:00:00
06/22/2000 02:00:00 - 07:30:00
06/22/2000 13:30:00
06/22/2000 21:30:00 - 22:30:00
06/22/2000 23:30:00 - 06/23/2000 00:00:00
06/23/2000 01:00:00 - 10:00:00
06/23/2000 12:30:00 - 13:30:00
06/24/2000 06:00:00 - 12:00:00
06/24/2000 13:00:00 - 13:30:00
06/24/2000 22:00:00 - 23:30:00
06/25/2000 01:00:00 - 04:30:00
06/25/2000 05:30:00 - 13:00:00
06/25/2000 21:30:00 - 22:30:00
06/25/2000 23:30:00 - 06/26/2000 09:30:00
06/27/2000 00:30:00 - 02:00:00
06/29/2000 19:30:00 - 22:00:00
06/29/2000 23:30:00 - 06/30/2000 03:00:00
06/30/2000 04:00:00 - 07:00:00
06/30/2000 08:00:00
06/30/2000 09:30:00 - 10:30:00
06/30/2000 11:30:00, 22:00:00

July 2000

Station 09
DO%, DO mg/L: deleted data: punctured membrane
07/27/2000 23:30:00 - 07/31/2000 23:30:00
No data due to maintenance
07/05/2000 10:00:00 - 07/10/2000 15:30:00
No data (sonde malfunctioning)
07/30/2000 22:00:00 - 23:30:00
Turbidity outliers, high values, data deleted.
07/02/2000 00:30 - 01:00:00
07/21/2000 20:30:00
07/25/2000 21:00:00

07/25/2000 22:00:00
07/25/2000 23:00:00 - 07/26/2000 06:00:00
07/26/2000 07:30:00
07/26/2000 10:00:00 - 11:00:00
07/26/2000 19:30:00 - 20:00:00
07/26/2000 21:00:00 - 21:30:00
07/27/2000 00:00:00
07/27/2000 01:30:00 - 02:00:00
07/27/2000 03:00:00
07/27/2000 04:00:00
07/27/2000 05:00:00
07/27/2000 06:00:00 - 07:30:00
07/27/2000 08:30:00 - 09:00:00
07/27/2000 10:30:00
07/27/2000 16:30:00 - 17:00:00
07/27/2000 18:00:00
07/27/2000 20:30:00 - 21:30:00
07/27/2000 22:30:00 - 07/28/2000 08:30:00
07/28/2000 09:30:00 - 12:30:00
07/28/2000 14:00:00 - 15:00:00
07/28/2000 16:30:00 - 18:30:00
07/28/2000 20:00:00 - 23:00:00
07/29/2000 00:00:00 - 01:00:00
07/29/2000 02:00:00 - 06:30:00
07/29/2000 07:30:00 - 09:30:00
07/29/2000 10:30:00
07/29/2000 11:30:00 - 14:30:00
07/29/2000 15:30:00 - 22:30:00
07/30/2000 01:00:00
07/30/2000 02:00:00
07/30/2000 03:30:00 - 10:30:00
07/30/2000 11:30:00 - 13:30:00
07/30/2000 15:00:00 - 15:30:00
07/30/2000 16:30:00
07/30/2000 17:30:00
07/30/2000 18:30:00 - 19:30:00
07/31/2000 00:00:00
07/31/2000 01:00:00 - 01:30:00
07/31/2000 03:00:00 - 03:30:00
07/31/2000 04:30:00
07/31/2000 05:30:00 - 07:00:00
07/31/2000 08:00:00 - 09:00:00
07/31/2000 10:00:00 - 11:00:00
07/31/2000 13:00:00 - 13:30:00
07/31/2000 15:30:00 - 16:00:00
07/31/2000 17:00:00 - 19:00:00
07/31/2000 20:00:00 - 21:00:00
07/31/2000 23:00:00 - 23:30:00

Station 10

No data due to sonde maintenance

07/05/2000 10:00:00 - 07/10/2000 15:30:00

Negative turbidity values, data were deleted.

