

North Carolina (NOC) National Estuarine Research Reserve Water Quality
Metadata
January - December 2003
Last Update: July 1, 2021

I. Data Set & Research Descriptors

1) Principal investigator(s) and contact persons:

Address: North Carolina National Estuarine Research Reserve
Center for Marine Science
5600 Marvin K. Moss Lane
Wilmington, NC 28409
Phone: (910) 350-2021
Fax: (910) 395-3942

Contact Persons:

Paula G. May, Research Associate
email: mayp@uncw.edu

2) Entry Verification:

The data are uploaded using the computer program EcoWatch that accompanies the YSI 6000 series dataloggers. After the file is uploaded from the water quality instrument, EcoWatch is used to plot the data and perform basic statistical analysis (i.e., min., max., mean, std.dev.). This information is printed out and attached to the Field Log for the particular deployment. This printout is used during file review to detect any gross outliers such as data taken when the water quality instrument was removed from the water or those caused by instrument failure. The data are exported as a .csv file and then opened into a Microsoft Excel file that contains the current month's cumulative recordings. When a complete month of data has been recorded the file is then reviewed. The first step is to format the data so that the parameter columns are in the correct order and the data have the correct number of decimal place holders. The CDMO 5.0 Excel macro is used to check for any dates and times that data were not recorded due to maintenance, battery failure, or other causes. Missing dates and times are inserted into the file and a period is inserted into the cells where data would normally be. An explanation for the missing data is recorded onto the Water Quality Editing Log. Next, the data are filtered using an Excel macro

to find readings outside the instrument measurement range and the "normal" range for the site in question. Data outside the instrument range are removed from the file and a period is inserted into the cell(s). An explanation for the missing dates and times are recorded onto the Water Quality Editing Log. Data outside the "normal" range of water quality for a particular site were investigated for validity based on weather data, field observations, QC checks, PC6000 printouts, and instrument diagnostics. If the data are rejected from the file a period is inserted into the cell(s) and an explanation for the missing dates and times are recorded onto metadata form. The metadata form is then submitted with the data files to the CDMO. Paula May, Research Associate, was responsible for data management during 2003. Upon data review by the CDMO, all periods were removed for dissemination purposes and left blank.

3) Research Objectives:

Water quality instruments are deployed at the Masonboro Island and Zeke's Island components of North Carolina's National Estuarine Research Reserve and are anchored to the bottom of the selected sites. Measurements are taken at 30-minute intervals for approximately two to four week periods. These sites are relatively unimpacted by manmade perturbations and are considered long term monitoring locations. The goal is to establish long-term water quality monitoring at relatively unimpacted sites by collecting data for each day of the year.

4) Research Methods:

The Estuarine Water Quality Monitoring Program began on 2 March 1992 at the Research Creek site of the Masonboro Island component. A second Masonboro Island site (Loosin Creek) was added on 26 February 2002. Data collection started on 19 May 1994 at the Zeke's Island component (East Cribbings) and an additional site (Zeke's Basin) was added 1 March 2002. The procedures described below were instituted in June 1995 and thus do not cover data recorded previously.

Before each YSI 6600/6600EDS is deployed, calibration and maintenance is performed following the manufacturer's instructions (YSI Manual addendum 7/94, sections 3,4, and 7). Calibration standards are required for pH, turbidity and salinity; all other parameters are done as described in the manual. Buffer solutions for a two-point pH calibration (pH 7 and 10) are purchased pre-made from a scientific supply house. The conductivity standard is obtained from YSI. The dissolved oxygen membranes are replaced before deployment and are allowed to settle at least 24 hrs prior to deployment.

Data sondes are wrapped in a wet, white towel and placed in a bucket for transport to the site. Monitoring stations are accessed using a small skiff equipped with an outboard motor. During deployment the weather conditions and tide stage are recorded in the field observation log. The water quality instrument is placed inside a locked steel cage, then anchored approximately 15cm off the bottom, and chained to a post at the monitoring site. Every 30 minutes during the sampling period measurements are taken for temperature, specific conductance, salinity, dissolved oxygen saturation, dissolved oxygen concentration, depth, pH, and turbidity, and occasionally chlorophyll. All data are recorded in Eastern Standard Time.

At the end of the sample period the water quality instrument is brought back to the laboratory wrapped in a wet, white towel. The weather and water quality measurements are again noted in the field observation log. The calibration drift and the effect of biofouling on the water quality instrument are checked by comparing data readings in calibration standards. The water quality data are then uploaded, and the instrument is cleaned and calibrated as noted previously.

5) Site Location and Character:

The components of North Carolina's National Estuarine Research Reserve (from north to south) are: the Northern Sites component, Rachel Carson, Masonboro

Island, Zeke's Island, and the Southern Sites component. They are located along the southeastern coast of the United States in the Atlantic Ocean. Currently, only data from Masonboro Island and Zeke's Island components are transferred to the CDMO.

A. Research Creek, Masonboro Island

The first Masonboro Island site (formerly called Masonboro Island (MS)) is 0.72 km north east from the mouth of Whiskey Creek, and east of the Intracoastal Waterway (ICW), in a small navigable channel called Research Creek at 34°09'21.7" latitude and 77° 50'59.9" longitude. The site has a salinity range from 18-35 ppt and a tidal range that averages 1.7 meters. The creek bottom is characterized by sand and detritus based sediment with areas of soft mud with a depth ranging from 0.34 to 2.45 m. The sole source of freshwater is rain. *Spartina* spp. marsh and dunes surround the site, which is relatively unimpacted by manmade perturbations and it is not accessible to road traffic. The site does experience minimal boat traffic.

B. Loosin Creek, Masonboro Island

The second Masonboro Island site (added in 2002) is 1.2 km east of the ICW, and 2.5 km south west of Masonboro Inlet, in a small navigable channel called Loosin Creek at 34° 10'20.0" latitude and 77° 49'58.1" longitude. The site has a salinity range from 18-35 ppt and a tidal range that averages 1.7 meters. The creek bottom is characterized by sand and detritus based sediment with areas of soft mud with a depth ranging from 0.1 to 2.5 m. The sole source of freshwater is rain. *Spartina* spp. marsh and dunes surround the site, which is relatively unimpacted by manmade perturbations and it is not accessible to road traffic. The site does experience minimal boat traffic.

C. East Cribbings, Zeke's Island

The first Zeke's Island site (formerly called Zeke's Island (ZI)) is located 1.8 km south of Federal Point boat launch in a tidal basin estuary at 33° 56'23.5" latitude and 77° 56'28.1" longitude. This site receives minimal freshwater input from leakage of the Cape Fear River through the 5.6 km rock jetty that separates the two bodies of water. The site has a salinity range from 15-35 ppt and a tidal range that averages 2 meters. Depth varies, but

typically it can be found to range from 0.11 to 2.30 meters. Bottom type substratum consists of large rocks (the cribbings) with sand and detritus based sediment. There are no pollutants from land. Marsh and dunes surround the site; not accessible to road traffic and minimal boat traffic.

D. Zeke's Basin, Zeke's Island

The second Zeke's Island site (added in 2002) is located 0.8 km south east of the Federal Point boat launch in a tidal basin estuary at 33° 57'17.0" latitude and 77° 56'6.0" longitude. This site receives minimal freshwater input from leakage of the Cape Fear River through the 5.6 km rock jetty that separates the two bodies of water. The site has a salinity range from 11-35 ppt and a tidal range that averages 2 meters. Depth varies, but typically it can be found to range from 0.1 to 2 meters. Bottom type substratum consists of sand and detritus based sediment with a layer of soft sulfuric mud. There are no pollutants from land. Marsh and dunes surround the site; not accessible to road traffic and minimal boat traffic.

6) Data Collection Period:

Research Creek data collection began on 2 March 1992 while monitoring of Loosin Creek started on 26 February 2002. East Cribbing data collection commenced on 19 May 1994 and Zeke's Basin data collection began on 1 March 2002. All monitoring is considered long term.

An asterisk (*) at the end of a deployment period indicates that a YSI 6600 sonde was used for that particular deployment. YSI 6600 EDS models were utilized for all other deployments. Each sonde is equipped with a non-vented depth probe and identical sensor models.

