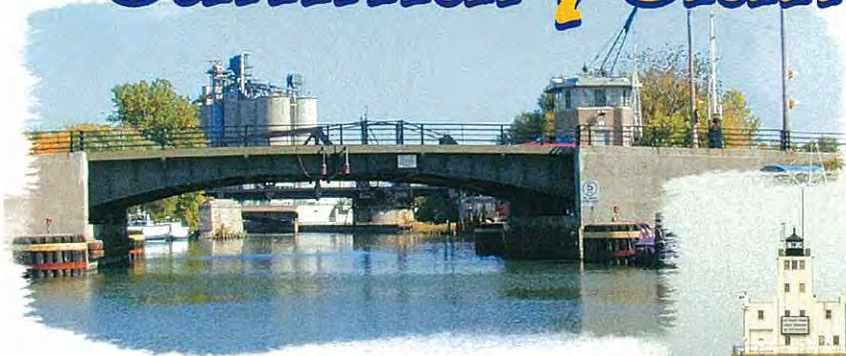




Water Quality Monitoring Data

Summary Statistics 2008



***Compiled by the Water Quality Research Department
Milwaukee Metropolitan Sewerage District***

MILWAUKEE METROPOLITAN SEWERAGE DISTRICT (MMSD) SURFACE WATER QUALITY MONITORING PROGRAM DATA SUMMARY STATISTICS REPORT - SURVEY DESCRIPTIONS

Overview

The goal of the Milwaukee Metropolitan Sewerage District (MMSD) water quality monitoring program is to document long term beneficial water quality improvements as a direct result of the facilities and watercourse improvement projects, nonpoint pollution prevention programs, and stormwater management plans. The monitoring strategies developed by the District support and substantiate the District's goals and policies of improved water quality and environmental protection.

In 1979 the District began its surface water quality-monitoring program to comply with the spirit of the Federal Water Pollution Control Act objectives and State water quality standards. Since the completion of the Inline Storage System (ISS) in 1993, the District has substantially reduced overflows helping to significantly improve Milwaukee-area water quality. Another component to the District's mission is to protect and manage the area's water resources through flood management planning/implementation. Both the reductions of CSO's and improvements made in managing floods are further justification to document long term, surface water quality trends within the District's service area.

In order to afford the MMSD greater spatial coverage, the 2008 Water Quality Monitoring program includes thirteen different surveys. Three surveys monitor Lake Michigan conditions near our wastewater treatment plants (Outer Harbor and South Shore surveys) and background Lake conditions (Nearshore survey). The District also conducts nine other surveys to monitor the effects of our operations and improvements made to our facilities and from our flood management efforts. These surveys include Rivers (Milwaukee, Menomonee, and Kinnickinnic), Little Menomonee River, Root River, Lincoln, Oak, Southbranch, Indian, Fish, Underwood, and Honey Creeks.

The information that follows lists additional details about this program, the rationale for monitoring area surface waters and the related laboratory variable names and detection limits used to assist with data interpretation. Data analysis for this report includes two parts, statistical summaries of the physical, chemical and biological analytical data from each monitoring site and box plots showing trends in the summarized data dating back to 1980 where available. Due to the extent of box plot trend analysis for 105 sites and 42 variables, it was decided to select some key indicator variables and show trends of select sites that would spatially represent the surveys. The box plots show a comparison of the median and percentile values for up to 14 years prior to the ISS completion, 15 years after ISS completion, the past three years (2006-2008) and the current year of analysis (2008). Results that are below the laboratory method detection limit are included as a zero value.

Monitoring Seasonal Time Frame/Frequency

Water quality monitoring of the local area rivers occurs year round. Winter sampling frequency is dependent on ice conditions on the waterways. As ice conditions recede more surveys are added to the schedule. The District's water quality monitoring program survey schedule is generally conducted on a biweekly basis. Due to sampling logistics and safety concerns, the Nearshore Lake survey is conducted 4-7 times in a sampling season, approximately 3 weeks between collection dates. The biweekly monitoring program will address by random design both dry and wet weather-sampling periods.

Monitoring Depth

The District's routine water quality monitoring program provides for sampling the water column at various depths depending on the specific depth of a particular monitoring location. Exact sampling depths at any location may vary from year to year or week to week depending on lake levels, seiches, dam operation and precipitation. Generally, three samples are collected at sites greater than four meters in depth (one meter below the surface, one meter above the bottom, and mid-depth point). Locations less than four meters in depth are generally sampled at either two depths (one meter below the surface and one meter above the bottom) or one depth (mid-depth) depending on site conditions. Samples are collected from mid-channel or where the predominance of flow is occurring at each location. Samples for metals tests are collected at mid-depth at sites greater than 4 meters depth and at the surface for shallower monitoring sites.

Monitoring Variables

In all, there are 44 types of water quality analyses listed in this data summary report. Each sample's tests may vary by survey type and depth due to method specifications, scientific judgement and costs. Where feasible the variables analyzed for each survey are kept consistent for data assessment purposes.

Types of Surveys

The District's surface water quality monitoring program is presently engaged in both Lake Michigan and River/Creek surveys including the following:

Outer Harbor (East of Jones Island Wastewater Treatment Plant)

Major Rivers (Milwaukee, Menomonee, Kinnickinnic Rivers)

Fish Creek

Southbranch Creek

Indian Creek

Lincoln Creek

Underwood Creek

Little Menomonee River

Honey Creek

South Shore (East of the South Shore Wastewater Treatment Plant)

Oak Creek

Root River

Nearshore (Nearshore zone of Lake Michigan)

The sampling rationale for the various monitoring surveys is briefly explained below.

Outer Harbor

Data collected from this area (Figure 1) on a biweekly basis are utilized to evaluate the impact that the Jones Island and river discharges are having on the quality of this part of the Lake that is intensively used for recreational boating and fishing. Sampling sites for this effort were selected based upon their position relative to the effluent outfall at Jones Island and the movement of water (or currents) found in the area. Samples are collected at 15 different locations. The point identified as OH-02 is the existing outfall for the Jones Island Wastewater Treatment Plant. As a point of reference the distance from Outer Harbor sampling point OH-7 to Outer Harbor sampling point OH-14 is one mile.

Rivers

Extensive monitoring of the three major river systems (Figure 2) within the District's sewer service boundaries provides baseline data for measuring and documenting potential sources of pollution both inside and outside the District boundaries. Water quality improvements as a direct result of facility and watercourse planning and systems operations can also be measured through the use of this survey's sampling results. There are 28 sites that are routinely monitored for this survey (designated "RI" and a site number). There are several additional sites listed in Figure 2 that have either been monitored in the past or are associated with specific event monitoring projects.

- Milwaukee River - The Milwaukee River is the largest river within the District's Service area and is currently recognized by community leaders as an important recreational water resource within the metropolitan area. This River enters the District at Pioneer Road (County Trunk C) from the north after passing through 86% of its drainage area. This monitoring effort was started in 1980 to provide baseline data for the Water Pollution Abatement Plan (WPAP) and will enable the District to assess its positive effects on water quality over time. In addition, recent plans for flood management improvements by MMSD on tributaries to this river will also be evaluated by utilizing current and historical water quality monitoring databases.
- Menomonee and Kinnickinnic River Surveys - Basically these two rivers have all of their respective watersheds within the boundaries of the District's service area. Water Quality improvement may result through the control of Combined Sewer Overflows (CSO) discharges and by the elimination of various discharge points which represent relief bypasses. Significant improvements in water quality due to the WPAP may be noted in these two rivers. However, uncontrolled, nonpoint sources of pollution may continue to have impacts. Also, evaluation of current and future flood management improvements, as part of MMSD's Watercourse Management Plan, will rely heavily on water quality data for these waters. Data collected will be useful to evaluate all of these factors.

The Menomonee River Valley has also been recently cited as having a promising potential for economic development. Continued water quality monitoring could help in planning that development.

Fish Creek

Fish Creek (Figure 3) is mainly located along the border between Milwaukee and Ozaukee counties in the Village of Bayside and the City of Mequon. The stream emerges from a storm sewer outfall at the south side of Donges Bay Road just west of Port Washington Road in the City of Mequon. Fish Creek drains directly into Lake Michigan 3.43 miles downstream from the source. Major precipitation events result in rapid surface runoff to Fish Creek, thereby causing a flashy response in this stream. This further results in significant flooding in the Village of Bayside. The District is in the process of evaluating options to reduce flooding as well as decreasing erosion along Fish Creek.

This survey is conducted 8 times per year (once a month, April - November) and has two sampling sites (FC-01 and FC-02). The Fish Creek survey was added to the District's monitoring program in 2002 in order to collect baseline data. If construction type improvements are chosen as a means to manage flooding problems in this watershed, then the water quality monitoring data will help in documenting and planning this process.

Southbranch Creek

This creek, (Figure 4) approximately 1.5 miles long, drains a 2.95 square mile area within the Villages of Brown Deer, River Hills and the City of Milwaukee before it enters into the Milwaukee River. The entire watershed lies in an urban setting and drains by means of a storm sewer system. Southbranch Creek has a

long history of flooding. Residential neighborhoods along the creek periodically flood during significant storms. In response to this recurring problem the MMSD along with other concerned parties have developed a flood management plan intended to minimize flooding. Highlights include the installation of four stormwater detention basins, the replacement of some culverts and deepening a section of the creek. Water quality monitoring in this watershed was added to the District's sampling program in 1999 to obtain data before, during and after the implementation of the flood management and environmental restoration project. This survey is conducted 10 times per year, once per month in the spring and autumn and twice per month during the summer of each year. The 4 sampling sites are designated with a "SB" and a site number.

Indian Creek

Indian Creek (Figure 5) is a major tributary of the Milwaukee River located in northern Milwaukee County. The creek, 2.6 miles in length, originates in the Village of Bayside near the intersection of East Brown Deer Road and North Rexleigh Drive. The Creek flows in a generally southwest direction through the Village of Fox Point, crosses Interstate 43 at the boundary of Fox Point and the Village of River Hills, and has its confluence with the Milwaukee River just south of Bradley Road in River Hills. Large storms typically cause flooding in this watershed.

This survey is conducted 8 times per year (once a month, April - November) and has four sampling sites (IC-01 through IC-04). The Indian Creek survey was added to the District's monitoring program in 2002 in order to collect baseline data. This stream will continue to be monitored during any construction and for several years after construction is completed. This will allow any changes in water quality, due to watercourse improvements, to be documented.

Lincoln Creek

This creek (Figure 6) enters the Milwaukee River downstream Silver Spring Drive (RI-03) and is north of our Port Washington Road sampling site (RI-04). Lincoln Creek is approximately nine miles in length and drains a 21-square mile watershed. There is a history of this creek having poor water quality and flooding problems due to urbanization within its watershed. In response to these problems the District along with other concerned parties have developed and implemented a flood management plan which involves environmental restoration, creation of wetland stormwater detention areas, changes in creek channel morphology, streambank erosion controls and improvement in creek bed substrate. Water quality monitoring in this watershed was added to the District's sampling program in 1997 to obtain data before, during and after the implementation of this plan. This survey is sampled once per month; April through November. The 5 sampling sites (designated "LC" and a site number) cover nearly 90% of the creek, from the headwaters to within a half mile of its confluence with the Milwaukee River.

Underwood Creek

Underwood Creek (Figure 7) originates in the City of Brookfield and flows approximately 8 miles, in a southeasterly direction, to its confluence with the Menomonee River. The Underwood Creek subwatershed encompasses approximately 19.8 square miles and includes portions of the communities of Brookfield, Elm Grove and Wauwatosa. The Underwood Creek subwatershed is comprised of the Underwood Creek mainstem, Dousman Ditch, and the South Branch of Underwood Creek. The majority of Underwood Creek (UC) and the South Branch of UC are in a concrete lined channel. The South Branch of UC flows 1.6 miles in a northerly direction from its origin at West Greenfield Avenue to its confluence with Underwood Creek near West Bluemound Road. The South Branch of UC flows through the cities of Milwaukee, West Allis, Brookfield, and New Berlin. Flooding problems have occurred in the UC subwatershed and sections of this creek have been scheduled for flood management improvements.

Underwood Creek was added to the MMSD sampling program in 2003 and includes two sites on the South Branch of UC and 5 sites on the Underwood Creek mainstem. Surveys are scheduled once a month from

April – November. The monitoring plan is to collect data for several years prior to any stream improvement projects, during construction and for several years after construction is completed to compare and document water quality changes in this watershed.

Little Menomonee River

The Little Menomonee River (Figure 8) originates in southern Ozaukee County near Freistadt Rd. and flows in a mostly southerly direction for a distance of approximately 10 miles to its confluence with the Menomonee River near Highway 100 and Hampton Avenue (Timmerman Field airport area). The Little Menomonee River subwatershed encompasses approximately 21.8 square miles, or nearly 16 percent of the Menomonee River watershed and includes portions of the communities of Mequon, Germantown and Milwaukee. It is entirely confined within the borders of Ozaukee and Milwaukee counties.

The Little Menomonee River was added to the MMSD monitoring program in 2007 and includes two sites (MI-01 and MI-02). Surveys are scheduled to be sampled twice a month (March - December) and are completed concurrently with the Menomonee River survey. The monitoring plan is to collect data from this subwatershed in order to assess water quality impacts stemming from the Little Menomonee River.

Honey Creek

Honey Creek (Figure 9) originates at the S. 43rd Street storm sewer outfall in the City of Greenfield and flows in a northerly direction for approximately 8.8 miles until its confluence with the Menomonee River in the City of Wauwatosa. The Honey Creek subwatershed encompasses 11 square miles and includes portions of the communities of Greenfield, Milwaukee, Wauwatosa, and West Allis. Channel modifications such as deepening, straightening, and lining with concrete have been made to 7.1 miles of Honey Creek. The Creek flows under State Fair Park in an enclosed channel that consists of 3 – 10 foot by 15 foot pipes. The Honey Creek subwatershed has experienced minor flooding problems, but the biggest problem with this Creek has been the ecological degradation and habitat loss due to channel modifications.

Honey Creek was added to the MMSD sampling program in 2003 and includes five sampling sites (HC-01 - HC-05). This survey is conducted 8 times per year (once a month, April - November). Baseline monitoring data is being collected to assist with future flood management planning efforts.

South Shore

Data collected from this area (Figure 10) on a biweekly basis is used to assess the impact of the discharge of the South Shore Wastewater Treatment Plant on the local environs of Lake Michigan. The point identified as SS-01 is the point of discharge from the South Shore Wastewater Treatment Plant. A major drinking water plant intake (Oak Creek) is located approximately one-mile southeast of SS-01.

As with the Outer Harbor Survey, sample locations were based upon the Lake currents found in the area and relative position of a selected sampling site to the outfall. Samples are collected at three depths at each site in a scheme similar to the Outer Harbor effort. The distance from SS-1 to SS-3 is 1,000 feet; the distance from SS-1 to SS-11 is 3,000 feet.

Oak Creek

This stream (Figure 11) lies completely within the District boundaries. Oak Creek flows into Lake Michigan about two miles north of the MMSD's South Shore WWTP. Knowledge of its water quality is helpful in determining impacts to the Lake's nearshore area. When monitoring began for the Oak Creek survey in 1985 the area was primarily rural drainage basin. Since then it has undergone significant development. Urbanization will increase the flows that the stream will be required to handle. The objective of the District is to monitor the resulting water quality changes over time. Oak Creek is a part of the District's facility and

watercourse management planning initiatives. This survey is sampled once per month; April through November. There are 7 sampling sites monitored for this survey and are designated with "OC" and a site number.

Root River

This river (Figure 12) drains approximately 197 square miles within Milwaukee, Waukesha, Racine and Kenosha counties. There is a history of low storm sewers within this river's watershed (potential for water back up) and flooding problems due to increasing urbanization within its watershed. In response to these problems, the District along with other concerned parties, are working on a flood management plan that may involve environmental restoration, creation of wetland stormwater detention areas, changes in creek channel morphology, streambank erosion controls and improvement in riverbed substrate. Water quality monitoring in this watershed was added to the District's sampling program to obtain data before, during and after the implementation of this plan.

This survey is conducted 10 times per year, once per month in the spring and autumn and twice per month during the summer of each year. The six sampling sites (designated "RR" and a site number) cover the upper 72 square miles of the watershed located within the District's service area.

Nearshore Lake Michigan

The purpose of this effort is to provide a data base for the District to assess the impact of MMSD discharges as well as all other sources of pollution, including stormwater runoff, on overall nearshore water quality. The scope of this effort overlaps those efforts being undertaken in the Outer Harbor and at South Shore and is conducted on a monthly basis (weather dependent). Some of this survey's sites are located at a distance from shore to provide data for determining Lake background levels. Lake background information has been useful in developing some of the District's effluent limitations and permit discharge fees. Sites located a distance from shore and are not one of the sites that overlap our Outer Harbor or South Shore efforts have a reduced list of variables tested. This is due to historical results that show values less than the method detection limit or very low concentrations for that test and were consequently removed from the list of tests requested for Lab analysis. The 14 points (Figure 13) sampled during this survey cover the area of the nearshore environs of Lake Michigan from Fox Point on the north to Wind Point on the south and from the western shore of Lake Michigan to a point ten miles east of the western shore. Sample sites are designated as "NS" and a site number. The total area of lake covered by this survey is over 300 square miles.

Data Usage

The data generated by the District's surface water quality and other related environmental monitoring programs have been utilized extensively in-house as well as by other agencies and/or organizations and individual citizens.

Also, this data has allowed other public agencies to make informed, defensible decisions regarding Milwaukee's valuable surface water resources. Examples of uses for this data include the MMSD 2020 Facilities Plan (developed by multi-agency and citizen stakeholder committees) and the Regional Water Quality Management Plan (required under the Clean Water Act) that has been recently updated by the Southeastern Wisconsin Regional Planning Commission. This type of long-term, comprehensive information has provided a service to the community by eliminating the need for smaller, more expensive piecemeal projects that would be required each time a specific need for information arises.

The District's comprehensive and aggressive surface water quality monitoring program reflects the District's commitment to the improvement and preservation of the community's surface water resources and it should be continued for use in future water resource decisions for the Milwaukee metropolitan area.

Abbreviations Legend for MMSD Water Quality Data – 2008

Variable Abbr. & name	Units of Measure
pH	Std. Units
TEMP - Temperature	Degrees Celsius
DO - Dissolved Oxygen	mg/L
Ammonia - Ammonia Nitrogen	mg/L
Nitrite - Nitrite Nitrogen	mg/L
Nitrate - Nitrate Nitrogen	mg/L
TKN - Total Kjeldahl Nitrogen	mg/L
PHOS – Phosphorus	mg/L
SOLPHOS - Soluble Phosphorus	mg/L
SOLSIL -Soluble Silica	mg/L
CHLA - Chlorophyll "a"	mg/m ³
SS - Suspended Solids	mg/L
VSS - Volatile Suspended Solids	mg/L
TS - Total Solids	mg/L
FECAL - Fecal Coliform Bacteria	CFU/100 mL
ECOLIQT - Escherichia coli Bacteria	MPN/100 mL
SPEC - Specific Conductivity	umhos/cm
CHLOR – Chloride	mg/L
CD - Total Cadmium	ug/L
CR - Total Chromium	ug/L
CU - Total Copper	ug/L
NI - Total Nickel	ug/L
PB - Total Lead	ug/L
ZN - Total Zinc	ug/L
CA - Total Calcium	mg/L
MG - Total Magnesium	mg/L
AG - Total Silver	ug/L
AS - Total Arsenic	ug/L
SE - Total Selenium	ug/L
HG - Mercury	ug/L
DS - Dissolved Solids	mg/L
LFC - Log ₁₀ Fecal Coliform Bacteria	CFU/100 mL
HARD – Hardness	mg/L
SCHII - Sechii Disk	meters
TURB – Turbidity	NTU
BOD5/20 - Biochemical Oxygen Demand	mg/L
IXLITE - 1% Light Level (measured with a Photometer)	meters
TNOC - Total Nonpurgeable Organic Carbon	mg/L
TNIC - Total Nonpurgeable Inorganic Carbon	mg/L
TNDOC - Total Nonpurgeable Dissolved Organic Carbon	mg/L
TALK - Total Alkalinity	mg/L

Water Quality Standards/Criteria for MMSD Water Quality Data – 2008

Variable	Standard/Criterion	References
Dissolved Oxygen		
Creeks/Rivers/Harbor	5 mg/L	1
Open Lake	6 mg/l	1
Fecal Coliform Bacteria	200 CFU/100 ml	1
Chloride	395 mg/L	2
Chlorophyll a	5.8 mg/m ³	3*
Total Phosphorus		
Open Lake	0.007 mg/L	4
Creeks/Upstream Menomonee and Kinnickinnic Rivers	0.075 mg/L	4
Downstream Menomonee and Kinnickinnic Rivers All Milwaukee River /Harbor	0.10 mg/L	4

References

1. Wisconsin Department of Natural Resources (WDNR), Wisconsin Administrative Code, NR 102, Register, February, 1998, No. 506.
2. WDNR, Wisconsin Administrative Code, NR 105, Chronic Toxicity Criteria, Register, February, 2004, No. 578.
3. United States Environmental Protection Agency (USEPA), December, 2000. Ambient Water Quality Criteria Recommendations, Rivers and Streams in Nutrient Ecoregion VII: USEPA, Office of Water, EPA 822-B-00-018. * (These values are not standards or criterion, but are recommended criterion that are used in the box plot trend analyses for reference).
4. Wisconsin Department of Natural Resources (WDNR), Proposed Changes to Wisconsin Administrative Code, NR 102, January, 2008.

Summary of Method Detection Limits (MDLs) for 2008 Water Quality Data

<u>Analyte (units)</u>	<u>Source</u> ¹⁻ <u>Reference Method</u>	<u>MDL</u> ²
<i>E. coli</i> (MPN/100 mL)	1-9223B 1-9223B 1-9223B	1/100 mL 10/100 mL (4/11/08, 7/17/08, 8/4/08, 8/7/08, 8/11/08, 8/13/08, 8/14/08) 100/100 mL (3/3/08, 4/1/08, 4/11/08, 6/8/08, 7/8/08, 8/4/08, 9/4/08, 11/12/08, 12/28/08)
Fecal Coliform (CFU/100 mL)	1-9222D 1-9222D 1-9222D 1-9222D 1-9222D 1-9222D	1/100 mL (11/3/08) 2/100 mL (4/23/08, 5/15/08, 5/29/08, 6/19/08, 7/9/08, 7/24/08, 8/12/08, 10/15/08) 3/100 mL 10/100 mL (1/8- 3/3/08, 3/31/08, 4/1/08, 4/9/08, 4/11/08, 4/25/08, 5/30/08, 6/5/08, 6/8/08, 6/23/08, 7/30- 8/4/08, 8/7/08, 9/3- 9/5/08, 9/9/08, 10/6/08, 11/12/08, 11/25/08, 12/28/08) 50/100 mL (6/8/08, 7/17/08, 8/4/08, 8/7/08, 8/11/08, 8/13/08, 8/14/08) 100/100 mL (6/10/08, 6/13/08, 7/8/08)
Hardness (mg/L as CaCO ₃)	3-6010C	NA (calculated)
Lead (µg/L)	3-6010C 3-6010	2.6 µg/L 1.4 µg/L (12/2/08) ³
Magnesium (mg/L)	3-6010C 3-6010C 3-6010	0.04 mg/L (1/8/08, 1/9/08) 0.15 mg/L 0.0237 mg/L (12/2/08) ³
Mercury (µg/L) (Total)	3-7470A	0.1 ug/L ³
Nickel (µg/L)	3-6010C 3-6010C 3-6010	1.8 µg/L (1/8/08, 1/9/08) 1.0 µg/L 0.15 ug/L (12/2/08) ³
Nitrate + Nitrite (mg/L as N)	5-353.2 5-353.2	0.026 mg/L (1/8/08, 1/9/08) 0.020 mg/L
Nitrate (mg/L as N)	5-353.2 5-353.2	0.026 mg/L (1/8/08, 1/9/08) 0.020 mg/L
Nitrite (mg/L as N)	5-353.2 5-353.2	0.002 mg/L (1/8/08, 1/9/08) 0.004 mg/L
Total Kjeldahl Nitrogen (mg/L as N)	2-351.2 2-351.2 2-351.2	0.11 mg/L (1/8/08, 1/9/08) 0.36 mg/L 0.42 mg/L (11/4-11/13/08, 11/25/08) ³
Phosphorus (mg/L as P) Soluble	2-365.1 2-365.1 2-365.4	0.021 mg/L (samples prior to 4/23/08) 0.030 mg/L 0.17 mg/L (11/4/08, 11/12/08, 11/13/08, 11/25/08) ³

Summary of Method Detection Limits (MDLs) for 2008 Water Quality Data

<u>Analyte (units)</u>	<u>Source</u> ¹⁻ <u>Reference Method</u>	<u>MDL</u> ²
Alkalinity (mg/L as CaCO ₃)	4-310.2 4-310.2	15.0 mg/L (1/8/08, 1/9/08) 10.0 mg/L
Ammonia (mg/L as N)	5-350.1 5-350.1 5-350.1 5-350.1	0.012 mg/L (1/8/08, 1/9/08) 0.005 mg/L 0.25 mg/L (11/4/08, 11/12/08, 11/13/08) ³ 0.50 mg/L (11/25/08) ³
Arsenic (µg/L)	3-6010C 3-6010	4.5 µg/L 1.2 ug/L (12/2/08) ³
Biochemical Oxygen Demand (BOD) – 5 day (mg/L) 20 day (mg/L)	1-5210B 1-5210B	2 mg/L 2 mg/L
Cadmium (µg/L)	3-6010C 3-6010C 3-6010	1.7 µg/L (1/8/08, 1/9/08) 2.1 µg/L 0.13 ug/L (12/2/08) ³
Calcium (mg/L)	3-6010C 3-6010C 3-6010	0.22 mg/L (1/8/08, 1/9/08) 0.78 mg/L 0.009 mg/L (12/2/08) ³
Carbon (mg/L as C) Dissolved Organic Nonpurgeable	2-415.2	0.44 mg/L (1/8/08, 1/9/08, 3/3/08, 3/12/08) 0.36 mg/L
Total Inorganic Nonpurgeable	2-415.2	0.44 mg/L (1/8/08, 1/9/08, 3/3/08) 0.36 mg/L
Total Organic Nonpurgeable	2-415.2	0.44 mg/L (1/8/08, 1/9/08, 3/3/08) 0.36 mg/L
Total	2-415.2	0.44 mg/L (1/8/08, 1/9/08, 3/3/08) 0.36 mg/L
Chloride (mg/L)	2-325.2 2-325.2	1.0 mg/L (saniples prior to 8/7/08) 4.0 mg/L
Chlorophyll <i>a</i> (mg/m ³)	1-10200H	0.11 mg/m ³
Chromium (µg/L)	3-6010C 3-6010C 3-6010	1.5 µg/L (1/8/08, 1/9/08) 7.5 µg/L 1.1 µg/L (12/2/08) ³
Copper (µg/L)	3-6010C 3-6010C 3-6010C 3-6010	3.1 µg/L (1/8/08, 1/9/08) 3.7 µg/L 4.0 µg/L (3/12/08) 0.49 ug/L (12/2/08) ³

Summary of Method Detection Limits (MDLs) for 2008 Water Quality Data

<u>Analyte (units)</u>	<u>Source ¹- Reference Method</u>	<u>MDL ²</u>
Phosphorus (mg/L as P)		
Total	2-365.1	0.021 mg/L (samples prior to 4/26/08)
	2-365.1	0.030 mg/L
	2-365.4	0.17 mg/L (11/4/08, 11/12/08, 11/13/08, 11/25/08) ³
PAH (µg/L)	3-8270C	See PAH Lab Report ³
Selenium (µg/L)	3-6010C	6.6 ug/L (1/8/08, 1/9/08)
	3-6010C	9.6 ug/L
	3-6010	1.6 ug/L (12/2/08) ³
Silica (mg/L as SiO ₂)	2-370.1	0.17 mg/L (4/2/08, 4/11/08, 4/15/08)
	2-370.1	0.25 mg/L
Silver (µg/L)	3-6010C	1.9 ug/L (1/8/08, 1/9/08)
	3-6010C	2.0 µg/L
	3-6010C	5.0 µg/L (3/12/08)
	3-6010	0.34 ug/L (12/2/08) ³
Solids (mg/L)		
Suspended	1-2540D	1 mg/L
Volatile	1-2540E	1 mg/L
Total	1-2540B	1 mg/L
Dissolved	1-2540C	1 mg/L
Turbidity (NTU)	2-180.1	0.01 NTU
Zinc (µg/L)	3-6010C	11.0 ug/L (1/8/08, 1/9/08)
	3-6010C	14.0 ug/L
	3-6010	2.6 ug/L (12/2/08) ³

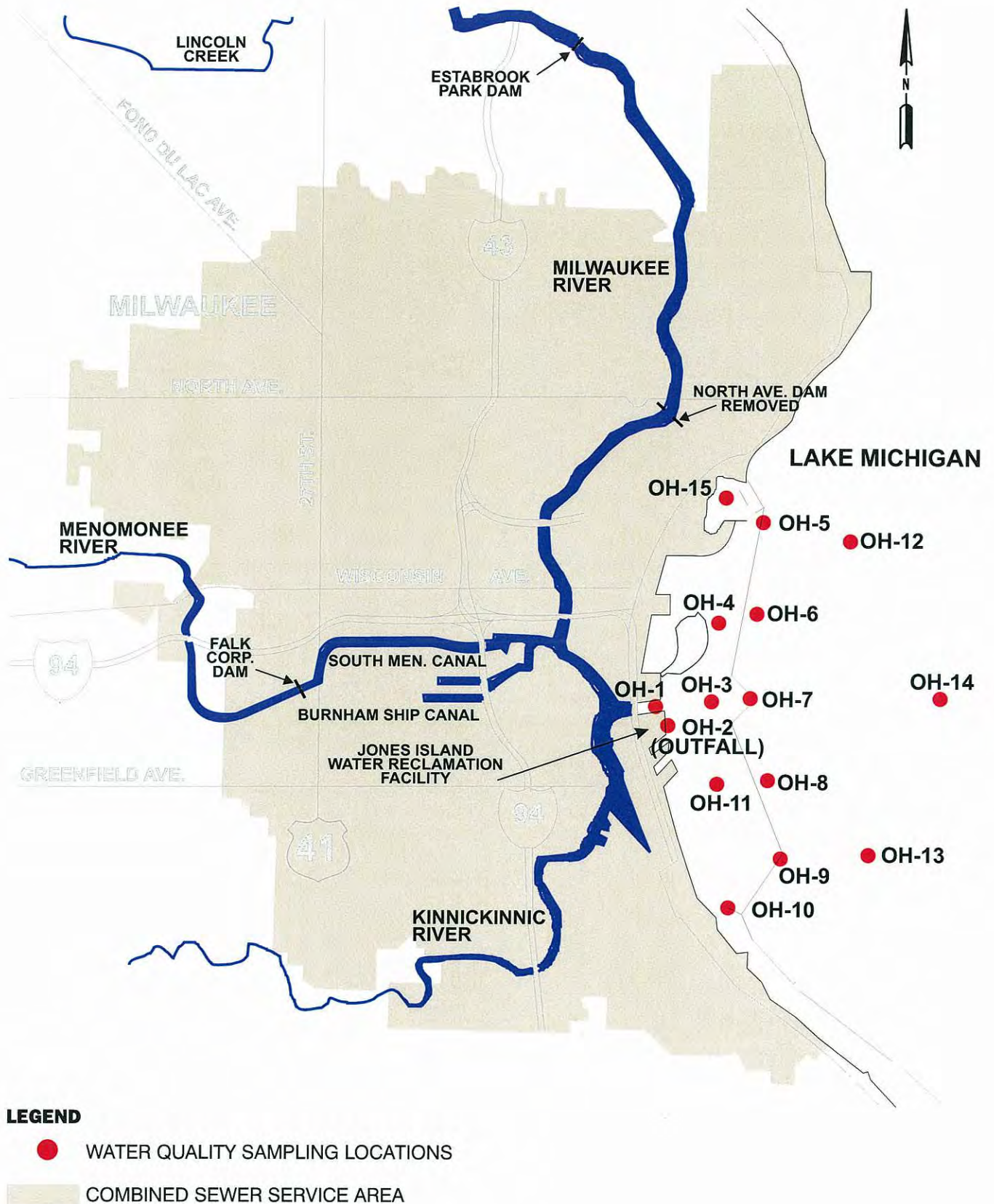
Footnotes

- ¹ See Method References on Page 4.
- ² The MDL value listed is based on a 1:1 dilution. For differences in analyte dilution values consult LIMS (Laboratory Information Management System) Results.
- ³ MDL for samples analyzed at Pace Analytical Laboratory (Green Bay).

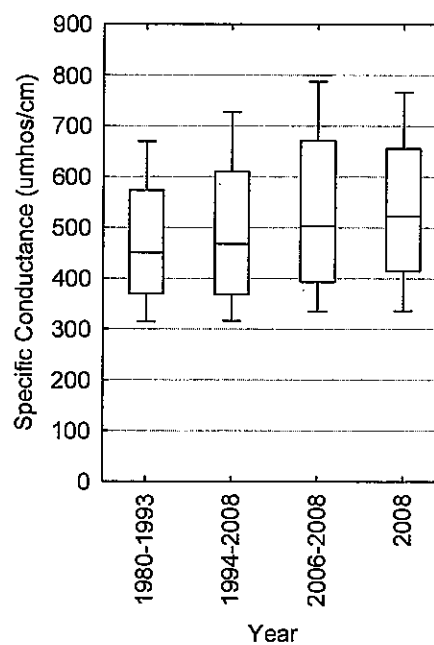
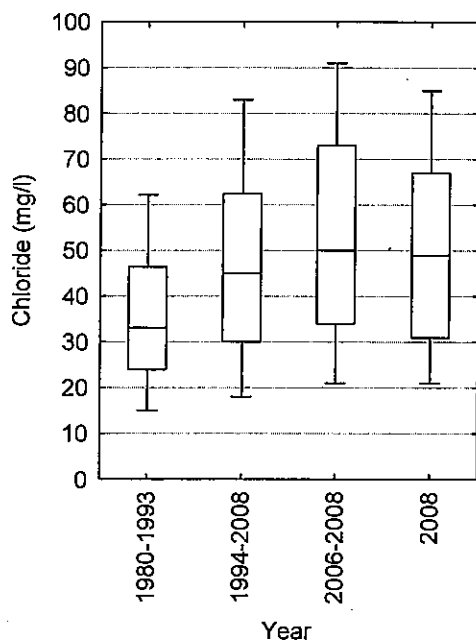
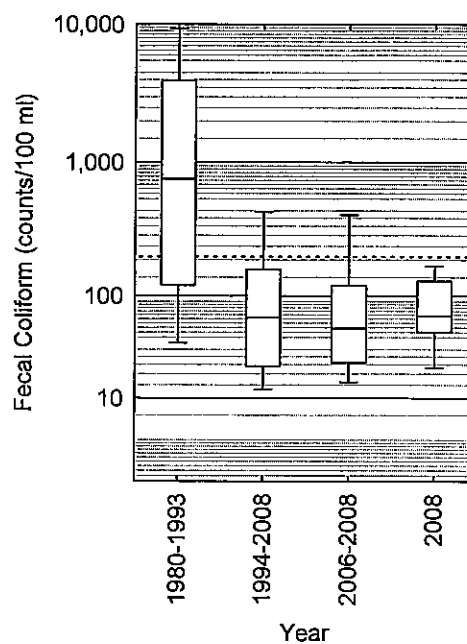
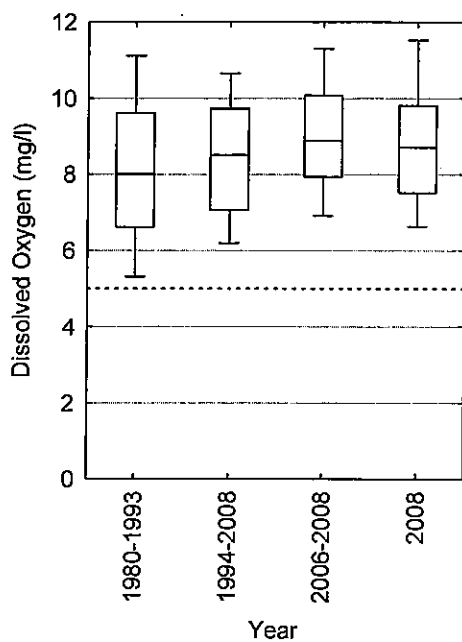
Summary of Method Detection Limits (MDLs) for 2008 Water Quality Data

METHOD REFERENCES

1. "Standard Methods for the Examination of Water and Wastewater," 20th ed., 1998. American Public Health Association (APHA), 1015 15th Street, NW, Washington, DC 20005.
2. "Methods of Chemical Analysis of Water and Wastes," USEPA, EMSL, Cincinnati, OH 45268, March, 1983 (EPA-600/4-79-020).
3. "Test Methods for Evaluating Solid Waste," 3rd Edition. SW846. 1995. USEPA, SWER, Washington, DC 20460.
4. "Methods of Chemical Analysis of Water and Wastes," USEPA, EMSL, Cincinnati, OH 45268, March, 1974 (EPA-600/4-79-020)..
5. "Methods of Chemical Analysis of Water and Wastes," USEPA, EMSL, Cincinnati, OH 45268, March, 1993 (EPA-600/4-79-020).

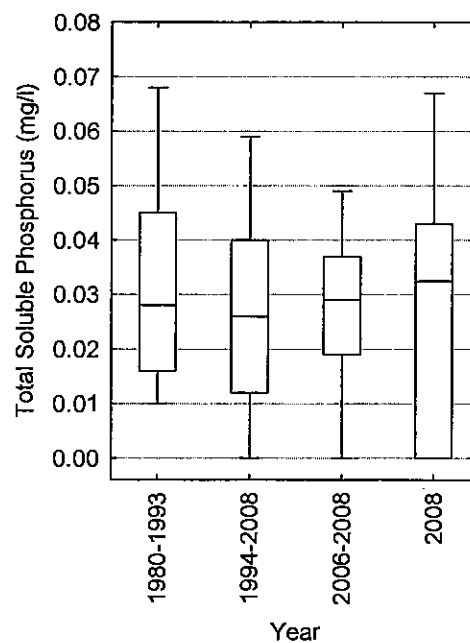
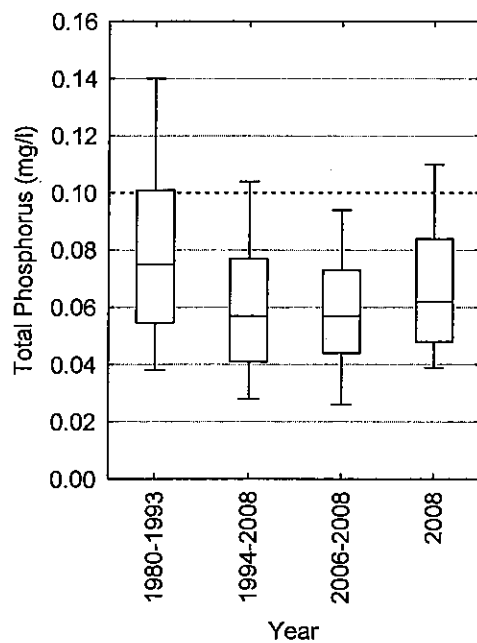
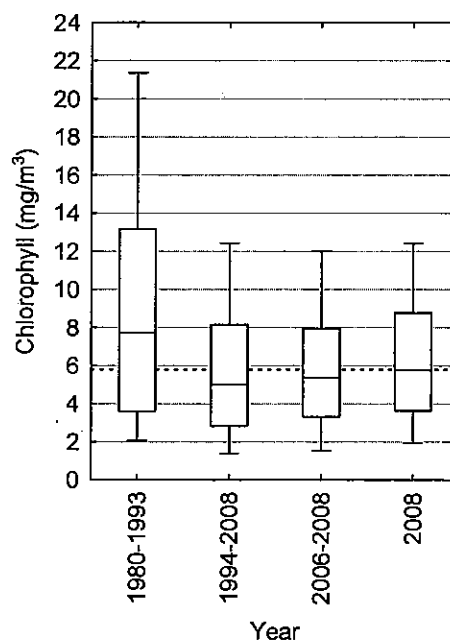
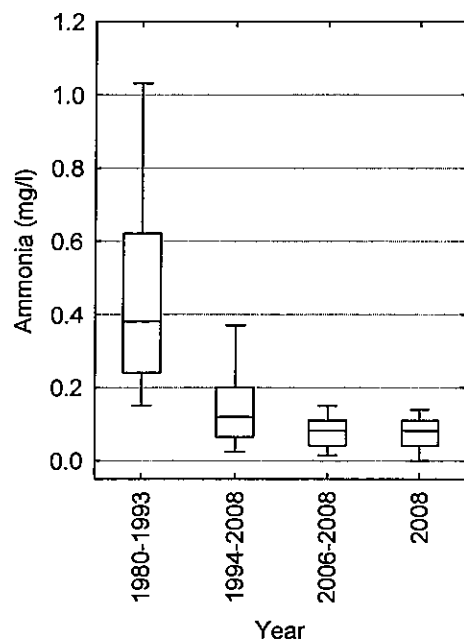


MMSD Water Quality Monitoring Program Data
Outer Harbor, Site OH-01



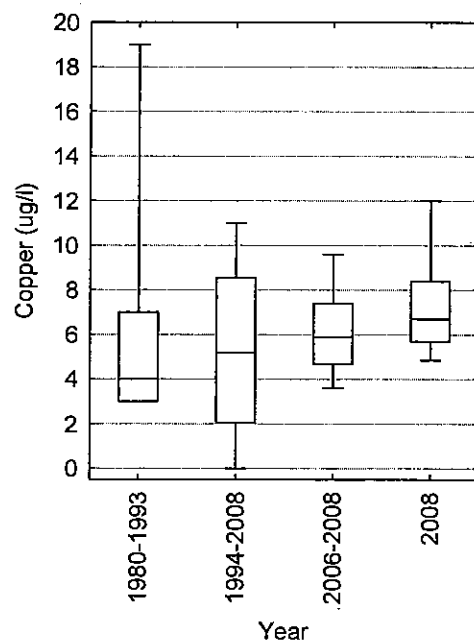
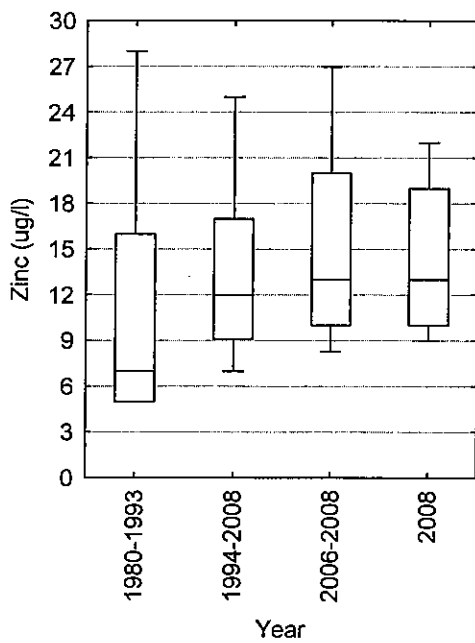
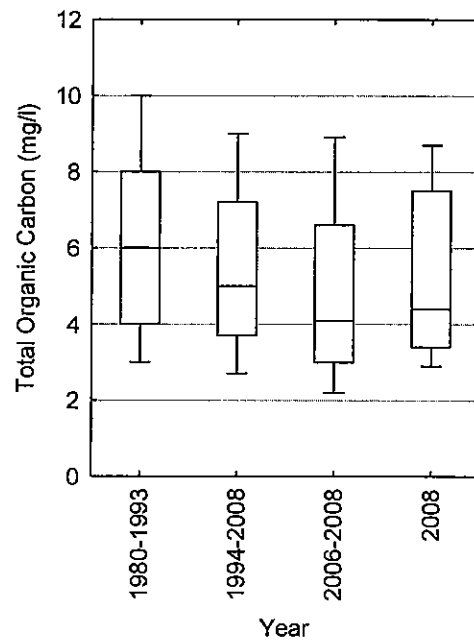
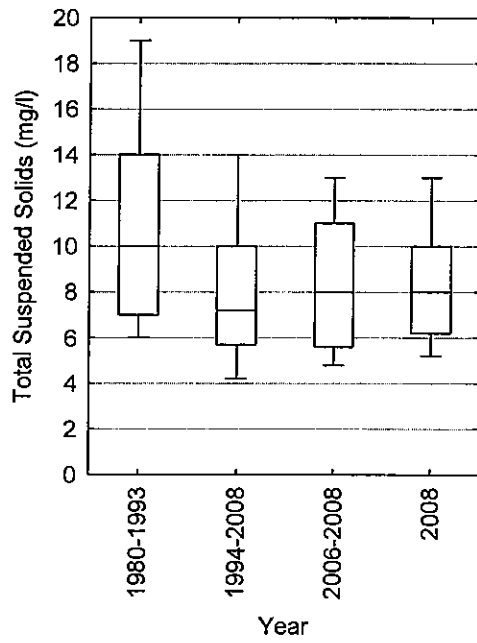
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--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Outer Harbor, Site OH-01



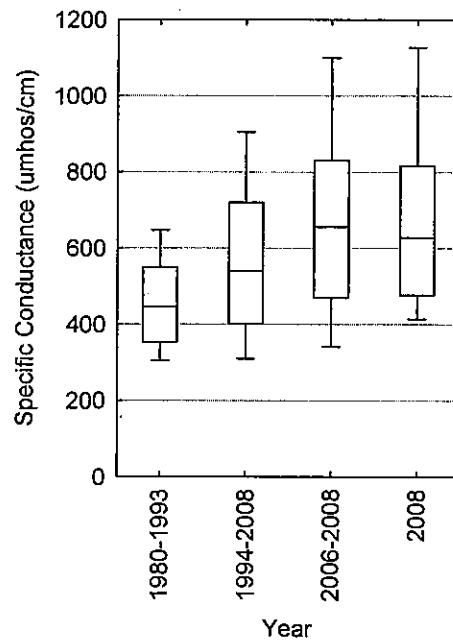
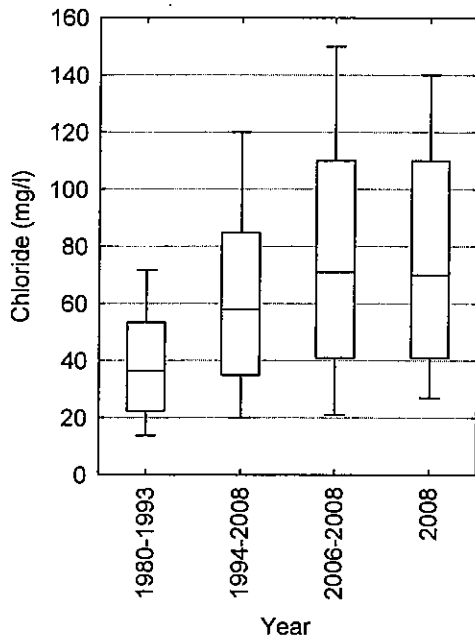
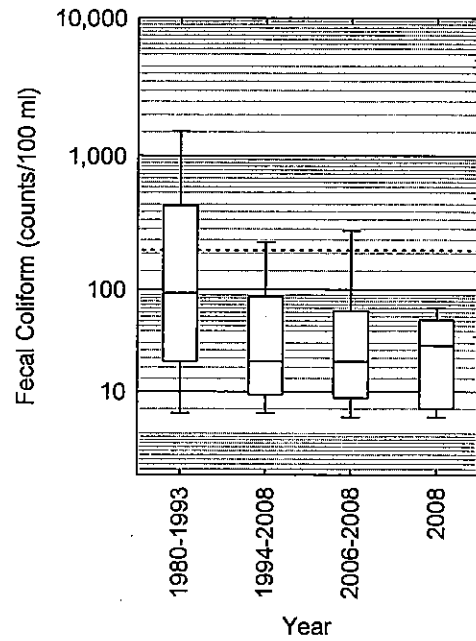
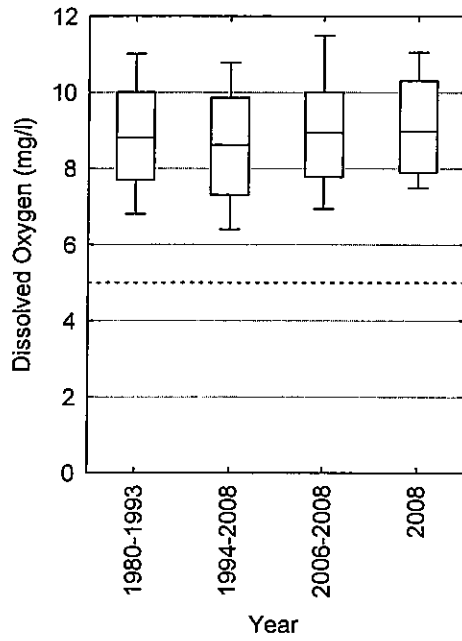
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— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Outer Harbor, Site OH-01



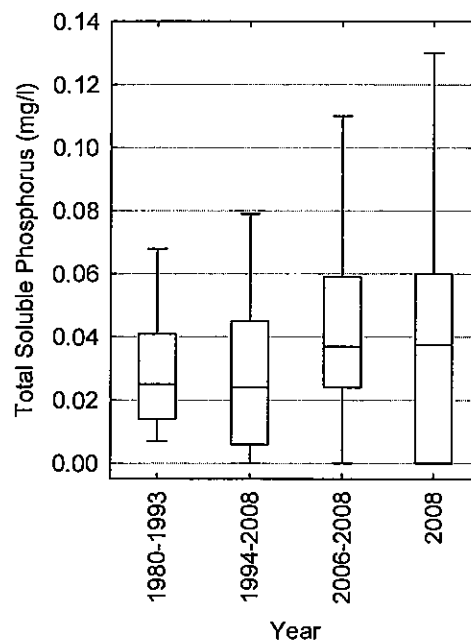
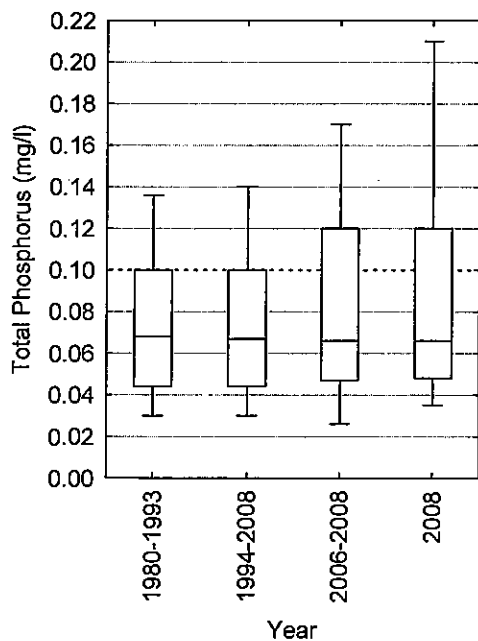
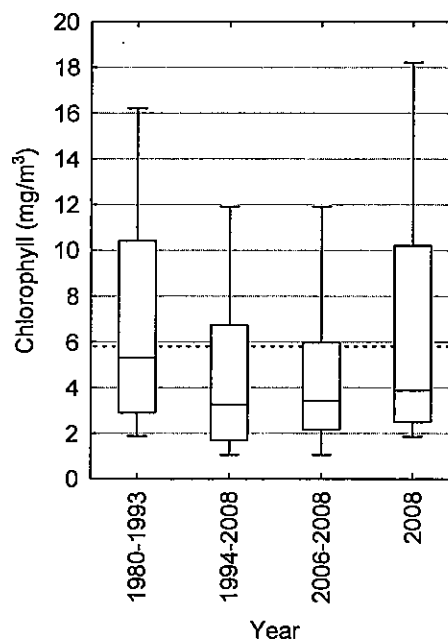
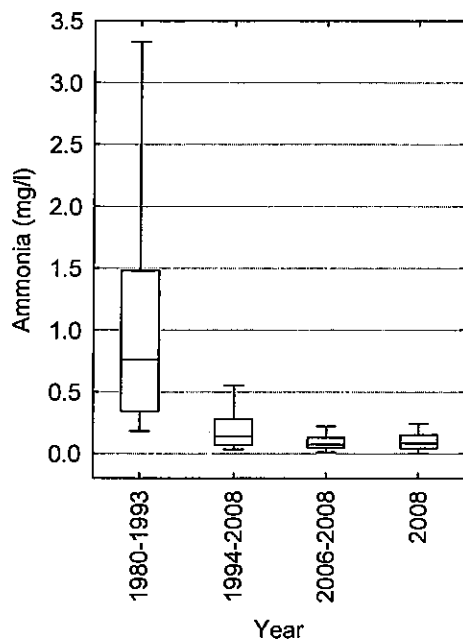
— Median □ 25%-75% ┘ 10%-90%

MMSD Water Quality Monitoring Program Data
Outer Harbor, Site OH-02



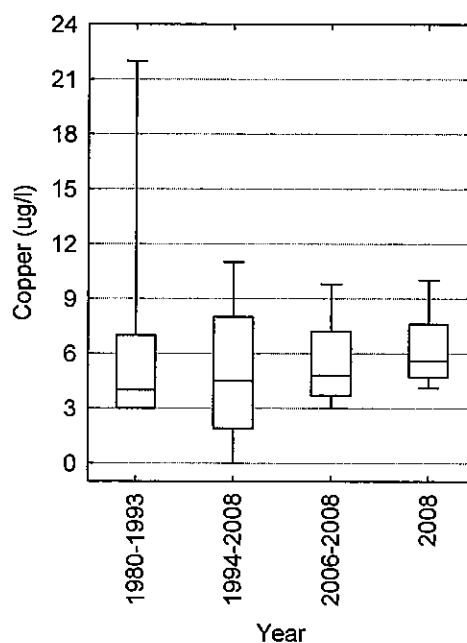
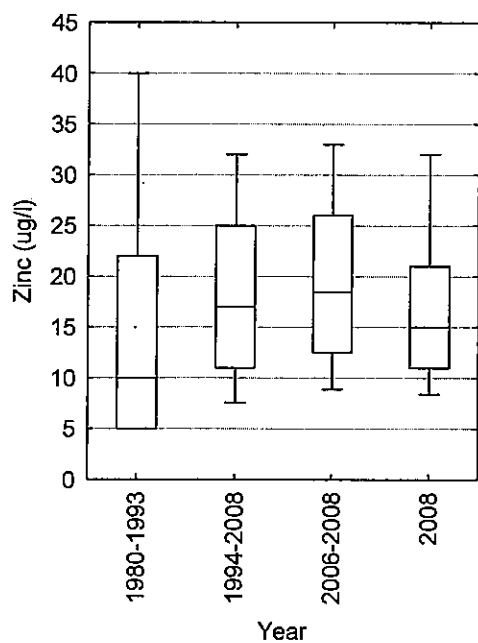
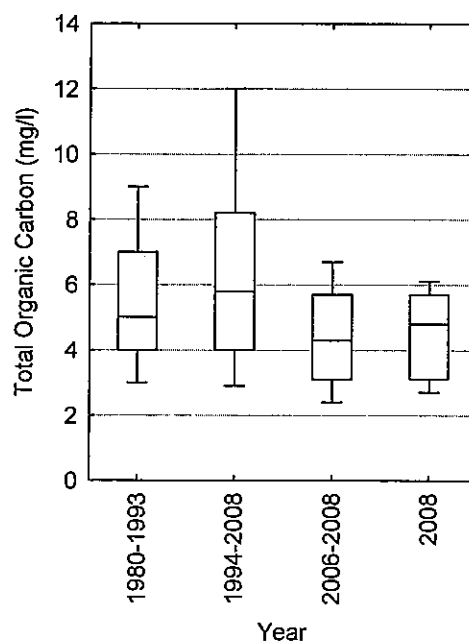
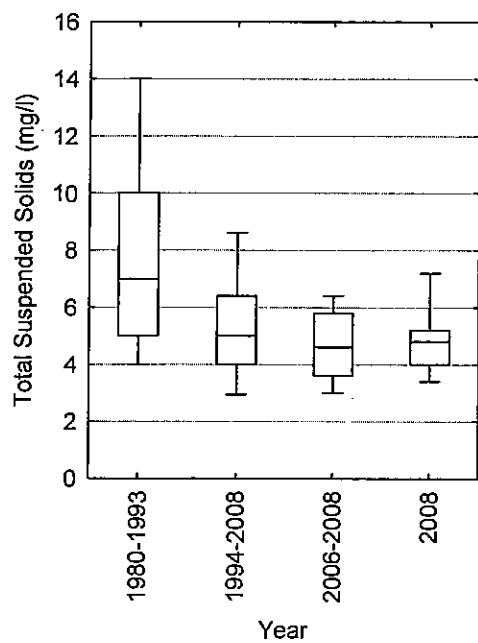
— Median □ 25%-75% ▮ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Outer Harbor, Site OH-02



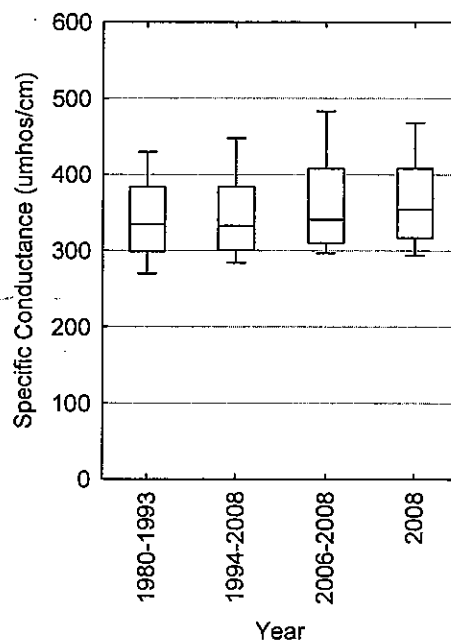
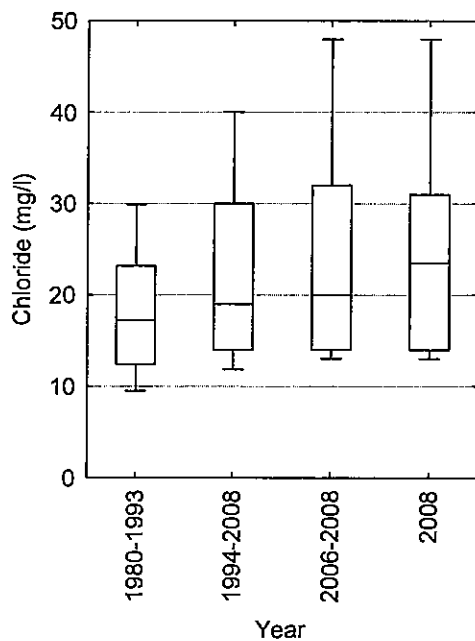
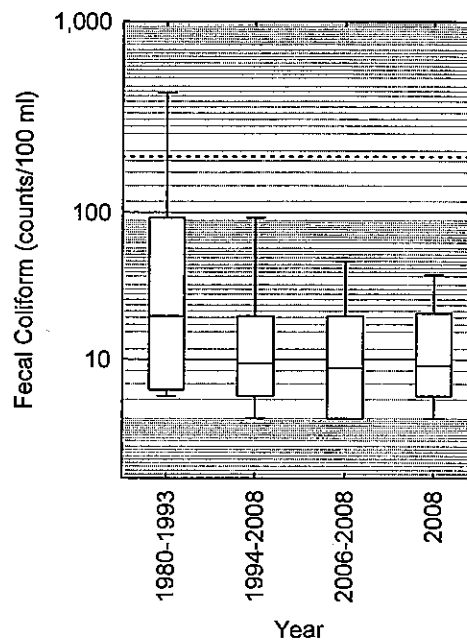
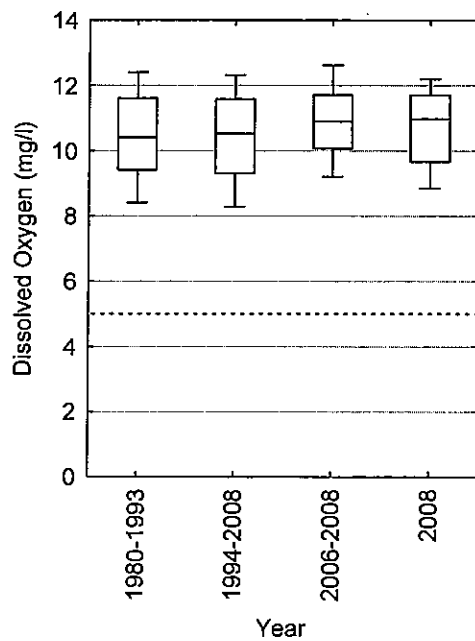
— Median □ 25%-75% ▤ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Outer Harbor, Site OH-02



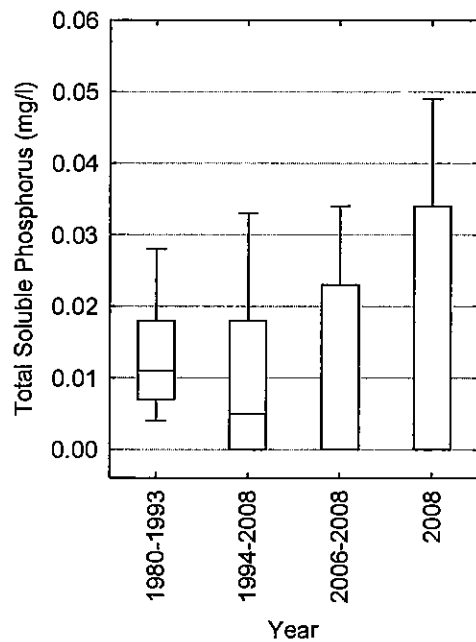
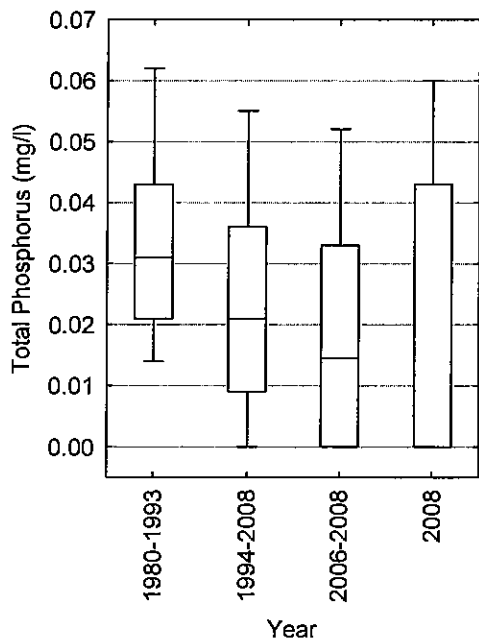
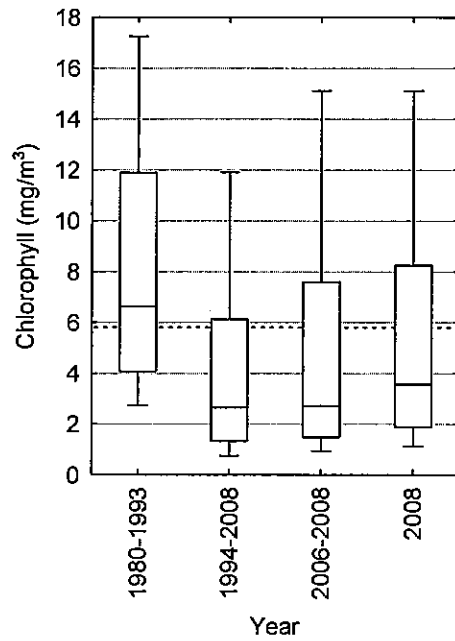
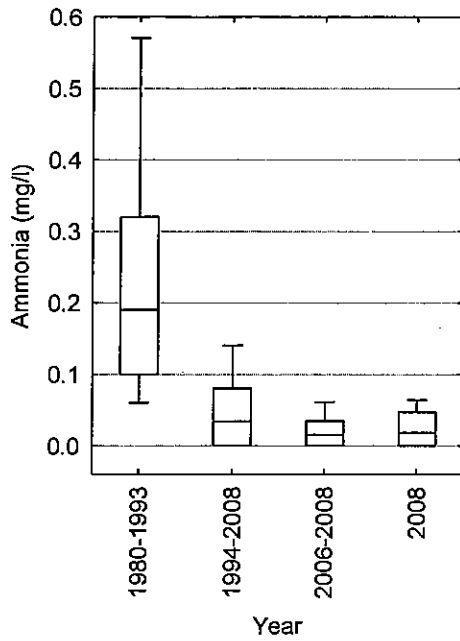
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MMSD Water Quality Monitoring Program Data
Outer Harbor, Site OH-05



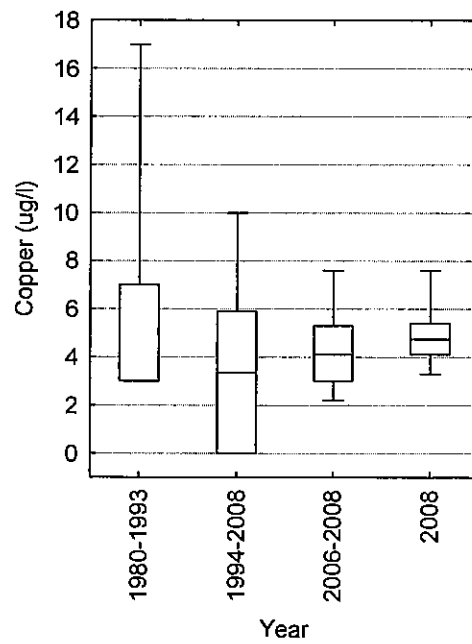
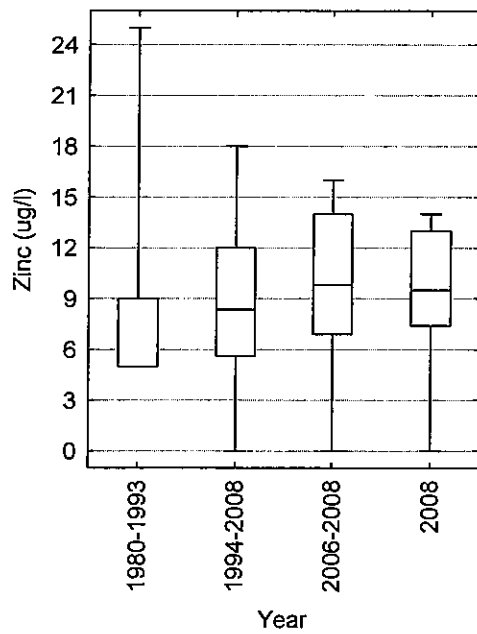
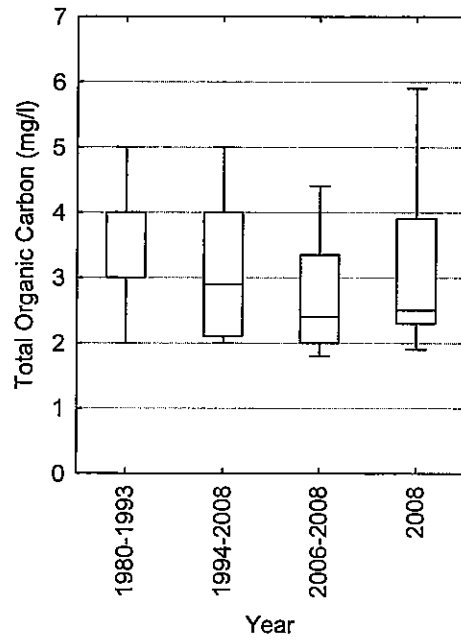
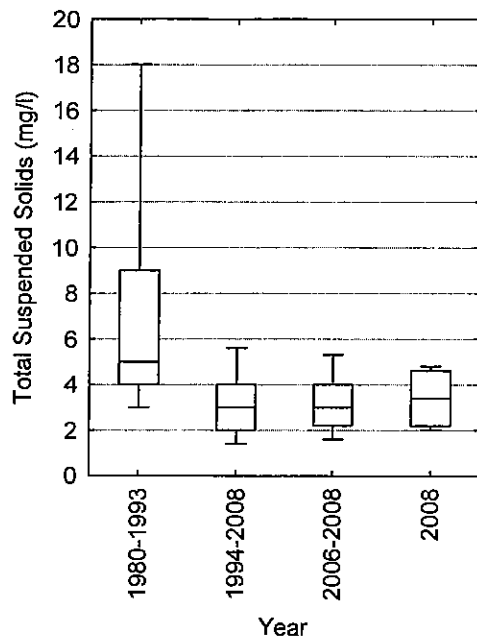
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— WQ Standard/Criterion

**MMSD Water Quality Monitoring Program Data
Outer Harbor, Site OH-05**



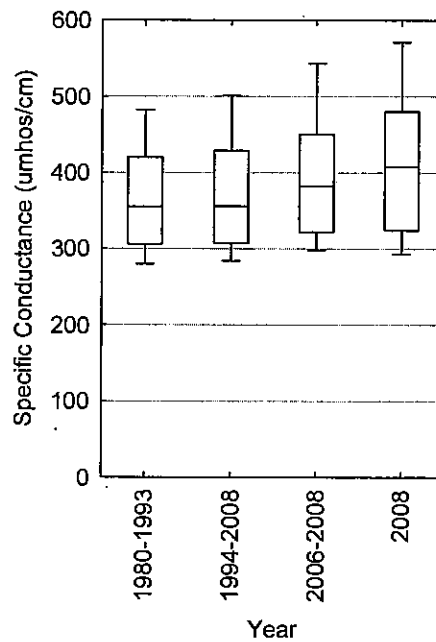
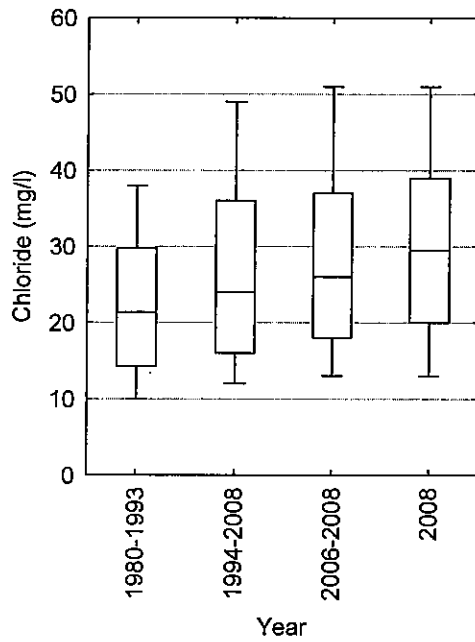
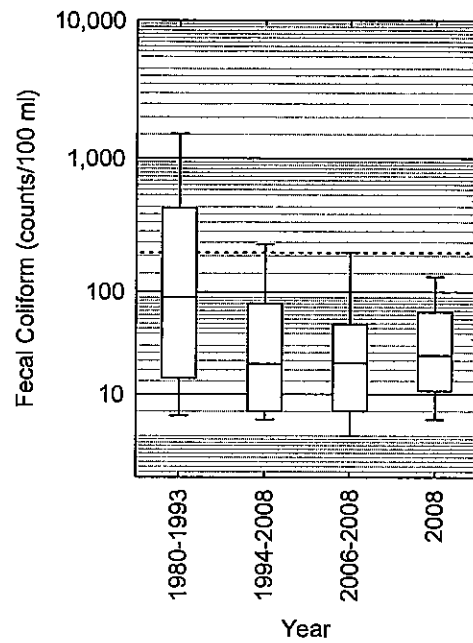
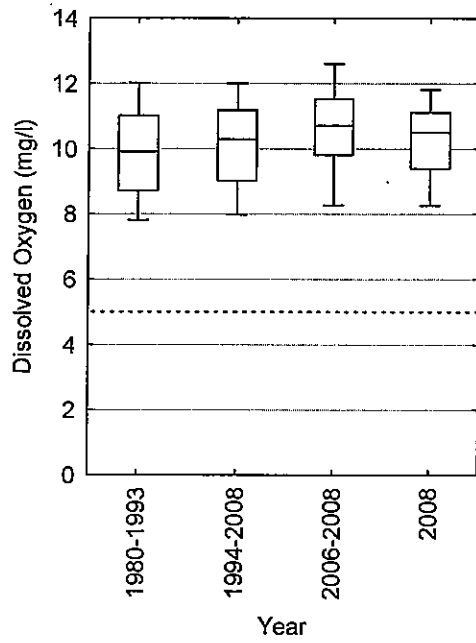
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MMSD Water Quality Monitoring Program Data
Outer Harbor, Site OH-05



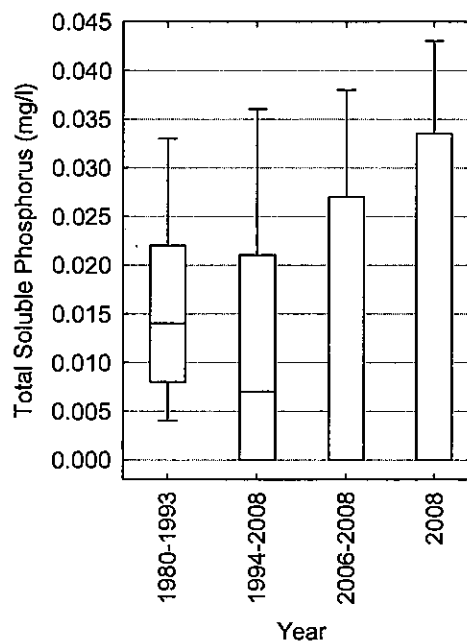
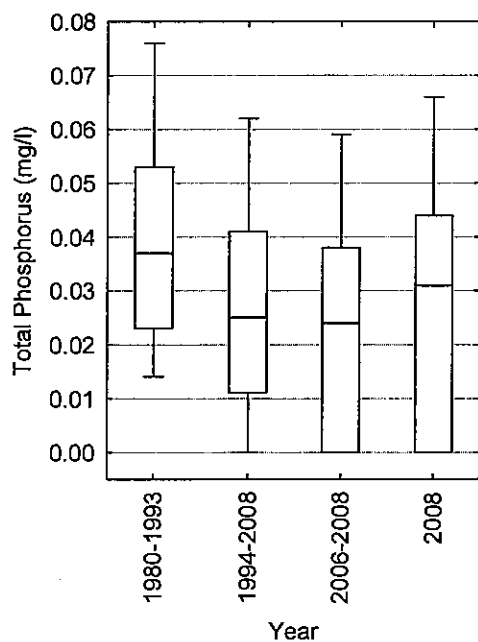
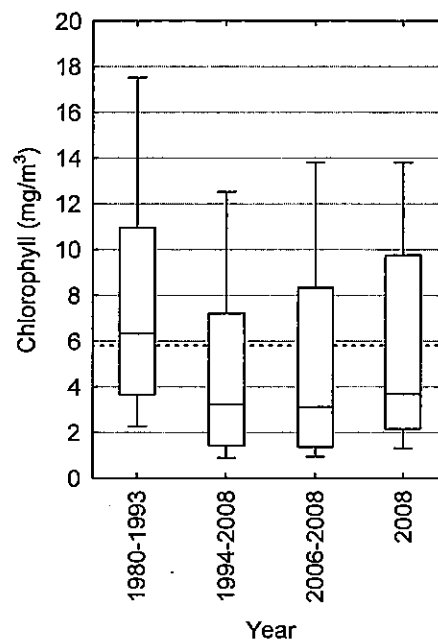
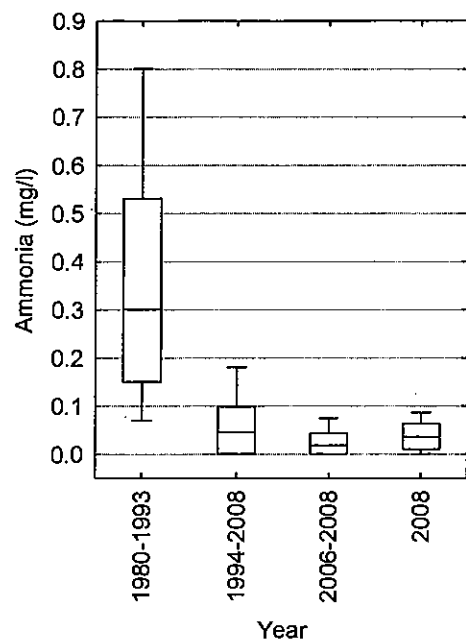
— Median □ 25%-75% ▤ 10%-90%

MMSD Water Quality Monitoring Program Data
Outer Harbor, Site OH-07



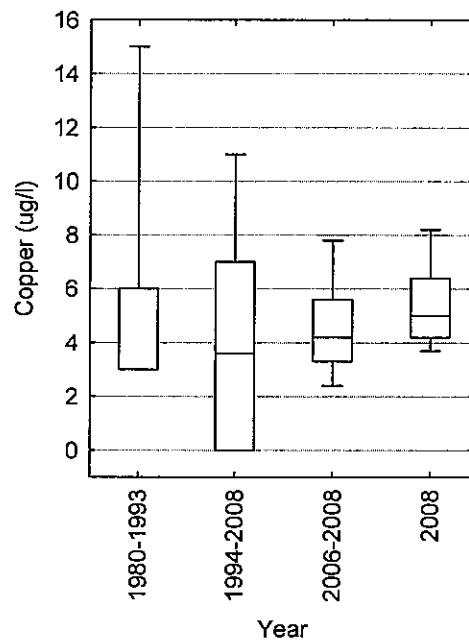
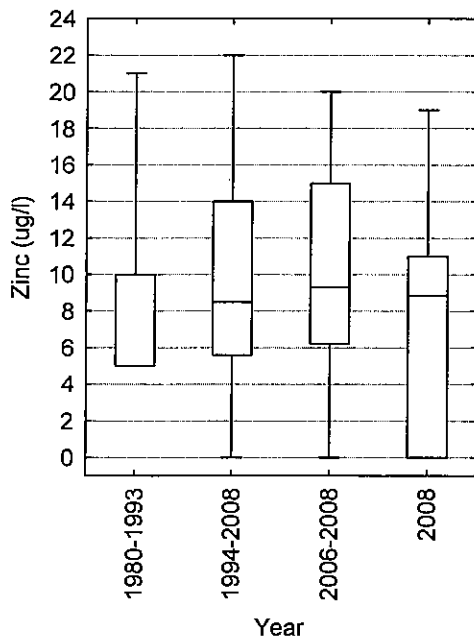
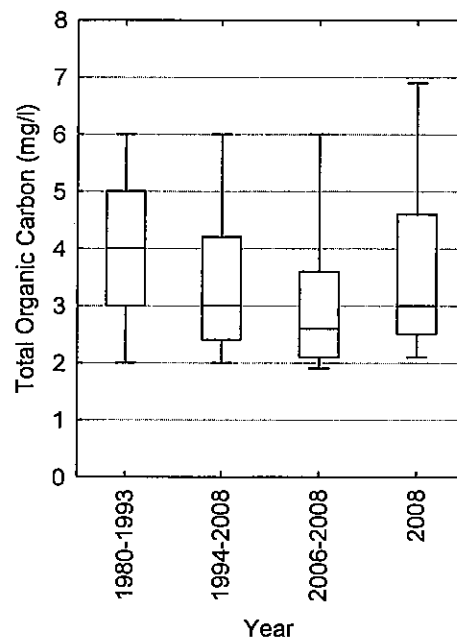
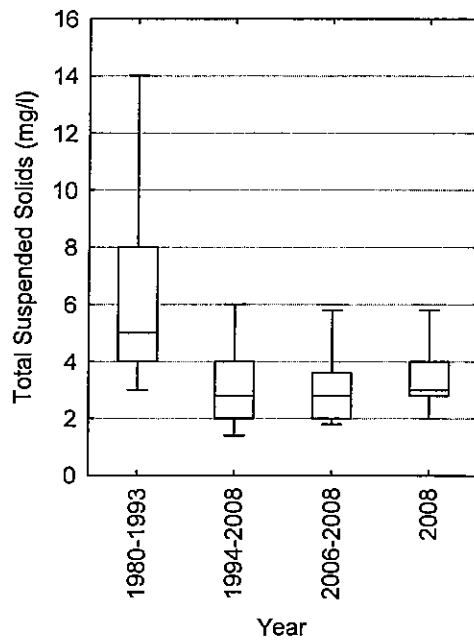
— Median □ 25%-75% ▮ 10%-90%
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MMSD Water Quality Monitoring Program Data
Outer Harbor, Site OH-07



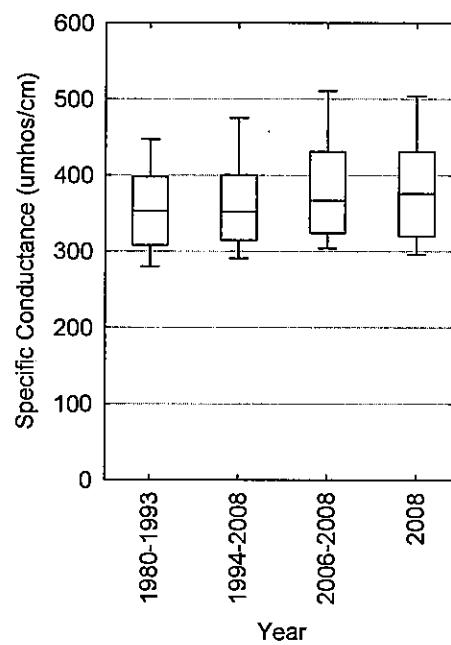
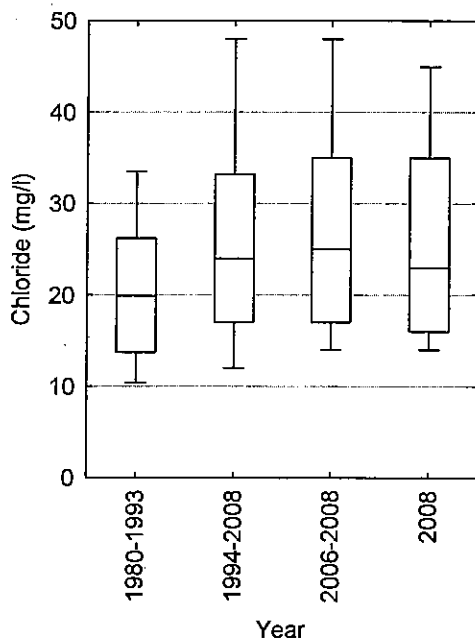
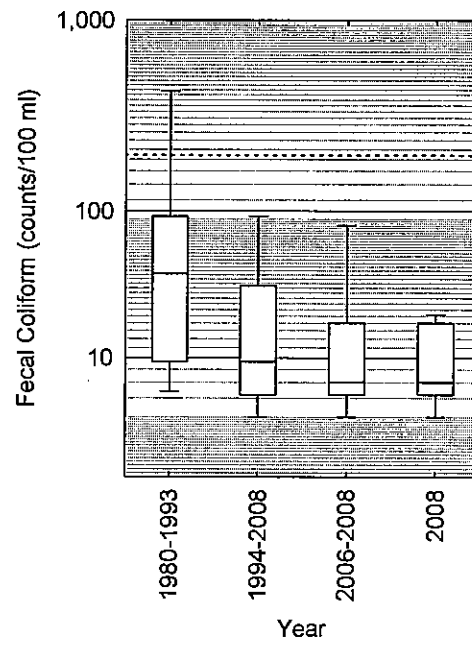
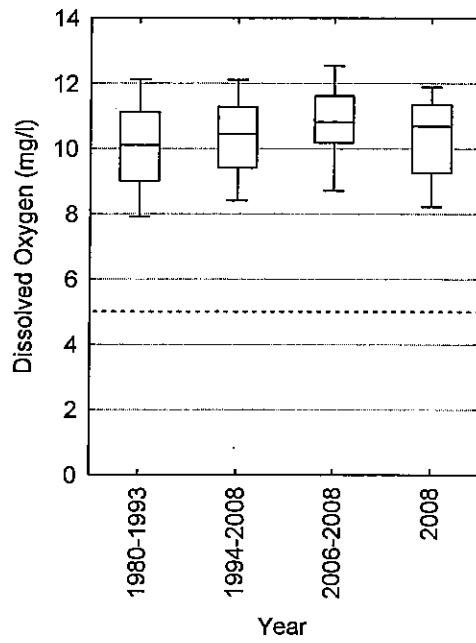
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MMSD Water Quality Monitoring Program Data
Outer Harbor, Site OH-07