07/01/2000 15:30:00 - 17:30:00
07/02/2000 07:30:00
07/02/2000 08:30:00 - 11:00:00
07/02/2000 12:00:00 - 14:30:00
07/02/2000 15:30:00 - 16:30:00
07/02/2000 17:30:00 - 18:30:00
07/02/2000 19:30:00 - 21:30:00
07/02/2000 22:30:00 - 07/03/2000 00:00:00
07/03/2000 01:00:00 - 02:30:00, 03:30:00 - 04:30:00
07/03/2000 13:00:00 - 16:00:00
07/03/2000 18:00:00 - 18:30:00
07/03/2000 20:00:00 - 21:30:00
07/03/2000 22:30:00
07/04/2000 04:30:00
07/04/2000 05:30:00
07/04/2000 08:00:00
07/04/2000 12:00:00 - 14:30:00
07/04/2000 16:30:00 - 17:00:00
07/05/2000 04:00:00 - 04:30:00
07/10/2000 16:00:00 - 07/11/2000 20:30:00
07/11/2000 21:30:00 - 07/15/2000 16:30:00
07/15/2000 19:00:00 - 07/16/2000 18:30:00
07/16/2000 19:30:00 - 07/17/2000 18:30:00
07/17/2000 20:30:00 - 07/18/2000 20:00:00
07/18/2000 21:00:00
07/18/2000 22:00:00 - 07/19/2000 19:30:00
07/19/2000 20:30:00
07/19/2000 21:30:00 - 07/31/2000 23:30:00

August 2000

Station 09

No data from 08/02/2000 09:00:00 - 08/29/2000 12:30:00, due to an error by technician when programming the new YSI 6600 model.
Turbidity data deleted 08/01/2000 00:00:00 - 08/02/2000 08:30:00 due to bad probe. No probe available for deployment 08/29/2000 13:00:00 - 08/31/2000 23:30:00.

Station 10

No data due to sonde maintenance
08/01/2000 00:00:00 - 08/29/2000 11:30:00
Deleted data: instrument was out of water
08/29/2000 12:00:00 - 12:30:00
No turbidity data: no probe available
08/29/2000 13:00:00 - 08/31/2000 23:30:00

September 2000

Station 09

High turbidity values (>1000), data were retained:

09/08/2000 23:00:00
No data due to sonde maintenance:
09/11/2000 11:00:00 - 09/15/2000 15:30:00
Negative turbidity values, data deleted:
09/01/2000 00:00:00 - 09/02/2000 10:30:00
09/02/2000 11:30:00 - 09/05/2000 19:00:00
09/05/2000 20:30:00 - 09/06/2000 10:30:00
09/06/2000 12:00:00 - 09/07/2000 19:00:00
09/07/2000 20:00:00 - 09/08/2000 07:30:00
09/08/2000 08:30:00 - 09:00:00
09/08/2000 10:00:00
09/08/2000 11:30:00 - 14:30:00
09/08/2000 15:30:00 - 21:00:00
09/08/2000 22:00:00 - 22:30:00
09/09/2000 00:30:00
09/09/2000 02:00:00 - 02:30:00
09/09/2000 10:30:00
09/09/2000 21:30:00
09/10/2000 08:30:00
09/10/2000 21:30:00
09/11/2000 00:00:00
09/15/2000 16:00:00 - 09/17 15:00:00
All data deleted due to stolen datalogger out of water:
09/17/2000 15:30:00 - 09/30/2000 23:30:00

Station 10
No data due to sonde maintenance:
09/11/2000 11:00:00 - 09/15/2000 15:30:00
No data due to calibration error and/or fouling of membrane:
09/15/2000 16:00:00 - 09/30/2000 23:30:00
No turbidity sensor or probe available:
09/01/2000 00:00:00 - 09/11/2000 10:30:00