Deployment and Retrieval Dates for 2003

Began	Ended
Research Creek, Masonboro Island:	
12/17/02, 12:00	01/14/03, 09:30*
01/14/03, 10:00	02/19/03, 14:30
02/19/03, 15:00	03/18/03, 09:30*
03/18/03, 10:30	04/22/03, 12:30
04/22/03, 13:30	05/20/03, 12:30
05/20/03, 13:00	06/17/03, 10:30
06/17/03, 11:00	07/02/03, 09:30

07/02/03, 10:30	07/17/03, 10:30
07/17/03, 11:00	08/05/03, 10:30
08/05/03, 11:30	08/15/03, 09:00
08/15/03, 09:30	09/09/03, 11:30
09/09/03, 12:30	10/06/03, 11:30
10/06/03, 12:00	11/11/03, 14:30
11/11/03, 15:30	12/11/03, 14:30
12/11/03, 15:30	01/12/04, 16:00

Loosin Creek, Masonboro Island:

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

East Cribbings, Zeke's Island:

12/18/02, 10:00	01/15/03, 10:00*
01/15/03, 10:30	02/27/03, 10:00
02/27/03, 10:30	03/19/03, 09:30
03/19/03, 10:00	04/22/03, 15:30
04/22/03, 16:00	05/20/03, 15:00
05/20/03, 15:30	06/17/03, 13:00
06/17/03, 13:30	07/01/03, 10:30
07/01/03, 11:00	07/17/03, 12:30
07/17/03, 13:00	07/31/03, 12:00
07/31/03, 12:30	08/14/03, 10:30
08/14/03, 11:30	09/11/03, 09:30
09/11/03, 10:00	10/07/03, 08:30
10/07/03, 09:00	11/12/03, 11:00
11/12/03, 11:30	12/12/03, 11:30
12/12/03, 12:00	01/23/04, 11:00

Zeke's Basin, Zeke's Island:

02/12/03, 16:00	02/27/03, 10:30
02/27/03, 11:00	03/19/03, 09:30
03/19/03, 10:00	04/22/03, 15:30
04/22/03, 16:00	05/20/03, 15:30
05/20/03, 16:00	06/17/03, 13:30
06/17/03, 14:00	07/01/03, 10:30
07/01/03, 11:00	07/17/03, 13:00
07/17/03, 13:30	07/31/03, 12:30
07/31/03, 13:00	08/14/03, 11:00*
08/14/03, 11:30	09/11/03, 09:30

09/11/03, 10:00	10/07/03, 09:00*
10/07/03, 09:30	11/12/03, 11:30
11/12/03, 12:00	12/12/03, 11:30
12/12/03, 12:00	01/23/04, 11:00

7) Distribution:

NOAA/ERD retains the right to analyze, synthesize and publish summaries of the NERRS System-wide Monitoring Program data. The PI retains the right to be fully credited for having collected and processed the data. Following academic courtesy standards, the PI and NERR site where the data were collected will be contacted and fully acknowledged in any subsequent publications in which any part of the data are used. Manuscripts resulting from this NOAA/OCRM supported research that are produced for publication in open literature, including refereed scientific journals, will acknowledge that the research was conducted under an award from the Estuarine Reserves Division, Office of Ocean and Atmospheric Administration. The data set enclosed within this package/transmission is only as good as the quality assurance and quality control procedures outlined by the enclosed metadata reporting statement. The user bears all responsibility for its subsequent use/misuse in any further analyses or comparisons. The Federal government reimburses or indemnifies the Recipient for its liability due to any losses resulting in any way from the use of this data.

NERR water quality data and metadata can be obtained from the Research Coordinator at the individual NERR site (please see Section 2.2-1 Principal Investigators and contact persons), from the Data Manager at the Centralized Data Management Office (please see personnel directory under the general information link on the CDMO home page) and online at the CDMO home page <http://cdmo.baruch.sc.edu/>. Data are available in text tab-delimited format.

8) Associated Researchers and Projects:

Projects are ongoing and continually changing. Check with the Research Coordinator or other contact person for an updated list of research.

II. Physical Structure Descriptors

9) Variable Sequence, range of measurements, units, resolution, and accuracy:

YSI 6600/6600 EDS 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.

10) Coded variable indicator and variable code definitions:

Site definitions:

RC= South Research Creek, Masonboro Island
 LC = Loosin Creek, Masonboro Island
 EC = East Cribbings, Zeke's Island
 ZB = Zeke's Basin, Zeke's Island

File definitions: site/type/month/year (ex. RCWQ0803 = Research Creek water quality data from August of 2003).

11) Data anomalies (suspect data):

This section lists and explains all anomalous (suspect) data that has either

been deleted or still remains in the data set. The data are either extreme for the aquatic system being monitored or are outside the measurement range of the instrument. The cause of such anomalies may be a bad calibration, fouling of the sensors, boat traffic disturbances, malfunction of the instrument, or the measurements may be correct.

Research Creek, January

During the following dates the turbidity data were outside of the sensors range. The data were retained. The high value reflects the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish or crab gets caught in the probe guard cup. In addition, large amounts of algae were observed on the sonde at the end of deployment and the wiper brush fell off the turbidity probe at some point during the deployment.

1/17/03	8:30:00	1378.2
1/23/03	3:00:00	1153.5
1/23/03	5:30:00	1342.3
1/23/03	6:00:00	1342.4
1/23/03	14:30:00	1341.6
1/23/03	15:00:00	1337.2
1/23/03	20:00:00	1280.3
1/25/03	4:30:00	1309.8
1/25/03	5:30:00	1307.5
1/25/03	13:30:00	1332
01/31/2003	12:00:00	1375.2
01/31/2003	19:00:00	1371.7
01/31/2003	20:00:00	1131.1

Research Creek, February

During the following dates the turbidity data were outside of the sensor's range. The data were retained. The high value reflects the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish or crab gets caught in the probe guard cup. In addition, large amounts of algae were observed on the sonde at the end of deployment and the wiper brush fell off the turbidity probe at some point during the deployment.

2/1/03	5:00:00	1106.1
2/1/03	10:00:00	1369.5
2/1/03	14:30:00	1412.5

2/1/03	17:30:00	1387.4
2/1/03	21:00:00	1374.6
2/1/03	22:30:00	1108.3
2/2/03	1:30:00	1365.2
2/2/03	2:00:00	1367.1
2/2/03	3:00:00	1355.2
2/2/03	6:30:00	1372.5
2/2/03	7:30:00	1321.8
2/2/03	11:00:00	1375.7
2/2/03	15:00:00	1110.9
2/2/03	15:30:00	1415.2
2/2/03	17:30:00	1375.6
2/2/03	18:30:00	1390.9
2/2/03	23:00:00	1383.8
2/3/03	3:00:00	1017.7
2/3/03	3:30:00	1379.8
2/3/03	4:30:00	1325
2/3/03	7:30:00	1378.5
2/3/03	8:30:00	1375.7
2/3/03	12:00:00	1393.7
2/3/03	14:30:00	1430.4
2/7/03	13:30:00	1225.5
2/7/03	14:00:00	1382.8
2/7/03	16:30:00	1386
2/7/03	22:30:00	1381.7
2/7/03	23:30:00	1380.4
2/8/03	1:00:00	1378.9
2/8/03	2:30:00	1373.6
2/8/03	3:30:00	1370.4
2/8/03	4:00:00	1199.2
2/8/03	5:30:00	1364
2/8/03	7:00:00	1361.3
2/8/03	10:30:00	1375.3
2/8/03	12:00:00	1377.6
2/8/03	14:00:00	1391.4
2/8/03	14:30:00	1395.8
2/8/03	17:30:00	1404.3
2/8/03	21:00:00	1396.7
2/22/03	22:00:00	1473.5
2/25/03	6:30:00	1553.9
2/26/03	8:30:00	1669.3

Large amounts of algae were observed on the sonde at the end of deployment and the wiper brush fell off the turbidity probe at some point during the deployment. Because of the above circumstances, the following turbidity data were removed.
02/09/03 12:30 - 02/19/03 14:30

The following DO data were removed due to a puncture in the DO membrane.
02/11/03 08:30 - 02/19/03 14:30

DO data for the following dates and times should be considered suspect due to compromised DO membrane integrity at some point during the deployment. Data were retained.
2/23/03 22:30 - 2/28/03 23:30

Research Creek, March

All parameters are missing due to sonde exchange on the following date and time.
3/18/03 10:00

DO data for the following dates and times should be considered suspect due to compromised DO membrane integrity at some point during the deployment. Data were retained.
3/01/03 00:00 - 03/18/03 09:30

DO data are suspect during the following dates, possibly due to fouling from sulfuric sediment. Data were retained.
3/22/03 06:30 - 3/30/03 02:30

On the following date, turbidity data was outside of the sensors range. The data was retained. The high value reflects the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish or crab gets caught in the probe guard cup.
3/15/03 22:00:00 1558.7

Research Creek, April

All parameters are missing due to sonde exchange on the following date and time.
4/22/03 13:00

On the following date, turbidity data was outside of the sensors range. The data was retained. The high value reflects the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish or crab gets caught in the probe guard cup.
4/20/03 15:30:00 1416.9

DO data are suspect during the following dates, possibly due to fouling from sulfuric sediment. Data were retained.
4/01/03 0:00 - 04/22/03 12:30

All parameter data are missing periodically throughout the end of April most

likely due to the interference from the telemetry system at this site resulting from incorrect time synchronization between the YSI, the CR10X and the telemetry computer.

Research Creek, May

All parameter data are missing periodically throughout the beginning and middle of May most likely due to the interference from the telemetry system at this site resulting from incorrect time synchronization between the YSI, the CR10X and the telemetry computer.

During the following dates the turbidity data were outside of the sensor's range. The data were retained. The high value reflects the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish or crab gets caught in the probe guard cup.

05/12/03	15:00:00	1748.4
05/12/03	18:00:00	1738.2
05/13/03	14:30:00	1145.4

Specific Conductivity and salinity data drift downward towards the end of the month most likely as a result of fouling. Data were retained but should be considered suspect.

Research Creek, June

Specific Conductivity and salinity data drift downward in the beginning of the month most likely as a result of fouling. Data were retained but should be considered suspect.