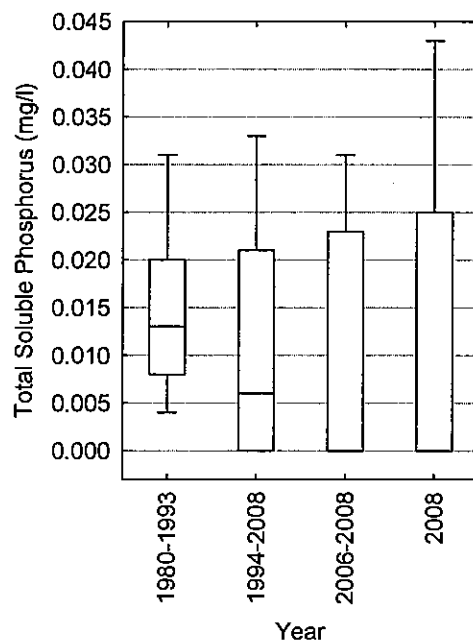
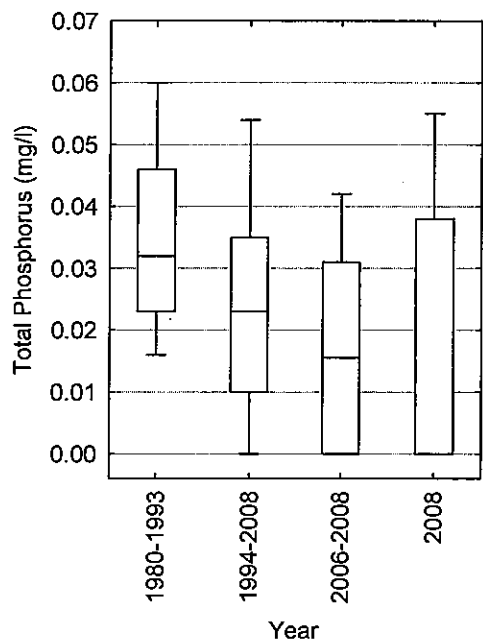
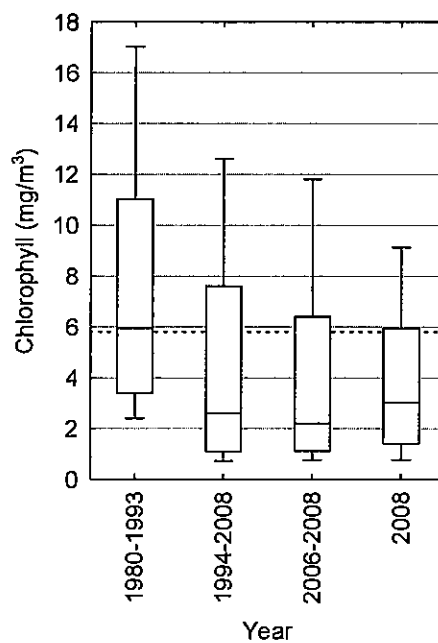
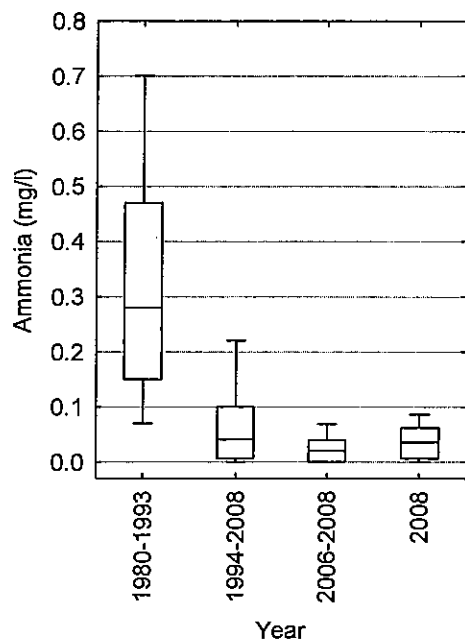
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MMSD Water Quality Monitoring Program Data
Outer Harbor, Site OH-09



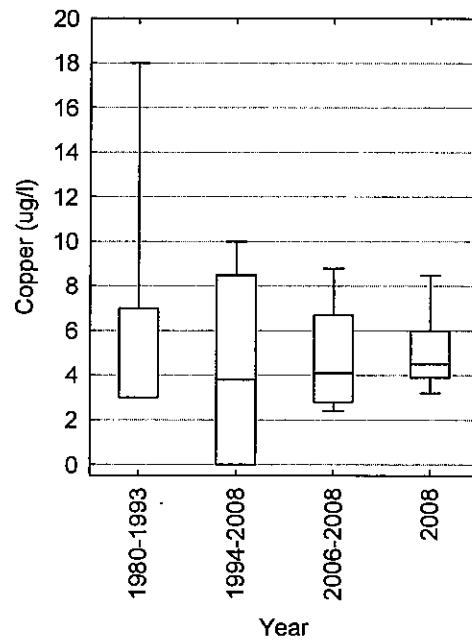
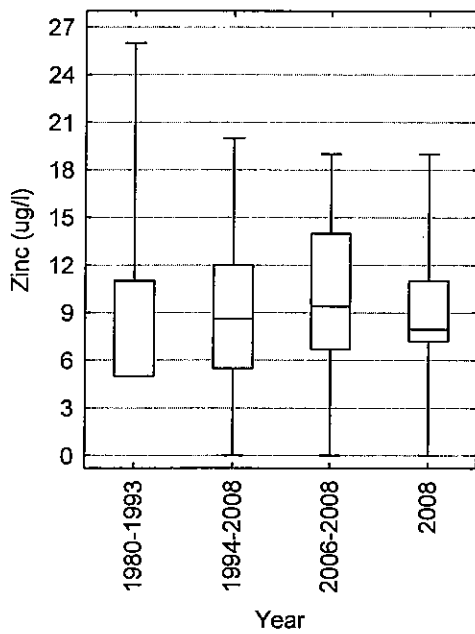
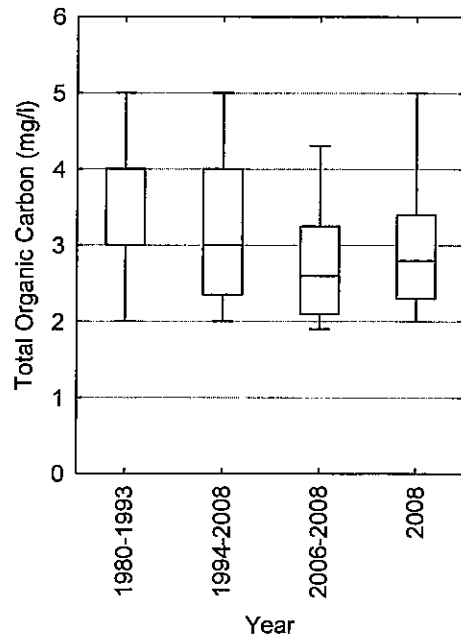
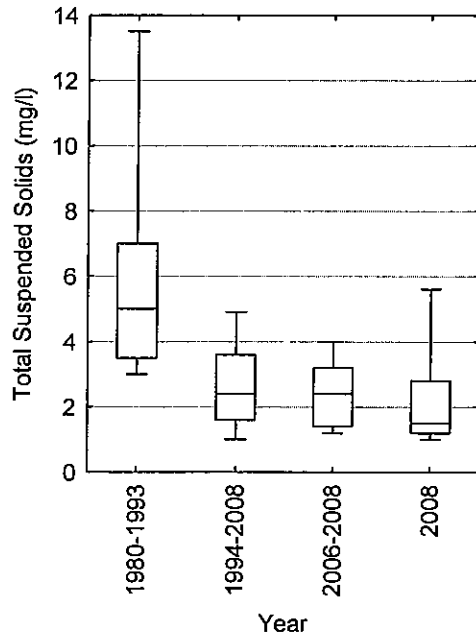
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— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Outer Harbor, Site OH-09



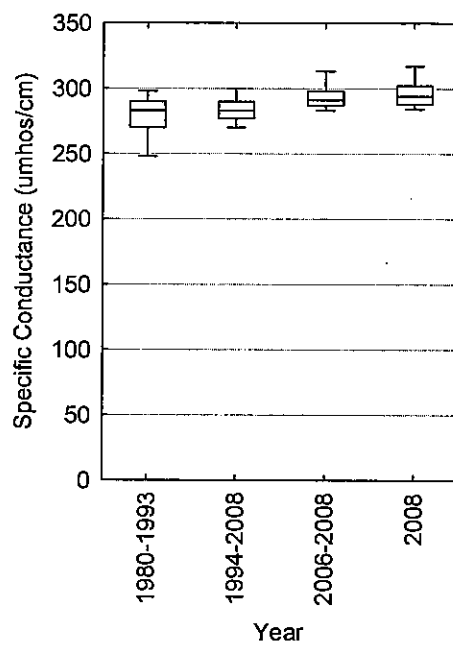
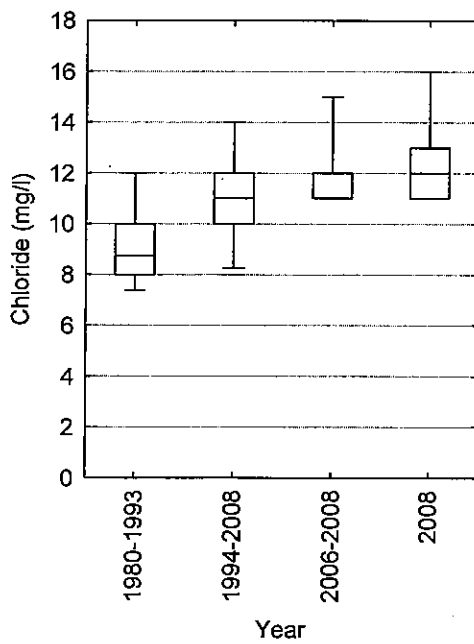
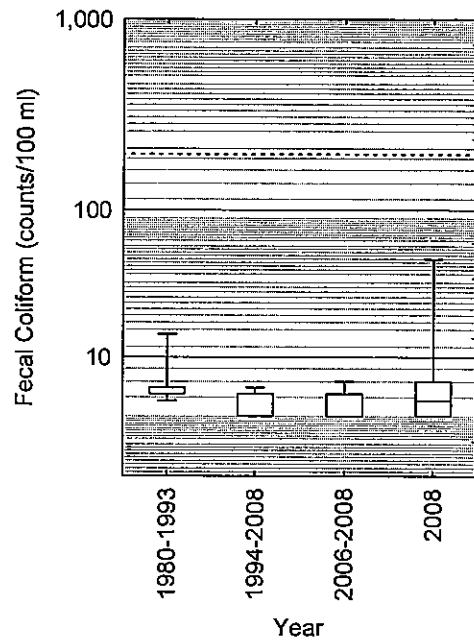
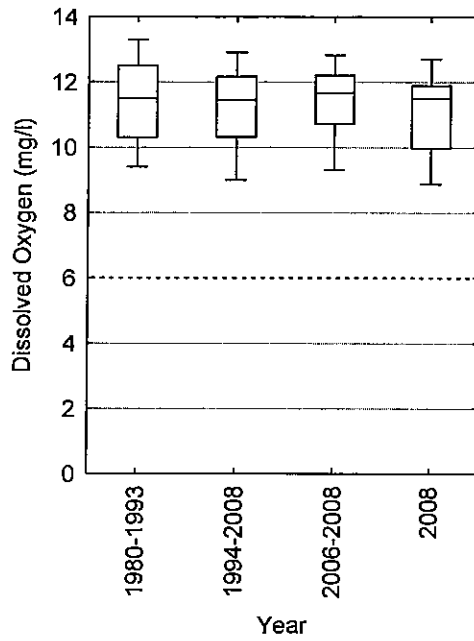
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--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Outer Harbor, Site OH-09



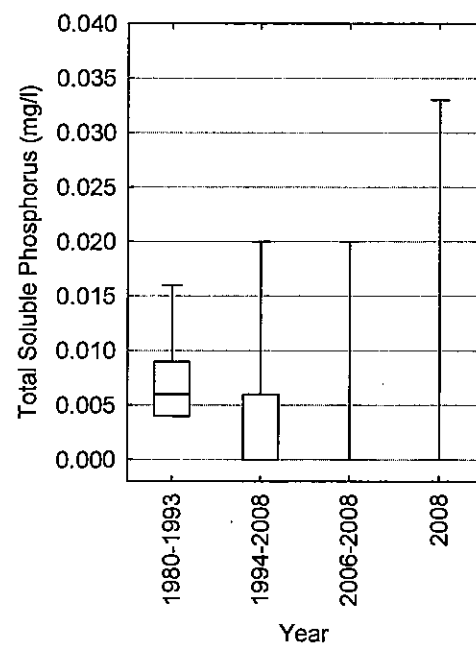
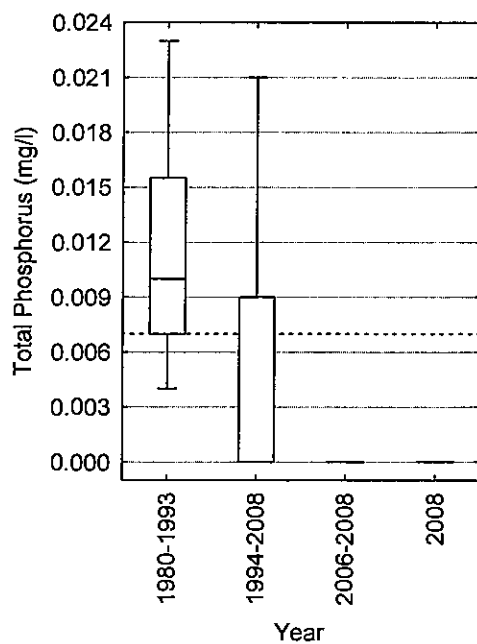
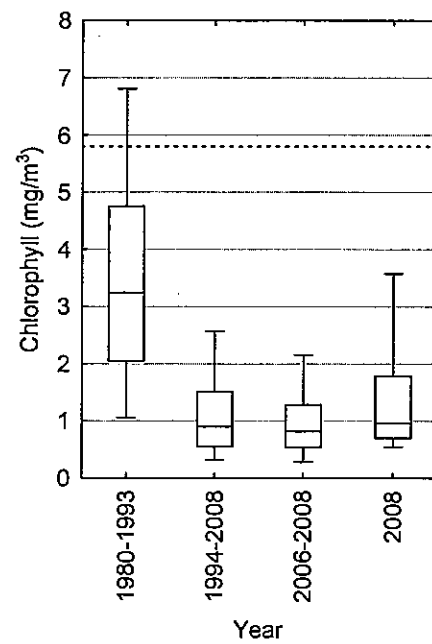
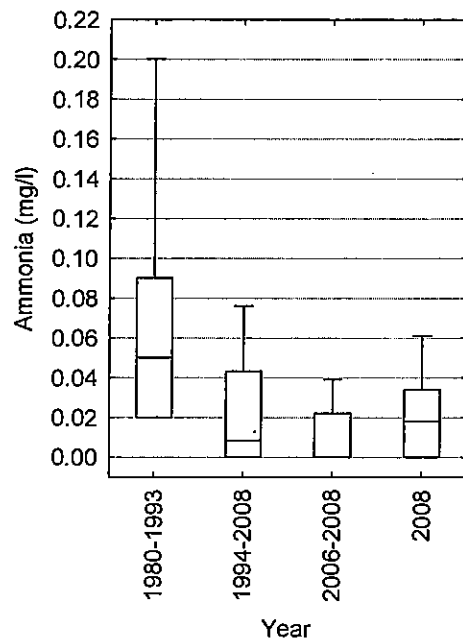
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MMSD Water Quality Monitoring Program Data
Outer Harbor, Site OH-14



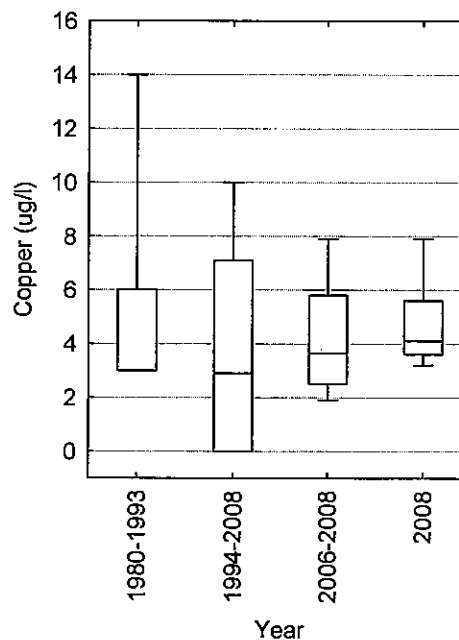
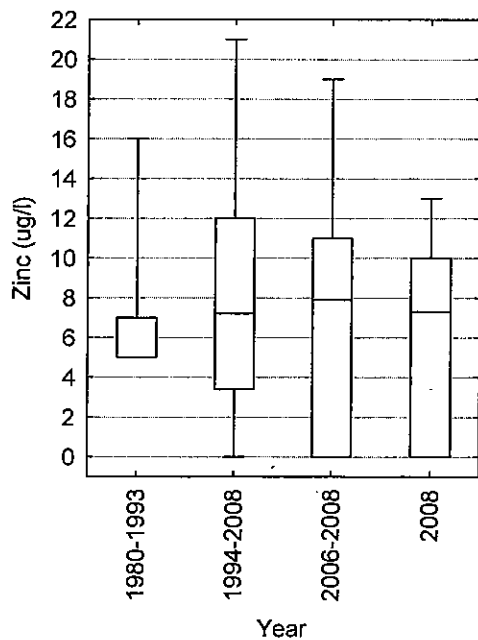
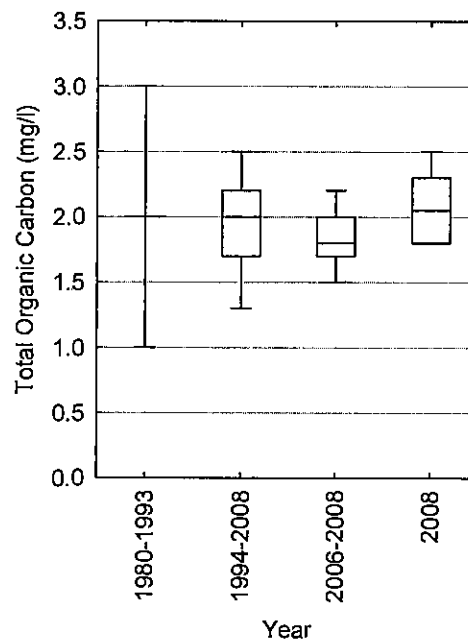
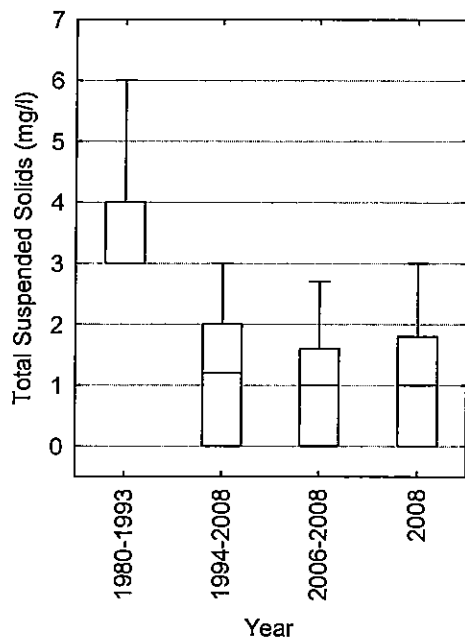
— Median □ 25%-75% ▤ 10%-90%
--- WQ Standard/Criterion

**MMSD Water Quality Monitoring Program Data
Outer Harbor, Site OH-14**



— Median □ 25%-75% ▮ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Outer Harbor, Site OH-14



— Median □ 25%-75% ▮ 10%-90%

OUTER HARBOR - SITE 1
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	14.3	8.8	6.55	0.78	0.015	0.83	0.078	0.44	0.068	0.030	4.10
Standard Error	0.0	0.7	0.2	0.53	0.04	0.001	0.04	0.006	0.05	0.005	0.004	0.35
Median	8.0	13.2	8.7	5.77	0.75	0.014	0.83	0.082	0.51	0.062	0.033	3.25
Mode	8.0	9.7	8.7	5.77	1.20	0.014	1.20	0.000	0.00	0.000	0.000	7.10
Standard Deviation	0.2	5.3	1.7	4.30	0.31	0.006	0.29	0.048	0.40	0.038	0.033	2.56
Sample Variance	0.0	28.0	2.9	18.51	0.09	0.000	0.09	0.002	0.16	0.001	0.001	6.54
Kurtosis	0.1	-0.9	-0.4	2.52	0.62	1.836	0.80	-0.775	-0.16	2.880	2.239	0.36
Skewness	-0.4	0.1	0.4	1.32	0.90	0.775	0.73	-0.174	0.46	1.257	1.363	1.08
Range	0.8	20.9	7.1	22.85	1.42	0.036	1.49	0.170	1.60	0.190	0.140	9.80
Minimum	7.5	4.2	5.5	0.65	0.28	0.000	0.31	0.000	0.00	0.000	0.000	1.20
Maximum	8.3	25.1	12.6	23.50	1.70	0.036	1.80	0.170	1.60	0.190	0.140	11.00
Count	66	66	66	66	54	54	66	63	62	63	60	54
Confidence Level(95.0%)	0.0	1.3	0.4	1.06	0.08	0.002	0.07	0.012	0.10	0.010	0.009	0.70

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	1.1	2.7	334.3	325.4	2.5	8.9	7.1	542	51.5	144	1.9	75
Standard Error	0.1	0.1	20.9	20.6	0.2	1.0	0.3	19	2.9	57	0.1	15
Median	1.1	2.7	345.0	332.5	2.2	8.0	6.7	523	49.0	69	1.8	49
Mode	0.9	2.5	230.0	ND	2.0	10.0	5.1	614	49.0	120	2.1	ND
Standard Deviation	0.3	0.7	78.3	77.0	0.9	3.6	2.8	151	23.7	265	0.5	58
Sample Variance	0.1	0.5	6134.1	5935.1	0.8	13.1	7.9	22733	560.6	70358	0.2	3361
Kurtosis	-0.9	4.7	0.1	0.0	5.0	1.8	0.1	-1	-0.5	19	1.9	5
Skewness	0.1	1.5	0.3	0.3	2.0	1.3	0.8	0	0.5	4	0.2	2
Range	1.1	3.3	270.0	265.2	3.4	13.2	12.3	589	97.0	1293	2.3	221
Minimum	0.6	1.6	230.0	222.8	1.6	4.8	2.7	292	13.0	7	0.8	19
Maximum	1.7	4.9	500.0	488.0	5.0	18.0	15.0	881	110.0	1300	3.1	240
Count	22	21	14	14	14	14	66	66	66	22	22	14
Confidence Level(95.0%)	0.1	0.3	45.2	44.5	0.5	2.1	0.7	37	5.8	118	0.2	33

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 1
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	48.46	21.34	0.0	4.5	7.5	3.9	0.5	14.8	0.1	1.6	2.9	ND
Standard Error	1.25	0.81	0.0	0.2	0.4	0.6	0.2	0.9	0.1	0.4	0.6	ND
Median	46.00	20.00	0.0	4.5	6.7	2.4	0.0	13.0	0.0	0.0	0.0	ND
Mode	41.00	27.00	0.0	4.5	7.1	2.0	0.0	10.0	0.0	0.0	0.0	ND
Standard Deviation	8.86	5.70	0.0	1.4	2.8	4.3	1.3	6.1	0.5	2.6	4.1	ND
Sample Variance	78.54	32.51	0.0	2.1	7.8	18.3	1.6	36.9	0.2	7.0	16.7	ND
Kurtosis	-1.30	-0.90	ND	4.5	1.8	9.4	5.1	2.3	15.6	-0.2	-0.7	ND
Skewness	0.41	0.35	ND	-1.5	1.5	3.1	2.5	1.3	4.1	1.2	0.9	ND
Range	28.00	20.00	0.0	7.5	11.7	20.6	5.3	29.9	2.3	7.9	12.0	0.0
Minimum	37.00	13.00	0.0	0.0	4.3	1.4	0.0	7.1	0.0	0.0	0.0	0.0
Maximum	65.00	33.00	0.0	7.5	16.0	22.0	5.3	37.0	2.3	7.9	12.0	0.0
Count	50	50	50	50	50	50	50	50	50	50	50	0
Confidence Level(95.0%)	2.52	1.62	0.0	0.4	0.8	1.2	0.4	1.7	0.1	0.8	1.2	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	208	173	ND	ND	46.2	40.7	5.3	ND
Standard Error	6	6	ND	ND	1.8	1.5	0.4	ND
Median	200	180	ND	ND	47.5	41.5	4.4	ND
Mode	170	200	ND	ND	53.0	42.0	3.7	ND
Standard Deviation	45	38	ND	ND	11.4	9.7	2.5	ND
Sample Variance	2048	1471	ND	ND	128.8	93.7	6.5	ND
Kurtosis	-1	-1	ND	ND	-0.9	-0.6	-0.1	ND
Skewness	0	0	ND	ND	0.1	0.4	0.9	ND
Range	150	120	0.0	0.0	42.0	36.0	10.0	0.0
Minimum	150	110	0.0	0.0	26.0	24.0	2.0	0.0
Maximum	300	230	0.0	0.0	68.0	60.0	12.0	0.0
Count	50	42	0	0	42	42	42	0
Confidence Level(95.0%)	13	12	ND	ND	3.5	3.0	0.8	ND

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 2
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.7	12.7	9.1	7.42	2.38	0.029	2.37	0.112	0.68	0.094	0.048	4.04
Standard Error	0.1	0.8	0.2	1.23	0.33	0.005	0.30	0.017	0.09	0.011	0.009	0.31
Median	7.8	12.0	9.0	3.87	1.60	0.020	1.60	0.082	0.75	0.066	0.038	3.95
Mode	8.0	ND	7.9	0.96	1.60	0.020	1.40	0.000	0.00	0.120	0.000	4.90
Standard Deviation	0.3	5.2	1.6	7.99	1.92	0.027	1.93	0.105	0.54	0.071	0.055	1.75
Sample Variance	0.1	27.3	2.4	63.78	3.67	0.001	3.72	0.011	0.29	0.005	0.003	3.06
Kurtosis	-0.6	-1.0	-0.2	4.37	-0.11	11.727	0.09	3.322	-0.68	2.739	2.982	-0.11
Skewness	0.1	0.3	-0.2	2.05	1.07	3.087	1.16	1.701	0.31	1.666	1.638	0.73
Range	1.4	18.3	6.8	34.64	6.32	0.144	6.42	0.460	1.80	0.340	0.240	6.20
Minimum	7.1	4.5	5.3	0.96	0.38	0.006	0.38	0.000	0.00	0.000	0.000	1.70
Maximum	8.4	22.9	12.1	35.60	6.70	0.150	6.80	0.460	1.80	0.340	0.240	7.90
Count	45	45	45	42	33	33	42	39	38	39	36	32
Confidence Level(95.0%)	0.1	1.6	0.5	2.49	0.68	0.010	0.60	0.034	0.18	0.023	0.019	0.63

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	1.5	4.2	385.7	380.8	2.2	4.9	4.4	691	79.9	120	1.3	133
Standard Error	0.1	0.3	33.4	33.5	0.2	0.4	0.3	42	8.3	92	0.2	92
Median	1.5	4.5	365.0	359.1	2.1	4.8	3.9	628	70.0	33	1.5	31
Mode	1.1	3.2	330.0	ND	1.8	5.2	3.9	427	140.0	3	0.5	ND
Standard Deviation	0.5	1.2	125.1	125.2	0.6	1.4	2.1	284	54.0	355	0.8	354
Sample Variance	0.2	1.4	15657.1	15679.1	0.4	2.1	4.4	80910	2912.3	125904	0.6	125597
Kurtosis	1.3	-1.2	-1.1	-1.1	0.6	0.9	3.9	1	4.2	15	1.4	14
Skewness	-0.7	0.2	0.1	0.1	0.7	0.6	1.9	1	1.6	4	0.5	4
Range	1.9	3.6	400.0	401.2	2.4	5.6	9.5	1167	275.0	1400	3.1	1398
Minimum	0.4	2.4	200.0	194.8	1.2	2.4	1.8	293	15.0	0	0.0	2
Maximum	2.3	6.0	600.0	596.0	3.6	8.0	11.3	1460	290.0	1400	3.1	1400
Count	15	13	14	14	14	14	42	45	42	15	15	15
Confidence Level(95.0%)	0.3	0.7	72.2	72.3	0.4	0.8	0.7	85	16.8	196	0.4	196

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 2
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	47.62	18.50	0.0	4.6	6.5	3.9	0.5	16.7	0.2	1.8	2.4	ND
Standard Error	1.51	0.63	0.0	0.6	0.4	0.4	0.2	1.3	0.1	0.4	0.5	ND
Median	47.50	18.00	0.0	4.7	5.6	2.9	0.0	15.0	0.0	0.0	0.0	ND
Mode	53.00	22.00	0.0	0.0	5.6	1.8	0.0	15.0	0.0	0.0	0.0	ND
Standard Deviation	9.76	4.09	0.0	3.7	2.5	2.8	1.1	8.6	0.7	2.6	3.4	ND
Sample Variance	95.31	16.74	0.0	13.4	6.4	8.0	1.2	73.9	0.4	6.8	11.5	ND
Kurtosis	1.68	1.54	ND	4.8	0.2	3.8	2.5	0.1	8.2	-1.0	-0.7	ND
Skewness	0.99	0.72	ND	1.4	1.1	1.9	1.9	0.5	3.1	0.9	0.9	ND
Range	47.00	21.00	0.0	19.0	9.5	13.1	3.9	38.0	2.8	7.1	11.0	0.0
Minimum	33.00	11.00	0.0	0.0	3.5	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	80.00	32.00	0.0	19.0	13.0	14.0	3.9	38.0	2.8	7.1	11.0	0.0
Count	42	42	42	42	42	42	42	42	42	42	41	0
Confidence Level(95.0%)	3.04	1.28	0.0	1.1	0.8	0.9	0.3	2.7	0.2	0.8	1.1	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	195	149	ND	ND	40.0	35.6	4.5	ND
Standard Error	6	4	ND	ND	1.2	1.0	0.2	ND
Median	195	145	ND	ND	40.0	35.0	4.8	ND
Mode	220	130	ND	ND	40.0	35.0	4.8	ND
Standard Deviation	41	27	ND	ND	7.6	6.2	1.6	ND
Sample Variance	1694	748	ND	ND	57.1	38.9	2.4	ND
Kurtosis	2	0	ND	ND	-0.2	-0.1	-0.6	ND
Skewness	1	1	ND	ND	0.4	0.4	0.3	ND
Range	200	110	0.0	0.0	31.0	26.0	6.2	0.0
Minimum	130	110	0.0	0.0	27.0	24.0	1.9	0.0
Maximum	330	220	0.0	0.0	58.0	50.0	8.1	0.0
Count	42	42	0	0	42	42	42	0
Confidence Level(95.0%)	13	9	ND	ND	2.4	1.9	0.5	ND

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 3
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	13.0	9.8	8.14	0.74	0.014	0.83	0.052	0.30	0.054	0.020	3.39
Standard Error	0.0	0.6	0.2	0.95	0.03	0.001	0.03	0.005	0.04	0.005	0.003	0.24
Median	8.0	12.2	10.2	4.54	0.70	0.013	0.83	0.047	0.37	0.048	0.000	2.60
Mode	8.1	9.6	10.7	1.59	1.00	0.012	1.30	0.000	0.00	0.000	0.000	1.60
Standard Deviation	0.2	5.3	1.4	8.35	0.27	0.007	0.30	0.046	0.32	0.042	0.027	1.88
Sample Variance	0.0	28.0	2.0	69.75	0.07	0.000	0.09	0.002	0.11	0.002	0.001	3.55
Kurtosis	0.3	-0.9	0.1	4.29	-0.13	3.646	-0.87	0.372	-0.88	0.829	2.313	1.96
Skewness	0.0	0.1	-0.6	2.06	0.53	1.512	0.22	0.768	0.54	0.961	1.485	1.44
Range	1.1	20.1	7.4	39.18	1.11	0.038	1.10	0.190	1.10	0.170	0.120	8.50
Minimum	7.5	3.8	5.2	0.52	0.29	0.005	0.30	0.000	0.00	0.000	0.000	1.20
Maximum	8.6	24.0	12.6	39.70	1.40	0.043	1.40	0.190	1.10	0.170	0.120	9.70
Count	78	78	78	78	63	63	78	75	74	75	72	62
Confidence Level(95.0%)	0.0	1.2	0.3	1.88	0.07	0.002	0.07	0.011	0.08	0.010	0.006	0.48

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	1.3	3.8	295.0	284.6	2.9	10.4	8.0	464	40.7	991	1.6	3057
Standard Error	0.1	0.3	13.3	12.5	0.6	3.8	1.6	12	2.1	843	0.2	2662
Median	1.4	3.7	290.0	277.6	2.1	5.8	4.2	460	37.0	40	1.6	613
Mode	1.4	5.0	290.0	ND	2.2	6.0	4.2	469	34.0	79	1.9	ND
Standard Deviation	0.5	1.6	56.4	52.9	2.6	16.1	13.7	105	18.3	4299	0.9	5325
Sample Variance	0.2	2.4	3179.4	2796.2	6.9	258.7	188.1	11117	333.4	18479207	0.9	28353213
Kurtosis	1.0	-0.3	0.2	0.2	9.3	10.6	12.5	0	0.2	26	1.9	4
Skewness	-0.4	-0.3	0.7	0.7	3.0	3.2	3.6	0	0.8	5	0.8	2
Range	2.2	5.7	190.0	188.4	10.6	66.2	71.7	449	84.0	22000	4.3	10997
Minimum	0.2	0.5	220.0	214.4	1.4	1.8	0.8	292	12.0	0	0.0	3
Maximum	2.4	6.2	410.0	402.8	12.0	68.0	72.5	741	96.0	22000	4.3	11000
Count	26	25	18	18	18	18	78	78	78	26	26	4
Confidence Level(95.0%)	0.2	0.6	28.0	26.3	1.3	8.0	3.1	24	4.1	1736	0.4	8473

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 3
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	43.04	17.31	0.0	3.7	6.3	3.0	0.5	12.9	0.2	1.5	3.5	0.0
Standard Error	1.07	0.58	0.0	0.6	0.5	0.5	0.4	1.6	0.1	0.5	1.0	0.0
Median	42.00	16.00	0.0	4.0	5.7	2.2	0.0	11.0	0.0	0.0	0.0	0.0
Mode	41.00	15.00	0.0	0.0	11.0	1.6	0.0	16.0	0.0	0.0	0.0	0.0
Standard Deviation	5.47	2.98	0.0	3.2	2.3	2.4	1.8	7.9	0.5	2.4	5.1	0.0
Sample Variance	29.88	8.86	0.0	10.2	5.4	5.8	3.3	63.1	0.2	5.6	25.7	0.0
Kurtosis	-0.34	-0.74	ND	0.3	-0.2	7.3	18.1	3.8	9.8	-0.7	-0.1	ND
Skewness	0.76	0.69	ND	0.6	1.0	2.6	4.1	1.5	3.1	1.1	1.1	ND
Range	18.00	10.00	0.0	11.0	7.3	10.7	8.7	38.0	2.1	6.2	14.0	0.0
Minimum	36.00	13.00	0.0	0.0	3.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	54.00	23.00	0.0	11.0	11.0	12.0	8.7	38.0	2.1	6.2	14.0	0.0
Count	26	26	26	26	26	26	26	26	26	26	26	4
Confidence Level(95.0%)	2.21	1.20	0.0	1.3	0.9	1.0	0.7	3.2	0.2	1.0	2.0	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	179	143	0.7	4.9	38.2	33.7	4.5	ND
Standard Error	5	4	0.3	0.3	1.0	0.8	0.3	ND
Median	170	135	0.0	4.6	36.0	33.0	3.8	ND
Mode	170	130	0.0	4.7	34.0	31.0	2.6	ND
Standard Deviation	26	28	1.4	1.2	7.1	5.9	2.0	ND
Sample Variance	651	775	1.8	1.4	50.3	34.3	4.0	ND
Kurtosis	0	-1	1.9	0.2	0.9	0.9	0.5	ND
Skewness	1	0	1.7	0.8	0.9	0.8	1.1	ND
Range	90	111	4.3	4.2	34.0	28.0	8.1	0.0
Minimum	140	99	0.0	3.1	26.0	24.0	1.9	0.0
Maximum	230	210	4.3	7.3	60.0	52.0	10.0	0.0
Count	26	54	17	14	54	54	54	0
Confidence Level(95.0%)	10	8	0.7	0.7	1.9	1.6	0.5	ND

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 4
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	12.2	10.6	8.46	0.59	0.013	0.64	0.064	0.18	0.032	0.017	2.80
Standard Error	0.0	1.0	0.2	1.37	0.03	0.002	0.04	0.023	0.05	0.007	0.004	0.22
Median	8.1	12.3	10.9	5.41	0.63	0.011	0.64	0.026	0.00	0.000	0.000	2.60
Mode	8.1	19.5	7.3	ND	0.65	0.015	0.67	0.000	0.00	0.000	0.000	3.30
Standard Deviation	0.3	5.9	1.5	8.21	0.18	0.008	0.22	0.132	0.30	0.039	0.024	1.19
Sample Variance	0.1	34.6	2.2	67.40	0.03	0.000	0.05	0.018	0.09	0.002	0.001	1.42
Kurtosis	0.0	-1.2	-0.4	2.53	-0.46	3.770	0.11	21.639	1.36	-0.429	-0.641	0.90
Skewness	-0.1	0.0	-0.6	1.59	0.24	1.988	0.65	4.373	1.49	0.854	0.984	1.17
Range	1.2	19.7	5.9	34.94	0.65	0.033	0.87	0.740	1.10	0.120	0.066	4.30
Minimum	7.5	3.1	7.3	0.86	0.32	0.005	0.33	0.000	0.00	0.000	0.000	1.40
Maximum	8.7	22.8	13.1	35.80	0.97	0.038	1.20	0.740	1.10	0.120	0.066	5.70
Count	36	36	36	36	28	28	36	34	33	34	32	28
Confidence Level(95.0%)	0.1	2.0	0.5	2.78	0.07	0.003	0.07	0.046	0.11	0.014	0.009	0.46

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	1.8	6.6	263.9	256.0	2.3	7.9	8.0	413	30.4	687	1.1	1102
Standard Error	0.2	0.9	11.5	10.3	0.5	2.9	2.4	12	2.1	666	0.2	1099
Median	2.0	9.0	250.0	246.3	2.0	3.7	2.4	402	27.0	9	0.9	4
Mode	2.0	10.0	240.0	ND	0.0	3.4	2.2	404	35.0	0	0.0	ND
Standard Deviation	0.8	3.7	48.8	43.6	2.3	12.5	14.4	74	12.5	2824	1.0	2199
Sample Variance	0.7	13.9	2378.1	1898.2	5.2	155.7	207.6	5485	156.7	7972737	1.0	4834875
Kurtosis	0.2	-1.6	1.0	0.8	7.5	9.0	7.8	1	1.3	18	4.3	4
Skewness	-0.4	-0.5	0.6	0.5	2.4	3.0	2.9	1	1.2	4	1.7	2
Range	3.2	9.4	210.0	182.0	10.0	50.0	58.4	300	50.0	12000	4.1	4400
Minimum	0.2	0.6	170.0	169.0	0.0	1.0	1.5	305	16.0	0	0.0	0
Maximum	3.4	10.0	380.0	351.0	10.0	51.0	59.9	605	66.0	12000	4.1	4400
Count	18	16	18	18	18	18	36	36	36	18	18	4
Confidence Level(95.0%)	0.4	2.0	24.3	21.7	1.1	6.2	4.9	25	4.2	1404	0.5	3499

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 4
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	40.00	15.22	0.0	3.0	5.9	3.1	0.7	10.1	0.1	1.5	4.4	0.0
Standard Error	1.08	0.53	0.0	0.8	0.5	0.5	0.4	1.9	0.1	0.6	1.2	0.0
Median	39.50	15.00	0.0	2.0	5.2	2.6	0.0	10.0	0.0	0.0	2.5	0.0
Mode	35.00	16.00	0.0	0.0	8.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
Standard Deviation	4.58	2.26	0.0	3.4	2.2	2.2	1.8	8.2	0.5	2.6	5.2	0.0
Sample Variance	20.94	5.12	0.0	11.8	5.0	5.0	3.3	66.9	0.3	6.9	26.9	0.0
Kurtosis	-0.67	1.30	ND	-1.1	-1.4	2.9	10.2	-0.1	18.0	0.0	-0.7	ND
Skewness	0.51	0.99	ND	0.6	0.4	1.8	3.1	0.4	4.2	1.3	0.8	ND
Range	15.00	9.00	0.0	10.0	6.5	7.9	7.2	28.0	2.2	7.4	15.0	0.0
Minimum	34.00	12.00	0.0	0.0	3.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	49.00	21.00	0.0	10.0	9.7	8.9	7.2	28.0	2.2	7.4	15.0	0.0
Count	18	18	18	18	18	18	18	18	18	18	18	4
Confidence Level(95.0%)	2.28	1.13	0.0	1.7	1.1	1.1	0.9	4.1	0.3	1.3	2.6	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	163	130	0.6	ND	34.3	30.7	3.6	ND
Standard Error	5	3	0.6	ND	1.1	0.9	0.2	ND
Median	160	130	0.0	ND	32.5	29.0	3.4	ND
Mode	140	130	0.0	ND	31.0	29.0	3.6	ND
Standard Deviation	21	20	1.2	ND	6.3	5.1	1.4	ND
Sample Variance	433	383	1.3	ND	40.0	26.3	2.0	ND
Kurtosis	0	3	4.0	ND	6.3	5.8	2.7	ND
Skewness	1	1	2.0	ND	2.4	2.3	1.6	ND
Range	70	92	2.3	0.0	27.0	22.0	6.0	0.0
Minimum	140	98	0.0	0.0	29.0	26.0	1.9	0.0
Maximum	210	190	2.3	0.0	56.0	48.0	7.9	0.0
Count	18	36	4	0	36	36	36	0
Confidence Level(95.0%)	10	7	1.8	ND	2.1	1.7	0.5	ND

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 5
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	11.9	10.7	7.47	0.53	0.008	0.53	0.026	0.12	0.020	0.014	2.66
Standard Error	0.0	0.9	0.2	1.46	0.04	0.001	0.03	0.004	0.04	0.005	0.004	0.25
Median	8.1	10.2	11.0	3.55	0.44	0.009	0.46	0.018	0.00	0.000	0.000	2.00
Mode	8.1	ND	11.5	ND	0.32	0.000	0.32	0.000	0.00	0.000	0.000	1.60
Standard Deviation	0.2	5.7	1.3	9.45	0.23	0.006	0.22	0.027	0.25	0.030	0.024	1.45
Sample Variance	0.1	32.3	1.8	89.23	0.05	0.000	0.05	0.001	0.06	0.001	0.001	2.10
Kurtosis	0.3	-1.0	-0.6	3.98	2.63	-0.325	2.51	0.323	0.87	1.930	1.872	2.20
Skewness	0.6	0.4	-0.3	2.15	1.36	0.168	1.35	0.966	1.61	1.442	1.572	1.58
Range	1.0	20.3	5.7	36.39	1.10	0.022	1.10	0.100	0.75	0.120	0.093	5.90
Minimum	7.6	2.5	7.9	0.61	0.20	0.000	0.20	0.000	0.00	0.000	0.000	1.40
Maximum	8.6	22.8	13.6	37.00	1.30	0.022	1.30	0.100	0.75	0.120	0.093	7.30
Count	42	42	42	42	33	33	42	38	37	38	36	33
Confidence Level(95.0%)	0.1	1.8	0.4	2.94	0.08	0.002	0.07	0.009	0.08	0.010	0.008	0.51

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	2.2	4.7	240.0	236.3	1.1	3.7	3.6	375	26.0	19	0.9	ND
Standard Error	0.3	0.5	13.5	13.4	0.2	0.7	0.7	14	2.6	7	0.2	ND
Median	2.1	4.7	220.0	216.3	1.2	3.4	2.5	355	23.5	9	0.9	ND
Mode	2.1	ND	220.0	ND	1.2	4.8	1.2	315	16.0	0	0.0	ND
Standard Deviation	1.1	1.9	50.5	50.2	0.9	2.5	4.6	88	16.9	27	0.6	ND
Sample Variance	1.2	3.5	2553.8	2517.3	0.7	6.3	21.4	7830	285.5	712	0.4	ND
Kurtosis	0.1	-0.3	-0.7	-0.8	-0.9	5.9	7.6	5	8.3	7	-1.1	ND
Skewness	0.6	0.0	0.8	0.8	-0.2	1.9	2.9	2	2.5	2	-0.1	ND
Range	3.8	6.3	160.0	156.0	2.6	11.0	19.4	438	89.0	100	2.0	0
Minimum	0.5	1.7	170.0	170.0	0.0	0.0	0.6	282	11.0	0	0.0	0
Maximum	4.3	8.0	330.0	326.0	2.6	11.0	20.0	720	100.0	100	2.0	0
Count	14	13	14	14	14	14	42	42	42	14	14	0
Confidence Level(95.0%)	0.6	1.1	29.2	29.0	0.5	1.4	1.4	28	5.3	15	0.4	ND

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 5
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	38.64	14.43	0.0	3.2	5.2	2.9	0.1	9.2	0.4	1.4	3.8	ND
Standard Error	1.26	0.75	0.0	1.1	0.5	0.4	0.1	1.3	0.2	0.6	1.3	ND
Median	37.00	13.00	0.0	2.1	4.8	2.3	0.0	9.5	0.0	0.0	0.0	ND
Mode	42.00	13.00	0.0	0.0	ND	2.2	0.0	14.0	0.0	0.0	0.0	ND
Standard Deviation	4.72	2.79	0.0	4.0	2.0	1.6	0.5	4.8	0.7	2.3	5.0	ND
Sample Variance	22.25	7.80	0.0	16.1	4.1	2.7	0.3	23.0	0.5	5.3	24.6	ND
Kurtosis	-1.17	-0.39	ND	1.4	5.3	-0.1	14.0	0.3	0.9	0.0	-0.8	ND
Skewness	0.56	0.82	ND	1.3	2.1	1.1	3.7	-0.8	1.5	1.3	0.8	ND
Range	14.00	9.00	0.0	13.0	7.8	4.8	2.0	16.0	2.1	6.3	14.0	0.0
Minimum	33.00	11.00	0.0	0.0	3.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	47.00	20.00	0.0	13.0	11.0	5.9	2.0	16.0	2.1	6.3	14.0	0.0
Count	14	14	14	14	14	14	14	14	14	14	14	0
Confidence Level(95.0%)	2.72	1.61	0.0	2.3	1.2	0.9	0.3	2.8	0.4	1.3	2.9	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	155	127	ND	ND	32.7	29.6	3.3	ND
Standard Error	6	4	ND	ND	1.0	0.8	0.2	ND
Median	145	120	ND	ND	30.5	28.0	2.5	ND
Mode	140	110	ND	ND	30.0	28.0	2.4	ND
Standard Deviation	21	23	ND	ND	6.6	5.2	1.6	ND
Sample Variance	458	539	ND	ND	43.2	27.1	2.6	ND
Kurtosis	-1	1	ND	ND	3.5	3.8	1.8	ND
Skewness	1	1	ND	ND	1.9	1.9	1.6	ND
Range	60	90	0.0	0.0	28.0	23.0	6.0	0.0
Minimum	130	100	0.0	0.0	25.0	23.0	1.8	0.0
Maximum	190	190	0.0	0.0	53.0	46.0	7.8	0.0
Count	14	42	0	0	42	41	41	0
Confidence Level(95.0%)	12	7	ND	ND	2.0	1.6	0.5	ND

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 6
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	9.7	11.1	ND	0.35	0.002	0.36	0.021	0.06	0.006	0.002	1.88
Standard Error	0.0	0.8	0.2	ND	0.01	0.001	0.01	0.004	0.02	0.002	0.002	0.07
Median	8.0	8.9	11.6	ND	0.35	0.000	0.35	0.014	0.00	0.000	0.000	1.70
Mode	8.0	9.0	11.7	ND	0.38	0.000	0.37	0.000	0.00	0.000	0.000	1.60
Standard Deviation	0.2	5.2	1.5	ND	0.08	0.003	0.08	0.025	0.14	0.013	0.010	0.39
Sample Variance	0.0	26.9	2.1	ND	0.01	0.000	0.01	0.001	0.02	0.000	0.000	0.16
Kurtosis	0.5	0.9	-0.1	ND	1.07	-1.068	0.19	4.697	3.46	2.195	21.437	-1.24
Skewness	0.8	1.2	-0.6	ND	0.51	0.889	0.65	1.988	2.26	1.976	4.560	0.63
Range	0.7	19.2	5.9	0.00	0.33	0.008	0.34	0.110	0.49	0.039	0.050	1.20
Minimum	7.8	2.1	7.9	0.00	0.20	0.000	0.20	0.000	0.00	0.000	0.000	1.40
Maximum	8.5	21.3	13.7	0.00	0.53	0.008	0.54	0.110	0.49	0.039	0.050	2.60
Count	39	39	39	0	30	30	39	36	36	36	33	30
Confidence Level(95.0%)	0.1	1.7	0.5	ND	0.03	0.001	0.03	0.009	0.05	0.004	0.003	0.15

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	5.7	11.7	185.4	183.8	0.6	1.6	1.7	310	14.1	12	0.8	ND
Standard Error	0.6	1.2	6.4	6.2	0.2	0.4	0.5	4	0.5	3	0.2	ND
Median	5.6	14.4	190.0	188.4	0.0	1.6	0.9	304	14.0	10	1.0	ND
Mode	4.5	14.5	190.0	ND	0.0	0.0	ND	322	14.0	0	0.0	ND
Standard Deviation	2.1	4.3	23.0	22.4	0.8	1.5	2.8	25	3.4	12	0.6	ND
Sample Variance	4.4	18.1	526.9	501.3	0.7	2.4	8.1	609	11.7	146	0.3	ND
Kurtosis	2.0	0.0	-0.3	-0.1	-0.3	6.1	9.1	2	3.7	2	-1.1	ND
Skewness	-1.0	-1.2	-0.4	-0.5	1.0	2.0	3.2	1	1.9	1	-0.4	ND
Range	7.9	11.8	80.0	79.8	2.4	6.0	11.2	106	14.0	42	1.6	0
Minimum	0.6	2.8	140.0	138.4	0.0	0.0	0.4	279	10.0	0	0.0	0
Maximum	8.5	14.6	220.0	218.2	2.4	6.0	11.6	385	24.0	42	1.6	0
Count	13	12	13	13	13	13	39	39	39	13	13	0
Confidence Level(95.0%)	1.3	2.7	13.9	13.5	0.5	0.9	0.9	8	1.1	7	0.3	ND

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 6
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	35.15	11.92	0.0	2.8	4.1	2.6	0.0	5.2	0.2	1.1	2.9	ND
Standard Error	0.67	0.29	0.0	0.8	0.3	0.5	0.0	1.4	0.2	0.6	1.3	ND
Median	35.00	12.00	0.0	3.9	3.7	1.8	0.0	7.6	0.0	0.0	0.0	ND
Mode	35.00	13.00	0.0	0.0	4.9	1.6	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	2.41	1.04	0.0	2.9	1.1	1.9	0.0	5.2	0.6	2.0	4.7	ND
Sample Variance	5.81	1.08	0.0	8.4	1.2	3.5	0.0	27.0	0.4	4.1	22.2	ND
Kurtosis	-0.72	-1.16	ND	-1.0	-0.8	6.0	ND	-2.1	6.6	0.5	-0.5	ND
Skewness	-0.04	-0.35	ND	0.5	0.4	2.4	ND	0.0	2.6	1.5	1.2	ND
Range	8.00	3.00	0.0	8.2	3.4	6.7	0.0	12.0	2.1	5.2	12.0	0.0
Minimum	31.00	10.00	0.0	0.0	2.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	39.00	13.00	0.0	8.2	5.9	8.0	0.0	12.0	2.1	5.2	12.0	0.0
Count	13	13	13	13	13	13	13	13	13	13	13	0
Confidence Level(95.0%)	1.46	0.63	0.0	1.8	0.7	1.1	0.0	3.1	0.4	1.2	2.8	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	138	111	ND	ND	28.3	26.1	2.2	ND
Standard Error	3	1	ND	ND	0.4	0.4	0.1	ND
Median	140	110	ND	ND	28.0	26.0	2.2	ND
Mode	140	110	ND	ND	27.0	24.0	2.4	ND
Standard Deviation	9	6	ND	ND	2.8	2.6	0.4	ND
Sample Variance	86	42	ND	ND	7.6	6.8	0.1	ND
Kurtosis	-1	3	ND	ND	0.9	0.3	0.1	ND
Skewness	0	1	ND	ND	1.0	0.8	0.8	ND
Range	30	30	0.0	0.0	12.0	11.0	1.5	0.0
Minimum	120	100	0.0	0.0	24.0	22.0	1.7	0.0
Maximum	150	130	0.0	0.0	36.0	33.0	3.2	0.0
Count	13	39	0	0	39	39	39	0
Confidence Level(95.0%)	6	2	ND	ND	0.9	0.8	0.1	ND

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 7
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	12.3	10.3	6.35	0.63	0.010	0.66	0.040	0.21	0.029	0.016	2.91
Standard Error	0.0	0.6	0.2	0.80	0.04	0.001	0.03	0.004	0.04	0.004	0.003	0.24
Median	8.0	10.9	10.5	3.68	0.60	0.010	0.64	0.036	0.00	0.031	0.000	2.25
Mode	8.2	5.9	10.5	1.40	1.10	0.012	1.10	0.000	0.00	0.000	0.000	1.60
Standard Deviation	0.2	5.3	1.4	6.46	0.27	0.005	0.26	0.033	0.33	0.035	0.025	1.79
Sample Variance	0.0	27.6	2.0	41.77	0.07	0.000	0.07	0.001	0.11	0.001	0.001	3.21
Kurtosis	0.2	-0.8	1.3	7.23	0.79	0.395	0.48	-0.693	1.88	3.003	3.421	3.52
Skewness	0.7	0.5	-0.8	2.30	1.06	-0.152	0.88	0.498	1.57	1.563	1.783	1.95
Range	0.8	20.8	8.1	35.60	1.11	0.023	1.11	0.110	1.30	0.150	0.110	7.85
Minimum	7.7	2.6	5.4	0.50	0.29	0.000	0.29	0.000	0.00	0.000	0.000	0.95
Maximum	8.6	23.4	13.5	36.10	1.40	0.023	1.40	0.110	1.30	0.150	0.110	8.80
Count	69	69	69	66	54	54	66	62	62	63	60	54
Confidence Level(95.0%)	0.0	1.3	0.3	1.59	0.07	0.001	0.06	0.008	0.08	0.009	0.007	0.49

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	2.0	4.5	262.1	258.7	1.3	3.5	3.1	419	31.7	121	1.4	144
Standard Error	0.2	0.4	12.6	12.4	0.2	0.4	0.3	12	2.0	65	0.2	112
Median	1.8	4.2	260.0	257.1	1.4	3.0	2.2	408	29.5	28	1.4	25
Mode	1.6	4.0	300.0	ND	1.4	3.0	2.1	322	51.0	3	0.5	40
Standard Deviation	1.0	1.6	47.1	46.4	0.9	1.4	2.3	102	16.1	304	0.7	432
Sample Variance	1.0	2.7	2218.1	2152.9	0.7	1.9	5.2	10458	257.8	92357	0.6	186541
Kurtosis	1.6	1.6	-0.8	-0.8	0.0	0.9	2.0	0	3.5	17	0.4	15
Skewness	1.1	0.8	0.1	0.1	0.0	1.2	1.6	1	1.5	4	0.2	4
Range	4.2	7.2	160.0	157.2	2.8	4.8	9.9	458	87.0	1400	3.1	1696
Minimum	0.3	1.8	180.0	177.0	0.0	1.8	0.5	283	12.0	0	0.0	4
Maximum	4.5	9.0	340.0	334.2	2.8	6.6	10.4	741	99.0	1400	3.1	1700
Count	23	21	14	14	14	14	66	69	66	22	22	15
Confidence Level(95.0%)	0.4	0.8	27.2	26.8	0.5	0.8	0.6	25	3.9	135	0.3	239

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 7
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	40.18	15.55	0.0	2.8	6.0	2.7	0.5	8.4	0.1	1.2	3.2	ND
Standard Error	1.04	0.56	0.0	0.6	0.7	0.4	0.3	1.4	0.1	0.5	1.1	ND
Median	40.00	15.00	0.0	3.9	5.0	2.2	0.0	8.9	0.0	0.0	0.0	ND
Mode	36.00	17.00	0.0	0.0	4.4	2.2	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	4.86	2.61	0.0	2.8	3.2	1.8	1.5	6.6	0.4	2.3	5.1	ND
Sample Variance	23.58	6.83	0.0	8.0	10.1	3.2	2.3	43.9	0.2	5.5	25.9	ND
Kurtosis	0.17	0.46	ND	-1.0	5.5	13.4	9.6	-0.1	22.0	1.0	0.0	ND
Skewness	0.84	0.97	ND	0.4	2.4	3.4	3.2	0.4	4.7	1.6	1.2	ND
Range	18.00	10.00	0.0	8.8	12.4	8.5	5.9	22.0	2.0	7.1	15.0	0.0
Minimum	34.00	12.00	0.0	0.0	3.6	1.4	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	52.00	22.00	0.0	8.8	16.0	9.9	5.9	22.0	2.0	7.1	15.0	0.0
Count	22	22	22	22	22	22	22	22	22	22	22	0
Confidence Level(95.0%)	2.15	1.16	0.0	1.3	1.4	0.8	0.7	2.9	0.2	1.0	2.3	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN/C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	165	136	0.2	4.5	35.8	32.0	3.8	ND
Standard Error	5	4	0.2	0.2	1.2	0.9	0.3	ND
Median	160	120	0.0	4.2	33.5	30.0	3.0	ND
Mode	140	110	0.0	4.0	31.0	26.0	3.3	ND
Standard Deviation	22	27	0.6	0.7	7.5	6.0	1.9	ND
Sample Variance	493	712	0.3	0.4	56.1	35.8	3.5	ND
Kurtosis	0	0	14.0	2.0	-1.0	-0.9	0.5	ND
Skewness	1	1	3.7	1.3	0.6	0.5	1.2	ND
Range	80	90	2.1	2.3	25.0	21.0	7.0	0.0
Minimum	140	110	0.0	3.8	26.0	24.0	1.9	0.0
Maximum	220	200	2.1	6.1	51.0	45.0	8.9	0.0
Count	22	42	14	11	42	42	42	0
Confidence Level(95.0%)	10	8	0.3	0.5	2.3	1.9	0.6	ND

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 8
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	10.1	11.1	ND	0.37	0.004	0.38	0.018	0.09	0.006	0.004	1.99
Standard Error	0.0	0.8	0.2	ND	0.02	0.001	0.02	0.003	0.04	0.002	0.002	0.09
Median	8.1	8.9	11.6	ND	0.35	0.005	0.36	0.010	0.00	0.000	0.000	1.80
Mode	8.1	20.1	ND	ND	0.34	0.000	0.34	0.000	0.00	0.000	0.000	1.70
Standard Deviation	0.2	5.3	1.4	ND	0.13	0.004	0.12	0.020	0.22	0.015	0.011	0.48
Sample Variance	0.0	27.7	2.0	ND	0.02	0.000	0.01	0.000	0.05	0.000	0.000	0.23
Kurtosis	0.1	0.4	-0.2	ND	11.54	-1.127	12.14	-0.966	8.58	7.603	5.600	1.28
Skewness	0.5	1.0	-0.5	ND	2.84	0.407	2.74	0.729	2.78	2.781	2.633	1.26
Range	0.7	19.2	5.6	0.00	0.70	0.012	0.70	0.059	1.00	0.066	0.039	2.00
Minimum	7.8	2.1	8.3	0.00	0.22	0.000	0.23	0.000	0.00	0.000	0.000	1.40
Maximum	8.5	21.3	13.8	0.00	0.92	0.012	0.93	0.059	1.00	0.066	0.039	3.40
Count	39	39	39	0	30	30	39	36	33	36	33	30
Confidence Level(95.0%)	0.1	1.7	0.5	ND	0.05	0.001	0.04	0.007	0.08	0.005	0.004	0.18

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	5.2	11.2	178.5	176.7	0.4	1.7	1.6	316	15.3	16	0.6	ND
Standard Error	0.7	1.1	8.7	8.5	0.2	0.5	0.4	6	0.9	11	0.2	ND
Median	5.1	12.0	190.0	188.4	0.0	1.4	0.9	306	14.0	3	0.5	ND
Mode	ND	14.0	190.0	120.0	0.0	0.0	ND	303	12.0	0	0.0	ND
Standard Deviation	2.4	4.0	31.3	30.6	0.7	1.9	2.4	38	5.4	39	0.7	ND
Sample Variance	5.6	15.7	980.8	938.8	0.5	3.4	5.8	1409	29.7	1492	0.5	ND
Kurtosis	-0.5	-0.4	-0.1	-0.1	-1.3	7.0	8.9	18	12.9	11	1.1	ND
Skewness	0.0	-0.8	-1.1	-1.0	1.0	2.3	3.1	4	3.3	3	1.3	ND
Range	7.9	12.4	90.0	88.8	1.6	7.2	10.3	220	29.0	140	2.1	0
Minimum	0.8	3.2	120.0	120.0	0.0	0.0	0.4	286	12.0	0	0.0	0
Maximum	8.7	15.6	210.0	208.8	1.6	7.2	10.7	506	41.0	140	2.1	0
Count	13	12	13	13	13	13	39	39	39	13	13	0
Confidence Level(95.0%)	1.4	2.5	18.9	18.5	0.4	1.1	0.8	12	1.8	23	0.4	ND

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 8
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	34.62	11.85	0.0	2.1	4.0	2.0	1.5	4.3	0.2	1.4	2.1	ND
Standard Error	0.53	0.25	0.0	0.9	0.4	0.3	1.5	1.8	0.2	0.6	1.0	ND
Median	35.00	12.00	0.0	0.0	3.7	1.8	0.0	0.0	0.0	0.0	0.0	ND
Mode	35.00	12.00	0.0	0.0	ND	2.2	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	1.89	0.90	0.0	3.1	1.4	1.1	5.5	6.5	0.6	2.3	3.5	ND
Sample Variance	3.59	0.81	0.0	9.8	2.1	1.3	30.8	42.6	0.4	5.1	12.0	ND
Kurtosis	1.26	1.54	ND	2.1	2.2	7.5	13.0	2.3	13.0	-0.5	0.7	ND
Skewness	0.66	1.16	ND	1.5	1.2	2.4	3.6	1.6	3.6	1.2	1.4	ND
Range	7.00	3.00	0.0	10.0	5.7	4.5	20.0	21.0	2.2	5.4	10.0	0.0
Minimum	32.00	11.00	0.0	0.0	1.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	39.00	14.00	0.0	10.0	7.6	5.4	20.0	21.0	2.2	5.4	10.0	0.0
Count	13	13	13	13	13	13	13	13	13	13	13	0
Confidence Level(95.0%)	1.14	0.54	0.0	1.9	0.9	0.7	3.4	3.9	0.4	1.4	2.1	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	136	112	ND	ND	28.6	26.3	2.3	ND
Standard Error	2	2	ND	ND	0.4	0.4	0.1	ND
Median	140	110	ND	ND	28.0	26.0	2.2	ND
Mode	140	110	ND	ND	28.0	26.0	2.4	ND
Standard Deviation	8	10	ND	ND	2.6	2.4	0.5	ND
Sample Variance	59	91	ND	ND	6.7	5.9	0.3	ND
Kurtosis	1	6	ND	ND	5.9	1.3	10.4	ND
Skewness	0	2	ND	ND	1.7	0.8	2.7	ND
Range	30	51	0.0	0.0	15.0	12.0	2.8	0.0
Minimum	120	99	0.0	0.0	24.0	22.0	1.8	0.0
Maximum	150	150	0.0	0.0	39.0	34.0	4.6	0.0
Count	13	39	0	0	39	39	39	0
Confidence Level(95.0%)	5	3	ND	ND	0.8	0.8	0.2	ND

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 9
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	11.6	10.4	4.30	0.54	0.008	0.57	0.036	0.29	0.020	0.014	2.67
Standard Error	0.0	0.8	0.2	0.57	0.04	0.001	0.04	0.005	0.08	0.006	0.004	0.26
Median	8.0	10.0	10.7	3.02	0.46	0.008	0.51	0.036	0.00	0.000	0.000	2.20
Mode	7.9	7.1	ND	4.13	0.40	0.011	0.74	0.000	0.00	0.000	0.000	1.60
Standard Deviation	0.2	5.3	1.5	3.70	0.22	0.005	0.24	0.032	0.51	0.035	0.025	1.48
Sample Variance	0.0	28.4	2.3	13.67	0.05	0.000	0.06	0.001	0.26	0.001	0.001	2.19
Kurtosis	-0.3	-0.8	0.8	0.88	0.66	0.439	0.19	-1.203	4.53	4.709	5.086	4.70
Skewness	0.0	0.4	-0.7	1.18	1.08	0.456	1.02	0.366	2.19	2.127	2.240	2.13
Range	1.0	19.5	7.6	14.84	0.85	0.022	0.95	0.100	1.90	0.140	0.098	6.20
Minimum	7.5	2.5	5.8	0.46	0.25	0.000	0.25	0.000	0.00	0.000	0.000	1.30
Maximum	8.5	22.0	13.5	15.30	1.10	0.022	1.20	0.100	1.90	0.140	0.098	7.50
Count	42	42	42	42	33	33	42	39	39	39	36	33
Confidence Level(95.0%)	0.1	1.7	0.5	1.15	0.08	0.002	0.08	0.010	0.16	0.011	0.009	0.52

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	2.8	6.3	230.7	228.4	0.8	2.3	2.4	389	27.4	18	0.8	12
Standard Error	0.5	0.6	11.9	11.7	0.2	0.5	0.3	13	2.4	10	0.2	5
Median	2.3	6.3	225.0	224.5	1.0	1.5	1.7	376	23.0	5	0.7	7
Mode	2.0	7.0	270.0	ND	1.0	1.2	1.6	378	23.0	5	0.7	0
Standard Deviation	1.7	2.2	44.5	43.8	0.8	1.9	2.2	86	15.8	39	0.6	18
Sample Variance	3.0	4.6	1976.4	1915.0	0.6	3.7	4.9	7405	251.2	1498	0.3	325
Kurtosis	0.4	-0.4	-0.4	-0.2	0.6	2.6	5.4	1	4.4	13	1.1	9
Skewness	1.2	0.2	0.1	0.0	0.7	1.6	2.3	1	1.8	4	0.7	3
Range	5.4	7.4	160.0	161.8	2.6	7.2	10.4	367	77.0	150	2.2	68
Minimum	0.9	2.9	150.0	147.0	0.0	0.0	0.5	292	11.0	0	0.0	0
Maximum	6.3	10.3	310.0	308.8	2.6	7.2	10.9	659	88.0	150	2.2	68
Count	14	13	14	14	14	14	42	42	42	14	14	13
Confidence Level(95.0%)	1.0	1.3	25.7	25.3	0.4	1.1	0.7	27	4.9	22	0.3	11

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 9
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	38.00	14.00	0.0	2.5	5.3	2.1	0.8	9.3	0.2	1.4	2.5	ND
Standard Error	1.14	0.67	0.0	0.6	0.6	0.2	0.7	2.1	0.2	0.6	1.1	ND
Median	37.50	13.00	0.0	3.9	4.5	2.2	0.0	8.0	0.0	0.0	0.0	ND
Mode	42.00	12.00	0.0	0.0	4.1	1.4	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	4.28	2.51	0.0	2.3	2.1	0.7	2.7	7.9	0.8	2.4	4.1	ND
Sample Variance	18.31	6.31	0.0	5.3	4.5	0.4	7.1	62.3	0.6	5.6	16.5	ND
Kurtosis	-1.76	-2.00	ND	-2.0	0.5	-1.2	13.1	3.0	14.0	-0.1	-0.8	ND
Skewness	-0.01	0.17	ND	-0.2	1.1	0.2	3.6	1.4	3.7	1.3	1.1	ND
Range	12.00	6.00	0.0	5.7	7.2	2.0	10.0	30.0	2.9	6.5	9.9	0.0
Minimum	32.00	11.00	0.0	0.0	2.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	44.00	17.00	0.0	5.7	10.0	3.2	10.0	30.0	2.9	6.5	9.9	0.0
Count	14	14	14	14	14	14	14	14	14	14	14	0
Confidence Level(95.0%)	2.47	1.45	0.0	1.3	1.2	0.4	1.5	4.6	0.4	1.4	2.3	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	153	125	ND	ND	32.8	29.5	3.2	ND
Standard Error	5	3	ND	ND	0.8	0.7	0.2	ND
Median	150	120	ND	ND	32.0	28.5	2.8	ND
Mode	170	110	ND	ND	32.0	30.0	2.5	ND
Standard Deviation	19	17	ND	ND	5.4	4.4	1.4	ND
Sample Variance	345	289	ND	ND	29.5	19.0	1.9	ND
Kurtosis	-2	0	ND	ND	-0.2	-0.4	4.2	ND
Skewness	0	1	ND	ND	0.9	0.8	2.0	ND
Range	50	60	0.0	0.0	20.0	16.0	6.1	0.0
Minimum	130	110	0.0	0.0	26.0	24.0	1.7	0.0
Maximum	180	170	0.0	0.0	46.0	40.0	7.8	0.0
Count	14	42	0	0	42	42	42	0
Confidence Level(95.0%)	11	5	ND	ND	1.7	1.4	0.4	ND

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 10
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	12.4	10.1	5.76	0.58	0.010	0.62	0.044	0.21	0.035	0.016	2.85
Standard Error	0.0	0.8	0.3	0.77	0.03	0.001	0.03	0.006	0.06	0.006	0.005	0.28
Median	8.0	11.6	10.6	3.96	0.53	0.010	0.60	0.038	0.00	0.035	0.000	2.40
Mode	8.0	16.4	9.8	10.90	0.62	0.006	0.79	0.000	0.00	0.000	0.000	1.50
Standard Deviation	0.2	5.4	1.7	5.01	0.19	0.005	0.19	0.040	0.35	0.036	0.028	1.60
Sample Variance	0.0	29.5	3.0	25.07	0.04	0.000	0.04	0.002	0.12	0.001	0.001	2.55
Kurtosis	-0.5	-1.0	-0.7	-0.42	-0.77	1.567	-1.04	-0.614	0.22	0.347	2.422	2.34
Skewness	0.2	0.2	-0.3	0.78	0.30	0.948	0.14	0.606	1.30	0.871	1.774	1.65
Range	0.8	19.1	6.9	17.81	0.71	0.025	0.71	0.140	1.10	0.120	0.095	5.80
Minimum	7.7	2.8	6.4	0.29	0.29	0.000	0.29	0.000	0.00	0.000	0.000	1.30
Maximum	8.5	21.9	13.3	18.10	1.00	0.025	1.00	0.140	1.10	0.120	0.095	7.10
Count	42	42	42	42	33	33	42	39	37	39	36	33
Confidence Level(95.0%)	0.1	1.7	0.5	1.56	0.07	0.002	0.06	0.013	0.12	0.012	0.009	0.57

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	2.3	6.7	254.3	251.0	1.1	3.3	3.0	422	32.3	17	0.9	14
Standard Error	0.2	0.8	10.3	10.1	0.3	0.4	0.3	11	2.1	6	0.2	5
Median	2.2	5.3	260.0	257.4	1.3	3.1	2.5	418	29.5	9	1.0	7
Mode	2.8	10.0	260.0	ND	0.0	5.0	2.5	391	29.0	0	0.0	4
Standard Deviation	0.9	2.9	38.4	37.9	1.1	1.4	1.6	72	13.9	22	0.6	19
Sample Variance	0.8	8.2	1472.5	1438.8	1.3	2.0	2.7	5191	192.5	464	0.3	370
Kurtosis	1.3	-2.0	0.5	0.5	-0.7	-1.0	1.2	1	10.7	3	-0.8	9
Skewness	0.9	0.0	-0.8	-0.8	0.5	0.3	1.5	1	2.5	2	-0.1	3
Range	3.6	7.5	140.0	136.8	3.4	4.4	5.9	335	83.0	75	1.9	74
Minimum	0.9	2.5	170.0	168.2	0.0	1.4	1.1	322	14.0	0	0.0	1
Maximum	4.5	10.0	310.0	305.0	3.4	5.8	6.9	657	97.0	75	1.9	75
Count	14	13	14	14	14	14	42	42	42	14	14	14
Confidence Level(95.0%)	0.5	1.7	22.2	21.9	0.6	0.8	0.5	22	4.3	12	0.3	11

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 10
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	38.86	14.71	0.0	1.3	5.0	2.4	0.6	7.2	0.0	1.9	2.9	ND
Standard Error	1.04	0.55	0.0	0.6	0.4	0.3	0.6	1.6	0.0	0.8	1.0	ND
Median	38.50	14.50	0.0	0.0	4.7	2.0	0.0	8.9	0.0	0.0	0.0	ND
Mode	36.00	14.00	0.0	0.0	4.9	2.2	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	3.88	2.05	0.0	2.2	1.6	1.2	2.1	5.9	0.0	2.9	3.6	ND
Sample Variance	15.05	4.22	0.0	4.9	2.5	1.4	4.2	34.9	0.0	8.3	12.8	ND
Kurtosis	-0.86	-1.27	ND	-0.8	0.4	1.3	14.0	-1.6	ND	-0.6	-1.5	ND
Skewness	0.34	0.08	ND	1.1	0.9	1.3	3.7	-0.3	ND	1.0	0.6	ND
Range	12.00	6.00	0.0	5.2	5.6	4.2	7.7	16.0	0.0	7.8	8.8	0.0
Minimum	33.00	12.00	0.0	0.0	2.9	1.1	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	45.00	18.00	0.0	5.2	8.5	5.3	7.7	16.0	0.0	7.8	8.8	0.0
Count	14	14	14	14	14	14	14	14	13	14	14	0
Confidence Level(95.0%)	2.24	1.19	0.0	1.3	0.9	0.7	1.2	3.4	0.0	1.7	2.1	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	156	129	ND	ND	33.9	30.4	3.5	ND
Standard Error	5	2	ND	ND	0.8	0.6	0.2	ND
Median	155	125	ND	ND	33.0	30.0	3.0	ND
Mode	150	120	ND	ND	30.0	26.0	2.9	ND
Standard Deviation	19	16	ND	ND	5.0	4.0	1.4	ND
Sample Variance	348	245	ND	ND	25.0	16.0	1.9	ND
Kurtosis	-1	0	ND	ND	-0.1	-0.1	2.0	ND
Skewness	0	1	ND	ND	0.9	0.8	1.6	ND
Range	60	60	0.0	0.0	18.0	15.0	5.4	0.0
Minimum	130	110	0.0	0.0	28.0	25.0	2.1	0.0
Maximum	190	170	0.0	0.0	46.0	40.0	7.5	0.0
Count	14	42	0	0	42	42	42	0
Confidence Level(95.0%)	11	5	ND	ND	1.6	1.2	0.4	ND

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 11
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	11.9	10.3	9.32	0.76	0.014	0.82	0.047	0.34	0.048	0.017	3.10
Standard Error	0.0	0.7	0.2	1.54	0.04	0.001	0.04	0.007	0.09	0.005	0.003	0.24
Median	8.0	11.3	10.4	5.01	0.76	0.013	0.79	0.032	0.00	0.038	0.000	2.55
Mode	7.9	19.8	10.5	3.21	1.10	0.013	1.30	0.000	0.00	0.000	0.000	1.50
Standard Deviation	0.3	5.6	1.3	11.28	0.26	0.007	0.28	0.054	0.61	0.038	0.023	1.53
Sample Variance	0.1	30.8	1.7	127.28	0.07	0.000	0.08	0.003	0.37	0.001	0.001	2.33
Kurtosis	0.1	-1.1	0.6	4.29	-0.89	4.664	-0.91	3.742	18.82	0.328	1.427	0.26
Skewness	0.7	0.2	-0.5	2.15	0.35	1.669	0.33	1.742	3.68	0.864	1.276	0.89
Range	1.2	18.8	6.1	47.21	0.93	0.040	0.92	0.240	3.70	0.140	0.088	5.80
Minimum	7.5	3.8	6.8	0.49	0.37	0.000	0.38	0.000	0.00	0.000	0.000	1.40
Maximum	8.6	22.6	12.9	47.70	1.30	0.040	1.30	0.240	3.70	0.140	0.088	7.20
Count	57	57	57	54	42	42	54	51	49	51	48	42
Confidence Level(95.0%)	0.1	1.5	0.3	3.08	0.08	0.002	0.08	0.015	0.18	0.011	0.007	0.48

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	1.5	3.9	290.0	280.9	2.7	9.1	8.0	468	40.1	587	1.5	2316
Standard Error	0.2	0.4	14.8	14.4	0.8	3.7	2.1	13	2.6	409	0.2	1720
Median	1.7	4.5	285.0	271.8	1.9	3.9	2.8	437	32.0	33	1.5	970
Mode	1.8	5.0	290.0	256.8	2.2	3.2	2.0	387	32.0	3	0.5	ND
Standard Deviation	0.7	1.8	62.6	60.9	3.2	15.7	15.2	100	19.4	1785	1.0	3846
Sample Variance	0.5	3.2	3917.6	3709.8	10.2	245.8	231.1	9974	376.1	3186055	1.0	14794265
Kurtosis	-0.5	-1.0	0.6	0.4	10.0	9.7	10.9	-1	0.5	16	0.5	4
Skewness	-0.4	-0.4	0.4	0.3	3.0	3.1	3.3	1	1.2	4	0.9	2
Range	2.4	5.8	250.0	251.4	14.0	62.6	70.7	359	78.0	7700	3.9	9097
Minimum	0.3	0.6	160.0	154.8	0.0	1.4	1.5	303	14.0	0	0.0	3
Maximum	2.7	6.4	410.0	406.2	14.0	64.0	72.2	662	92.0	7700	3.9	9100
Count	19	17	18	18	18	18	54	57	54	19	19	5
Confidence Level(95.0%)	0.3	0.9	31.1	30.3	1.6	7.8	4.1	26	5.3	860	0.5	4776

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 11
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	42.06	16.44	0.0	3.1	6.1	2.4	1.7	11.6	0.0	2.1	2.6	0.0
Standard Error	1.68	0.80	0.0	0.8	0.5	0.2	1.1	1.8	0.0	0.7	0.9	0.0
Median	40.50	16.00	0.0	3.9	5.5	2.1	0.0	10.0	0.0	0.0	0.0	0.0
Mode	47.00	16.00	0.0	0.0	7.8	1.7	0.0	13.0	0.0	0.0	0.0	0.0
Standard Deviation	7.11	3.38	0.0	3.4	2.3	1.0	4.8	7.8	0.0	2.8	4.0	0.0
Sample Variance	50.53	11.44	0.0	11.2	5.2	1.0	22.6	61.5	0.0	7.8	15.9	0.0
Kurtosis	1.56	0.93	ND	-0.7	-1.2	1.6	7.2	3.4	ND	-0.8	-0.5	ND
Skewness	1.20	1.08	ND	0.6	0.3	1.4	2.8	1.4	ND	0.8	1.1	ND
Range	28.00	13.00	0.0	9.3	7.2	3.8	17.0	34.0	0.0	8.1	11.0	0.0
Minimum	33.00	12.00	0.0	0.0	2.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	61.00	25.00	0.0	9.3	10.0	5.0	17.0	34.0	0.0	8.1	11.0	0.0
Count	18	18	18	18	18	18	18	18	17	18	18	4
Confidence Level(95.0%)	3.53	1.68	0.0	1.7	1.1	0.5	2.4	3.9	0.0	1.4	2.0	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN/C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	172	136	1.3	ND	36.0	32.0	4.0	ND
Standard Error	7	3	0.7	ND	0.8	0.7	0.2	ND
Median	165	130	1.2	ND	35.0	31.0	3.6	ND
Mode	150	130	0.0	ND	31.0	29.0	3.0	ND
Standard Deviation	30	20	1.5	ND	5.9	4.9	1.4	ND
Sample Variance	901	407	2.2	ND	34.7	23.6	1.9	ND
Kurtosis	1	0	-5.8	ND	0.7	0.5	-0.4	ND
Skewness	1	0	0.0	ND	1.0	0.8	0.9	ND
Range	120	96	2.7	0.0	26.0	21.0	4.9	0.0
Minimum	130	84	0.0	0.0	27.0	24.0	2.2	0.0
Maximum	250	180	2.7	0.0	53.0	45.0	7.1	0.0
Count	18	54	4	0	54	54	54	0
Confidence Level(95.0%)	15	6	2.4	ND	1.6	1.3	0.4	ND

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 12
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	9.9	11.2	1.96	0.33	0.003	0.33	0.017	0.14	0.006	0.003	1.77
Standard Error	0.0	0.9	0.2	0.28	0.01	0.001	0.01	0.003	0.04	0.003	0.002	0.04
Median	8.1	8.4	11.6	1.57	0.32	0.002	0.32	0.016	0.00	0.000	0.000	1.75
Mode	7.9	2.4	8.9	1.90	0.32	0.000	0.33	0.000	0.00	0.000	0.000	1.80
Standard Deviation	0.2	5.4	1.4	1.74	0.08	0.004	0.07	0.018	0.23	0.015	0.010	0.23
Sample Variance	0.0	28.7	2.0	3.02	0.01	0.000	0.00	0.000	0.05	0.000	0.000	0.05
Kurtosis	0.0	0.5	0.1	6.73	1.36	-0.910	2.04	0.946	-0.32	3.219	7.806	0.56
Skewness	0.8	1.1	-0.5	2.49	1.03	0.593	1.19	1.122	1.22	2.199	2.875	0.69
Range	0.8	19.7	6.0	8.09	0.35	0.012	0.35	0.066	0.64	0.047	0.041	1.00
Minimum	7.7	1.9	7.9	0.16	0.19	0.000	0.20	0.000	0.00	0.000	0.000	1.40
Maximum	8.5	21.6	13.9	8.25	0.54	0.012	0.55	0.066	0.64	0.047	0.041	2.40
Count	39	39	39	39	30	30	39	34	33	34	33	30
Confidence Level(95.0%)	0.1	1.7	0.5	0.56	0.03	0.001	0.02	0.006	0.08	0.005	0.003	0.09

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	4.6	11.2	187.7	186.5	0.3	1.2	1.3	300	13.4	6	0.4	ND
Standard Error	0.4	1.0	5.0	4.9	0.2	0.4	0.3	3	0.5	3	0.2	ND
Median	4.7	11.4	190.0	187.8	0.0	1.0	0.7	293	12.0	0	0.0	ND
Mode	ND	11.4	180.0	179.0	0.0	0.0	0.5	285	12.0	0	0.0	ND
Standard Deviation	1.5	3.7	17.9	17.6	0.7	1.3	1.8	20	3.4	11	0.6	ND
Sample Variance	2.1	13.3	319.2	309.2	0.5	1.8	3.4	393	11.5	119	0.3	ND
Kurtosis	3.3	0.8	0.8	1.0	4.6	2.8	8.4	1	1.9	7	0.1	ND
Skewness	-1.3	-0.3	-0.2	-0.1	2.2	1.5	3.1	1	1.6	3	1.1	ND
Range	5.9	13.6	70.0	70.0	2.2	4.6	7.7	74	13.0	38	1.6	0
Minimum	0.8	3.4	150.0	150.0	0.0	0.0	0.3	279	10.0	0	0.0	0
Maximum	6.7	17.0	220.0	220.0	2.2	4.6	8.0	353	23.0	38	1.6	0
Count	13	13	13	13	13	13	39	39	39	13	13	0
Confidence Level(95.0%)	0.9	2.2	10.8	10.6	0.4	0.8	0.6	6	1.1	7	0.3	ND

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 12
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	35.23	11.92	0.0	2.4	4.4	2.7	1.1	6.5	0.1	1.2	3.2	ND
Standard Error	0.92	0.31	0.0	1.0	0.4	0.6	0.7	1.7	0.1	0.6	1.3	ND
Median	35.00	12.00	0.0	0.0	4.0	2.3	0.0	7.6	0.0	0.0	0.0	ND
Mode	35.00	12.00	0.0	0.0	3.0	ND	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	3.32	1.12	0.0	3.7	1.6	2.1	2.6	6.0	0.3	2.3	4.6	ND
Sample Variance	11.03	1.24	0.0	13.7	2.6	4.5	6.9	36.6	0.1	5.4	21.3	ND
Kurtosis	6.91	4.51	ND	2.5	0.0	3.6	4.2	-0.8	12.0	0.4	0.8	ND
Skewness	2.21	1.88	ND	1.6	0.8	1.8	2.3	0.3	3.5	1.5	1.3	ND
Range	14.00	4.00	0.0	12.0	5.4	7.5	8.0	18.0	1.2	5.9	14.0	0.0
Minimum	31.00	11.00	0.0	0.0	2.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	45.00	15.00	0.0	12.0	7.9	8.3	8.0	18.0	1.2	5.9	14.0	0.0
Count	13	13	13	13	13	13	13	13	12	13	13	0
Confidence Level(95.0%)	2.01	0.67	0.0	2.2	1.0	1.3	1.6	3.7	0.2	1.4	2.8	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	135	111	ND	ND	28.0	25.8	2.2	ND
Standard Error	4	1	ND	ND	0.4	0.4	0.1	ND
Median	130	110	ND	ND	28.0	26.0	2.1	ND
Mode	130	110	ND	ND	26.0	24.0	1.9	ND
Standard Deviation	13	7	ND	ND	2.4	2.3	0.4	ND
Sample Variance	177	52	ND	ND	5.9	5.3	0.2	ND
Kurtosis	3	3	ND	ND	-0.5	-0.5	0.4	ND
Skewness	2	1	ND	ND	0.4	0.3	0.7	ND
Range	50	35	0.0	0.0	9.0	9.0	1.6	0.0
Minimum	120	95	0.0	0.0	24.0	22.0	1.5	0.0
Maximum	170	130	0.0	0.0	33.0	31.0	3.1	0.0
Count	13	39	0	0	39	37	37	0
Confidence Level(95.0%)	8	2	ND	ND	0.8	0.8	0.1	ND