October 2000

Station 09
All data deleted due to calibration error:
10/01/2000 00:00:00 - 10/06/2000 12:00:00
10/15/2000 16:30:00:00 - 10/25/2000 07:30:00 data not recorded because
the
sonde was not deployed at station 09 (it was missing due to vandalism).
No data due to maintenance of sondes:
10/25/2000 08:00:00 - 10/27/2000 15:30:00
Negative depth data were deleted:
10/06/2000 12:00:00 - 10/15/2000 16:00:00, bad data due to calibration
error
Negative turbidity data due to problems with probe were deleted:
10/06/2000 12:30:00 - 10/09/2000 08:30:00
10/09/2000 10:00:00
10/09/2000 11:00:00
10/09/2000 12:30:00 - 13:30:00

Station 10

DO data deleted due to fouling of probe:

10/01/2000 00:00:00 - 10/02/2000 09:00:00

No data due to sonde maintenance

10/02/2000 09:30:00 - 10/05/2000 09:00:00

10/25/2000 03:30:00 - 10/27/2000 15:30:00

Negative and/or zero turbidity values were deleted:

10/01/2000 00:00:00 - 01:30:00

10/01/2000 04:00:00 - 05:00:00

10/01/2000 22:00:00

10/01/2000 23:30:00

10/02/2000 00:00:00

10/02/2000 04:30:00

10/02/2000 08:30:00 - 09:00:00

10/13/2000 14:30:00

10/17/2000 14:30:00, 18:30:00

10/18/2000 16:00:00 - 16:30:00

10/18/2000 18:30:00

10/18/2000 21:30:00

10/19/2000 15:00:00

10/19/2000 16:30:00 - 17:00:00

10/19/2000 19:00:00

10/20/2000 16:00:00 - 19:00:00

10/20/2000 20:30:00

10/20/2000 21:30:00 - 22:00:00

10/21/2000 14:00:00

10/21/2000 17:30:00 - 18:00:00

10/21/2000 19:00:00 - 19:30:00

10/21/2000 21:00:00

10/21/2000 22:30:00 - 10/22/2000 00:00:00

10/22/2000 06:00:00

10/22/2000 14:30:00

10/22/2000 18:30:00

10/22/2000 20:00:00 - 22:30:00

10/22/2000 23:30:00

10/23/2000 00:00:00

10/23/2000 01:00:00

10/23/2000 02:30:00

10/23/2000 13:30:00

10/23/2000 18:00:00

10/23/2000 19:30:00 - 20:00:00

10/23/2000 22:00:00

10/24/2000 04:30:00, 17:00:00

10/27/2000 16:00:00

10/27/2000 20:00:00 - 10/28/2000 00:30:00

10/28/2000 01:30:00 - 05:00:00

10/28/2000 06:00:00 - 06:30:00

10/28/2000 12:00:00 - 13:00:00

10/28/2000 14:00:00

10/28/2000 15:00:00

10/28/2000 18:30:00

10/28/2000 19:30:00 - 21:30:00

10/28/2000 23:00:00

10/29/2000 02:30:00
10/29/2000 04:00:00 - 05:00:00
10/29/2000 07:00:00
10/29/2000 11:00:00
10/29/2000 12:00:00 - 13:00:00
10/29/2000 14:00:00
10/29/2000 15:00:00
10/29/2000 16:30:00
10/29/2000 19:00:00 - 20:00:00
10/29/2000 21:00:00 - 22:30:00
10/30/2000 00:00:00 - 01:30:00
10/30/2000 02:30:00 - 04:00:00
10/30/2000 05:00:00 - 06:30:00
10/30/2000 07:30:00
10/30/2000 11:30:00 - 13:30:00
10/30/2000 14:30:00 - 19:30:00
10/30/2000 20:30:00 - 21:30:00
10/30/2000 22:30:00
10/31/2000 00:00:00
10/31/2000 11:00:00 - 12:00:00
10/31/2000 13:00:00 - 14:30:00
10/31/2000 15:30:00 - 16:30:00
10/31/2000 17:30:00 - 18:00:00
10/31/2000 19:00:00 - 21:00:00