The following DO data were removed due to a puncture in the DO membrane.
06/05/03 13:00 - 06/17/03 10:30

During the following dates the turbidity data were outside of the sensor's range. The data were retained. The high value reflects the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish or crab gets caught in the probe guard cup.

06/07/03	23:30:00	2299
06/10/03	16:30:00	2911.6
06/15/03	06:30:00	2159.7

All parameter data are missing periodically throughout the middle and end of June most likely due to the interference from the telemetry system at this site resulting from incorrect time synchronization between the YSI, the CR10X and the telemetry computer.

Research Creek, July

All parameters are missing due to sonde exchange on the following date and time.

07/02/03 10:00:00

All parameter data are missing periodically throughout the month of July most likely due to the interference from the telemetry system at this site resulting from incorrect time synchronization between the YSI, the CR10X and the telemetry computer.

During the following dates the turbidity data were outside of the sensor's range. The data were retained. The high value reflects the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if an animal gets caught in the probe guard cup.

7/1/03	3:30:00	2445.2
7/1/03	15:00:00	1234.5
7/1/03	22:00:00	2427.2
7/2/03	5:00:00	2163.2
7/2/03	5:30:00	2431.2
7/2/03	19:30:00	2011
7/14/03	18:30:00	3265.1

DO data are abnormally high for unknown reasons during the following dates and

times. Data were retained but should be considered suspect.

7/16/03 19:00 - 7/17/03 10:30

Research Creek, August

All parameters are missing due to sonde exchange on the following date and time.

8/05/03 11:00

All parameter data are missing periodically throughout the month of August most likely due to the interference from the telemetry system at this site resulting

from incorrect time synchronization between the YSI, the CR10X and the telemetry computer.

During the following dates the turbidity data were outside of the sensor's range. The data were retained. The high value reflects the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish or crab gets caught in the probe guard cup.

8/3/03	17:30:00	1425.1
8/4/03	21:00:00	2519.7
8/9/03	19:30:00	1328.9
8/10/03	10:30:00	2266.7
8/28/03	11:30:00	1321.1
8/28/03	13:00:00	1169.1

Research Creek, September

All parameters are missing due to sonde exchange on the following date and time.
9/09/03 12:00

All parameter data are missing periodically throughout the beginning of September most likely due to the interference from the telemetry system at this site resulting from incorrect time synchronization between the YSI, the CR10X and the telemetry computer.

During the following dates the turbidity data were outside of the sensor's range. The data were retained. The high value reflects the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish or crab gets caught in the probe guard cup.

9/2/03	4:00:00	1052.9
9/3/03	20:00:00	1546
9/4/03	6:30:00	1003.3
9/4/03	7:00:00	1157
9/4/03	8:30:00	1118.8
9/4/03	15:00:00	1047.4
9/4/03	16:30:00	1007.1
9/4/03	21:00:00	1107.4
9/4/03	23:30:00	1187.9
9/13/03	6:00:00	1788.1
9/14/03	17:00:00	1833.6

Specific Conductivity and salinity data drift downward towards the end of the month most likely as a result of fouling. Data were retained but should be

considered suspect.

Research Creek, October

Data from all the parameters were not recorded during the following dates and

times due to sonde battery failure.

10/11/03 5:00:00 - 10/17/03 14:30:00

Specific Conductivity and salinity data drift downward in the beginning of the

month and towards the end of the month, most likely as a result of fouling.

Data were retained but should be considered suspect.

During the following dates the turbidity data were outside of the sensor's

range. The data were retained. The high value reflects the turbid conditions

that occur during heavy rainfall and high wind events, when the probe is covered

by sediment, or if a fish or crab gets caught in the probe guard cup. In addition, the wiper was observed parked near the optics of the turbidity probe

for the deployment ending on 10/06/03 at 11:30.

10/2/03	20:30:00	1752
10/2/03	22:30:00	1719.1
10/3/03	2:30:00	1702.1
10/3/03	3:30:00	1750
10/3/03	4:00:00	1738.5
10/3/03	13:30:00	1773.8
10/3/03	19:00:00	1758.7
10/4/03	3:00:00	1762
10/4/03	14:30:00	1776.3
10/5/03	2:00:00	1765.6
10/6/03	1:00:00	1748.4
10/6/03	2:30:00	1772.2
10/6/03	3:00:00	1579.4
10/6/03	4:00:00	1774.5
10/6/03	5:30:00	1772.9
10/6/03	10:30:00	1789.7
10/28/03	16:30:00	1176
10/28/03	17:30:00	1130.3
10/28/03	20:00:00	1079.8
10/28/03	20:30:00	1777.9
10/28/03	21:00:00	1266.2
10/29/2003	06:30:00	1965.2
10/29/2003	07:00:00	1124.8
10/29/2003	10:00:00	1048.5
10/29/2003	20:00:00	1001.8
10/29/2003	22:00:00	1409.1
10/30/2003	01:00:00	2059.5
10/30/2003	01:30:00	1948.5
10/30/2003	08:00:00	1578.6

10/30/2003	09:00:00	1047.6
10/30/2003	12:30:00	1031.8
10/30/2003	13:00:00	1530.2
10/30/2003	18:30:00	1061

Research Creek, November

All parameters are missing due to sonde exchange on the following date and time.

11/11/03 15:00

Specific Conductivity, salinity, and pH data drift downward in the beginning of the month most likely as a result of fouling. Data were retained but should be considered suspect.

During the following dates the turbidity data were outside of the sensor's range. The data were retained. The high value reflects the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish gets caught in the probe guard cup.

11/3/03	03:00:00	1316
11/3/03	21:00:00	2067
11/4/03	06:00:00	1328
11/4/03	20:00:00	2103
11/5/03	03:30:00	1016
11/9/03	05:00:00	1211

Data for all the parameters were deleted due to the sonde being out of water for

the ISCO deployment.

11/18/03 11:30

Research Creek, December

All parameters are missing due to sonde exchange on the following date and time.

12/11/03 15:00

During the following dates the turbidity data were outside of the sensor's range. The data were retained. The high value reflects the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish gets caught in the probe guard cup.

12/15/03	22:30:00	2112.9
12/16/03	23:00:00	2534.1
12/17/03	3:00:00	2541.6
12/17/03	10:00:00	2559.8

Loosin Creek, January

On the following dates DO drops suddenly for unknown reason. Calibration showed

good recovery and low fouling of probes. Data retained but suspect.

01/02/03 22:00:00 - 01/03/03 02:30:00

On the following dates the turbidity data were highly erratic due to probe

failure. Data were deleted.

01/16/03 11:30 - 01/31/03 23:30

The temperature probe failed while deployed during the following dates.

All

parameter data except depth were deleted since the temperature data is used in

almost every output of the sonde.

01/24/03 05:00 - 01/31/03 23:30

During the following dates the turbidity data were outside of the sensor's

range. The data were retained. The high values reflect the turbid conditions

that occur during heavy rainfall and high wind events, when the probe is covered

by sediment, or if a fish gets caught in the probe guard cup.

1/1/2003	11:30:00	1615
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1/1/2003	19:30:00	1610
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1/1/2003	21:30:00	1621
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1/2/2003	0:00:00	1612
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1/3/2003	2:00:00	1617
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1/5/2003	17:30:00	1602
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1/7/2003	1:00:00	1579
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1/7/2003	4:30:00	1537
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1/7/2003	13:00:00	1587
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1/9/2003	11:30:00	1583
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On the following date the depth reading was negative. However, based on the

other parameters measured, the sonde was not out of the water. The data was

retained.

01/20/03	03:00	-0.007
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Loosin Creek, February

The temperature probe failed while deployed during the following dates.

All

parameter data were deleted except depth since the temperature data is used in

almost every output of the sonde.

02/01/03 00:00 - 02/19/03 14:00

On the following date the turbidity data was outside of the sensor's range.

The data was retained. The high value reflects the turbid conditions that occur

during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish gets caught in the probe guard cup.

2/28/2003 4:30:00 1562

Loosin Creek, March

During the following dates the turbidity data were outside of the sensor's

range. The data were retained. The high values reflect the turbid conditions

that occur during heavy rainfall and high wind events, when the probe is covered

by sediment, or if a fish gets caught in the probe guard cup.

3/4/2003 3:30:00 1204

3/14/2003 6:00:00 1600

Loosin Creek, April

All parameters are missing data due to sonde exchange on the following date and

time.

04/22/03 13:30

Loosin Creek, May

During the following dates, there was an unusual prolonged elevation in salinity

and specific conductivity values for unknown reasons. Data were retained.

05/20/03 14:00 - 05/23/03 03:30

On the following date the turbidity data was outside of the sensor's range.

The data were retained. The high value reflects the turbid conditions that

occur during heavy rainfall and high wind events, when the probe is covered by

sediment, or if a fish gets caught in the probe guard cup.

5/21/2003 5:00:00 1951

Loosin Creek, June

During the following dates the turbidity data were outside of the sensor's

range. The data were retained. The high values reflect the turbid conditions

that occur during heavy rainfall and high wind events, when the probe is covered

by sediment, or if a fish gets caught in the probe guard cup.