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 13
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	10.3	11.1	1.39	0.35	0.003	0.35	0.022	0.10	0.009	0.006	1.98
Standard Error	0.0	0.9	0.2	0.13	0.02	0.001	0.01	0.004	0.04	0.003	0.002	0.11
Median	8.1	9.1	11.6	1.10	0.35	0.000	0.33	0.015	0.00	0.000	0.000	1.80
Mode	8.1	20.2	12.1	1.69	0.35	0.000	0.31	0.000	0.00	0.000	0.000	1.60
Standard Deviation	0.2	5.5	1.5	0.83	0.10	0.003	0.09	0.022	0.25	0.021	0.014	0.60
Sample Variance	0.0	30.0	2.2	0.69	0.01	0.000	0.01	0.000	0.06	0.000	0.000	0.35
Kurtosis	-0.3	0.0	-0.2	0.28	2.05	-0.921	3.13	-0.316	3.61	2.644	4.516	2.92
Skewness	0.3	0.8	-0.5	1.08	1.02	0.730	1.38	0.914	2.21	2.043	2.261	1.86
Range	0.7	19.5	6.3	3.08	0.44	0.010	0.43	0.069	0.90	0.071	0.055	2.40
Minimum	7.8	1.9	7.5	0.34	0.20	0.000	0.21	0.000	0.00	0.000	0.000	1.40
Maximum	8.6	21.4	13.9	3.42	0.64	0.010	0.64	0.069	0.90	0.071	0.055	3.80
Count	37	37	37	39	30	30	39	36	36	36	33	30
Confidence Level(95.0%)	0.1	1.8	0.5	0.27	0.04	0.001	0.03	0.007	0.08	0.007	0.005	0.22

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	5.7	13.8	183.8	182.6	0.4	1.2	1.2	307	14.1	5	0.2	4
Standard Error	0.6	1.6	5.1	5.0	0.2	0.3	0.2	5	0.8	5	0.1	3
Median	6.7	15.9	180.0	180.0	0.0	1.2	0.7	297	12.0	0	0.0	0
Mode	ND	18.0	180.0	178.8	0.0	0.0	0.5	295	11.0	0	0.0	0
Standard Deviation	2.3	5.4	18.5	18.1	0.7	1.2	1.5	33	5.0	19	0.5	11
Sample Variance	5.4	29.3	342.3	329.0	0.5	1.4	2.2	1061	24.5	343	0.3	120
Kurtosis	0.9	-0.5	0.4	0.4	-0.6	-1.0	5.3	17	17.0	13	10.9	13
Skewness	-1.1	-0.9	0.4	0.3	1.1	0.5	2.5	4	3.6	4	3.3	4
Range	8.2	14.5	70.0	68.8	1.8	3.4	5.9	191	29.0	67	1.8	40
Minimum	0.8	4.0	150.0	148.8	0.0	0.0	0.4	278	10.0	0	0.0	0
Maximum	9.0	18.5	220.0	217.6	1.8	3.4	6.3	469	39.0	67	1.8	40
Count	13	12	13	13	13	13	39	37	39	13	13	13
Confidence Level(95.0%)	1.4	3.4	11.2	11.0	0.4	0.7	0.5	11	1.6	11	0.3	7

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 13
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	34.31	11.54	0.0	2.3	4.1	2.0	1.0	4.2	0.3	1.2	1.0	ND
Standard Error	0.51	0.18	0.0	0.8	0.4	0.2	1.0	1.3	0.2	0.6	0.7	ND
Median	34.00	11.00	0.0	0.0	3.9	1.7	0.0	0.0	0.0	0.0	0.0	ND
Mode	34.00	11.00	0.0	0.0	ND	ND	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	1.84	0.66	0.0	2.7	1.6	0.9	3.6	4.9	0.6	2.3	2.6	ND
Sample Variance	3.40	0.44	0.0	7.6	2.4	0.8	13.0	23.5	0.3	5.2	6.6	ND
Kurtosis	-0.63	-0.02	ND	-1.4	1.2	-1.3	13.0	-2.1	-0.2	0.2	3.5	ND
Skewness	-0.06	0.86	ND	0.5	1.2	0.3	3.6	0.3	1.4	1.5	2.2	ND
Range	6.00	2.00	0.0	7.5	5.4	2.6	13.0	11.0	1.3	5.4	7.3	0.0
Minimum	31.00	11.00	0.0	0.0	2.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	37.00	13.00	0.0	7.5	7.8	3.4	13.0	11.0	1.3	5.4	7.3	0.0
Count	13	13	13	13	13	13	13	13	12	13	13	0
Confidence Level(95.0%)	1.11	0.40	0.0	1.7	0.9	0.5	2.2	2.9	0.4	1.4	1.5	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	133	110	ND	ND	28.1	25.9	2.2	ND
Standard Error	2	1	ND	ND	0.3	0.3	0.1	ND
Median	130	110	ND	ND	28.0	26.0	2.1	ND
Mode	130	110	ND	ND	29.0	27.0	1.8	ND
Standard Deviation	6	9	ND	ND	2.1	2.0	0.5	ND
Sample Variance	40	79	ND	ND	4.5	4.1	0.2	ND
Kurtosis	0	0	ND	ND	-1.1	-0.9	2.6	ND
Skewness	0	0	ND	ND	0.1	0.0	1.4	ND
Range	20	36	0.0	0.0	7.0	8.0	2.3	0.0
Minimum	120	94	0.0	0.0	25.0	22.0	1.6	0.0
Maximum	140	130	0.0	0.0	32.0	30.0	3.9	0.0
Count	13	39	0	0	39	39	39	0
Confidence Level(95.0%)	4	3	ND	ND	0.7	0.7	0.2	ND

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 14
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	10.5	11.1	1.58	0.32	0.003	0.33	0.023	0.06	0.006	0.005	1.84
Standard Error	0.0	0.7	0.2	0.18	0.01	0.001	0.01	0.003	0.02	0.003	0.002	0.08
Median	8.0	8.9	11.5	0.96	0.33	0.000	0.33	0.018	0.00	0.000	0.000	1.70
Mode	7.9	8.9	11.9	0.64	0.33	0.000	0.33	0.000	0.00	0.000	0.000	1.80
Standard Deviation	0.3	5.4	1.4	1.39	0.06	0.006	0.06	0.027	0.17	0.019	0.013	0.58
Sample Variance	0.1	28.9	2.0	1.93	0.00	0.000	0.00	0.001	0.03	0.000	0.000	0.34
Kurtosis	-0.7	-0.1	0.1	3.80	2.52	29.920	2.46	5.408	5.55	8.068	4.478	21.92
Skewness	-0.2	0.8	-0.6	1.91	0.48	4.927	0.64	1.925	2.61	3.105	2.383	3.96
Range	1.2	20.1	6.5	6.84	0.36	0.042	0.36	0.140	0.68	0.075	0.054	4.10
Minimum	7.3	1.7	7.5	0.34	0.19	0.000	0.20	0.000	0.00	0.000	0.000	1.10
Maximum	8.5	21.7	14.0	7.18	0.55	0.042	0.56	0.140	0.68	0.075	0.054	5.20
Count	63	63	63	63	51	51	63	59	56	58	56	51
Confidence Level(95.0%)	0.1	1.4	0.4	0.35	0.02	0.002	0.02	0.007	0.04	0.005	0.003	0.16

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	5.3	12.4	186.2	185.0	0.5	1.2	1.2	298	13.0	19	0.5	ND
Standard Error	0.5	1.0	4.9	5.0	0.2	0.3	0.2	2	0.3	11	0.2	ND
Median	5.5	12.0	190.0	187.0	0.0	1.0	0.7	294	12.0	2	0.3	ND
Mode	6.2	12.0	200.0	200.0	0.0	0.0	1.1	291	12.0	0	0.0	ND
Standard Deviation	2.3	4.6	17.6	17.9	0.8	1.2	1.3	16	2.7	49	0.7	ND
Sample Variance	5.4	21.4	309.0	319.4	0.6	1.5	1.6	243	7.4	2397	0.5	ND
Kurtosis	0.3	-0.7	-1.3	-1.3	0.3	0.2	5.8	7	6.6	16	0.5	ND
Skewness	0.2	0.4	-0.2	-0.2	1.3	0.9	2.5	2	2.3	4	1.3	ND
Range	9.1	15.9	50.0	52.8	2.2	3.8	5.7	92	15.0	220	2.3	0
Minimum	1.1	4.1	160.0	156.2	0.0	0.0	0.2	280	10.0	0	0.0	0
Maximum	10.2	20.0	210.0	209.0	2.2	3.8	5.9	372	25.0	220	2.3	0
Count	21	20	13	13	13	13	63	63	63	21	21	0
Confidence Level(95.0%)	1.1	2.2	10.6	10.8	0.5	0.7	0.3	4	0.7	22	0.3	ND

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 14
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	34.48	11.57	0.0	1.6	4.7	2.3	0.6	5.8	0.2	1.1	2.3	ND
Standard Error	0.57	0.18	0.0	0.7	0.4	0.3	0.5	1.2	0.1	0.5	0.8	ND
Median	34.00	12.00	0.0	0.0	4.1	2.1	0.0	7.3	0.0	0.0	0.0	ND
Mode	34.00	12.00	0.0	0.0	3.9	2.1	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	2.62	0.81	0.0	3.0	1.8	1.6	2.2	5.4	0.5	2.1	3.7	ND
Sample Variance	6.86	0.66	0.0	8.9	3.4	2.5	4.7	29.5	0.3	4.6	13.9	ND
Kurtosis	4.95	3.09	ND	3.7	0.6	5.6	19.4	-1.7	4.0	2.0	-0.4	ND
Skewness	1.58	0.99	ND	1.9	1.1	2.3	4.4	0.1	2.3	1.7	1.2	ND
Range	13.00	4.00	0.0	11.0	6.7	6.7	9.9	14.0	1.7	7.1	10.0	0.0
Minimum	30.00	10.00	0.0	0.0	2.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	43.00	14.00	0.0	11.0	9.0	7.5	9.9	14.0	1.7	7.1	10.0	0.0
Count	21	21	21	21	21	21	21	21	20	21	20	0
Confidence Level(95.0%)	1.19	0.37	0.0	1.4	0.8	0.7	1.0	2.5	0.2	1.0	1.7	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	135	109	0.3	2.7	27.9	25.8	2.1	ND
Standard Error	2	1	0.3	0.2	0.4	0.4	0.1	ND
Median	130	110	0.0	2.5	28.0	26.0	2.1	ND
Mode	130	110	0.0	2.0	29.0	24.0	1.8	ND
Standard Deviation	10	8	1.1	0.6	2.2	2.1	0.4	ND
Sample Variance	96	66	1.3	0.3	4.7	4.5	0.2	ND
Kurtosis	8	5	13.0	-1.4	0.6	-0.7	4.3	ND
Skewness	2	1	3.6	0.4	0.3	0.0	1.5	ND
Range	50	45	4.1	1.5	10.0	8.0	2.2	0.0
Minimum	120	95	0.0	2.0	24.0	22.0	1.4	0.0
Maximum	170	140	4.1	3.5	34.0	30.0	3.6	0.0
Count	21	39	13	10	37	36	36	0
Confidence Level(95.0%)	4	3	0.7	0.4	0.7	0.7	0.1	ND

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 15
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	14.5	10.0	5.93	0.56	0.010	0.57	0.059	0.26	0.055	0.024	3.73
Standard Error	0.1	1.5	0.4	1.98	0.06	0.002	0.05	0.010	0.08	0.012	0.010	0.63
Median	8.1	15.7	10.4	2.38	0.55	0.010	0.51	0.048	0.20	0.053	0.000	3.30
Mode	ND	ND	ND	ND	0.38	0.010	0.39	ND	0.00	0.000	0.000	1.50
Standard Deviation	0.3	5.3	1.5	7.13	0.19	0.005	0.18	0.033	0.28	0.041	0.033	2.00
Sample Variance	0.1	28.1	2.4	50.88	0.04	0.000	0.03	0.001	0.08	0.002	0.001	4.00
Kurtosis	1.2	-0.9	0.1	6.58	-1.25	2.259	-1.07	-0.184	-1.67	0.173	1.526	0.13
Skewness	0.4	-0.3	-0.9	2.44	0.20	0.177	0.19	0.201	0.35	0.584	1.335	0.82
Range	1.0	16.6	4.9	25.68	0.57	0.021	0.57	0.120	0.73	0.130	0.100	6.20
Minimum	7.7	6.2	7.1	1.22	0.29	0.000	0.30	0.000	0.00	0.000	0.000	1.50
Maximum	8.7	22.8	12.0	26.90	0.86	0.021	0.87	0.120	0.73	0.130	0.100	7.70
Count	13	13	13	13	10	10	13	12	12	11	11	10
Confidence Level(95.0%)	0.2	3.2	0.9	4.31	0.14	0.004	0.11	0.021	0.18	0.028	0.022	1.43

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	276.9	273.3	1.4	3.6	3.1	427	30.2	19	1.0	ND
Standard Error	ND	ND	14.9	14.6	0.3	0.5	0.4	13	2.2	7	0.1	ND
Median	ND	ND	290.0	282.6	1.2	3.8	2.7	403	29.0	10	1.0	ND
Mode	ND	ND	310.0	ND	1.0	2.6	ND	ND	32.0	5	0.7	ND
Standard Deviation	ND	ND	53.6	52.5	1.0	1.9	1.4	47	8.1	26	0.5	ND
Sample Variance	ND	ND	2873.1	2754.0	1.0	3.5	2.0	2242	64.8	670	0.2	ND
Kurtosis	ND	ND	1.2	1.1	-1.1	0.1	0.1	1	-0.1	6	-0.3	ND
Skewness	ND	ND	0.6	0.6	0.0	0.7	0.8	1	0.9	2	0.7	ND
Range	0.0	0.0	210.0	204.4	3.0	6.4	4.6	152	25.0	90	1.5	0
Minimum	0.0	0.0	190.0	189.0	0.0	1.0	1.2	385	21.0	3	0.5	0
Maximum	0.0	0.0	400.0	393.4	3.0	7.4	5.8	537	46.0	93	2.0	0
Count	0	0	13	13	13	13	13	13	13	13	13	0
Confidence Level(95.0%)	ND	ND	32.4	31.7	0.6	1.1	0.8	29	4.9	16	0.3	ND

ND = No Data

Provisional MMSD Water Quality Data

OUTER HARBOR - SITE 15
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	41.85	17.31	0.0	3.1	6.5	2.6	0.4	8.2	0.1	1.4	2.0	ND
Standard Error	1.64	0.80	0.0	0.8	0.5	0.4	0.3	1.1	0.1	0.6	0.9	ND
Median	42.00	17.00	0.0	4.0	6.1	2.3	0.0	9.1	0.0	0.0	0.0	ND
Mode	37.00	17.00	0.0	0.0	6.1	2.3	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	5.90	2.90	0.0	2.8	2.0	1.4	0.9	3.9	0.3	2.3	3.3	ND
Sample Variance	34.81	8.40	0.0	7.9	3.9	1.9	0.9	15.3	0.1	5.4	11.1	ND
Kurtosis	-0.23	0.85	ND	-1.2	4.7	3.1	3.5	1.8	13.0	-0.5	1.3	ND
Skewness	0.55	0.95	ND	0.1	1.8	1.7	2.2	-1.5	3.6	1.1	1.5	ND
Range	20.00	10.00	0.0	8.1	8.0	5.0	2.7	13.0	1.1	6.0	10.0	0.0
Minimum	34.00	14.00	0.0	0.0	4.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	54.00	24.00	0.0	8.1	12.0	6.1	2.7	13.0	1.1	6.0	10.0	0.0
Count	13	13	13	13	13	13	13	13	13	13	13	0
Confidence Level(95.0%)	3.57	1.75	0.0	1.7	1.2	0.8	0.6	2.4	0.2	1.4	2.0	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	173	147	0.2	4.7	39.4	34.7	4.5	ND
Standard Error	7	7	0.2	0.3	2.1	1.6	0.6	ND
Median	170	140	0.0	4.6	37.0	34.0	3.5	ND
Mode	150	120	0.0	ND	41.0	28.0	2.5	ND
Standard Deviation	26	26	0.7	1.1	7.5	5.9	2.0	ND
Sample Variance	690	656	0.6	1.2	56.1	34.2	4.0	ND
Kurtosis	0	-1	13.0	2.2	-0.5	-0.4	-0.7	ND
Skewness	1	1	3.6	1.3	0.6	0.7	0.8	ND
Range	90	70	2.7	3.7	24.0	18.0	5.8	0.0
Minimum	140	120	0.0	3.4	30.0	28.0	2.5	0.0
Maximum	230	190	2.7	7.1	54.0	46.0	8.3	0.0
Count	13	13	13	10	13	13	13	0
Confidence Level(95.0%)	16	15	0.5	0.8	4.5	3.5	1.2	ND

ND = No Data

Provisional MMSD Water Quality Data

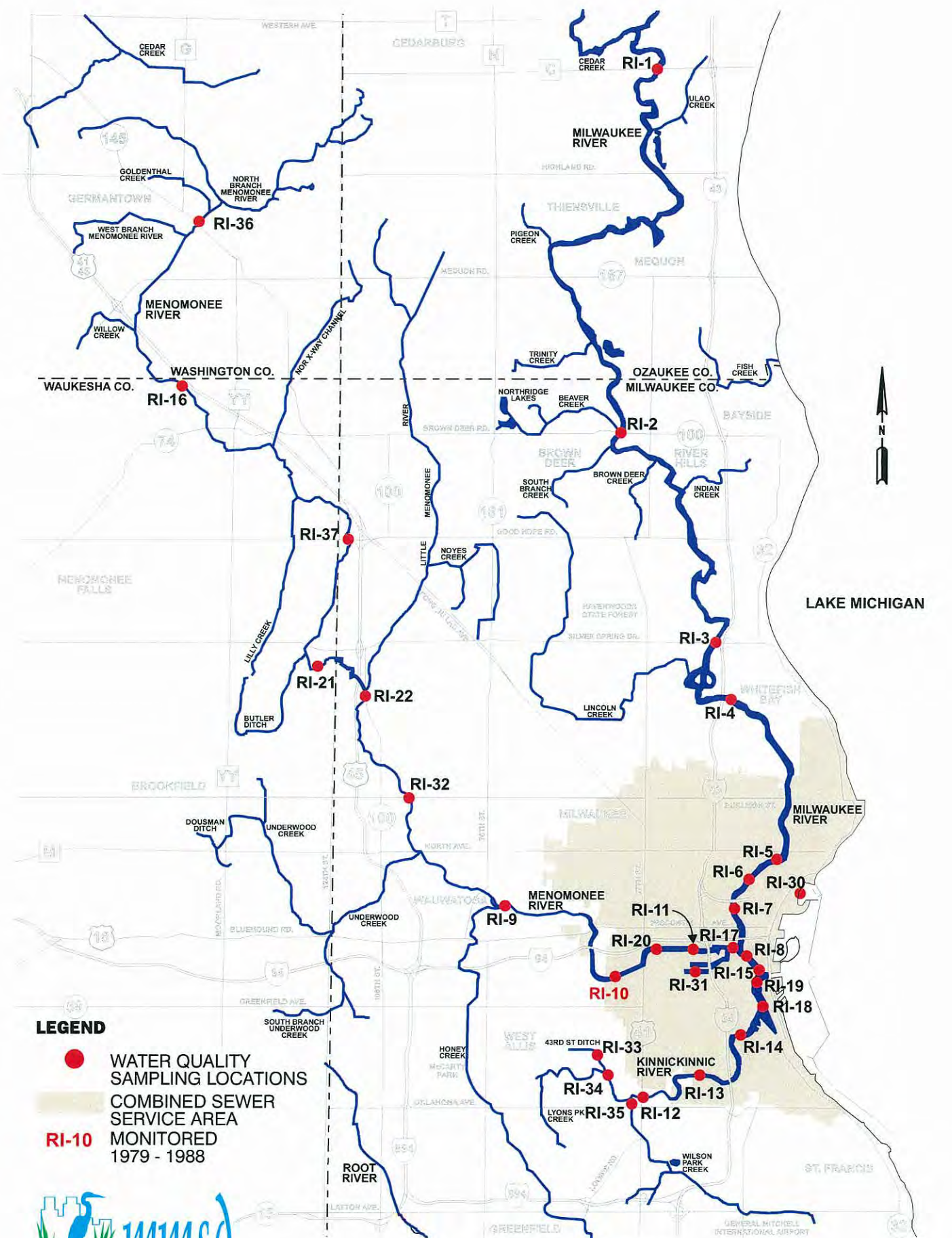
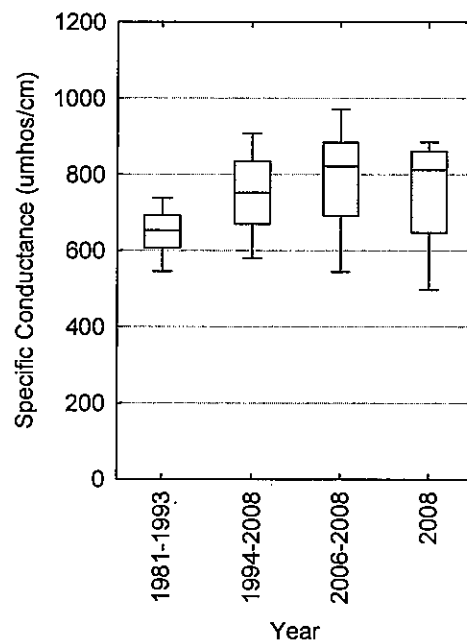
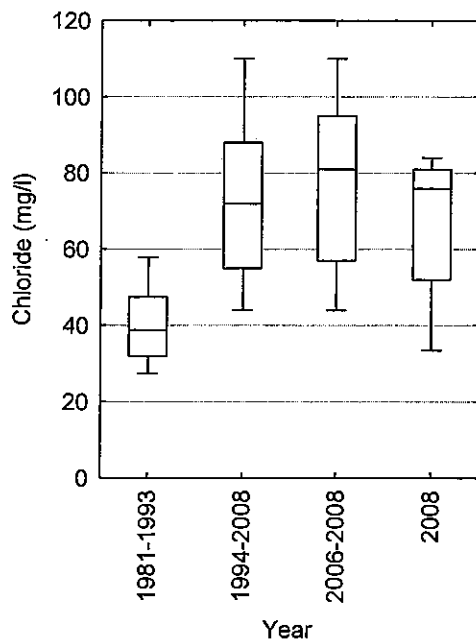
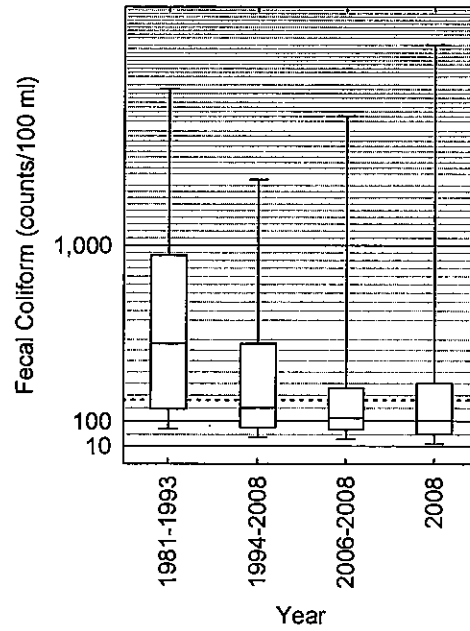
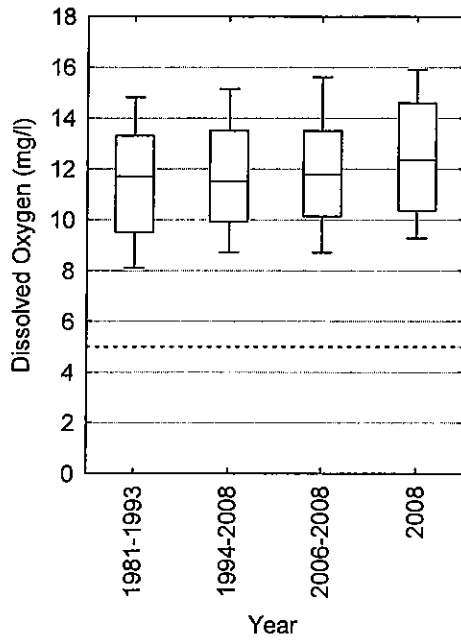


FIGURE 2
RIVER (RI & ML) SURVEY WATER QUALITY SAMPLING LOCATIONS

10/17/07

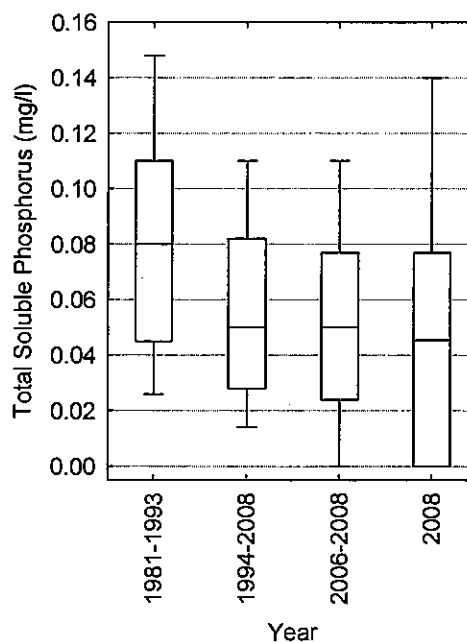
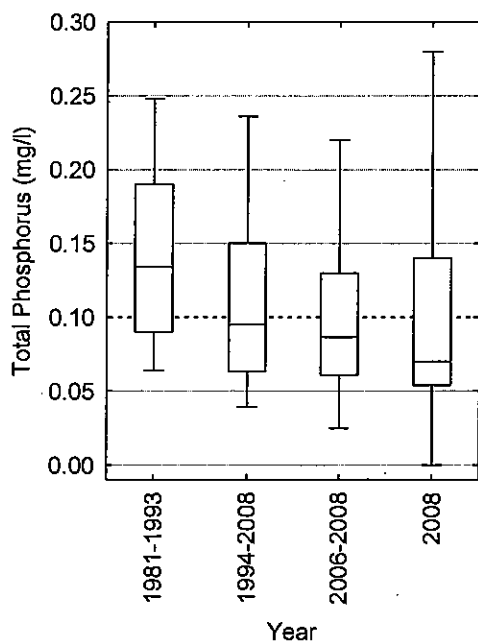
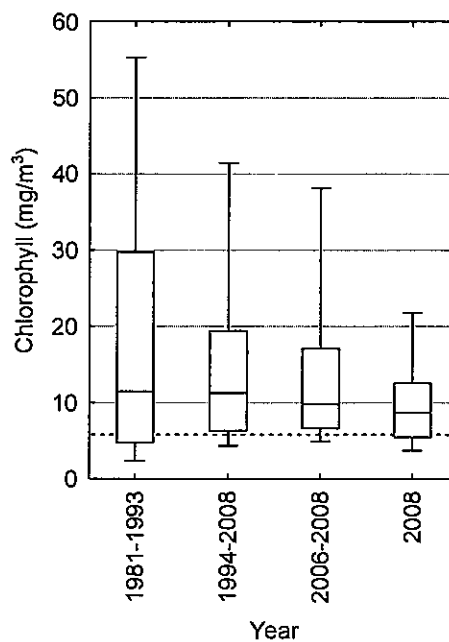
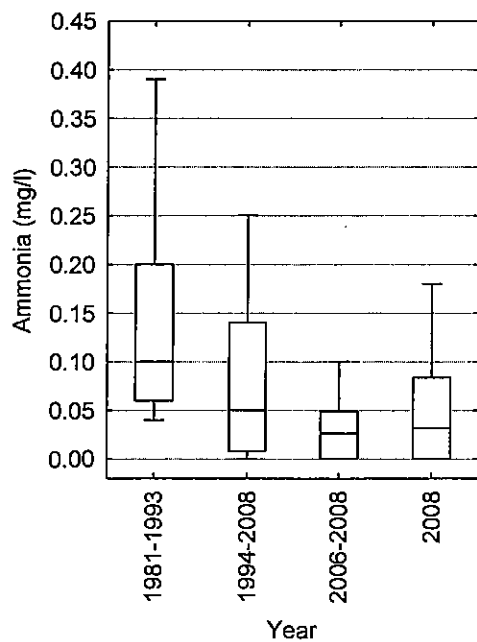
02-034 (RI & ML)

MMSD Water Quality Monitoring Program Data
Milwaukee River at Pioneer Road, Site RI-01



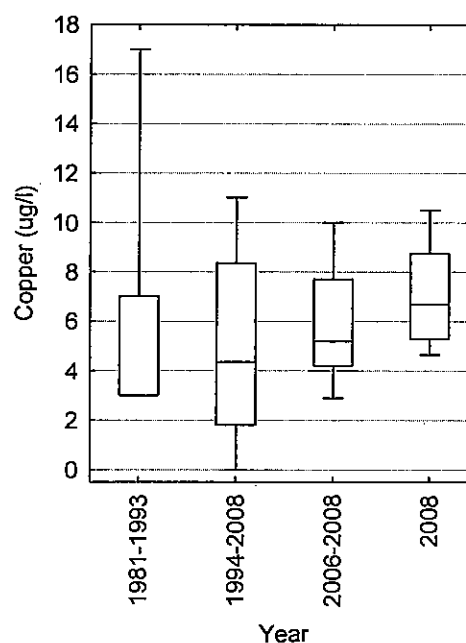
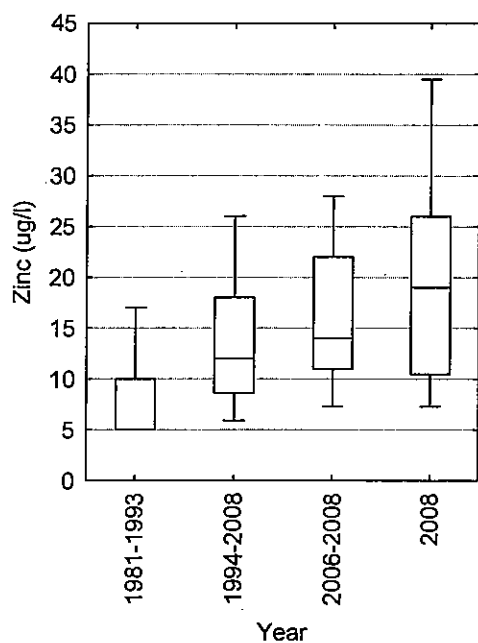
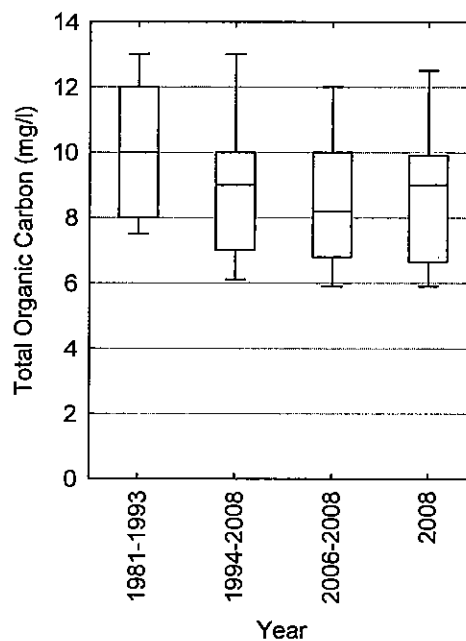
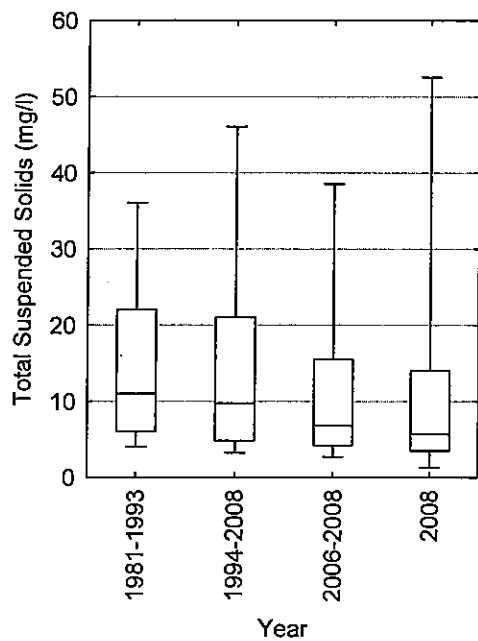
— Median □ 25%-75% ▮ 10%-90%
---- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Milwaukee River at Pioneer Road, Site RI-01



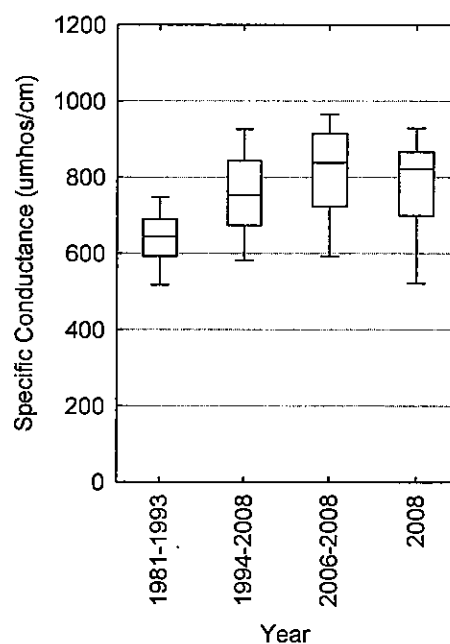
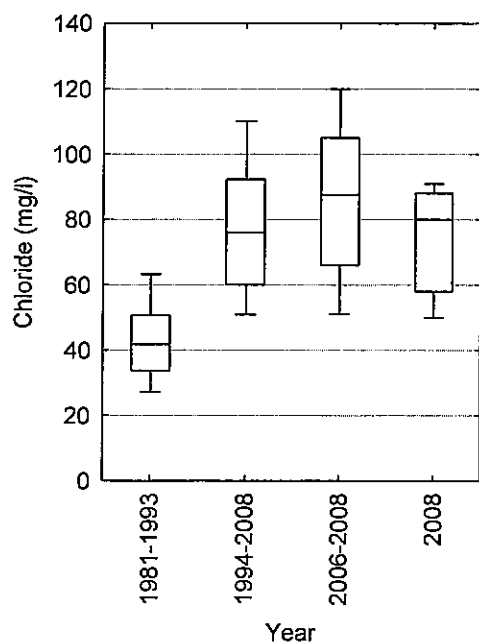
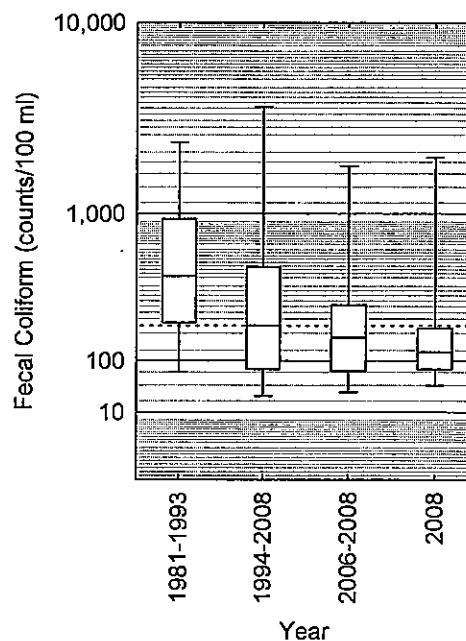
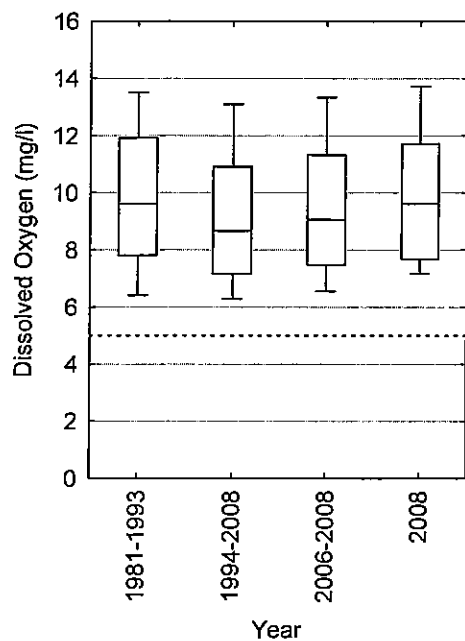
— Median □ 25%-75% ▮ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Milwaukee River at Pioneer Road, Site RI-01



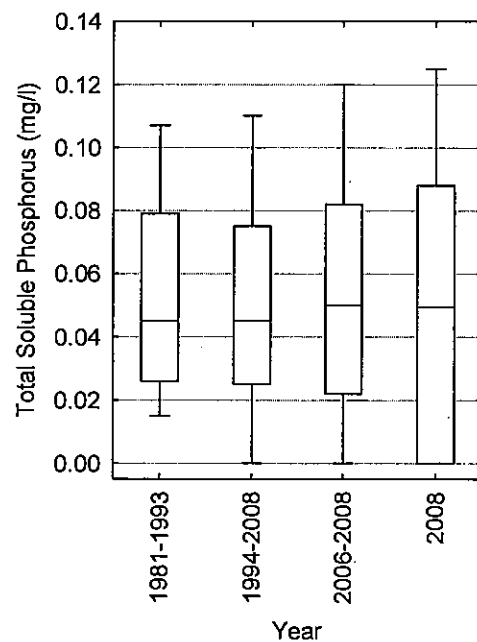
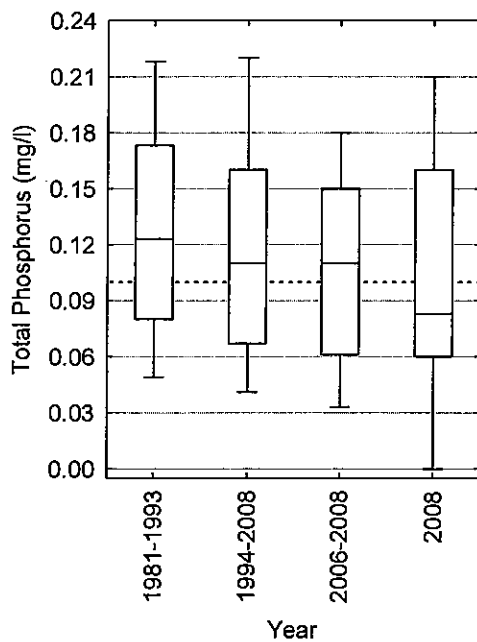
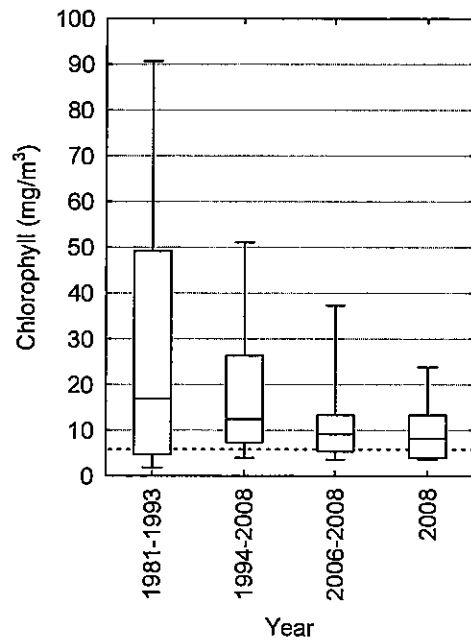
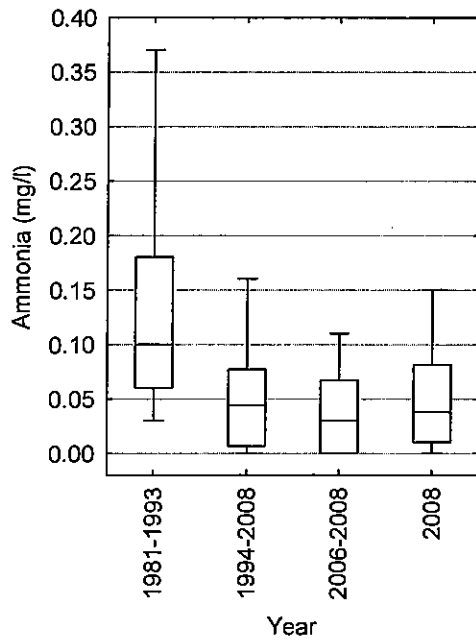
— Median □ 25%-75% ▤ 10%-90%

**MMSD Water Quality Monitoring Program Data
Milwaukee River at Silver Spring Drive, Site RI-03**



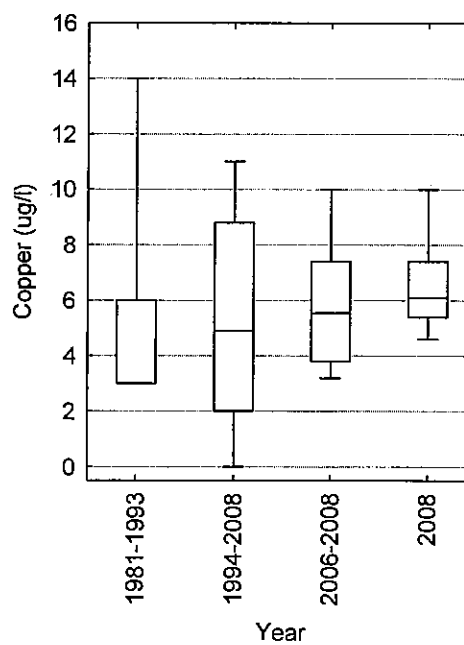
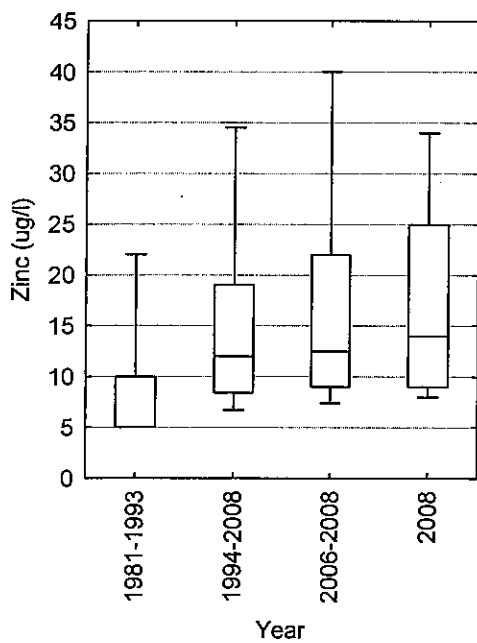
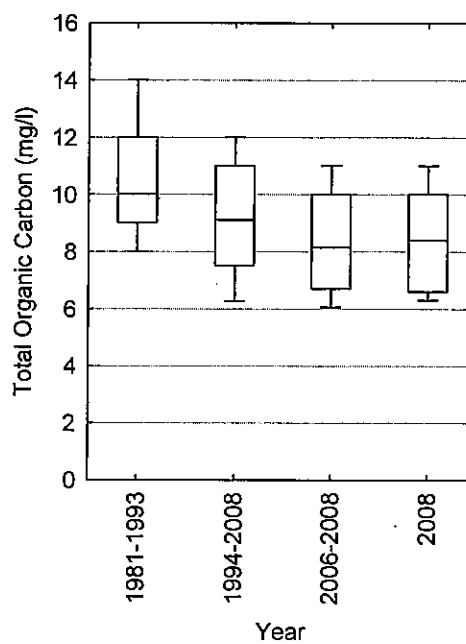
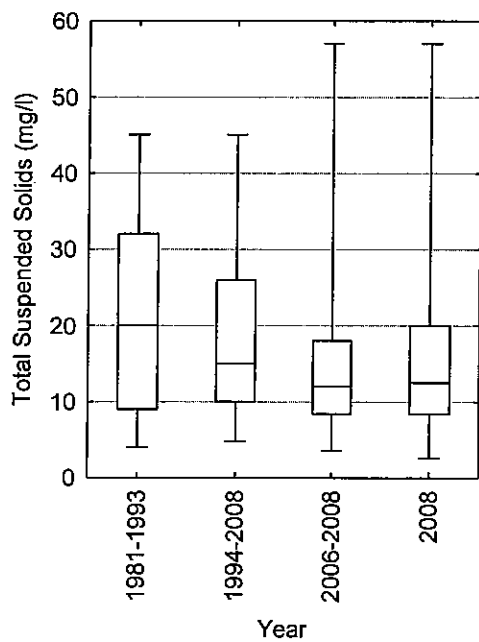
— Median □ 25%-75% ▤ 10%-90%
 — WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Milwaukee River at Silver Spring Drive, Site RI-03



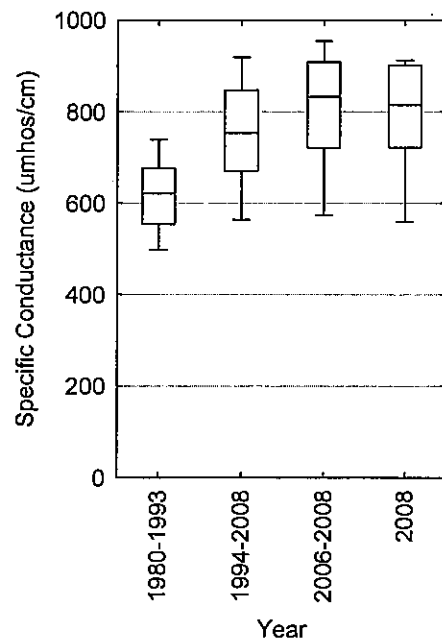
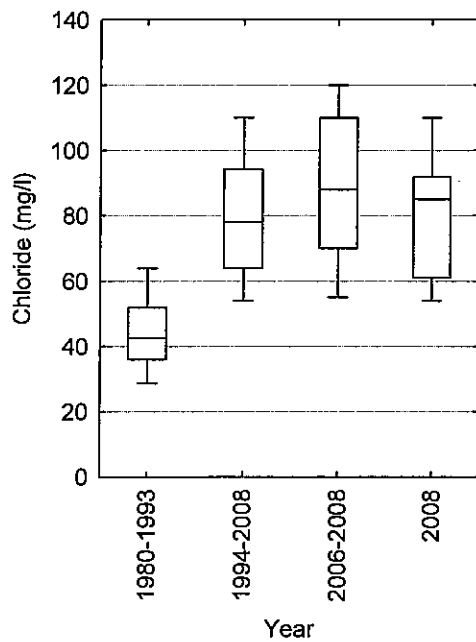
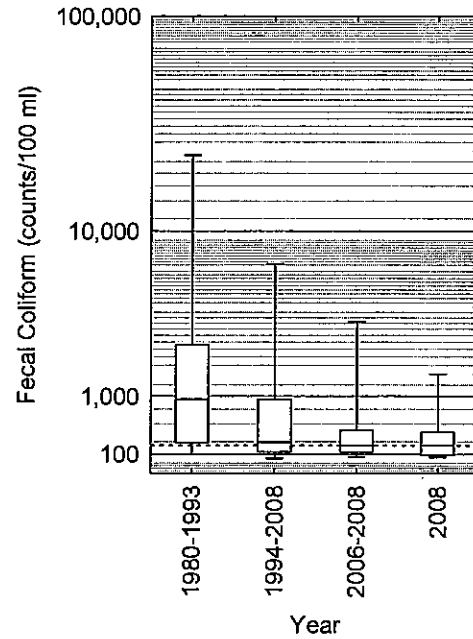
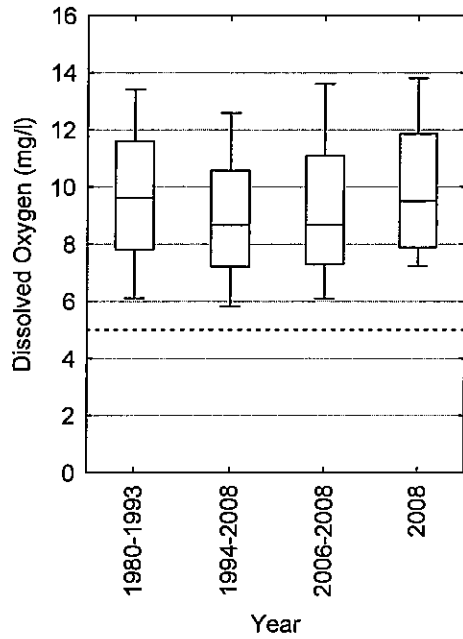
— Median □ 25%-75% ▤ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Milwaukee River at Silver Spring Drive, Site RI-03



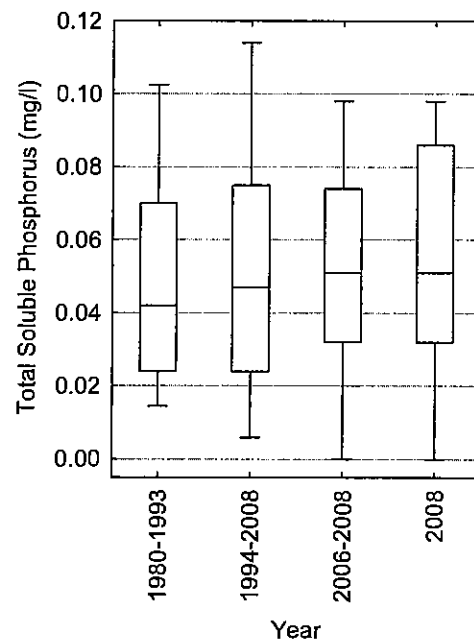
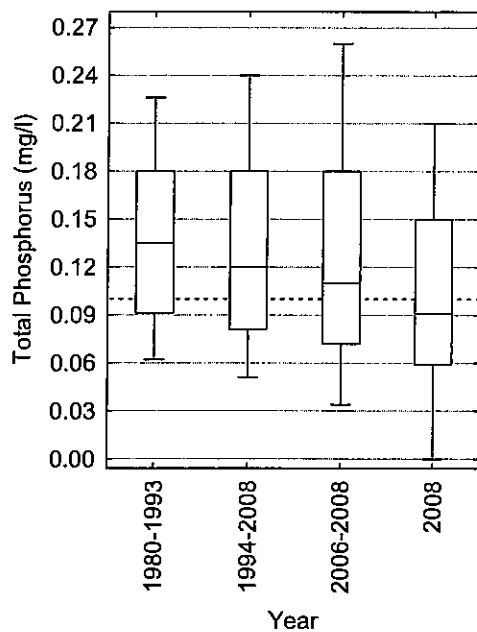
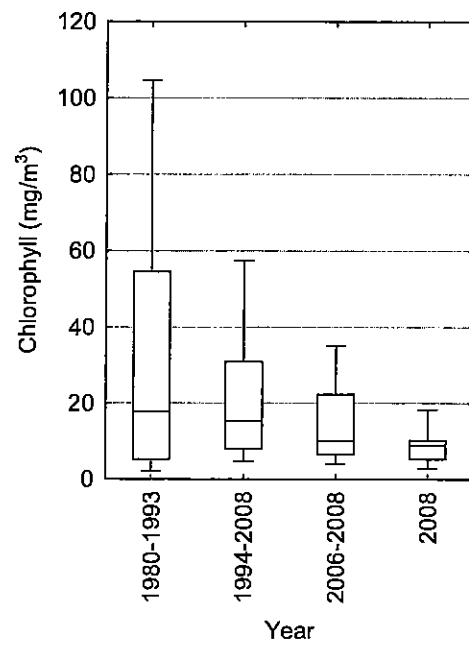
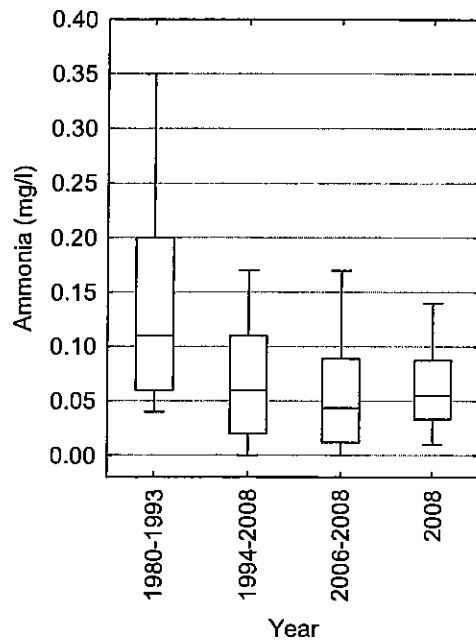
— Median □ 25%-75% ▮ 10%-90%

**MMSD Water Quality Monitoring Program Data
Milwaukee River at North Avenue Dam, Site RI-05**



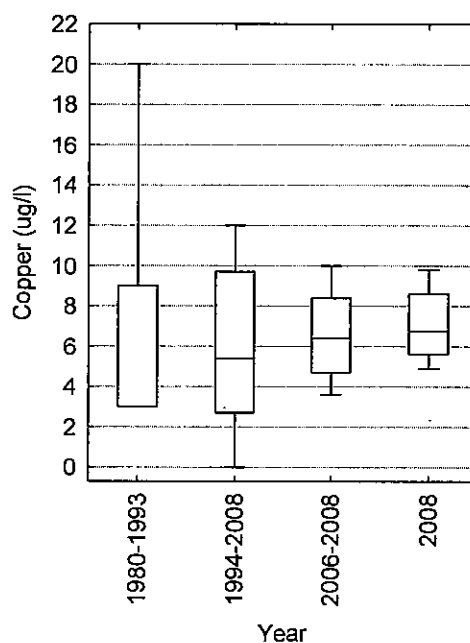
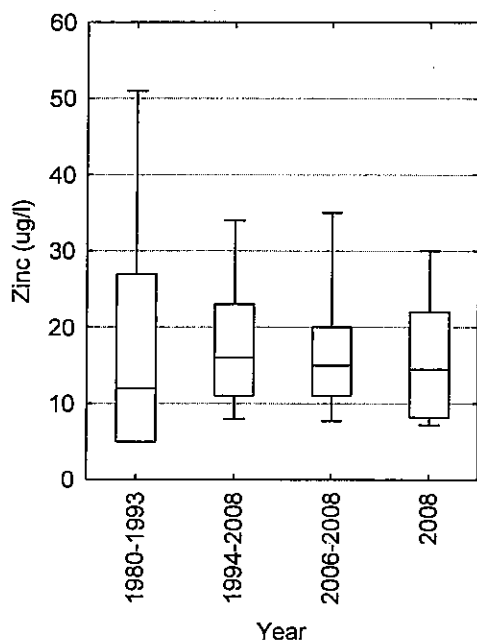
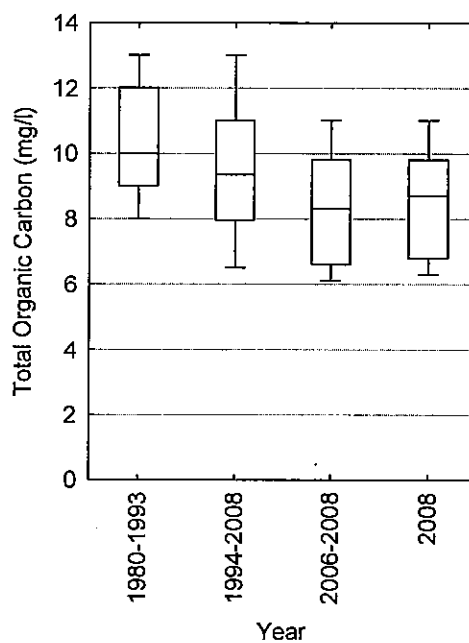
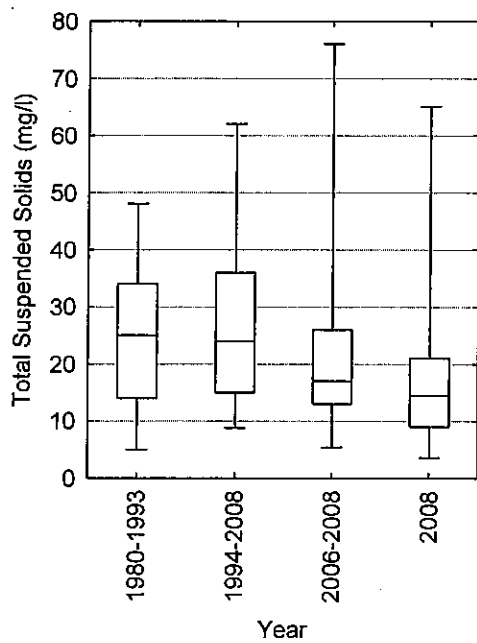
— Median □ 25%-75% ▤ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Milwaukee River at North Avenue Dam, Site RI-05



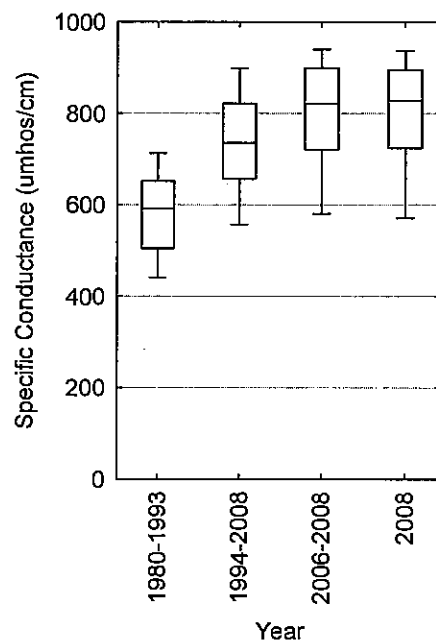
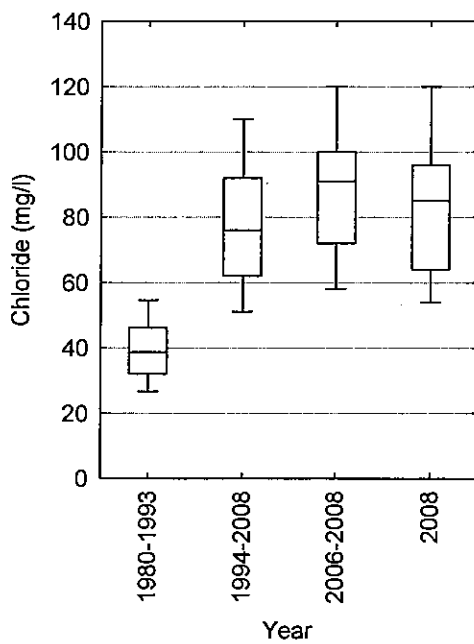
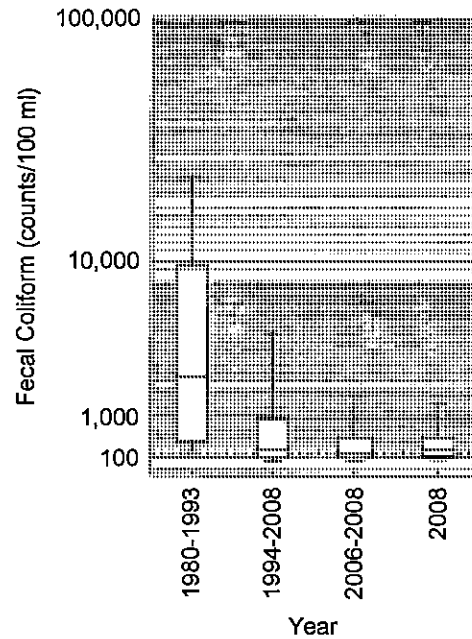
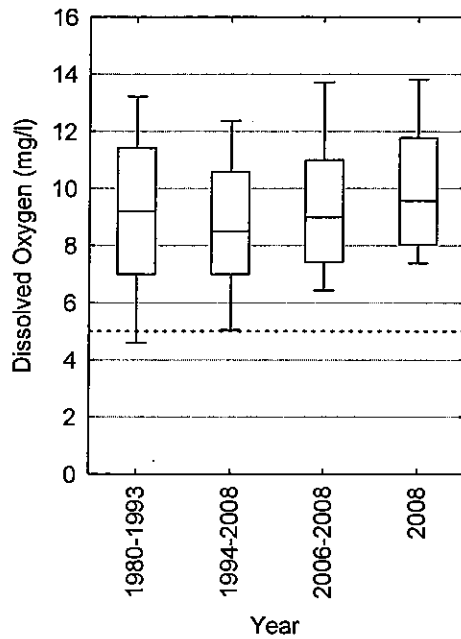
— Median □ 25%-75% ▤ 10%-90%
--- WQ Standard/Criterion

**MMSD Water Quality Monitoring Program Data
Milwaukee River at North Avenue Dam, Site RI-05**



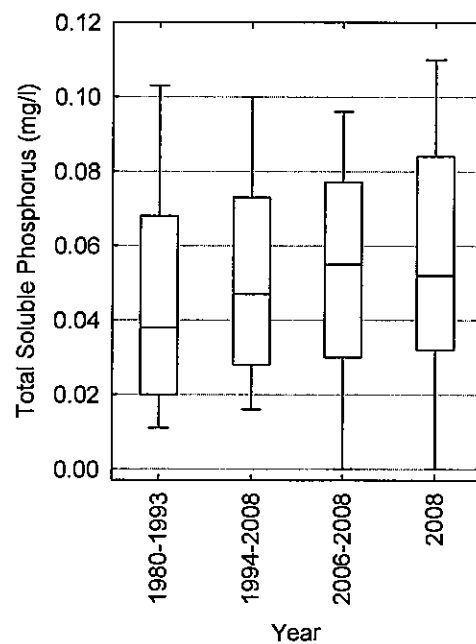
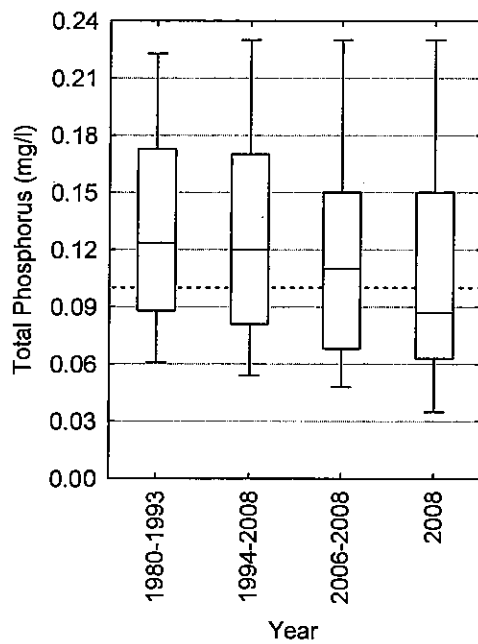
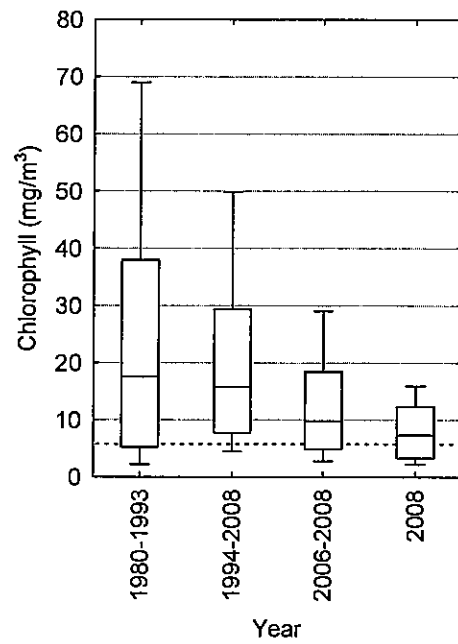
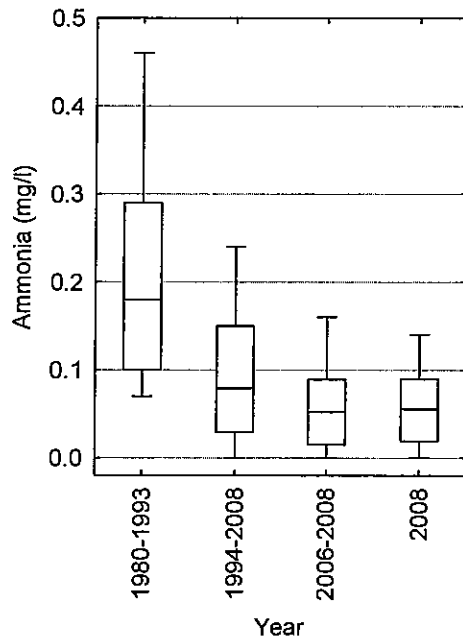
— Median □ 25%-75% ▤ 10%-90%

MMSD Water Quality Monitoring Program Data
Milwaukee River at Wells St., Site RI-07



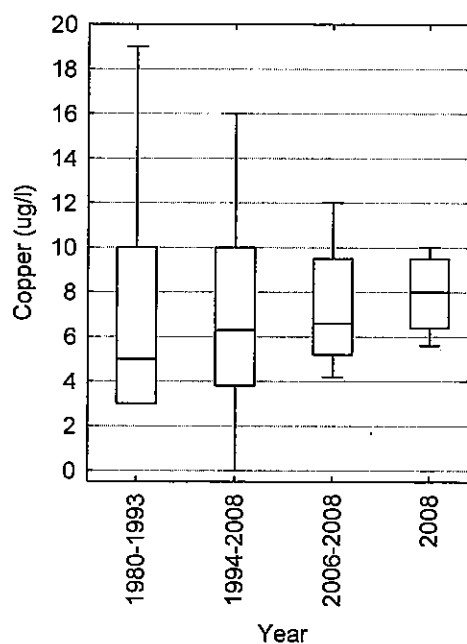
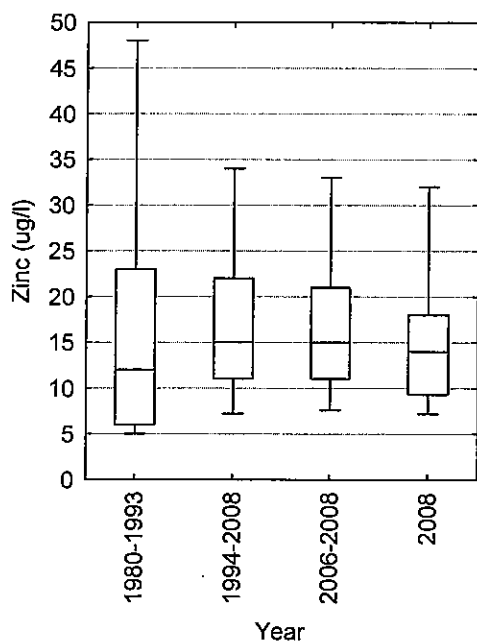
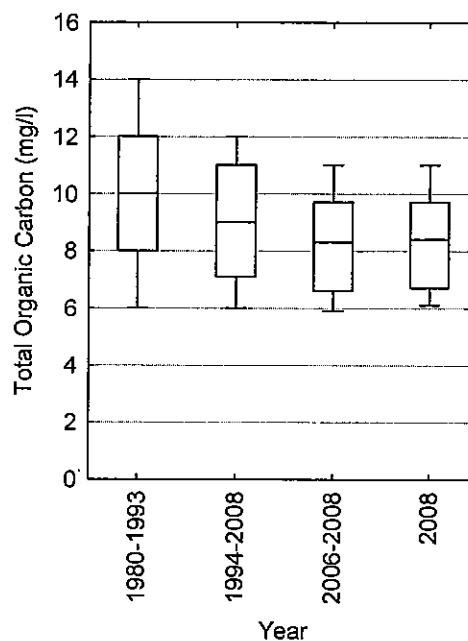
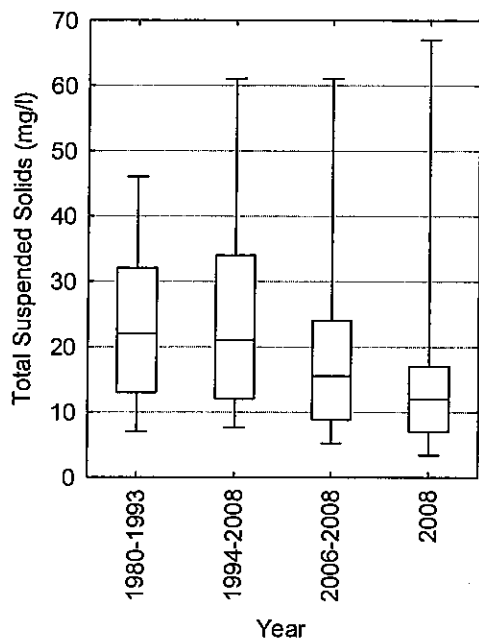
— Median □ 25%-75% ▤ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Milwaukee River at Wells St., Site RI-07



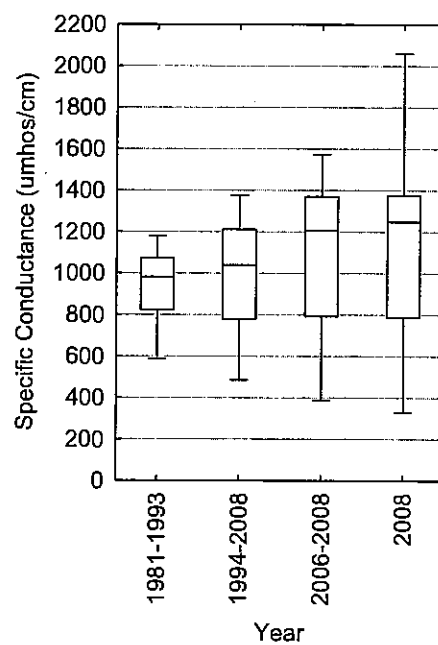
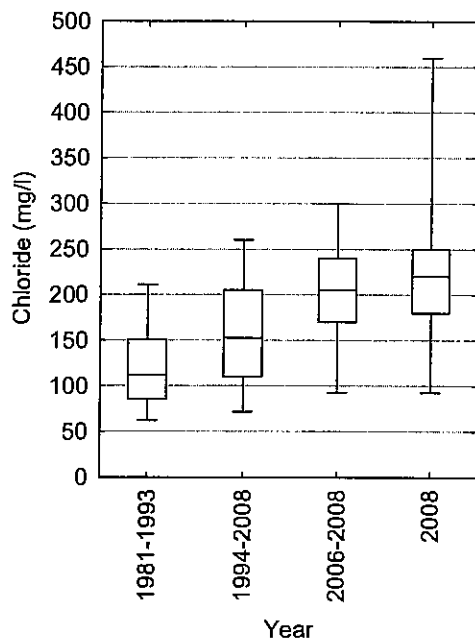
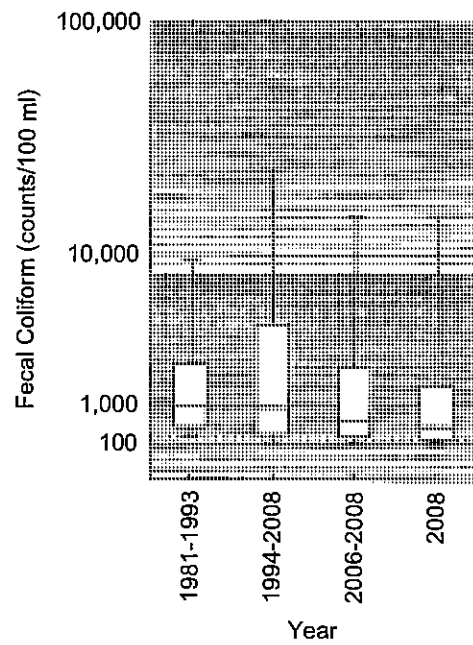
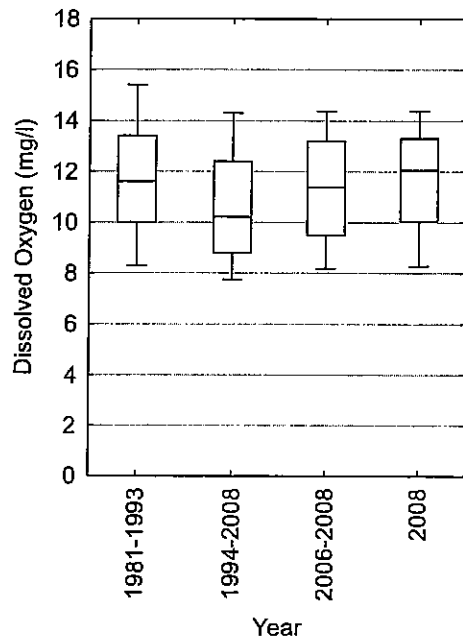
— Median □ 25%-75% ⊢ 10%-90%
 — WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Milwaukee River at Wells St., Site RI-07



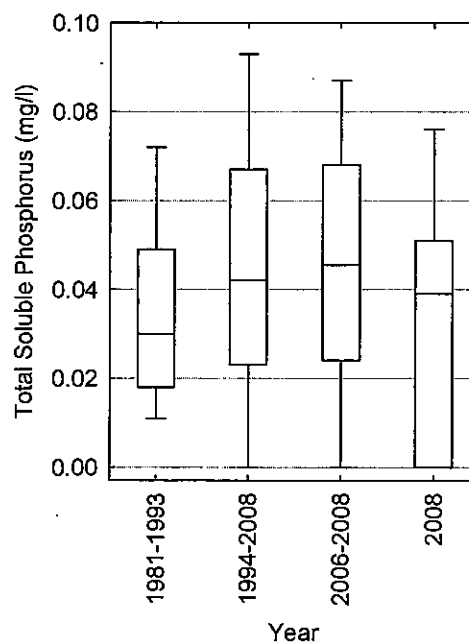
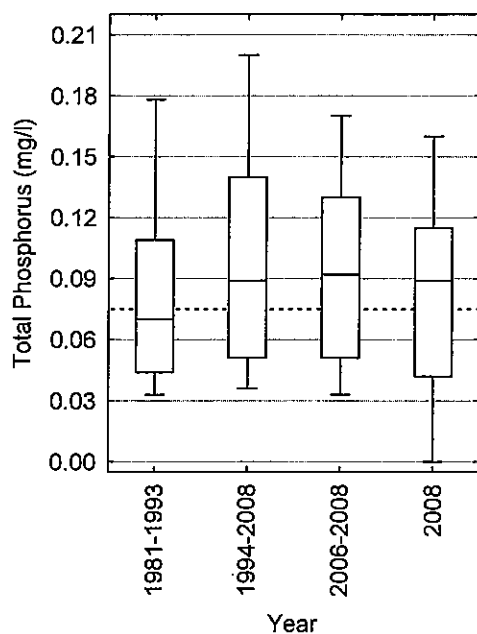
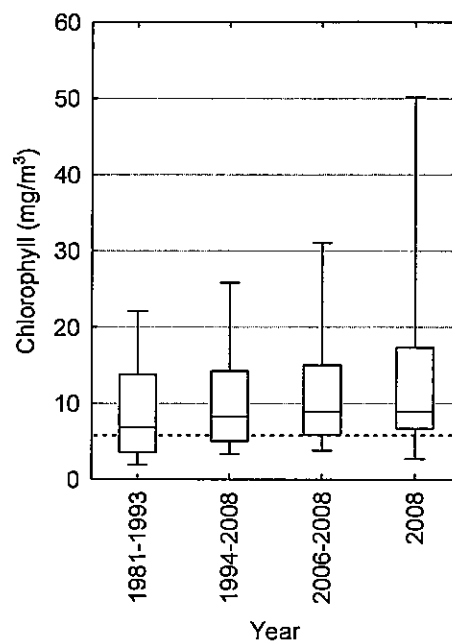
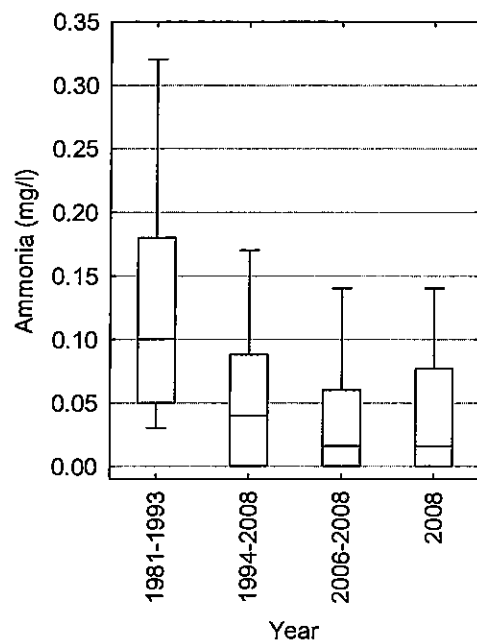
— Median □ 25%-75% ▮ 10%-90%

MMSD Water Quality Monitoring Program Data
Menomonee River at North 70th St., Site RI-09



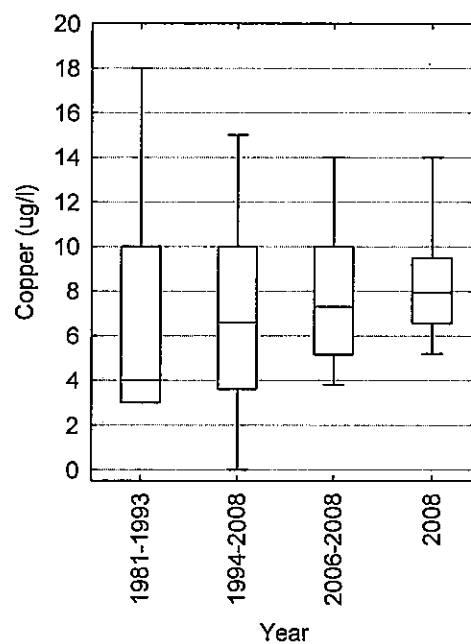
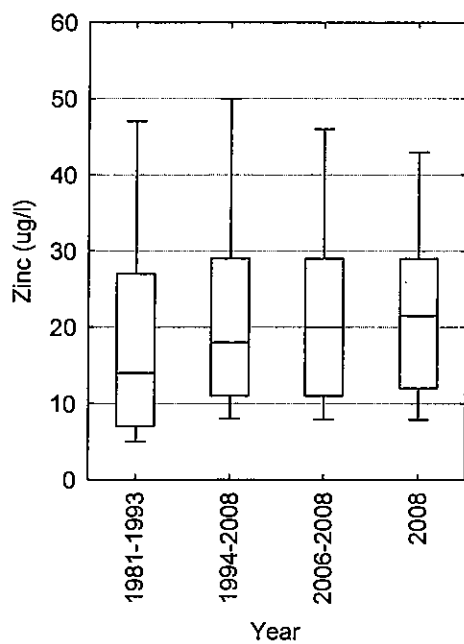
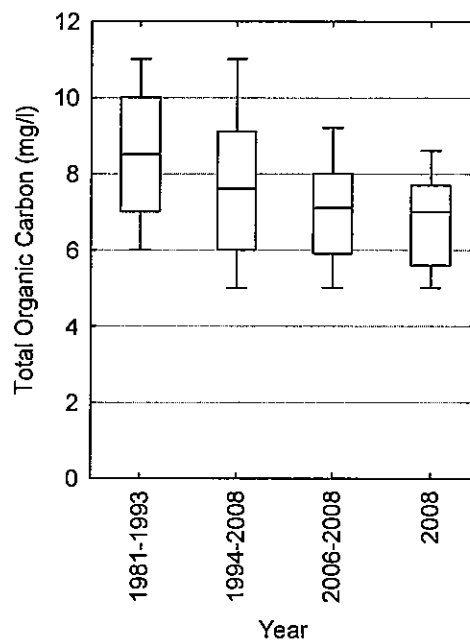
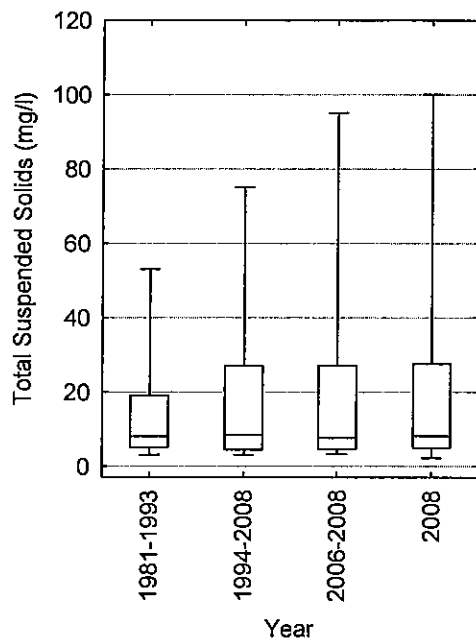
— Median □ 25%-75% ▤ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Menomonee River at North 70th St., Site RI-09



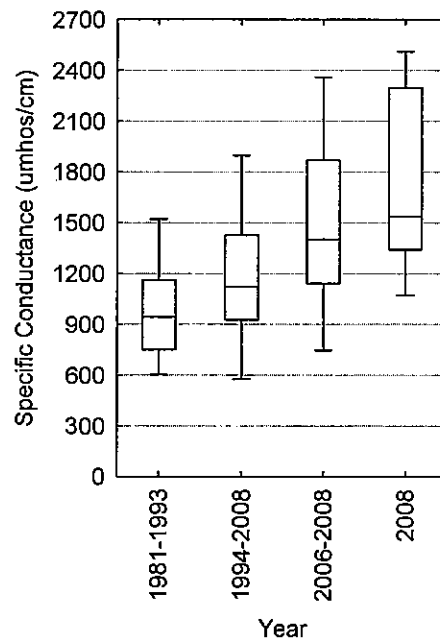
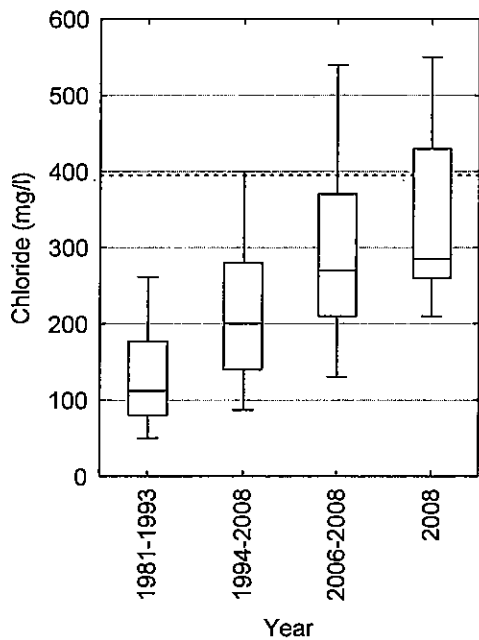
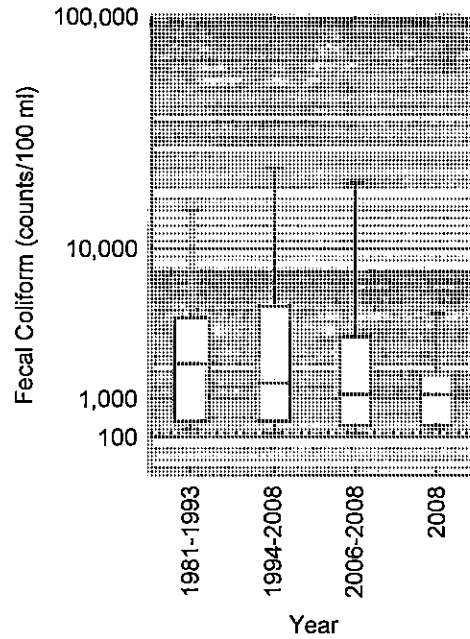
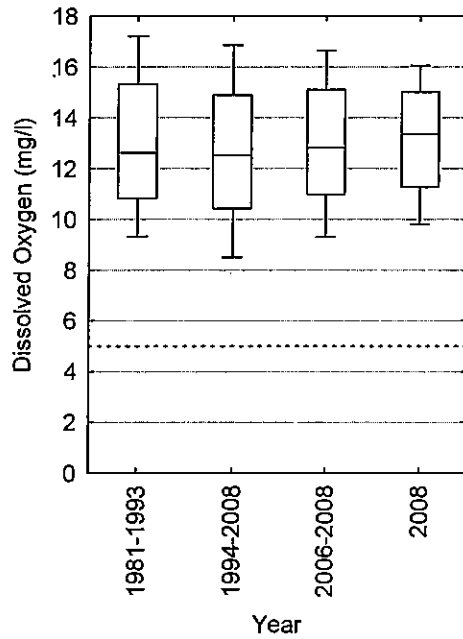
— Median □ 25%-75% ▮ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Menomonee River at North 70th St., Site RI-09