November 2000

Station 9

Turbidity outlier data deleted:
11/25/2000 11:30:00

Station 10

Turbidity outliers (>1000), data were deleted:
11/13/2000 17:30:00 - 18:30:00, 20:30:00 - 22:30:00, 23:30:00
11/14/2000 00:00:00, 01:30:00, 03:30:00 - 04:00:00, 06:30:00
Sonde out of water; data deleted:
11/13/2000 10:30:00 - 13:30:00
Negative turbidity values, data were deleted:
11/01/2000 00:30:00
11/01/2000 14:00:00
11/01/2000 19:00:00 - 21:30:00
11/01/2000 22:30:00 - 23:30:00
11/02/2000 01:00:00
11/02/2000 18:30:00
11/02/2000 20:00:00
11/02/2000 21:00:00 - 22:30:00
11/03/2000 00:00:00
11/03/2000 01:00:00 - 02:00:00
11/03/2000 03:30:00 - 04:30:00
11/03/2000 06:30:00 - 07:00:00
11/03/2000 09:00:00
11/03/2000 10:00:00 - 13:00:00

11/03/2000 14:00:00 - 15:30:00
11/03/2000 16:30:00 - 17:00:00
11/03/2000 18:00:00
11/03/2000 19:30:00 - 23:30:00
11/04/2000 00:00:00 - 01:00:00
11/04/2000 02:00:00 - 02:30:00
11/04/2000 05:00:00
11/04/2000 07:00:00 - 10:30:00
11/04/2000 11:30:00
11/04/2000 18:30:00 - 22:00:00
11/04/2000 23:00:00
11/05/2000 00:00:00
11/05/2000 01:00:00 - 03:00:00
11/05/2000 04:30:00, 06:30:00
11/05/2000 07:30:00 - 08:00:00
11/05/2000 09:30:00 - 13:30:00
11/05/2000 14:30:00
11/05/2000 15:30:00
11/05/2000 16:30:00
11/05/2000 18:00:00
11/05/2000 19:00:00 - 20:00:00
11/05/2000 21:00:00 - 22:00:00
11/06/2000 00:30:00 - 02:00:00
11/06/2000 03:00:00
11/06/2000 04:00:00
11/06/2000 05:00:00
11/06/2000 06:00:00 - 07:30:00
11/06/2000 08:30:00 - 09:30:00
11/06/2000 10:30:00 - 11:30:00
11/06/2000 12:30:00 - 13:00:00
11/06/2000 15:00:00
11/06/2000 17:00:00
11/06/2000 18:00:00
11/06/2000 19:30:00 - 23:30:00
11/07/2000 00:00:00 - 00:30:00
11/07/2000 01:30:00
11/07/2000 02:30:00
11/07/2000 03:30:00 - 04:00:00
11/07/2000 05:00:00 - 05:30:00
11/07/2000 06:30:00 - 09:00:00
11/07/2000 10:00:00 - 12:30:00
11/07/2000 13:30:00
11/07/2000 14:30:00
11/07/2000 18:00:00 - 21:00:00
11/07/2000 22:00:00 - 23:30:00
11/08/2000 00:00:00 - 02:00:00
11/08/2000 03:00:00 - 06:30:00
11/08/2000 07:30:00 - 12:00:00
11/08/2000 13:00:00 - 14:00:00
11/08/2000 15:30:00
11/08/2000 16:30:00 - 17:00:00
11/08/2000 19:00:00 - 23:30:00
11/09/2000 00:00:00 - 00:30:00
11/09/2000 01:30:00 - 10:00:00