6/3/2003	22:00:00	1838
6/8/2003	10:00:00	1430
6/9/2003	22:30:00	1665
6/10/2003	6:00:00	1003
6/10/2003	21:30:00	1404
6/11/2003	7:00:00	1109
6/11/2003	19:00:00	1939
6/13/2003	16:00:00	2031
6/15/2003	6:00:00	1206
6/15/2003	7:30:00	1567
6/15/2003	12:00:00	1053
6/15/2003	13:30:00	1253
6/15/2003	14:00:00	1321
6/15/2003	15:00:00	1196
6/15/2003	19:30:00	1364
6/15/2003	20:00:00	1115
6/15/2003	21:30:00	1749
6/15/2003	22:30:00	1355
6/16/2003	2:30:00	1550
6/16/2003	3:30:00	1191
6/16/2003	5:30:00	1220
6/16/2003	9:00:00	1113
6/16/2003	10:30:00	1979
6/16/2003	12:00:00	1431
6/16/2003	13:30:00	1457
6/16/2003	15:00:00	1527
6/16/2003	16:30:00	1839
6/16/2003	18:00:00	1937
6/16/2003	19:30:00	1997
6/16/2003	21:00:00	1719
6/16/2003	23:00:00	2000
6/17/2003	0:00:00	1990
6/17/2003	5:30:00	1429
6/17/2003	7:00:00	1987
6/17/2003	8:30:00	1989
6/17/2003	10:00:00	1992
6/25/2003	1:30:00	1636
6/27/2003	20:30:00	1423
6/29/2003	13:00:00	1933
6/29/2003	13:30:00	1939
6/29/2003	14:00:00	1284
6/29/2003	14:30:00	1406
6/29/2003	15:00:00	1219
6/29/2003	15:30:00	1314
6/29/2003	16:00:00	1303
6/29/2003	22:30:00	1658
6/29/2003	23:00:00	1874
6/29/2003	23:30:00	1873
6/30/2003	0:00:00	1898
6/30/2003	11:30:00	1151
6/30/2003	12:00:00	1861
6/30/2003	12:30:00	1440
6/30/2003	13:00:00	1859

6/30/2003	13:30:00	1541
6/30/2003	14:00:00	1645
6/30/2003	14:30:00	1638
6/30/2003	22:30:00	1414

On the following dates DO drops for unknown reason. Post deployment check for

DO% was 56.9%. Data retained but suspect.

06/05/03 02:30:00 - 06/17/03 11:00:00

Specific Conductivity and salinity data drift downward in the beginning of the

month most likely as a result of fouling. Data were retained but should be

considered suspect.

06/01/03 00:00 - 06/17/03 11:30

On the following dates DO values were erratic due to a fouled DO membrane. Data

were retained but should be considered suspect.

06/29/03 01:00 - 06/30/03 23:30

Loosin Creek, July

On the following date salinity and pH values dropped suddenly for unknown reasons. Data were retained but should be considered suspect.

07/11/03 11:30 - 14:00

On the following date salinity values dropped suddenly for unknown reasons.

Data were retained but should be considered suspect.

07/12/03 12:30 - 13:30

On the following dates DO values were erratic most likely due to a fouled DO

membrane. Data were retained but should be considered suspect.

07/01/03 00:00 - 07/02/03 09:30

On the following date pH values dropped suddenly for unknown reasons.

Data

were retained but should be considered suspect.

07/11/03 11:30

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

During the following dates the turbidity data were outside of the sensor's

range. The data were retained. The high values reflect the turbid conditions

that occur during heavy rainfall and high wind events, when the probe is covered

by sediment, or if a fish gets caught in the probe guard cup. The small negative turbidity values could be a result of the probe's resolution or contamination of the zero standard when the probe was calibrated.

7/1/2003 0:30:00 1731

7/1/2003	10:00:00	1779
7/1/2003	10:30:00	1784
7/1/2003	11:00:00	1792
7/1/2003	11:30:00	1894
7/12/2003	12:00:00	-1.3
7/12/2003	12:30:00	-1.7
7/21/2003	11:30:00	1936
7/30/2003	4:00:00	1558
7/31/2003	8:30:00	1272

Loosin Creek, August

During the following dates the turbidity data were outside of the sensor's range. The data were retained. The high values reflect the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish gets caught in the probe guard cup.

8/4/2003	4:00:00	1057
8/4/2003	4:30:00	1180
8/4/2003	9:30:00	1962
8/6/2003	18:00:00	1408
8/11/2003	18:30:00	2325
8/26/2003	11:30:00	1028
8/26/2003	12:00:00	1223
8/26/2003	13:30:00	2020
8/26/2003	14:00:00	1107
8/26/2003	14:30:00	2012
8/26/2003	15:00:00	1054
8/26/2003	15:30:00	1713
8/26/2003	17:00:00	1934
8/26/2003	17:30:00	1933
8/26/2003	18:30:00	1327
8/26/2003	19:30:00	1461
8/26/2003	22:00:00	1965
8/27/2003	0:30:00	1874
8/27/2003	2:00:00	1397
8/27/2003	3:00:00	1352
8/27/2003	5:30:00	1904
8/27/2003	6:30:00	1363
8/27/2003	7:30:00	1718
8/27/2003	8:00:00	1318
8/27/2003	8:30:00	1401
8/27/2003	10:00:00	1721
8/27/2003	10:30:00	1492
8/27/2003	11:00:00	1612
8/27/2003	12:30:00	1723
8/27/2003	13:00:00	1951
8/27/2003	15:30:00	2020
8/27/2003	16:00:00	1425
8/27/2003	19:00:00	1922
8/27/2003	20:30:00	1907
8/27/2003	21:30:00	1940

8/27/2003	23:00:00	1955
8/28/2003	0:00:00	1951
8/28/2003	1:30:00	1907
8/28/2003	2:00:00	1096
8/28/2003	2:30:00	1187
8/28/2003	4:00:00	1975
8/28/2003	4:30:00	1108
8/28/2003	5:00:00	1299
8/28/2003	6:30:00	1666
8/28/2003	7:30:00	1715
8/28/2003	8:00:00	1027
8/28/2003	8:30:00	1907
8/28/2003	10:00:00	1682
8/28/2003	11:00:00	1975
8/28/2003	13:30:00	1698
8/28/2003	14:30:00	1022
8/28/2003	15:00:00	1392
8/28/2003	16:00:00	2029
8/28/2003	16:30:00	1003
8/28/2003	17:00:00	1822
8/28/2003	19:00:00	1827
8/28/2003	21:00:00	1911
8/28/2003	21:30:00	1761
8/28/2003	23:30:00	1960
8/29/2003	0:00:00	1308
8/29/2003	0:30:00	1022
8/29/2003	1:00:00	1674
8/29/2003	1:30:00	1037
8/29/2003	2:30:00	1091
8/29/2003	3:00:00	1623
8/29/2003	3:30:00	1457
8/29/2003	5:30:00	1958
8/29/2003	6:00:00	1120
8/29/2003	7:00:00	1089
8/29/2003	8:30:00	1380
8/29/2003	9:00:00	1215
8/29/2003	11:00:00	1936
8/29/2003	11:30:00	1370
8/29/2003	13:30:00	1541
8/29/2003	14:00:00	1573
8/29/2003	16:00:00	1484
8/29/2003	17:30:00	1027
8/29/2003	18:00:00	1278
8/29/2003	20:00:00	1125
8/29/2003	21:00:00	1902
8/29/2003	21:30:00	1890
8/29/2003	22:00:00	1879
8/29/2003	23:30:00	1000
8/30/2003	0:00:00	1394
8/30/2003	0:30:00	1956
8/30/2003	2:00:00	1051
8/30/2003	2:30:00	1394
8/30/2003	3:00:00	1963
8/30/2003	5:00:00	1438

8/30/2003	9:30:00	1557
8/30/2003	10:00:00	1542
8/30/2003	12:00:00	1943
8/30/2003	12:30:00	1273
8/30/2003	14:30:00	2013
8/30/2003	15:00:00	1289
8/30/2003	16:30:00	1813
8/30/2003	17:00:00	1986
8/30/2003	23:30:00	1532
8/31/2003	0:00:00	1070
8/31/2003	2:00:00	1317
8/31/2003	2:30:00	1075
8/31/2003	6:30:00	1240
8/31/2003	12:00:00	1650
8/31/2003	14:00:00	1058
8/31/2003	14:30:00	1556
8/31/2003	17:00:00	1255
8/31/2003	18:30:00	1332
8/31/2003	21:30:00	1727

During the following dates the turbidity data were outside of the sensor's range. The data were removed. A toadfish was observed in the probe guard cup for the deployment ending on 9/09/03.
08/26/03 08:30:00 - 08/31/03 23:30:00

Loosin Creek, September

During the following dates the turbidity data were outside of the sensor's range. The data were removed. A toadfish was observed in the probe guard cup for the deployment ending on 9/09/03. The wiper was observed parked near the optics of the turbidity probe for the deployment ending on 10/06/03.
9/1/03 0:00:00 - 9/9/03 10:30
9/25/03 23:00 - 9/30/03 23:30

Loosin Creek, October

During the following dates salinity values flattened out most likely due to fouling. Data were retained but should be considered suspect.
10/01/03 00:00 - 10/06/03 10:30

During the following dates DO values peaked unusually high most likely due to algal fouling. Data were retained but should be considered suspect.
10/01/03 00:00 - 10/06/03 10:30

During the following dates DO and pH values drift downward due to fouling. Data were retained but should be considered suspect.