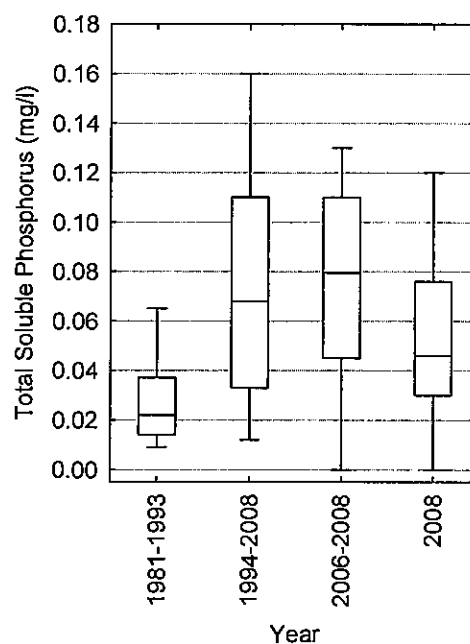
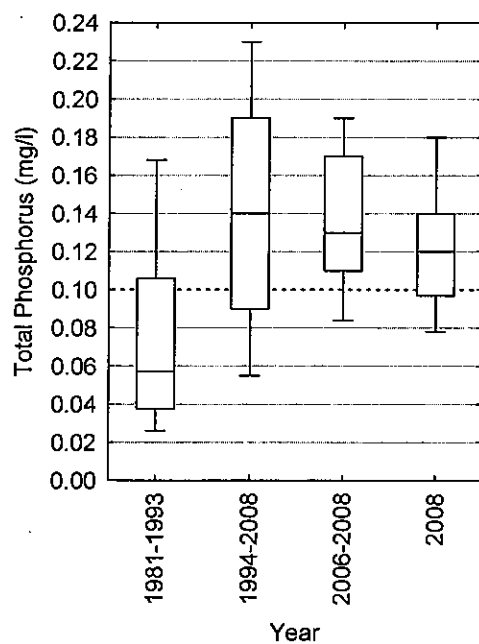
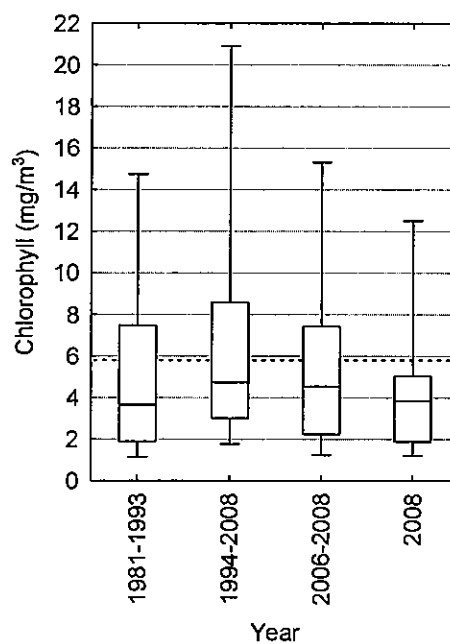
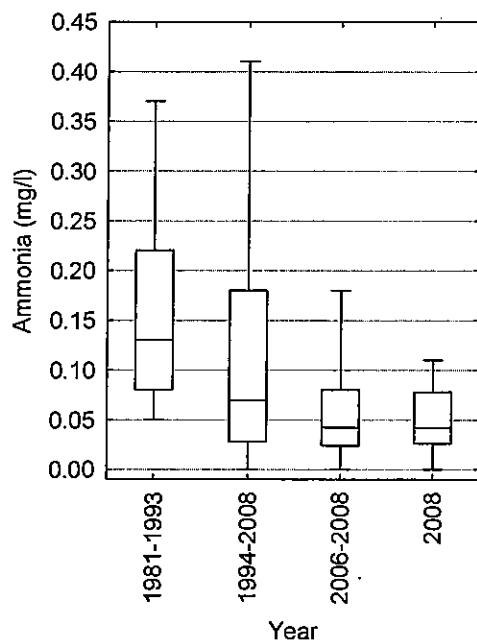
— Median □ 25%-75% ┘ 10%-90%

MMSD Water Quality Monitoring Program Data
Kinnickinnic River at S. 27th St., Site RI-12



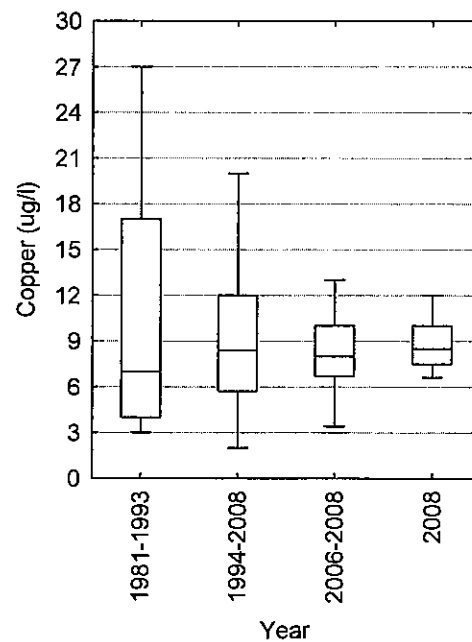
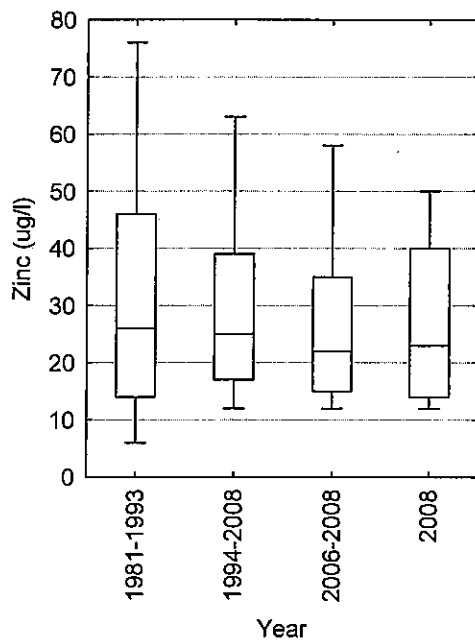
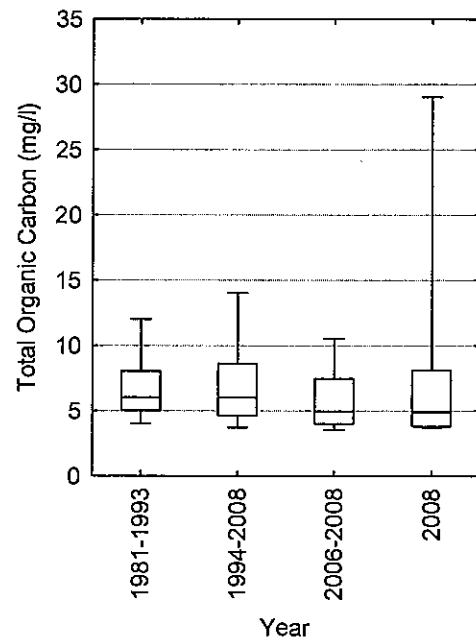
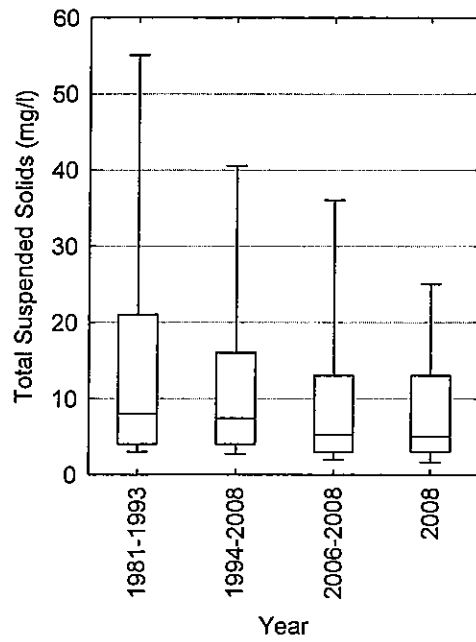
— Median □ 25%-75% ▮ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Kinnickinnic River at S. 27th St., Site RI-12



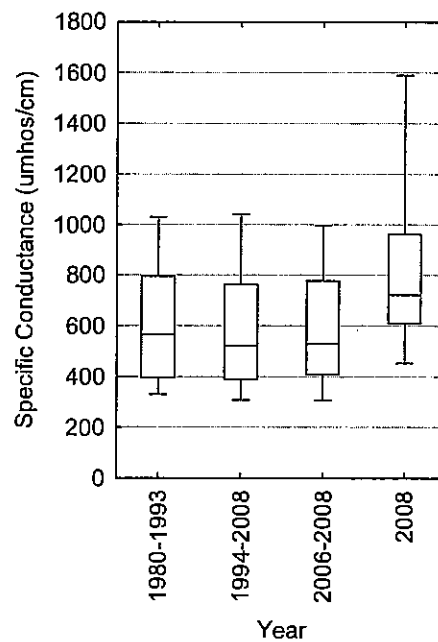
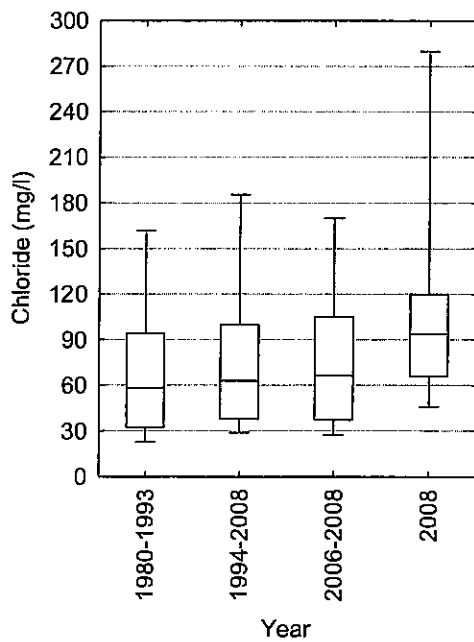
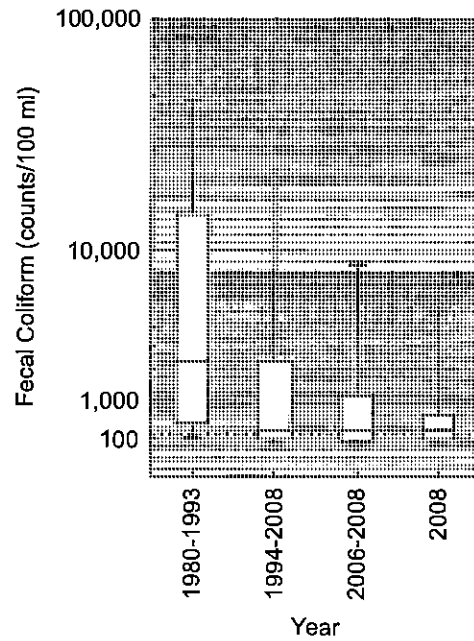
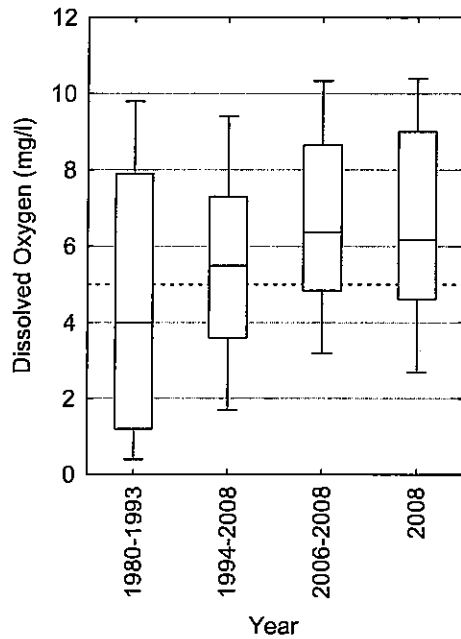
— Median □ 25%-75% ▮ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Kinnickinnic River at S. 27th St., Site RI-12



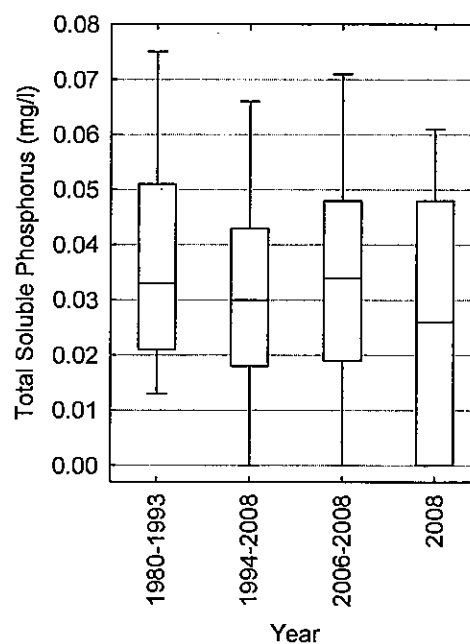
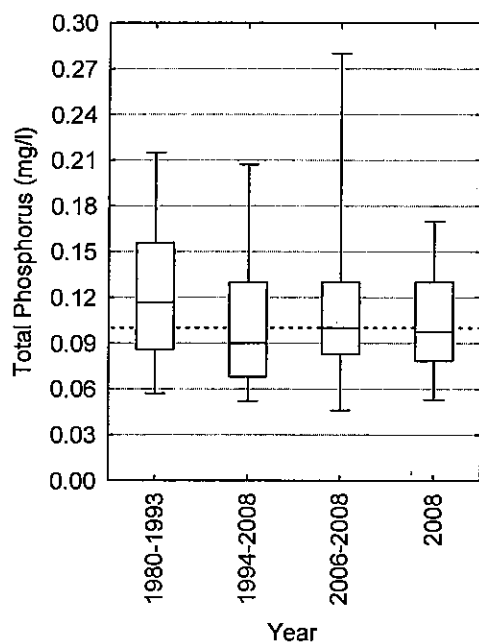
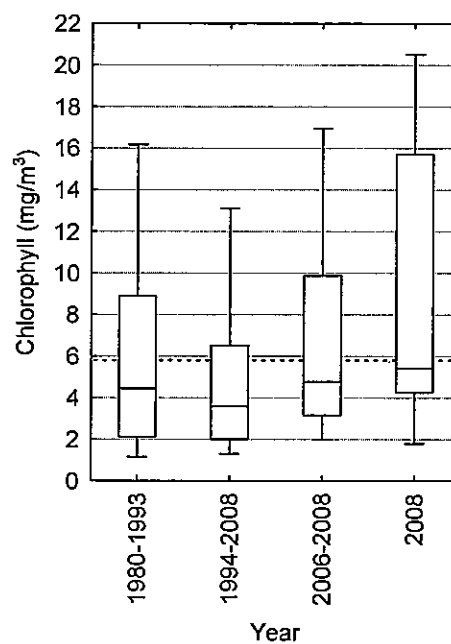
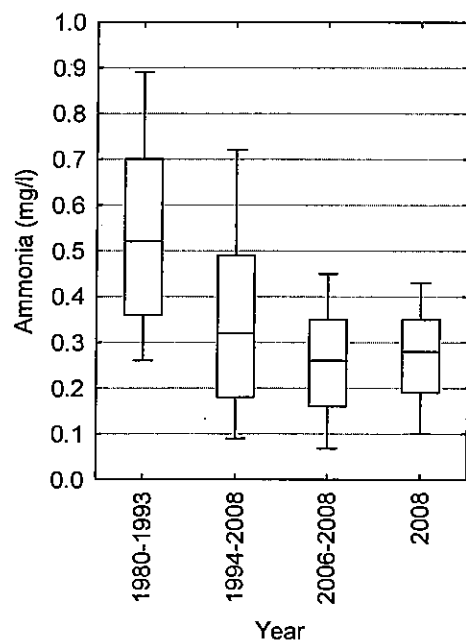
— Median □ 25%-75% ┘ 10%-90%

MMSD Water Quality Monitoring Program Data
Kinnickinnic River at 1st St., Site RI-14



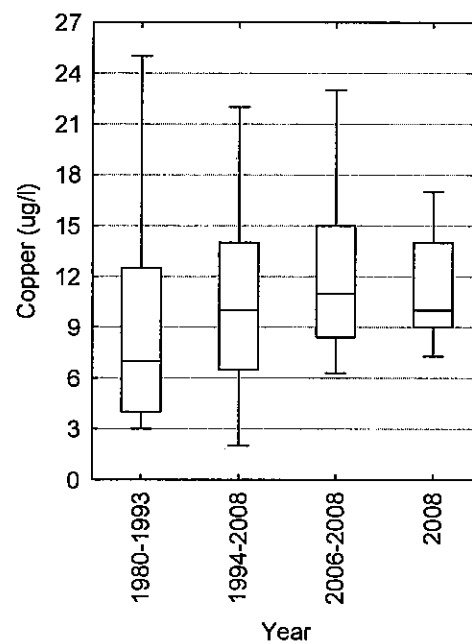
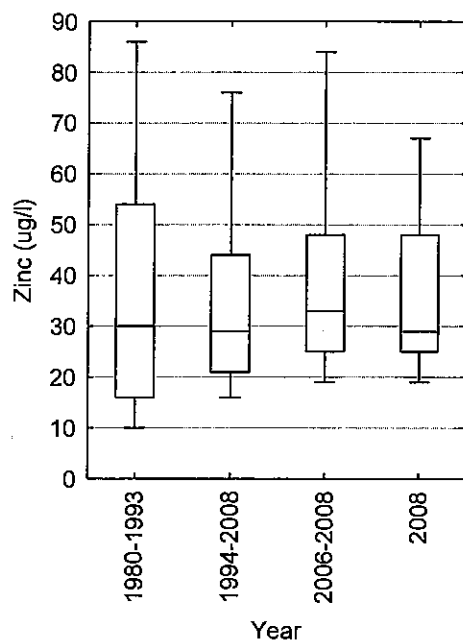
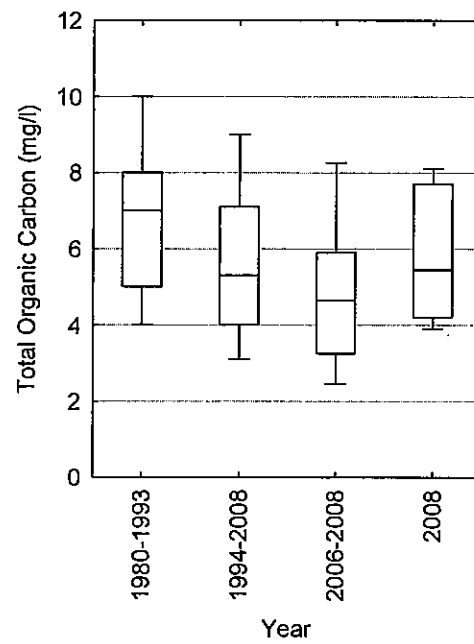
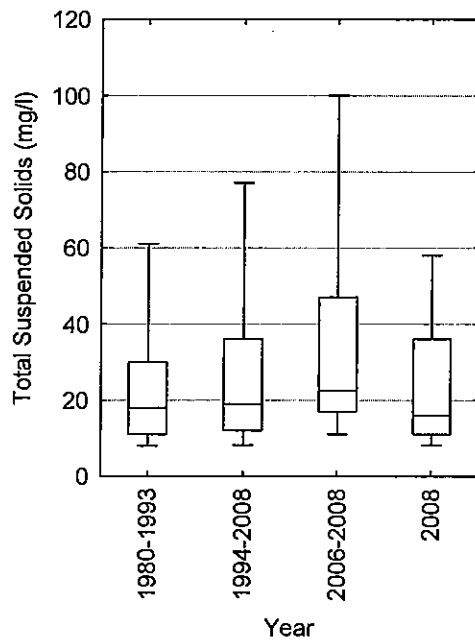
— Median □ 25%-75% ▮ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Kinnickinnic River at 1st St., Site RI-14



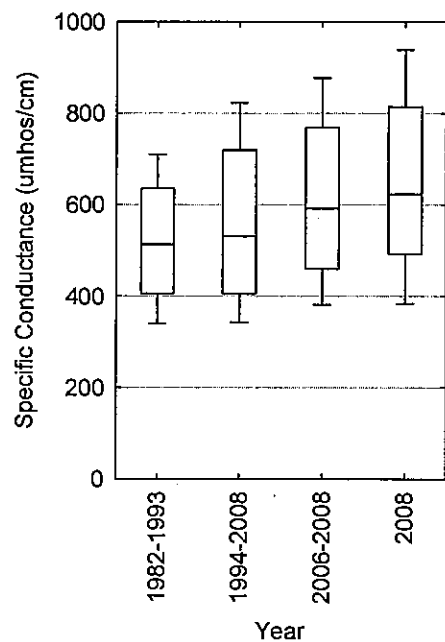
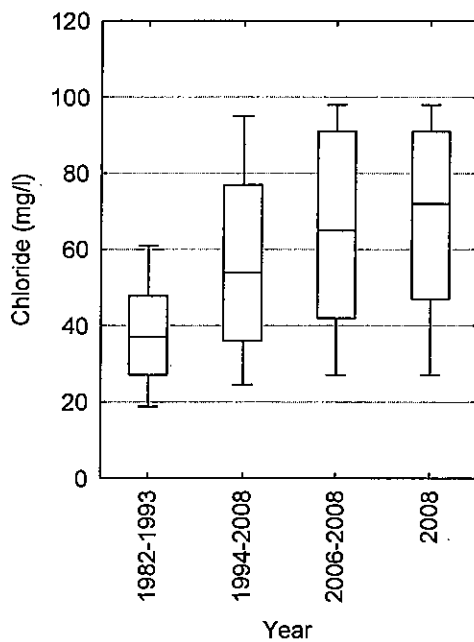
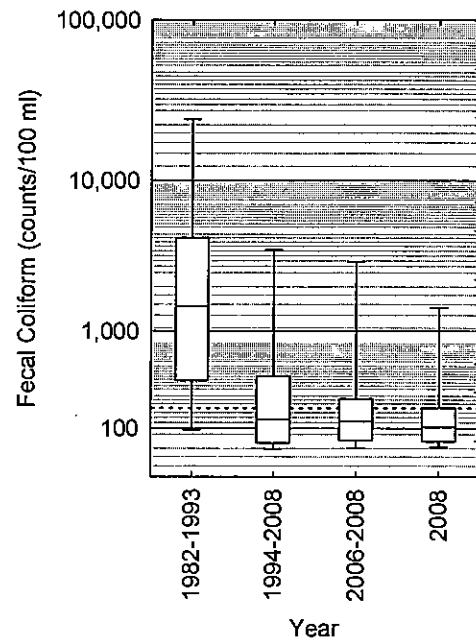
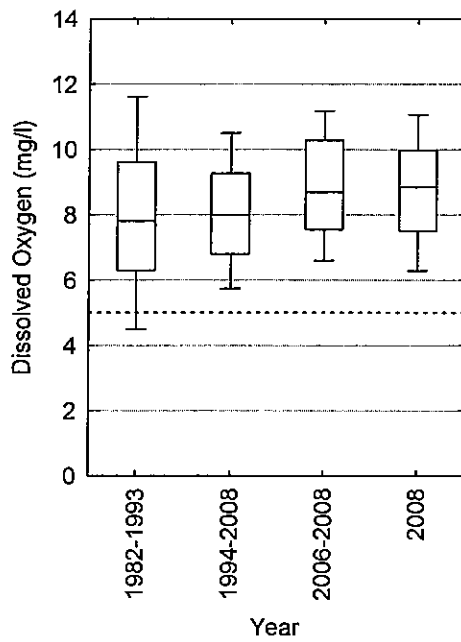
— Median □ 25%-75% ▤ 10%-90%
—— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Kinnickinnic River at 1st St., Site RI-14



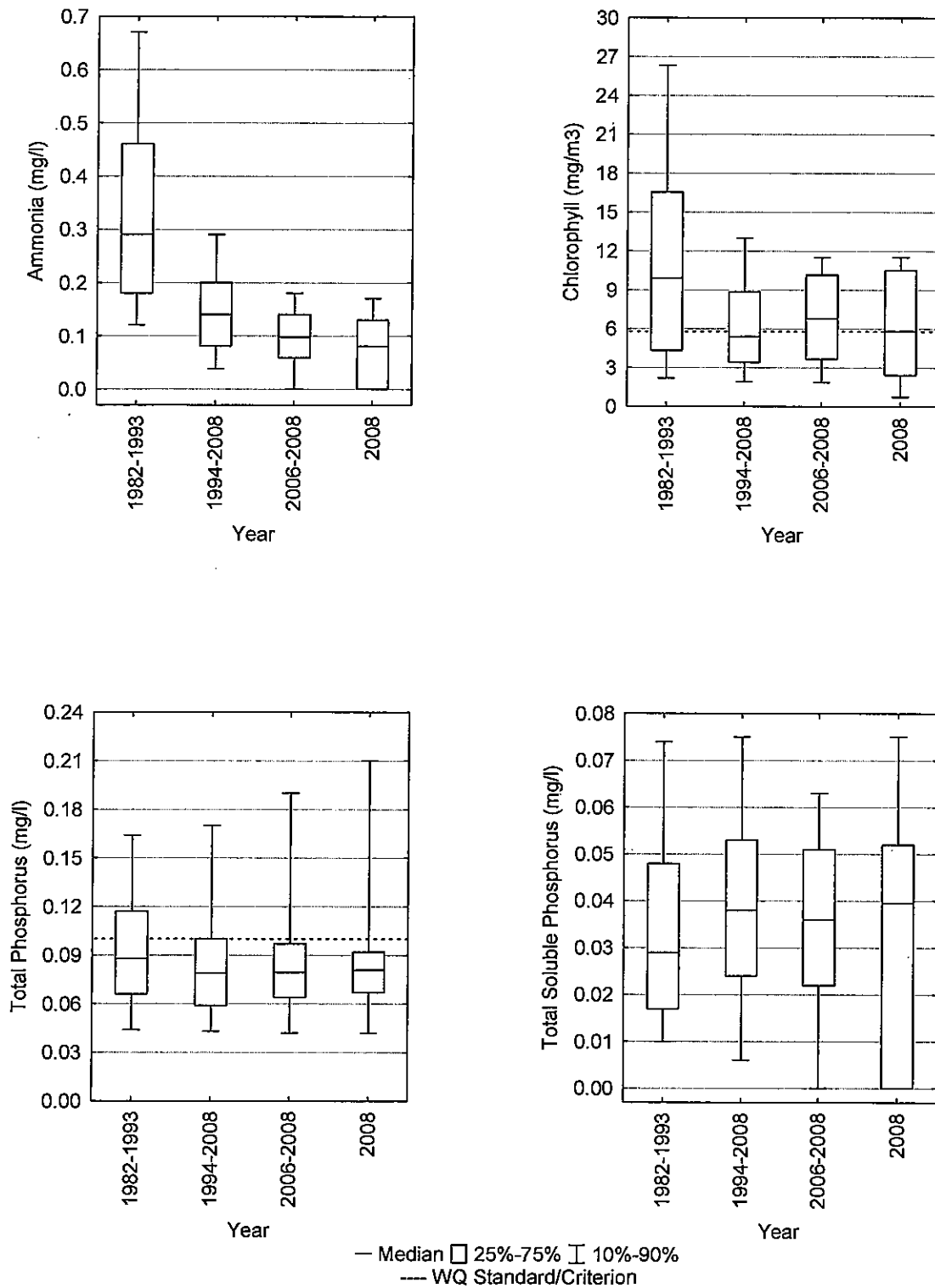
— Median □ 25%-75% ± 10%-90%

MMSD Water Quality Monitoring Program Data
Milwaukee River at C-NW Railway, Site RI-15

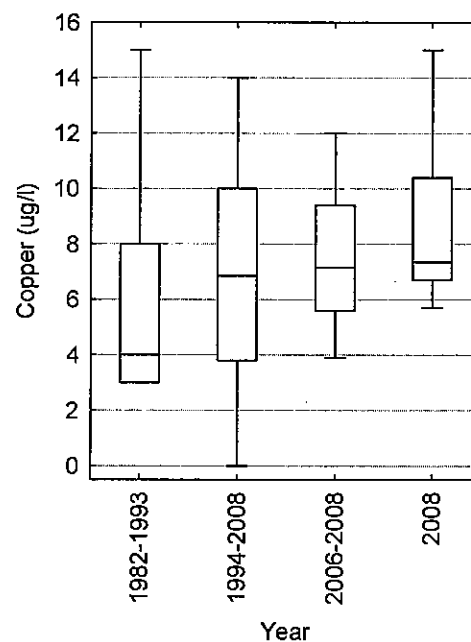
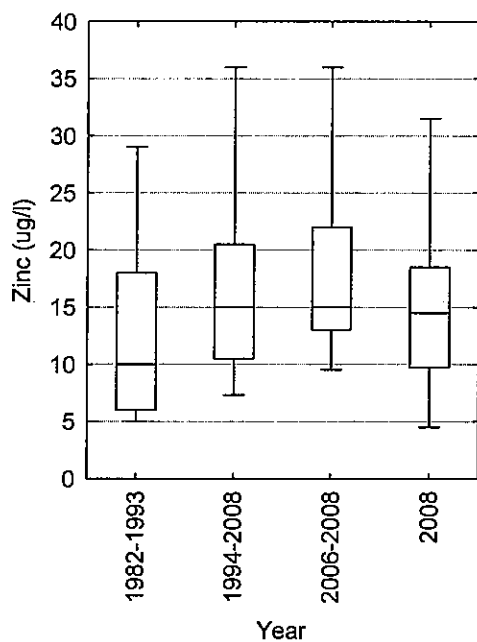
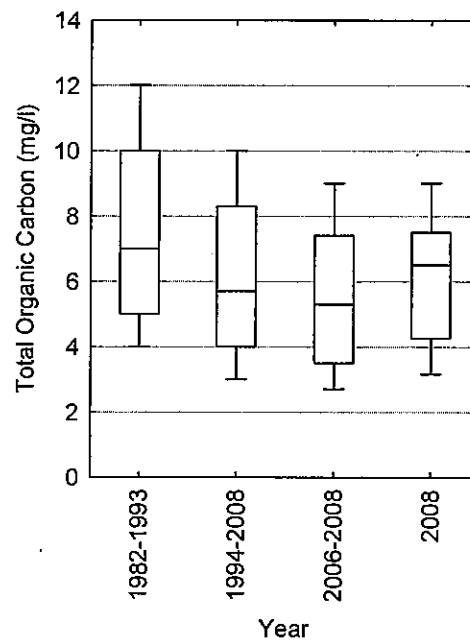
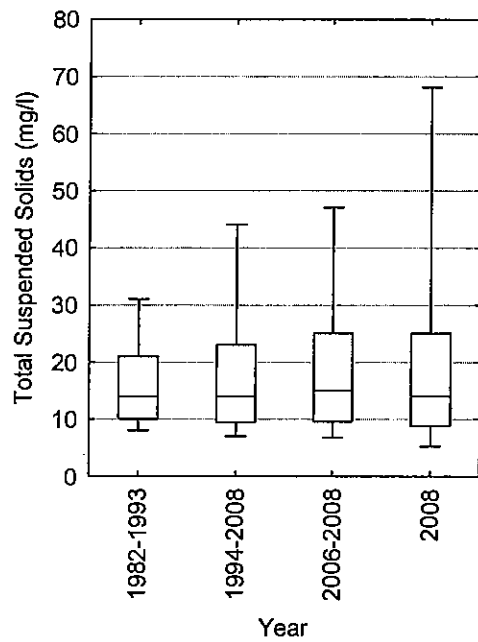


— Median □ 25%-75% ▮ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Milwaukee River at C-NW Railway, Site RI-15

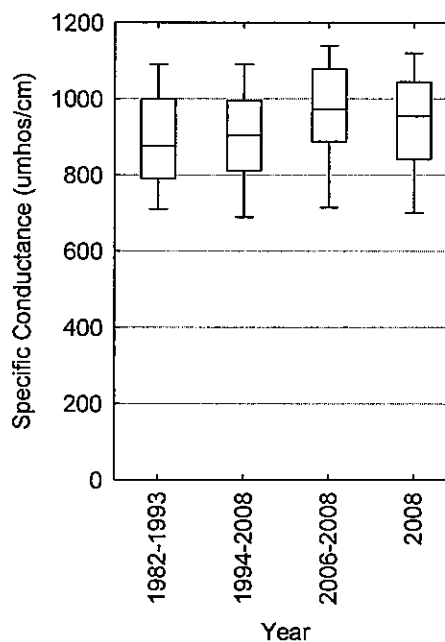
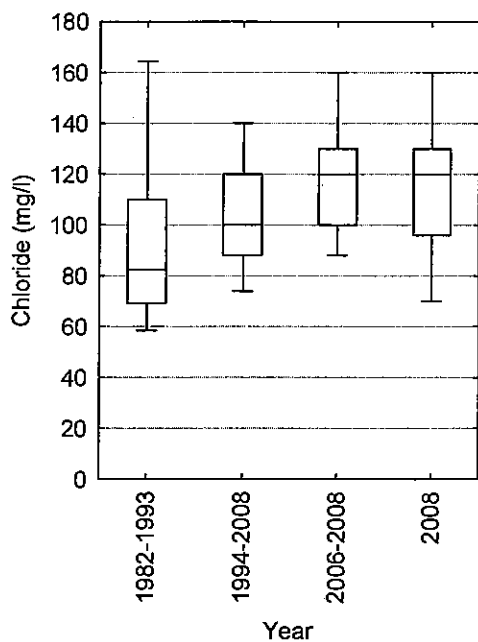
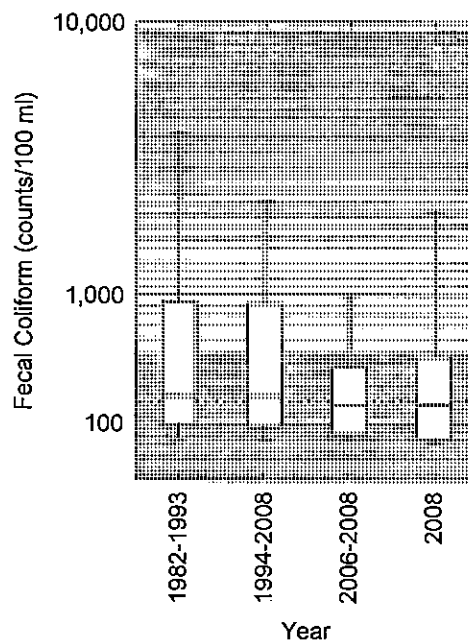
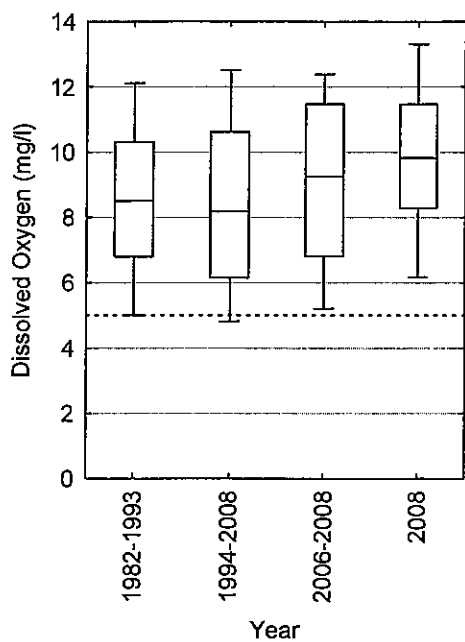


MMSD Water Quality Monitoring Program Data
Milwaukee River at C-NW Railway, Site RI-15



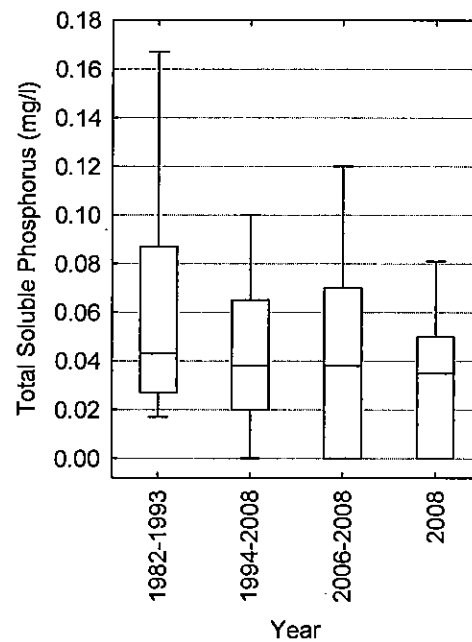
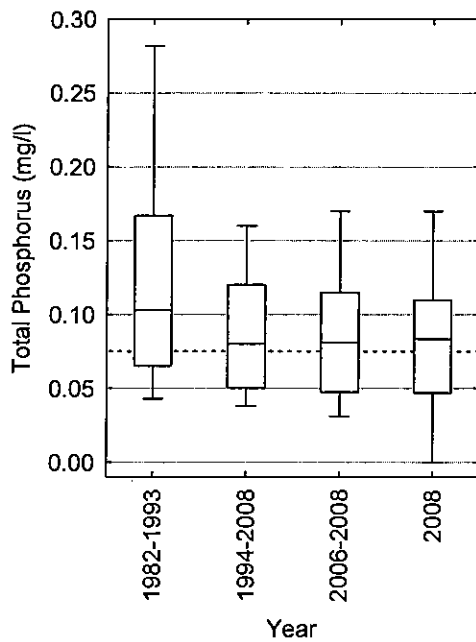
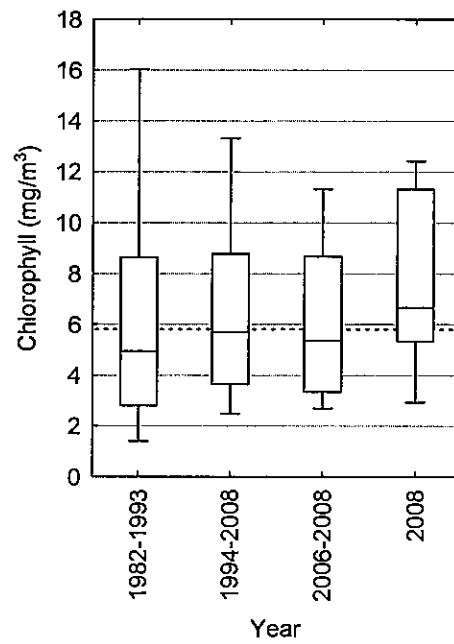
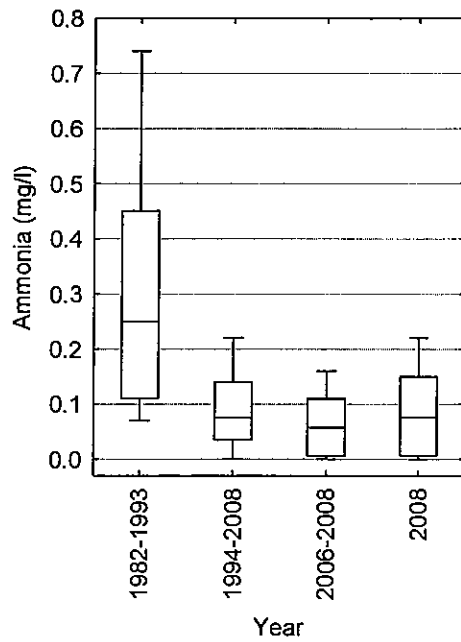
— Median □ 25%-75% I 10%-90%

**MMSD Water Quality Monitoring Program Data
Menomonee River at County Line Rd., Site RI-16**



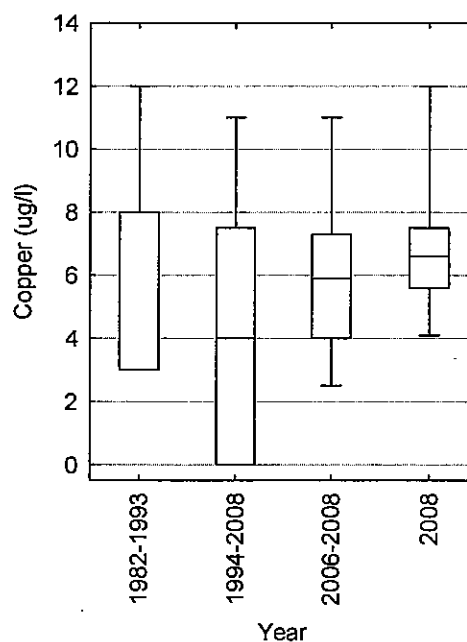
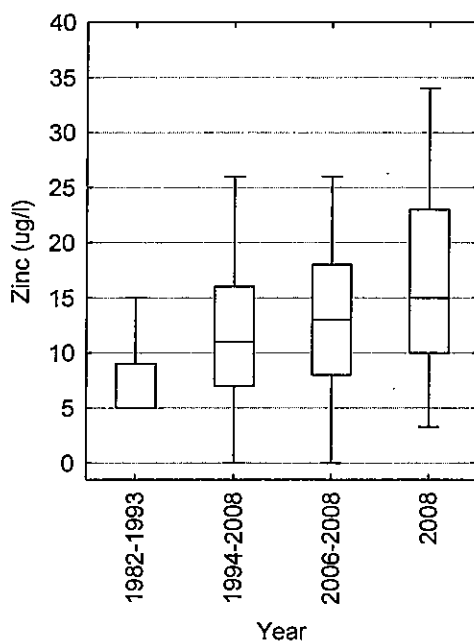
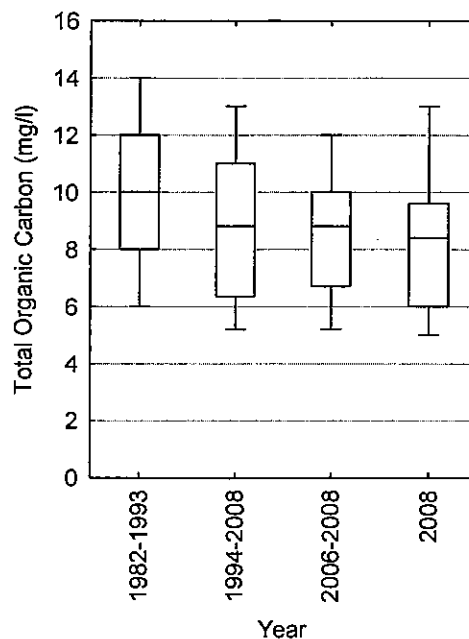
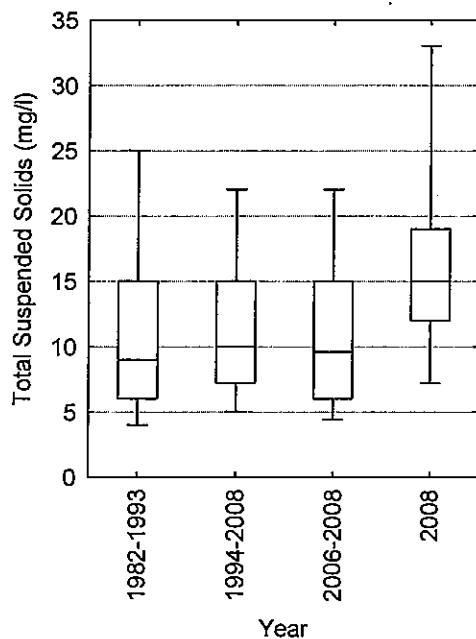
— Median □ 25%-75% ▤ 10%-90%
 — WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Menomonee River at County Line Rd., Site RI-16



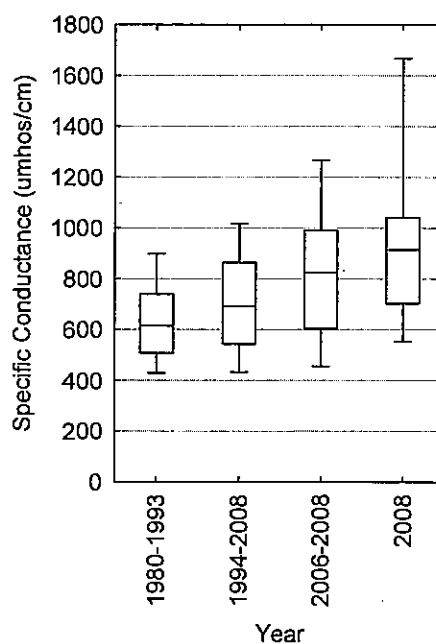
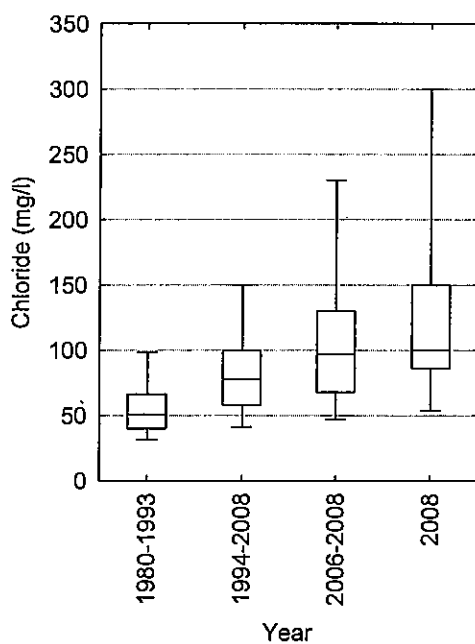
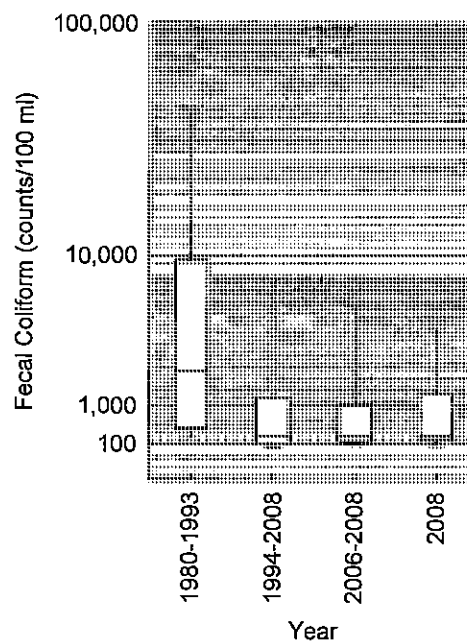
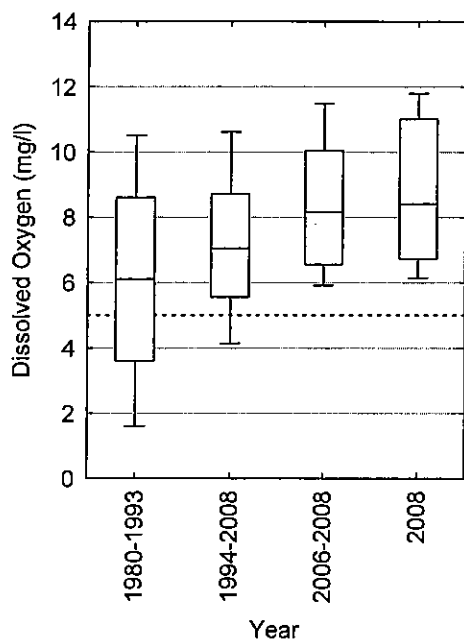
— Median 25%-75% 10%-90%
— WQ Standard/Criterion

**MMSD Water Quality Monitoring Program Data
Menomonee River at County Line Rd., Site RI-16**



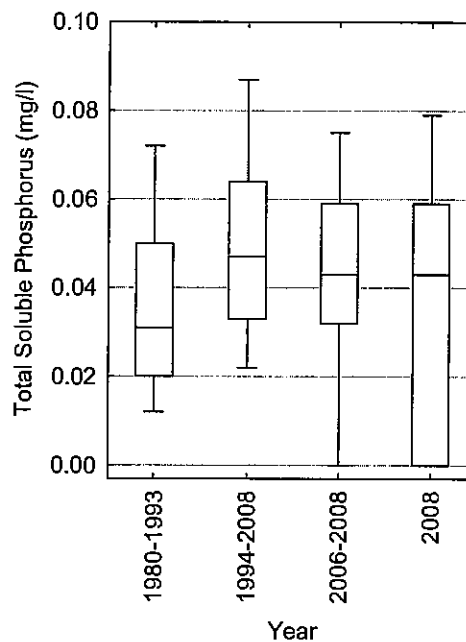
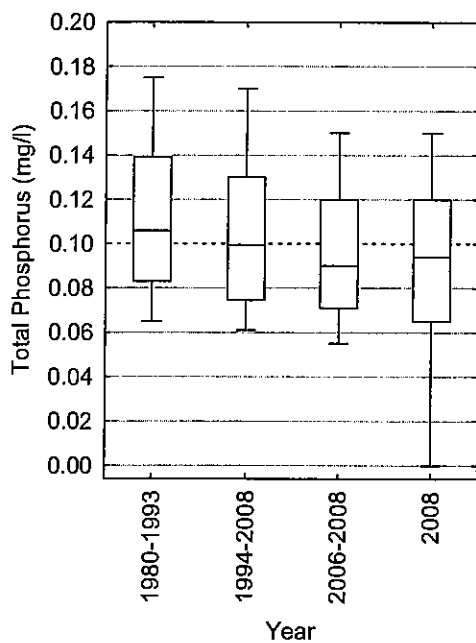
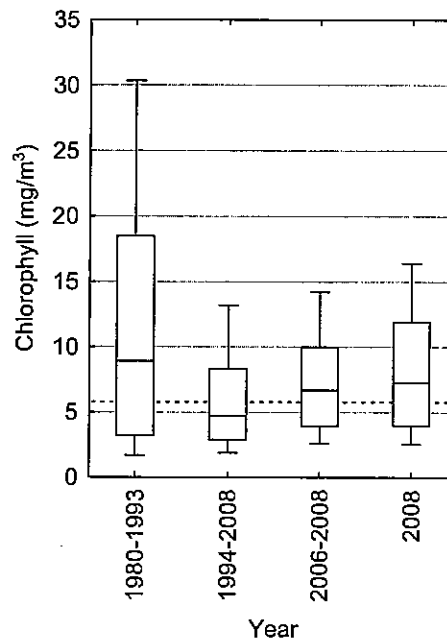
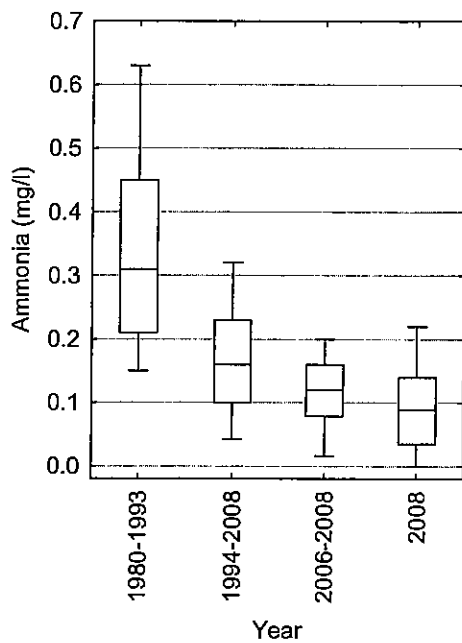
— Median □ 25%-75% ▮ 10%-90%

MMSD Water Quality Monitoring Program Data
Menomonee River at South Second St., Site RI-17



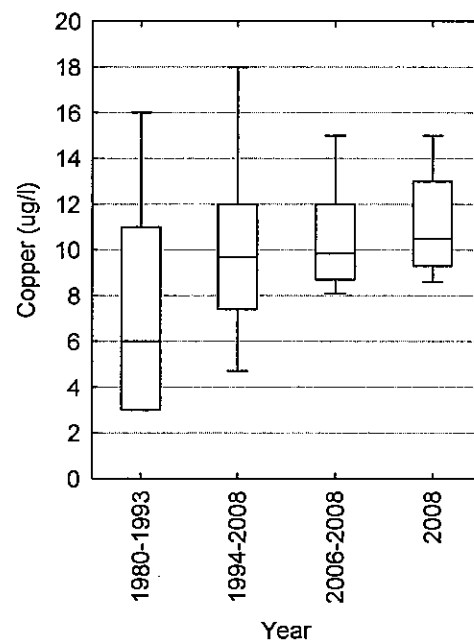
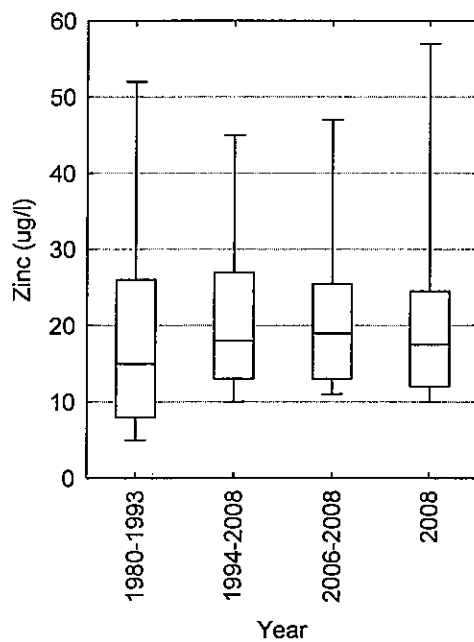
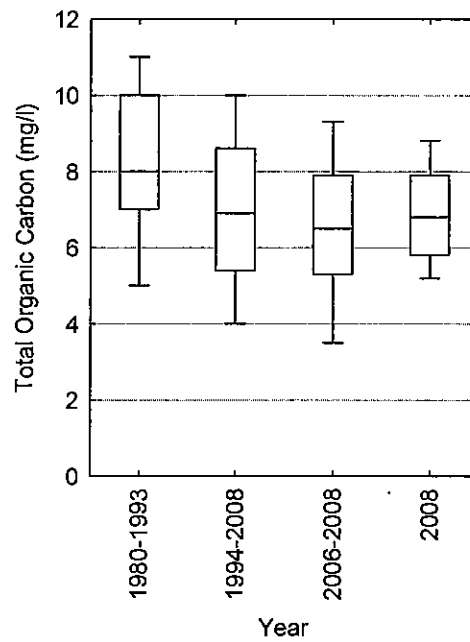
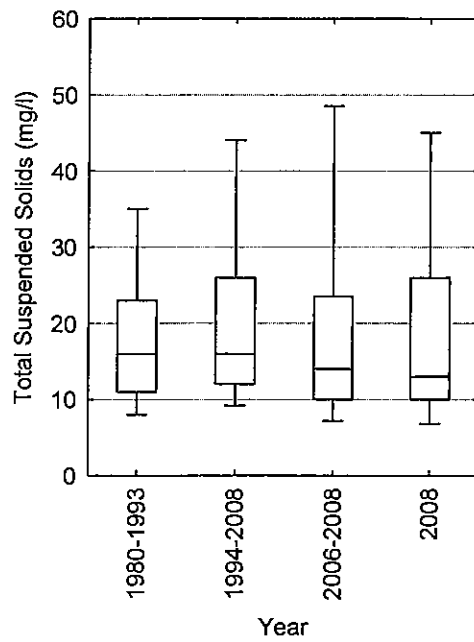
— Median □ 25%-75% ▤ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Menomonee River at South Second St., Site RI-17



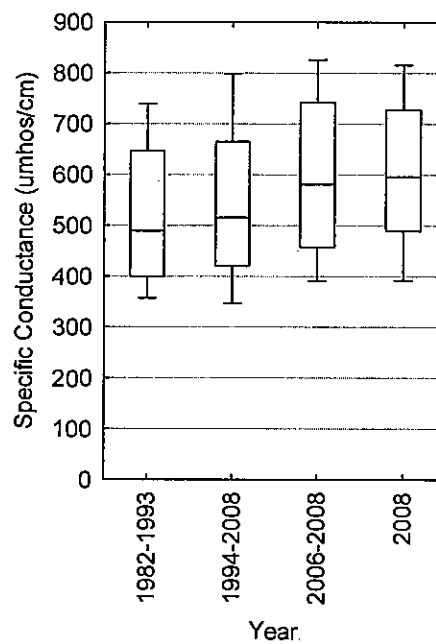
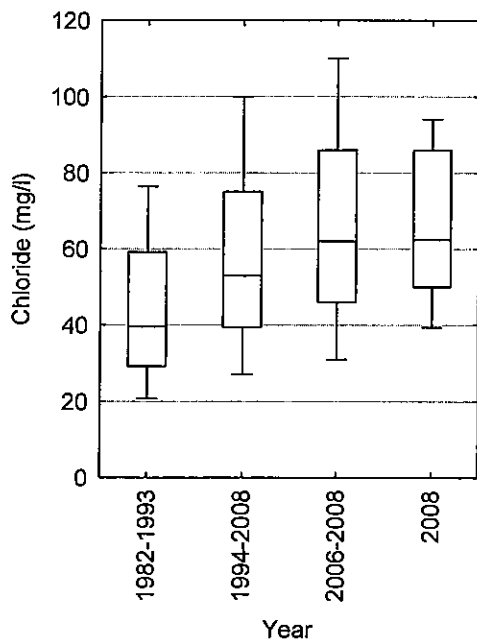
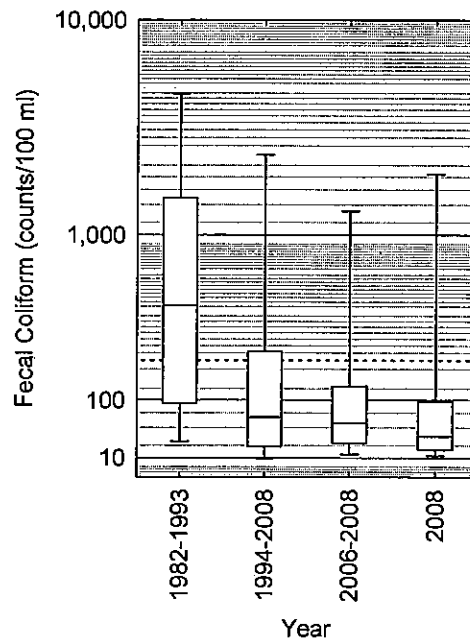
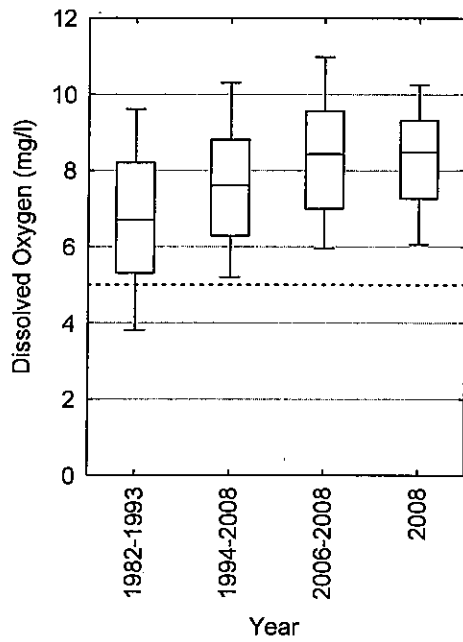
— Median □ 25%-75% ▤ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Menomonee River at South Second St., Site RI-17



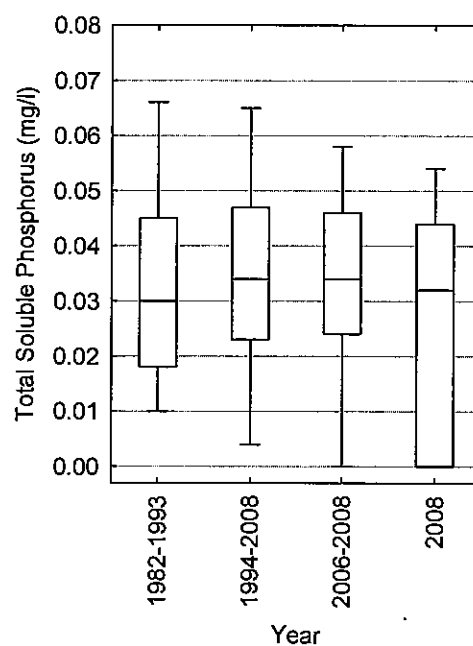
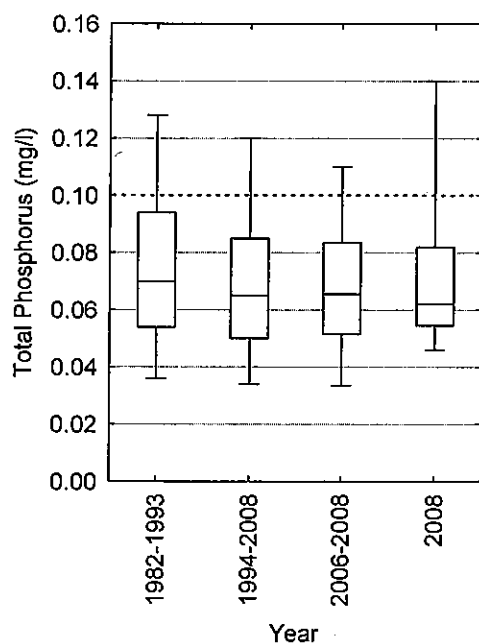
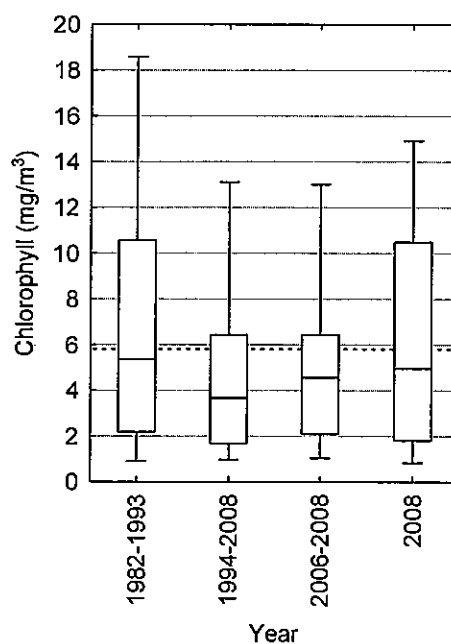
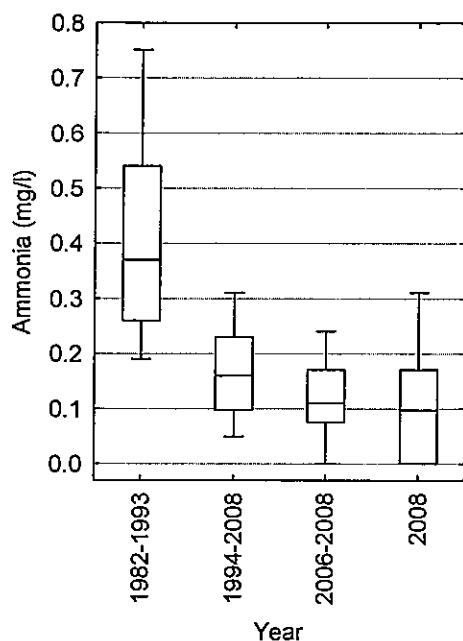
— Median □ 25%-75% ± 10%-90%

MMSD Water Quality Monitoring Program Data
Kinnickinnic River at Greenfield Ave. Extended, Site RI-18



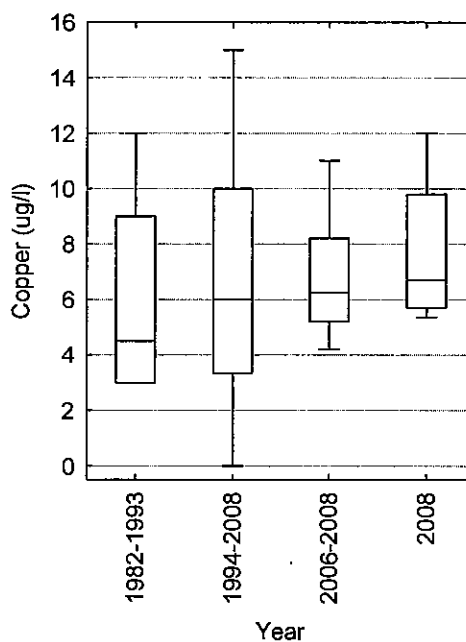
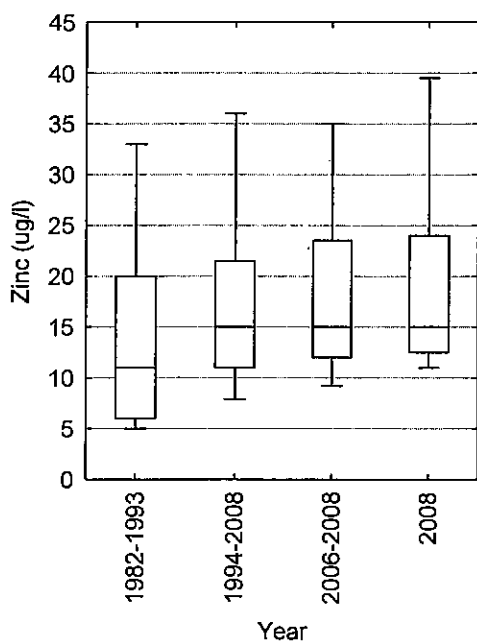
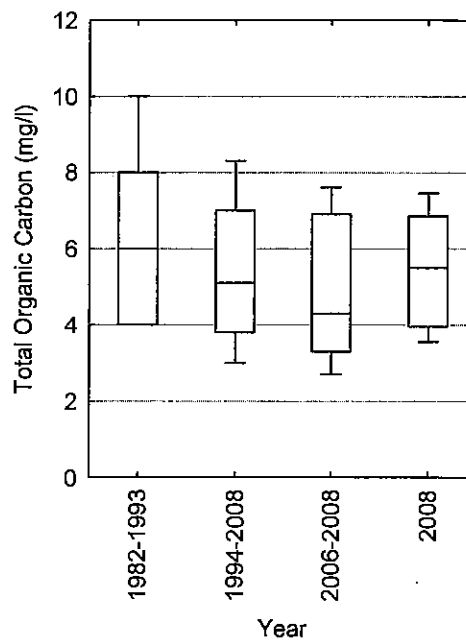
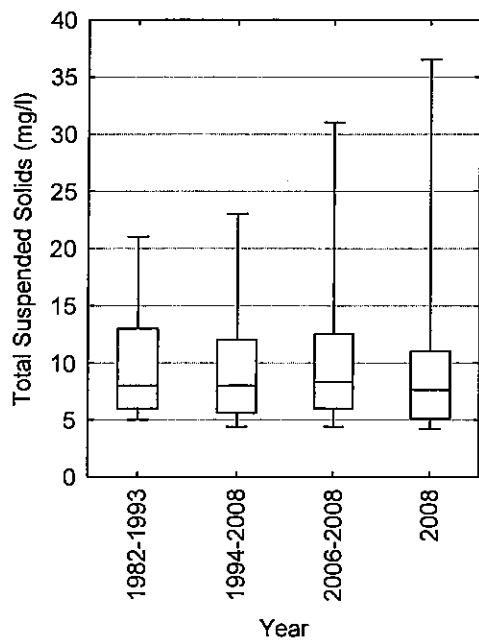
— Median □ 25%-75% ▮ 10%-90%
---- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Kinnickinnic River at Greenfield Ave. Extended, Site RI-18



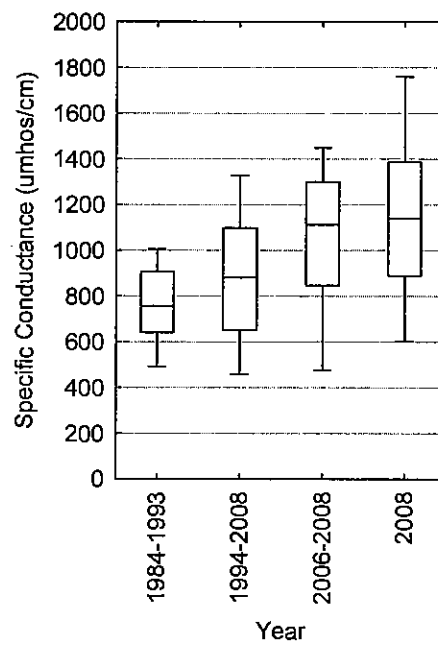
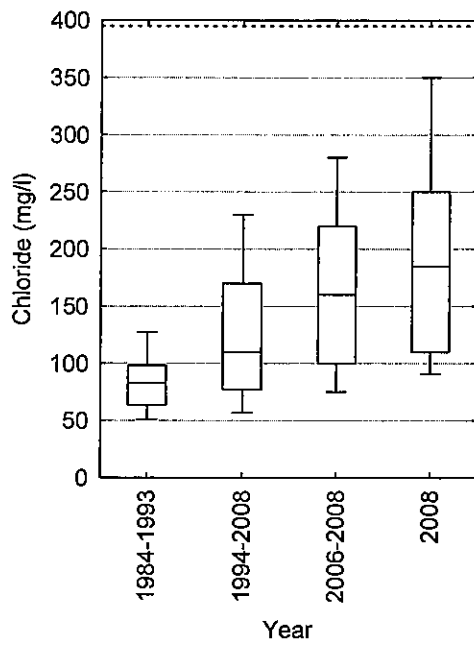
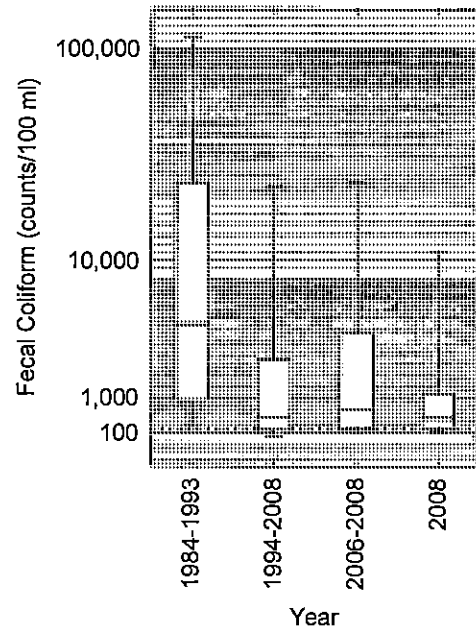
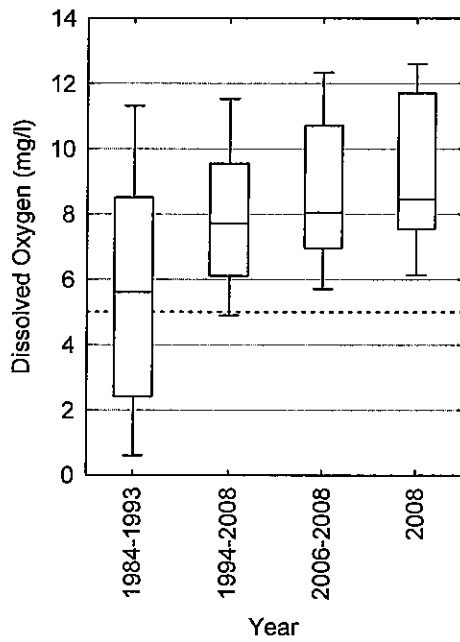
— Median 25%-75% 10%-90%
 --- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Kinnickinnic River at Greenfield Ave. Extended, Site RI-18



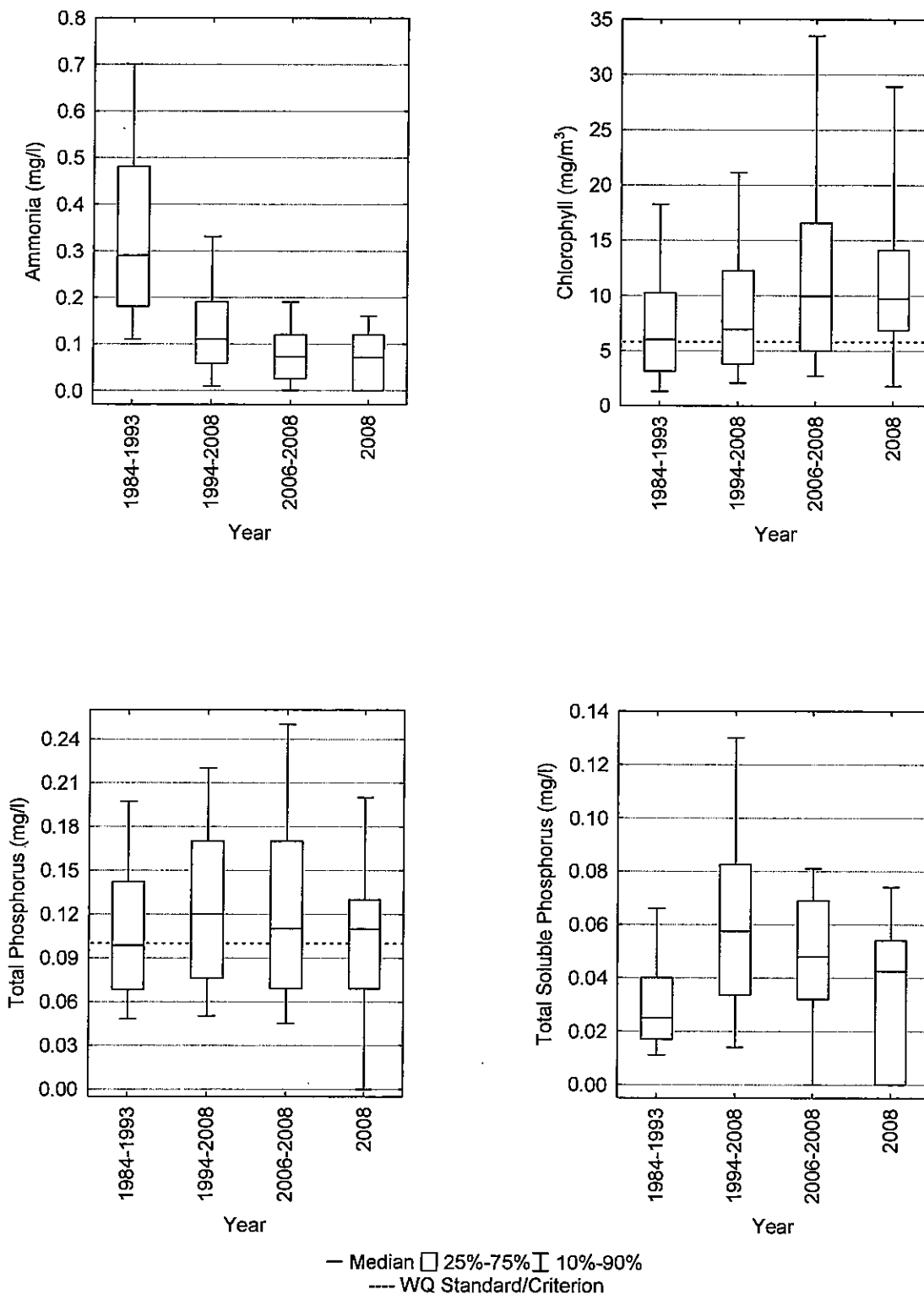
— Median □ 25%-75% ┘ 10%-90%

MMSD Water Quality Monitoring Program Data
Menomonee River at 25th St., Site RI-20

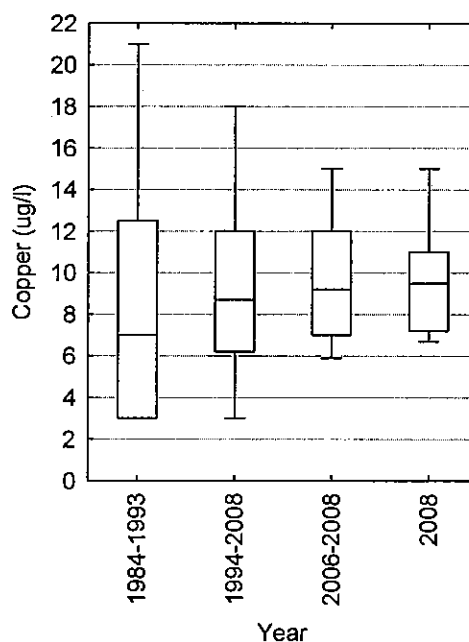
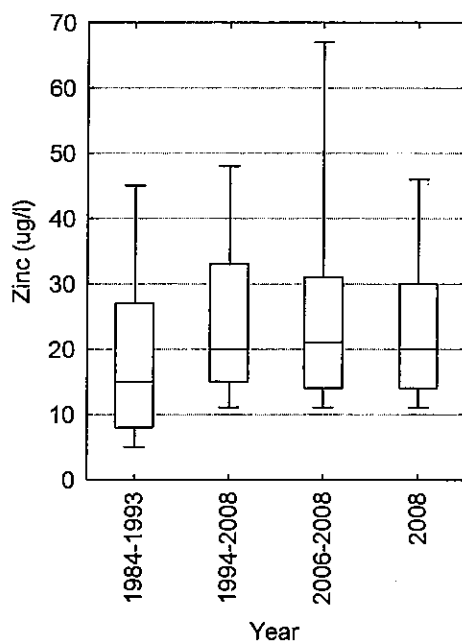
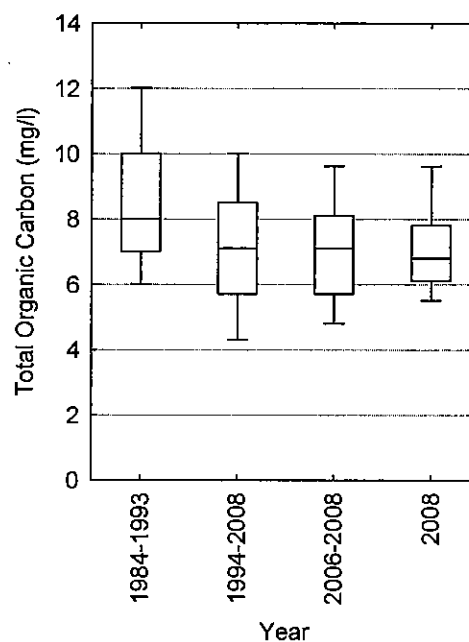
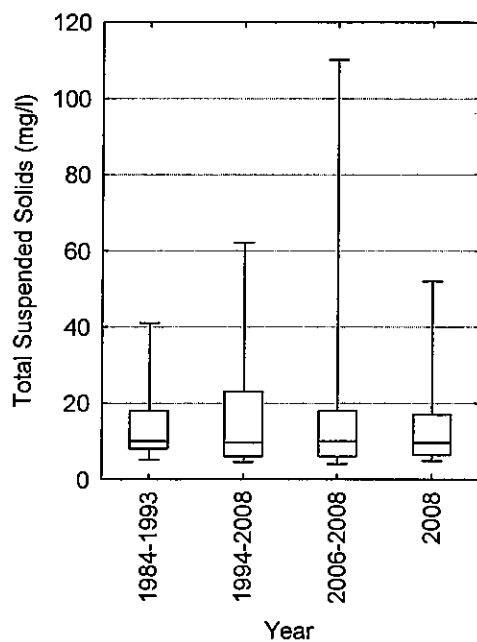


— Median □ 25%-75% ▤ 10%-90%
 ---- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Menomonee River at 25th St., Site RI-20

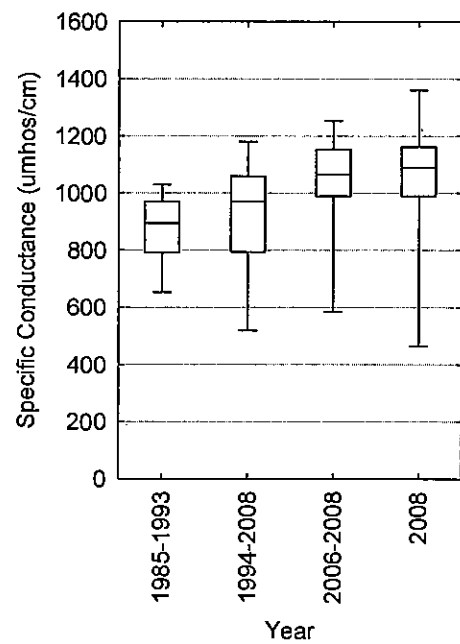
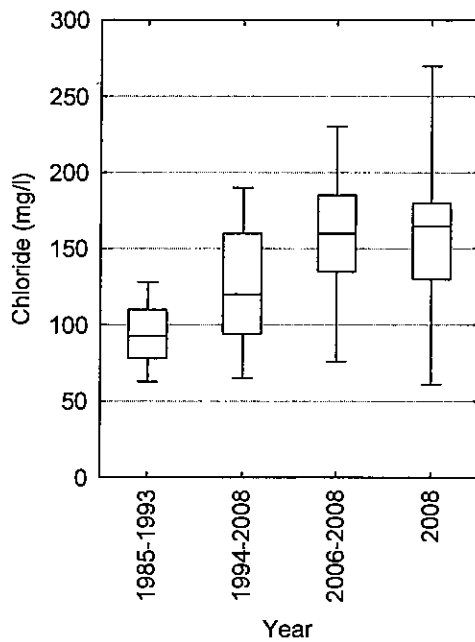
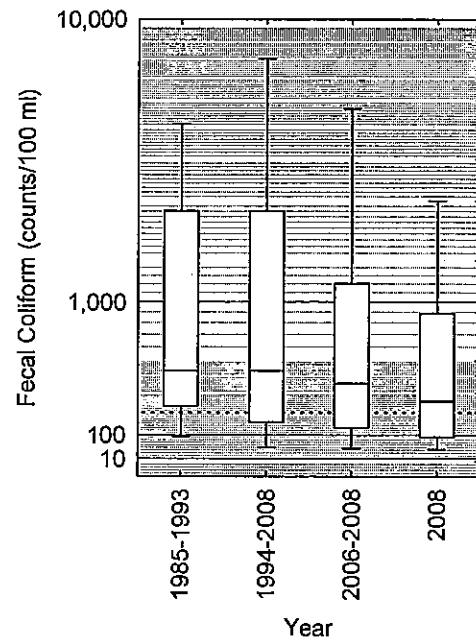
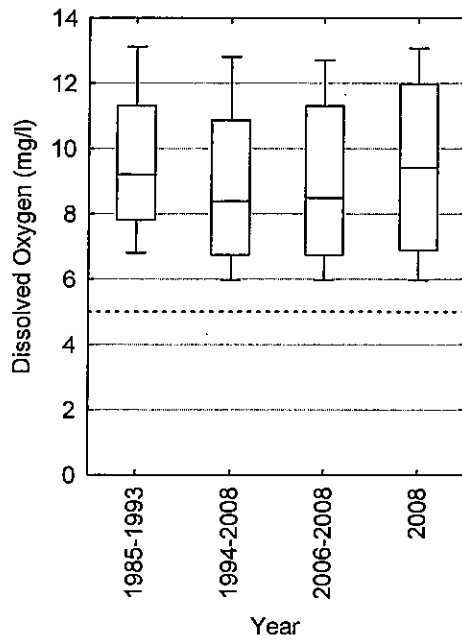


MMSD Water Quality Monitoring Program Data
Menomonee River at 25th St., Site RI-20



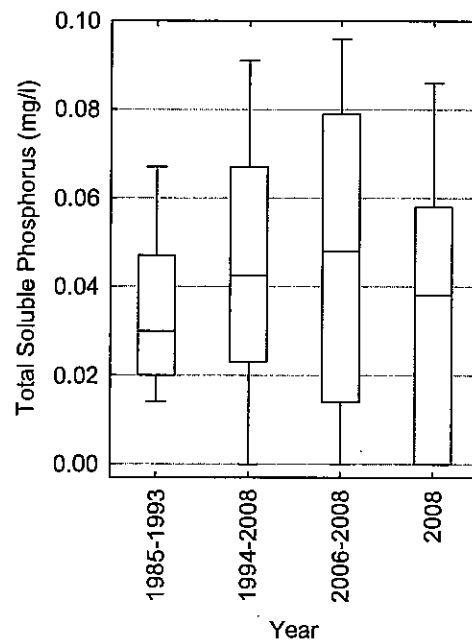
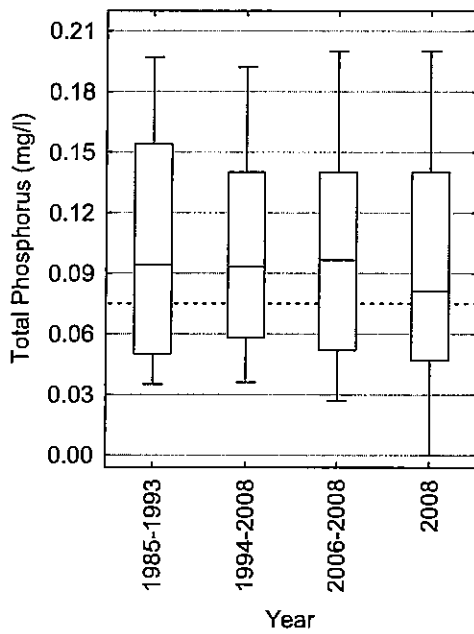
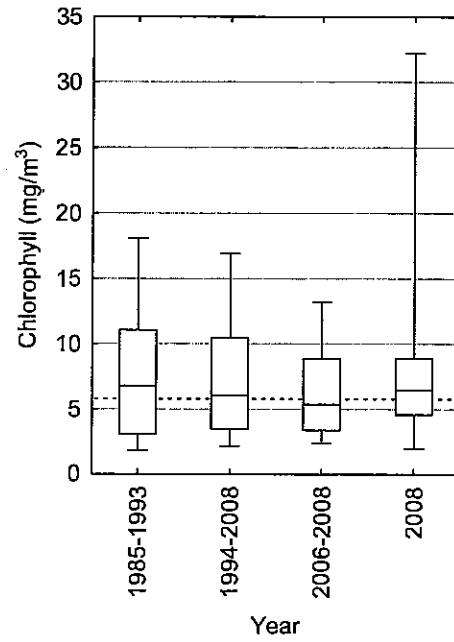
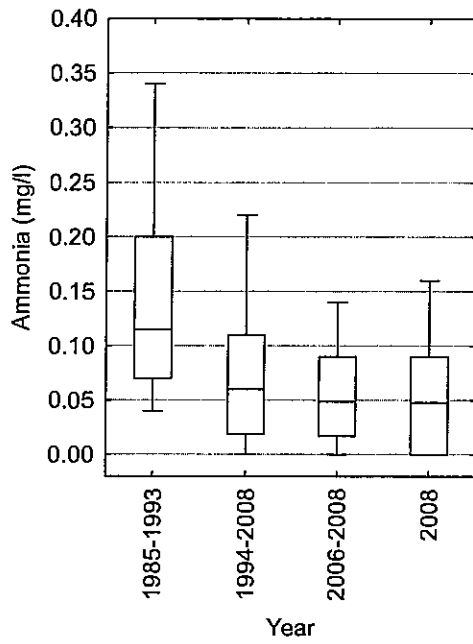
— Median □ 25%-75% ▤ 10%-90%