11/09/2000 11:00:00 - 12:00:00
11/09/2000 13:00:00 - 15:00:00
11/09/2000 18:30:00 - 19:00:00
11/09/2000 20:00:00
11/09/2000 21:30:00 - 22:00:00
11/09/2000 23:00:00
11/10/2000 02:30:00 - 03:00:00
11/10/2000 04:30:00 - 05:00:00
11/10/2000 06:30:00 - 09:30:00
11/10/2000 10:30:00 - 15:00:00
11/10/2000 16:30:00 - 21:30:00
11/10/2000 22:30:00 - 23:30:00
11/11/2000 00:00:00 - 04:00:00
11/11/2000 05:00:00 - 05:30:00
11/11/2000 06:30:00 - 07:30:00
11/11/2000 08:30:00 - 09:00:00
11/11/2000 10:00:00 - 14:30:00
11/11/2000 16:00:00
11/11/2000 17:30:00 - 18:30:00
11/11/2000 20:00:00
11/11/2000 21:30:00 - 23:30:00
11/12/2000 01:00:00
11/12/2000 02:00:00
11/12/2000 03:00:00
11/12/2000 04:00:00
11/12/2000 05:30:00
11/12/2000 07:00:00
11/12/2000 08:00:00 - 14:30:00
11/12/2000 17:30:00
11/12/2000 19:00:00 - 20:00:00
11/12/2000 21:00:00 - 23:30:00
11/13/2000 00:30:00 - 02:00:00
11/13/2000 03:30:00 - 04:00:00
11/13/2000 05:00:00 - 05:30:00
11/13/2000 07:00:00
11/13/2000 09:30:00 - 10:00:00
11/14/2000 10:30:00 - 15:30:00
11/14/2000 16:30:00 - 17:00:00
11/14/2000 18:00:00 - 23:30:00
11/15/2000 00:30:00 - 02:00:00, 04:30:00 - 05:00:00
11/15/2000 06:00:00 - 06:30:00
11/15/2000 07:30:00 - 11/16/2000 03:30:00
11/16/2000 05:00:00 - 05:30:00, 07:00:00 - 07:30:00, 09:30:00
11/16/2000 11:00:00 - 11/17/2000 05:30:00
11/17/2000 06:30:00 - 07:00:00, 08:00:00
11/17/2000 09:00:00 - 09:30:00
11/17/2000 10:30:00 - 16:00:00
11/17/2000 17:00:00 - 11/18/2000 01:00:00
11/18/2000 02:00:00 - 07:00:00
11/18/2000 08:00:00 - 12:30:00
11/18/2000 13:30:00 - 18:00:00
11/18/2000 19:00:00
11/18/2000 20:00:00
11/18/2000 21:00:00 - 23:30:00

11/19/2000 00:00:00 - 00:30:00
11/19/2000 01:30:00 - 10:30:00
11/19/2000 11:30:00 - 15:30:00
11/19/2000 16:30:00 - 22:00:00
11/19/2000 23:00:00 - 23:30:00
11/20/2000 00:00:00
11/20/2000 01:00:00 - 12:00:00
11/20/2000 13:00:00 - 23:30:00
11/21/2000 00:00:00 - 00:30:00
11/21/2000 01:30:00 - 02:00:00
11/21/2000 03:00:00 - 09:30:00
11/21/2000 10:30:00 - 13:00:00
11/21/2000 14:00:00
11/21/2000 15:00:00 - 20:30:00
11/21/2000 21:30:00, 22:30:00
11/22/2000 00:30:00 - 02:30:00
11/22/2000 03:30:00 - 07:00:00
11/22/2000 08:00:00
11/22/2000 11:30:00 - 13:30:00
11/22/2000 16:00:00 - 16:30:00
11/22/2000 17:30:00 - 18:00:00
11/23/2000 02:00:00
11/23/2000 05:00:00
11/23/2000 07:00:00
11/23/2000 09:00:00
11/23/2000 17:00:00
11/23/2000 18:30:00
11/23/2000 21:00:00
11/24/2000 01:00:00 - 03:30:00
11/24/2000 04:30:00 - 05:30:00
11/24/2000 06:30:00 - 07:00:00
11/24/2000 15:00:00
11/24/2000 18:00:00
11/24/2000 21:00:00 - 23:30:00
11/25/2000 00:30:00
11/25/2000 04:00:00 - 05:00:00
11/25/2000 06:30:00 - 07:30:00
11/25/2000 12:00:00
11/25/2000 16:30:00
11/26/2000 00:30:00
11/26/2000 03:00:00 - 04:00:00, 05:00:00
11/26/2000 06:30:00 - 13:00:00
11/26/2000 14:00:00 - 15:00:00
11/26/2000 21:30:00
11/26/2000 23:00:00
11/27/2000 02:30:00 - 05:30:00
11/27/2000 06:30:00
11/27/2000 07:30:00
11/27/2000 08:30:00
11/27/2000 09:30:00
11/27/2000 10:30:00 - 13:30:00
11/27/2000 15:30:00, 18:30:00
11/27/2000 19:30:00 - 11/28/2000 10:30:00
11/28/2000 11:30:00 - 12:00:00