10/07/03 18:30 - 10/31/03 23:30

During the following dates the turbidity data were outside of the sensor's range. The data were removed. The wiper was observed parked near the optics of the turbidity probe for the deployment ending on 10/06/03.
10/01/03 00:00 - 10/06/03 10:30

During the following deployment dates the turbidity data was unusually high possibly due to different probe specs used on the sonde. Data retained but suspect.
10/21/03 00:00 to 11/11/03 14:30

During the following dates the turbidity data were outside of the sensor's range. The data were retained. The high values reflect the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish gets caught in the probe guard cup.
10/25/2003 22:00:00 1048
10/27/2003 3:30:00 1371

Loosin Creek, November

During the following dates DO and pH values drift downward due to fouling. Data were retained but should be considered suspect.
11/01/03 00:00 - 11/11/03 14:00

During the following deployment dates the turbidity data was unusually high possibly due to different probe specs used on the sonde. Data retained but suspect.
10/21/03 00:00 to 11/11/03 14:30

During the following dates the turbidity data were outside of the sensor's range. The data were retained. The high values reflect the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish gets caught in the probe guard cup.
11/4/2003 9:30:00 1185
11/4/2003 13:30:00 1494
11/4/2003 15:30:00 1194
11/4/2003 18:00:00 1179
11/5/2003 7:00:00 1131
11/5/2003 11:00:00 1743
11/5/2003 12:00:00 1287

11/5/2003	14:00:00	1100
11/5/2003	16:00:00	1092
11/5/2003	18:00:00	1135
11/5/2003	21:30:00	1418
11/6/2003	0:30:00	1070
11/6/2003	3:00:00	1074
11/6/2003	3:30:00	1036
11/6/2003	5:30:00	1809
11/6/2003	8:30:00	1096
11/6/2003	11:00:00	1085
11/6/2003	15:30:00	1271
11/6/2003	18:30:00	1012
11/6/2003	21:00:00	1060
11/7/2003	1:30:00	1154
11/7/2003	5:00:00	1345
11/7/2003	7:00:00	1006
11/7/2003	9:30:00	1091
11/7/2003	10:00:00	1422
11/7/2003	12:00:00	1066
11/7/2003	12:30:00	1201
11/7/2003	15:00:00	1196
11/7/2003	17:00:00	1254
11/7/2003	17:30:00	1055
11/7/2003	20:00:00	1059
11/7/2003	20:30:00	1252
11/7/2003	22:30:00	1812
11/7/2003	23:00:00	1235
11/7/2003	23:30:00	1026
11/8/2003	2:00:00	1309
11/8/2003	5:00:00	1403
11/8/2003	5:30:00	1100
11/8/2003	7:00:00	1787
11/8/2003	7:30:00	1428
11/8/2003	10:00:00	1058
11/8/2003	10:30:00	1410
11/8/2003	12:30:00	1070
11/8/2003	13:00:00	1069
11/8/2003	13:30:00	1126
11/8/2003	15:00:00	1223
11/8/2003	15:30:00	1356
11/8/2003	16:00:00	1151
11/8/2003	19:00:00	1800
11/8/2003	22:00:00	1779
11/8/2003	23:30:00	1223
11/9/2003	1:00:00	1103
11/9/2003	3:00:00	1089
11/9/2003	4:30:00	1776
11/9/2003	6:30:00	1012
11/9/2003	7:00:00	1061
11/9/2003	7:30:00	1129
11/9/2003	10:00:00	1116
11/9/2003	10:30:00	1198
11/9/2003	12:00:00	1035
11/9/2003	13:30:00	1737

11/9/2003	16:00:00	1036
11/9/2003	17:00:00	1740
11/9/2003	19:00:00	1778
11/9/2003	19:30:00	1155
11/9/2003	20:00:00	1751
11/9/2003	21:30:00	1085
11/9/2003	22:00:00	1752
11/9/2003	23:00:00	1129
11/9/2003	23:30:00	1406
11/10/2003	1:00:00	1394
11/10/2003	2:30:00	1704
11/10/2003	3:00:00	1306
11/10/2003	4:30:00	1120
11/10/2003	5:00:00	1322
11/10/2003	6:00:00	1023
11/10/2003	6:30:00	1277
11/10/2003	7:30:00	1571
11/10/2003	8:00:00	1742
11/10/2003	9:30:00	1338
11/10/2003	11:00:00	1642
11/10/2003	12:30:00	1034
11/10/2003	13:00:00	1349
11/10/2003	14:30:00	1747
11/10/2003	15:00:00	1053
11/10/2003	16:00:00	1718
11/10/2003	18:00:00	1404
11/10/2003	19:30:00	1177
11/10/2003	21:00:00	1311
11/10/2003	21:30:00	1060
11/10/2003	23:30:00	1739
11/11/2003	0:00:00	1655
11/11/2003	2:00:00	1270
11/11/2003	4:30:00	1107
11/11/2003	5:30:00	1145
11/11/2003	6:00:00	1466
11/11/2003	8:30:00	1557
11/11/2003	10:00:00	1767
11/11/2003	10:30:00	1228
11/11/2003	11:30:00	1759
11/11/2003	12:00:00	1199
11/11/2003	13:30:00	1004
11/16/2003	9:30:00	1864

Loosin Creek, December

During the following dates pH values decreased following a new sonde deployment.

This was most likely due to differences in the ranges of the two pH probes that

were deployed. Data were retained.

12/11/03 16:00 - 12/31/03 23:30

During the following dates the turbidity data were outside of the sensor's

range. The data were retained. The high values reflect the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish gets caught in the probe guard cup.

12/9/2003	16:00:00	1583
12/22/2003	9:30:00	1657

East Cribbings, January

Data for all parameters were deleted due to the sonde being exposed periodically at low tide for brief durations on the following dates and times.

01/21/03	06:00 - 01/21/03	06:30
01/22/03	07:00	
01/23/03	23:30 - 01/24/03	00:00
01/24/03	04:30 - 01/24/03	11:30
01/24/03	21:30	
01/25/03	00:00 - 01/25/03	00:30
01/25/03	06:00 - 01/25/03	07:30
01/25/03	22:30	
01/26/03	23:30	
01/27/03	12:30	
01/28/03	00:00 - 01/28/03	00:30

There is an unusual drop in the DO% and DO mg/L readings during the following period due to an unknown cause. Data were retained. Consider data suspect.

01/06/03	10:30
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During the following dates the turbidity data were outside of the sensor's range. The data were retained. The high value reflects the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish gets caught in the probe guard cup.

01/21/03	20:30	1158
01/30/03	23:00	1334

East Cribbings, February

Data for all parameters were deleted due to the sonde being exposed periodically at low tide for brief durations on the following dates and times.

02/05/03	06:30 - 07:00
02/06/03	07:00 - 07:30
02/13/03	00:30 - 01:30
02/14/03	01:30 - 02:00
02/15/03	02:30
02/16/03	02:30 - 04:00
02/25/03	23:30
02/26/03	00:00 - 00:30

There is an unusual drop in the specific conductivity and salinity readings during the following period due to an unknown cause. Data were retained. Consider data suspect.
02/06/03 19:30

During the following dates the turbidity data were outside of the sensor's range. The data were retained. The high value reflects the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish gets caught in the probe guard cup.
02/27/03 02:30 1109

East Cribbings, March

During the following dates the turbidity data were outside of the sensor's range. The data were retained. The high value reflects the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish gets caught in the probe guard cup.
03/11/03 01:30 1414
03/15/03 03:00 1401

East Cribbings, April

Data for all parameters were deleted due to the sonde being exposed periodically at low tide for brief durations on the following dates and times.
04/28/03 14:00
04/29/03 02:30
04/30/03 03:00 - 03:30
04/30/03 14:30 - 15:30

During the following period the turbidity data were outside of the sensor's range (small negative values) due to probe failure. The data were deleted.
04/22/03 16:00 - 04/30/03 23:30

East Cribbings, May

All data for the following dates and times were deleted due to sonde being exposed at low tide.
05/09/03 09:30:00

Data for all parameters were deleted due to the sonde being exposed periodically at low tide for brief durations on the following dates and times.

05/01/03 04:00
05/01/03 15:00 - 16:00
05/02/03 04:30
05/03/03 16:30 - 17:00
05/06/03 19:00
05/08/03 20:30 - 21:00
05/13/03 01:00 - 01:30
05/14/03 02:30
05/14/03 14:00 - 14:30
05/15/03 15:00 - 15:30
05/16/03 04:00 - 04:30
05/16/03 15:30 - 16:30
05/17/03 05:00 - 05:30
05/17/03 16:30 - 17:30
05/20/03 19:00 - 19:30
05/21/03 08:00 - 09:00
05/21/03 19:30 - 21:00
05/22/03 09:00 - 10:00
05/22/03 21:00 - 21:30
05/23/03 22:30
05/24/03 11:00

There were negative values for the DO% and DO mg/L readings during the following period due to an unknown cause. Data were deleted.
05/22/03 05:00 - 05/31/03 23:30

During the following period the turbidity data were outside of the sensor's range (small negative values) due to probe failure. The data were deleted.
05/01/03 00:00 - 05/20/03 15:00

DO data for the following dates and times should be considered suspect due to compromised DO membrane integrity at some point during the deployment. Data were retained.
05/19/03 08:00 - 05/20/03 15:00

During the following dates the turbidity data were outside of the sensor's range. The data were retained. The high value reflects the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish gets caught in the probe guard cup.