MMSD Water Quality Monitoring Program Data
Menomonee River at Hampton Ave., Site RI-22



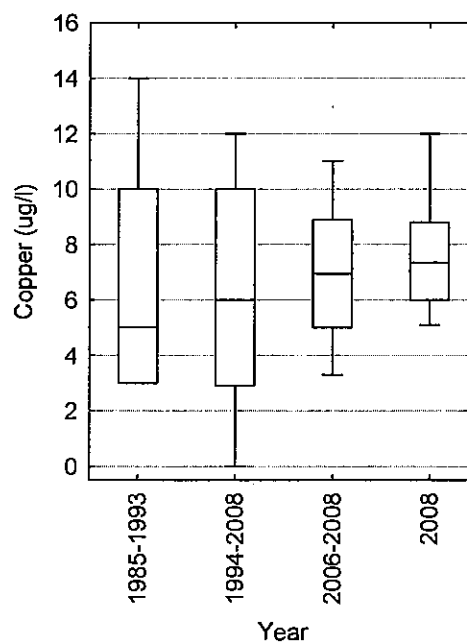
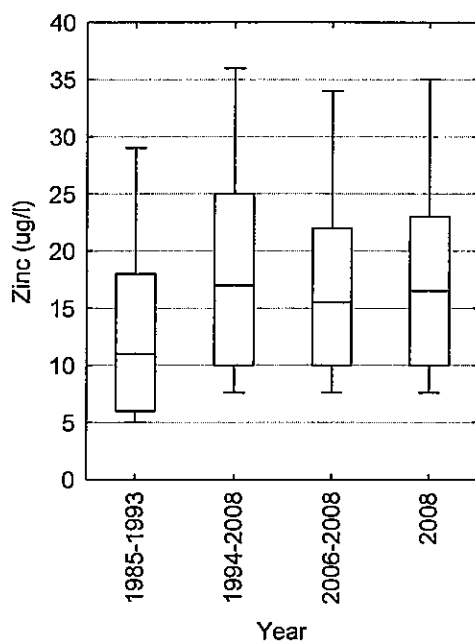
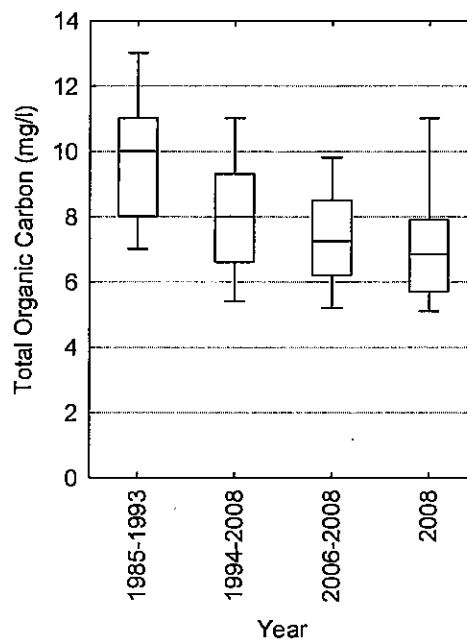
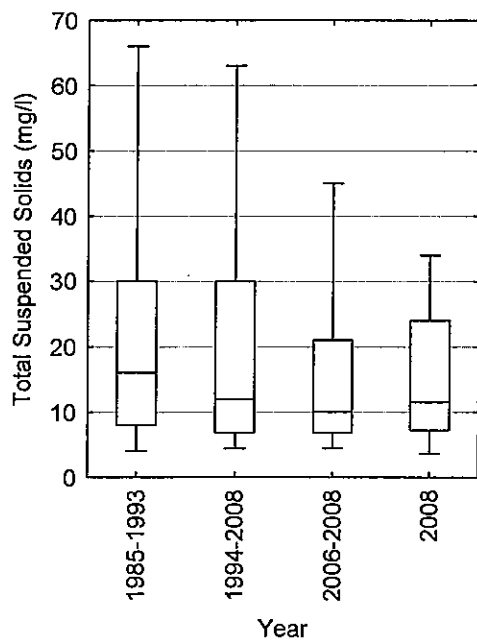
— Median □ 25%-75% ▤ 10%-90%
---WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Menomonee River at Hampton Ave., Site RI-22



— Median 25%-75% 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Menomonee River at Hampton Ave., Site RI-22



— Median □ 25%-75% ▮ 10%-90%

PIONEER ROAD - SITE 1
MILWAUKEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.2	11.3	12.3	10.75	1.50	0.020	1.62	0.056	1.04	0.100	0.052	ND
Standard Error	0.1	1.8	0.6	1.90	0.14	0.005	0.13	0.017	0.14	0.023	0.011	ND
Median	8.3	13.3	12.3	8.66	1.50	0.016	1.50	0.032	0.97	0.070	0.046	ND
Mode	8.3	ND	ND	ND	1.50	0.016	1.50	0.000	1.20	0.000	0.000	ND
Standard Deviation	0.3	7.9	2.6	8.48	0.55	0.018	0.57	0.072	0.58	0.096	0.048	ND
Sample Variance	0.1	62.7	6.6	71.95	0.30	0.000	0.33	0.005	0.34	0.009	0.002	ND
Kurtosis	0.6	-1.3	-0.9	5.32	2.63	7.767	0.98	1.389	1.83	0.527	-0.472	ND
Skewness	-1.0	-0.3	0.3	2.16	0.82	2.617	0.53	1.483	1.06	1.142	0.685	ND
Range	1.0	23.2	9.1	35.64	2.45	0.070	2.54	0.240	2.40	0.320	0.140	0.00
Minimum	7.6	-0.3	8.0	2.46	0.45	0.008	0.46	0.000	0.00	0.000	0.000	0.00
Maximum	8.6	23.0	17.2	38.10	2.90	0.078	3.00	0.240	2.40	0.320	0.140	0.00
Count	20	20	20	20	15	15	20	18	18	18	18	0
Confidence Level(95.0%)	0.1	3.7	1.2	3.97	0.30	0.010	0.27	0.036	0.29	0.048	0.024	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	477.0	461.3	4.5	15.7	9.0	752	65.9	768	2.2	751
Standard Error	ND	ND	19.6	22.3	1.4	5.6	3.4	32	4.5	340	0.2	498
Median	ND	ND	500.0	495.0	2.3	5.7	3.0	812	76.0	100	2.0	107
Mode	ND	ND	550.0	544.8	0.0	10.0	ND	ND	81.0	140	2.1	ND
Standard Deviation	ND	ND	87.5	99.8	6.4	24.9	15.2	144	19.9	1520	0.8	2228
Sample Variance	ND	ND	7653.7	9967.1	41.3	622.2	232.5	20806	396.1	2311038	0.6	4964217
Kurtosis	ND	ND	-1.3	-1.5	8.1	6.9	5.3	-1	-0.5	6	-0.1	18
Skewness	ND	ND	-0.4	-0.4	2.8	2.6	2.5	-1	-0.9	2	0.7	4
Range	0.0	0.0	280.0	291.0	27.0	100.0	55.0	430	64.0	5793	2.9	9993
Minimum	0.0	0.0	320.0	305.0	0.0	0.0	1.0	477	24.0	7	0.8	7
Maximum	0.0	0.0	600.0	596.0	27.0	100.0	56.0	907	88.0	5800	3.8	10000
Count	0	0	20	20	20	20	20	20	20	20	20	20
Confidence Level(95.0%)	ND	ND	40.9	46.7	3.0	11.7	7.1	68	9.3	711	0.4	1043

ND = No Data

Provisional MMSD Water Quality Data

PIONEER ROAD - SITE 1
MILWAUKEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	68.30	36.60	0.0	4.3	7.1	4.1	0.9	21.1	0.2	2.5	2.6	0.0
Standard Error	2.49	1.67	0.0	0.7	0.6	0.6	0.3	3.4	0.1	0.8	1.1	0.0
Median	70.00	39.00	0.0	5.3	6.7	3.5	0.0	19.0	0.0	0.0	0.0	0.0
Mode	76.00	25.00	0.0	0.0	6.5	5.0	0.0	26.0	0.0	0.0	0.0	0.0
Standard Deviation	11.13	7.48	0.0	3.1	2.7	2.6	1.5	15.2	0.5	3.8	4.9	0.0
Sample Variance	123.80	55.94	0.0	9.8	7.5	6.9	2.2	231.6	0.2	14.1	23.6	0.0
Kurtosis	-0.88	-0.83	20.0	-0.5	1.3	1.1	0.1	4.2	3.9	-0.4	1.5	ND
Skewness	-0.11	-0.68	4.5	-0.1	0.6	1.4	1.3	1.9	2.3	1.1	1.7	ND
Range	38.00	25.00	0.2	11.0	12.5	8.8	4.0	63.0	1.5	11.0	14.0	0.0
Minimum	50.00	23.00	0.0	0.0	1.5	1.2	0.0	5.0	0.0	0.0	0.0	0.0
Maximum	88.00	48.00	0.2	11.0	14.0	10.0	4.0	68.0	1.5	11.0	14.0	0.0
Count	20	20	20	20	20	20	20	20	20	20	19	3
Confidence Level(95.0%)	5.21	3.50	0.0	1.5	1.3	1.2	0.7	7.1	0.2	1.8	2.3	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	322	269	1.0	9.6	72.7	64.0	8.6	8.4
Standard Error	13	11	0.4	1.4	2.3	2.6	0.5	0.6
Median	340	285	0.0	8.7	77.5	69.0	9.0	8.5
Mode	350	300	0.0	15.0	78.0	71.0	6.8	8.9
Standard Deviation	58	49	1.6	5.6	10.3	11.5	2.4	2.5
Sample Variance	3340	2392	2.5	31.5	106.4	131.5	5.6	6.4
Kurtosis	-1	0	0.3	-0.8	-0.1	-0.3	-0.6	0.9
Skewness	0	-1	1.2	-0.2	-1.1	-1.1	0.5	0.9
Range	200	150	4.5	18.0	32.0	34.0	7.9	10.3
Minimum	220	170	0.0	0.0	51.0	41.0	5.1	4.7
Maximum	420	320	4.5	18.0	83.0	75.0	13.0	15.0
Count	20	20	20	16	20	20	20	20
Confidence Level(95.0%)	27	23	0.7	3.0	4.8	5.4	1.1	1.2

ND = No Data

Provisional MMSD Water Quality Data

BROWN DEER ROAD - SITE 2
MILWAUKEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	12.2	10.4	10.59	1.30	0.018	1.41	0.064	0.95	0.101	0.049	ND
Standard Error	0.1	1.8	0.5	1.97	0.12	0.003	0.11	0.013	0.11	0.016	0.010	ND
Median	8.2	13.7	10.3	8.56	1.20	0.012	1.25	0.053	0.98	0.078	0.041	ND
Mode	ND	ND	ND	ND	1.10	0.012	1.10	0.000	1.00	0.140	0.000	ND
Standard Deviation	0.3	8.7	2.6	9.24	0.51	0.014	0.53	0.061	0.49	0.075	0.044	ND
Sample Variance	0.1	76.1	6.9	85.40	0.26	0.000	0.28	0.004	0.24	0.006	0.002	ND
Kurtosis	-0.4	-1.4	-1.3	9.80	4.60	6.157	1.29	0.577	0.97	-0.058	-0.598	ND
Skewness	-0.8	-0.2	0.3	2.73	1.69	2.345	1.08	1.031	0.60	0.733	0.556	ND
Range	0.9	25.1	7.9	43.36	2.36	0.056	2.34	0.220	2.10	0.260	0.140	0.00
Minimum	7.6	-0.2	6.8	2.24	0.44	0.007	0.46	0.000	0.00	0.000	0.000	0.00
Maximum	8.5	24.9	14.6	45.60	2.80	0.063	2.80	0.220	2.10	0.260	0.140	0.00
Count	23	23	23	22	17	17	22	21	20	22	21	0
Confidence Level(95.0%)	0.1	3.8	1.1	4.10	0.26	0.007	0.24	0.028	0.23	0.033	0.020	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	480.5	463.7	4.7	16.6	11.5	783	74.6	961	2.3	628
Standard Error	ND	ND	21.7	24.0	1.0	4.1	3.2	31	5.1	547	0.1	278
Median	ND	ND	495.0	487.5	3.6	9.6	6.0	827	80.5	155	2.2	120
Mode	ND	ND	400.0	ND	0.0	15.0	6.0	ND	82.0	150	2.2	120
Standard Deviation	ND	ND	101.6	112.7	4.7	19.8	14.9	149	23.7	2564	0.7	1334
Sample Variance	ND	ND	10328.4	12701.7	22.0	392.2	222.9	22252	564.0	6575216	0.5	1778576
Kurtosis	ND	ND	-0.5	-0.4	2.9	3.6	4.4	0	0.0	18	1.0	10
Skewness	ND	ND	-0.6	-0.7	1.8	2.1	2.3	-1	0.0	4	1.0	3
Range	0.0	0.0	350.0	396.6	17.0	68.8	52.4	565	95.0	11981	2.8	5684
Minimum	0.0	0.0	260.0	207.0	0.0	1.2	1.4	485	25.0	19	1.3	16
Maximum	0.0	0.0	610.0	603.6	17.0	70.0	53.8	1050	120.0	12000	4.1	5700
Count	0	0	22	22	22	23	22	23	22	22	22	23
Confidence Level(95.0%)	ND	ND	45.1	50.0	2.1	8.6	6.6	65	10.5	1137	0.3	577

ND = No Data

Provisional MMSD Water Quality Data

BROWN DEER ROAD - SITE 2
MILWAUKEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	67.74	35.52	0.0	4.0	7.0	3.9	0.9	16.3	0.2	2.5	4.4	0.0
Standard Error	2.38	1.69	0.0	0.6	0.5	0.5	0.4	1.8	0.1	0.7	1.1	0.0
Median	69.00	37.00	0.0	4.2	6.6	3.3	0.0	14.0	0.0	0.0	0.0	0.0
Mode	83.00	41.00	0.0	0.0	6.6	1.9	0.0	11.0	0.0	0.0	0.0	0.0
Standard Deviation	11.42	8.11	0.0	3.0	2.6	2.2	1.8	8.5	0.4	3.3	5.3	0.0
Sample Variance	130.38	65.72	0.0	8.7	6.8	4.7	3.2	72.0	0.2	11.1	28.2	0.0
Kurtosis	-0.91	-0.89	23.0	1.1	1.9	4.2	1.5	2.2	4.3	-0.7	-1.2	ND
Skewness	-0.19	-0.42	4.8	0.5	0.9	1.7	1.7	1.3	2.4	0.9	0.6	ND
Range	39.00	28.00	0.1	12.0	12.3	9.8	5.4	37.8	1.3	9.1	15.0	0.0
Minimum	46.00	20.00	0.0	0.0	1.7	1.2	0.0	3.2	0.0	0.0	0.0	0.0
Maximum	85.00	48.00	0.1	12.0	14.0	11.0	5.4	41.0	1.3	9.1	15.0	0.0
Count	23	23	23	23	23	23	23	23	23	23	22	4
Confidence Level(95.0%)	4.94	3.51	0.0	1.3	1.1	0.9	0.8	3.7	0.2	1.4	2.4	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	314	266	0.9	9.4	71.4	63.0	8.4	8.3
Standard Error	13	11	0.3	1.0	2.4	2.5	0.5	0.5
Median	330	290	0.0	8.5	76.5	67.5	8.5	8.2
Mode	350	300	0.0	8.5	77.0	71.0	12.0	8.9
Standard Deviation	61	51	1.5	4.3	11.1	11.6	2.1	2.3
Sample Variance	3708	2558	2.4	18.1	122.2	134.4	4.5	5.4
Kurtosis	-1	0	-0.3	-0.7	0.3	0.2	-1.0	0.2
Skewness	0	-1	1.3	0.6	-1.1	-1.1	0.4	0.7
Range	200	170	4.1	13.7	39.0	39.0	6.7	9.2
Minimum	200	150	0.0	4.3	47.0	38.0	5.3	4.8
Maximum	400	320	4.1	18.0	86.0	77.0	12.0	14.0
Count	23	22	23	18	22	22	22	22
Confidence Level(95.0%)	26	22	0.7	2.1	4.9	5.1	0.9	1.0

ND = No Data

Provisional MMSD Water Quality Data

SILVER SPRING DRIVE - SITE 3
MILWAUKEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	12.5	10.0	11.73	1.23	0.017	1.34	0.055	0.86	0.110	0.051	ND
Standard Error	0.0	1.8	0.5	2.70	0.12	0.003	0.12	0.013	0.10	0.018	0.011	ND
Median	8.2	13.0	9.6	8.17	1.15	0.012	1.20	0.038	0.83	0.083	0.050	ND
Mode	7.8	ND	ND	ND	1.30	0.011	1.30	0.000	0.99	0.000	0.000	ND
Standard Deviation	0.2	8.5	2.5	12.39	0.50	0.013	0.53	0.059	0.42	0.084	0.048	ND
Sample Variance	0.1	72.0	6.4	153.57	0.25	0.000	0.28	0.004	0.18	0.007	0.002	ND
Kurtosis	-0.5	-1.2	-1.0	8.15	7.18	5.793	2.01	1.196	2.40	0.598	-1.003	ND
Skewness	-0.5	-0.3	0.6	2.64	2.15	2.305	1.31	1.355	0.69	0.852	0.435	ND
Range	0.9	24.2	7.6	53.94	2.36	0.052	2.34	0.210	2.00	0.320	0.140	0.00
Minimum	7.7	-0.3	7.1	2.26	0.44	0.007	0.46	0.000	0.00	0.000	0.000	0.00
Maximum	8.5	23.9	14.7	56.20	2.80	0.059	2.80	0.210	2.00	0.320	0.140	0.00
Count	22	22	22	21	16	16	21	20	19	21	20	0
Confidence Level(95.0%)	0.1	3.8	1.1	5.64	0.26	0.007	0.24	0.028	0.20	0.038	0.022	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	475.7	455.6	5.4	20.6	14.2	779	75.6	3332	2.3	844
Standard Error	ND	ND	18.7	21.4	1.2	5.0	3.8	33	6.1	2890	0.2	430
Median	ND	ND	500.0	491.0	4.4	12.5	8.7	822	80.0	120	2.1	125
Mode	ND	ND	540.0	ND	4.8	11.0	ND	928	50.0	110	2.0	130
Standard Deviation	ND	ND	85.7	98.1	5.3	23.4	17.6	153	28.0	13244	0.8	2018
Sample Variance	ND	ND	7345.7	9619.1	28.2	548.1	308.5	23435	785.9	175403416	0.6	4073184
Kurtosis	ND	ND	-0.7	-0.6	3.0	3.6	5.1	0	3.2	21	4.1	8
Skewness	ND	ND	-0.5	-0.6	1.8	2.0	2.4	0	1.1	5	1.9	3
Range	0.0	0.0	280.0	333.0	20.0	88.6	69.2	625	135.0	60979	3.5	7672
Minimum	0.0	0.0	310.0	253.0	0.0	1.4	1.3	483	25.0	21	1.3	28
Maximum	0.0	0.0	590.0	586.0	20.0	90.0	70.5	1108	160.0	61000	4.8	7700
Count	0	0	21	21	21	22	21	22	21	21	21	22
Confidence Level(95.0%)	ND	ND	39.0	44.6	2.4	10.4	8.0	68	12.8	6029	0.4	895

ND = No Data

Provisional MMSD Water Quality Data

SILVER SPRING DRIVE - SITE 3
MILWAUKEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	66.82	35.32	0.0	3.6	6.4	3.7	0.7	17.8	0.2	2.5	4.3	0.0
Standard Error	2.20	1.62	0.0	0.5	0.4	0.5	0.3	2.3	0.1	0.7	1.4	0.0
Median	68.00	37.50	0.0	4.2	6.1	2.7	0.0	14.0	0.0	0.0	0.0	0.0
Mode	65.00	32.00	0.0	0.0	10.0	2.2	0.0	13.0	0.0	0.0	0.0	0.0
Standard Deviation	10.32	7.58	0.0	2.4	2.0	2.5	1.6	11.0	0.4	3.4	6.5	0.0
Sample Variance	106.54	57.47	0.0	6.0	4.2	6.3	2.5	120.3	0.2	11.8	42.6	0.0
Kurtosis	-0.26	-0.61	ND	-0.9	0.9	3.2	5.4	-0.1	3.7	-0.8	1.0	ND
Skewness	-0.48	-0.56	ND	-0.4	0.0	1.9	2.5	0.9	2.3	0.9	1.4	ND
Range	40.00	27.00	0.0	7.3	8.6	9.4	5.5	38.3	1.2	9.6	22.0	0.0
Minimum	45.00	20.00	0.0	0.0	1.4	1.6	0.0	3.7	0.0	0.0	0.0	0.0
Maximum	85.00	47.00	0.0	7.3	10.0	11.0	5.5	42.0	1.2	9.6	22.0	0.0
Count	22	22	22	22	22	22	22	22	22	22	22	4
Confidence Level(95.0%)	4.58	3.36	0.0	1.1	0.9	1.1	0.7	4.9	0.2	1.5	2.9	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	311	266	0.8	10.4	71.6	63.2	8.4	8.3
Standard Error	12	11	0.3	1.4	2.5	2.6	0.4	0.5
Median	320	290	0.0	8.8	77.0	69.0	8.4	8.1
Mode	260	300	0.0	13.0	77.0	71.0	10.0	10.0
Standard Deviation	56	52	1.4	5.6	11.5	11.8	2.0	2.2
Sample Variance	3098	2675	1.9	31.6	131.2	140.1	4.2	4.8
Kurtosis	0	0	1.0	1.2	0.0	0.0	-1.1	0.8
Skewness	-1	-1	1.5	1.0	-1.0	-1.0	0.4	0.8
Range	210	180	4.4	21.0	40.0	38.0	6.6	9.2
Minimum	190	150	0.0	4.0	46.0	38.0	5.4	4.8
Maximum	400	330	4.4	25.0	86.0	76.0	12.0	14.0
Count	22	21	22	17	21	21	21	21
Confidence Level(95.0%)	25	24	0.6	2.9	5.2	5.4	0.9	1.0

ND = No Data

Provisional MMSD Water Quality Data

PORT WASHINGTON ROAD - SITE 4
MILWAUKEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	12.1	10.3	11.11	1.22	0.017	1.31	0.062	0.81	0.105	0.055	ND
Standard Error	0.1	1.8	0.5	1.78	0.12	0.003	0.12	0.015	0.08	0.015	0.010	ND
Median	8.2	13.0	9.6	10.24	1.10	0.013	1.15	0.038	0.85	0.092	0.047	ND
Mode	8.3	23.7	9.6	13.10	1.10	0.011	1.10	0.000	0.51	0.000	0.000	ND
Standard Deviation	0.3	8.7	2.5	8.36	0.51	0.011	0.54	0.069	0.38	0.072	0.044	ND
Sample Variance	0.1	76.1	6.1	69.87	0.26	0.000	0.29	0.005	0.14	0.005	0.002	ND
Kurtosis	0.9	-1.4	-1.2	1.68	5.43	4.956	2.49	0.787	1.80	0.351	-0.530	ND
Skewness	-1.2	-0.2	0.5	1.34	2.00	2.125	1.45	1.212	-0.31	0.664	0.463	ND
Range	1.0	24.9	7.4	32.10	2.35	0.045	2.43	0.240	1.70	0.270	0.140	0.00
Minimum	7.4	-0.3	7.1	2.10	0.45	0.007	0.47	0.000	0.00	0.000	0.000	0.00
Maximum	8.5	24.6	14.4	34.20	2.80	0.052	2.90	0.240	1.70	0.270	0.140	0.00
Count	23	23	23	22	17	17	22	21	20	22	21	0
Confidence Level(95.0%)	0.1	3.8	1.1	3.71	0.26	0.006	0.24	0.031	0.18	0.032	0.020	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	500.9	481.8	5.2	20.0	13.7	816	82.1	1393	2.3	1020
Standard Error	ND	ND	22.9	25.0	1.0	4.1	3.4	43	8.5	792	0.1	523
Median	ND	ND	495.0	479.0	3.8	12.0	7.6	833	80.0	140	2.1	140
Mode	ND	ND	450.0	409.0	0.0	11.0	12.3	ND	80.0	100	2.0	140
Standard Deviation	ND	ND	107.5	117.1	4.8	19.6	15.8	208	39.8	3797	0.7	2507
Sample Variance	ND	ND	11561.0	13717.3	23.0	382.4	249.2	43071	1586.6	14418891	0.5	6282603
Kurtosis	ND	ND	4.2	3.2	2.8	2.4	4.8	3	9.1	11	1.8	8
Skewness	ND	ND	1.5	1.3	1.6	1.7	2.3	1	2.5	3	1.5	3
Range	0.0	0.0	500.0	523.8	19.0	71.4	62.5	954	204.0	15969	2.7	9575
Minimum	0.0	0.0	350.0	322.0	0.0	1.6	1.7	498	26.0	31	1.5	25
Maximum	0.0	0.0	850.0	845.8	19.0	73.0	64.1	1452	230.0	16000	4.2	9600
Count	0	0	22	22	22	23	22	23	22	23	23	23
Confidence Level(95.0%)	ND	ND	47.7	51.9	2.1	8.5	7.0	90	17.7	1642	0.3	1084

ND = No Data

Provisional MMSD Water Quality Data

PORT WASHINGTON ROAD - SITE 4
MILWAUKEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	67.26	35.13	0.0	3.8	7.1	4.1	0.9	16.6	0.1	2.5	3.2	0.0
Standard Error	2.44	1.60	0.0	0.6	0.6	0.6	0.4	1.6	0.1	0.7	0.9	0.0
Median	68.00	38.00	0.0	4.2	6.4	3.4	0.0	15.0	0.0	0.0	0.0	0.0
Mode	83.00	41.00	0.0	0.0	4.9	3.4	0.0	22.0	0.0	0.0	0.0	0.0
Standard Deviation	11.72	7.69	0.0	2.7	3.0	2.9	1.7	7.8	0.3	3.3	3.9	0.0
Sample Variance	137.29	59.12	0.0	7.2	9.0	8.2	2.9	61.6	0.1	10.8	15.3	0.0
Kurtosis	-0.32	-0.81	ND	-0.5	7.5	2.3	1.2	-0.8	9.1	-0.6	-0.7	ND
Skewness	-0.46	-0.56	ND	-0.1	2.1	1.6	1.7	0.5	3.2	0.9	0.7	ND
Range	42.00	27.00	0.0	9.2	16.2	10.7	5.1	27.9	1.2	9.9	12.0	0.0
Minimum	43.00	20.00	0.0	0.0	1.8	1.3	0.0	5.1	0.0	0.0	0.0	0.0
Maximum	85.00	47.00	0.0	9.2	18.0	12.0	5.1	33.0	1.2	9.9	12.0	0.0
Count	23	23	23	23	23	23	23	23	23	23	21	4
Confidence Level(95.0%)	5.07	3.32	0.0	1.2	1.3	1.2	0.7	3.4	0.1	1.4	1.8	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	311	263	1.3	10.9	70.2	61.6	8.5	8.2
Standard Error	13	11	0.3	1.2	2.5	2.6	0.4	0.5
Median	330	290	0.0	9.9	75.0	66.0	8.4	8.2
Mode	340	300	0.0	14.0	80.0	70.0	10.0	6.5
Standard Deviation	60	54	1.6	4.9	11.9	12.3	1.8	2.2
Sample Variance	3639	2868	2.5	24.2	142.5	151.8	3.3	4.6
Kurtosis	-1	0	-1.1	-0.9	0.2	0.0	-0.7	0.8
Skewness	-1	-1	0.6	0.4	-1.1	-1.1	0.5	0.9
Range	210	170	4.6	16.4	41.0	41.0	5.8	9.0
Minimum	190	150	0.0	4.6	42.0	33.0	6.2	5.0
Maximum	400	320	4.6	21.0	83.0	74.0	12.0	14.0
Count	23	22	23	18	22	22	22	22
Confidence Level(95.0%)	26	24	0.7	2.4	5.3	5.5	0.8	1.0

ND = No Data

Provisional MMSD Water Quality Data

NORTH AVENUE - SITE 5
MILWAUKEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.2	12.6	10.0	9.21	1.19	0.017	1.28	0.065	1.10	0.105	0.056	ND
Standard Error	0.1	1.8	0.5	1.26	0.12	0.002	0.11	0.011	0.21	0.018	0.009	ND
Median	8.2	13.4	9.5	8.93	1.10	0.013	1.10	0.055	0.94	0.091	0.051	ND
Mode	7.7	ND	ND	ND	1.10	0.011	1.10	0.044	1.00	0.000	0.000	ND
Standard Deviation	0.3	8.4	2.5	5.91	0.49	0.009	0.53	0.048	0.96	0.081	0.041	ND
Sample Variance	0.1	70.7	6.5	34.96	0.24	0.000	0.28	0.002	0.92	0.007	0.002	ND
Kurtosis	0.1	-1.2	-1.1	1.96	5.72	1.879	1.98	0.220	14.35	-0.125	-0.501	ND
Skewness	-0.1	-0.4	0.6	1.25	2.06	1.410	1.37	0.861	3.60	0.571	0.367	ND
Range	1.0	24.1	7.3	24.66	2.22	0.036	2.30	0.170	4.50	0.290	0.140	0.00
Minimum	7.7	-0.3	6.9	1.34	0.48	0.006	0.50	0.000	0.40	0.000	0.000	0.00
Maximum	8.7	23.8	14.2	26.00	2.70	0.042	2.80	0.170	4.90	0.290	0.140	0.00
Count	22	22	22	22	17	17	22	20	20	21	21	0
Confidence Level(95.0%)	0.1	3.7	1.1	2.62	0.25	0.005	0.24	0.022	0.45	0.037	0.019	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	501.4	479.9	5.8	21.5	14.1	821	89.2	1480	2.4	ND
Standard Error	ND	ND	21.0	23.1	1.0	4.8	3.0	47	10.3	933	0.1	ND
Median	ND	ND	525.0	504.5	4.5	14.5	10.5	815	85.0	200	2.3	ND
Mode	ND	ND	600.0	ND	7.6	17.0	ND	ND	85.0	200	2.3	ND
Standard Deviation	ND	ND	98.5	108.3	4.6	22.6	14.0	218	48.3	4376	0.7	ND
Sample Variance	ND	ND	9707.6	11736.0	21.4	511.9	195.1	47674	2329.1	19150485	0.5	ND
Kurtosis	ND	ND	1.1	-0.1	1.6	2.9	2.7	7	9.5	17	2.2	ND
Skewness	ND	ND	-1.0	-0.7	1.4	2.0	1.9	2	2.7	4	1.4	ND
Range	0.0	0.0	400.0	411.6	18.0	79.6	48.1	1099	243.0	19974	2.9	0
Minimum	0.0	0.0	240.0	226.0	0.0	2.4	2.5	490	27.0	26	1.4	0
Maximum	0.0	0.0	640.0	637.6	18.0	82.0	50.6	1589	270.0	20000	4.3	0
Count	0	0	22	22	22	22	22	22	22	22	22	0
Confidence Level(95.0%)	ND	ND	43.7	48.0	2.1	10.0	6.2	97	21.4	1940	0.3	ND

ND = No Data

Provisional MMSD Water Quality Data

NORTH AVENUE - SITE 5
MILWAUKEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	69.32	36.14	0.0	4.5	7.2	3.5	1.0	15.9	0.2	2.1	4.0	0.0
Standard Error	2.57	1.67	0.0	0.4	0.5	0.3	0.4	2.0	0.1	0.7	1.0	0.0
Median	70.50	39.00	0.0	4.4	6.8	3.5	0.0	14.5	0.0	0.0	0.0	0.0
Mode	65.00	40.00	0.0	4.5	7.2	2.0	0.0	16.0	0.0	0.0	0.0	0.0
Standard Deviation	12.07	7.82	0.0	1.6	2.4	1.5	1.9	9.4	0.5	3.4	4.6	0.0
Sample Variance	145.75	61.17	0.0	2.7	5.9	2.2	3.6	89.2	0.2	11.5	21.5	0.0
Kurtosis	-0.14	0.08	22.0	2.7	2.2	0.0	1.3	-0.2	9.1	-0.5	-1.7	ND
Skewness	-0.02	-0.61	4.7	-0.8	0.7	0.7	1.7	0.7	3.1	1.2	0.4	ND
Range	48.00	31.00	0.2	7.9	12.0	5.5	5.8	36.0	1.8	9.0	12.0	0.0
Minimum	47.00	19.00	0.0	0.0	2.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	95.00	50.00	0.2	7.9	14.0	6.9	5.8	36.0	1.8	9.0	12.0	0.0
Count	22	22	22	22	22	22	22	22	22	22	21	4
Confidence Level(95.0%)	5.35	3.47	0.0	0.7	1.1	0.7	0.8	4.2	0.2	1.5	2.1	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	322	262	1.2	11.3	70.0	61.5	8.6	8.4
Standard Error	13	11	0.3	0.9	2.4	2.4	0.4	0.5
Median	335	285	0.0	9.4	75.5	66.5	8.7	8.1
Mode	340	290	0.0	17.0	65.0	71.0	9.0	6.3
Standard Deviation	61	50	1.6	3.7	11.2	11.2	1.9	2.3
Sample Variance	3682	2495	2.6	14.0	125.9	126.5	3.5	5.1
Kurtosis	0	0	-0.8	-1.6	0.0	0.0	-0.8	2.0
Skewness	0	-1	0.8	0.3	-1.0	-1.1	0.4	1.1
Range	240	170	4.6	11.2	37.0	35.0	5.9	9.8
Minimum	200	150	0.0	5.8	46.0	37.0	6.1	5.2
Maximum	440	320	4.6	17.0	83.0	72.0	12.0	15.0
Count	22	22	22	18	22	22	22	22
Confidence Level(95.0%)	27	22	0.7	1.9	5.0	5.0	0.8	1.0

ND = No Data

Provisional MMSD Water Quality Data

WALNUT STREET - SITE 6
MILWAUKEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	13.5	9.6	8.72	1.13	0.016	1.24	0.047	0.93	0.119	0.056	ND
Standard Error	0.0	1.3	0.4	1.71	0.08	0.002	0.08	0.008	0.15	0.015	0.006	ND
Median	8.2	14.0	9.3	6.32	1.00	0.013	1.10	0.042	0.82	0.091	0.052	ND
Mode	8.2	-0.3	8.1	ND	1.10	0.011	1.10	0.000	0.82	0.000	0.000	ND
Standard Deviation	0.2	8.1	2.5	7.83	0.45	0.010	0.50	0.047	0.93	0.091	0.040	ND
Sample Variance	0.0	66.1	6.1	61.28	0.21	0.000	0.25	0.002	0.87	0.008	0.002	ND
Kurtosis	-0.4	-1.0	-0.8	7.23	8.50	1.552	3.33	0.619	22.32	0.486	-0.533	ND
Skewness	-0.7	-0.4	0.7	2.47	2.66	1.369	1.72	1.108	4.26	0.916	0.434	ND
Range	0.7	24.9	7.9	34.14	2.33	0.042	2.41	0.170	5.90	0.370	0.140	0.00
Minimum	7.7	-0.3	6.6	1.96	0.47	0.000	0.49	0.000	0.00	0.000	0.000	0.00
Maximum	8.4	24.6	14.5	36.10	2.80	0.042	2.90	0.170	5.90	0.370	0.140	0.00
Count	42	42	42	21	32	32	42	38	38	38	38	0
Confidence Level(95.0%)	0.1	2.5	0.8	3.56	0.16	0.003	0.16	0.016	0.31	0.030	0.013	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	507.4	486.3	5.9	21.0	13.7	811	87.9	1051	2.5	788
Standard Error	ND	ND	17.2	19.0	0.9	3.9	2.2	29	7.4	608	0.1	396
Median	ND	ND	515.0	498.0	4.0	12.0	9.4	825	84.5	220	2.3	190
Mode	ND	ND	550.0	324.0	4.4	9.4	10.5	538	88.0	400	2.6	1200
Standard Deviation	ND	ND	111.6	123.3	6.0	25.4	14.3	187	48.2	2787	0.6	1815
Sample Variance	ND	ND	12453.9	15210.9	36.5	645.9	203.3	35146	2326.2	7769555	0.4	3294294
Kurtosis	ND	ND	2.4	1.1	2.5	2.7	2.5	3	9.6	19	1.0	17
Skewness	ND	ND	-0.5	-0.3	1.8	2.0	2.0	1	2.8	4	0.6	4
Range	0.0	0.0	630.0	636.4	23.0	88.0	52.1	905	273.0	12981	2.8	8369
Minimum	0.0	0.0	140.0	130.0	0.0	3.0	3.2	490	27.0	19	1.3	31
Maximum	0.0	0.0	770.0	766.4	23.0	91.0	55.3	1395	300.0	13000	4.1	8400
Count	0	0	42	42	42	42	42	42	42	21	21	21
Confidence Level(95.0%)	ND	ND	34.8	38.4	1.9	7.9	4.4	58	15.0	1269	0.3	826

ND = No Data

Provisional MMSD Water Quality Data

WALNUT STREET - SITE 6
MILWAUKEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	67.48	35.38	0.0	3.4	7.8	3.1	1.5	15.5	0.1	2.4	5.0	0.0
Standard Error	2.01	1.62	0.0	0.6	0.5	0.4	0.6	1.9	0.1	0.8	1.1	0.0
Median	69.00	38.00	0.0	4.3	7.3	2.8	0.0	13.0	0.0	0.0	6.0	0.0
Mode	69.00	38.00	0.0	0.0	10.0	1.9	0.0	7.4	0.0	0.0	0.0	0.0
Standard Deviation	9.19	7.45	0.0	2.6	2.3	1.8	2.7	8.9	0.3	3.4	5.0	0.0
Sample Variance	84.46	55.45	0.0	6.6	5.1	3.3	7.5	79.7	0.1	11.8	25.4	0.0
Kurtosis	0.66	-0.26	21.0	-1.5	0.0	6.6	2.3	-0.1	7.7	-0.6	-0.9	ND
Skewness	-0.68	-0.75	4.6	-0.4	0.7	2.3	1.8	1.1	3.0	1.0	0.5	ND
Range	39.00	27.00	0.2	7.0	8.4	8.0	9.2	27.6	1.2	9.6	15.0	0.0
Minimum	46.00	19.00	0.0	0.0	4.6	1.4	0.0	7.4	0.0	0.0	0.0	0.0
Maximum	85.00	46.00	0.2	7.0	13.0	9.4	9.2	35.0	1.2	9.6	15.0	0.0
Count	21	21	21	21	21	21	21	21	21	21	21	4
Confidence Level(95.0%)	4.18	3.39	0.0	1.2	1.0	0.8	1.2	4.1	0.2	1.6	2.3	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	314	263	0.9	10.1	70.1	61.9	8.4	8.3
Standard Error	11	8	0.2	1.1	1.7	1.7	0.3	0.3
Median	330	290	0.0	9.0	75.0	66.5	8.4	7.7
Mode	330	290	0.0	8.5	64.0	70.0	12.0	11.0
Standard Deviation	53	50	1.4	4.4	11.1	11.3	1.9	2.2
Sample Variance	2775	2462	1.9	19.1	122.4	128.5	3.7	4.9
Kurtosis	0	1	-0.1	0.4	0.1	0.0	-0.9	1.0
Skewness	-1	-1	1.1	-0.3	-1.0	-1.1	0.4	1.1
Range	210	170	4.1	17.0	37.0	36.0	6.3	9.5
Minimum	190	140	0.0	0.0	46.0	37.0	5.7	5.5
Maximum	400	310	4.1	17.0	83.0	73.0	12.0	15.0
Count	21	42	38	17	42	42	42	42
Confidence Level(95.0%)	24	15	0.5	2.2	3.4	3.5	0.6	0.7

ND = No Data

Provisional MMSD Water Quality Data

WELLS STREET - SITE 7
MILWAUKEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	13.4	10.1	8.30	1.15	0.018	1.24	0.062	1.07	0.114	0.058	ND
Standard Error	0.0	1.1	0.3	1.17	0.06	0.001	0.06	0.007	0.19	0.010	0.005	ND
Median	8.2	14.5	9.6	7.35	1.00	0.015	1.10	0.056	0.77	0.087	0.052	ND
Mode	8.3	-0.3	13.5	ND	1.20	0.012	1.10	0.000	1.10	0.140	0.000	ND
Standard Deviation	0.2	8.7	2.4	5.48	0.46	0.010	0.47	0.052	1.45	0.079	0.041	ND
Sample Variance	0.1	75.4	5.7	29.98	0.21	0.000	0.23	0.003	2.11	0.006	0.002	ND
Kurtosis	-0.6	-1.2	-1.0	-1.05	4.06	1.374	1.69	-0.216	38.46	0.278	-0.369	ND
Skewness	-0.5	-0.3	0.6	0.46	1.91	1.305	1.33	0.733	5.81	0.876	0.441	ND
Range	0.9	25.7	7.5	17.04	2.15	0.046	2.23	0.200	11.00	0.330	0.160	0.00
Minimum	7.7	-0.3	7.0	1.36	0.45	0.000	0.47	0.000	0.00	0.000	0.000	0.00
Maximum	8.5	25.4	14.5	18.40	2.60	0.046	2.70	0.200	11.00	0.330	0.160	0.00
Count	66	66	66	22	51	51	66	60	60	61	61	0
Confidence Level(95.0%)	0.1	2.1	0.6	2.43	0.13	0.003	0.12	0.013	0.38	0.020	0.010	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	506.8	485.3	6.6	21.5	14.6	803	87.8	937	2.5	3000
Standard Error	ND	ND	12.1	13.5	0.8	3.4	1.9	21	5.6	495	0.1	2671
Median	ND	ND	510.0	496.0	4.4	12.0	9.0	829	85.0	245	2.4	445
Mode	ND	ND	560.0	518.0	4.8	13.0	11.0	571	96.0	120	2.1	ND
Standard Deviation	ND	ND	98.3	109.8	6.9	27.7	15.8	167	45.6	2320	0.6	5341
Sample Variance	ND	ND	9668.2	12059.6	47.3	767.3	248.1	28011	2077.9	5380408	0.3	28527400
Kurtosis	ND	ND	0.9	0.4	6.8	7.1	3.9	2	10.2	19	1.1	4
Skewness	ND	ND	0.3	0.2	2.3	2.5	2.2	1	2.9	4	0.9	2
Range	0.0	0.0	520.0	546.2	39.0	147.8	67.1	830	254.0	10967	2.5	10890
Minimum	0.0	0.0	300.0	270.0	0.0	2.2	2.8	488	26.0	33	1.5	110
Maximum	0.0	0.0	820.0	816.2	39.0	150.0	69.9	1318	280.0	11000	4.0	11000
Count	0	0	66	66	66	66	66	66	66	22	22	4
Confidence Level(95.0%)	ND	ND	24.2	27.0	1.7	6.8	3.9	41	11.2	1028	0.3	8499

ND = No Data

Provisional MMSD Water Quality Data

WELLS STREET - SITE 7
MILWAUKEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	66.55	34.77	0.0	4.9	8.4	3.2	1.0	15.8	0.1	2.3	3.7	0.0
Standard Error	2.05	1.51	0.0	0.4	0.6	0.3	0.4	2.2	0.1	0.8	1.0	0.0
Median	67.00	37.00	0.0	4.8	8.0	3.1	0.0	14.0	0.0	0.0	0.0	0.0
Mode	67.00	41.00	0.0	4.3	10.0	2.0	0.0	17.0	0.0	0.0	0.0	0.0
Standard Deviation	9.63	7.10	0.0	2.0	2.7	1.5	1.8	10.1	0.2	3.7	4.3	0.0
Sample Variance	92.83	50.47	0.0	4.0	7.2	2.2	3.4	102.4	0.1	13.4	18.3	0.0
Kurtosis	0.03	0.22	ND	1.9	4.0	-0.6	1.7	0.3	22.0	-0.2	-1.3	ND
Skewness	-0.21	-0.76	ND	-1.0	1.5	0.7	1.7	0.7	4.7	1.2	0.5	ND
Range	40.00	29.00	0.0	8.2	12.2	4.9	5.9	38.0	1.1	9.9	12.0	0.0
Minimum	45.00	18.00	0.0	0.0	4.8	1.5	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	85.00	47.00	0.0	8.2	17.0	6.4	5.9	38.0	1.1	9.9	12.0	0.0
Count	22	22	22	22	22	22	22	22	22	22	19	4
Confidence Level(95.0%)	4.27	3.15	0.0	0.9	1.2	0.7	0.8	4.5	0.1	1.6	2.1	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	310	261	0.8	9.9	69.7	61.2	8.4	8.3
Standard Error	11	6	0.2	1.0	1.3	1.4	0.2	0.3
Median	315	280	0.0	8.9	74.0	65.0	8.4	7.6
Mode	360	280	0.0	17.0	74.0	69.0	12.0	11.0
Standard Deviation	51	47	1.4	4.0	10.8	11.0	1.9	2.2
Sample Variance	2552	2201	2.0	16.3	117.6	121.5	3.8	4.6
Kurtosis	0	1	0.9	-0.9	0.3	0.2	-0.8	0.2
Skewness	-1	-1	1.5	0.4	-1.1	-1.1	0.4	0.9
Range	210	170	4.9	12.1	39.0	39.0	6.8	8.4
Minimum	190	140	0.0	4.9	44.0	35.0	5.2	5.6
Maximum	400	310	4.9	17.0	83.0	74.0	12.0	14.0
Count	22	66	58	18	66	66	66	66
Confidence Level(95.0%)	22	12	0.4	2.0	2.7	2.7	0.5	0.5

ND = No Data

Provisional MMSD Water Quality Data

WATER STREET - SITE 8
MILWAUKEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	14.4	9.1	8.61	1.00	0.019	1.10	0.082	0.78	0.105	0.051	ND
Standard Error	0.0	0.9	0.3	1.44	0.06	0.001	0.06	0.008	0.05	0.008	0.004	ND
Median	8.1	15.6	8.8	7.23	0.87	0.015	0.92	0.075	0.80	0.087	0.047	ND
Mode	8.3	14.2	13.0	ND	1.80	0.013	1.90	0.000	1.10	0.110	0.000	ND
Standard Deviation	0.3	7.4	2.3	6.77	0.43	0.011	0.45	0.060	0.37	0.066	0.035	ND
Sample Variance	0.1	54.1	5.1	45.87	0.19	0.000	0.21	0.004	0.14	0.004	0.001	ND
Kurtosis	-0.4	-0.9	-0.8	1.20	4.05	3.321	1.22	0.527	0.75	0.915	0.437	ND
Skewness	-0.5	-0.4	0.3	1.13	2.07	1.839	1.39	0.563	0.23	1.095	0.478	ND
Range	1.1	27.8	8.4	26.10	1.93	0.045	1.91	0.270	1.70	0.270	0.150	0.00
Minimum	7.5	0.4	5.3	1.00	0.47	0.009	0.49	0.000	0.00	0.000	0.000	0.00
Maximum	8.6	28.2	13.7	27.10	2.40	0.054	2.40	0.270	1.70	0.270	0.150	0.00
Count	67	67	67	22	51	51	66	61	60	64	63	0
Confidence Level(95.0%)	0.1	1.8	0.6	3.00	0.12	0.003	0.11	0.015	0.10	0.016	0.009	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	498.0	472.7	5.7	26.1	17.9	802	92.8	1223	2.5	908
Standard Error	ND	ND	12.7	14.1	0.7	4.1	2.6	29	5.0	651	0.1	415
Median	ND	ND	515.0	497.2	3.6	14.0	10.3	800	92.5	200	2.3	160
Mode	ND	ND	420.0	470.0	2.8	15.0	52.8	918	100.0	180	2.3	160
Standard Deviation	ND	ND	103.0	114.2	5.5	33.5	21.2	238	41.0	3121	0.6	1992
Sample Variance	ND	ND	10600.7	13049.0	30.4	1122.6	447.5	56467	1682.0	9742803	0.4	3968237
Kurtosis	ND	ND	1.2	0.4	3.1	5.7	7.4	5	1.1	19	1.2	15
Skewness	ND	ND	-0.5	-0.4	2.0	2.5	2.7	1	1.0	4	1.2	4
Range	0.0	0.0	570.0	582.2	20.8	148.4	100.3	1487	184.0	14948	2.5	9260
Minimum	0.0	0.0	140.0	123.0	1.2	1.6	3.7	396	26.0	52	1.7	40
Maximum	0.0	0.0	710.0	705.2	22.0	150.0	104.0	1883	210.0	15000	4.2	9300
Count	0	0	66	66	66	67	66	67	66	23	23	23
Confidence Level(95.0%)	ND	ND	25.3	28.1	1.4	8.2	5.2	58	10.1	1350	0.3	861

ND = No Data

Provisional MMSD Water Quality Data

WATER STREET - SITE 8
MILWAUKEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	64.78	32.30	0.0	5.5	9.3	3.4	2.4	20.4	0.1	2.2	4.0	0.0
Standard Error	2.17	1.62	0.0	0.5	0.5	0.5	0.9	2.7	0.1	0.7	1.2	0.0
Median	65.00	33.00	0.0	5.4	8.7	2.9	0.0	17.0	0.0	0.0	0.0	0.0
Mode	63.00	40.00	0.0	5.4	15.0	2.1	0.0	18.0	0.0	0.0	0.0	0.0
Standard Deviation	10.41	7.78	0.0	2.4	2.4	2.3	4.1	12.8	0.4	3.2	5.4	0.0
Sample Variance	108.27	60.49	0.0	5.9	6.0	5.5	16.7	165.0	0.1	10.3	28.8	0.0
Kurtosis	-0.34	-0.58	ND	2.1	1.0	8.2	3.9	1.8	8.6	-0.9	-1.4	ND
Skewness	-0.18	-0.45	ND	-0.1	1.2	2.7	2.0	1.5	3.1	1.0	0.7	ND
Range	39.00	28.00	0.0	11.0	8.7	10.4	15.0	46.0	1.3	8.1	13.0	0.0
Minimum	44.00	17.00	0.0	0.0	6.3	1.6	0.0	8.0	0.0	0.0	0.0	0.0
Maximum	83.00	45.00	0.0	11.0	15.0	12.0	15.0	54.0	1.3	8.1	13.0	0.0
Count	23	23	23	23	23	23	23	23	23	23	21	4
Confidence Level(95.0%)	4.50	3.36	0.0	1.0	1.1	1.0	1.8	5.6	0.2	1.4	2.4	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	294	239	0.9	10.4	63.6	56.1	7.5	7.3
Standard Error	12	7	0.2	1.1	1.6	1.5	0.2	0.2
Median	290	250	0.0	12.0	65.5	57.5	7.2	6.8
Mode	270	290	0.0	13.0	74.0	68.0	6.8	8.7
Standard Deviation	57	55	1.6	4.7	12.8	12.5	1.8	2.0
Sample Variance	3270	3012	2.6	21.9	162.9	156.3	3.3	4.0
Kurtosis	-1	0	0.5	-0.3	-0.4	-0.4	-0.1	2.0
Skewness	0	-1	1.4	-0.6	-0.8	-0.7	0.6	1.2
Range	210	219	5.0	17.0	48.0	46.0	8.4	10.2
Minimum	180	91	0.0	0.0	34.0	27.0	3.6	3.8
Maximum	390	310	5.0	17.0	82.0	73.0	12.0	14.0
Count	23	66	59	18	66	66	66	66
Confidence Level(95.0%)	25	13	0.4	2.3	3.1	3.1	0.4	0.5

ND = No Data

Provisional MMSD Water Quality Data

70TH STREET - SITE 9
MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	11.1	11.6	17.59	0.65	0.024	0.59	0.056	0.76	0.086	0.037	ND
Standard Error	0.0	1.5	0.4	4.26	0.09	0.004	0.08	0.021	0.11	0.012	0.006	ND
Median	8.0	12.6	12.1	8.93	0.54	0.018	0.49	0.016	0.71	0.089	0.039	ND
Mode	7.7	ND	10.1	12.10	1.30	0.018	1.10	0.000	0.00	0.000	0.000	ND
Standard Deviation	0.2	8.1	2.2	22.11	0.43	0.020	0.44	0.112	0.57	0.064	0.033	ND
Sample Variance	0.1	66.1	4.7	488.87	0.18	0.000	0.19	0.012	0.32	0.004	0.001	ND
Kurtosis	-0.8	-1.4	-0.7	4.77	0.22	7.124	0.43	15.427	6.28	0.135	2.396	ND
Skewness	0.0	0.1	-0.2	2.31	0.96	2.329	1.05	3.658	2.00	0.571	1.034	ND
Range	0.8	23.8	8.2	83.26	1.56	0.089	1.63	0.550	2.80	0.250	0.140	0.00
Minimum	7.5	0.1	7.2	2.34	0.14	0.005	0.07	0.000	0.00	0.000	0.000	0.00
Maximum	8.4	23.9	15.5	85.60	1.70	0.094	1.70	0.550	2.80	0.250	0.140	0.00
Count	28	28	28	27	21	21	27	27	26	28	27	0
Confidence Level(95.0%)	0.1	3.2	0.8	8.75	0.20	0.009	0.17	0.044	0.23	0.025	0.013	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	801.9	779.3	6.4	22.9	16.3	1228	267.1	5214	2.8	2810
Standard Error	ND	ND	69.8	72.1	1.8	6.3	4.3	152	47.2	3347	0.2	1293
Median	ND	ND	770.0	760.0	2.8	8.1	7.2	1248	220.0	450	2.7	380
Mode	ND	ND	850.0	ND	2.0	100.0	ND	ND	220.0	1000	3.0	160
Standard Deviation	ND	ND	362.9	374.9	9.1	33.2	22.2	804	245.0	16735	0.8	6840
Sample Variance	ND	ND	131692.6	140529.3	82.9	1102.6	491.7	646735	60032.6	280064987	0.7	46781081
Kurtosis	ND	ND	4.7	4.4	8.8	4.4	3.9	6	12.6	22	0.7	11
Skewness	ND	ND	1.9	1.7	2.8	2.3	2.1	2	3.3	5	0.9	3
Range	0.0	0.0	1690.0	1795.0	42.0	129.0	85.6	3925	1267.0	82955	3.3	30958
Minimum	0.0	0.0	310.0	200.0	0.0	1.0	2.4	196	33.0	45	1.7	42
Maximum	0.0	0.0	2000.0	1995.0	42.0	130.0	88.0	4121	1300.0	83000	4.9	31000
Count	0	0	27	27	27	28	27	28	27	25	25	28
Confidence Level(95.0%)	ND	ND	143.6	148.3	3.6	12.9	8.8	312	96.9	6908	0.3	2652

ND = No Data

Provisional MMSD Water Quality Data

70TH STREET - SITE 9
MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	72.68	31.82	0.0	4.9	8.7	4.0	1.5	26.0	0.4	2.3	5.1	0.0
Standard Error	3.81	1.97	0.0	0.4	0.6	0.3	0.4	4.9	0.1	0.6	1.1	0.0
Median	78.00	36.00	0.0	4.6	8.0	3.4	0.0	21.5	0.0	0.0	5.4	0.0
Mode	86.00	40.00	0.0	4.3	14.0	3.0	0.0	24.0	0.0	0.0	0.0	0.0
Standard Deviation	20.16	10.44	0.1	2.3	3.4	1.8	2.2	25.7	0.7	3.2	5.8	0.0
Sample Variance	406.60	109.04	0.0	5.1	11.7	3.1	5.0	661.9	0.5	10.0	33.8	0.0
Kurtosis	-0.65	-1.08	28.0	0.8	2.0	1.7	0.4	10.3	0.4	-0.7	-0.8	ND
Skewness	-0.63	-0.50	5.3	-0.1	1.3	1.4	1.3	3.0	1.3	0.9	0.7	ND
Range	69.00	34.00	0.3	9.3	15.8	7.2	7.1	130.0	2.4	9.2	18.0	0.0
Minimum	31.00	12.00	0.0	0.0	3.2	1.6	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	100.00	46.00	0.3	9.3	19.0	8.8	7.1	130.0	2.4	9.2	18.0	0.0
Count	28	28	28	28	28	28	28	28	28	28	27	4
Confidence Level(95.0%)	7.82	4.05	0.0	0.9	1.3	0.7	0.9	10.0	0.3	1.2	2.3	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	313	218	2.4	12.3	57.7	50.9	6.8	6.5
Standard Error	18	13	0.5	1.1	3.1	3.1	0.3	0.3
Median	340	240	2.4	11.0	66.0	59.0	7.0	6.3
Mode	380	270	0.0	11.0	45.0	60.0	5.0	6.3
Standard Deviation	93	69	2.4	5.2	16.2	16.2	1.4	1.5
Sample Variance	8710	4823	5.9	27.1	264.0	260.9	1.9	2.1
Kurtosis	-1	0	1.7	1.2	-0.7	-0.5	-0.7	2.0
Skewness	-1	-1	1.2	0.8	-0.6	-0.7	0.2	1.0
Range	310	247	8.8	21.5	58.0	60.0	5.3	6.7
Minimum	120	53	0.0	4.5	24.0	15.0	4.6	4.3
Maximum	430	300	8.8	26.0	82.0	75.0	9.9	11.0
Count	28	27	27	21	27	27	27	27
Confidence Level(95.0%)	36	27	1.0	2.4	6.4	6.4	0.6	0.6

ND = No Data

Provisional MMSD Water Quality Data

MUSKEGO AVENUE - SITE 11
MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.9	14.4	8.4	10.67	0.80	0.026	0.85	0.124	0.88	0.102	0.043	ND
Standard Error	0.0	1.0	0.3	2.29	0.04	0.001	0.03	0.015	0.04	0.008	0.003	ND
Median	7.9	16.0	7.8	7.94	0.75	0.024	0.80	0.110	0.83	0.100	0.048	ND
Mode	7.8	5.1	12.7	ND	1.10	0.018	1.10	0.000	1.10	0.000	0.000	ND
Standard Deviation	0.2	8.6	2.8	11.66	0.29	0.011	0.30	0.127	0.36	0.068	0.028	ND
Sample Variance	0.0	73.2	7.8	136.03	0.08	0.000	0.09	0.016	0.13	0.005	0.001	ND
Kurtosis	-0.8	-1.2	-0.7	6.76	0.29	0.680	0.34	8.406	2.08	-0.100	-0.820	ND
Skewness	-0.3	-0.2	0.1	2.47	0.81	1.117	0.83	2.585	0.91	0.397	-0.277	ND
Range	0.9	29.1	11.3	51.80	1.28	0.042	1.36	0.630	2.20	0.280	0.098	0.00
Minimum	7.4	0.0	2.1	1.10	0.32	0.013	0.34	0.000	0.00	0.000	0.000	0.00
Maximum	8.3	29.1	13.4	52.90	1.60	0.055	1.70	0.630	2.20	0.280	0.098	0.00
Count	78	78	78	26	60	60	78	75	75	76	76	0
Confidence Level(95.0%)	0.0	1.9	0.6	4.71	0.08	0.003	0.07	0.029	0.08	0.016	0.006	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	632.3	607.7	6.4	24.6	21.2	1092	177.7	2744	2.5	ND
Standard Error	ND	ND	26.9	27.3	0.8	4.1	3.1	55	14.9	1602	0.2	ND
Median	ND	ND	585.0	574.1	4.3	11.5	10.6	981	150.0	150	2.2	ND
Mode	ND	ND	540.0	534.0	2.0	14.0	11.0	1452	110.0	150	2.2	ND
Standard Deviation	ND	ND	237.3	240.9	7.4	36.1	26.9	482	131.2	8008	0.8	ND
Sample Variance	ND	ND	56290.7	58030.1	54.4	1303.8	726.3	232795	17219.2	64130733	0.7	ND
Kurtosis	ND	ND	6.6	6.4	6.6	8.8	5.7	13	18.3	11	0.8	ND
Skewness	ND	ND	1.8	1.7	2.6	2.9	2.4	3	3.4	3	1.1	ND
Range	0.0	0.0	1610.0	1601.6	37.0	176.8	127.6	3415	945.0	32972	3.1	0
Minimum	0.0	0.0	190.0	184.4	1.0	3.2	4.5	407	45.0	28	1.4	0
Maximum	0.0	0.0	1800.0	1786.0	38.0	180.0	132.0	3822	990.0	33000	4.5	0
Count	0	0	78	78	78	78	78	78	78	25	25	0
Confidence Level(95.0%)	ND	ND	53.5	54.3	1.7	8.1	6.1	109	29.6	3306	0.3	ND

ND = No Data

Provisional MMSD Water Quality data

MUSKEGO AVENUE - SITE 11
MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	65.58	30.46	0.0	5.9	11.2	4.5	2.6	34.2	0.2	2.3	3.7	0.0
Standard Error	2.65	1.58	0.0	0.7	1.0	0.8	1.1	8.7	0.1	0.7	1.0	0.0
Median	66.00	30.00	0.0	5.3	10.0	3.3	0.0	19.5	0.0	0.0	0.0	0.0
Mode	45.00	29.00	0.0	5.4	10.0	3.2	0.0	16.0	0.0	0.0	0.0	0.0
Standard Deviation	13.51	8.07	0.0	3.7	4.8	4.0	5.6	44.5	0.5	3.6	5.2	0.0
Sample Variance	182.57	65.14	0.0	13.6	22.7	15.9	31.8	1983.7	0.2	12.7	27.3	0.0
Kurtosis	-0.37	-1.11	26.0	8.4	6.9	12.2	10.0	8.3	3.3	-0.3	-1.3	ND
Skewness	-0.03	-0.23	5.1	2.4	2.6	3.3	3.0	3.0	2.2	1.2	0.8	ND
Range	53.00	26.00	0.1	20.0	20.0	19.1	25.0	170.2	1.6	9.7	13.0	0.0
Minimum	42.00	16.00	0.0	0.0	8.0	1.9	0.0	9.8	0.0	0.0	0.0	0.0
Maximum	95.00	42.00	0.1	20.0	28.0	21.0	25.0	180.0	1.6	9.7	13.0	0.0
Count	26	26	26	26	25	26	26	26	26	26	26	4
Confidence Level(95.0%)	5.46	3.26	0.0	1.5	2.0	1.6	2.3	18.0	0.2	1.4	2.1	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	289	216	1.8	11.7	57.1	50.3	6.8	6.6
Standard Error	13	7	0.3	1.0	1.7	1.6	0.1	0.1
Median	280	230	2.0	9.4	61.0	54.0	6.6	6.3
Mode	280	270	0.0	15.0	43.0	67.0	5.9	5.7
Standard Deviation	64	60	2.1	4.5	15.0	14.6	1.2	1.3
Sample Variance	4159	3650	4.5	20.6	223.9	211.8	1.4	1.7
Kurtosis	-1	0	0.1	-0.1	0.0	0.0	-0.2	0.5
Skewness	0	-1	1.0	0.9	-0.7	-0.7	0.7	1.0
Range	220	232	7.0	16.8	66.0	64.3	5.0	5.2
Minimum	180	68	0.0	5.2	14.0	7.7	5.0	4.8
Maximum	400	300	7.0	22.0	80.0	72.0	10.0	10.0
Count	26	78	65	20	78	78	78	78
Confidence Level(95.0%)	26	14	0.5	2.1	3.4	3.3	0.3	0.3

ND = No Data

Provisional MMSD Water Quality data

27TH STREET - SITE 12
KINNICKINNIC RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	12.8	13.2	6.87	0.67	0.026	0.64	0.057	0.79	0.155	0.055	ND
Standard Error	0.1	1.5	0.6	2.48	0.11	0.002	0.09	0.012	0.10	0.037	0.009	ND
Median	8.1	14.6	13.3	3.83	0.50	0.024	0.53	0.042	0.78	0.120	0.046	ND
Mode	7.6	ND	11.3	ND	0.85	0.024	1.90	0.000	1.10	0.120	0.000	ND
Standard Deviation	0.4	7.3	3.0	11.65	0.47	0.009	0.44	0.054	0.43	0.174	0.043	ND
Sample Variance	0.2	54.0	9.3	135.65	0.22	0.000	0.19	0.003	0.18	0.030	0.002	ND
Kurtosis	-0.4	-1.3	1.1	14.47	3.51	0.407	5.10	2.082	-0.32	20.060	-0.788	ND
Skewness	-0.4	-0.2	0.2	3.66	2.04	0.691	2.32	1.496	-0.15	4.396	0.514	ND
Range	1.5	23.5	14.2	53.75	1.60	0.037	1.65	0.200	1.60	0.853	0.130	0.00
Minimum	7.2	1.0	6.7	0.75	0.30	0.011	0.25	0.000	0.00	0.067	0.000	0.00
Maximum	8.7	24.5	20.9	54.50	1.90	0.048	1.90	0.200	1.60	0.920	0.130	0.00
Count	23	23	23	22	17	17	22	21	20	22	21	0
Confidence Level(95.0%)	0.2	3.2	1.3	5.16	0.24	0.005	0.20	0.025	0.20	0.077	0.020	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	1180.5	1141.7	6.5	38.2	74.2	1885	417.9	2324	3.0	1946
Standard Error	ND	ND	140.2	134.0	3.1	30.1	67.7	235	91.1	983	0.1	580
Median	ND	ND	1000.0	996.6	2.8	5.0	3.5	1538	285.0	1100	3.0	730
Mode	ND	ND	1200.0	ND	0.0	1.6	ND	ND	400.0	1100	3.0	730
Standard Deviation	ND	ND	657.8	628.7	14.5	144.6	317.7	1126	427.1	4611	0.5	2784
Sample Variance	ND	ND	432709.3	395297.5	210.1	20895.7	100911.3	1267887	182392.8	21258500	0.2	7749562
Kurtosis	ND	ND	6.9	9.3	19.9	22.8	22.0	10	15.8	18	0.8	7
Skewness	ND	ND	2.2	2.5	4.4	4.8	4.7	3	3.8	4	0.9	3
Range	0.0	0.0	3160.0	3188.2	70.0	700.0	1494.8	5701	2137.0	21750	1.9	11740
Minimum	0.0	0.0	340.0	304.0	0.0	0.0	1.2	513	63.0	250	2.4	260
Maximum	0.0	0.0	3500.0	3492.2	70.0	700.0	1496.0	6214	2200.0	22000	4.3	12000
Count	0	0	22	22	22	23	22	23	22	22	22	23
Confidence Level(95.0%)	ND	ND	291.7	278.8	6.4	62.5	140.8	487	189.4	2044	0.2	1204

ND = No Data

Provisional MMSD Water Quality Data

27TH STREET - SITE 12
KINNICKINNIC RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	86.48	35.43	0.0	7.7	9.9	7.0	2.2	39.3	0.2	2.3	3.7	0.0
Standard Error	4.77	2.31	0.0	1.4	1.2	1.7	1.0	11.9	0.1	0.7	1.1	0.0
Median	89.00	35.00	0.0	6.0	8.5	4.3	0.0	23.0	0.0	0.0	0.0	0.0
Mode	98.00	32.00	0.0	4.0	12.0	4.3	0.0	14.0	0.0	0.0	0.0	0.0
Standard Deviation	22.89	11.06	0.1	6.9	5.7	8.0	4.8	57.3	0.6	3.3	5.2	0.0
Sample Variance	523.99	122.35	0.0	47.7	32.5	64.1	23.1	3282.9	0.4	11.1	26.9	0.0
Kurtosis	0.16	-0.37	23.0	9.7	13.0	6.7	14.0	15.4	12.9	0.0	0.2	ND
Skewness	-0.60	-0.62	4.8	2.8	3.3	2.7	3.5	3.8	3.5	1.2	1.1	ND
Range	85.00	39.00	0.3	34.0	29.2	32.3	22.0	269.0	2.8	10.0	17.0	0.0
Minimum	35.00	12.00	0.0	0.0	3.8	1.7	0.0	11.0	0.0	0.0	0.0	0.0
Maximum	120.00	51.00	0.3	34.0	33.0	34.0	22.0	280.0	2.8	10.0	17.0	0.0
Count	23	23	23	23	23	23	23	23	23	23	22	4
Confidence Level(95.0%)	9.90	4.78	0.0	3.0	2.5	3.5	2.1	24.8	0.3	1.4	2.3	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNOC	TNOC	TNOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	362	226	6.2	23.1	67.8	51.9	15.5	14.3
Standard Error	21	12	1.5	6.2	6.3	2.7	6.2	5.6
Median	370	235	3.0	11.9	62.0	53.0	4.9	4.6
Mode	500	260	0.0	84.0	67.0	53.0	3.7	3.7
Standard Deviation	101	56	7.3	26.4	29.3	12.5	28.9	26.5
Sample Variance	10115	3159	53.0	699.4	861.2	155.3	835.4	701.8
Kurtosis	0	0	-1.2	1.5	10.4	-0.4	12.6	13.0
Skewness	-1	-1	0.8	1.6	2.8	0.0	3.4	3.5
Range	360	210	18.0	84.0	146.0	47.0	126.7	116.9
Minimum	140	100	0.0	0.0	34.0	28.0	3.3	3.1
Maximum	500	310	18.0	84.0	180.0	75.0	130.0	120.0
Count	23	22	23	18	22	22	22	22
Confidence Level(95.0%)	43	25	3.1	13.2	13.0	5.5	12.8	11.7

ND = No Data

Provisional MMSD Water Quality Data

8TH STREET - SITE 13
KINNICKINNIC RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.5	13.9	15.6	7.13	0.56	0.020	0.52	0.054	0.51	0.090	0.039	ND
Standard Error	0.1	1.7	0.8	1.81	0.14	0.003	0.12	0.023	0.09	0.010	0.009	ND
Median	8.5	16.0	14.8	4.09	0.41	0.024	0.40	0.000	0.56	0.083	0.042	ND
Mode	ND	ND	13.3	ND	ND	0.000	0.35	0.000	0.00	0.130	0.000	ND
Standard Deviation	0.6	8.4	3.8	8.50	0.59	0.014	0.55	0.104	0.39	0.044	0.039	ND
Sample Variance	0.4	70.0	14.5	72.32	0.34	0.000	0.30	0.011	0.15	0.002	0.002	ND
Kurtosis	-0.5	-1.2	-1.1	4.36	2.43	-1.240	3.79	8.298	-1.26	1.949	0.043	ND
Skewness	0.0	-0.3	0.0	2.19	1.68	-0.135	1.93	2.725	-0.17	0.749	0.800	ND
Range	2.4	27.2	13.7	31.56	1.97	0.044	2.07	0.430	1.10	0.210	0.130	0.00
Minimum	7.3	0.3	8.0	0.54	0.03	0.000	0.03	0.000	0.00	0.000	0.000	0.00
Maximum	9.7	27.4	21.7	32.10	2.00	0.044	2.10	0.430	1.10	0.210	0.130	0.00
Count	22	23	23	22	17	17	22	21	20	20	19	0
Confidence Level(95.0%)	0.3	3.6	1.6	3.77	0.30	0.007	0.24	0.047	0.18	0.021	0.019	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	1148.2	1141.4	2.8	7.4	6.1	1913	435.4	3839	2.8	2237
Standard Error	ND	ND	161.8	162.0	0.5	1.7	1.6	295	114.4	1841	0.2	755
Median	ND	ND	960.0	957.7	2.2	4.4	3.2	1552	270.0	360	2.6	520
Mode	ND	ND	1000.0	ND	0.0	12.0	ND	ND	270.0	ND	ND	870
Standard Deviation	ND	ND	758.8	759.8	2.3	8.3	7.7	1414	536.6	8438	0.8	3620
Sample Variance	ND	ND	575844.2	577318.2	5.1	69.6	58.9	1999258	287972.0	71198306	0.7	13106777
Kurtosis	ND	ND	11.3	11.2	0.6	4.1	6.2	10	16.7	13	-0.7	2
Skewness	ND	ND	3.0	3.0	0.9	2.1	2.5	3	3.9	3	0.5	2
Range	0.0	0.0	3760.0	3787.6	8.4	34.0	30.9	7076	2632.0	36955	2.9	11939
Minimum	0.0	0.0	340.0	306.0	0.0	0.0	0.8	265	68.0	45	1.7	61
Maximum	0.0	0.0	4100.0	4093.6	8.4	34.0	31.7	7341	2700.0	37000	4.6	12000
Count	0	0	22	22	22	23	22	23	22	21	21	23
Confidence Level(95.0%)	ND	ND	336.5	336.9	1.0	3.6	3.4	611	237.9	3841	0.4	1566

ND = No Data

Provisional MMSD Water Quality Data

8TH STREET - SITE 13
KINNICKINNIC RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	79.87	34.39	0.0	5.9	8.5	6.4	0.9	26.1	0.2	2.5	3.2	0.0
Standard Error	4.00	2.24	0.0	0.8	0.6	2.1	0.4	3.3	0.1	0.7	0.9	0.0
Median	83.00	35.00	0.0	5.4	7.8	4.0	0.0	23.0	0.0	0.0	0.0	0.0
Mode	83.00	30.00	0.0	0.0	7.5	3.0	0.0	20.0	0.0	0.0	0.0	0.0
Standard Deviation	19.20	10.72	0.1	3.9	2.6	10.0	1.8	15.6	0.5	3.3	4.3	0.0
Sample Variance	368.66	114.98	0.0	15.5	7.0	100.5	3.3	243.5	0.2	11.1	18.6	0.0
Kurtosis	0.32	-0.42	23.0	1.9	1.9	19.9	2.0	0.0	3.7	-0.4	-0.7	ND
Skewness	-0.70	-0.53	4.8	0.9	1.2	4.4	1.8	0.7	2.3	1.0	0.9	ND
Range	73.00	37.00	0.3	17.0	11.7	49.0	5.7	61.0	1.4	9.6	13.0	0.0
Minimum	37.00	13.00	0.0	0.0	4.3	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	110.00	50.00	0.3	17.0	16.0	51.0	5.7	61.0	1.4	9.6	13.0	0.0
Count	23	23	23	23	23	23	23	23	23	23	22	4
Confidence Level(95.0%)	8.30	4.64	0.0	1.7	1.1	4.3	0.8	6.7	0.2	1.4	1.9	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	341	212	5.5	20.0	63.7	46.9	16.7	16.0
Standard Error	19	11	1.4	5.2	7.1	2.4	7.2	6.9
Median	350	210	3.1	12.5	54.5	45.5	5.0	4.6
Mode	350	190	0.0	8.4	43.0	48.0	5.2	4.2
Standard Deviation	91	52	6.6	22.1	33.3	11.4	33.7	32.4
Sample Variance	8312	2739	43.8	490.1	1106.8	128.9	1138.9	1049.0
Kurtosis	0	1	-0.5	4.1	5.5	0.0	7.7	7.8
Skewness	-1	0	1.1	2.1	2.4	0.7	3.0	3.0
Range	340	210	17.0	84.0	126.0	41.0	116.6	116.9
Minimum	150	100	0.0	0.0	34.0	29.0	3.4	3.1
Maximum	490	310	17.0	84.0	160.0	70.0	120.0	120.0
Count	23	22	23	18	22	22	22	22
Confidence Level(95.0%)	39	23	2.9	11.0	14.8	5.0	15.0	14.4

ND = No Data

Provisional MMSD Water Quality Data

1ST STREET - SITE 14
KINNICKINNICK RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.5	11.9	6.6	9.21	0.83	0.045	0.87	0.257	0.97	0.110	0.027	ND
Standard Error	0.0	1.4	0.6	1.71	0.12	0.008	0.09	0.028	0.11	0.012	0.006	ND
Median	7.4	13.3	6.3	5.41	0.67	0.036	0.82	0.260	0.95	0.098	0.028	ND
Mode	7.3	ND	ND	ND	0.63	0.053	0.82	0.100	1.00	0.110	0.000	ND
Standard Deviation	0.2	6.9	2.9	8.02	0.50	0.036	0.45	0.130	0.52	0.057	0.027	ND
Sample Variance	0.1	48.2	8.3	64.35	0.25	0.001	0.20	0.017	0.27	0.003	0.001	ND
Kurtosis	-0.7	-1.2	-0.6	0.56	7.18	13.149	9.77	-0.837	1.29	3.105	0.901	ND
Skewness	0.7	-0.2	0.1	1.21	2.44	3.369	2.74	-0.240	0.32	1.093	0.888	ND
Range	0.8	23.2	11.0	28.35	2.11	0.173	2.20	0.460	2.30	0.280	0.100	0.00
Minimum	7.2	-0.1	1.5	0.75	0.39	0.007	0.40	0.000	0.00	0.000	0.000	0.00
Maximum	8.0	23.1	12.5	29.10	2.50	0.180	2.60	0.460	2.30	0.280	0.100	0.00
Count	24	24	24	22	18	18	23	22	21	21	20	0
Confidence Level(95.0%)	0.1	2.9	1.2	3.56	0.25	0.018	0.19	0.057	0.24	0.026	0.013	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	495.2	468.3	6.5	28.3	21.0	866	124.7	5156	2.5	4621
Standard Error	ND	ND	40.4	38.4	1.1	5.1	3.8	85	19.2	3124	0.2	3076
Median	ND	ND	440.0	424.0	4.4	17.5	14.2	724	95.0	290	2.5	310
Mode	ND	ND	870.0	373.2	4.4	9.6	ND	ND	100.0	110	2.0	310
Standard Deviation	ND	ND	193.6	184.0	5.2	25.1	18.4	415	92.3	14980	1.0	14753
Sample Variance	ND	ND	37462.5	33862.2	26.5	630.4	338.9	171955	8516.9	224397763	0.9	217641736
Kurtosis	ND	ND	-0.5	-0.4	3.8	2.1	4.5	0	0.1	8	0.9	18
Skewness	ND	ND	0.8	0.8	1.8	1.6	2.1	1	1.3	3	0.8	4
Range	0.0	0.0	620.0	630.4	21.2	93.2	76.0	1282	282.0	52993	3.9	68994
Minimum	0.0	0.0	250.0	230.0	1.8	6.8	5.6	408	38.0	7	0.8	6
Maximum	0.0	0.0	870.0	860.4	23.0	100.0	81.6	1690	320.0	53000	4.7	69000
Count	0	0	23	23	23	24	23	24	23	23	23	23
Confidence Level(95.0%)	ND	ND	83.7	79.6	2.2	10.6	8.0	175	39.9	6478	0.4	6380

ND = No Data

Provisional MMSD Water Quality Data

1ST STREET - SITE 14
KINNICKINNIC RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	49.17	20.35	0.0	7.0	11.7	4.2	5.5	37.3	0.1	2.3	3.0	0.0
Standard Error	2.01	1.08	0.0	0.5	0.9	0.3	1.2	3.9	0.1	0.6	1.0	0.0
Median	48.00	20.00	0.0	7.0	10.0	4.3	3.7	29.0	0.0	0.0	0.0	0.0
Mode	62.00	25.00	0.0	7.2	14.0	2.6	0.0	15.0	0.0	0.0	0.0	0.0
Standard Deviation	9.64	5.17	0.1	2.4	4.2	1.4	5.9	18.6	0.3	3.0	4.5	0.0
Sample Variance	92.97	26.69	0.0	5.9	17.8	1.9	34.4	345.9	0.1	8.9	19.9	0.0
Kurtosis	-0.52	-1.20	23.0	0.1	1.9	-0.1	-0.1	0.4	8.7	-1.0	-0.3	ND
Skewness	-0.22	-0.12	4.8	0.7	1.2	0.6	0.8	1.0	3.2	0.8	1.1	ND
Range	37.00	17.00	0.3	9.2	18.2	5.3	20.0	69.0	1.1	7.9	12.0	0.0
Minimum	28.00	11.00	0.0	3.8	5.8	2.1	0.0	15.0	0.0	0.0	0.0	0.0
Maximum	65.00	28.00	0.3	13.0	24.0	7.4	20.0	84.0	1.1	7.9	12.0	0.0
Count	23	23	23	23	23	23	23	23	23	23	22	4
Confidence Level(95.0%)	4.17	2.23	0.0	1.1	1.8	0.6	2.5	8.0	0.1	1.3	2.0	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	208	159	4.2	16.0	43.7	37.6	6.1	5.8
Standard Error	9	7	1.1	1.6	1.8	1.8	0.5	0.5
Median	210	150	2.5	15.5	43.0	38.0	5.8	5.4
Mode	210	150	0.0	16.0	40.0	43.0	7.7	11.0
Standard Deviation	44	36	5.5	6.8	8.6	8.4	2.5	2.2
Sample Variance	1970	1290	30.6	46.0	74.3	71.3	6.1	4.9
Kurtosis	-1	0	1.6	3.1	-0.5	-0.9	1.2	1.0
Skewness	0	0	1.6	1.4	-0.1	-0.1	1.1	0.9
Range	150	143	17.0	29.8	33.0	31.0	9.8	9.0
Minimum	120	77	0.0	5.2	27.0	21.0	2.2	2.0
Maximum	270	220	17.0	35.0	60.0	52.0	12.0	11.0
Count	23	23	24	18	23	23	23	23
Confidence Level(95.0%)	19	16	2.3	3.4	3.7	3.7	1.1	1.0

ND = No Data

Provisional MMSD Water Quality Data

C-NW RAILWAY - SITE 15
MILWAUKEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	14.0	8.8	6.70	0.81	0.017	0.89	0.083	0.69	0.095	0.036	ND
Standard Error	0.0	0.7	0.3	1.26	0.03	0.001	0.04	0.010	0.06	0.008	0.005	ND
Median	8.0	14.6	8.8	5.81	0.80	0.014	0.84	0.081	0.80	0.081	0.040	ND
Mode	8.0	14.6	10.5	11.10	0.78	0.012	0.95	0.000	0.00	0.083	0.000	ND
Standard Deviation	0.2	5.7	2.0	5.35	0.22	0.010	0.27	0.071	0.45	0.063	0.034	ND
Sample Variance	0.0	32.7	4.0	28.66	0.05	0.000	0.08	0.005	0.21	0.004	0.001	ND
Kurtosis	-0.6	-0.3	0.3	3.51	0.97	4.888	0.02	0.639	-1.14	2.531	0.896	ND
Skewness	-0.3	-0.3	0.3	1.54	0.63	2.151	0.73	0.776	-0.23	1.595	0.914	ND
Range	0.9	23.9	9.2	22.19	1.04	0.045	1.03	0.290	1.40	0.300	0.130	0.00
Minimum	7.5	1.1	4.6	0.41	0.46	0.006	0.47	0.000	0.00	0.000	0.000	0.00
Maximum	8.4	25.0	13.8	22.60	1.50	0.051	1.50	0.290	1.40	0.300	0.130	0.00
Count	60	60	60	18	47	47	59	54	54	57	56	0
Confidence Level(95.0%)	0.1	1.5	0.5	2.66	0.06	0.003	0.07	0.019	0.12	0.017	0.009	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	1.0	2.2	423.1	398.4	5.3	24.6	16.8	654	66.8	1280	2.1	ND
Standard Error	0.1	0.2	13.8	14.2	0.7	4.2	2.9	26	3.7	1045	0.2	ND
Median	1.0	2.4	440.0	394.8	3.6	14.0	10.1	623	72.0	104	2.0	ND
Mode	0.9	0.5	510.0	300.0	3.6	16.0	15.8	592	72.0	140	2.1	ND
Standard Deviation	0.5	1.0	106.2	108.8	5.7	32.5	22.4	198	28.2	4673	0.7	ND
Sample Variance	0.3	0.9	11276.7	11832.5	32.3	1059.3	500.1	39247	793.0	21836023	0.5	ND
Kurtosis	1.8	-0.4	-0.7	-1.0	5.5	7.6	8.5	-1	-0.6	19	3.8	ND
Skewness	0.9	-0.3	-0.5	-0.2	2.3	2.8	3.0	0	0.0	4	1.5	ND
Range	2.2	3.5	420.0	427.8	27.0	146.6	99.5	701	124.0	20992	3.4	0
Minimum	0.2	0.5	180.0	165.0	0.0	3.4	2.6	310	16.0	8	0.9	0
Maximum	2.4	4.0	600.0	592.8	27.0	150.0	102.0	1011	140.0	21000	4.3	0
Count	20	19	59	59	59	59	59	60	59	20	20	0
Confidence Level(95.0%)	0.2	0.5	27.7	28.3	1.5	8.5	5.8	51	7.3	2187	0.3	ND