11/28/2000 13:30:00
11/28/2000 14:30:00 - 17:30:00
11/28/2000 19:30:00 - 11/29/2000 09:00:00
11/29/2000 14:00:00, 15:00:00
11/30/2000 20:00:00
11/30/2000 21:30:00

December 2000

Station 09

Bad SpCond and salinity data due to possible fouling, all data were deleted:

12/04/2000 03:00:00 - 12/04/2000 08:30:00

SpCond and salinity data deleted due to possible fouling:

12/08/2000 03:30:00 - 12/14/2000 05:30:00

pH data: broken probe

12/26/2000 08:30:00 - 12/27/2000 03:30:00

No data recorded by sonde (gap)

12/27/2000 04:00:00 - 09:00:00

Negative and/or zero turbidity values, data were deleted.

12/04/2000 09:00:00 - 09:30:00

12/04/2000 16:00:00

12/05/2000 06:30:00 - 07:00:00

12/07/2000 04:00:00 - 05:00:00

12/08/2000 00:30:00

12/08/2000 02:30:00

12/08/2000 03:30:00 - 06:00:00

12/08/2000 09:00:00

12/09/2000 05:30:00 - 06:00:00

12/10/2000 08:00:00 - 08:30:00

12/11/2000 06:00:00 - 06:30:00

12/12/2000 07:30:00

12/12/2000 08:30:00

12/20/2000 04:00:00, 05:00:00

12/20/2000 06:00:00

12/20/2000 08:00:00 - 08:30:00

12/20/2000 22:00:00

12/20/2000 23:00:00

12/21/2000 00:00:00

12/21/2000 01:00:00

12/21/2000 08:00:00 - 08:30:00

12/23/2000 05:30:00

12/23/2000 06:30:00

12/23/2000 07:30:00

12/24/2000 07:00:00 - 07:30:00

12/24/2000 12:00:00, 13:30:00

12/25/2000 06:00:00

12/25/2000 07:00:00 - 09:30:00

12/25/2000 10:30:00

12/25/2000 11:30:00

12/27/2000 09:30:00 - 12:30:00

12/27/2000 14:30:00 - 15:00:00

12/27/2000 22:30:00 - 12/28/2000 01:30:00

12/28/2000 03:30:00

12/28/2000 05:00:00 - 06:30:00
12/28/2000 07:30:00 - 08:00:00
12/28/2000 09:00:00 - 11:30:00
12/28/2000 13:00:00 - 13:30:00
12/28/2000 19:00:00 - 19:30:00
12/28/2000 20:30:00 - 21:00:00
12/28/2000 23:00:00 - 12/29/2000 00:30:00
12/29/2000 01:30:00 - 02:00:00
12/29/2000 03:30:00 - 06:30:00
12/29/2000 07:30:00
12/29/2000 08:30:00 - 14:00:00
12/29/2000 20:30:00 - 12/30/2000 01:00:00
12/30/2000 02:00:00 - 02:30:00
12/30/2000 04:00:00 - 04:30:00
12/30/2000 05:30:00 - 07:00:00
12/30/2000 08:00:00 - 15:30:00
12/30/2000 21:30:00 - 12/31/2000 10:00:00
12/31/2000 11:30:00 - 13:30:00
12/31/2000 14:30:00 - 16:00:00

Station 10

pH data deleted due to sensor failure:

12/04/2000 09:30:00 - 12/26/2000 09:00:00

Specific Conductivity and salinity data deleted due to fouling of membrane:

12/08/2000 03:30:00 - 12/14/2000 05:30:00

No data due to sonde maintenance

12/27/2000 03:30:00 - 08:30:00

pH sensor failure, pH data were deleted for the following dates/times:

12/26/2000 13:30:00 - 12/27/2000 03:00:00

Negative depth, all data deleted:

12/26/2000 09:30:00 - 13:00:00

The following negative and/or zero turbidity values were deleted:

12/01/2000 01:30:00, 03:00:00, 07:30:00 - 08:00:00, 11:00:00, 21:00:00, 22:30:00

12/02/2000 00:30:00 - 01:00:00

12/02/2000 02:00:00 - 03:00:00

12/02/2000 04:00:00

12/02/2000 05:00:00

12/02/2000 18:30:00

12/02/2000 20:30:00

12/02/2000 21:30:00

12/02/2000 22:30:00

12/03/2000 02:00:00

12/03/2000 03:30:00 - 07:30:00

12/03/2000 08:30:00 - 09:00:00

12/03/2000 10:30:00 - 11:00:00

12/03/2000 12:00:00 - 21:30:00

12/03/2000 23:00:00

12/04/2000 01:00:00 - 06:00:00

12/04/2000 07:30:00 - 08:00:00, 09:30:00, 16:00:00

12/05/2000 04:30:00 - 05:00:00

12/05/2000 06:30:00 - 07:00:00

12/07/2000 04:00:00 - 05:00:00
12/08/2000 00:30:00, 02:30:00, 03:30:00 - 06:00:00, and 09:00:00
12/09/2000 05:30:00 - 06:00:00
12/10/2000 08:30:00 - 09:00:00
12/11/2000 06:00:00 - 06:30:00
12/12/2000 08:30:00
12/16/2000 16:30:00, 19:00:00
12/20/2000 04:00:00
12/20/2000 05:00:00
12/20/2000 06:00:00
12/20/2000 08:00:00 - 08:30:00
12/20/2000 23:00:00
12/21/2000 00:00:00
12/21/2000 08:00:00 - 08:30:00
12/23/2000 05:30:00, 06:30:00, 07:30:00, 12/24/2000 07:00:00 - 07:30:00
12/24/2000 12:00:00, 13:00:00 - 13:30:00
12/25/2000 03:00:00, 06:00:00, 07:00:00 - 09:30:00
12/25/2000 10:30:00
12/25/2000 11:30:00
12/26/2000 09:00:00
12/27/2000 09:00:00 - 12:00:00, 13:00:00 - 17:30:00
12/27/2000 18:30:00 - 20:00:00
12/27/2000 21:00:00 - 12/29/2000 04:00:00
12/29/2000 05:00:00 - 14:00:00
12/29/2000 15:00:00 - 16:00:00
12/29/2000 17:00:00 - 17:30:00, 18:30:00 - 19:30:00
12/29/2000 20:30:00 - 12/30/2000 02:00:00
12/30/2000 03:00:00 - 04:00:00, 05:00:00 - 09:00:00
12/30/2000 10:00:00 - 14:30:00
12/30/2000 15:30:00
12/30/2000 22:30:00 - 12/31/2000 05:00:00
12/31/2000 06:00:00, 07:00:00 - 10:30:00, 12:00:00 - 13:30:00, 14:30:00,
15:30:00 - 16:00:00, 17:00:00 - 19:30:00, 20:30:00, 21:30:00 - 23:30:00

12. Other remarks

On 06/30/2021 this dataset was updated to include embedded QAQC flags for anomalous/suspect data. System-wide monitoring data beginning in 2007 were

processed to allow for QAQC flags and codes to be embedded in the data files

rather than detailed in the metadata alone (as in the anomalous/suspect, deleted, and missing data sections above). Prior to 2006, rejected data were deleted from the dataset so they are unavailable to be used at all, but

suspect data were only noted in the metadata document. Suspect data flags

<1> were embedded retroactively in order to allow suspect data to be easily

identified and filtered from the dataset if desired for analysis and reporting purposes. No other flags or codes were embedded in the dataset and users should still refer to the detailed explanations above for more information.

The sonde from Station 09 was deployed on 09/15/2000 16:00:00. The sonde was stolen shortly after, and then appeared on 10/25/2000 around 08:00:00.