05/21/03	17:00	1230
05/22/03	06:00	1835
05/23/03	09:00	1825
05/23/03	13:00	1846
05/23/03	16:00	1846
05/23/03	16:30	1396
05/24/03	08:30	1815

East Cribbings, June

DO data for the following dates and times should be considered suspect due to

exposure of the DO probe at low tide for brief durations early in the deployment. Data were retained.

06/01/03 00:00 - 06/17/03 13:00

On the following dates, the turbidity data was outside of the sensor's range.

The data were retained. The high value reflects the turbid conditions that

occur during heavy rainfall and high wind events, when the probe is covered by

sediment, or if a fish gets caught in the probe guard cup.

06/26/03	03:30	1383
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06/30/03	18:30	1645
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East Cribbings, July

During the following period, the DO% and DO mg/L readings included large negative values due to a membrane puncture. Data were deleted.

07/01/03 00:00 - 07/17/03 12:30

On the following dates, the turbidity data was outside of the sensor's range.

The data were retained. The high value reflects the turbid conditions that

occur during heavy rainfall and high wind events, when the probe is covered by

sediment, or if a fish gets caught in the probe guard cup.

07/10/03	11:00	2131
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07/12/03	21:30	2104
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07/18/03	11:30	1236
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07/20/03	16:30	2329
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07/22/03	07:00	1165
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07/27/03	15:30	2381
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DO data for the following dates and times should be considered suspect due to

compromised DO membrane integrity at some point during the deployment. Data

were retained.

07/17/03 13:00 - 07/31/03 12:00

East Cribbings, August

All parameters are missing data due to sonde exchange.

8/14/03	11:00
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East Cribbings, September

During the following periods, the DO% and DO mg/L readings were irregular due to Fouling and a possible membrane puncture and are considered suspect. Data were retained.

09/01/03 00:00 - 09/11/03 09:30

During the following periods, the DO% and DO mg/L readings were irregular due to a membrane puncture. Data were deleted.

09/28/03 04:30 - 09/30/03 23:30

During the following period, the specific conductivity and salinity readings were irregular, most likely due to fouling and are considered suspect. Data were retained.

09/25/03 09:30 - 09/30/03 23:30

During the following period, the pH readings were irregular, most likely due to fouling and are considered suspect. Data were retained.

09/28/03 00:00 - 09/30/03 23:30

On the following date, the turbidity data was outside of the sensor's range.

The data was retained. The high value reflects the turbid conditions that occur

during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish gets caught in the probe guard cup.

09/28/03 19:00 1270

During the following periods the turbidity data were outside of the sensor's range (small negative values). The values were changed to zero.

09/28/03 21:30

09/28/03 22:30

09/28/03 23:30

09/29/03 01:00

09/29/03 02:00

09/29/03 03:00 - 03:30

East Cribbings, October

During the following periods, the DO% and DO mg/L readings were irregular due to a membrane puncture. Data were deleted.

10/01/03 00:00 - 10/07/03 08:30

Specific conductivity, salinity, DO%, DO mg/L, pH, and turbidity data were considered suspect for the following dates and times due to abnormal values

possibly due to mud in the sonde guard. Data were retained.

10/01/03 00:00 - 10/07/03 08:30

Specific conductivity and salinity data were considered suspect for the following dates and times due to abnormally high values. Data were retained.

10/26/03 03:30 - 10/31/03 23:30

East Cribbings, November

Specific conductivity and salinity data were considered suspect for the following dates and times due to abnormally high values. Data were retained.

11/01/03 00:00 - 11/12/03 11:00

During the following date and times the turbidity data were outside of the sensor's range. The data were retained. The high value may reflect the turbid

conditions that occur during heavy rainfall and high wind events, when the probe

is covered by sediment, or if a fish gets caught in the probe guard cup.

11/13/03	16:30	3797
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11/15/03	17:30	2877
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East Cribbings, December

During the following dates pH values increased following a new sonde deployment.

This was most likely due to differences in the ranges of the two pH probes that

were deployed. Data were retained.

12/12/03 12:00 - 12/31/03 23:30

Zeke's Basin, January

No data were collected during January due to the replacement of the deployment structure.

Zeke's Basin, February

Due to the replacement of the deployment structure, data collection for this

site began on 02/12/03 at 16:00.

Zeke's Basin, March

The sonde did not record data for the following dates and times for unknown reasons.

03/02/03 06:00 - 3/03/03 5:30

Unusually high DO data on 03/12/03 15:00:00 - 15:30:00 suspect, cause unknown.

Zeke's Basin, April

During the following date and times the turbidity data were outside of the sensor's range. The data were retained. The high value may reflect the turbid

conditions that occur during heavy rainfall and high wind events, when the probe

is covered by sediment, or if a fish gets caught in the probe guard cup.

04/01/2003	10:00:00	1581
04/01/2003	12:00:00	1268
04/01/2003	12:30:00	1019
04/01/2003	13:00:00	1298
04/01/2003	13:30:00	1135
04/01/2003	14:00:00	1097
04/01/2003	14:30:00	1682
04/01/2003	15:30:00	1141
04/01/2003	17:00:00	1064

Due to probe failure during deployment, DO data for the following dates and

times were removed. The rest of the data for this deployment should be considered suspect due to an internal leak.

4/17/03 22:00 - 04/22/03 15:30

The wide range of DO data (from 160.6% to as low as 2.3%) for deployment 04/22/2003 16:00:00 through 05/20/2003 15:30:00 is most likely due to fouling of

probes. The membrane passed both the post deployment calibration check and

membrane integrity test. Data retained.

Zeke's Basin, May

During the following dates the turbidity data were outside of the sensor's

range. The data were retained. The high value may reflect the turbid conditions that occur during heavy rainfall and high wind events, when the probe

is covered by sediment, or if a fish gets caught in the probe guard cup.

05/02/2003	16:00:00	1158
05/02/2003	18:30:00	1600
05/02/2003	19:00:00	1187
05/02/2003	19:30:00	1829
05/02/2003	20:00:00	1571
05/02/2003	20:30:00	1327
05/06/2003	07:00:00	1779
05/06/2003	07:30:00	1779
05/06/2003	08:30:00	1292
05/06/2003	09:00:00	1012
05/06/2003	09:30:00	1789
05/06/2003	10:00:00	1423
05/06/2003	11:00:00	1128
05/06/2003	11:30:00	1082
05/06/2003	12:00:00	1188

05/06/2003	12:30:00	1219
05/06/2003	13:00:00	1810
05/06/2003	13:30:00	1814
05/06/2003	14:00:00	1254
05/06/2003	14:30:00	1817
05/06/2003	15:00:00	1177
05/06/2003	19:00:00	1499
05/06/2003	19:30:00	1806
05/08/2003	15:30:00	1086
05/08/2003	16:00:00	1131
05/08/2003	16:30:00	1879
05/08/2003	17:00:00	1040
05/09/2003	13:30:00	1396
05/09/2003	16:00:00	1896
05/09/2003	16:30:00	1571
05/09/2003	17:00:00	1390
05/09/2003	17:30:00	1241
05/10/2003	11:30:00	1821
05/10/2003	16:00:00	1899
05/10/2003	16:30:00	1470
05/10/2003	17:00:00	1462
05/10/2003	17:30:00	1904
05/10/2003	18:00:00	1656
05/10/2003	18:30:00	1762
05/10/2003	19:00:00	1594
05/10/2003	19:30:00	1518
05/10/2003	20:00:00	1137
05/11/2003	01:30:00	1100
05/11/2003	02:30:00	1122
05/11/2003	04:00:00	1055
05/11/2003	05:00:00	1280
05/11/2003	06:00:00	1086
05/11/2003	08:00:00	1168
05/11/2003	12:00:00	1133
05/11/2003	12:30:00	1394
05/11/2003	13:00:00	1378
05/11/2003	13:30:00	1230
05/11/2003	15:00:00	1045
05/11/2003	15:30:00	1557
05/11/2003	16:00:00	1851
05/11/2003	17:30:00	1651
05/11/2003	18:00:00	1584
05/11/2003	18:30:00	1629
05/11/2003	19:00:00	1595
05/11/2003	19:30:00	1387
05/11/2003	20:00:00	1211
05/11/2003	21:30:00	1312
05/11/2003	22:30:00	1242
05/11/2003	23:30:00	1426
05/12/2003	00:00:00	1297
05/12/2003	00:30:00	1429
05/12/2003	01:00:00	1004
05/12/2003	02:00:00	1553
05/12/2003	02:30:00	1085