ND = No Data

Provisional MMSD Water Quality Data

C-NW RAILWAY - SITE 15
MILWAUKEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	55.30	25.75	0.0	5.4	8.9	2.9	1.9	16.4	0.2	2.0	4.1	0.0
Standard Error	2.77	1.91	0.0	0.5	0.8	0.3	0.9	2.6	0.1	0.7	1.2	0.0
Median	53.00	23.50	0.0	5.2	7.4	2.5	0.0	14.5	0.0	0.0	0.0	0.0
Mode	44.00	18.00	0.0	6.5	6.9	2.3	0.0	0.0	0.0	0.0	0.0	0.0
Standard Deviation	12.38	8.55	0.0	2.0	3.4	1.1	3.9	11.8	0.4	3.2	5.4	0.0
Sample Variance	153.17	73.14	0.0	4.1	11.9	1.3	14.9	140.1	0.2	10.1	28.8	0.0
Kurtosis	-0.61	-0.53	ND	3.1	0.0	3.6	4.9	4.3	3.3	-0.2	-1.2	ND
Skewness	0.73	0.82	ND	-0.1	1.1	1.7	2.3	1.7	2.2	1.2	0.8	ND
Range	41.00	27.00	0.0	10.0	10.9	5.0	14.0	53.0	1.4	9.4	14.0	0.0
Minimum	40.00	17.00	0.0	0.0	5.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	81.00	44.00	0.0	10.0	16.0	6.4	14.0	53.0	1.4	9.4	14.0	0.0
Count	20	20	20	20	20	20	20	20	20	20	19	4
Confidence Level(95.0%)	5.79	4.00	0.0	0.9	1.6	0.5	1.8	5.5	0.2	1.5	2.6	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	245	200	0.6	8.8	53.5	47.4	6.3	6.1
Standard Error	15	7	0.2	1.1	1.9	1.7	0.3	0.3
Median	225	200	0.0	8.4	55.0	49.0	6.5	6.1
Mode	280	150	0.0	7.4	75.0	33.0	7.3	6.3
Standard Deviation	65	57	1.3	4.4	14.8	13.4	2.4	2.4
Sample Variance	4268	3252	1.7	19.4	217.7	180.0	5.6	5.9
Kurtosis	-1	-1	3.8	0.4	-1.4	-1.3	-0.1	1.5
Skewness	1	0	2.2	0.3	0.0	0.1	0.4	0.9
Range	210	205	4.8	18.0	46.0	42.0	9.8	10.7
Minimum	170	95	0.0	0.0	30.0	27.0	2.2	2.3
Maximum	380	300	4.8	18.0	76.0	69.0	12.0	13.0
Count	20	59	54	17	59	59	60	59
Confidence Level(95.0%)	31	15	0.4	2.3	3.8	3.5	0.6	0.6

ND = No Data

Provisional MMSD Water Quality Data

COUNTY LINE ROAD - SITE 16
MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.7	10.7	9.8	8.16	0.89	0.025	0.86	0.099	1.03	0.080	0.032	ND
Standard Error	0.0	1.5	0.5	0.82	0.12	0.003	0.10	0.020	0.10	0.011	0.006	ND
Median	7.8	12.0	9.8	6.66	0.77	0.020	0.78	0.077	1.05	0.084	0.035	ND
Mode	7.9	ND	ND	11.30	1.30	0.024	1.30	0.000	1.10	0.000	0.000	ND
Standard Deviation	0.2	8.0	2.4	4.29	0.57	0.014	0.52	0.101	0.52	0.054	0.033	ND
Sample Variance	0.1	64.0	5.8	18.37	0.33	0.000	0.27	0.010	0.27	0.003	0.001	ND
Kurtosis	-0.1	-1.4	-0.4	0.75	5.52	0.702	6.59	3.388	0.74	-0.414	0.378	ND
Skewness	-0.7	0.0	-0.3	0.86	2.01	1.174	2.16	1.562	0.20	0.310	0.826	ND
Range	1.0	23.6	9.1	17.02	2.59	0.052	2.57	0.430	2.30	0.180	0.120	0.00
Minimum	7.1	0.3	4.7	2.68	0.21	0.010	0.23	0.000	0.00	0.000	0.000	0.00
Maximum	8.1	23.9	13.8	19.70	2.80	0.062	2.80	0.430	2.30	0.180	0.120	0.00
Count	27	27	27	27	21	21	27	26	26	26	27	0
Confidence Level(95.0%)	0.1	3.2	1.0	1.70	0.26	0.007	0.21	0.041	0.21	0.022	0.013	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	558.5	541.4	4.6	17.1	10.8	920	117.3	1025	2.3	ND
Standard Error	ND	ND	20.8	20.7	0.4	1.8	1.2	33	7.2	570	0.2	ND
Median	ND	ND	580.0	555.0	4.4	15.0	9.1	954	120.0	180	2.3	ND
Mode	ND	ND	490.0	ND	4.8	14.0	14.0	ND	120.0	19	1.3	ND
Standard Deviation	ND	ND	108.3	107.4	1.9	9.4	6.0	174	37.5	2849	0.8	ND
Sample Variance	ND	ND	11736.2	11525.8	3.6	88.2	35.9	30186	1406.8	8119474	0.6	ND
Kurtosis	ND	ND	-0.3	-0.4	0.9	2.9	1.3	1	1.5	20	0.1	ND
Skewness	ND	ND	-0.4	-0.5	0.9	1.6	1.3	-1	0.6	4	0.4	ND
Range	0.0	0.0	440.0	436.0	8.2	39.0	23.5	728	177.0	13993	3.3	0
Minimum	0.0	0.0	300.0	286.0	1.4	6.0	3.4	437	43.0	7	0.8	0
Maximum	0.0	0.0	740.0	722.0	9.6	45.0	26.9	1165	220.0	14000	4.1	0
Count	0	0	27	27	27	27	27	27	27	25	25	0
Confidence Level(95.0%)	ND	ND	42.9	42.5	0.8	3.7	2.4	69	14.8	1176	0.3	ND

ND = No Data

Provisional MMSD Water Quality Data

COUNTY LINE ROAD - SITE 16
MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	74.89	36.44	0.0	3.2	7.5	4.5	0.6	18.4	0.1	2.2	4.0	0.0
Standard Error	3.53	1.93	0.0	0.4	0.8	0.6	0.2	2.7	0.1	0.6	1.0	0.0
Median	76.00	38.00	0.0	4.3	6.6	3.7	0.0	15.0	0.0	0.0	0.0	0.0
Mode	81.00	23.00	0.0	0.0	5.6	3.5	0.0	23.0	0.0	0.0	0.0	0.0
Standard Deviation	18.32	10.02	0.0	2.2	4.1	3.1	1.2	13.8	0.4	3.2	5.0	0.0
Sample Variance	335.56	100.33	0.0	4.9	16.9	9.6	1.4	189.8	0.1	10.1	25.1	0.0
Kurtosis	0.21	-0.20	ND	-1.2	9.7	10.1	1.2	3.2	5.3	0.0	-1.0	ND
Skewness	-0.10	-0.40	ND	-0.8	2.6	2.9	1.7	1.5	2.6	1.2	0.7	ND
Range	77.00	41.00	0.0	5.7	22.9	15.7	3.6	63.0	1.1	9.0	14.0	0.0
Minimum	33.00	14.00	0.0	0.0	1.1	1.3	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	110.00	55.00	0.0	5.7	24.0	17.0	3.6	63.0	1.1	9.0	14.0	0.0
Count	27	27	27	27	27	27	27	27	27	27	25	4
Confidence Level(95.0%)	7.25	3.96	0.0	0.9	1.6	1.2	0.5	5.5	0.1	1.3	2.1	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	337	267	2.0	13.0	70.2	62.0	8.3	8.1
Standard Error	16	11	0.5	1.4	2.7	2.9	0.5	0.6
Median	340	290	2.1	13.0	77.0	64.0	8.4	8.0
Mode	340	300	0.0	15.0	80.0	64.0	13.0	4.7
Standard Deviation	85	59	2.7	6.4	13.9	14.8	2.6	2.9
Sample Variance	7212	3500	7.3	40.4	193.7	220.1	6.9	8.3
Kurtosis	0	1	10.5	5.3	-0.6	-0.4	-0.9	1.1
Skewness	0	-1	2.8	1.7	-0.8	-0.9	0.4	1.0
Range	350	230	13.0	29.8	47.0	51.0	8.2	11.6
Minimum	140	110	0.0	4.2	40.0	28.0	4.8	4.4
Maximum	490	340	13.0	34.0	87.0	79.0	13.0	16.0
Count	27	27	26	21	27	27	27	27
Confidence Level(95.0%)	34	23	1.1	2.9	5.5	5.9	1.0	1.1

ND = No Data

Provisional MMSD Water Quality Data

2ND STREET - SITE 17
MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	15.4	8.8	8.42	0.90	0.024	0.98	0.104	0.85	0.094	0.038	ND
Standard Error	0.0	0.8	0.2	1.14	0.03	0.001	0.03	0.010	0.04	0.007	0.003	ND
Median	8.0	16.7	8.4	7.26	0.85	0.020	0.92	0.089	0.92	0.094	0.043	ND
Mode	8.2	4.8	10.6	4.90	1.10	0.015	1.10	0.000	1.10	0.000	0.000	ND
Standard Deviation	0.2	7.5	2.3	5.94	0.26	0.011	0.30	0.092	0.36	0.057	0.030	ND
Sample Variance	0.1	56.5	5.1	35.31	0.07	0.000	0.09	0.008	0.13	0.003	0.001	ND
Kurtosis	-0.9	-1.1	-1.2	1.05	-0.05	0.801	-0.43	3.767	-0.32	1.735	-1.109	ND
Skewness	-0.3	-0.1	0.0	1.15	0.65	1.170	0.63	1.515	-0.19	0.619	0.004	ND
Range	0.9	27.6	8.8	23.30	1.02	0.047	1.19	0.460	1.60	0.270	0.110	0.00
Minimum	7.5	1.5	3.5	1.00	0.48	0.008	0.51	0.000	0.00	0.000	0.000	0.00
Maximum	8.4	29.1	12.4	24.30	1.50	0.055	1.70	0.460	1.60	0.270	0.110	0.00
Count	82	82	82	27	63	63	81	79	78	77	79	0
Confidence Level(95.0%)	0.1	1.7	0.5	2.35	0.07	0.003	0.07	0.021	0.08	0.013	0.007	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	580.5	557.6	5.7	23.2	20.3	976	144.4	2020	2.6	1322
Standard Error	ND	ND	23.3	23.6	0.7	3.2	2.9	46	11.9	1209	0.1	744
Median	ND	ND	530.0	522.2	3.6	13.0	11.6	915	100.0	245	2.4	205
Mode	ND	ND	540.0	912.0	3.6	12.0	11.8	991	110.0	400	2.6	100
Standard Deviation	ND	ND	209.5	212.8	5.9	29.0	25.9	415	107.5	6396	0.7	3938
Sample Variance	ND	ND	43872.3	45265.1	34.4	840.1	669.8	172173	11555.9	40910270	0.4	15508028
Kurtosis	ND	ND	2.2	1.7	10.3	14.2	12.1	1	2.4	26	1.1	25
Skewness	ND	ND	1.5	1.3	3.0	3.6	3.4	1	1.7	5	1.1	5
Range	0.0	0.0	1000.0	1033.0	33.0	165.6	144.2	1816	502.0	33948	2.8	20959
Minimum	0.0	0.0	300.0	230.0	0.0	4.4	3.8	408	38.0	52	1.7	41
Maximum	0.0	0.0	1300.0	1263.0	33.0	170.0	148.0	2224	540.0	34000	4.5	21000
Count	0	0	81	81	81	82	81	82	81	28	28	28
Confidence Level(95.0%)	ND	ND	46.3	47.0	1.3	6.4	5.7	91	23.8	2480	0.3	1527

ND = No Data

Provisional MMSD Water Quality Data

2ND STREET - SITE 17
MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	63.18	29.96	0.0	5.2	11.3	3.4	1.5	25.0	0.1	2.3	3.9	0.0
Standard Error	2.09	1.46	0.0	0.5	0.5	0.3	0.6	4.4	0.1	0.6	1.1	0.0
Median	62.50	29.50	0.0	5.0	10.5	3.0	0.0	17.5	0.0	0.0	0.0	0.0
Mode	68.00	39.00	0.0	7.1	10.0	3.6	0.0	12.0	0.0	0.0	0.0	0.0
Standard Deviation	11.07	7.72	0.0	2.4	2.6	1.7	3.0	23.1	0.3	3.2	5.9	0.0
Sample Variance	122.45	59.67	0.0	5.6	6.5	2.8	8.7	534.0	0.1	10.4	35.0	0.0
Kurtosis	-0.76	-1.11	ND	1.3	-0.3	3.2	11.7	10.4	11.8	-0.4	1.3	ND
Skewness	-0.34	0.01	ND	-0.2	0.5	1.7	3.1	3.0	3.6	1.1	1.4	ND
Range	39.00	26.00	0.0	11.0	10.6	7.0	14.0	111.9	1.2	9.5	21.0	0.0
Minimum	42.00	17.00	0.0	0.0	6.4	1.4	0.0	8.1	0.0	0.0	0.0	0.0
Maximum	81.00	43.00	0.0	11.0	17.0	8.4	14.0	120.0	1.2	9.5	21.0	0.0
Count	28	28	28	27	28	28	28	28	28	28	27	4
Confidence Level(95.0%)	4.29	3.00	0.0	0.9	1.0	0.7	1.1	9.0	0.1	1.2	2.3	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	280	227	1.1	10.7	59.1	52.2	6.8	6.6
Standard Error	11	6	0.2	1.0	1.5	1.5	0.2	0.2
Median	280	230	0.0	10.0	61.0	53.0	6.8	6.1
Mode	250	190	0.0	14.0	74.0	68.0	6.8	5.4
Standard Deviation	57	55	1.7	4.5	13.9	13.5	1.4	1.5
Sample Variance	3233	2978	2.7	19.9	194.6	181.8	2.0	2.2
Kurtosis	-1	0	-0.5	-1.1	-1.2	-1.0	-0.7	-0.4
Skewness	0	-1	1.1	0.2	-0.2	-0.2	0.1	0.7
Range	200	230	4.8	14.4	50.0	48.0	6.1	6.0
Minimum	180	80	0.0	4.6	32.0	25.0	3.5	4.0
Maximum	380	310	4.8	19.0	82.0	73.0	9.6	10.0
Count	28	81	69	21	81	81	81	81
Confidence Level(95.0%)	22	12	0.4	2.0	3.1	3.0	0.3	0.3

ND = No Data

Provisional MMSD Water Quality Data

GREENFIELD AVENUE EXTENDED - SITE 18
KINNICKINNIC RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.9	13.5	8.2	6.67	0.84	0.022	0.89	0.120	0.64	0.075	0.029	ND
Standard Error	0.0	0.7	0.2	1.42	0.04	0.002	0.03	0.016	0.06	0.006	0.003	ND
Median	7.9	13.9	8.5	4.95	0.77	0.018	0.84	0.097	0.62	0.062	0.032	ND
Mode	8.0	13.9	6.3	ND	1.10	0.018	1.20	0.000	0.00	0.062	0.000	ND
Standard Deviation	0.2	5.5	1.8	6.36	0.25	0.013	0.24	0.116	0.44	0.045	0.025	ND
Sample Variance	0.0	30.0	3.2	40.48	0.06	0.000	0.06	0.013	0.20	0.002	0.001	ND
Kurtosis	0.6	-0.2	0.5	2.03	2.36	1.833	1.48	0.261	-0.69	2.320	-0.406	ND
Skewness	-0.8	-0.4	-0.1	1.45	1.30	1.627	0.98	0.936	0.13	1.278	0.401	ND
Range	0.9	22.8	8.8	24.16	1.21	0.051	1.20	0.470	1.60	0.210	0.091	0.00
Minimum	7.4	0.9	4.1	0.54	0.49	0.007	0.50	0.000	0.00	0.000	0.000	0.00
Maximum	8.2	23.7	12.8	24.70	1.70	0.058	1.70	0.470	1.60	0.210	0.091	0.00
Count	60	60	60	20	48	48	60	54	54	52	55	0
Confidence Level(95.0%)	0.1	1.4	0.5	2.98	0.07	0.004	0.06	0.032	0.12	0.013	0.007	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	1.3	3.0	368.3	354.3	3.2	14.0	13.6	611	68.1	1981	1.8	ND
Standard Error	0.1	0.3	11.2	11.7	0.5	2.5	2.8	21	3.9	1747	0.2	ND
Median	1.2	2.9	360.0	341.3	2.0	7.6	5.9	597	62.5	37	1.6	ND
Mode	1.2	3.8	330.0	224.0	1.6	7.6	ND	634	86.0	19	1.3	ND
Standard Deviation	0.6	1.5	86.4	90.6	3.5	19.6	21.8	161	30.4	7815	0.9	ND
Sample Variance	0.3	2.1	7468.4	8205.5	12.4	385.8	473.6	25976	921.4	61067732	0.9	ND
Kurtosis	-0.1	2.1	0.2	0.1	6.6	8.7	8.8	0	3.8	19	4.0	ND
Skewness	-0.3	0.8	0.5	0.5	2.5	3.0	3.1	0	1.6	4	1.5	ND
Range	2.2	6.5	420.0	422.6	17.0	93.2	95.6	659	151.0	35000	4.5	0
Minimum	0.1	0.5	200.0	191.4	0.0	2.8	2.5	343	19.0	0	0.0	0
Maximum	2.3	7.0	620.0	614.0	17.0	96.0	98.1	1002	170.0	35000	4.5	0
Count	20	19	60	60	59	60	60	60	60	20	20	0
Confidence Level(95.0%)	0.3	0.7	22.3	23.4	0.9	5.1	5.6	42	7.8	3657	0.4	ND

ND = No Data

Provisional MMSD Water Quality Data

GREENFIELD AVENUE EXTENDED - SITE 18
KINNICKINNIC RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	49.75	22.25	0.0	6.0	7.8	3.0	2.1	20.4	0.2	2.4	4.9	0.0
Standard Error	2.13	1.27	0.0	0.6	0.6	0.3	0.9	2.9	0.1	0.7	1.1	0.0
Median	47.50	20.50	0.0	5.6	6.7	2.6	0.0	15.0	0.0	0.0	5.3	0.0
Mode	42.00	28.00	0.0	5.1	12.0	1.8	0.0	12.0	0.0	0.0	0.0	0.0
Standard Deviation	9.52	5.68	0.0	2.5	2.7	1.3	4.2	12.8	0.5	3.2	4.8	0.0
Sample Variance	90.62	32.30	0.0	6.3	7.4	1.8	17.4	162.6	0.2	10.2	22.8	0.0
Kurtosis	-0.82	-0.20	ND	1.6	-0.1	2.8	8.6	2.9	0.9	-1.3	-1.5	ND
Skewness	0.29	0.44	ND	0.1	1.1	1.6	2.8	1.8	1.7	0.8	0.3	ND
Range	35.00	23.00	0.0	12.0	9.0	5.4	17.0	48.8	1.3	8.4	13.0	0.0
Minimum	32.00	12.00	0.0	0.0	5.0	1.5	0.0	9.2	0.0	0.0	0.0	0.0
Maximum	67.00	35.00	0.0	12.0	14.0	6.9	17.0	58.0	1.3	8.4	13.0	0.0
Count	20	20	20	20	20	20	20	20	20	20	19	4
Confidence Level(95.0%)	4.46	2.66	0.0	1.2	1.3	0.6	2.0	6.0	0.2	1.5	2.3	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN/C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	217	175	0.4	9.1	46.9	41.5	5.4	5.3
Standard Error	10	6	0.1	1.0	1.3	1.2	0.2	0.2
Median	200	175	0.0	8.0	46.0	40.5	5.5	4.9
Mode	270	230	0.0	8.0	49.0	45.0	7.4	5.7
Standard Deviation	47	44	1.1	4.3	10.0	9.1	1.7	1.7
Sample Variance	2171	1944	1.1	18.3	100.6	82.5	2.8	3.0
Kurtosis	-1	0	5.2	0.6	-1.1	-1.0	-0.8	-0.6
Skewness	0	0	2.5	0.3	-0.1	-0.2	0.4	0.7
Range	180	206	4.1	17.0	37.0	34.0	6.9	6.4
Minimum	130	74	0.0	0.0	28.0	23.0	2.4	2.5
Maximum	310	280	4.1	17.0	65.0	57.0	9.3	8.9
Count	20	60	54	17	60	60	60	60
Confidence Level(95.0%)	22	11	0.3	2.2	2.6	2.3	0.4	0.4

ND = No Data

Provisional MMSD Water Quality Data

JONES ISLAND FERRY - SITE 19
KINNICKINNIC RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.9	13.6	8.6	6.00	0.85	0.020	0.90	0.096	0.67	0.081	0.030	ND
Standard Error	0.0	0.7	0.2	1.06	0.04	0.002	0.04	0.012	0.06	0.008	0.004	ND
Median	8.0	13.6	8.8	5.81	0.79	0.015	0.84	0.100	0.69	0.067	0.033	ND
Mode	7.9	ND	9.0	ND	1.10	0.014	1.10	0.000	0.00	0.000	0.000	ND
Standard Deviation	0.2	5.6	1.9	4.73	0.30	0.011	0.30	0.087	0.47	0.055	0.028	ND
Sample Variance	0.0	31.7	3.5	22.39	0.09	0.000	0.09	0.008	0.22	0.003	0.001	ND
Kurtosis	-0.1	-0.4	0.5	0.63	4.47	1.574	2.94	-0.916	4.12	2.498	0.499	ND
Skewness	-0.5	-0.2	0.2	1.05	1.82	1.462	1.42	0.395	1.05	1.572	0.748	ND
Range	0.9	23.7	8.9	17.22	1.46	0.047	1.56	0.300	2.60	0.250	0.110	0.00
Minimum	7.4	0.9	4.4	0.58	0.44	0.004	0.44	0.000	0.00	0.000	0.000	0.00
Maximum	8.3	24.6	13.3	17.80	1.90	0.051	2.00	0.300	2.60	0.250	0.110	0.00
Count	60	60	60	20	48	48	60	54	54	54	57	0
Confidence Level(95.0%)	0.1	1.5	0.5	2.21	0.09	0.003	0.08	0.024	0.13	0.015	0.007	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	1.1	2.6	384.2	370.7	3.4	13.5	13.0	629	67.6	1765	1.9	ND
Standard Error	0.1	0.2	11.9	12.4	0.4	2.5	2.7	24	3.8	1645	0.2	ND
Median	1.2	2.8	390.0	375.6	2.4	7.6	6.7	637	67.0	48	1.7	ND
Mode	1.3	2.6	440.0	452.0	2.0	12.0	4.7	799	87.0	17	1.2	ND
Standard Deviation	0.4	0.9	91.1	95.4	3.4	19.4	20.8	186	29.2	7357	0.8	ND
Sample Variance	0.2	0.8	8297.3	9097.0	11.6	374.6	431.8	34755	852.4	54131650	0.6	ND
Kurtosis	1.4	0.6	-0.2	-0.4	8.2	9.9	10.0	-1	0.6	20	8.0	ND
Skewness	-0.4	-1.0	-0.1	0.0	2.7	3.2	3.3	0	0.4	4	2.6	ND
Range	2.0	3.3	420.0	425.2	19.0	97.2	95.7	721	135.0	32984	3.3	0
Minimum	0.1	0.5	180.0	171.2	0.0	2.8	2.9	309	15.0	16	1.2	0
Maximum	2.1	3.8	600.0	596.4	19.0	100.0	98.6	1030	150.0	33000	4.5	0
Count	20	19	59	59	59	59	60	60	60	20	20	0
Confidence Level(95.0%)	0.2	0.4	23.7	24.9	0.9	5.0	5.4	48	7.5	3443	0.4	ND

ND = No Data

Provisional MMSD Water Quality Data

JONES ISLAND FERRY - SITE 19
KINNICKINNICK RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	52.20	23.95	0.0	5.3	8.1	3.3	1.3	18.3	0.2	2.2	4.7	0.0
Standard Error	2.54	1.59	0.0	0.6	0.6	0.4	0.8	2.6	0.1	0.7	0.9	0.0
Median	51.00	23.50	0.0	5.0	7.7	3.0	0.0	13.5	0.0	0.0	5.7	0.0
Mode	54.00	27.00	0.0	0.0	12.0	3.4	0.0	18.0	0.0	0.0	0.0	0.0
Standard Deviation	11.37	7.12	0.0	2.8	2.9	1.6	3.5	11.4	0.4	3.1	4.0	0.0
Sample Variance	129.33	50.68	0.0	8.1	8.3	2.6	12.1	130.9	0.2	9.4	15.7	0.0
Kurtosis	0.13	-0.15	ND	-0.1	0.0	4.7	13.7	2.7	2.8	-0.5	-1.6	ND
Skewness	0.58	0.34	ND	-0.6	0.8	2.0	3.6	1.6	2.1	1.0	-0.1	ND
Range	43.00	26.00	0.0	9.6	11.1	6.9	15.0	43.6	1.2	9.3	11.0	0.0
Minimum	34.00	13.00	0.0	0.0	3.9	1.6	0.0	8.4	0.0	0.0	0.0	0.0
Maximum	77.00	39.00	0.0	9.6	15.0	8.5	15.0	52.0	1.2	9.3	11.0	0.0
Count	20	20	20	20	20	20	20	20	20	20	19	4
Confidence Level(95.0%)	5.32	3.33	0.0	1.3	1.4	0.8	1.6	5.4	0.2	1.4	1.9	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	230	187	0.4	7.3	49.8	44.0	5.7	5.6
Standard Error	13	7	0.1	0.9	1.6	1.4	0.2	0.2
Median	225	190	0.0	7.4	51.0	46.0	5.4	5.4
Mode	260	230	0.0	4.8	63.0	52.0	7.7	5.3
Standard Deviation	56	51	1.0	3.7	12.0	10.8	1.9	1.9
Sample Variance	3189	2612	1.1	13.7	144.5	116.7	3.6	3.6
Kurtosis	0	-1	4.1	1.7	-1.1	-1.1	-0.8	0.3
Skewness	1	0	2.4	0.7	-0.2	-0.2	0.1	0.5
Range	210	225	3.6	16.0	42.0	39.0	7.9	8.9
Minimum	140	75	0.0	0.0	28.0	23.0	2.1	2.1
Maximum	350	300	3.6	16.0	70.0	62.0	10.0	11.0
Count	20	60	54	17	60	60	60	60
Confidence Level(95.0%)	26	13	0.3	1.9	3.1	2.8	0.5	0.5

ND = No Data

Provisional MMSD Water Quality Data

25TH STREET - SITE 20
MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.8	12.0	9.1	14.60	0.74	0.024	0.70	0.075	0.91	0.106	0.034	ND
Standard Error	0.0	1.6	0.5	4.12	0.08	0.002	0.08	0.013	0.06	0.012	0.006	ND
Median	7.8	12.9	8.5	9.73	0.66	0.021	0.63	0.072	0.89	0.110	0.043	ND
Mode	7.8	ND	ND	11.10	ND	0.021	0.42	0.000	1.10	0.110	0.000	ND
Standard Deviation	0.2	8.2	2.6	21.00	0.34	0.010	0.38	0.065	0.28	0.064	0.030	ND
Sample Variance	0.0	67.7	6.9	440.86	0.12	0.000	0.15	0.004	0.08	0.004	0.001	ND
Kurtosis	1.4	-1.3	-0.9	18.37	0.79	2.570	0.66	-0.844	-0.82	-0.085	-1.586	ND
Skewness	-0.7	0.1	0.0	4.05	0.83	1.182	0.64	0.379	0.12	0.228	-0.019	ND
Range	1.1	26.0	9.2	108.88	1.42	0.047	1.70	0.210	1.01	0.250	0.082	0.00
Minimum	7.2	-0.1	4.3	1.12	0.18	0.007	0.00	0.000	0.39	0.000	0.000	0.00
Maximum	8.3	25.9	13.5	110.00	1.60	0.054	1.70	0.210	1.40	0.250	0.082	0.00
Count	27	27	27	26	20	20	26	26	25	26	26	0
Confidence Level(95.0%)	0.1	3.3	1.0	8.48	0.16	0.005	0.16	0.026	0.11	0.026	0.012	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	676.2	654.3	6.1	22.7	16.7	1145	186.1	5989	2.8	4852
Standard Error	ND	ND	41.4	44.4	1.3	7.1	5.7	77	18.4	3460	0.2	2469
Median	ND	ND	645.0	629.1	3.9	9.6	6.4	1140	185.0	420	2.6	370
Mode	ND	ND	1100.0	ND	3.2	6.4	ND	1249	200.0	1100	3.0	1300
Standard Deviation	ND	ND	211.2	226.3	6.6	36.8	29.0	402	93.7	17298	0.8	12831
Sample Variance	ND	ND	44584.6	51215.8	43.1	1350.7	843.2	161289	8785.5	299217888	0.6	164645934
Kurtosis	ND	ND	0.1	0.1	6.7	10.7	11.6	0	-0.4	11	1.5	15
Skewness	ND	ND	0.6	0.4	2.4	3.2	3.3	0	0.6	3	1.3	4
Range	0.0	0.0	810.0	875.2	30.0	168.2	131.8	1743	348.0	72933	3.0	60966
Minimum	0.0	0.0	290.0	220.0	0.0	1.8	2.2	389	42.0	67	1.8	34
Maximum	0.0	0.0	1100.0	1095.2	30.0	170.0	134.0	2132	390.0	73000	4.9	61000
Count	0	0	26	26	26	27	26	27	26	25	25	27
Confidence Level(95.0%)	ND	ND	85.3	91.4	2.7	14.5	11.7	159	37.9	7140	0.3	5076

ND = No Data

Provisional MMSD Water Quality Data

25TH STREET - SITE 20
MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	69.52	30.59	0.0	5.3	10.6	5.4	2.2	26.6	0.1	2.2	2.8	0.0
Standard Error	3.04	1.57	0.0	0.9	1.0	1.0	1.1	4.2	0.1	0.6	0.9	0.0
Median	66.00	31.00	0.0	4.7	9.5	3.4	0.0	20.0	0.0	0.0	0.0	0.0
Mode	91.00	23.00	0.0	4.5	11.0	3.4	0.0	21.0	0.0	0.0	0.0	0.0
Standard Deviation	15.80	8.18	0.0	4.6	5.4	5.1	5.8	21.9	0.4	3.3	4.6	0.0
Sample Variance	249.72	66.94	0.0	21.1	28.9	26.0	33.7	480.3	0.2	10.8	20.8	0.0
Kurtosis	0.18	-0.47	27.0	16.9	11.5	4.5	22.1	7.8	5.3	-0.4	0.1	ND
Skewness	-0.49	-0.40	5.2	3.6	3.0	2.1	4.5	2.5	2.6	1.1	1.3	ND
Range	63.00	32.00	0.2	26.0	27.3	21.3	30.0	110.0	1.3	8.9	13.0	0.0
Minimum	28.00	12.00	0.0	0.0	5.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	91.00	44.00	0.2	26.0	33.0	23.0	30.0	110.0	1.3	8.9	13.0	0.0
Count	27	27	27	27	27	27	27	27	27	27	26	4
Confidence Level(95.0%)	6.25	3.24	0.0	1.8	2.1	2.0	2.3	8.7	0.2	1.3	1.8	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	300	215	3.0	12.9	56.9	49.8	7.2	6.9
Standard Error	14	12	0.7	1.0	2.6	2.6	0.4	0.4
Median	300	230	3.0	13.5	60.5	54.0	6.8	6.7
Mode	250	260	0.0	17.0	69.0	54.0	6.8	6.3
Standard Deviation	72	60	3.7	4.5	13.3	13.2	2.2	2.2
Sample Variance	5219	3620	14.0	20.2	176.6	174.3	4.7	5.0
Kurtosis	0	0	13.8	0.6	0.0	-0.3	10.6	6.5
Skewness	0	-1	3.3	0.4	-0.9	-0.8	2.8	2.2
Range	290	205	19.0	18.9	52.0	50.0	11.4	10.9
Minimum	120	75	0.0	5.1	25.0	20.0	4.6	4.1
Maximum	410	280	19.0	24.0	77.0	70.0	16.0	15.0
Count	27	26	26	20	26	26	26	26
Confidence Level(95.0%)	29	24	1.5	2.1	5.4	5.3	0.9	0.9

ND = No Data

Provisional MMSD Water Quality Data

127TH STREET EXTENDED - SITE 21
MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	13.2	10.5	9.39	0.47	0.018	0.45	0.040	0.78	0.086	0.032	ND
Standard Error	0.0	1.5	0.5	1.84	0.08	0.003	0.07	0.011	0.07	0.015	0.008	ND
Median	8.0	14.2	10.0	6.01	0.42	0.014	0.39	0.014	0.82	0.093	0.032	ND
Mode	7.8	ND	ND	ND	ND	0.012	0.28	0.000	1.10	0.110	0.000	ND
Standard Deviation	0.2	7.4	2.3	8.83	0.34	0.011	0.33	0.050	0.35	0.070	0.038	ND
Sample Variance	0.0	55.2	5.5	78.04	0.11	0.000	0.11	0.002	0.12	0.005	0.001	ND
Kurtosis	-0.2	-0.9	-0.5	3.92	4.99	0.264	6.20	0.490	0.44	-0.232	1.403	ND
Skewness	-0.4	-0.5	0.6	1.98	1.87	1.134	2.00	1.123	-0.84	0.635	1.138	ND
Range	0.8	24.6	8.6	35.84	1.45	0.037	1.55	0.170	1.20	0.230	0.140	0.00
Minimum	7.5	0.0	6.6	1.56	0.05	0.006	0.05	0.000	0.00	0.000	0.000	0.00
Maximum	8.3	24.6	15.2	37.40	1.50	0.043	1.60	0.170	1.20	0.230	0.140	0.00
Count	23	23	23	23	17	17	23	22	22	22	23	0
Confidence Level(95.0%)	0.1	3.2	1.0	3.82	0.17	0.006	0.14	0.022	0.15	0.031	0.016	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	642.2	626.6	5.3	15.5	12.6	1081	171.8	1552	2.5	928
Standard Error	ND	ND	38.1	39.7	1.4	2.7	2.5	75	18.2	600	0.2	412
Median	ND	ND	660.0	652.8	2.8	10.0	8.0	1095	170.0	180	2.3	190
Mode	ND	ND	660.0	ND	2.8	7.4	ND	ND	160.0	28	1.4	ND
Standard Deviation	ND	ND	182.8	190.6	6.6	13.0	11.9	361	87.1	2879	0.9	1975
Sample Variance	ND	ND	33399.6	36313.4	43.1	168.0	142.6	130255	7584.1	8287184	0.8	3900753
Kurtosis	ND	ND	1.7	1.7	6.4	0.5	3.0	5	9.2	3	-0.6	8
Skewness	ND	ND	0.0	-0.1	2.5	1.1	1.6	1	2.4	2	0.3	3
Range	0.0	0.0	850.0	875.6	27.0	46.2	47.6	1876	457.0	9593	3.1	7600
Minimum	0.0	0.0	250.0	221.0	1.0	2.8	2.2	410	43.0	7	0.8	0
Maximum	0.0	0.0	1100.0	1096.6	28.0	49.0	49.8	2286	500.0	9600	4.0	7600
Count	0	0	23	23	23	23	23	23	23	23	23	23
Confidence Level(95.0%)	ND	ND	79.0	82.4	2.8	5.6	5.2	156	37.7	1245	0.4	854

ND = No Data

Provisional MMSD Water Quality Data

127TH STREET EXTENDED - SITE 21
MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	71.70	34.30	0.0	3.7	6.9	5.6	1.3	13.7	0.2	2.6	3.3	0.0
Standard Error	3.38	1.90	0.0	0.6	0.5	1.7	0.8	1.8	0.1	0.6	1.1	0.0
Median	76.00	37.00	0.0	4.2	6.6	3.5	0.0	13.0	0.0	0.0	0.0	0.0
Mode	76.00	36.00	0.0	0.0	5.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0
Standard Deviation	16.22	9.10	0.0	2.8	2.2	8.4	3.7	8.8	0.5	3.0	5.2	0.0
Sample Variance	263.22	82.86	0.0	7.8	4.7	69.8	13.5	76.9	0.2	9.3	27.1	0.0
Kurtosis	0.94	0.34	ND	-0.7	2.4	20.6	16.6	-0.6	1.7	-1.4	0.0	ND
Skewness	-1.04	-0.98	ND	0.0	0.5	4.4	3.9	0.2	1.9	0.6	1.2	ND
Range	65.00	35.00	0.0	9.3	11.1	41.1	17.0	30.0	1.4	7.7	15.0	0.0
Minimum	33.00	13.00	0.0	0.0	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	98.00	48.00	0.0	9.3	13.0	43.0	17.0	30.0	1.4	7.7	15.0	0.0
Count	23	23	23	23	23	23	23	23	23	23	23	4
Confidence Level(95.0%)	7.02	3.94	0.0	1.2	0.9	3.6	1.6	3.8	0.2	1.3	2.3	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	321	246	1.2	10.8	65.3	58.1	7.1	6.8
Standard Error	16	12	0.3	1.2	2.9	2.8	0.4	0.4
Median	340	270	0.0	9.6	71.0	64.0	7.4	6.6
Mode	350	290	0.0	13.0	71.0	64.0	7.8	5.2
Standard Deviation	76	59	1.3	5.3	13.8	13.6	1.7	1.9
Sample Variance	5836	3434	1.8	28.0	190.3	185.0	2.9	3.5
Kurtosis	1	1	-1.5	0.7	0.2	0.2	0.5	1.3
Skewness	-1	-1	0.4	0.8	-1.2	-1.2	0.9	1.0
Range	300	200	3.8	19.9	45.0	43.0	6.1	7.7
Minimum	140	100	0.0	4.1	34.0	28.0	4.9	4.3
Maximum	440	300	3.8	24.0	79.0	71.0	11.0	12.0
Count	23	23	23	18	23	23	23	23
Confidence Level(95.0%)	33	25	0.6	2.6	6.0	5.9	0.7	0.8

ND = No Data

Provisional MMSD Water Quality Data

HAMPTON AVENUE - SITE 22
MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.8	11.5	9.4	9.43	0.67	0.025	0.62	0.062	0.79	0.094	0.035	ND
Standard Error	0.0	1.5	0.5	1.92	0.09	0.003	0.08	0.014	0.07	0.015	0.006	ND
Median	7.8	12.6	9.4	6.46	0.57	0.020	0.58	0.048	0.74	0.081	0.038	ND
Mode	7.8	ND	ND	8.88	1.10	0.015	1.10	0.000	1.10	0.000	0.000	ND
Standard Deviation	0.2	7.8	2.7	9.79	0.39	0.015	0.38	0.072	0.33	0.074	0.032	ND
Sample Variance	0.1	60.3	7.2	95.78	0.15	0.000	0.15	0.005	0.11	0.006	0.001	ND
Kurtosis	0.8	-1.4	-1.4	3.79	1.04	-0.825	1.19	1.609	0.91	0.133	-1.365	ND
Skewness	-0.4	-0.1	0.0	2.15	0.90	0.654	0.88	1.398	-0.75	0.622	0.229	ND
Range	1.0	23.6	8.6	36.83	1.62	0.048	1.62	0.270	1.30	0.280	0.090	0.00
Minimum	7.2	0.4	5.1	0.97	0.08	0.006	0.08	0.000	0.00	0.000	0.000	0.00
Maximum	8.2	24.0	13.7	37.80	1.70	0.054	1.70	0.270	1.30	0.280	0.090	0.00
Count	26	26	26	26	20	20	26	25	25	25	26	0
Confidence Level(95.0%)	0.1	3.1	1.1	3.95	0.18	0.007	0.15	0.030	0.14	0.031	0.013	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	629.6	608.4	5.0	21.2	23.5	1074	168.8	3236	2.5	ND
Standard Error	ND	ND	34.5	37.0	0.9	5.7	6.4	87	16.0	2281	0.2	ND
Median	ND	ND	665.0	653.5	3.6	11.5	10.0	1090	165.0	255	2.4	ND
Mode	ND	ND	660.0	ND	2.4	8.4	ND	ND	160.0	ND	ND	ND
Standard Deviation	ND	ND	176.0	188.7	4.8	29.1	32.8	443	81.7	10700	0.8	ND
Sample Variance	ND	ND	30971.8	35592.9	23.5	848.4	1075.0	196257	6674.1	114498292	0.7	ND
Kurtosis	ND	ND	0.7	0.5	6.0	7.8	11.6	5	2.2	20	0.9	ND
Skewness	ND	ND	-0.7	-0.7	2.4	2.8	3.2	1	1.0	4	0.8	ND
Range	0.0	0.0	790.0	806.0	21.0	117.6	154.2	2209	381.0	49984	3.5	0
Minimum	0.0	0.0	210.0	181.0	1.0	2.4	3.8	333	29.0	16	1.2	0
Maximum	0.0	0.0	1000.0	987.0	22.0	120.0	158.0	2542	410.0	50000	4.7	0
Count	0	0	26	26	26	26	26	26	26	22	22	0
Confidence Level(95.0%)	ND	ND	71.1	76.2	2.0	11.8	13.2	179	33.0	4744	0.4	ND

ND = No Data

Provisional MMSD Water Quality Data

HAMPTON AVENUE - SITE 22
MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	70.54	32.40	0.0	4.8	7.8	3.9	1.6	19.7	0.1	2.5	3.7	0.0
Standard Error	3.88	2.01	0.0	0.4	0.6	0.3	0.8	2.9	0.1	0.6	1.0	0.0
Median	75.50	36.00	0.0	4.5	7.4	3.6	0.0	16.5	0.0	0.0	0.0	0.0
Mode	69.00	36.00	0.0	4.3	7.5	4.7	0.0	15.0	0.0	0.0	0.0	0.0
Standard Deviation	19.79	10.27	0.0	1.9	3.1	1.7	4.3	14.8	0.4	3.2	4.8	0.0
Sample Variance	391.54	105.42	0.0	3.8	9.7	3.0	18.1	220.4	0.2	10.2	23.2	0.0
Kurtosis	0.69	-0.03	26.0	2.2	4.2	4.8	18.6	11.7	5.7	-0.6	-0.8	ND
Skewness	-1.12	-0.98	5.1	-0.5	1.6	1.7	4.1	3.0	2.7	0.9	0.8	ND
Range	74.00	36.70	0.2	8.9	16.0	8.4	21.0	74.2	1.4	9.0	15.0	0.0
Minimum	26.00	8.30	0.0	0.0	2.0	1.5	0.0	6.8	0.0	0.0	0.0	0.0
Maximum	100.00	45.00	0.2	8.9	18.0	9.9	21.0	81.0	1.4	9.0	15.0	0.0
Count	26	26	26	26	26	26	26	26	26	26	25	4
Confidence Level(95.0%)	7.99	4.15	0.0	0.8	1.3	0.7	1.7	6.0	0.2	1.3	2.0	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	310	233	1.6	12.6	62.0	54.6	7.4	7.1
Standard Error	18	14	0.5	1.2	3.2	3.2	0.5	0.5
Median	340	265	0.0	14.0	67.0	59.5	6.9	6.8
Mode	350	280	0.0	14.0	77.0	70.0	6.6	6.9
Standard Deviation	90	70	2.5	5.5	16.3	16.4	2.4	2.4
Sample Variance	8126	4926	6.3	30.8	264.6	268.3	5.6	5.8
Kurtosis	1	1	7.7	5.8	-0.4	-0.2	3.4	1.8
Skewness	-1	-2	2.5	1.8	-0.8	-0.9	1.7	1.3
Range	322	247	11.0	26.4	55.0	55.0	10.2	10.1
Minimum	98	53	0.0	4.6	28.0	21.0	4.8	3.9
Maximum	420	300	11.0	31.0	83.0	76.0	15.0	14.0
Count	26	26	25	20	26	26	26	26
Confidence Level(95.0%)	36	28	1.0	2.6	6.6	6.6	1.0	1.0

ND = No Data

Provisional MMSD Water Quality Data

BURNHAM SHIP CANAL - SITE 31
MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.8	20.3	7.0	11.76	1.02	0.024	1.05	0.138	1.06	0.086	0.036	ND
Standard Error	0.0	1.1	0.4	2.80	0.17	0.002	0.13	0.018	0.17	0.009	0.006	ND
Median	7.8	20.7	7.2	7.91	0.78	0.022	0.86	0.140	0.90	0.090	0.040	ND
Mode	7.6	21.4	7.4	ND	0.63	0.022	1.30	0.000	1.10	0.100	0.000	ND
Standard Deviation	0.2	5.9	2.2	14.57	0.78	0.009	0.69	0.091	0.86	0.045	0.030	ND
Sample Variance	0.0	34.5	4.9	212.19	0.61	0.000	0.48	0.008	0.74	0.002	0.001	ND
Kurtosis	-1.0	-1.2	0.0	9.69	15.49	1.472	17.80	-1.081	14.87	3.448	-1.003	ND
Skewness	0.2	0.1	-0.1	2.81	3.74	1.474	3.91	-0.038	3.53	0.324	0.190	ND
Range	0.6	18.7	9.0	69.21	3.68	0.031	3.64	0.300	4.42	0.220	0.092	0.00
Minimum	7.5	11.5	2.4	0.99	0.52	0.015	0.56	0.000	0.38	0.000	0.000	0.00
Maximum	8.2	30.2	11.4	70.20	4.20	0.046	4.20	0.300	4.80	0.220	0.092	0.00
Count	27	27	27	27	21	21	27	26	26	24	25	0
Confidence Level(95.0%)	0.1	2.3	0.9	5.76	0.35	0.004	0.27	0.037	0.35	0.019	0.012	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	635.6	623.5	4.0	12.1	10.5	1097	172.7	855	2.4	ND
Standard Error	ND	ND	51.9	51.5	0.4	1.4	1.2	98	25.6	474	0.1	ND
Median	ND	ND	580.0	563.4	3.8	8.8	8.5	968	120.0	250	2.4	ND
Mode	ND	ND	580.0	ND	4.8	6.8	6.7	592	110.0	ND	ND	ND
Standard Deviation	ND	ND	269.5	267.5	2.2	7.1	6.1	508	132.9	2466	0.6	ND
Sample Variance	ND	ND	72617.9	71554.6	4.7	50.6	36.6	257579	17656.8	6078835	0.4	ND
Kurtosis	ND	ND	2.4	2.3	0.1	0.1	1.3	3	2.9	25	0.8	ND
Skewness	ND	ND	1.7	1.6	0.5	1.1	1.5	2	1.9	5	0.7	ND
Range	0.0	0.0	1050.0	1038.8	9.0	24.6	21.3	1958	498.0	12976	2.7	0
Minimum	0.0	0.0	350.0	341.2	0.0	4.4	3.9	592	52.0	24	1.4	0
Maximum	0.0	0.0	1400.0	1380.0	9.0	29.0	25.2	2550	550.0	13000	4.1	0
Count	0	0	27	27	27	27	26	27	27	27	27	0
Confidence Level(95.0%)	ND	ND	106.6	105.8	0.9	2.8	2.4	201	52.6	975	0.2	ND

ND = No Data

Provisional MMSD Water Quality Data

BURNHAM SHIP CANAL - SITE 31
MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	68.19	31.96	0.0	4.8	13.3	3.8	3.0	24.5	0.2	2.4	3.6	0.0
Standard Error	2.95	1.47	0.0	0.3	0.5	0.5	1.0	2.8	0.1	0.7	1.0	0.0
Median	69.00	32.00	0.0	4.7	12.0	3.0	0.0	20.0	0.0	0.0	0.0	0.0
Mode	76.00	40.00	0.0	5.6	12.0	2.8	0.0	20.0	0.0	0.0	0.0	0.0
Standard Deviation	15.34	7.66	0.0	1.4	2.8	2.7	5.3	14.5	0.4	3.8	5.0	0.0
Sample Variance	235.39	58.65	0.0	2.1	7.9	7.2	28.5	210.5	0.2	14.5	24.7	0.0
Kurtosis	-0.21	-1.18	ND	3.7	0.3	11.8	4.8	1.3	5.5	-0.2	-0.8	ND
Skewness	0.17	-0.31	ND	-1.2	1.0	3.2	2.2	1.3	2.6	1.2	0.9	ND
Range	58.00	23.00	0.0	7.2	10.0	13.1	21.0	54.6	1.5	10.0	14.0	0.0
Minimum	42.00	19.00	0.0	0.0	10.0	1.9	0.0	9.4	0.0	0.0	0.0	0.0
Maximum	100.00	42.00	0.0	7.2	20.0	15.0	21.0	64.0	1.5	10.0	14.0	0.0
Count	27	27	27	27	27	27	27	27	27	27	26	4
Confidence Level(95.0%)	6.07	3.03	0.0	0.6	1.1	1.1	2.1	5.7	0.2	1.5	2.0	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	302	232	0.8	11.0	61.0	54.2	6.7	6.2
Standard Error	13	10	0.3	0.7	2.3	2.2	0.2	0.4
Median	310	240	0.0	9.6	62.0	56.0	6.6	5.8
Mode	340	240	0.0	14.0	62.0	55.0	6.1	5.3
Standard Deviation	67	50	1.3	3.0	12.2	11.6	1.3	1.8
Sample Variance	4526	2479	1.8	9.2	148.2	134.2	1.6	3.4
Kurtosis	-1	-1	1.1	-1.0	-1.1	-1.2	0.2	4.3
Skewness	0	-1	1.4	0.4	-0.4	-0.3	0.4	-1.0
Range	240	170	4.7	10.3	41.0	37.0	5.5	10.0
Minimum	180	130	0.0	5.7	39.0	34.0	4.3	0.0
Maximum	420	300	4.7	16.0	80.0	71.0	9.8	10.0
Count	27	27	26	21	27	27	27	27
Confidence Level(95.0%)	27	20	0.5	1.4	4.8	4.6	0.5	0.7

ND = No Data

Provisional MMSD Water Quality Data

BURLEIGH STREET - SITE 32
MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	11.2	11.1	15.28	0.62	0.023	0.56	0.101	0.84	0.096	0.034	ND
Standard Error	0.1	1.7	0.5	4.38	0.09	0.003	0.08	0.036	0.10	0.015	0.006	ND
Median	8.0	12.8	11.1	8.06	0.50	0.021	0.49	0.036	0.72	0.081	0.040	ND
Mode	7.8	ND	12.1	ND	0.47	0.012	ND	0.000	1.10	0.000	0.000	ND
Standard Deviation	0.3	7.9	2.5	20.99	0.38	0.013	0.39	0.173	0.48	0.074	0.030	ND
Sample Variance	0.1	62.7	6.4	440.55	0.15	0.000	0.15	0.030	0.23	0.005	0.001	ND
Kurtosis	-0.3	-1.4	-0.9	8.80	0.09	-0.306	0.81	9.264	8.44	0.507	-1.574	ND
Skewness	0.1	-0.1	0.0	2.86	0.70	0.734	0.95	2.937	2.24	0.842	0.060	ND
Range	1.1	24.6	8.6	91.92	1.46	0.046	1.56	0.750	2.60	0.280	0.084	0.00
Minimum	7.5	0.1	7.0	1.58	0.04	0.005	0.04	0.000	0.00	0.000	0.000	0.00
Maximum	8.5	24.7	15.5	93.50	1.50	0.050	1.60	0.750	2.60	0.280	0.084	0.00
Count	23	23	23	23	18	18	23	23	22	23	23	0
Confidence Level(95.0%)	0.1	3.4	1.1	9.08	0.19	0.007	0.17	0.075	0.21	0.032	0.013	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	703.5	687.3	4.3	16.5	13.5	1165	208.1	3347	2.6	2347
Standard Error	ND	ND	46.6	47.1	0.7	3.3	2.9	89	25.7	2014	0.2	1201
Median	ND	ND	680.0	673.6	3.6	11.5	9.6	1141	180.0	300	2.5	235
Mode	ND	ND	710.0	ND	4.8	18.0	3.1	ND	190.0	180	2.3	46
Standard Deviation	ND	ND	223.6	226.0	3.3	16.4	13.9	425	123.3	9229	0.9	5882
Sample Variance	ND	ND	49987.4	51068.4	10.7	267.9	193.1	180854	15196.6	85171620	0.8	34598540
Kurtosis	ND	ND	3.5	3.6	2.2	4.0	3.7	7	7.4	12	0.4	12
Skewness	ND	ND	1.5	1.4	1.2	2.0	2.0	2	2.5	3	0.4	3
Range	0.0	0.0	1020.0	1043.6	14.0	63.2	50.5	2054	581.0	38993	3.7	25974
Minimum	0.0	0.0	380.0	352.0	0.0	1.8	2.6	605	69.0	7	0.8	26
Maximum	0.0	0.0	1400.0	1395.6	14.0	65.0	53.1	2659	650.0	39000	4.6	26000
Count	0	0	23	23	23	24	23	23	23	21	21	24
Confidence Level(95.0%)	ND	ND	96.7	97.7	1.4	6.9	6.0	184	53.3	4201	0.4	2484

ND = No Data

Provisional MMSD Water Quality Data

BURLEIGH STREET - SITE 32
MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	70.04	31.58	0.0	5.2	7.7	3.6	1.0	22.3	0.2	2.0	2.9	ND
Standard Error	3.17	1.68	0.0	0.3	0.5	0.3	0.3	4.0	0.1	0.6	0.9	ND
Median	72.50	34.50	0.0	4.9	7.2	3.3	0.0	17.0	0.0	0.0	0.0	ND
Mode	79.00	27.00	0.0	4.3	7.7	4.7	0.0	13.0	0.0	0.0	0.0	ND
Standard Deviation	15.54	8.23	0.0	1.6	2.5	1.7	1.6	19.8	0.4	3.1	4.4	ND
Sample Variance	241.35	67.73	0.0	2.5	6.4	2.8	2.4	392.9	0.2	9.4	19.0	ND
Kurtosis	0.08	-0.96	24.0	1.6	1.5	1.3	0.6	10.4	3.8	0.5	-0.3	ND
Skewness	-0.59	-0.47	4.9	0.8	0.9	1.1	1.3	2.9	2.3	1.3	1.1	ND
Range	60.00	27.00	0.2	7.5	11.4	6.9	5.0	100.0	1.3	9.2	12.0	0.0
Minimum	36.00	17.00	0.0	1.6	2.6	1.2	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	96.00	44.00	0.2	9.1	14.0	8.1	5.0	100.0	1.3	9.2	12.0	0.0
Count	24	24	24	24	24	24	24	24	24	24	23	0
Confidence Level(95.0%)	6.56	3.48	0.0	0.7	1.1	0.7	0.7	8.4	0.2	1.3	1.9	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	305	230	2.0	12.9	60.1	52.8	7.3	6.8
Standard Error	14	12	0.4	1.2	3.0	3.0	0.4	0.4
Median	330	250	2.2	13.0	66.0	59.0	7.3	6.6
Mode	280	280	0.0	14.0	72.0	24.0	7.7	6.6
Standard Deviation	71	57	2.1	5.1	14.4	14.5	1.8	1.7
Sample Variance	4991	3283	4.5	25.6	208.2	210.7	3.1	3.0
Kurtosis	0	0	-0.1	-0.1	-0.8	-0.6	1.4	2.7
Skewness	-1	-1	0.7	0.5	-0.6	-0.7	1.1	1.4
Range	250	199	7.2	18.8	48.0	49.0	6.8	7.6
Minimum	160	91	0.0	5.2	32.0	24.0	5.2	4.4
Maximum	410	290	7.2	24.0	80.0	73.0	12.0	12.0
Count	24	23	23	17	23	23	23	23
Confidence Level(95.0%)	30	25	0.9	2.6	6.2	6.3	0.8	0.7

ND = No Data

Provisional MMSD Water Quality Data

43RD STREET DITCH - SITE 33
TRIBUTARY TO KINNICKINNIC RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.5	13.6	8.0	1.55	0.91	0.051	0.86	0.234	1.27	0.384	0.271	ND
Standard Error	0.1	1.1	0.3	0.43	0.14	0.009	0.12	0.057	0.24	0.041	0.050	ND
Median	7.6	14.2	7.5	0.97	0.75	0.036	0.74	0.235	1.01	0.355	0.240	ND
Mode	7.7	ND	ND	ND	0.83	ND	0.86	0.000	1.20	0.270	ND	ND
Standard Deviation	0.3	4.9	1.4	1.84	0.51	0.035	0.49	0.229	0.96	0.164	0.206	ND
Sample Variance	0.1	23.7	1.8	3.38	0.26	0.001	0.24	0.052	0.93	0.027	0.043	ND
Kurtosis	-0.2	-1.1	-0.9	6.09	3.62	2.781	5.14	-0.297	4.54	3.288	3.080	ND
Skewness	-0.6	-0.2	0.4	2.45	1.86	1.799	2.09	0.627	1.92	1.303	1.531	ND
Range	1.2	15.5	4.5	7.20	1.84	0.116	2.00	0.730	4.10	0.730	0.803	0.00
Minimum	6.8	5.4	5.9	0.23	0.46	0.024	0.40	0.000	0.00	0.110	0.057	0.00
Maximum	8.0	20.9	10.4	7.43	2.30	0.140	2.40	0.730	4.10	0.840	0.860	0.00
Count	18	18	18	18	14	14	18	16	16	16	17	0
Confidence Level(95.0%)	0.2	2.4	0.7	0.91	0.29	0.020	0.24	0.122	0.51	0.087	0.106	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	950.0	937.1	4.8	12.9	11.4	1725	320.6	2231	2.5	881
Standard Error	ND	ND	83.5	80.2	1.5	5.9	5.8	164	45.5	1007	0.3	378
Median	ND	ND	910.0	906.9	2.6	4.4	5.3	1605	280.0	680	2.8	335
Mode	ND	ND	1400.0	ND	2.4	3.8	ND	ND	280.0	0	0.0	96
Standard Deviation	ND	ND	354.2	340.1	6.6	25.1	24.7	697	193.0	4028	1.2	1605
Sample Variance	ND	ND	125470.6	115665.2	43.2	630.3	610.9	485734	37260.8	16225004	1.5	2575550
Kurtosis	ND	ND	0.4	-0.1	9.8	15.2	17.6	0	1.3	10	0.3	12
Skewness	ND	ND	0.8	0.6	3.0	3.8	4.2	1	1.3	3	-1.0	3
Range	0.0	0.0	1320.0	1239.0	28.0	108.2	107.8	2437	729.0	16000	4.2	6795
Minimum	0.0	0.0	480.0	451.0	0.0	1.8	2.2	714	91.0	0	0.0	5
Maximum	0.0	0.0	1800.0	1690.0	28.0	110.0	110.0	3151	820.0	16000	4.2	6800
Count	0	0	18	18	18	18	18	18	18	16	16	18
Confidence Level(95.0%)	ND	ND	176.1	169.1	3.3	12.5	12.3	347	96.0	2146	0.7	798

ND = No Data

Provisional MMSD Water Quality Data

43RD STREET DITCH - SITE 33
 TRIBUTARY TO KINNICKINNIC RIVER
 WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	94.50	28.56	0.0	4.8	18.2	4.1	3.2	49.5	0.1	2.4	4.1	ND
Standard Error	5.30	1.29	0.0	0.7	2.2	0.3	1.9	7.7	0.1	0.8	1.2	ND
Median	94.00	29.50	0.0	4.9	16.5	4.2	0.0	41.0	0.0	0.0	0.0	ND
Mode	110.00	25.00	0.0	0.0	12.0	4.0	0.0	54.0	0.0	0.0	0.0	ND
Standard Deviation	22.50	5.46	0.1	3.2	9.3	1.4	8.2	32.6	0.4	3.5	5.1	ND
Sample Variance	506.38	29.79	0.0	10.0	86.6	2.0	66.9	1065.8	0.2	12.2	26.3	ND
Kurtosis	-0.60	-0.76	18.0	0.4	-0.2	2.3	15.5	4.5	6.1	-0.4	-1.3	ND
Skewness	0.29	-0.42	4.2	0.2	0.6	0.8	3.8	2.3	2.7	1.1	0.7	ND
Range	79.00	18.00	0.2	12.0	34.3	6.2	35.0	118.0	1.3	9.6	14.0	0.0
Minimum	61.00	18.00	0.0	0.0	2.7	1.8	0.0	22.0	0.0	0.0	0.0	0.0
Maximum	140.00	36.00	0.2	12.0	37.0	8.0	35.0	140.0	1.3	9.6	14.0	0.0
Count	18	18	18	18	18	18	18	18	18	18	17	0
Confidence Level(95.0%)	11.19	2.71	0.0	1.6	4.6	0.7	4.1	16.2	0.2	1.7	2.6	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	353	219	4.9	17.3	56.5	50.7	5.8	5.4
Standard Error	18	10	0.9	2.0	2.4	2.4	0.5	0.5
Median	365	220	3.8	14.0	52.0	48.0	4.9	4.9
Mode	410	220	0.0	14.0	66.0	39.0	4.3	4.0
Standard Deviation	75	42	3.9	7.6	10.3	10.2	2.0	2.0
Sample Variance	5612	1806	15.5	58.1	106.5	104.4	4.1	3.9
Kurtosis	-1	-1	1.1	1.2	-1.6	-1.3	2.1	0.6
Skewness	0	0	1.0	1.4	0.2	0.2	1.6	1.2
Range	240	140	15.0	26.5	31.0	33.0	7.0	6.5
Minimum	230	150	0.0	8.5	41.0	35.0	4.0	3.2
Maximum	470	290	15.0	35.0	72.0	68.0	11.0	9.7
Count	18	18	18	14	18	18	18	18
Confidence Level(95.0%)	37	21	2.0	4.4	5.1	5.1	1.0	1.0

ND = No Data

Provisional MMSD Water Quality Data

JACKSON PARK LAGOON - SITE 34
KINNICKINNIC RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.8	14.5	12.1	5.78	1.02	0.045	0.96	0.238	1.00	0.228	0.134	ND
Standard Error	0.1	1.5	0.8	1.17	0.17	0.003	0.15	0.046	0.12	0.023	0.020	ND
Median	7.8	15.4	11.4	4.45	0.74	0.042	0.68	0.240	0.98	0.225	0.145	ND
Mode	7.8	ND	ND	ND	ND	0.055	1.80	0.000	1.20	0.140	0.220	ND
Standard Deviation	0.3	6.0	3.3	4.81	0.62	0.013	0.63	0.177	0.48	0.093	0.080	ND
Sample Variance	0.1	36.0	11.0	23.10	0.39	0.000	0.39	0.031	0.23	0.009	0.006	ND
Kurtosis	-0.9	-0.7	0.3	4.62	0.84	1.698	1.53	1.359	-0.04	-1.377	-1.940	ND
Skewness	0.0	-0.5	0.8	2.02	1.32	1.089	1.49	0.683	-0.27	0.198	0.048	ND
Range	1.0	19.6	11.4	19.20	2.03	0.050	2.23	0.670	1.80	0.289	0.196	0.00
Minimum	7.3	3.9	7.7	1.20	0.47	0.026	0.37	0.000	0.00	0.091	0.044	0.00
Maximum	8.2	23.5	19.1	20.40	2.50	0.076	2.60	0.670	1.80	0.380	0.240	0.00
Count	17	17	17	17	14	14	17	15	15	16	16	0
Confidence Level(95.0%)	0.1	3.1	1.7	2.47	0.36	0.007	0.32	0.098	0.27	0.049	0.043	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	945.9	939.2	2.4	6.7	6.6	1627	312.4	1054	2.6	1035
Standard Error	ND	ND	79.1	79.1	0.5	1.4	1.1	140	30.5	378	0.1	428
Median	ND	ND	940.0	936.8	2.0	4.8	4.8	1497	290.0	370	2.6	280
Mode	ND	ND	1200.0	1495.2	2.0	4.8	ND	ND	260.0	570	2.8	110
Standard Deviation	ND	ND	326.1	326.1	2.0	5.6	4.5	578	125.9	1559	0.6	1763
Sample Variance	ND	ND	106338.2	106355.3	4.1	31.7	20.4	334569	15856.6	2431717	0.3	3109339
Kurtosis	ND	ND	-0.9	-0.9	2.6	2.9	5.0	-1	-0.9	1	-0.8	6
Skewness	ND	ND	0.2	0.2	1.4	1.9	2.1	0	0.3	2	0.7	3
Range	0.0	0.0	1070.0	1072.8	8.0	20.0	18.2	1872	400.0	4323	1.8	6490
Minimum	0.0	0.0	430.0	422.4	0.0	2.0	2.3	669	110.0	77	1.9	110
Maximum	0.0	0.0	1500.0	1495.2	8.0	22.0	20.5	2541	510.0	4400	3.6	6600
Count	0	0	17	17	17	17	17	17	17	17	17	17
Confidence Level(95.0%)	ND	ND	167.7	167.7	1.0	2.9	2.3	297	64.7	802	0.3	907

ND = No Data

Provisional MMSD Water Quality Data

JACKSON PARK LAGOON - SITE 34
KINNICKINNIC RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	80.18	29.24	0.0	4.8	9.5	3.8	1.2	28.5	0.4	2.2	4.0	ND
Standard Error	4.79	2.21	0.0	1.0	0.5	0.5	0.5	2.6	0.2	0.8	1.4	ND
Median	83.00	27.00	0.0	4.3	9.5	3.5	0.0	27.0	0.0	0.0	0.0	ND
Mode	ND	23.00	0.0	4.3	10.0	4.0	0.0	24.0	0.0	0.0	0.0	ND
Standard Deviation	19.73	9.12	0.0	4.0	1.9	1.8	1.9	10.8	0.8	3.3	5.5	ND
Sample Variance	389.28	83.19	0.0	15.7	3.7	3.4	3.5	116.6	0.6	11.0	30.8	ND
Kurtosis	0.54	-0.59	ND	5.8	3.2	9.5	1.2	4.5	1.8	-0.5	-1.2	ND
Skewness	0.00	0.05	ND	1.8	1.5	2.8	1.4	1.9	1.6	1.0	0.8	ND
Range	81.00	32.00	0.0	17.0	8.1	7.8	6.0	46.0	2.5	9.4	14.0	0.0
Minimum	39.00	12.00	0.0	0.0	6.9	2.2	0.0	15.0	0.0	0.0	0.0	0.0
Maximum	120.00	44.00	0.0	17.0	15.0	10.0	6.0	61.0	2.5	9.4	14.0	0.0
Count	17	17	17	16	17	16	17	17	17	17	16	0
Confidence Level(95.0%)	10.14	4.69	0.0	2.1	1.0	1.0	1.0	5.6	0.4	1.7	3.0	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	321	209	1.2	13.8	53.4	48.4	5.1	4.5
Standard Error	21	13	0.4	1.2	2.9	3.0	0.4	0.2
Median	320	210	0.0	13.5	53.0	48.0	4.9	4.3
Mode	360	210	0.0	15.0	50.0	48.0	5.0	3.7
Standard Deviation	86	52	1.7	4.5	11.9	12.4	1.6	0.9
Sample Variance	7393	2682	2.9	20.1	142.6	153.4	2.5	0.9
Kurtosis	0	0	-0.7	3.5	0.2	0.1	5.6	1.7
Skewness	0	0	1.0	1.5	0.0	0.1	2.1	1.1
Range	330	211	4.7	17.6	47.0	47.0	6.7	3.9
Minimum	150	99	0.0	8.4	30.0	26.0	3.3	3.1
Maximum	480	310	4.7	26.0	77.0	73.0	10.0	7.0
Count	17	17	17	14	17	17	17	17
Confidence Level(95.0%)	44	27	0.9	2.6	6.1	6.4	0.8	0.5

ND = No Data

Provisional MMSD Water Quality Data

WILSON PARK CREEK - SITE 35
TRIBUTARY TO KINNICKINNIC RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.2	12.9	12.2	5.14	0.33	0.019	0.33	0.038	0.67	0.095	0.050	ND
Standard Error	0.1	1.6	0.6	1.33	0.10	0.004	0.08	0.009	0.11	0.008	0.010	ND
Median	8.2	14.5	12.7	2.55	0.21	0.017	0.24	0.031	0.74	0.092	0.044	ND
Mode	ND	ND	ND	ND	0.12	0.000	0.13	0.000	0.00	0.100	0.000	ND
Standard Deviation	0.4	7.0	2.5	5.66	0.37	0.016	0.36	0.038	0.45	0.032	0.042	ND
Sample Variance	0.2	48.4	6.2	31.98	0.14	0.000	0.13	0.001	0.20	0.001	0.002	ND
Kurtosis	-0.3	-0.9	0.4	0.31	8.42	0.515	10.28	-0.246	-0.87	1.273	0.555	ND
Skewness	-0.5	-0.3	-0.9	1.33	2.70	0.855	2.94	0.770	-0.46	1.071	0.793	ND
Range	1.5	23.2	9.1	16.79	1.46	0.056	1.56	0.120	1.40	0.120	0.150	0.00
Minimum	7.3	1.2	6.2	0.41	0.04	0.000	0.04	0.000	0.00	0.050	0.000	0.00
Maximum	8.8	24.4	15.3	17.20	1.50	0.056	1.60	0.120	1.40	0.170	0.150	0.00
Count	18	18	18	18	14	14	18	16	16	17	17	0
Confidence Level(95.0%)	0.2	3.5	1.2	2.81	0.21	0.009	0.18	0.020	0.24	0.016	0.022	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	1128.3	1123.0	2.2	5.3	4.4	1866	394.4	1268	2.8	1278
Standard Error	ND	ND	138.4	138.1	0.4	0.9	0.7	272	101.9	445	0.1	354
Median	ND	ND	1045.0	1038.6	2.2	4.4	4.3	1479	260.0	500	2.7	905
Mode	ND	ND	1100.0	ND	2.8	4.4	ND	ND	200.0	170	2.2	2400
Standard Deviation	ND	ND	587.0	585.9	1.9	3.7	2.9	1153	432.5	1889	0.5	1500
Sample Variance	ND	ND	344555.9	343291.3	3.4	13.4	8.7	1330381	187037.9	3569203	0.3	2251285
Kurtosis	ND	ND	7.5	7.5	5.0	1.3	1.0	9	12.4	3	-0.1	5
Skewness	ND	ND	2.4	2.4	1.7	1.2	1.2	3	3.4	2	0.9	2
Range	0.0	0.0	2640.0	2638.6	8.0	13.8	10.0	5184	1890.0	6260	1.7	5880
Minimum	0.0	0.0	460.0	455.6	0.0	1.2	1.3	734	110.0	140	2.1	120
Maximum	0.0	0.0	3100.0	3094.2	8.0	15.0	11.3	5918	2000.0	6400	3.8	6000
Count	0	0	18	18	18	18	18	18	18	18	18	18
Confidence Level(95.0%)	ND	ND	291.9	291.4	0.9	1.8	1.5	574	215.1	939	0.3	746

ND = No Data

Provisional MMSD Water Quality Data

WILSON PARK CREEK - SITE 35
 TRIBUTARY TO KINNICKINNIC RIVER
 WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	89.33	38.56	0.0	8.2	7.9	4.1	0.7	20.1	0.1	1.8	3.3	ND
Standard Error	4.68	2.25	0.0	1.3	0.6	0.4	0.3	3.1	0.1	0.7	1.0	ND
Median	92.00	37.00	0.0	6.2	7.8	4.0	0.0	16.0	0.0	0.0	0.0	ND
Mode	110.00	32.00	0.0	ND	9.1	3.2	0.0	16.0	0.0	0.0	0.0	ND
Standard Deviation	19.87	9.53	0.1	5.4	2.8	1.5	1.5	13.0	0.4	2.8	4.0	ND
Sample Variance	394.82	90.73	0.0	29.2	7.6	2.3	2.2	170.2	0.2	7.8	15.8	ND
Kurtosis	0.72	0.65	18.0	4.8	2.0	1.0	1.5	3.1	6.0	-0.1	-1.6	ND
Skewness	-0.49	-0.74	4.2	2.0	1.1	1.1	1.7	1.8	2.7	1.2	0.5	ND
Range	79.00	36.00	0.3	23.0	11.9	5.3	4.2	48.7	1.3	7.8	9.8	0.0
Minimum	41.00	15.00	0.0	2.0	3.1	2.5	0.0	9.3	0.0	0.0	0.0	0.0
Maximum	120.00	51.00	0.3	25.0	15.0	7.8	4.2	58.0	1.3	7.8	9.8	0.0
Count	18	18	18	18	18	18	18	18	18	18	17	0
Confidence Level(95.0%)	9.88	4.74	0.0	2.7	1.4	0.8	0.7	6.5	0.2	1.4	2.0	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	382	245	5.5	23.9	74.7	55.2	19.3	18.1
Standard Error	20	13	1.7	7.6	10.5	3.0	10.3	9.8
Median	375	250	2.3	9.3	65.5	55.5	4.6	4.2
Mode	380	270	0.0	ND	48.0	45.0	4.6	3.5
Standard Deviation	86	57	7.3	28.4	44.5	12.6	43.9	41.7
Sample Variance	7344	3250	53.1	806.5	1977.3	159.7	1925.8	1738.0
Kurtosis	1	0	-1.1	0.9	12.5	-0.4	15.6	15.5
Skewness	-1	0	0.9	1.5	3.3	-0.1	3.9	3.9
Range	340	230	17.0	79.7	206.0	49.0	186.9	179.5
Minimum	170	110	0.0	4.3	34.0	29.0	3.1	0.5
Maximum	510	340	17.0	84.0	240.0	78.0	190.0	180.0
Count	18	18	18	14	18	18	18	18
Confidence Level(95.0%)	43	28	3.6	16.4	22.1	6.3	21.8	20.7

ND = No Data

Provisional MMSD Water Quality Data

HWY 145, NORTH OF FREISTADT ROAD - SITE 36
MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.4	9.6	7.4	5.43	1.17	0.030	1.18	0.057	1.00	0.059	0.034	ND
Standard Error	0.0	1.4	0.6	1.22	0.09	0.008	0.07	0.009	0.10	0.008	0.006	ND
Median	7.4	11.1	7.9	3.79	1.10	0.020	1.10	0.055	1.00	0.055	0.038	ND
Mode	7.2	ND	ND	ND	1.10	0.017	1.10	0.000	1.40	0.000	0.000	ND
Standard Deviation	0.1	6.9	2.8	5.84	0.37	0.035	0.36	0.044	0.45	0.038	0.029	ND
Sample Variance	0.0	47.1	7.6	34.10	0.14	0.001	0.13	0.002	0.21	0.001	0.001	ND
Kurtosis	-0.1	-1.3	-0.7	12.40	1.50	12.960	2.24	-1.476	1.75	0.460	0.759	ND
Skewness	0.0	-0.1	-0.6	3.25	0.56	3.387	0.72	0.068	0.41	0.556	0.685	ND
Range	0.6	20.2	9.1	28.30	1.58	0.160	1.66	0.120	2.20	0.150	0.110	0.00
Minimum	7.1	0.2	2.0	0.60	0.52	0.000	0.54	0.000	0.00	0.000	0.000	0.00
Maximum	7.7	20.4	11.1	28.90	2.10	0.160	2.20	0.120	2.20	0.150	0.110	0.00
Count	23	23	23	23	18	18	23	22	22	23	23	0
Confidence Level(95.0%)	0.1	3.0	1.2	2.53	0.19	0.017	0.15	0.019	0.20	0.017	0.013	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	490.9	485.4	2.3	5.5	4.3	760	46.4	217	1.9	324
Standard Error	ND	ND	20.4	20.6	0.3	0.5	0.5	30	2.2	77	0.1	155
Median	ND	ND	510.0	506.8	2.2	5.2	4.2	788	48.0	88	1.9	88
Mode	ND	ND	510.0	586.6	2.8	11.0	4.2	ND	32.0	21	1.3	0
Standard Deviation	ND	ND	97.9	98.9	1.6	2.5	2.4	146	10.5	370	0.7	742
Sample Variance	ND	ND	9581.0	9784.7	2.6	6.0	5.8	21354	111.0	137102	0.4	550069
Kurtosis	ND	ND	0.3	0.3	1.5	0.5	7.8	0	0.2	12	-0.6	19
Skewness	ND	ND	-0.9	-0.9	1.0	1.0	2.4	-1	-0.2	3	0.0	4
Range	0.0	0.0	380.0	381.0	6.4	8.4	11.4	578	45.0	1695	2.5	3600
Minimum	0.0	0.0	270.0	264.4	0.0	2.6	1.8	449	25.0	5	0.7	0
Maximum	0.0	0.0	650.0	645.4	6.4	11.0	13.2	1027	70.0	1700	3.2	3600
Count	0	0	23	23	23	23	23	23	23	23	23	23
Confidence Level(95.0%)	ND	ND	42.3	42.8	0.7	1.1	1.0	63	4.6	160	0.3	321

ND = No Data

Provisional MMSD Water Quality Data

HWY 145, NORTH OF FREISTADT ROAD - SITE 36
MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	78.52	38.09	0.0	2.6	5.6	2.8	0.5	12.2	0.1	1.9	4.0	ND
Standard Error	3.36	1.91	0.0	0.5	0.4	0.2	0.2	2.7	0.1	0.6	1.1	ND
Median	79.00	38.00	0.0	3.8	5.4	3.0	0.0	9.0	0.0	0.0	0.0	ND
Mode	63.00	21.00	0.0	0.0	5.5	3.6	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	16.13	9.17	0.0	2.6	1.9	1.0	1.1	13.1	0.3	2.9	5.0	ND
Sample Variance	260.17	84.08	0.0	6.6	3.6	1.0	1.1	172.5	0.1	8.6	25.3	ND
Kurtosis	1.03	0.00	ND	-1.2	7.0	-0.3	4.2	4.4	8.7	1.2	-1.3	ND
Skewness	0.34	-0.17	ND	0.3	1.1	0.2	2.3	1.9	3.2	1.5	0.7	ND
Range	73.00	37.00	0.0	7.8	11.3	3.8	3.8	55.0	1.1	9.3	13.0	0.0
Minimum	47.00	21.00	0.0	0.0	0.7	1.2	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	120.00	58.00	0.0	7.8	12.0	5.0	3.8	55.0	1.1	9.3	13.0	0.0
Count	23	23	23	23	23	23	23	23	23	22	22	0
Confidence Level(95.0%)	6.98	3.97	0.0	1.1	0.8	0.4	0.5	5.7	0.1	1.3	2.2	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	353	305	0.5	10.6	84.3	71.8	12.4	12.1
Standard Error	16	10	0.2	1.1	3.3	3.1	0.7	0.6
Median	350	320	0.0	12.0	85.0	76.0	13.0	12.0
Mode	350	330	0.0	13.0	95.0	77.0	11.0	11.0
Standard Deviation	74	50	1.1	4.6	15.7	14.9	3.2	3.0
Sample Variance	5547	2499	1.2	20.7	247.7	223.3	10.3	9.1
Kurtosis	1	0	2.9	-0.6	0.6	0.4	0.0	-0.2
Skewness	0	-1	2.0	0.2	-1.1	-1.0	0.3	0.3
Range	330	180	3.5	15.8	53.0	52.0	13.2	11.6
Minimum	200	180	0.0	4.2	47.0	38.0	6.8	6.4
Maximum	530	360	3.5	20.0	100.0	90.0	20.0	18.0
Count	23	23	22	17	23	23	23	23
Confidence Level(95.0%)	32	22	0.5	2.3	6.8	6.5	1.4	1.3

ND = No Data

Provisional MMSD Water Quality Data

GOOD HOPE ROAD, EAST OF 124TH STREET - SITE 37
MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	.C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.8	11.6	9.5	9.50	0.67	0.019	0.63	0.049	0.88	0.083	0.036	ND
Standard Error	0.0	1.6	0.6	2.44	0.09	0.003	0.08	0.013	0.08	0.011	0.007	ND
Median	7.8	12.8	9.2	5.06	0.59	0.015	0.50	0.033	0.81	0.070	0.041	ND
Mode	7.7	12.8	ND	ND	1.10	0.012	1.10	0.000	1.00	0.150	0.000	ND
Standard Deviation	0.1	7.2	2.7	11.17	0.39	0.012	0.38	0.057	0.36	0.050	0.031	ND
Sample Variance	0.0	52.0	7.2	124.84	0.15	0.000	0.14	0.003	0.13	0.002	0.001	ND
Kurtosis	-0.4	-1.2	-1.1	5.28	1.59	1.399	1.83	0.317	0.94	-1.002	-1.059	ND
Skewness	0.6	-0.2	0.1	2.40	1.25	1.002	1.35	1.039	1.00	0.089	0.255	ND
Range	0.5	23.2	9.2	40.31	1.52	0.048	1.51	0.190	1.38	0.170	0.090	0.00
Minimum	7.6	0.5	4.7	1.29	0.18	0.000	0.19	0.000	0.42	0.000	0.000	0.00
Maximum	8.2	23.7	13.8	41.60	1.70	0.048	1.70	0.190	1.80	0.170	0.090	0.00
Count	21	21	21	21	17	17	21	20	20	21	21	0
Confidence Level(95.0%)	0.1	3.3	1.2	5.09	0.20	0.006	0.17	0.027	0.17	0.023	0.014	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	641.4	628.8	3.8	12.6	10.7	1040	164.0	1323	2.6	1532
Standard Error	ND	ND	22.0	22.0	0.4	1.4	1.3	38	9.7	581	0.1	710
Median	ND	ND	660.0	643.0	3.6	12.0	9.7	1079	160.0	370	2.6	290
Mode	ND	ND	710.0	ND	2.4	12.0	ND	ND	140.0	ND	ND	ND
Standard Deviation	ND	ND	100.9	101.0	1.9	6.2	6.0	175	44.5	2534	0.7	3253
Sample Variance	ND	ND	10182.9	10207.5	3.7	38.8	35.4	30465	1980.5	6422088	0.4	10581939
Kurtosis	ND	ND	0.6	0.6	1.5	-0.5	-1.2	1	2.1	8	-0.1	8
Skewness	ND	ND	-0.1	-0.1	1.1	0.4	0.4	0	0.4	3	0.7	3
Range	0.0	0.0	420.0	421.0	8.0	22.4	18.0	771	215.0	9941	2.2	12964
Minimum	0.0	0.0	460.0	443.0	1.0	3.6	2.7	673	65.0	59	1.8	36
Maximum	0.0	0.0	880.0	864.0	9.0	26.0	20.7	1444	280.0	10000	4.0	13000
Count	0	0	21	21	21	21	21	21	21	19	19	21
Confidence Level(95.0%)	ND	ND	45.9	46.0	0.9	2.8	2.7	79	20.3	1221	0.3	1481

ND = No Data

Provisional MMSD Water Quality Data

GOOD HOPE ROAD, EAST OF 124TH STREET - SITE 37
MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	72.62	34.57	0.0	4.4	7.1	3.1	0.6	15.4	0.2	1.7	3.4	ND
Standard Error	2.95	1.59	0.0	0.3	0.5	0.2	0.3	1.8	0.1	0.7	1.0	ND
Median	72.00	36.00	0.0	4.3	6.7	3.1	0.0	14.0	0.0	0.0	0.0	ND
Mode	100.00	38.00	0.0	4.3	6.0	3.1	0.0	12.0	0.0	0.0	0.0	ND
Standard Deviation	13.52	7.27	0.0	1.2	2.2	1.1	1.4	8.2	0.4	3.0	4.5	ND
Sample Variance	182.85	52.86	0.0	1.4	4.8	1.3	2.0	67.2	0.2	9.0	20.2	ND
Kurtosis	0.69	-0.77	ND	9.6	4.3	0.7	2.2	1.0	3.3	0.9	-0.9	ND
Skewness	0.17	-0.21	ND	-2.3	1.9	0.7	1.9	0.9	2.2	1.5	0.8	ND
Range	57.00	27.00	0.0	6.6	9.5	4.8	4.1	34.0	1.3	8.1	13.0	0.0
Minimum	43.00	21.00	0.0	0.0	4.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	100.00	48.00	0.0	6.6	14.0	6.0	4.1	34.0	1.3	8.1	13.0	0.0
Count	21	21	21	21	21	21	21	21	21	21	20	0
Confidence Level(95.0%)	6.16	3.31	0.0	0.5	1.0	0.5	0.6	3.7	0.2	1.4	2.1	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	324	253	1.5	12.0	66.2	58.6	7.6	7.4
Standard Error	14	10	0.4	1.1	2.6	2.5	0.4	0.4
Median	340	270	1.1	13.5	69.0	63.0	8.0	7.5
Mode	300	290	0.0	15.0	74.0	63.0	8.5	8.1
Standard Deviation	62	45	1.7	4.4	11.7	11.5	1.9	1.9
Sample Variance	3895	2021	2.9	19.5	138.0	132.3	3.7	3.5
Kurtosis	0	0	-0.9	-0.6	-0.6	-0.6	-0.1	0.9
Skewness	0	-1	0.6	-0.2	-0.7	-0.6	0.5	0.8
Range	250	170	4.9	15.5	41.0	39.0	7.0	7.4
Minimum	200	150	0.0	4.5	42.0	36.0	5.0	4.6
Maximum	450	320	4.9	20.0	83.0	75.0	12.0	12.0
Count	21	21	20	16	21	21	21	21
Confidence Level(95.0%)	28	20	0.8	2.4	5.3	5.2	0.9	0.9