05/12/2003	03:00:00	1081
05/12/2003	03:30:00	1770
05/12/2003	04:00:00	1352
05/12/2003	05:00:00	1825
05/12/2003	06:00:00	1451
05/12/2003	06:30:00	1354
05/12/2003	07:00:00	1700
05/12/2003	07:30:00	1818
05/12/2003	09:30:00	1043
05/12/2003	11:30:00	1125
05/12/2003	12:00:00	1187
05/12/2003	12:30:00	1391
05/12/2003	13:00:00	1258
05/12/2003	13:30:00	1422
05/12/2003	14:30:00	1458
05/12/2003	16:00:00	1151
05/12/2003	16:30:00	1385
05/12/2003	20:30:00	1801
05/12/2003	22:30:00	1099
05/12/2003	23:30:00	1298
05/13/2003	00:30:00	1806
05/13/2003	03:00:00	1265
05/13/2003	07:00:00	1592
05/13/2003	08:30:00	1187
05/13/2003	11:30:00	1803
05/13/2003	12:00:00	1803
05/13/2003	13:00:00	1204
05/13/2003	13:30:00	1196
05/13/2003	14:00:00	1293
05/13/2003	14:30:00	1330
05/13/2003	17:00:00	1071
05/14/2003	12:30:00	1163
05/14/2003	15:00:00	1127
05/14/2003	15:30:00	1208
05/15/2003	03:30:00	1214
05/16/2003	03:00:00	1243
05/17/2003	04:30:00	1211
05/17/2003	12:30:00	1794
05/17/2003	14:30:00	1023
05/17/2003	17:00:00	1334
05/17/2003	19:00:00	1078
05/17/2003	19:30:00	1315
05/17/2003	22:00:00	1800
05/18/2003	03:00:00	1799
05/18/2003	08:00:00	1779
05/18/2003	09:00:00	1600
05/18/2003	09:30:00	1781
05/18/2003	17:30:00	1112
05/18/2003	18:00:00	1361
05/19/2003	04:30:00	1313
05/19/2003	09:00:00	1758
05/19/2003	21:00:00	1754
05/19/2003	22:30:00	1758
05/20/2003	02:30:00	1721

05/20/2003	04:30:00	1744
05/20/2003	11:30:00	1160
05/20/2003	14:30:00	1797
05/23/2003	13:30:00	1456
05/28/2003	13:30:00	1270
05/28/2003	14:00:00	1269
05/28/2003	14:30:00	1294
05/28/2003	15:00:00	1143
05/28/2003	22:30:00	1023
05/28/2003	23:00:00	1066
05/28/2003	23:30:00	1171
05/29/2003	10:30:00	1393
05/29/2003	11:00:00	1543
05/29/2003	11:30:00	1966
05/29/2003	17:30:00	1012
05/30/2003	09:00:00	1938
05/30/2003	17:30:00	2011
05/30/2003	18:30:00	1241
05/30/2003	20:30:00	1075
05/30/2003	23:00:00	1967
05/31/2003	07:30:00	1070
05/31/2003	10:30:00	1183
05/31/2003	11:00:00	1709
05/31/2003	11:30:00	1158
05/31/2003	12:00:00	1318
05/31/2003	12:30:00	1088
05/31/2003	13:00:00	1101
05/31/2003	19:00:00	1220
05/31/2003	20:00:00	1064

DO values drop suddenly on 30 of May at 19:00 due to a possible membrane puncture. Data for 05/30/03 04:00 - 05/31/03 23:30 were retained but should be considered suspect.

Zeke's Basin, June

DO data for the following dates and times should be considered suspect due to compromised DO membrane integrity at some point during the deployment.
06/01/03 00:00 - 06/17/03 13:30

During the following dates the turbidity data were outside of the sensor's range. The data were retained. The high value reflects the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish gets caught in the probe guard cup.

6/11/2003	14:00:00	1313
6/12/2003	14:30:00	1179
6/13/2003	12:00:00	1049
6/13/2003	12:30:00	1189
6/13/2003	13:30:00	1343

6/13/2003	15:00:00	1072
6/13/2003	16:00:00	1009
6/13/2003	18:00:00	1250
6/14/2003	14:00:00	1005
6/14/2003	15:00:00	1437
6/14/2003	15:30:00	1213
6/14/2003	16:00:00	1177
6/14/2003	16:30:00	1380
6/15/2003	13:30:00	1287
6/15/2003	14:30:00	1287
6/15/2003	15:00:00	1124
6/15/2003	15:30:00	1247
6/15/2003	17:00:00	1088
6/15/2003	17:30:00	1163

Zeke's Basin, July

DO data for the following dates and times should be considered suspect due to compromised DO membrane integrity at some point during the deployment.
07/17/03 13:30 - 07/31/03 12:30

During the following dates the turbidity data were outside of the sensor's range. The data were retained. The high value reflects the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish gets caught in the probe guard cup.

7/7/2003	13:30:00	1049
7/7/2003	17:30:00	1001
7/10/2003	18:30:00	1183
7/11/2003	19:00:00	1210
7/28/2003	9:00:00	1061
7/28/2003	11:00:00	1291
7/28/2003	11:30:00	1011
7/28/2003	13:00:00	1164
7/28/2003	13:30:00	1001
7/28/2003	14:30:00	1259
7/28/2003	15:30:00	1073

Zeke's Basin, August

DO data for the following dates and times should be considered suspect due to compromised DO membrane integrity at some point during the deployment.
08/14/03 11:30 - 09/11/03 09:30

During the following dates the turbidity data were outside of the sensor's range. The data were retained. The high value reflects the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish gets caught in the probe guard cup. The small

negative turbidity values could be a result of the probe's resolution or contamination of the zero standard when the probe was calibrated.

8/3/2003	16:30:00	1126
8/3/2003	17:30:00	1063
8/3/2003	20:00:00	-0001
8/3/2003	20:30:00	-0002
8/3/2003	21:30:00	-0001
8/3/2003	22:00:00	-0002
8/3/2003	22:30:00	-0002
8/3/2003	23:00:00	-0002
8/3/2003	23:30:00	-0002
8/4/2003	0:00:00	-0002
8/4/2003	0:30:00	-0002
8/4/2003	1:00:00	-0001
8/4/2003	2:00:00	-0002
8/4/2003	8:00:00	1034
8/4/2003	12:00:00	-0002
8/4/2003	15:30:00	1024
8/5/2003	13:00:00	1022
8/5/2003	15:00:00	-0001
8/5/2003	15:30:00	-0001
8/5/2003	16:00:00	-0001
8/5/2003	16:30:00	-0002
8/5/2003	17:00:00	-0001
8/5/2003	17:30:00	-0002
8/6/2003	17:00:00	-0001
8/6/2003	17:30:00	-0001
8/6/2003	20:00:00	1003
8/6/2003	20:30:00	1027
8/6/2003	21:00:00	1294
8/7/2003	5:30:00	1204
8/15/2003	17:00:00	1749
8/16/2003	18:00:00	1041
8/16/2003	21:30:00	1630
8/16/2003	22:00:00	1798
8/16/2003	22:30:00	1769
8/17/2003	1:30:00	1044
8/17/2003	10:30:00	2035
8/17/2003	11:00:00	1144
8/17/2003	14:00:00	1158
8/17/2003	14:30:00	2036
8/17/2003	15:00:00	1381
8/17/2003	15:30:00	1634
8/17/2003	16:00:00	1319
8/17/2003	16:30:00	1660
8/17/2003	17:00:00	1540
8/17/2003	17:30:00	2047
8/17/2003	18:30:00	1564
8/17/2003	19:00:00	1849
8/17/2003	19:30:00	2028
8/17/2003	20:00:00	1198
8/17/2003	22:00:00	1906
8/17/2003	22:30:00	1956
8/17/2003	23:00:00	1366

8/18/2003	0:00:00	1256
8/18/2003	0:30:00	1926
8/18/2003	1:00:00	1892
8/18/2003	1:30:00	1992
8/18/2003	2:00:00	1232
8/18/2003	2:30:00	1642
8/18/2003	6:30:00	1731
8/22/2003	4:00:00	1453
8/22/2003	15:30:00	1325
8/22/2003	16:00:00	1538
8/22/2003	16:30:00	1777
8/22/2003	17:30:00	1346
8/22/2003	23:00:00	1444
8/23/2003	4:00:00	1223
8/23/2003	6:00:00	1740
8/23/2003	6:30:00	1355
8/23/2003	8:30:00	1852
8/23/2003	9:00:00	1293
8/23/2003	9:30:00	1199
8/23/2003	11:00:00	1490
8/23/2003	11:30:00	1390
8/23/2003	12:00:00	1648
8/23/2003	13:00:00	1650
8/23/2003	15:00:00	1098
8/23/2003	20:00:00	2025
8/24/2003	7:30:00	1031
8/24/2003	11:30:00	1176
8/24/2003	17:30:00	1851
8/25/2003	3:30:00	1329

Zeke's Basin, September

DO data for the following dates and times should be considered suspect due to compromised DO membrane integrity at some point during the deployment.
08/14/03 11:30 - 09/11/03 09:30

DO values drop unusually low during the following dates and times for unknown reasons. Consider data suspect.
09/15/03 22:30 - 09/16/03 01:00

During the following dates the turbidity data were outside of the sensor's range. The data were retained. The high value reflects the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish gets caught in the probe guard cup. The small negative turbidity values could be a result of the probe's resolution or contamination of the zero standard when the probe was calibrated.

09/07/2003	18:00:00	1417
09/19/2003	02:00:00	1160

09/19/2003 06:00:00 1066

Zeke's Basin, October

On the following date the turbidity data was outside of the sensor's range. The data was retained. The high value reflects the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish gets caught in the probe guard cup.
10/23/03 00:00:00 1978.2

Zeke's Basin, November

For the following dates and times, data are suspect. Rain was documented on 11/19/03 through 11/21/03, therefore suspect data may possibly be due to a weather event. Specific Conductivity, salinity, dissolved oxygen, pH, and turbidity were all affected.
11/12/03 20:30:00 through 11/22/03 06:30:00

During the following dates the turbidity data were outside of the sensor's range. The data were retained. The high value reflects the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish gets caught in the probe guard cup. The small negative turbidity values could be a result of the probe's resolution or contamination of the zero standard when the probe was calibrated.

11/5/2003	8:00:00	1532
11/12/2003	22:00:00	1002
11/12/2003	22:30:00	1699
11/12/2003	23:00:00	1756
11/12/2003	23:30:00	2381
11/13/2003	0:00:00	1562
11/13/2003	0:30:00	1774
11/13/2003	1:00:00	1626
11/13/2003	1:30:00	1318
11/13/2003	2:00:00	1505
11/13/2003	2:30:00	1531
11/13/2003	3:00:00	1536
11/13/2003	3:30:00	1382
11/13/2003	4:00:00	1286
11/13/2003	15:30:00	1216
11/13/2003	16:00:00	1511
11/14/2003	9:30:00	1508
11/14/2003	10:00:00	1068
11/17/2003	15:00:00	1099
11/17/2003	15:30:00	1096
11/17/2003	16:00:00	1025
11/17/2003	17:30:00	1676
11/17/2003	19:00:00	1265
11/17/2003	20:00:00	1175

11/18/2003	9:30:00	1430
11/18/2003	13:00:00	1119
11/18/2003	15:30:00	2380
11/18/2003	16:30:00	1572
11/18/2003	18:30:00	1320
11/18/2003	19:30:00	1768
11/18/2003	20:30:00	1926
11/18/2003	21:30:00	1181
11/19/2003	3:00:00	1058
11/19/2003	5:30:00	1970
11/19/2003	9:30:00	1950
11/19/2003	10:00:00	1017
11/19/2003	10:30:00	1323
11/19/2003	13:00:00	1418
11/19/2003	14:00:00	1380
11/19/2003	22:30:00	1448
11/21/2003	12:30:00	1243
11/28/2003	20:00:00	1321
11/28/2003	20:30:00	1108

Zeke's Basin, December

During the following date and times the turbidity data were outside of the sensor's range. The data were retained. The high value reflects the turbid conditions that occur during heavy rainfall and high wind events, when the probe is covered by sediment, or if a fish gets caught in the probe guard cup.

12/30/2003	09:30:00	2554.3
12/30/2003	15:00:00	2568.1

12) Missing data:

Missing data are denoted by a period in the data set. All periods were later removed for dissemination purposes and left blank. Data are missing due to equipment failure where no probes were deployed, maintenance/calibration of equipment, and elimination of obvious outliers or elimination of data due to calibration problems (both pre and post). For more details on deleted data, see the Data Anomalies Section. To find out more details about missing data, contact the Research Coordinator at the site submitting the data.

13) Post Deployment Information:

End of Deployment Post-calibration Readings in Standard Solutions, uncleaned probes:

[Standards used: DO = 100%; pH = 7.00; Specific conductivity = 50.00
mS/cm;
Turbidity = 0.0 NTU]

Site RC

Date; DO(%Sat.); pH 7; Specific Conductivity 50.00; Turbidity 0; Depth
0.000m

01/14/03; 91.6; 7.14; 49.12; 1.1; -0.090
02/19/03; 104.6; 7.17; 50.1; -0.3; 0.027
03/18/03; 99.7; 7.17; 50.4; 0.0; -0.218
04/22/03; 98.2; 7.0; 51.1; 0.3; 0.122
05/20/03; 106.7; 7.4; 48.70; 1.2; 0.132
06/17/03; 103.0; 7.14; 49.69; 0.4; -0.116
07/02/03; 108.6; 6.94; 50.09; -0.2; -0.044
07/17/03; 100.6; 7.08; 50.61; -0.3; 0.021
08/05/03; 104.5; 7.10; 50.58; -0.4; -0.058
08/15/03; 98.8; 7.05; 50.42; -1.3; 0.076
09/09/03; 100.8; 7.09; 49.4; 0.0; -0.080
10/06/03; 90; 7.10; 44.8; 0.0; 0.004
11/11/03; 99.4; 7.01; 51.01; 0.4; 0.036
12/11/03; 99.6; 7.13; 50.49; -0.4; -0.046
01/21/04; 103.0; 7.10; 49.55; 0.3; 0.094

Site LC

Date; DO(%Sat.); pH 7; Specific Conductivity 50.00; Turbidity 0; Depth
0.000m

01/14/03; 102.2; 7.26; 48.82; 1.3; 0.085
02/19/03; 89.1; 6.96; 51.86; -0.5; 0.023
03/18/03; 98.9; 7.15; 49.98; 0.0; -0.207
04/22/03; 103.9; 7.02; 50.1; 0.6; 0.107
05/20/03; 104.7; 7.03; 50.89; -0.4; 0.135
06/17/03; 56.9; 5.30; 38.26; 0.3; -0.068
07/02/03; 96.1; 6.92; 50.01; -0.6; -0.047
07/17/03; 99.5; 7.25; 51.09; 0.4; 0.066
08/05/03; 101.2; 7.04; 49.37; -0.3; -0.061
08/15/03; 106.4; 7.07; 47.65; 0.1; 0.083
09/09/03; 97.8; 7.16; 49.5; 0.0; -0.087
10/06/03; 95.1; 6.94; 48.30; 0.3; 0.012
11/11/03; 94.9; 7.01; 51.10; 0.8; 0.022
12/11/03; 102.4; 7.4; 50.32; 0.0; -0.004
01/21/04; 103; 7.02; 48.0; -0.1; 0.100

Site EC

Date; DO(%Sat.); pH 7; Specific Conductivity 50.00; Turbidity 0; Depth
0.000m

01/15/03; 99.3; 7.19; 50.50; 1.1; -0.058
02/27/03; 101.6; 7.15; 50.27; -0.8; -0.175
03/19/03; 96.4; 7.18; 50.05; 0.0; 0.016

04/22/03; 97; 7.1; 49.4; 0.2; -0.008
05/20/03; 110.2; 7.25; 43.83; -1.9; 0.145
06/17/03; 137.4; 7.07; 48.81; 0.2; -0.052
07/01/03; 102.9; 7.11; 53.48; -0.4; 0.026
07/17/03; 26.4; 7.05; 50.53; 0.1; -0.023
07/31/03; 121.4; 7.04; 48.76; -0.6; 0.006
08/14/03; 90.2; 7.18; 50.13; -0.5; 0.063
09/11/03; 100.8; 7.22; 51.3; -0.1; -0.118
10/07/03; 130.9; 7.27; 50.16; 0.3; 0.026
11/12/03; 103.3; 7.11; 60.6; 0.5; -0.050
12/12/03; 100.9; 6.97; 50.84; -0.1; -0.011
01/23/04; 104.1; 7.13; 53.55; 0.8; -0.053

Site ZB

Date; DO(%Sat.); pH 7; Specific Conductivity 50.00; Turbidity 0; Depth
0.000m

02/27/03; 101.3; 7.18; 50.55; -0.2; -0.070
03/19/03; 100; 6.9; 50.5; 0.0; 0.018
04/22/03; -50; 7.05; 50.6; 0.2; 0.028
05/20/03; 105.5; 6.99; 49.75; 0.0; 0.151
06/17/03; 94.8; 7.27; 49.41; 0.3; -0.076
07/01/03; 106.3; 6.96; 51.50; -0.3; 0.030
07/17/03; 101.9; 7.06; 49.73; 0.373; -0.024
07/31/03; 112.2; 7.27; 52.06; -0.3; -0.004
08/14/03; 97.4; 6.98; 49.12; -1.3; 0.064
09/11/03; 101.3; 7.06; 51.8; -0.2; -0.120
10/07/03; 99.9; 7.17; 50.03; 0.3; 0.031
11/12/03; 92.9; 7.07; 48.95; 0.2; -0.051
12/12/03; 101.0; 7.02; 50.75; -0.1; -0.011
01/23/04; 99.7; 7.25; 50.31; 0.4; -0.056

14) Other remarks:

On 07/01/2021 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.

Date/Time stamps were slightly off for many of this year's data sets due to a glitch in the YSI EDS software. Time stamps were corrected to reflect half hour sampling increments.

Hurricane Isabel passed over the area on 18 September 2003.

High turbidity values above instrument's top range (1000 NTU), caused by blockage of light transmittance by an obstruction are left in the file.

Whenever specific conductivity or salinity data (referred to as conductivity data) were suspect, consider DO data in mg/l and depth suspect as well, since specific conductivity is used to calculate depth and DO data in mg/l.

Negative or zero depth readings were not deleted if the salinity and DO readings indicated that the sonde was submerged during these periods.

There is a consistent problem with the position of the East Cribbings sonde.

The sonde is located in a deep area between a sandbar and the shore. At high tide, it is difficult to tell if the sonde was positioned correctly and as a result the sonde is sometimes positioned on the incline from the sandbar, which accounts for the various depths depicted in the data and the graphs.