ND = No Data

Provisional MMSD Water Quality Data

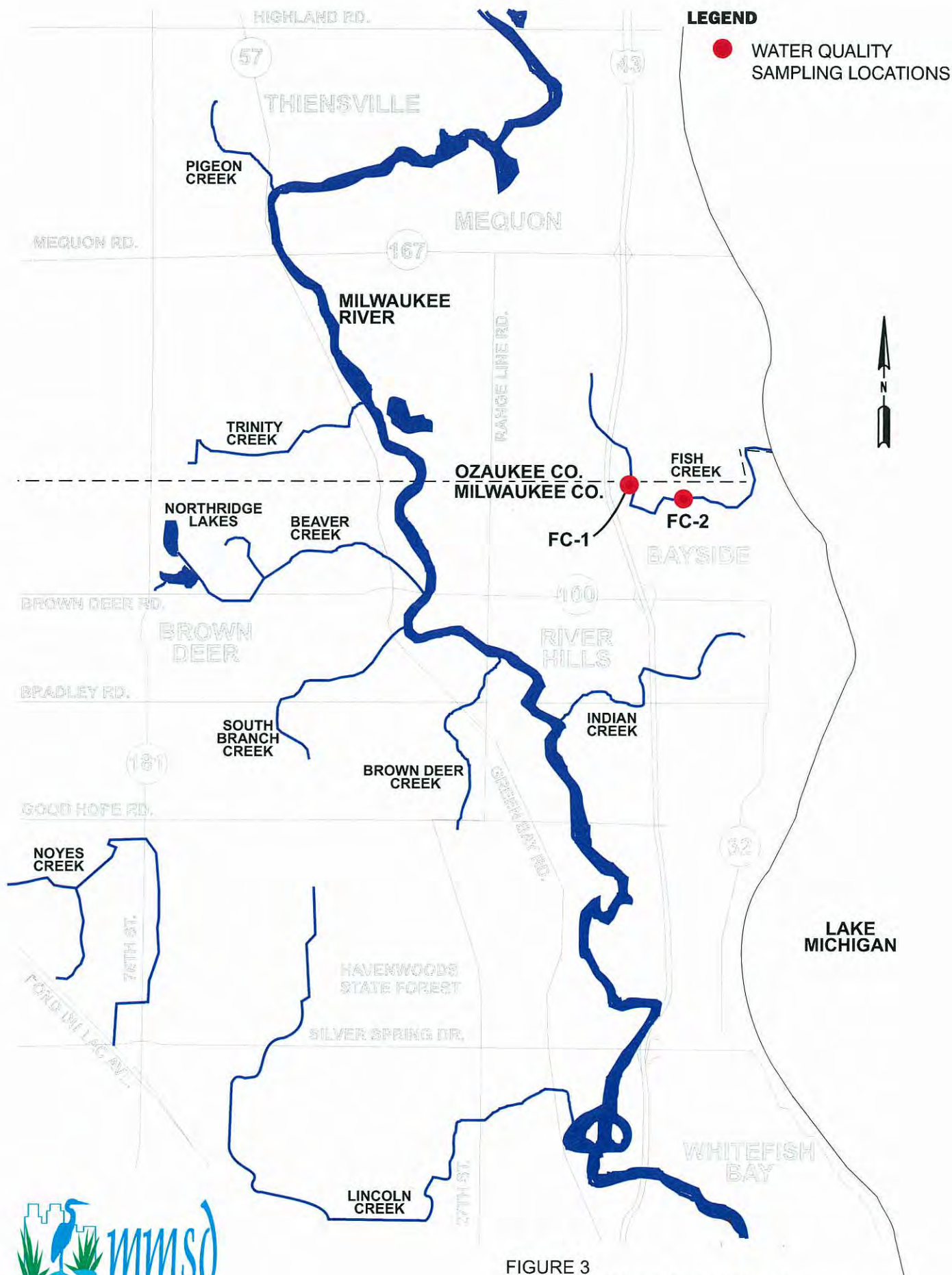
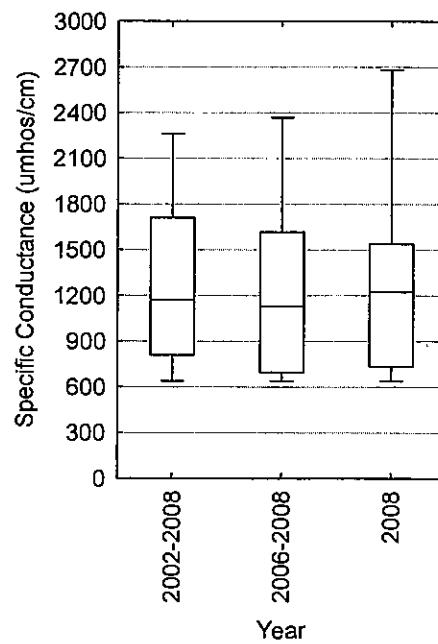
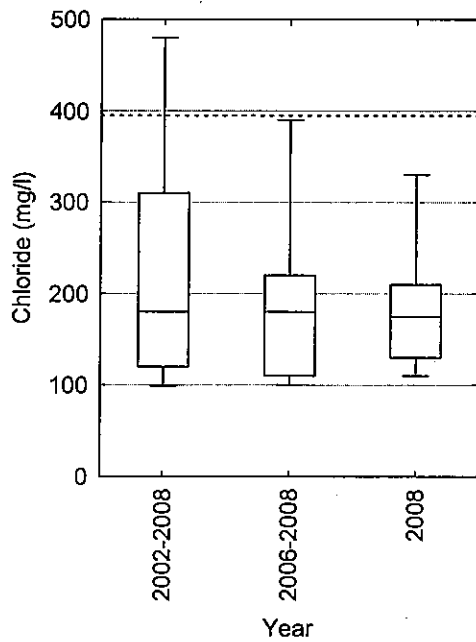
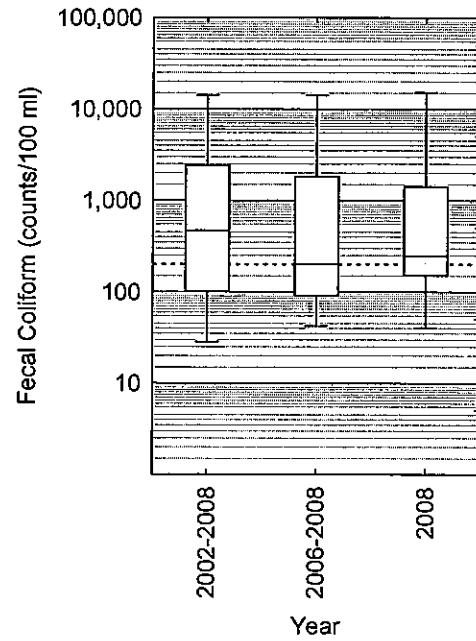
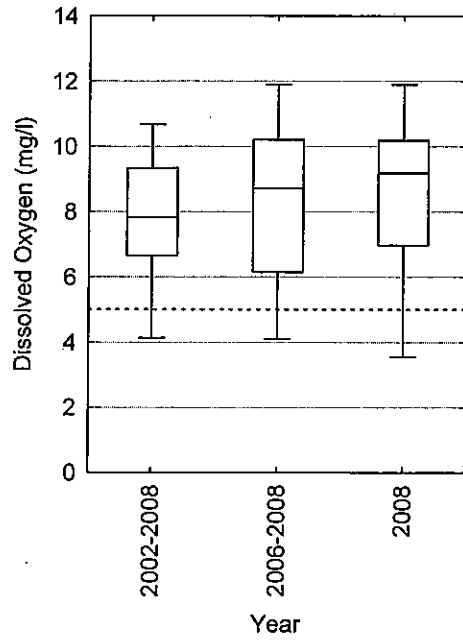


FIGURE 3
FISH CREEK (FC) SURVEY
WATER QUALITY SAMPLING LOCATIONS

1/18/02

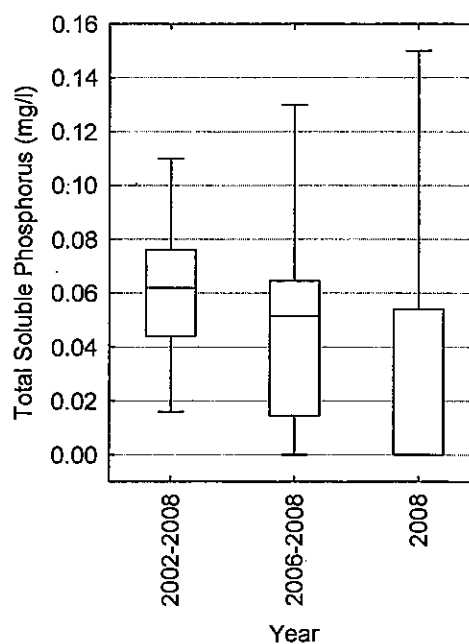
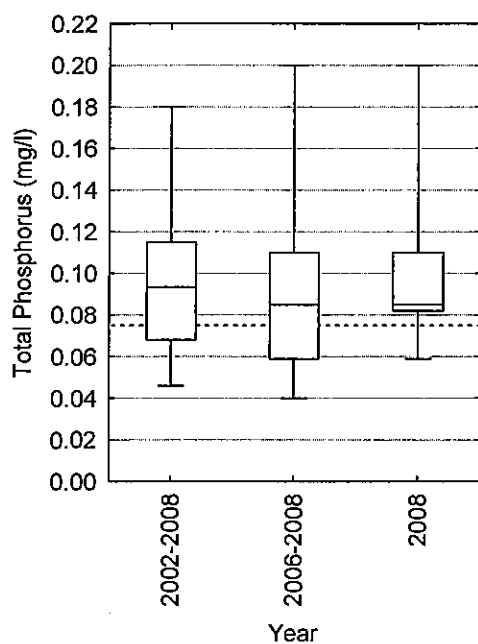
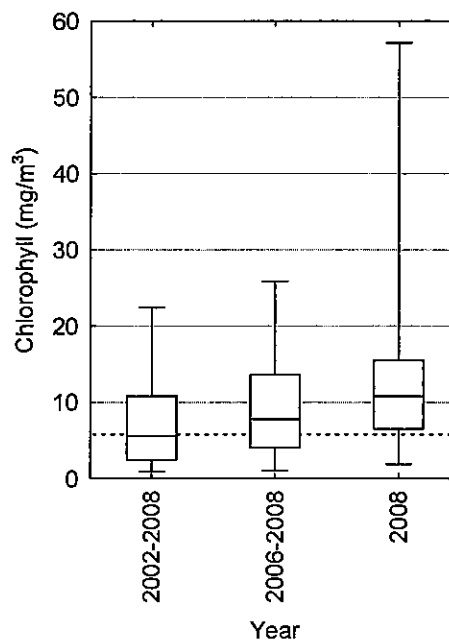
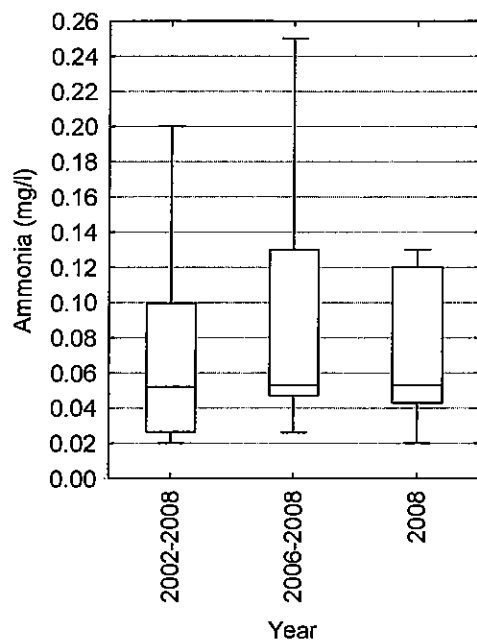
02-034 pg10

MMSD Water Quality Monitoring Program Data
Fish Creek at Port Washington Rd. and Katherine Ln., Site FC-01



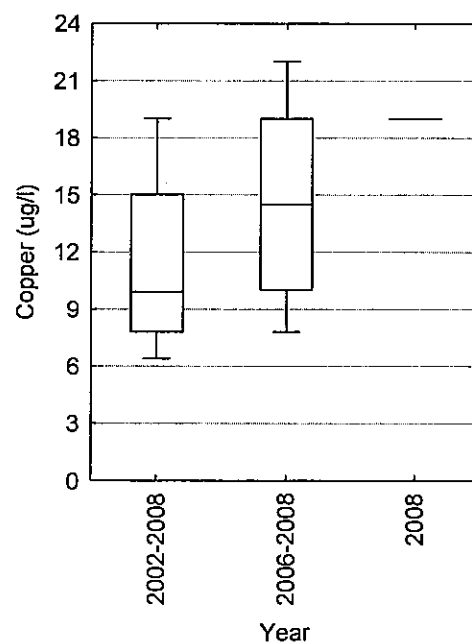
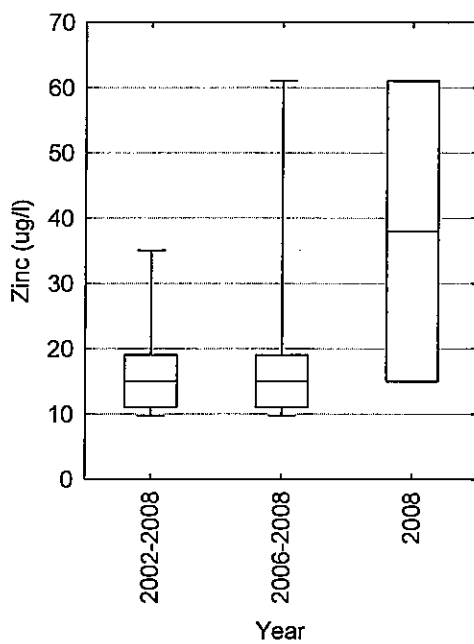
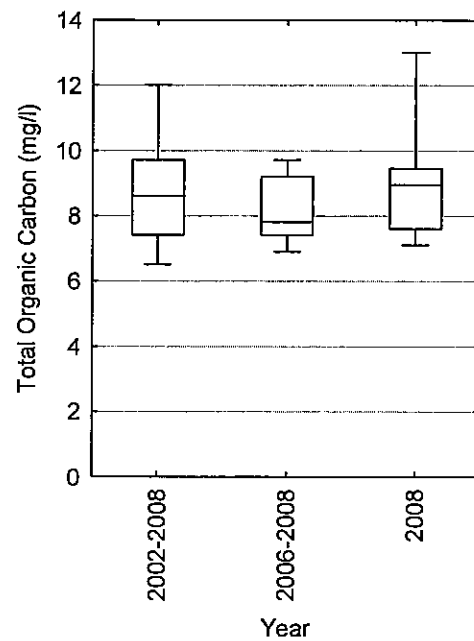
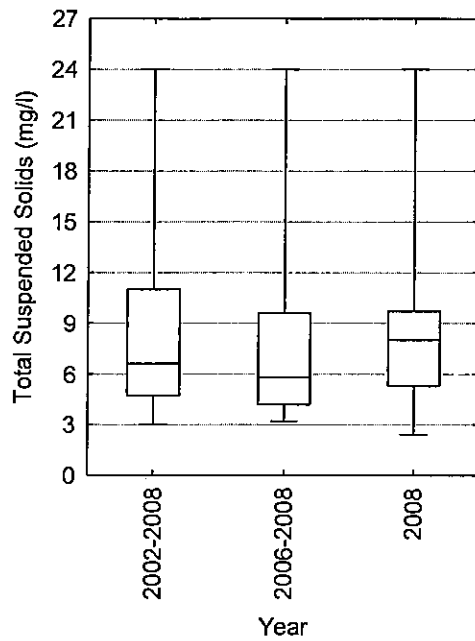
— Median □ 25%-75% ▤ 10%-90%
 — WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Fish Creek at Port Washington Rd. and Katherine Ln., Site FC-01



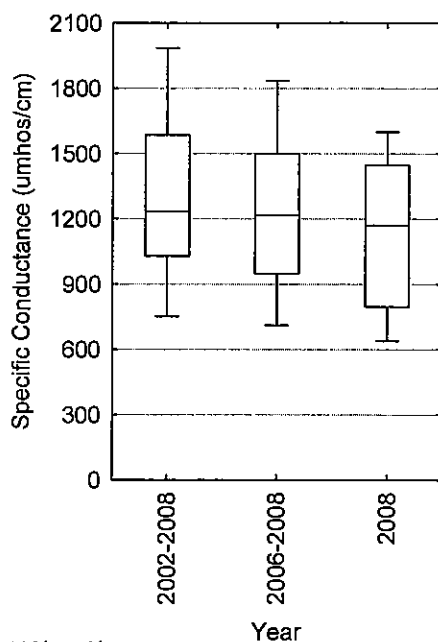
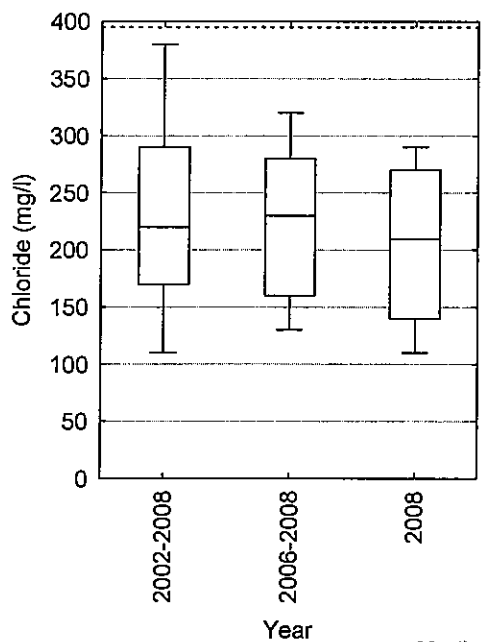
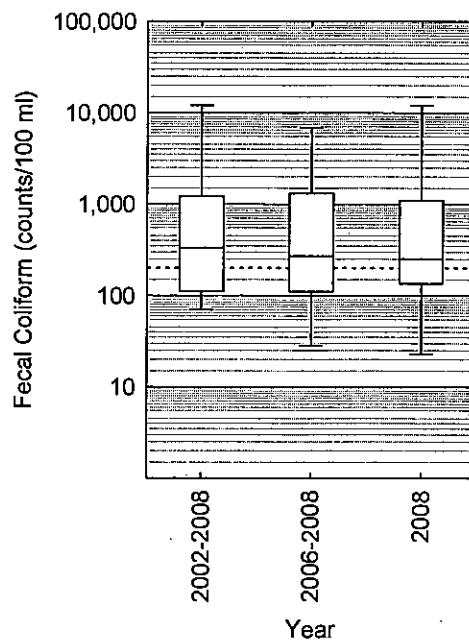
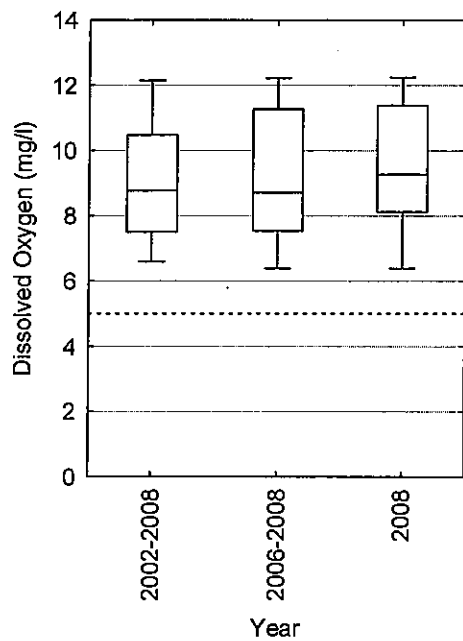
— Median □ 25%-75% ▮ 10%-90%
 --- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Fish Creek at Port Washington Rd. and Katherine Ln., Site FC-01



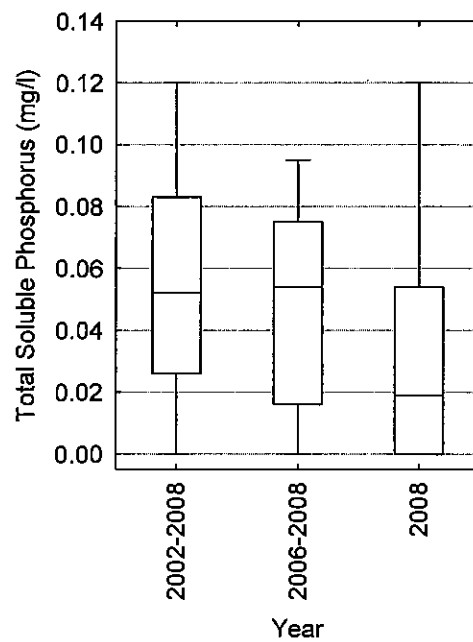
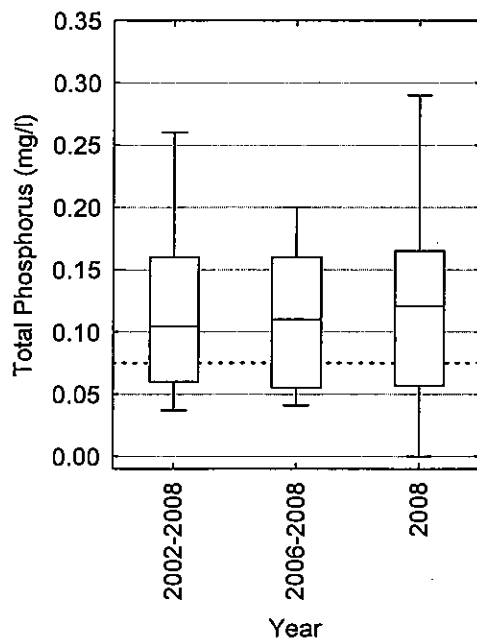
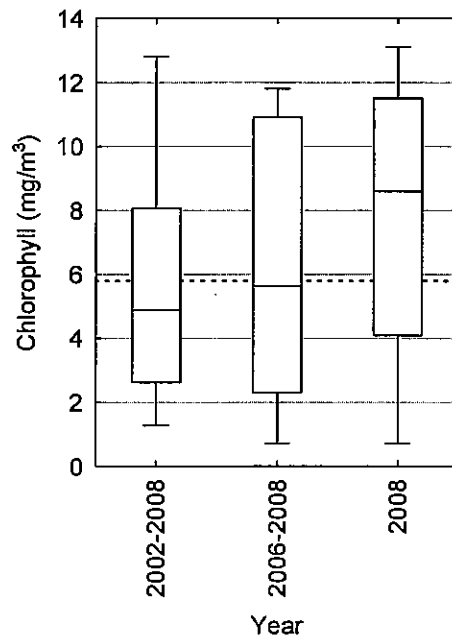
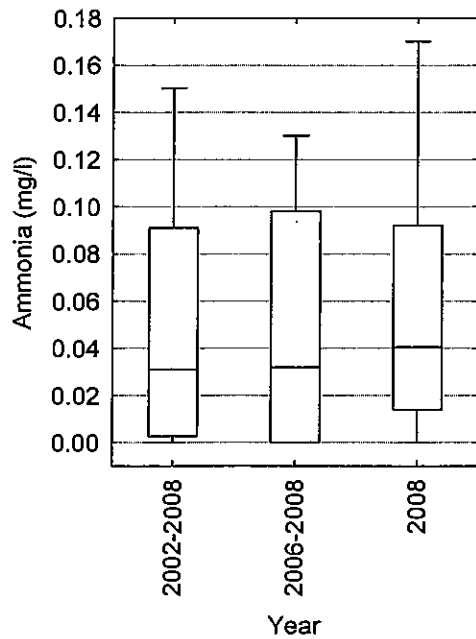
— Median □ 25%-75% I 10%-90%

MMSD Water Quality Monitoring Program Data
Fish Creek at Ravine Baye Rd., Site FC-02



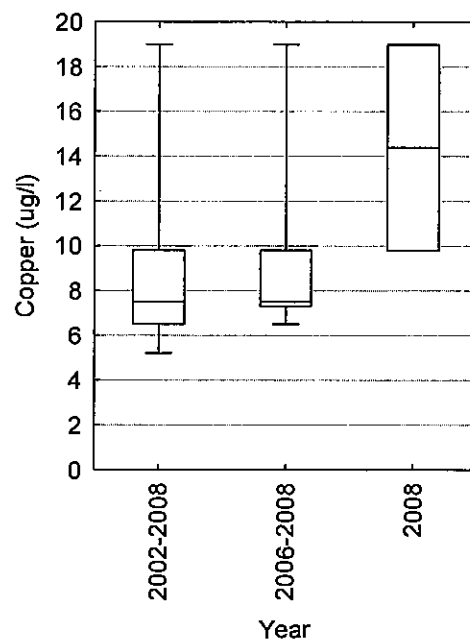
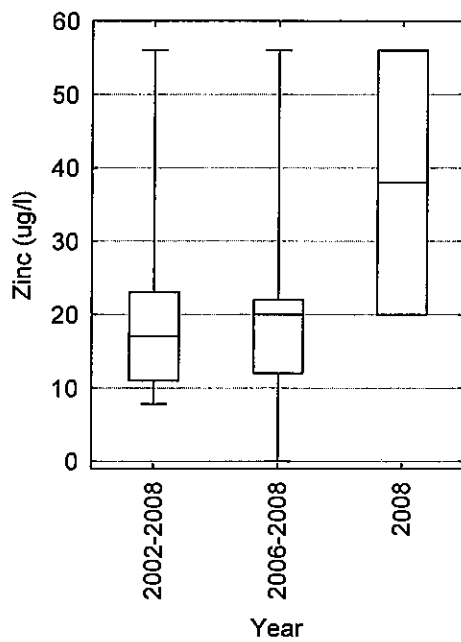
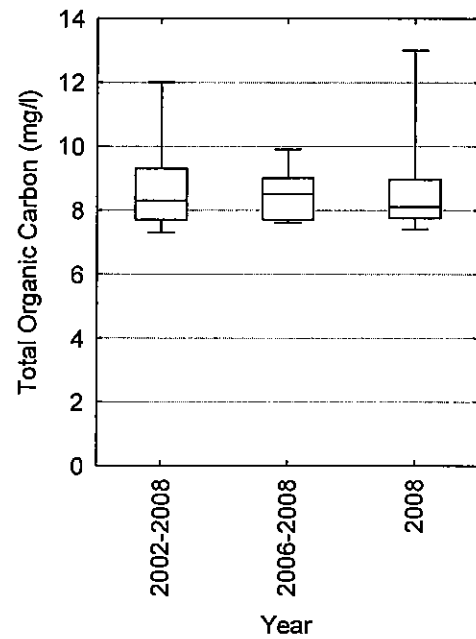
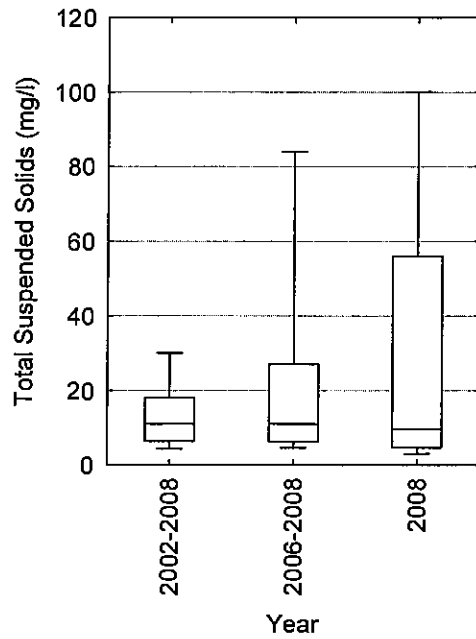
— Median □ 25%-75% ▤ 10%-90%
 --- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Fish Creek at Ravine Baye Rd., Site FC-02



— Median □ 25%-75% ▮ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Fish Creek at Ravine Bay Rd., Site FC-02



— Median □ 25%-75% ▤ 10%-90%

PORT WASHINGTON ROAD AND KATHERINE LANE - SITE 1
FISH CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.8	14.2	8.5	15.58	0.44	0.014	0.41	0.063	0.88	0.088	0.032	ND
Standard Error	0.1	1.9	0.9	6.19	0.09	0.005	0.09	0.016	0.11	0.020	0.019	ND
Median	7.7	16.0	9.2	10.81	0.44	0.007	0.42	0.051	0.88	0.085	0.000	ND
Mode	ND	ND	ND	13.60	ND	ND	0.11	ND	ND	ND	0.000	ND
Standard Deviation	0.3	5.3	2.7	17.51	0.25	0.013	0.27	0.046	0.30	0.056	0.054	ND
Sample Variance	0.1	28.0	7.2	306.77	0.06	0.000	0.07	0.002	0.09	0.003	0.003	ND
Kurtosis	-1.8	-0.6	0.5	6.12	-1.43	3.762	-1.66	-0.980	-1.84	2.878	3.375	ND
Skewness	0.4	-0.7	-0.8	2.37	-0.13	1.893	0.16	0.350	0.15	0.766	1.848	ND
Range	0.8	15.4	8.3	55.23	0.64	0.036	0.65	0.130	0.76	0.200	0.150	0.00
Minimum	7.5	5.1	3.6	1.87	0.11	0.004	0.11	0.000	0.54	0.000	0.000	0.00
Maximum	8.3	20.5	11.9	57.10	0.75	0.040	0.76	0.130	1.30	0.200	0.150	0.00
Count	8	8	8	8	7	7	8	8	8	8	8	0
Confidence Level(95.0%)	0.3	4.4	2.2	14.64	0.23	0.012	0.22	0.038	0.25	0.047	0.045	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	611.3	602.2	4.5	9.1	7.6	1289	183.8	2329	2.6	2295
Standard Error	ND	ND	70.9	72.1	0.9	2.3	2.4	239	24.9	1823	0.3	1562
Median	ND	ND	575.0	568.3	4.7	8.0	4.9	1223	175.0	245	2.4	580
Mode	ND	ND	ND	ND	6.4	ND	ND	ND	ND	ND	ND	ND
Standard Deviation	ND	ND	200.7	204.0	2.5	6.6	6.9	675	70.3	5155	0.8	4417
Sample Variance	ND	ND	40269.6	41599.3	6.4	43.2	47.8	455780	4941.1	26575413	0.7	19511843
Kurtosis	ND	ND	0.9	0.8	-1.8	4.7	2.2	2	2.2	8	0.8	7
Skewness	ND	ND	0.7	0.6	0.0	2.0	1.7	1	1.3	3	0.9	3
Range	0.0	0.0	650.0	665.6	6.8	21.6	20.0	2044	220.0	14960	2.6	12965
Minimum	0.0	0.0	340.0	316.0	1.2	2.4	2.1	638	110.0	40	1.6	35
Maximum	0.0	0.0	990.0	981.6	8.0	24.0	22.1	2682	330.0	15000	4.2	13000
Count	0	0	8	8	8	8	8	8	8	8	8	8
Confidence Level(95.0%)	ND	ND	167.8	170.5	2.1	5.5	5.8	564	58.8	4310	0.7	3693

ND = No Data

Provisional MMSD Water Quality Data

PORT WASHINGTON ROAD AND KATHERINE LANE - SITE 1
FISH CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	46.00	21.45	0.0	2.6	19.0	6.6	4.7	38.0	0.6	0.0	0.0	0.0
Standard Error	21.00	12.55	0.0	2.6	0.0	1.0	4.7	23.0	0.6	0.0	0.0	0.0
Median	46.00	21.45	0.0	2.6	19.0	6.6	4.7	38.0	0.6	0.0	0.0	0.0
Mode	ND	ND	0.0	ND	19.0	ND	ND	ND	ND	ND	ND	0.0
Standard Deviation	29.70	17.75	0.0	3.6	0.0	1.3	6.6	32.5	0.8	ND	ND	0.0
Sample Variance	882.00	315.01	0.0	13.0	0.0	1.8	44.2	1058.0	0.6	ND	ND	0.0
Kurtosis	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Skewness	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Range	42.00	25.10	0.0	5.1	0.0	1.9	9.4	46.0	1.1	0.0	0.0	0.0
Minimum	25.00	8.90	0.0	0.0	19.0	5.6	0.0	15.0	0.0	0.0	0.0	0.0
Maximum	67.00	34.00	0.0	5.1	19.0	7.5	9.4	61.0	1.1	0.0	0.0	0.0
Count	2	2	2	2	2	2	2	2	2	1	1	2
Confidence Level(95.0%)	266.83	159.46	0.0	32.4	0.0	12.1	59.7	292.2	7.0	ND	ND	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	205	186	1.7	7.8	55.3	46.3	9.0	8.9
Standard Error	106	21	0.9	1.5	4.6	5.0	0.7	0.8
Median	205	195	0.0	6.0	58.0	49.5	9.0	8.6
Mode	ND	190	0.0	5.4	59.0	50.0	ND	ND
Standard Deviation	149	60	2.6	4.0	12.9	14.3	1.9	2.2
Sample Variance	22261	3617	6.9	15.6	166.8	203.9	3.4	5.0
Kurtosis	ND	4	0.9	3.7	4.0	4.7	3.0	5.0
Skewness	ND	-2	1.4	1.9	-1.5	-1.9	1.5	2.1
Range	211	199	6.9	11.3	45.0	49.0	5.9	7.1
Minimum	99	51	0.0	4.7	27.0	14.0	7.1	6.9
Maximum	310	250	6.9	16.0	72.0	63.0	13.0	14.0
Count	2	8	8	7	8	8	8	8
Confidence Level(95.0%)	1341	50	2.2	3.7	10.8	11.9	1.6	1.9

ND = No Data

Provisional MMSD Water Quality Data

RAVINE BAYE ROAD - SITE 2
FISH CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.8	13.9	9.5	7.77	0.37	0.018	0.35	0.058	1.15	0.122	0.033	ND
Standard Error	0.1	1.9	0.7	1.65	0.10	0.006	0.10	0.020	0.31	0.032	0.015	ND
Median	7.7	15.2	9.3	8.59	0.32	0.013	0.27	0.041	0.73	0.121	0.019	ND
Mode	ND	ND	ND	ND	0.19	ND	0.20	0.000	0.69	ND	0.000	ND
Standard Deviation	0.3	5.3	2.1	4.67	0.27	0.015	0.29	0.058	0.87	0.091	0.043	ND
Sample Variance	0.1	28.3	4.3	21.81	0.07	0.000	0.08	0.003	0.75	0.008	0.002	ND
Kurtosis	0.2	-0.5	-1.0	-1.51	-0.96	0.709	-0.56	0.839	2.64	0.566	1.410	ND
Skewness	0.3	-0.6	0.0	-0.44	0.84	1.273	0.97	1.067	1.78	0.624	1.271	ND
Range	0.9	15.4	5.8	12.38	0.70	0.041	0.73	0.170	2.53	0.290	0.120	0.00
Minimum	7.3	4.8	6.4	0.72	0.08	0.004	0.08	0.000	0.47	0.000	0.000	0.00
Maximum	8.3	20.2	12.2	13.10	0.78	0.045	0.81	0.170	3.00	0.290	0.120	0.00
Count	8	8	8	8	7	7	8	8	8	8	8	0
Confidence Level(95.0%)	0.2	4.4	1.7	3.90	0.25	0.014	0.24	0.048	0.72	0.076	0.036	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	691.3	660.8	7.1	30.5	16.8	1133	205.0	1872	2.6	1492
Standard Error	ND	ND	64.3	73.3	2.8	13.8	7.9	129	24.8	1455	0.3	1220
Median	ND	ND	695.0	687.2	3.2	9.6	9.7	1171	210.0	250	2.4	180
Mode	ND	ND	ND	ND	3.0	ND	ND	ND	ND	ND	ND	180
Standard Deviation	ND	ND	182.0	207.3	7.9	39.0	22.2	366	70.1	4116	0.8	3450
Sample Variance	ND	ND	33126.8	42984.0	61.9	1523.4	494.0	134141	4914.3	16943513	0.7	11904755
Kurtosis	ND	ND	-1.2	-1.2	0.7	0.0	7.0	-2	-1.8	8	1.0	8
Skewness	ND	ND	0.3	0.0	1.5	1.3	2.6	0	-0.1	3	0.6	3
Range	0.0	0.0	510.0	585.8	20.4	97.0	68.2	961	180.0	11977	2.7	9958
Minimum	0.0	0.0	470.0	386.0	1.6	3.0	2.4	639	110.0	23	1.4	42
Maximum	0.0	0.0	980.0	971.8	22.0	100.0	70.6	1600	290.0	12000	4.1	10000
Count	0	0	8	8	8	8	8	8	8	8	8	8
Confidence Level(95.0%)	ND	ND	152.2	173.3	6.6	32.6	18.6	306	58.6	3441	0.7	2885

ND = No Data

Provisional MMSD Water Quality Data

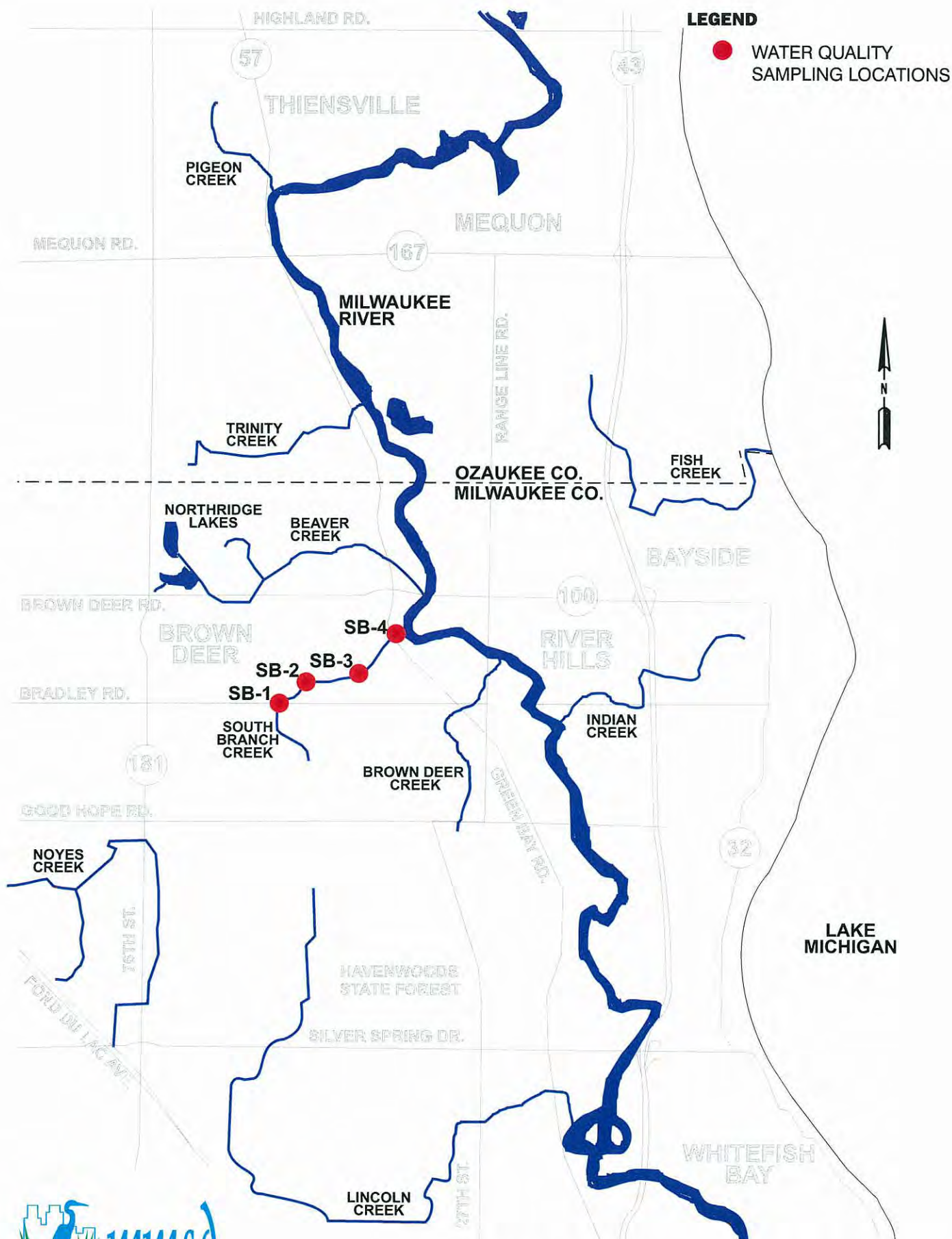
RAVINE BAYE ROAD - SITE 2
FISH CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	56.50	27.00	0.0	6.7	14.4	10.3	3.5	38.0	0.0	0.0	0.0	0.0
Standard Error	21.50	12.00	0.0	1.9	4.6	3.7	3.5	18.0	0.0	0.0	0.0	0.0
Median	56.50	27.00	0.0	6.7	14.4	10.3	3.5	38.0	0.0	0.0	0.0	0.0
Mode	ND	ND	0.0	ND	ND	ND	ND	ND	0.0	ND	ND	0.0
Standard Deviation	30.41	16.97	0.0	2.6	6.5	5.2	4.9	25.5	0.0	ND	ND	0.0
Sample Variance	924.50	288.00	0.0	6.8	42.3	27.4	23.8	648.0	0.0	ND	ND	0.0
Kurtosis	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Skewness	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Range	43.00	24.00	0.0	3.7	9.2	7.4	6.9	36.0	0.0	0.0	0.0	0.0
Minimum	35.00	15.00	0.0	4.8	9.8	6.6	0.0	20.0	0.0	0.0	0.0	0.0
Maximum	78.00	39.00	0.0	8.5	19.0	14.0	6.9	56.0	0.0	0.0	0.0	0.0
Count	2	2	2	2	2	2	2	2	2	1	1	2
Confidence Level(95.0%)	273.18	152.47	0.0	23.5	58.4	47.0	43.8	228.7	0.0	ND	ND	0.0

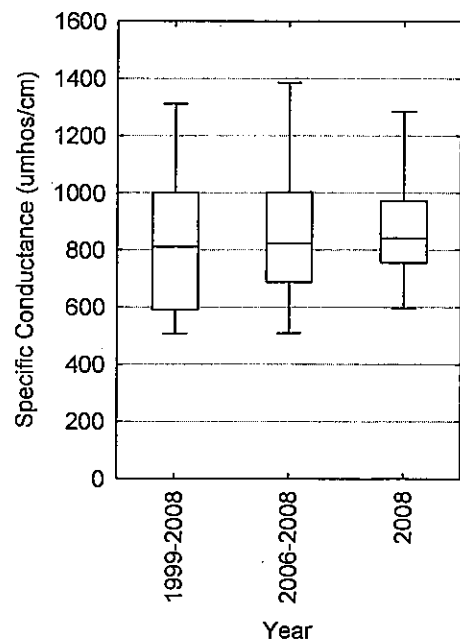
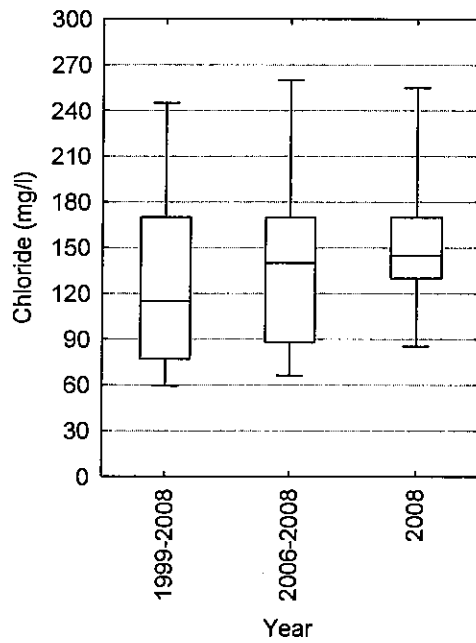
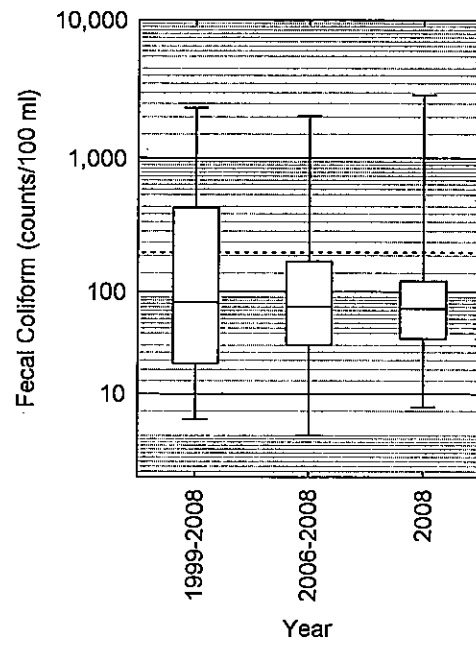
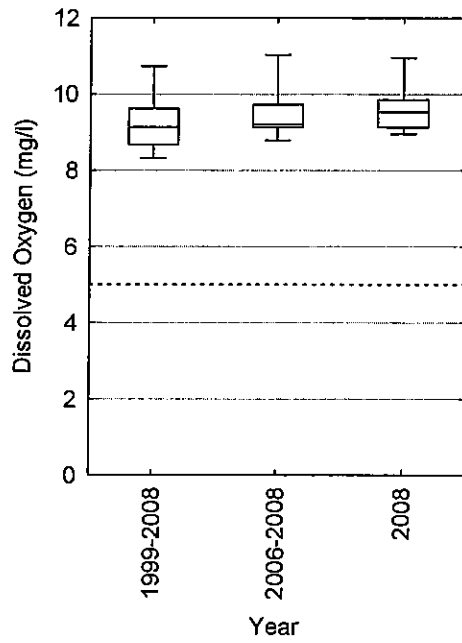
VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	250	205	1.5	7.0	59.5	50.8	8.8	8.8
Standard Error	100	26	1.2	1.5	5.2	5.8	0.6	0.7
Median	250	215	0.0	5.5	62.0	53.5	8.1	7.8
Mode	ND	ND	0.0	5.1	ND	ND	ND	ND
Standard Deviation	141	73	3.5	4.0	14.8	16.5	1.8	2.1
Sample Variance	20000	5398	12.1	16.2	220.0	272.8	3.3	4.4
Kurtosis	ND	1	6.8	6.4	1.3	1.8	5.4	1.2
Skewness	ND	-1	2.6	2.5	-1.1	-1.2	2.3	1.5
Range	200	222	9.9	11.4	46.0	52.0	5.6	5.8
Minimum	150	58	0.0	4.6	30.0	17.0	7.4	7.2
Maximum	350	280	9.9	16.0	76.0	69.0	13.0	13.0
Count	2	8	8	7	8	8	8	8
Confidence Level(95.0%)	1271	61	2.9	3.7	12.4	13.8	1.5	1.8

ND = No Data

Provisional MMSD Water Quality Data

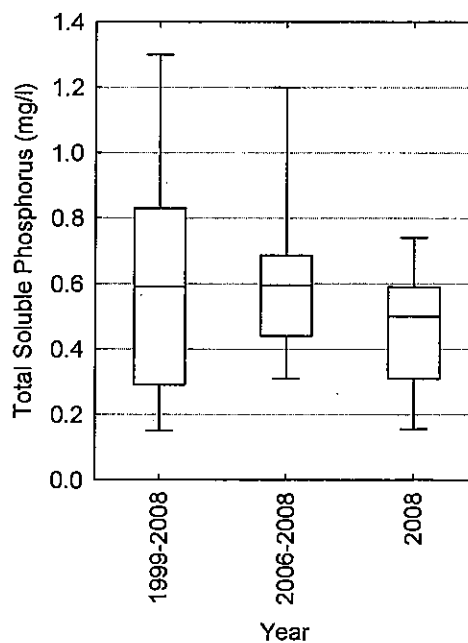
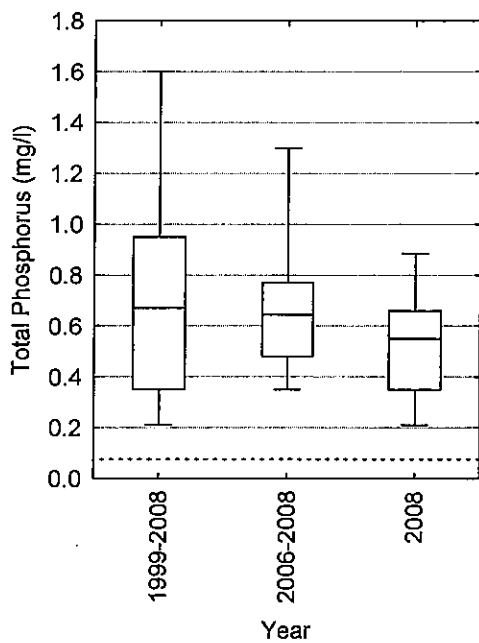
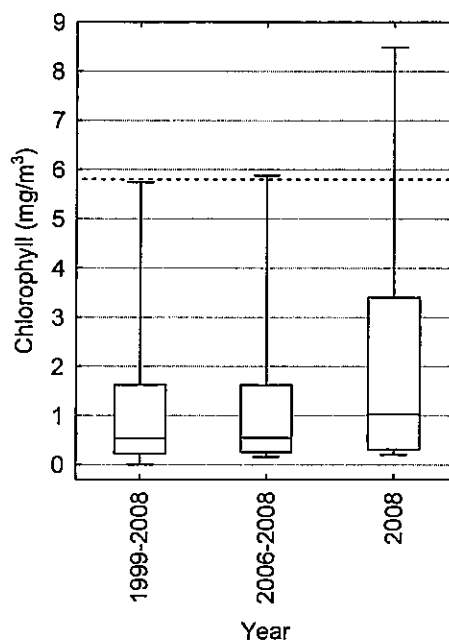
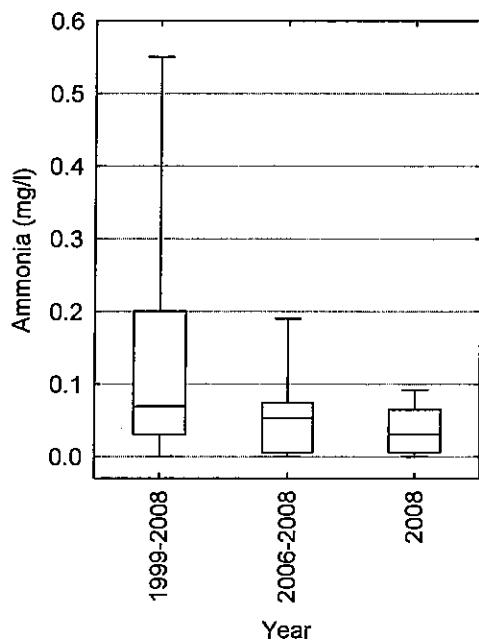


MMSD Water Quality Monitoring Program Data
Southbranch Creek at Bradley Rd., Site SB-01



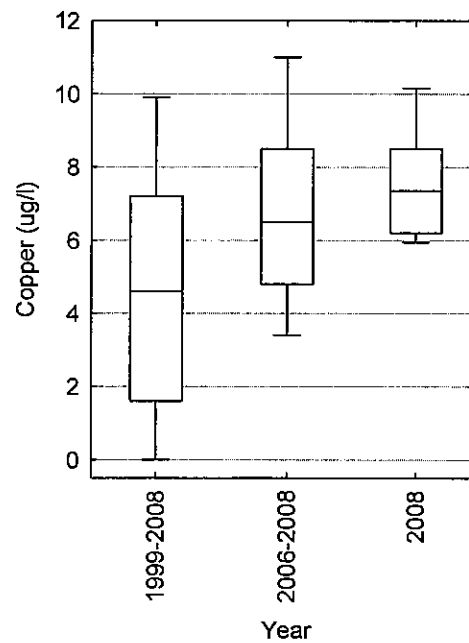
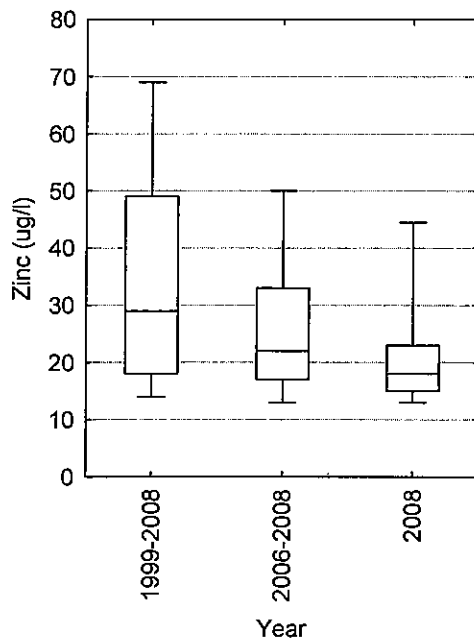
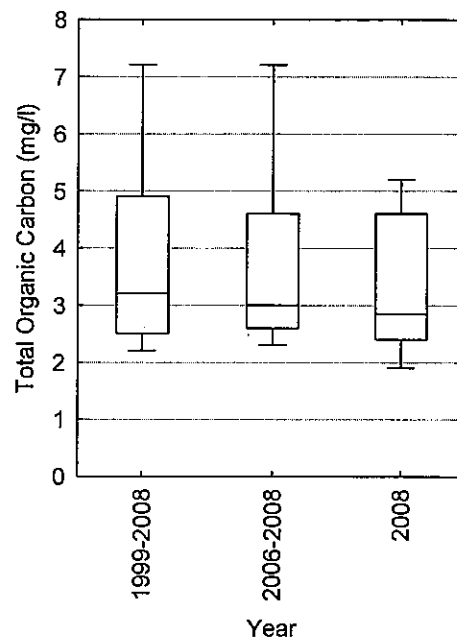
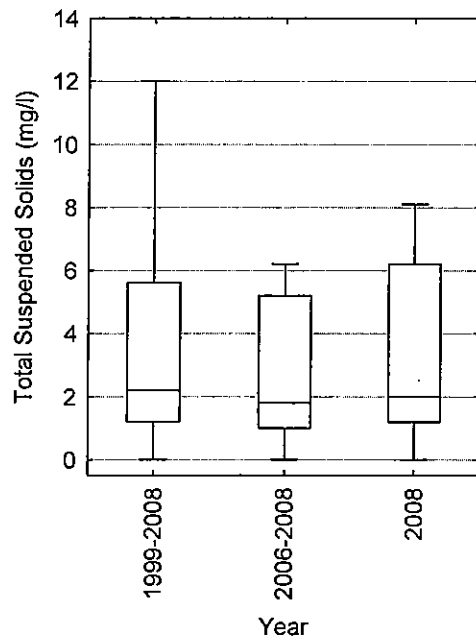
— Median □ 25%-75% ▮ 10%-90%
---- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Southbranch Creek at Bradley Rd., Site SB-01



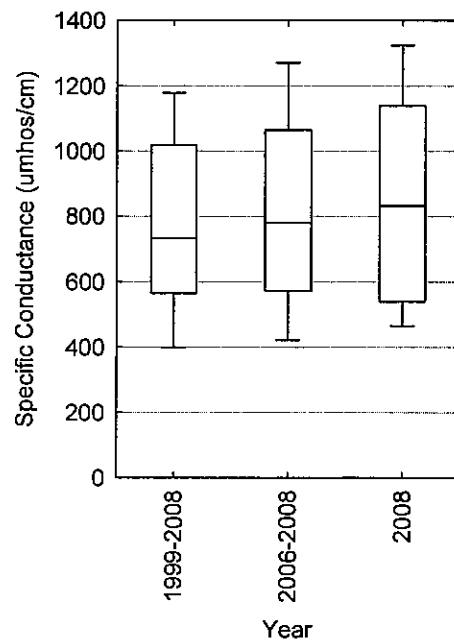
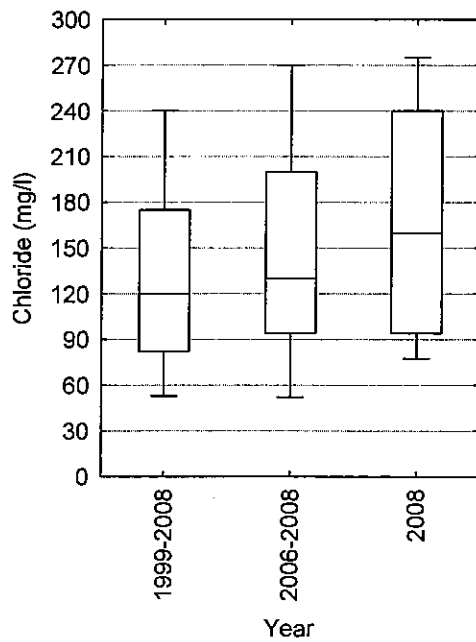
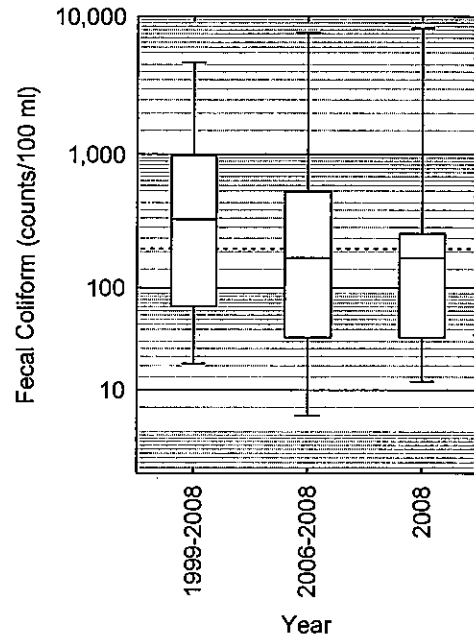
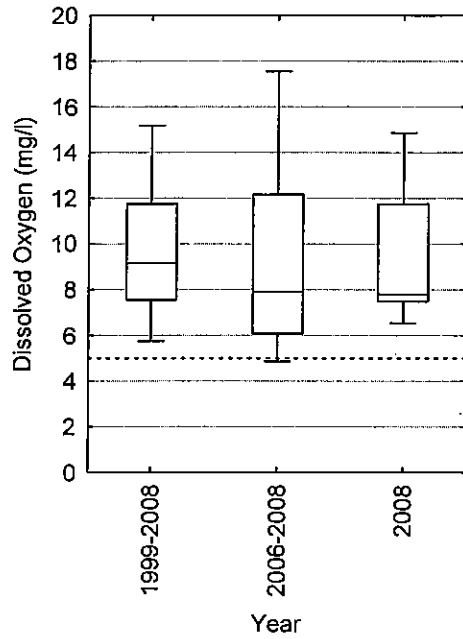
— Median □ 25%-75% ▤ 10%-90%
—— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Southbranch Creek at Bradley Rd., Site SB-01



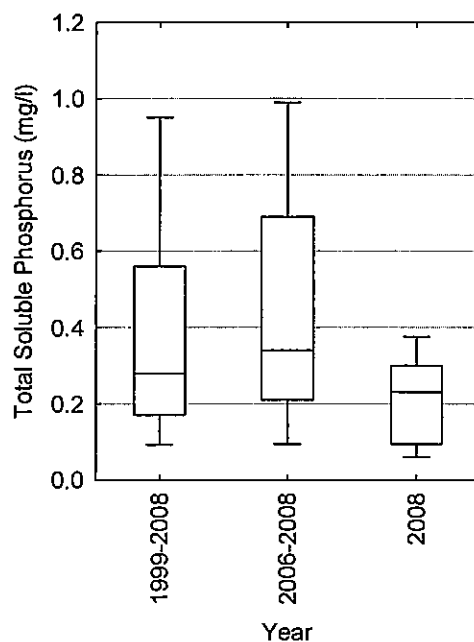
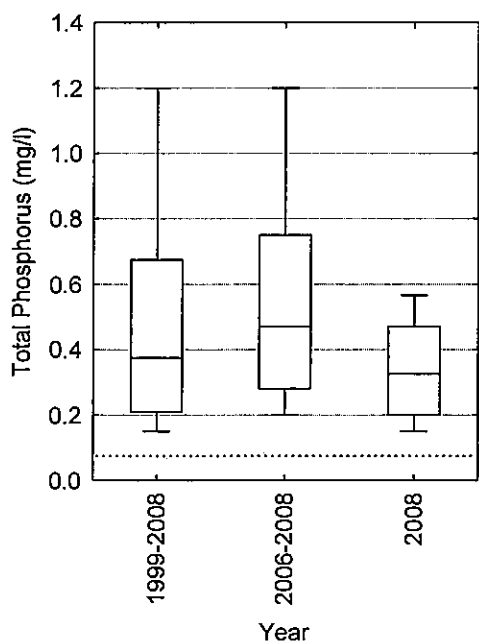
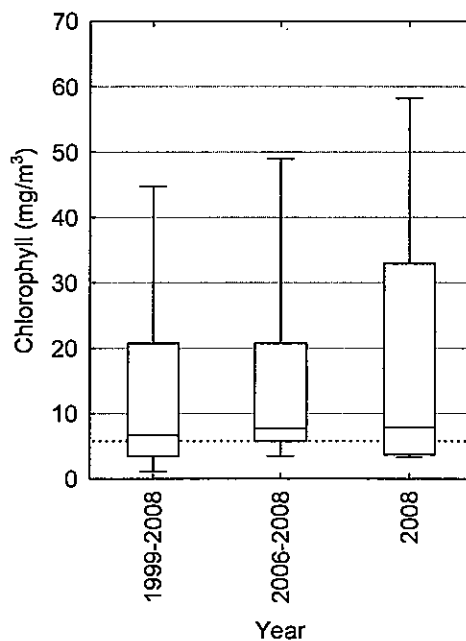
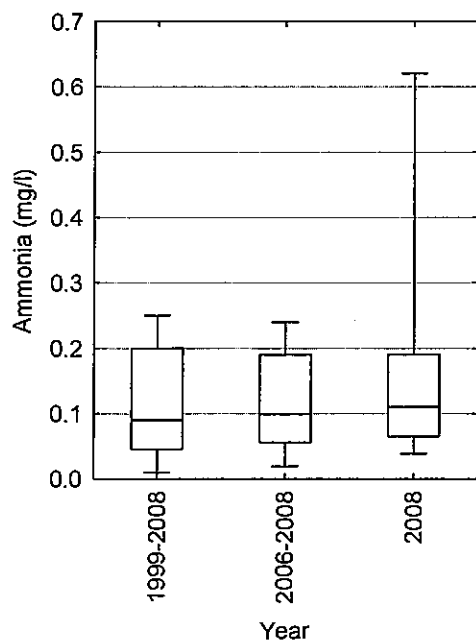
— Median □ 25%-75% ┘ 10%-90%

MMSD Water Quality Monitoring Program Data
Southbranch Creek at 55th St., Site SB-02



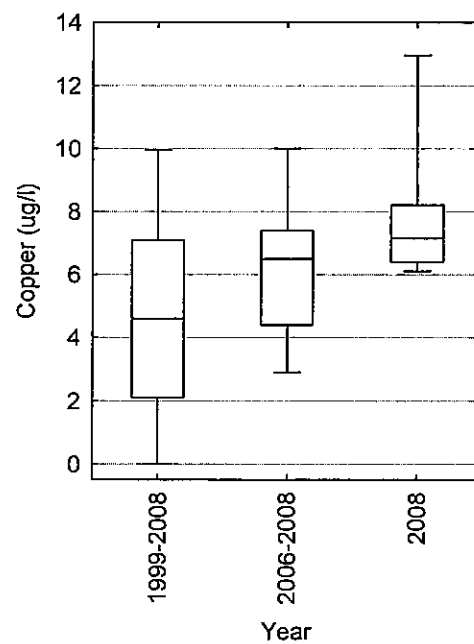
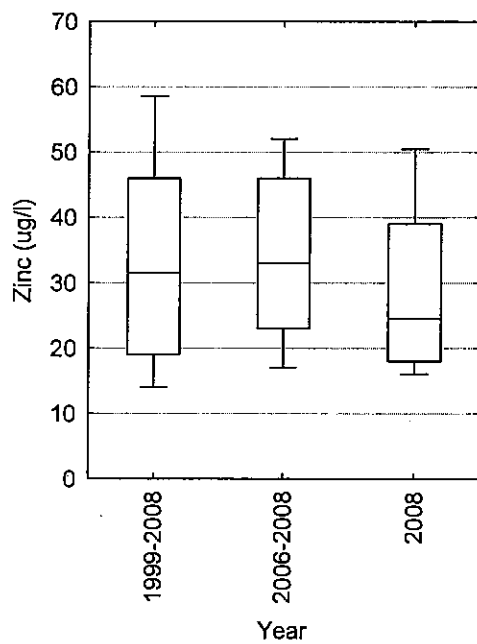
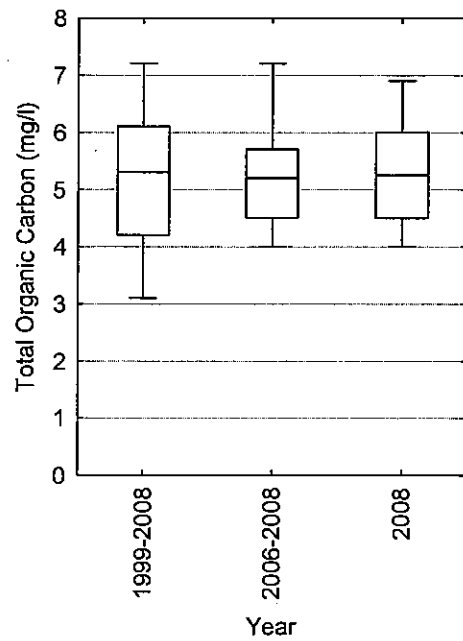
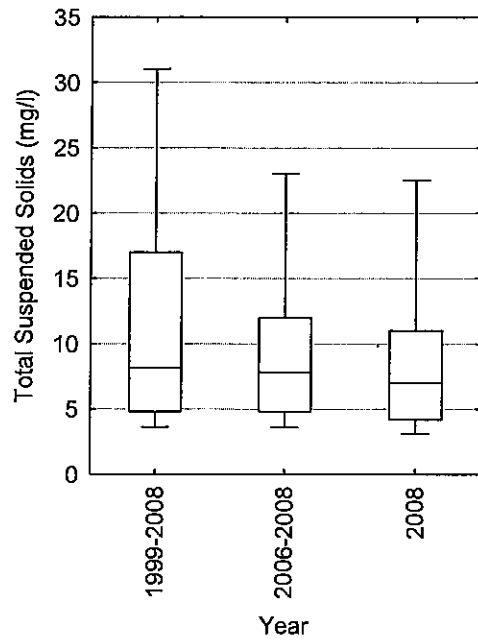
— Median □ 25%-75% ▤ 10%-90%
 --- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Southbranch Creek at 55th St., Site SB-02



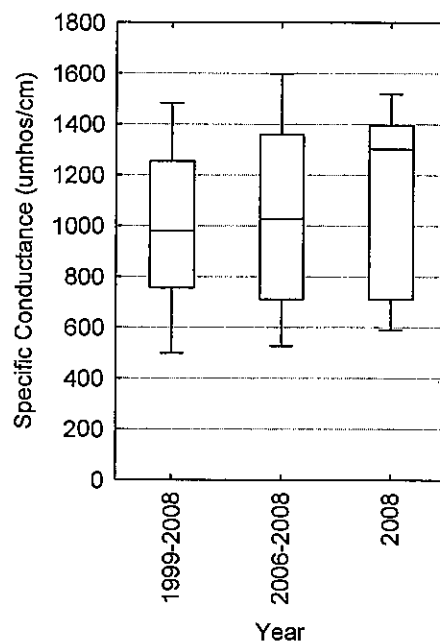
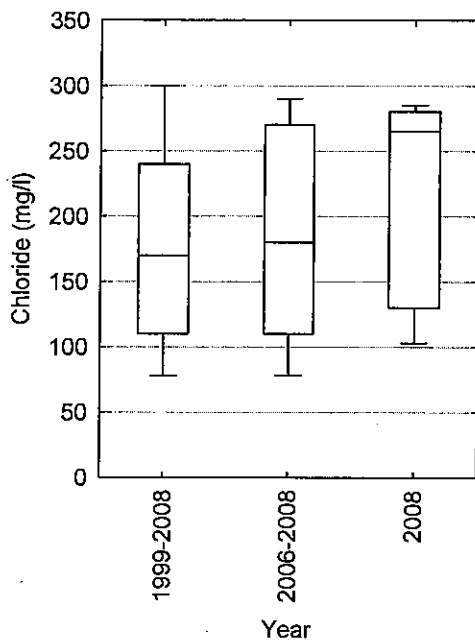
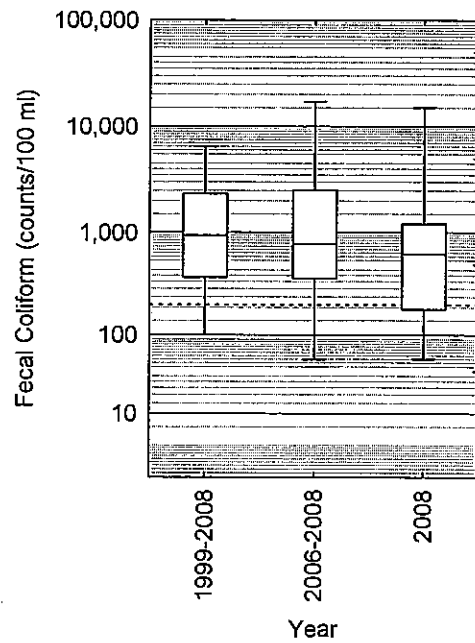
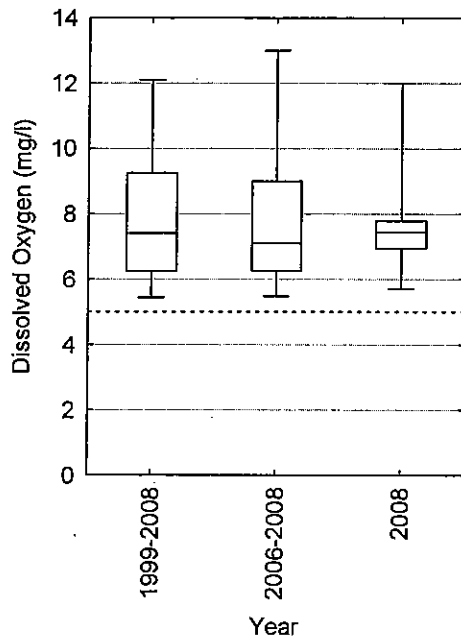
— Median □ 25%-75% ▤ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Southbranch Creek at 55th St., Site SB-02



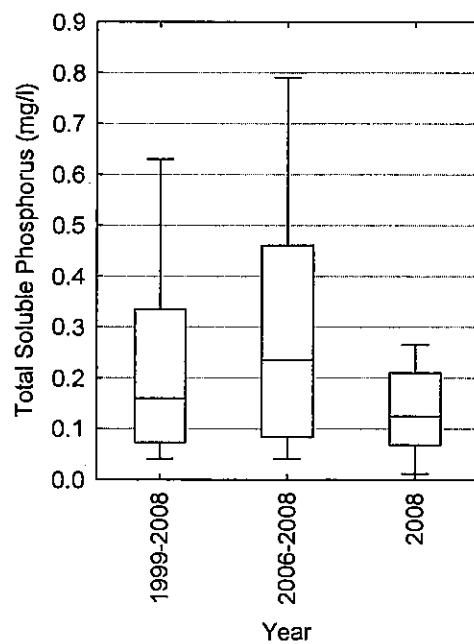
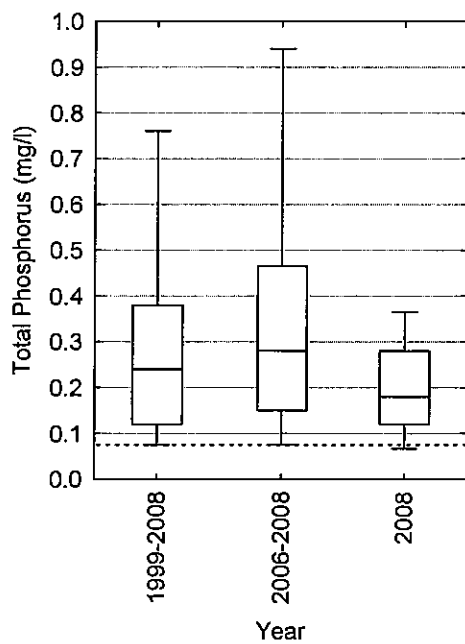
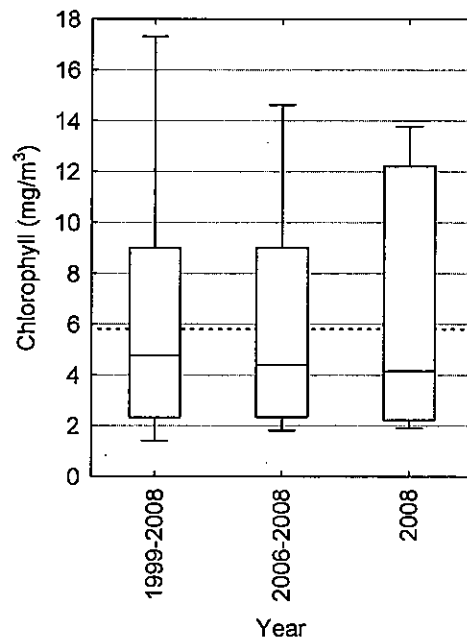
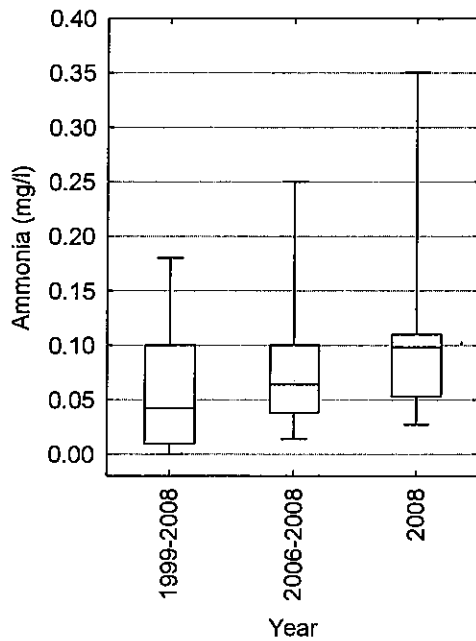
— Median □ 25%-75% ┘ 10%-90%

MMSD Water Quality Monitoring Program Data
Southbranch Creek at Green Bay Ct., Site SB-04



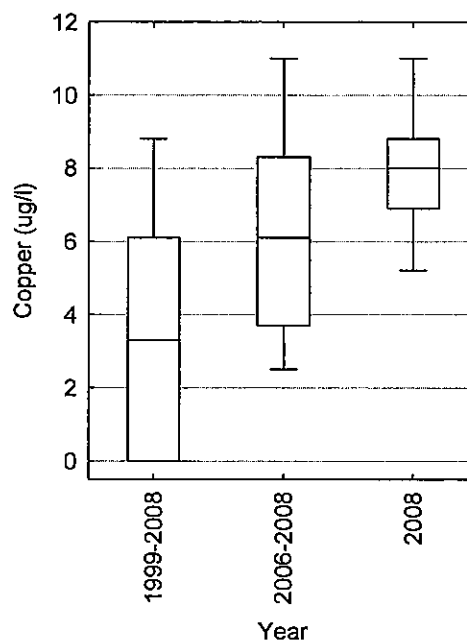
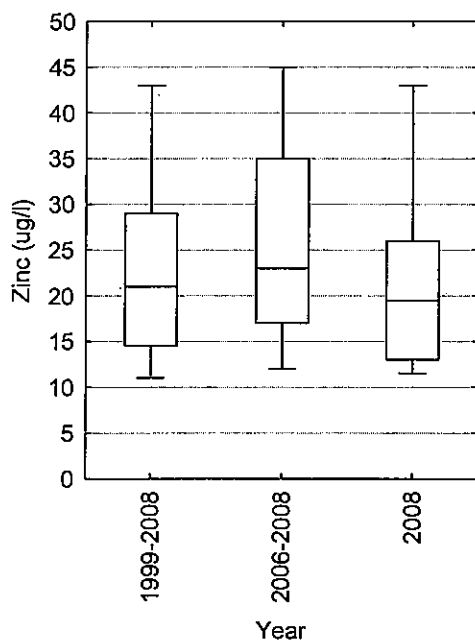
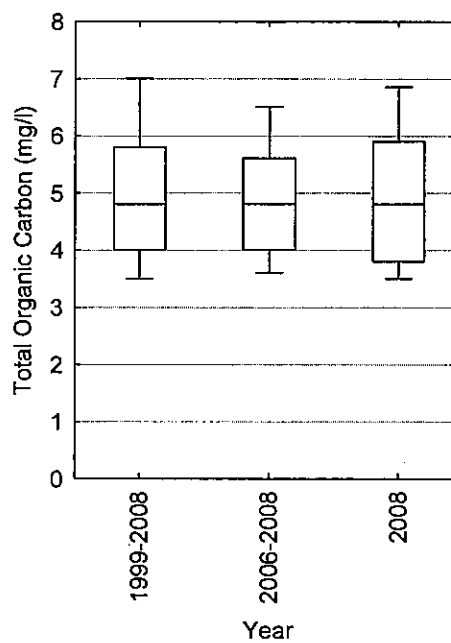
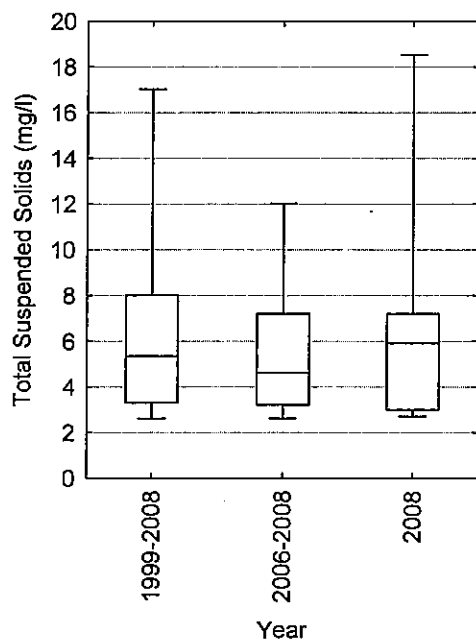
— Median □ 25%-75% ▤ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Southbranch Creek at Green Bay Ct., Site SB-04



— Median □ 25%-75% ▤ 10%-90%
 ---- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Southbranch Creek at Green Bay Ct., Site SB-04



— Median □ 25%-75% ┘ 10%-90%

BRADLEY RD., WEST OF EDGEWORTH DR. - SITE 1
SOUTHBRANCH CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	15.2	9.7	2.59	0.85	0.028	0.89	0.039	0.09	0.544	0.474	ND
Standard Error	0.1	1.3	0.2	1.03	0.06	0.009	0.07	0.011	0.06	0.077	0.069	ND
Median	8.0	16.2	9.5	1.03	0.82	0.021	0.83	0.031	0.00	0.550	0.500	ND
Mode	8.0	ND	9.1	ND	0.78	ND	1.10	0.000	0.00	ND	0.590	ND
Standard Deviation	0.2	4.0	0.8	3.27	0.20	0.028	0.22	0.035	0.19	0.243	0.219	ND
Sample Variance	0.0	16.2	0.6	10.70	0.04	0.001	0.05	0.001	0.04	0.059	0.048	ND
Kurtosis	4.1	1.4	2.0	0.62	-0.26	5.793	-0.27	-1.002	1.53	-0.205	0.265	ND
Skewness	-1.2	-1.3	1.4	1.43	0.35	2.205	0.50	0.498	1.80	-0.016	-0.337	ND
Range	0.8	12.8	2.7	8.73	0.63	0.100	0.72	0.100	0.47	0.810	0.768	0.00
Minimum	7.5	6.5	8.8	0.16	0.57	0.000	0.58	0.000	0.00	0.140	0.072	0.00
Maximum	8.3	19.2	11.4	8.89	1.20	0.100	1.30	0.100	0.47	0.950	0.840	0.00
Count	10	10	10	10	10	10	10	10	10	10	10	0
Confidence Level(95.0%)	0.1	2.9	0.6	2.34	0.14	0.020	0.16	0.025	0.13	0.174	0.157	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	513.0	509.5	1.6	3.5	3.5	892	157.1	619	1.8	ND
Standard Error	ND	ND	45.3	45.0	0.4	1.1	1.3	78	19.0	554	0.3	ND
Median	ND	ND	505.0	500.8	1.2	2.0	1.0	842	145.0	73	1.9	ND
Mode	ND	ND	ND	ND	1.0	6.2	ND	ND	140.0	ND	ND	ND
Standard Deviation	ND	ND	143.3	142.4	1.1	3.3	4.2	247	60.2	1751	0.9	ND
Sample Variance	ND	ND	20534.4	20279.7	1.2	11.1	17.7	61176	3624.1	3064351	0.7	ND
Kurtosis	ND	ND	-0.3	-0.3	1.4	-0.3	-0.7	0	0.7	10	2.9	ND
Skewness	ND	ND	0.2	0.3	0.9	0.8	1.1	1	0.6	3	0.9	ND
Range	0.0	0.0	450.0	445.8	4.0	10.0	10.5	851	209.0	5597	3.3	0
Minimum	0.0	0.0	300.0	298.6	0.0	0.0	0.3	507	61.0	3	0.5	0
Maximum	0.0	0.0	750.0	744.4	4.0	10.0	10.8	1358	270.0	5600	3.7	0
Count	0	0	10	10	10	10	10	10	10	10	10	0
Confidence Level(95.0%)	ND	ND	102.5	101.9	0.8	2.4	3.0	177	43.1	1252	0.6	ND

ND = No Data

Provisional MMSD Water Quality Data

BRADLEY RD., WEST OF EDGEWORTH DR. - SITE 1
SOUTHBRANCH CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	53.50	19.70	0.0	2.6	7.6	2.9	0.9	22.9	0.0	0.6	2.8	0.0
Standard Error	3.28	1.29	0.0	1.0	0.5	0.5	0.6	4.1	0.0	0.6	1.5	0.0
Median	52.50	19.50	0.0	1.9	7.4	2.4	0.0	18.0	0.0	0.0	0.0	0.0
Mode	52.00	19.00	0.0	0.0	ND	ND	0.0	23.0	0.0	0.0	0.0	0.0
Standard Deviation	10.38	4.08	0.0	3.3	1.7	1.7	2.0	12.9	0.0	1.8	4.8	0.0
Sample Variance	107.83	16.68	0.0	10.8	2.7	3.0	3.9	166.1	0.0	3.4	22.6	0.0
Kurtosis	0.73	0.47	ND	1.7	0.5	4.3	5.7	4.4	ND	9.0	0.1	ND
Skewness	0.68	0.27	ND	1.3	1.0	1.9	2.4	2.0	ND	3.0	1.3	ND
Range	35.00	14.00	0.0	10.0	5.2	6.0	6.0	42.0	0.0	5.5	12.0	0.0
Minimum	39.00	13.00	0.0	0.0	5.8	1.2	0.0	13.0	0.0	0.0	0.0	0.0
Maximum	74.00	27.00	0.0	10.0	11.0	7.2	6.0	55.0	0.0	5.5	12.0	0.0
Count	10	10	10	10	10	10	10	10	10	9	10	2
Confidence Level(95.0%)	7.43	2.92	0.0	2.4	1.2	1.2	1.4	9.2	0.0	1.4	3.4	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	216	144	0.5	3.9	38.1	34.6	3.3	2.9
Standard Error	13	10	0.3	0.4	2.6	2.6	0.4	0.4
Median	210	135	0.0	3.7	35.5	33.0	2.9	2.5
Mode	210	130	0.0	2.7	39.0	33.0	4.6	2.5
Standard Deviation	42	32	1.0	1.3	8.3	8.2	1.3	1.3
Sample Variance	1804	1025	1.1	1.8	68.3	67.8	1.7	1.6
Kurtosis	0	0	2.2	0.0	0.3	0.3	-0.1	2.3
Skewness	1	1	1.9	0.9	1.1	0.8	0.8	1.5
Range	130	106	2.8	4.0	24.0	26.0	4.3	4.3
Minimum	160	94	0.0	2.6	29.0	23.0	1.5	1.5
Maximum	290	200	2.8	6.6	53.0	49.0	5.8	5.8
Count	10	10	10	10	10	10	10	10
Confidence Level(95.0%)	30	23	0.7	1.0	5.9	5.9	0.9	0.9

ND = No Data

Provisional MMSD Water Quality Data

55TH ST., NORTH OF BRADLEY RD. - SITE 2
SOUTHBRANCH CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	18.4	9.5	20.19	0.49	0.018	0.50	0.201	1.09	0.341	0.221	ND
Standard Error	0.1	1.8	1.1	7.89	0.20	0.004	0.20	0.091	0.44	0.051	0.038	ND
Median	8.4	20.2	7.8	7.83	0.24	0.018	0.26	0.110	0.67	0.325	0.230	ND
Mode	ND	ND	ND	ND	ND	0.007	ND	ND	ND	ND	ND	ND
Standard Deviation	0.4	5.6	3.5	24.96	0.62	0.012	0.62	0.288	1.39	0.160	0.120	ND
Sample Variance	0.2	31.1	12.0	622.76	0.38	0.000	0.38	0.083	1.93	0.026	0.014	ND
Kurtosis	-1.4	1.3	2.5	4.47	5.83	1.292	5.50	8.615	8.10	-0.194	-0.803	ND
Skewness	-0.7	-1.2	1.6	2.04	2.32	0.862	2.25	2.871	2.76	0.451	-0.142	ND
Range	1.1	17.9	11.1	79.60	2.04	0.044	2.03	0.979	4.90	0.530	0.378	0.00
Minimum	7.4	6.2	6.4	3.10	0.06	0.000	0.07	0.021	0.00	0.110	0.032	0.00
Maximum	8.5	24.0	17.5	82.70	2.10	0.044	2.10	1.000	4.90	0.640	0.410	0.00
Count	10	10	10	10	10	10	10	10	10	10	10	0
Confidence Level(95.0%)	0.3	4.0	2.5	17.85	0.44	0.009	0.44	0.206	0.99	0.115	0.086	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	529.0	519.6	4.0	9.4	8.2	874	172.9	1729	2.1	ND
Standard Error	ND	ND	59.9	59.4	0.8	2.3	2.7	107	24.8	1586	0.3	ND
Median	ND	ND	520.0	516.3	3.6	7.0	5.5	833	160.0	170	2.2	ND
Mode	ND	ND	ND	ND	2.8	7.0	ND	ND	ND	170	2.2	ND
Standard Deviation	ND	ND	189.5	187.8	2.4	7.4	8.5	338	78.4	5016	1.0	ND
Sample Variance	ND	ND	35898.9	35283.7	6.0	54.1	71.6	114004	6142.8	25155915	0.9	ND
Kurtosis	ND	ND	-1.5	-1.6	-0.4	0.5	6.7	-1	-1.5	10	2.5	ND
Skewness	ND	ND	0.0	0.0	0.6	1.3	2.4	0	0.1	3	0.6	ND
Range	0.0	0.0	530.0	527.2	7.4	20.4	28.7	972	222.0	15997	3.7	0
Minimum	0.0	0.0	270.0	265.8	1.2	2.6	2.0	421	68.0	3	0.5	0
Maximum	0.0	0.0	800.0	793.0	8.6	23.0	30.7	1393	290.0	16000	4.2	0
Count	0	0	10	10	10	10	10	10	10	10	10	0
Confidence Level(95.0%)	ND	ND	135.5	134.4	1.8	5.3	6.1	242	56.1	3588	0.7	ND

ND = No Data

Provisional MMSD Water Quality Data

55TH ST., NORTH OF BRADLEY RD. - SITE 2
SOUTHBRANCH CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	45.20	19.60	0.0	4.5	8.1	4.1	0.8	29.3	1.0	0.8	3.7	0.0
Standard Error	4.64	2.59	0.0	1.7	0.9	0.9	0.8	4.2	0.6	0.5	1.5	0.0
Median	45.00	19.50	0.0	4.1	7.2	3.3	0.0	24.5	0.0	0.0	0.0	0.0
Mode	ND	30.00	0.0	0.0	6.4	2.4	0.0	ND	0.0	0.0	0.0	0.0
Standard Deviation	14.67	8.20	0.0	5.5	3.0	3.0	2.5	13.3	1.9	1.5	4.8	0.0
Sample Variance	215.29	67.30	0.0	30.2	9.0	8.9	6.1	176.9	3.7	2.4	22.8	0.0
Kurtosis	-0.48	-1.63	ND	6.4	6.1	6.7	9.0	-0.8	4.4	0.8	-2.0	ND
Skewness	0.14	-0.02	ND	2.3	2.4	2.5	3.0	0.8	2.2	1.6	0.6	ND
Range	48.00	21.80	0.0	19.0	10.2	10.3	7.4	37.0	5.8	3.6	11.0	0.0
Minimum	23.00	8.20	0.0	0.0	5.8	1.7	0.0	15.0	0.0	0.0	0.0	0.0
Maximum	71.00	30.00	0.0	19.0	16.0	12.0	7.4	52.0	5.8	3.6	11.0	0.0
Count	10	10	10	10	10	10	9	10	10	9	10	2
Confidence Level(95.0%)	10.50	5.87	0.0	3.9	2.1	2.1	1.9	9.5	1.4	1.2	3.4	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	193	124	2.8	9.2	36.0	30.6	5.3	4.9
Standard Error	22	14	0.9	1.2	3.2	3.2	0.4	0.3
Median	190	130	2.5	7.5	36.0	31.5	5.3	4.9
Mode	ND	130	0.0	12.0	36.0	36.0	4.5	4.1
Standard Deviation	69	43	2.9	3.9	10.1	10.0	1.1	1.0
Sample Variance	4712	1880	8.5	15.0	102.7	99.4	1.2	1.1
Kurtosis	-1	-1	-0.5	0.0	-1.0	-0.6	-0.4	-0.4
Skewness	0	0	0.7	1.0	0.1	0.1	0.2	0.4
Range	209	134	8.3	11.7	30.0	32.0	3.7	3.3
Minimum	91	66	0.0	5.3	23.0	16.0	3.5	3.4
Maximum	300	200	8.3	17.0	53.0	48.0	7.2	6.7
Count	10	10	10	10	10	10	10	10
Confidence Level(95.0%)	49	31	2.1	2.8	7.2	7.1	0.8	0.7

ND = No Data

Provisional MMSD Water Quality Data

47TH ST., SOUTH OF CHURCHILL LN. - SITE 3
SOUTHBRANCH CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.5	17.8	12.1	10.66	0.31	0.012	0.32	0.066	1.29	0.297	0.218	ND
Standard Error	0.1	1.8	1.0	2.26	0.08	0.003	0.08	0.016	0.61	0.040	0.028	ND
Median	8.5	18.6	11.7	9.28	0.20	0.009	0.21	0.069	0.68	0.345	0.250	ND
Mode	ND	ND	ND	ND	0.16	ND	ND	ND	0.00	0.360	0.250	ND
Standard Deviation	0.3	5.6	3.1	7.14	0.25	0.008	0.26	0.051	1.92	0.125	0.089	ND
Sample Variance	0.1	31.0	9.5	50.94	0.06	0.000	0.07	0.003	3.69	0.016	0.008	ND
Kurtosis	2.6	1.4	5.5	0.04	4.44	-1.149	4.21	0.583	1.14	0.198	0.641	ND
Skewness	-1.2	-1.1	1.9	1.03	2.04	0.298	1.99	0.709	1.61	-0.990	-1.233	ND
Range	1.1	18.2	11.9	20.49	0.83	0.024	0.85	0.170	5.10	0.399	0.275	0.00
Minimum	7.8	5.6	8.1	2.91	0.11	0.000	0.11	0.000	0.00	0.061	0.035	0.00
Maximum	8.9	23.8	20.0	23.40	0.94	0.024	0.96	0.170	5.10	0.460	0.310	0.00
Count	10	10	10	10	10	10	10	10	10	10	10	0
Confidence Level(95.0%)	0.2	4.0	2.2	5.11	0.18	0.006	0.18	0.037	1.37	0.090	0.064	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	567.0	560.9	2.8	6.1	5.3	956	195.1	3463	2.8	ND
Standard Error	ND	ND	62.7	62.3	0.6	1.7	2.2	107	26.3	2544	0.3	ND
Median	ND	ND	620.0	614.6	2.2	4.7	2.2	1046	220.0	450	2.7	ND
Mode	ND	ND	310.0	307.8	2.2	2.2	ND	ND	250.0	ND	ND	ND
Standard Deviation	ND	ND	198.3	196.9	1.8	5.3	7.1	338	83.3	8044	0.9	ND
Sample Variance	ND	ND	39312.2	38769.5	3.2	28.0	50.2	114258	6931.7	64706299	0.7	ND
Kurtosis	ND	ND	-1.7	-1.7	0.3	3.6	4.8	-2	-1.9	9	0.6	ND
Skewness	ND	ND	-0.3	-0.3	1.1	1.8	2.3	0	-0.2	3	0.5	ND
Range	0.0	0.0	510.0	505.8	5.4	17.0	22.1	935	208.0	25974	3.0	0
Minimum	0.0	0.0	310.0	307.8	1.0	2.0	1.1	511	92.0	26	1.4	0
Maximum	0.0	0.0	820.0	813.6	6.4	19.0	23.2	1446	300.0	26000	4.4	0
Count	0	0	10	10	10	10	10	10	10	10	10	0
Confidence Level(95.0%)	ND	ND	141.8	140.9	1.3	3.8	5.1	242	59.6	5754	0.6	ND

ND = No Data

Provisional MMSD Water Quality Data

47TH ST., SOUTH OF CHURCHILL LN. - SITE 3
SOUTHBRANCH CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	47.60	19.77	0.0	2.5	7.0	3.1	0.4	20.1	0.2	0.5	3.7	0.0
Standard Error	4.99	2.57	0.0	1.2	0.4	0.4	0.4	3.4	0.2	0.5	1.3	0.0
Median	47.50	20.00	0.0	0.0	7.0	2.7	0.0	14.0	0.0	0.0	3.0	0.0
Mode	ND	ND	0.0	0.0	ND	4.3	0.0	13.0	0.0	0.0	0.0	0.0
Standard Deviation	15.78	8.12	0.0	3.9	1.4	1.2	1.2	10.8	0.8	1.4	4.0	0.0
Sample Variance	249.16	65.95	0.0	15.5	1.9	1.5	1.5	115.7	0.6	2.1	16.2	0.0
Kurtosis	0.83	-1.60	ND	3.3	-1.1	-1.0	10.0	0.2	10.0	9.0	-1.9	ND
Skewness	0.61	-0.03	ND	1.8	0.0	0.6	3.2	1.3	3.2	3.0	0.3	ND
Range	54.00	22.00	0.0	12.0	4.1	3.6	3.9	28.0	2.4	4.3	10.0	0.0
Minimum	26.00	9.00	0.0	0.0	4.9	1.6	0.0	12.0	0.0	0.0	0.0	0.0
Maximum	80.00	31.00	0.0	12.0	9.0	5.2	3.9	40.0	2.4	4.3	10.0	0.0
Count	10	10	10	10	10	10	10	10	10	9	10	2
Confidence Level(95.0%)	11.29	5.81	0.0	2.8	1.0	0.9	0.9	7.7	0.5	1.1	2.9	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	201	131	1.8	7.3	36.9	31.4	5.4	5.1
Standard Error	23	14	0.7	0.8	3.1	3.0	0.3	0.3
Median	200	140	1.1	6.0	37.0	31.5	5.6	5.0
Mode	ND	140	0.0	5.7	37.0	31.0	ND	ND
Standard Deviation	72	43	2.1	2.5	9.8	9.5	1.1	1.0
Sample Variance	5166	1871	4.3	6.1	96.5	89.4	1.2	1.0
Kurtosis	0	0	-1.5	-0.2	-0.3	-0.1	-0.2	0.0
Skewness	0	0	0.6	1.2	0.2	0.2	-0.6	0.7
Range	230	136	5.0	6.9	31.0	31.0	3.4	3.3
Minimum	100	74	0.0	5.1	24.0	18.0	3.4	3.7
Maximum	330	210	5.0	12.0	55.0	49.0	6.8	7.0
Count	10	10	10	10	10	10	10	10
Confidence Level(95.0%)	51	31	1.5	1.8	7.0	6.8	0.8	0.7

ND = No Data

Provisional MMSD Water Quality Data

GREEN BAY CT., N. OF GREEN BAY RD. AND TEUTONIA AVE. - SITE 4
SOUTHBRANCH CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.5	15.7	8.0	6.38	0.39	0.013	0.41	0.128	1.06	0.207	0.132	ND
Standard Error	0.1	1.5	0.7	1.56	0.10	0.004	0.11	0.040	0.43	0.035	0.030	ND
Median	7.4	16.6	7.4	4.15	0.23	0.010	0.24	0.098	0.80	0.180	0.125	ND
Mode	7.3	ND	ND	ND	0.15	0.000	0.16	0.100	0.00	0.280	ND	ND
Standard Deviation	0.2	4.6	2.2	4.94	0.32	0.011	0.34	0.127	1.35	0.111	0.094	ND
Sample Variance	0.0	21.6	5.0	24.44	0.10	0.000	0.12	0.016	1.81	0.012	0.009	ND
Kurtosis	-1.1	2.1	0.7	-1.14	1.89	-0.895	2.48	3.287	5.25	-1.142	-1.022	ND
Skewness	0.5	-1.1	1.3	0.84	1.51	0.665	1.63	1.880	2.11	0.195	0.240	ND
Range	0.6	17.1	6.6	12.80	0.96	0.032	1.06	0.416	4.50	0.324	0.280	0.00
Minimum	7.2	5.4	5.5	1.80	0.14	0.000	0.14	0.014	0.00	0.046	0.000	0.00
Maximum	7.8	22.5	12.1	14.60	1.10	0.032	1.20	0.430	4.50	0.370	0.280	0.00
Count	10	10	10	10	10	10	10	10	10	10	10	0
Confidence Level(95.0%)	0.1	3.3	1.6	3.54	0.23	0.008	0.24	0.091	0.96	0.080	0.067	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	687.0	679.5	3.0	7.5	7.1	1150	220.6	3386	2.7	ND
Standard Error	ND	ND	78.6	78.7	0.7	2.2	2.0	119	24.6	2358	0.3	ND
Median	ND	ND	780.0	773.1	2.9	5.9	5.0	1302	265.0	620	2.8	ND
Mode	ND	ND	780.0	ND	3.0	ND	ND	ND	270.0	770	2.9	ND
Standard Deviation	ND	ND	248.5	248.9	2.3	7.0	6.2	375	77.7	7456	0.9	ND
Sample Variance	ND	ND	61756.7	61937.6	5.4	49.0	39.0	140984	6030.3	55597288	0.9	ND
Kurtosis	ND	ND	-1.0	-1.1	5.0	6.5	4.0	-1	-1.2	8	1.0	ND
Skewness	ND	ND	-0.8	-0.8	1.8	2.4	2.0	-1	-0.9	3	-0.1	ND
Range	0.0	0.0	680.0	679.2	8.8	23.4	20.0	1040	194.0	23991	3.4	0
Minimum	0.0	0.0	260.0	257.0	0.0	2.6	2.4	556	96.0	9	1.0	0
Maximum	0.0	0.0	940.0	936.2	8.8	26.0	22.4	1596	290.0	24000	4.4	0
Count	0	0	10	10	10	10	10	10	10	10	10	0
Confidence Level(95.0%)	ND	ND	177.8	178.0	1.7	5.0	4.5	269	55.6	5334	0.7	ND

ND = No Data

Provisional MMSD Water Quality Data

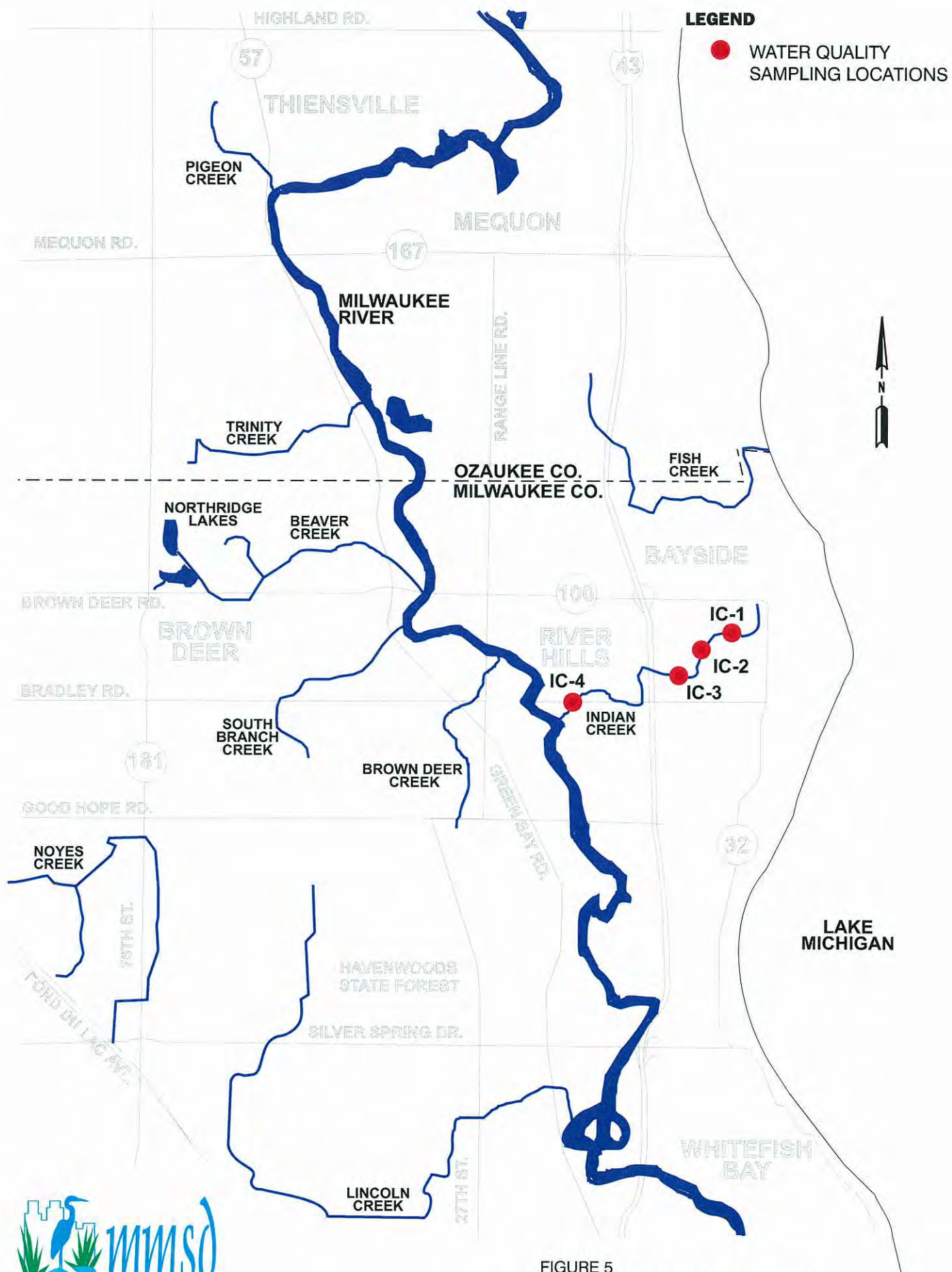
GREEN BAY CT., N. OF GREEN BAY RD. AND TEUTONIA AVE. - SITE 4
SOUTHBRANCH CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	64.60	26.70	0.0	2.9	8.0	4.6	0.8	22.5	0.2	1.1	2.8	0.0
Standard Error	6.34	3.26	0.0	1.1	0.6	1.3	0.5	3.8	0.2	0.7	1.5	0.0
Median	73.50	32.50	0.0	2.0	8.0	3.0	0.0	19.5	0.0	0.0	0.0	0.0
Mode	ND	34.00	0.0	0.0	11.0	2.8	0.0	ND	0.0	0.0	0.0	0.0
Standard Deviation	20.04	10.31	0.0	3.4	2.0	4.2	1.6	12.1	0.8	2.2	4.7	0.0
Sample Variance	401.60	106.23	0.0	11.8	4.1	17.8	2.7	146.7	0.6	4.8	22.2	0.0
Kurtosis	-1.38	-1.99	ND	0.4	-0.4	7.2	2.2	0.2	10.0	2.1	-0.1	ND
Skewness	-0.46	-0.41	ND	1.0	0.1	2.6	1.9	1.1	3.2	1.8	1.3	ND
Range	57.00	26.00	0.0	10.0	6.2	14.0	4.4	35.0	2.4	5.8	12.0	0.0
Minimum	34.00	13.00	0.0	0.0	4.8	2.0	0.0	11.0	0.0	0.0	0.0	0.0
Maximum	91.00	39.00	0.0	10.0	11.0	16.0	4.4	46.0	2.4	5.8	12.0	0.0
Count	10	10	10	10	10	10	10	10	10	9	10	2
Confidence Level(95.0%)	14.34	7.37	0.0	2.5	1.4	3.0	1.2	8.7	0.5	1.7	3.4	0.0

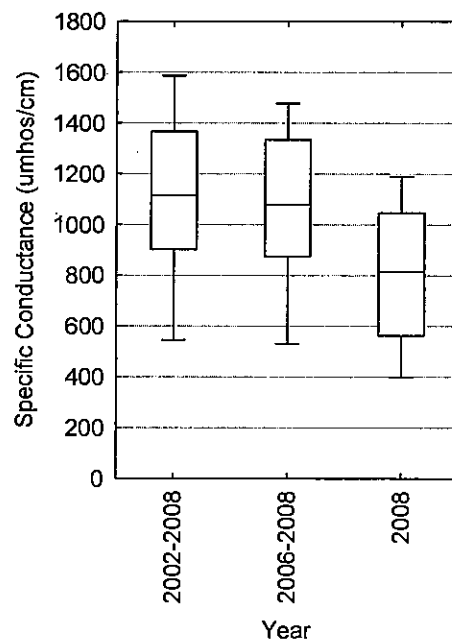
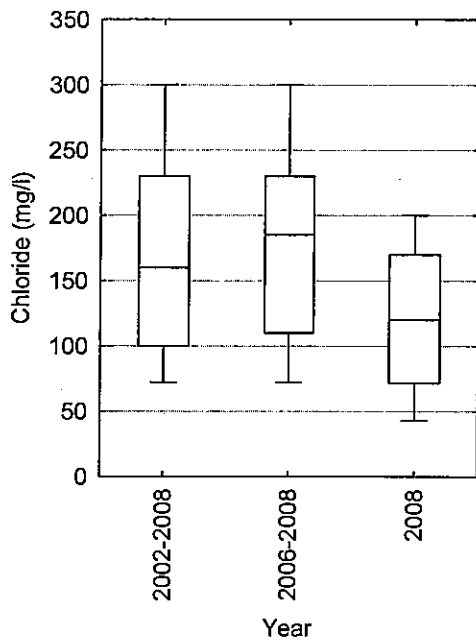
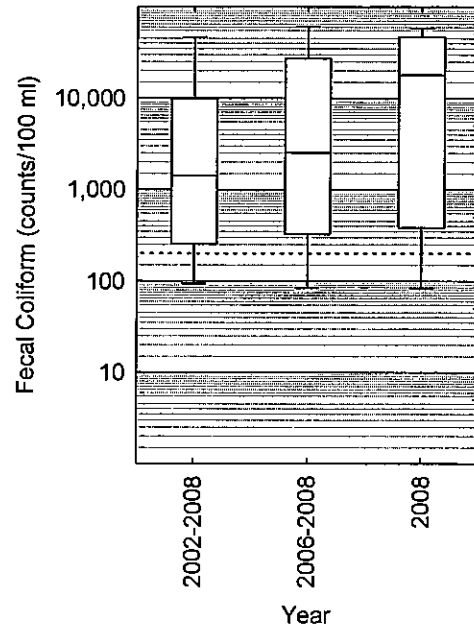
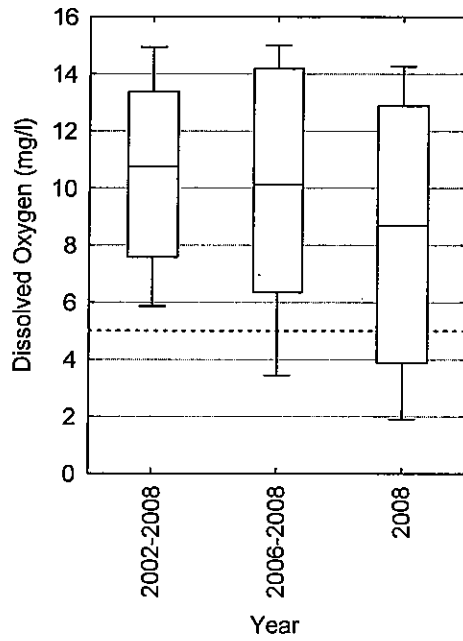
VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN/C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	273	177	0.8	6.2	48.3	43.1	4.9	4.4
Standard Error	29	19	0.6	0.9	4.2	4.5	0.4	0.4
Median	325	195	0.0	4.8	54.5	49.0	4.8	3.9
Mode	330	240	0.0	4.6	ND	49.0	3.5	3.8
Standard Deviation	92	59	1.8	2.9	13.4	14.2	1.4	1.4
Sample Variance	8512	3444	3.4	8.3	178.7	201.7	1.9	1.9
Kurtosis	-2	-1	5.1	3.1	-1.1	-0.9	-0.4	3.5
Skewness	0	-1	2.3	1.9	-0.7	-0.7	0.7	1.8
Range	250	164	5.5	8.7	38.0	42.0	4.1	4.4
Minimum	140	76	0.0	4.3	26.0	18.0	3.5	3.3
Maximum	390	240	5.5	13.0	64.0	60.0	7.6	7.7
Count	10	10	10	10	10	10	10	10
Confidence Level(95.0%)	66	42	1.3	2.1	9.6	10.2	1.0	1.0

ND = No Data

Provisional MMSD Water Quality Data

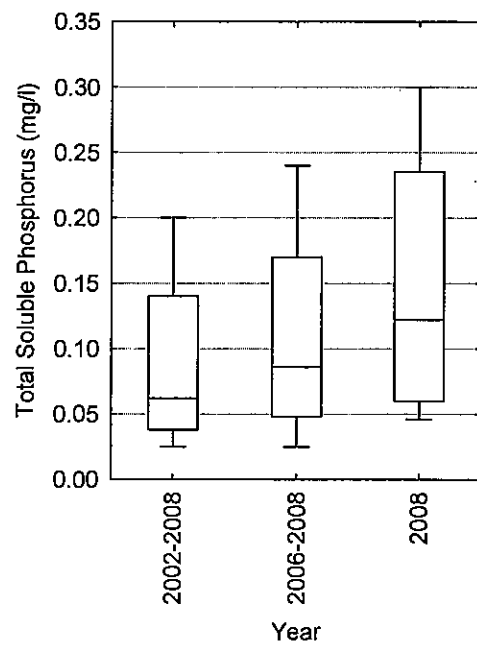
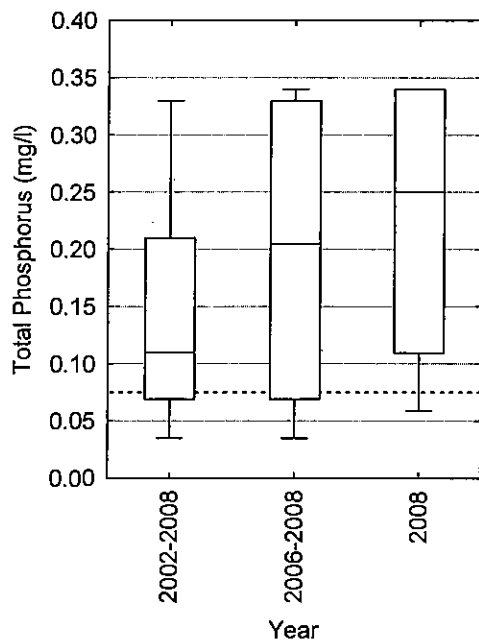
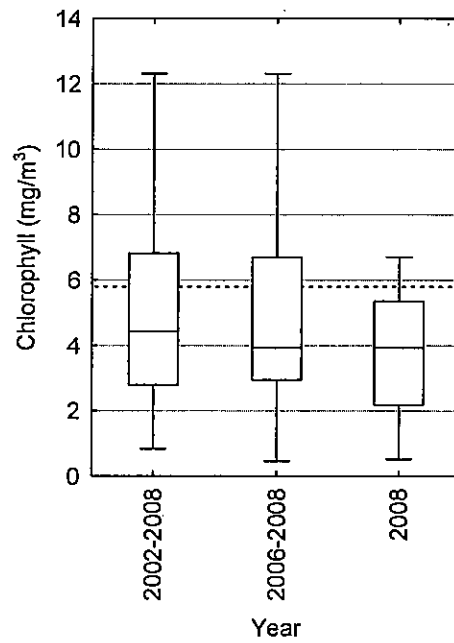
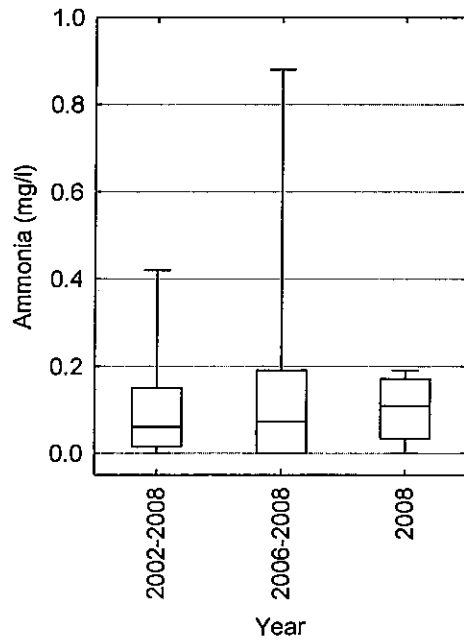


MMSD Water Quality Monitoring Program Data
Indian Creek at Manor Ln., Site IC-01



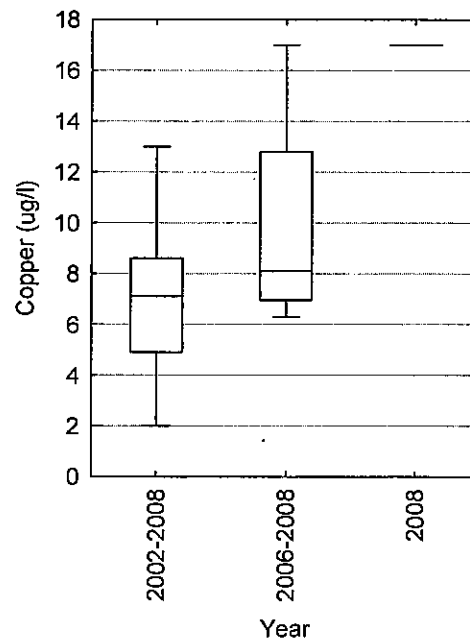
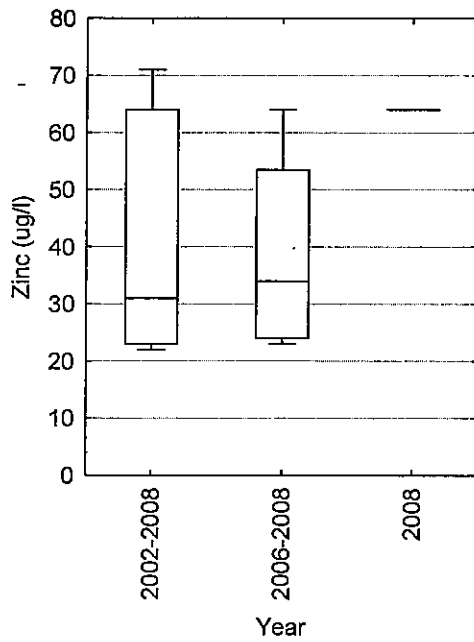
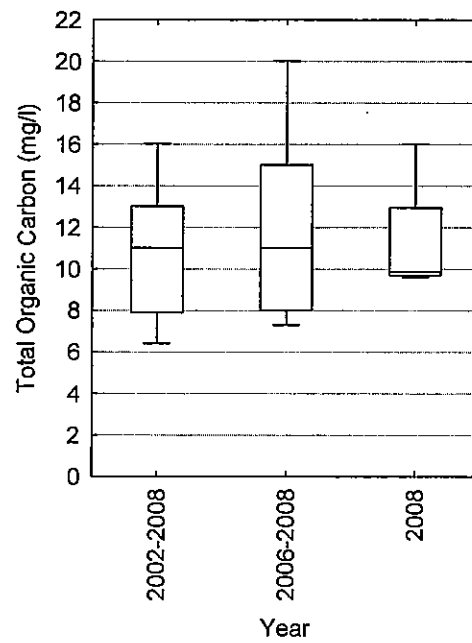
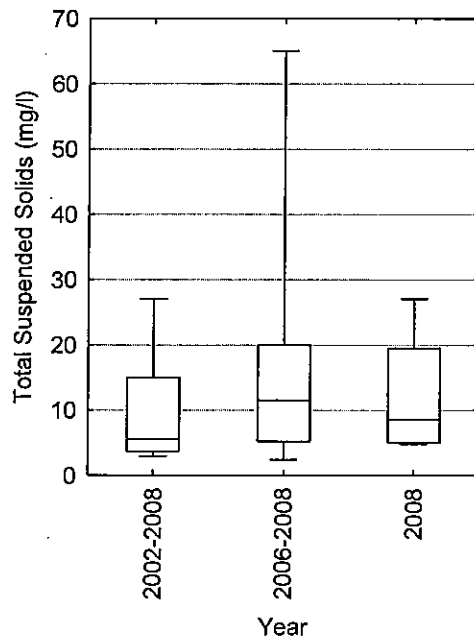
— Median □ 25%-75% ▮ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Indian Creek at Manor Ln., Site IC-01



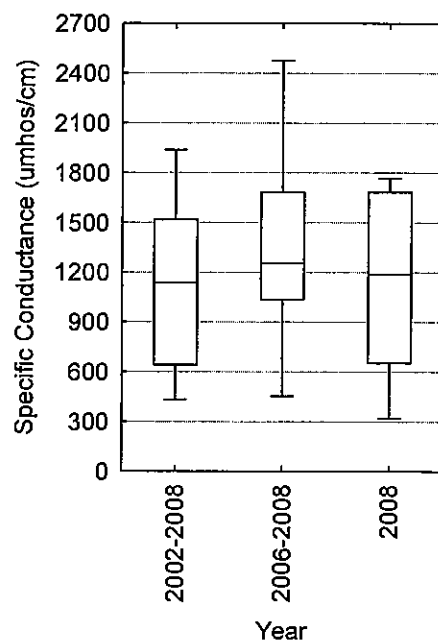
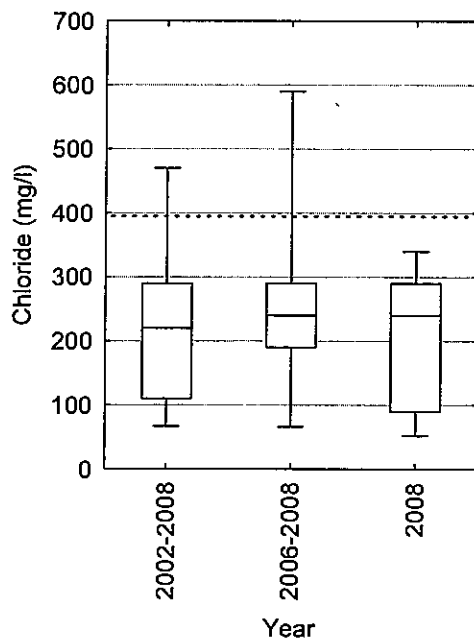
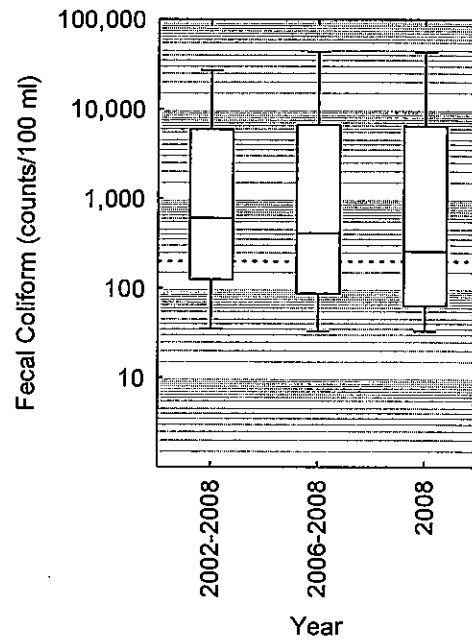
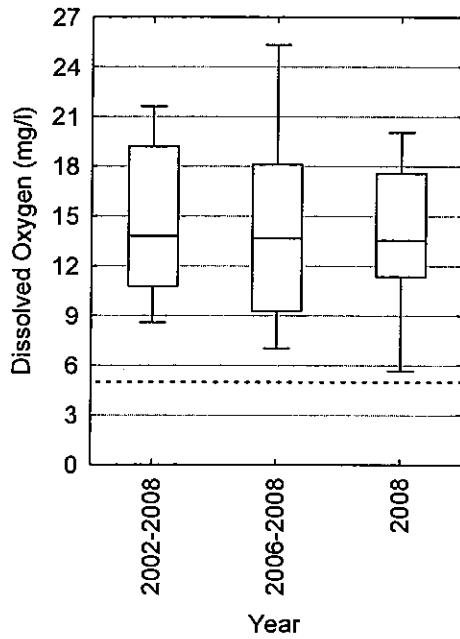
— Median □ 25%-75% ▤ 10%-90%
 ---- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Indian Creek at Manor Ln., Site IC-01



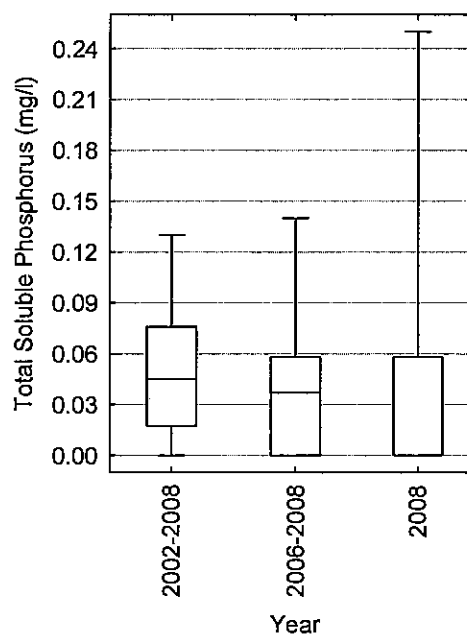
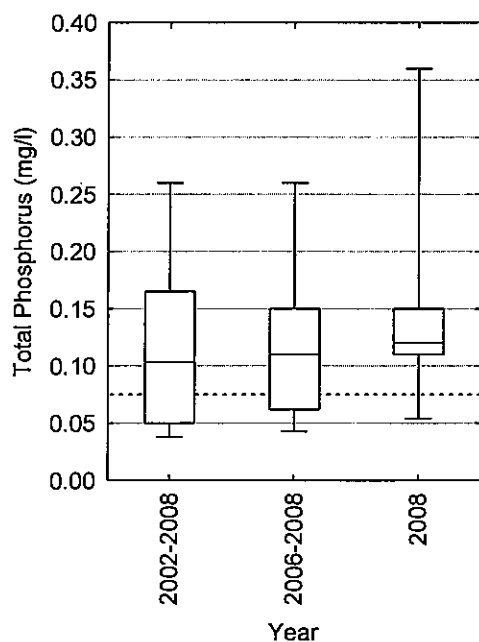
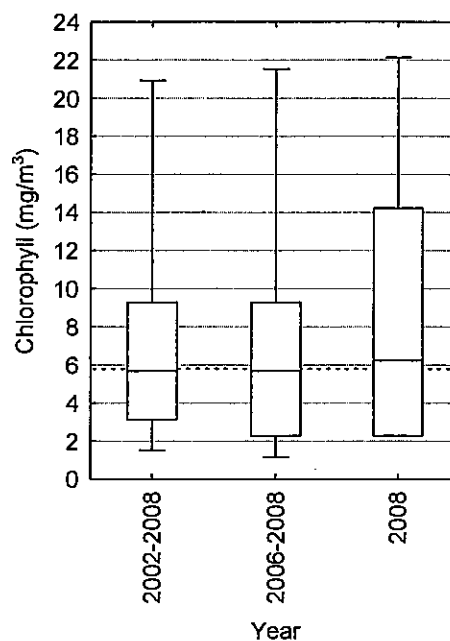
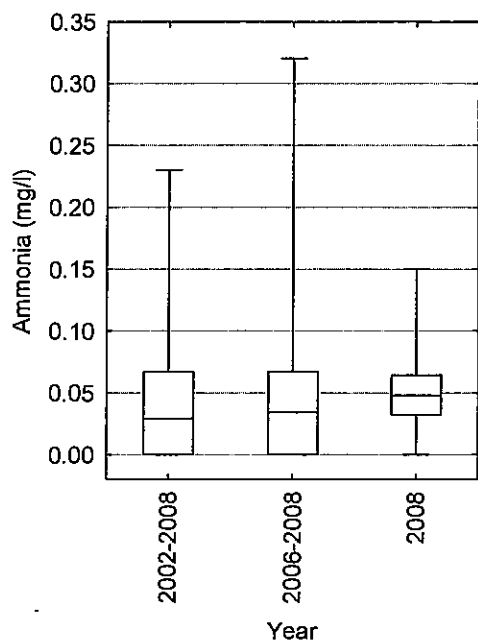
— Median □ 25%-75% ▤ 10%-90%

MMSD Water Quality Monitoring Program Data
Indian Creek at Port Washington Rd., Site IC-03



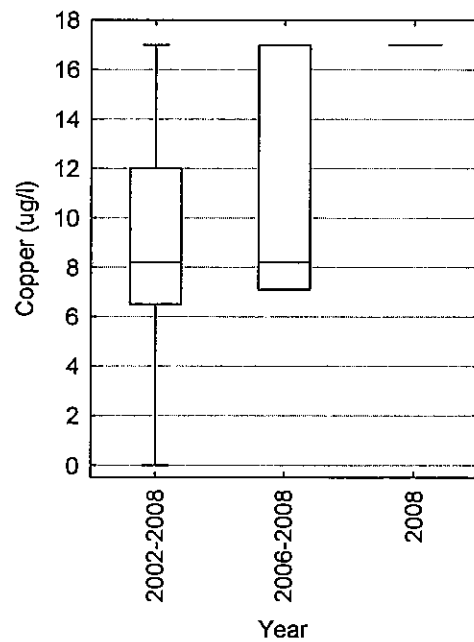
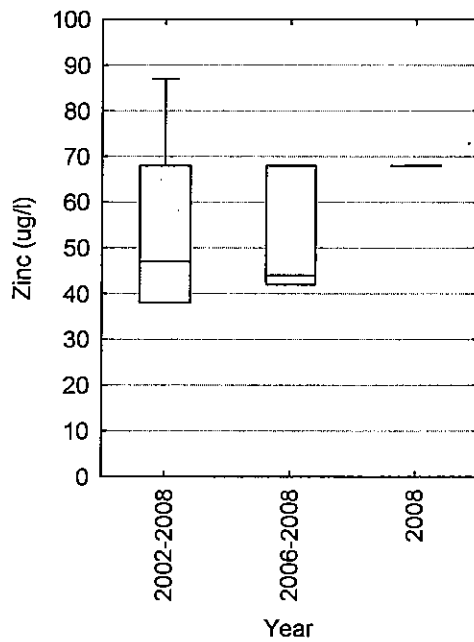
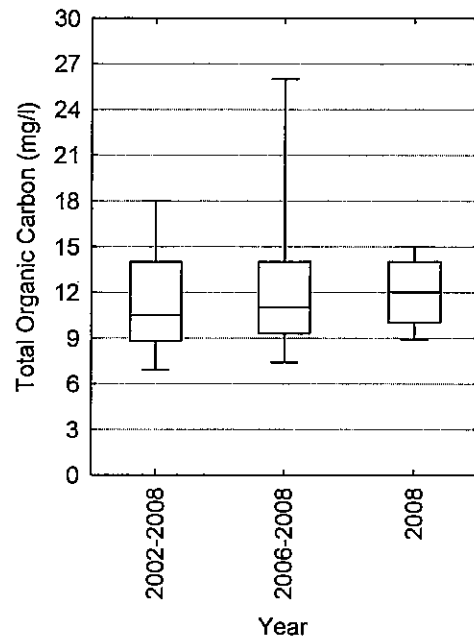
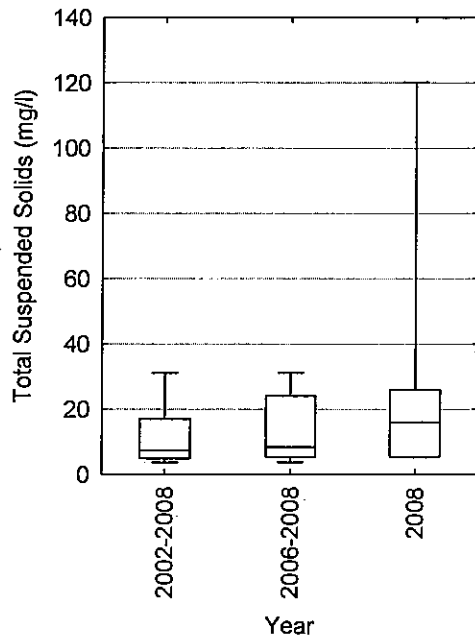
— Median □ 25%-75% ⊢ 10%-90%
 ---- WQ Standard/Criterion

**MMSD Water Quality Monitoring Program Data
Indian Creek at Port Washington Rd., Site IC-03**



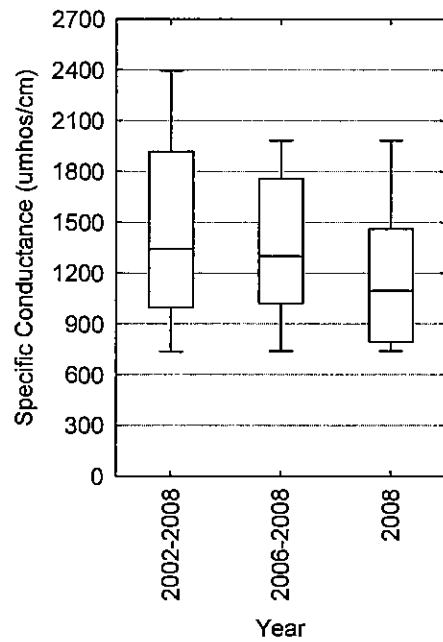
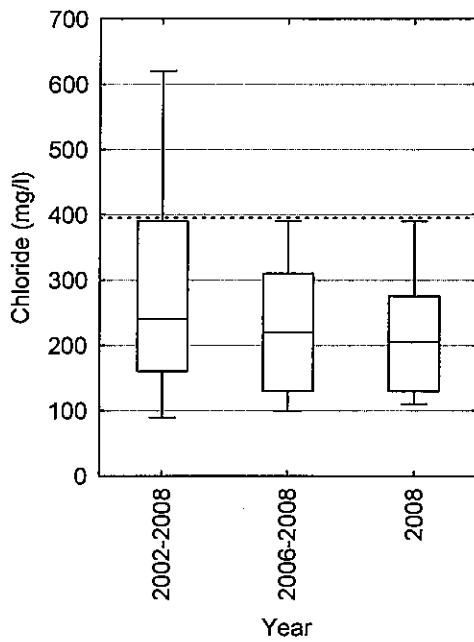
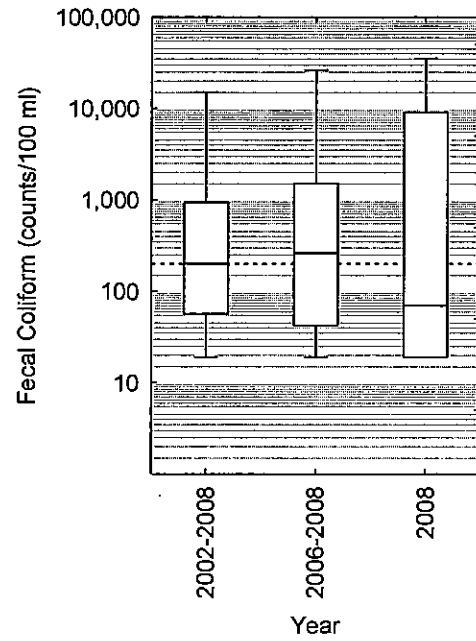
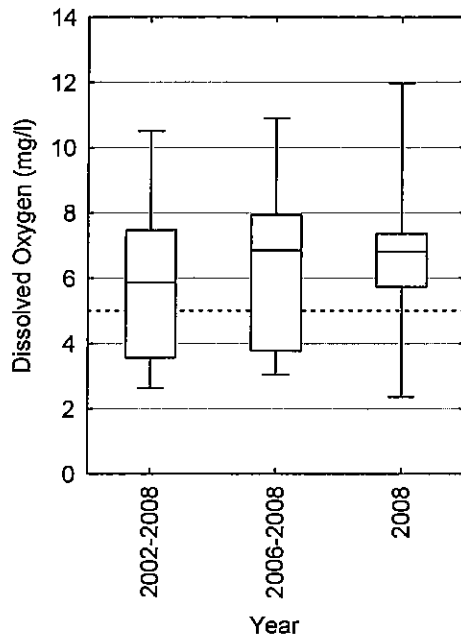
— Median □ 25%-75% ▤ 10%-90%
 — WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Indian Creek at Port Washington Rd., Site IC-03



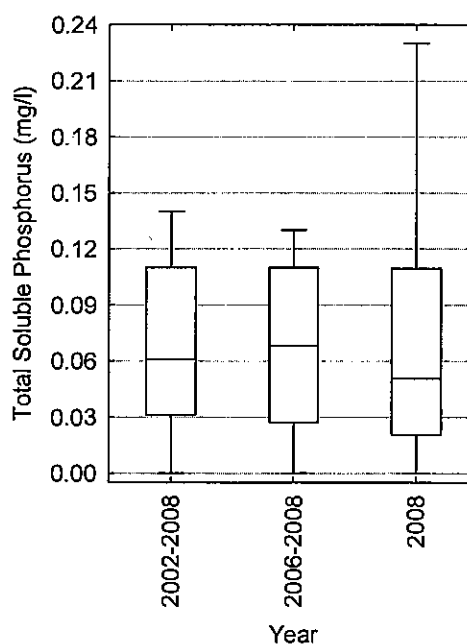
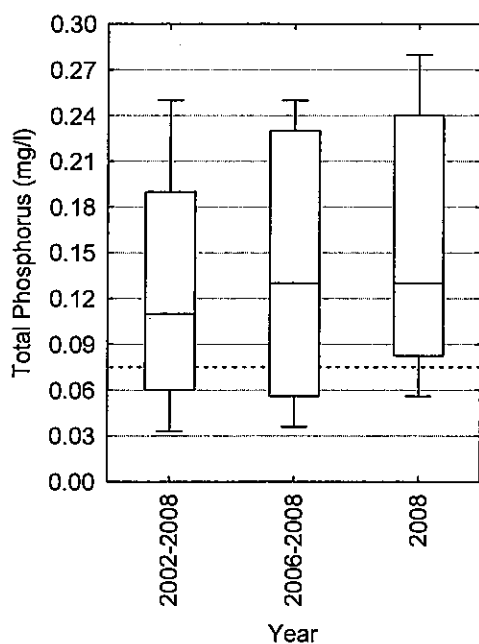
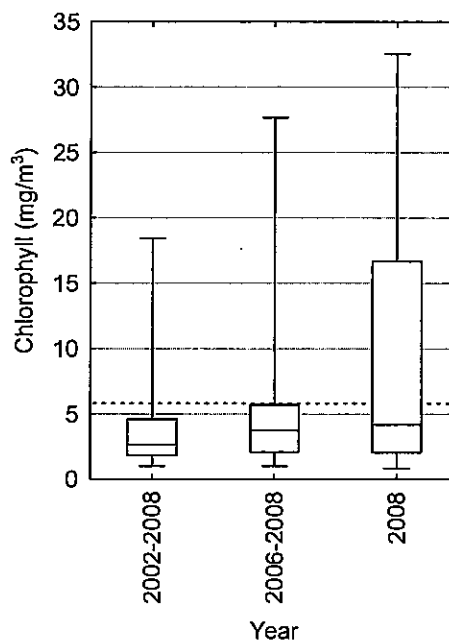
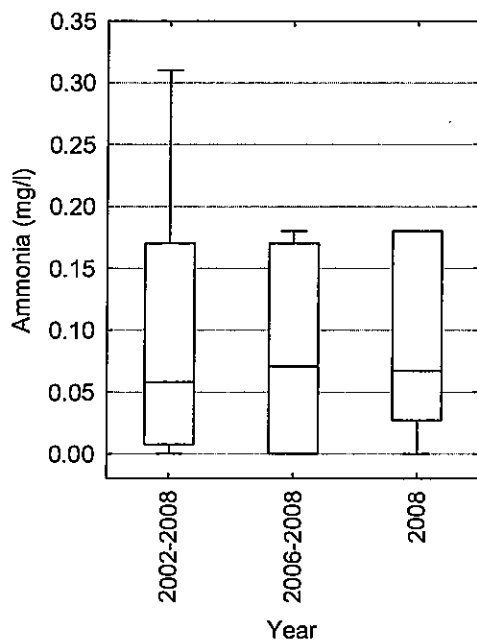
— Median □ 25%-75% ▤ 10%-90%

MMSD Water Quality Monitoring Program Data
Indian Creek at Bradley Rd., Site IC-04



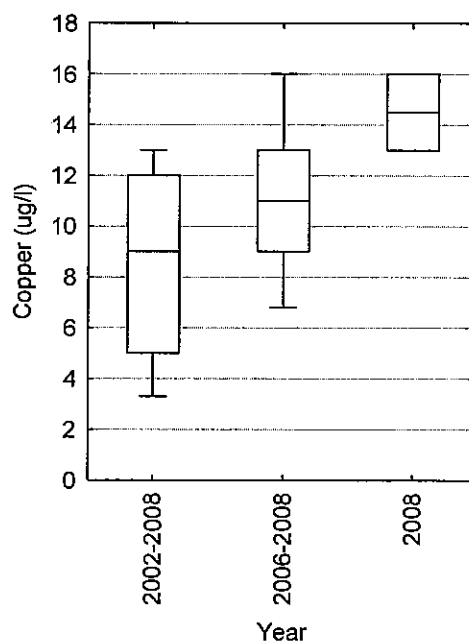
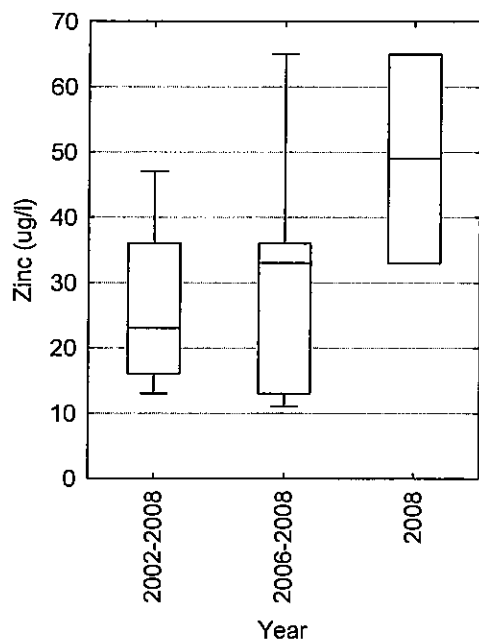
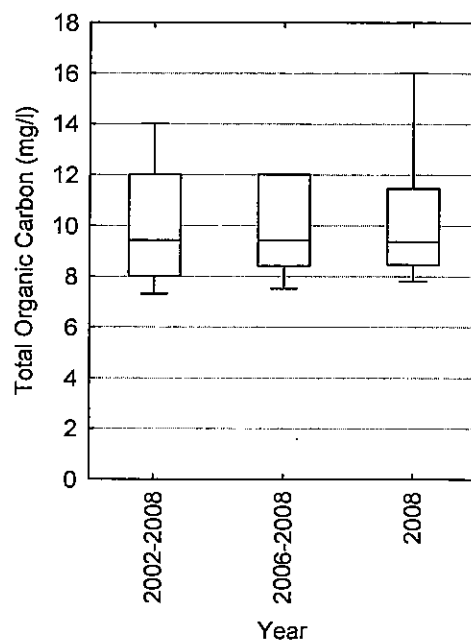
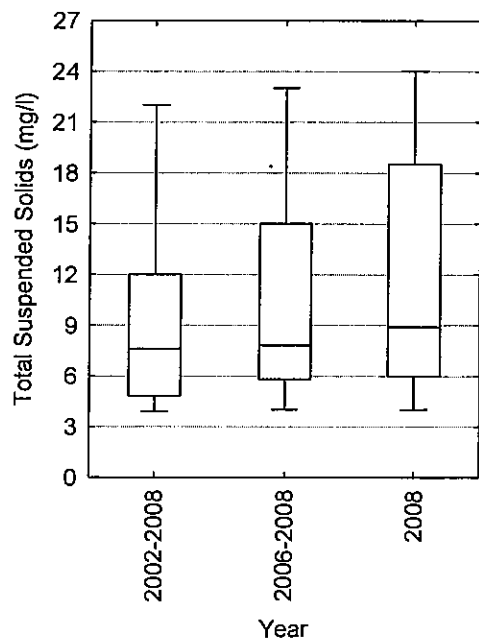
— Median □ 25%-75% ▮ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Indian Creek at Bradley Rd., Site IC-04



— Median □ 25%-75% ▮ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Indian Creek at Bradley Rd., Site IC-04



— Median □ 25%-75% ┘ 10%-90%

MANOR LANE - SITE 1
INDIAN CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.5	13.9	8.4	3.77	0.70	0.046	0.76	0.102	1.45	0.225	0.148	ND
Standard Error	0.3	3.4	2.8	1.27	0.25	0.018	0.27	0.042	0.48	0.070	0.057	ND
Median	7.4	14.6	8.7	3.93	0.74	0.044	0.81	0.109	1.00	0.250	0.122	ND
Mode	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.340	ND	ND
Standard Deviation	0.5	6.8	5.6	2.53	0.49	0.037	0.54	0.085	0.83	0.139	0.115	ND
Sample Variance	0.3	46.1	30.9	6.41	0.24	0.001	0.29	0.007	0.68	0.019	0.013	ND
Kurtosis	2.6	0.3	-2.7	1.56	-3.01	-1.171	-3.00	-2.265	ND	-3.545	-0.472	ND
Skewness	1.5	-0.5	-0.2	-0.39	-0.28	0.314	-0.32	-0.336	1.72	-0.435	0.935	ND
Range	1.2	16.1	12.4	6.18	1.08	0.085	1.17	0.190	1.46	0.281	0.254	0.00
Minimum	7.1	5.2	1.9	0.51	0.12	0.006	0.13	0.000	0.94	0.059	0.046	0.00
Maximum	8.2	21.3	14.3	6.69	1.20	0.091	1.30	0.190	2.40	0.340	0.300	0.00
Count	4	4	4	4	4	4	4	4	3	4	4	0
Confidence Level(95.0%)	0.8	10.8	8.8	4.03	0.78	0.059	0.85	0.135	2.05	0.222	0.183	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	505.0	492.8	4.6	12.3	16.2	805	120.8	23441	3.5	10638
Standard Error	ND	ND	106.5	111.0	1.2	5.2	6.7	165	33.1	14117	0.7	5997
Median	ND	ND	485.0	476.4	3.5	8.6	14.8	815	120.0	17840	3.7	10220
Mode	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Standard Deviation	ND	ND	213.0	222.0	2.3	10.4	13.4	331	66.1	28235	1.4	11994
Sample Variance	ND	ND	45366.7	49290.9	5.3	107.6	179.0	109248	4375.6	797198082	1.9	143860025
Kurtosis	ND	ND	-1.1	-1.2	3.9	1.7	-4.6	0	-0.2	-3	-3.8	-6
Skewness	ND	ND	0.4	0.3	2.0	1.5	0.2	0	0.1	1	-0.3	0
Range	0.0	0.0	490.0	512.2	4.8	22.2	26.9	790	157.0	57917	2.8	21890
Minimum	0.0	0.0	280.0	253.0	3.2	4.8	4.2	400	43.0	83	1.9	110
Maximum	0.0	0.0	770.0	765.2	8.0	27.0	31.1	1190	200.0	58000	4.8	22000
Count	0	0	4	4	4	4	4	4	4	4	4	4
Confidence Level(95.0%)	ND	ND	338.9	353.3	3.7	16.5	21.3	526	105.3	44928	2.2	19085

ND=No Data

Provisional MMSD Water Quality Data

MANOR LANE - SITE 1
INDIAN CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	36.00	11.00	0.0	9.5	17.0	4.5	5.3	64.0	0.0	ND	0.0	0.0
Standard Error	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ND	0.0	0.0
Median	36.00	11.00	0.0	9.5	17.0	4.5	5.3	64.0	0.0	ND	0.0	0.0
Mode	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Standard Deviation	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sample Variance	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Kurtosis	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Skewness	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Range	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Minimum	36.00	11.00	0.0	9.5	17.0	4.5	5.3	64.0	0.0	0.0	0.0	0.0
Maximum	36.00	11.00	0.0	9.5	17.0	4.5	5.3	64.0	0.0	0.0	0.0	0.0
Count	1	1	1	1	1	1	1	1	1	0	1	1
Confidence Level(95.0%)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	130	164	4.1	10.1	53.8	42.3	11.3	11.3
Standard Error	0	54	2.1	2.2	12.2	13.1	1.6	1.9
Median	130	145	3.4	8.9	47.5	37.5	9.9	9.7
Mode	ND	ND	ND	ND	ND	ND	ND	ND
Standard Deviation	ND	108	4.2	4.5	24.4	26.3	3.1	3.8
Sample Variance	ND	11723	17.3	20.1	594.9	690.9	9.7	14.5
Kurtosis	ND	1	0.6	-0.7	1.7	1.3	4.0	3.8
Skewness	ND	1	0.9	1.0	1.3	1.0	2.0	1.9
Range	0	255	9.7	9.6	56.0	62.0	6.4	8.1
Minimum	130	55	0.0	6.4	32.0	16.0	9.6	8.9
Maximum	130	310	9.7	16.0	88.0	78.0	16.0	17.0
Count	1	4	4	4	4	4	4	4
Confidence Level(95.0%)	ND	172	6.6	7.1	38.8	41.8	5.0	6.1

ND=No Data

Provisional MMSD Water Quality Data

DEAN ROAD - SITE 2
INDIAN CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.6	14.7	8.6	10.60	0.45	0.026	0.41	0.142	1.65	0.174	0.076	ND
Standard Error	0.1	2.4	1.6	4.54	0.22	0.008	0.19	0.046	0.31	0.043	0.038	ND
Median	7.6	15.1	7.0	6.61	0.15	0.024	0.14	0.121	1.60	0.150	0.049	ND
Mode	ND	ND	ND	ND	ND	ND	ND	ND	2.20	0.150	ND	ND
Standard Deviation	0.3	6.5	4.3	12.02	0.53	0.020	0.51	0.112	0.76	0.114	0.101	ND
Sample Variance	0.1	41.9	18.1	144.43	0.28	0.000	0.26	0.013	0.58	0.013	0.010	ND
Kurtosis	0.9	-1.2	1.1	5.98	-0.65	-1.134	-0.03	-2.122	-2.83	5.107	6.271	ND
Skewness	0.9	-0.5	1.3	2.39	1.15	0.471	1.32	0.355	0.15	2.113	2.443	ND
Range	0.9	16.6	11.8	35.20	1.24	0.051	1.24	0.266	1.67	0.350	0.300	0.00
Minimum	7.3	5.9	4.8	2.00	0.07	0.004	0.06	0.024	0.93	0.070	0.000	0.00
Maximum	8.1	22.5	16.6	37.20	1.30	0.055	1.30	0.290	2.60	0.420	0.300	0.00
Count	7	7	7	7	6	6	7	6	6	7	7	0
Confidence Level(95.0%)	0.3	6.0	3.9	11.11	0.56	0.021	0.47	0.117	0.80	0.105	0.093	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	715.7	704.9	3.8	10.9	14.4	1243	233.9	1340	2.2	8279
Standard Error	ND	ND	116.3	119.4	0.6	3.3	5.6	230	46.7	1174	0.4	6884
Median	ND	ND	790.0	784.6	2.8	5.6	8.9	1319	250.0	173	2.1	130
Mode	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND
Standard Deviation	ND	ND	307.6	316.0	1.6	8.8	14.9	610	123.6	2876	1.0	18213
Sample Variance	ND	ND	94628.6	99825.1	2.6	77.7	223.4	371523	15282.1	8273106	1.1	331710145
Kurtosis	ND	ND	-0.7	-0.7	-1.7	0.6	2.5	-1	-0.4	6	0.0	6
Skewness	ND	ND	-0.6	-0.6	0.4	1.3	1.7	-1	-0.3	2	0.7	3
Range	0.0	0.0	860.0	882.0	4.2	23.0	40.6	1679	359.0	7191	2.9	48983
Minimum	0.0	0.0	240.0	213.0	1.8	4.0	3.7	331	51.0	9	1.0	17
Maximum	0.0	0.0	1100.0	1095.0	6.0	27.0	44.3	2010	410.0	7200	3.9	49000
Count	0	0	7	7	7	7	7	7	7	6	6	7
Confidence Level(95.0%)	ND	ND	284.5	292.2	1.5	8.2	13.8	564	114.3	3018	1.1	16844

ND=No Data

Provisional MMSD Water Quality Data

DEAN ROAD - SITE 2
INDIAN CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	18.00	6.10	0.0	19.0	15.0	11.0	9.0	72.0	0.0	ND	0.0	0.0
Standard Error	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ND	0.0	0.0
Median	18.00	6.10	0.0	19.0	15.0	11.0	9.0	72.0	0.0	ND	0.0	0.0
Mode	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Standard Deviation	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sample Variance	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Kurtosis	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Skewness	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Range	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Minimum	18.00	6.10	0.0	19.0	15.0	11.0	9.0	72.0	0.0	0.0	0.0	0.0
Maximum	18.00	6.10	0.0	19.0	15.0	11.0	9.0	72.0	0.0	0.0	0.0	0.0
Count	1	1	1	1	1	1	1	1	1	0	1	1
Confidence Level(95.0%)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	71	180	3.9	11.0	57.9	45.9	12.3	11.8
Standard Error	0	30	1.5	1.9	6.9	7.7	1.4	1.4
Median	71	190	2.3	10.6	59.0	48.0	12.0	11.0
Mode	ND	190	ND	ND	ND	ND	12.0	11.0
Standard Deviation	ND	80	3.9	4.6	18.3	20.3	3.8	3.7
Sample Variance	ND	6475	15.1	20.8	334.5	411.1	14.2	13.5
Kurtosis	ND	2	3.9	-2.3	1.7	2.5	-1.2	-1.1
Skewness	ND	-1	1.8	0.2	-1.2	-1.3	0.8	0.9
Range	0	247	12.0	10.6	55.0	62.9	9.0	8.4
Minimum	71	23	0.0	6.4	23.0	6.1	9.0	8.6
Maximum	71	270	12.0	17.0	78.0	69.0	18.0	17.0
Count	1	7	7	6	7	7	7	7
Confidence Level(95.0%)	ND	74	3.6	4.8	16.9	18.8	3.5	3.4

ND=No Data

Provisional MMSD Water Quality Data

PORT WASHINGTON ROAD - SITE 3
INDIAN CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	14.7	13.6	8.61	0.50	0.019	0.46	0.057	1.45	0.149	0.049	ND
Standard Error	0.2	2.9	1.8	2.77	0.21	0.008	0.21	0.021	0.22	0.037	0.035	ND
Median	7.9	16.3	13.5	6.23	0.33	0.015	0.14	0.048	1.50	0.120	0.000	ND
Mode	ND	ND	ND	2.27	ND	0.000	ND	ND	ND	0.110	0.000	ND
Standard Deviation	0.5	7.6	4.6	7.32	0.52	0.021	0.54	0.051	0.55	0.098	0.092	ND
Sample Variance	0.2	58.0	21.4	53.65	0.27	0.000	0.30	0.003	0.30	0.010	0.008	ND
Kurtosis	1.2	-0.6	0.7	0.74	0.82	1.214	1.47	2.620	-2.53	5.084	5.647	ND
Skewness	1.0	-0.9	-0.5	1.19	1.20	1.163	1.41	1.342	-0.06	2.081	2.339	ND
Range	1.4	20.4	14.4	19.83	1.31	0.055	1.50	0.150	1.26	0.306	0.250	0.00
Minimum	7.4	2.3	5.7	2.27	0.09	0.000	0.00	0.000	0.84	0.054	0.000	0.00
Maximum	8.8	22.7	20.0	22.10	1.40	0.055	1.50	0.150	2.10	0.360	0.250	0.00
Count	7	7	7	7	6	6	7	6	6	7	7	0
Confidence Level(95.0%)	0.4	7.0	4.3	6.77	0.54	0.022	0.50	0.054	0.58	0.091	0.085	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	741.4	712.8	7.1	28.7	14.6	1185	207.4	8334	2.8	6611
Standard Error	ND	ND	132.2	125.2	3.4	15.6	5.9	210	39.5	7008	0.5	5461
Median	ND	ND	740.0	734.6	5.0	16.0	5.7	1189	240.0	255	2.4	490
Mode	ND	ND	ND	ND	5.0	ND	ND	ND	ND	ND	ND	490
Standard Deviation	ND	ND	349.7	331.3	9.1	41.1	15.6	555	104.5	17166	1.2	14450
Sample Variance	ND	ND	122281.0	109783.1	82.5	1693.3	244.3	307842	10919.6	294666177	1.5	208793038
Kurtosis	ND	ND	-1.1	-1.1	5.5	6.1	0.6	-1	-1.0	6	-0.8	6
Skewness	ND	ND	-0.1	-0.3	2.3	2.4	1.4	-1	-0.5	2	0.8	3
Range	0.0	0.0	960.0	870.0	27.0	114.8	39.7	1444	288.0	42967	3.1	38984
Minimum	0.0	0.0	240.0	224.0	0.0	5.2	3.5	321	52.0	33	1.5	16
Maximum	0.0	0.0	1200.0	1094.0	27.0	120.0	43.2	1765	340.0	43000	4.6	39000
Count	0	0	7	7	7	7	7	7	7	6	6	7
Confidence Level(95.0%)	ND	ND	323.4	306.4	8.4	38.1	14.5	513	96.6	18014	1.3	13364

ND=No Data

Provisional MMSD Water Quality Data

PORT WASHINGTON ROAD - SITE 3
INDIAN CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	18.00	6.10	0.0	10.0	17.0	7.3	10.0	68.0	0.0	ND	0.0	0.0
Standard Error	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	ND	0.0	0.0
Median	18.00	6.10	0.0	10.0	17.0	7.3	10.0	68.0	0.0	ND	0.0	0.0
Mode	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Standard Deviation	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sample Variance	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Kurtosis	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Skewness	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Range	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Minimum	18.00	6.10	0.0	10.0	17.0	7.3	10.0	68.0	0.0	0.0	0.0	0.0
Maximum	18.00	6.10	0.0	10.0	17.0	7.3	10.0	68.0	0.0	0.0	0.0	0.0
Count	1	1	1	1	1	1	1	1	1	0	1	1
Confidence Level(95.0%)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	70	187	4.7	11.1	59.4	47.2	12.0	11.5
Standard Error	0	36	1.5	1.7	7.9	8.6	0.9	0.9
Median	70	160	3.9	10.5	55.0	43.0	12.0	12.0
Mode	ND	160	2.4	ND	ND	ND	10.0	13.0
Standard Deviation	ND	95	4.1	4.2	21.0	22.8	2.4	2.4
Sample Variance	ND	8935	16.7	17.6	439.6	519.0	5.8	5.8
Kurtosis	ND	0	0.5	-1.5	0.4	0.7	-2.1	-1.3
Skewness	ND	-1	1.0	0.4	-0.8	-0.8	0.0	0.0
Range	0	269	12.0	10.3	60.0	66.7	6.1	6.7
Minimum	70	21	0.0	6.7	22.0	6.3	8.9	8.3
Maximum	70	290	12.0	17.0	82.0	73.0	15.0	15.0
Count	1	7	7	6	7	7	7	7
Confidence Level(95.0%)	ND	87	3.8	4.4	19.4	21.1	2.2	2.2

ND=No Data

Provisional MMSD Water Quality Data

BRADLEY ROAD - SITE 4
INDIAN CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.6	13.7	6.8	9.88	0.84	0.022	0.77	0.094	1.31	0.155	0.074	ND
Standard Error	0.1	2.2	1.0	4.46	0.33	0.007	0.31	0.030	0.35	0.030	0.027	ND
Median	7.6	14.7	6.8	4.17	0.61	0.023	0.55	0.067	1.00	0.130	0.051	ND
Mode	ND	ND	ND	ND	0.17	ND	ND	0.180	ND	0.130	0.000	ND
Standard Deviation	0.1	6.2	2.7	12.63	0.86	0.019	0.87	0.080	0.93	0.086	0.076	ND
Sample Variance	0.0	38.6	7.2	159.40	0.74	0.000	0.76	0.006	0.86	0.007	0.006	ND
Kurtosis	-0.4	-1.1	2.4	0.20	3.02	-0.044	3.64	-2.467	4.69	-1.704	1.954	ND
Skewness	-1.0	-0.6	0.5	1.41	1.75	0.668	1.87	0.156	2.08	0.416	1.334	ND
Range	0.4	16.3	9.6	31.68	2.43	0.054	2.63	0.180	2.73	0.224	0.230	0.00
Minimum	7.3	4.7	2.4	0.82	0.17	0.000	0.07	0.000	0.57	0.056	0.000	0.00
Maximum	7.7	21.0	12.0	32.50	2.60	0.054	2.70	0.180	3.30	0.280	0.230	0.00
Count	8	8	8	8	7	7	8	7	7	8	8	0
Confidence Level(95.0%)	0.1	5.2	2.2	10.56	0.80	0.017	0.73	0.074	0.86	0.072	0.063	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	708.8	696.9	3.8	11.9	16.4	1177	215.0	6364	2.4	3684
Standard Error	ND	ND	97.4	98.4	0.8	2.7	4.2	159	34.1	4934	0.5	2626
Median	ND	ND	650.0	637.5	4.3	8.9	11.4	1095	205.0	70	1.8	205
Mode	ND	ND	ND	ND	ND	ND	ND	ND	130.0	19	1.3	ND
Standard Deviation	ND	ND	275.4	278.3	2.1	7.5	11.9	449	96.5	13055	1.3	7428
Sample Variance	ND	ND	75841.1	77434.4	4.6	56.9	142.4	201881	9314.3	170443080	1.8	55181579
Kurtosis	ND	ND	2.8	2.7	-1.6	-1.1	1.3	0	-0.1	6	-1.0	5
Skewness	ND	ND	1.6	1.6	-0.2	0.7	1.4	1	0.8	2	0.9	2
Range	0.0	0.0	830.0	834.0	5.8	20.0	34.6	1243	280.0	34981	3.3	20984
Minimum	0.0	0.0	470.0	456.0	1.0	4.0	5.8	738	110.0	19	1.3	16
Maximum	0.0	0.0	1300.0	1290.0	6.8	24.0	40.4	1981	390.0	35000	4.5	21000
Count	0	0	8	8	8	8	8	8	8	7	7	8
Confidence Level(95.0%)	ND	ND	230.2	232.6	1.8	6.3	10.0	376	80.7	12074	1.2	6210

ND=No Data

Provisional MMSD Water Quality Data

BRADLEY ROAD - SITE 4
INDIAN CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	58.00	31.00	0.0	6.7	14.5	8.6	3.9	49.0	0.0	0.0	5.0	0.0
Standard Error	31.00	20.00	0.0	2.3	1.5	2.4	3.9	16.0	0.0	0.0	5.0	0.0
Median	58.00	31.00	0.0	6.7	14.5	8.6	3.9	49.0	0.0	0.0	5.0	0.0
Mode	ND	ND	0.0	ND	ND	ND	ND	ND	0.0	ND	ND	0.0
Standard Deviation	43.84	28.28	0.0	3.3	2.1	3.4	5.5	22.6	0.0	ND	7.0	0.0
Sample Variance	1922.00	800.00	0.0	10.6	4.5	11.5	30.4	512.0	0.0	ND	49.0	0.0
Kurtosis	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Skewness	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Range	62.00	40.00	0.0	4.6	3.0	4.8	7.8	32.0	0.0	0.0	9.9	0.0
Minimum	27.00	11.00	0.0	4.4	13.0	6.2	0.0	33.0	0.0	0.0	0.0	0.0
Maximum	89.00	51.00	0.0	9.0	16.0	11.0	7.8	65.0	0.0	0.0	9.9	0.0
Count	2	2	2	2	2	2	2	2	2	1	2	2
Confidence Level(95.0%)	393.89	254.12	0.0	29.2	19.1	30.5	49.6	203.3	0.0	ND	62.9	0.0

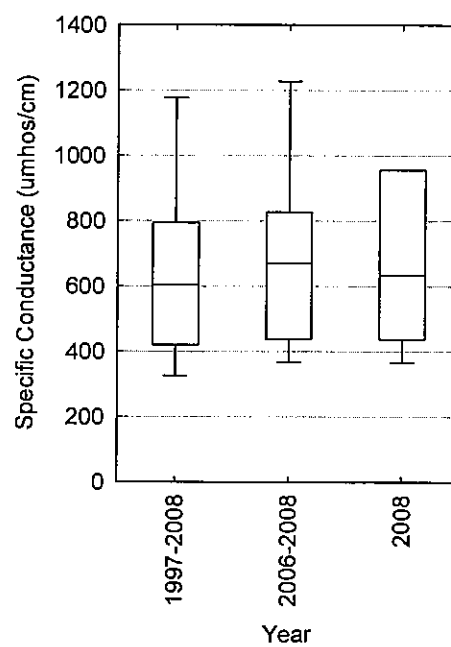
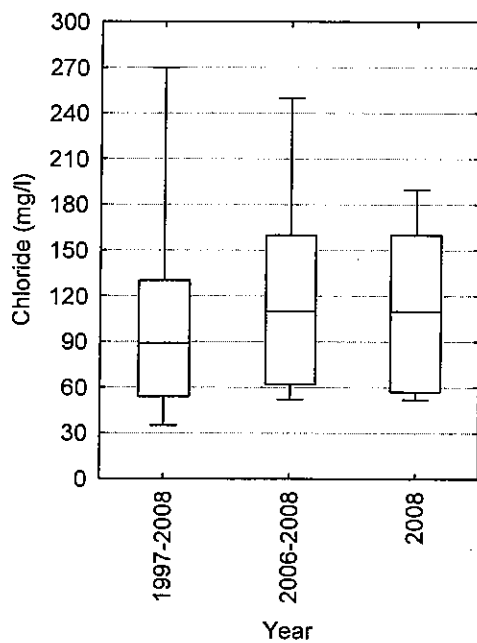
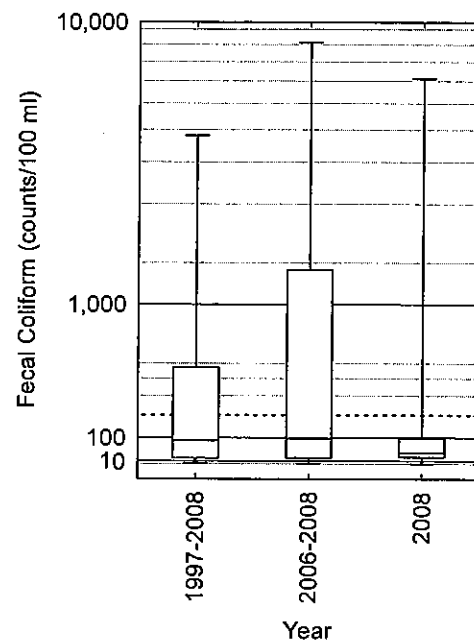
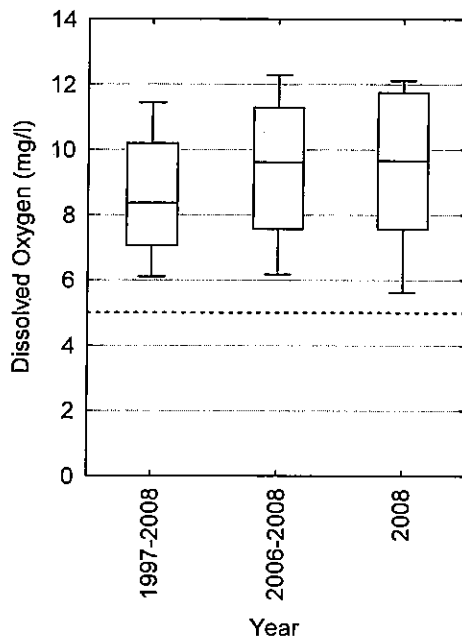
VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	270	179	3.3	9.2	56.3	45.9	10.3	10.2
Standard Error	160	28	1.2	1.5	6.0	6.6	1.0	1.1
Median	270	190	2.7	8.7	59.0	50.0	9.4	9.2
Mode	ND	ND	0.0	ND	ND	ND	ND	9.2
Standard Deviation	226	79	3.5	4.0	17.0	18.7	2.8	3.2
Sample Variance	51200	6224	12.2	16.2	290.2	348.0	7.9	10.5
Kurtosis	ND	1	3.8	-0.3	0.6	2.1	1.7	2.3
Skewness	ND	-1	1.7	0.9	-0.9	-1.3	1.5	1.6
Range	320	249	11.0	10.9	52.0	60.5	8.2	10.0
Minimum	110	21	0.0	5.1	24.0	7.5	7.8	7.0
Maximum	430	270	11.0	16.0	76.0	68.0	16.0	17.0
Count	2	8	8	7	8	8	8	8
Confidence Level(95.0%)	2033	66	2.9	3.7	14.2	15.6	2.3	2.7

ND=No Data

Provisional MMSD Water Quality Data

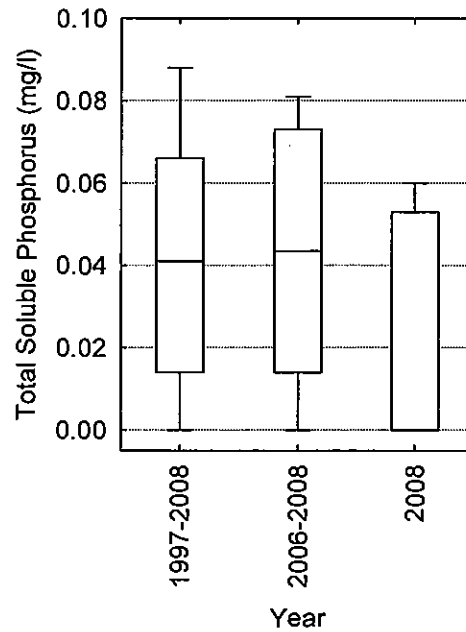
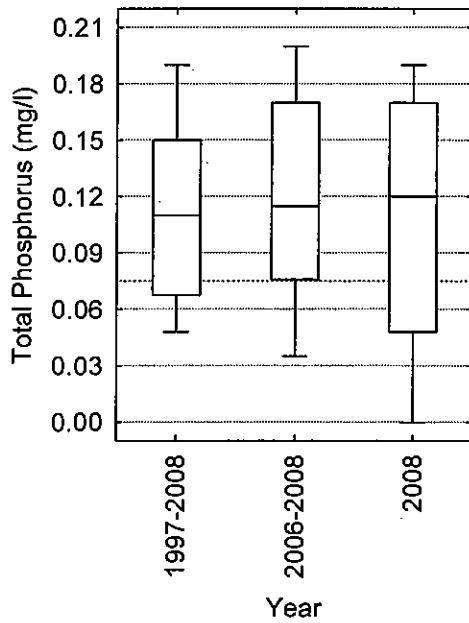
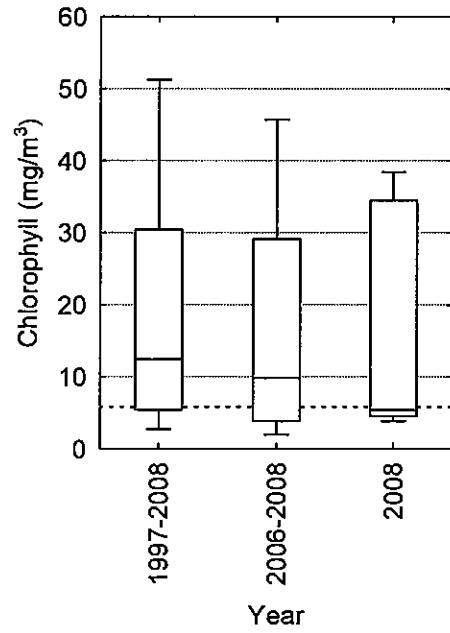
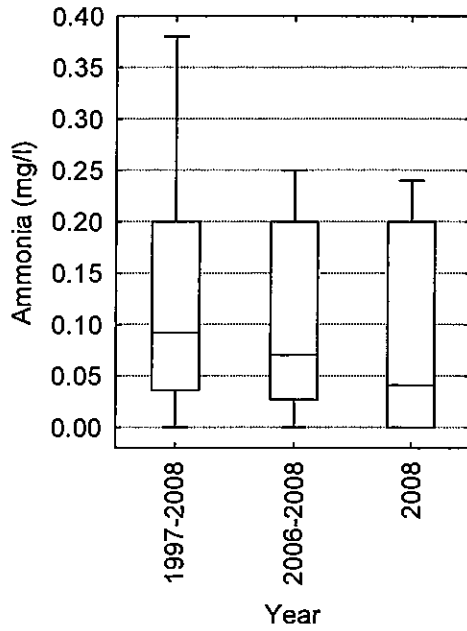


MMSD Water Quality Monitoring Program Data
Lincoln Creek at 60th St., Site LC-01



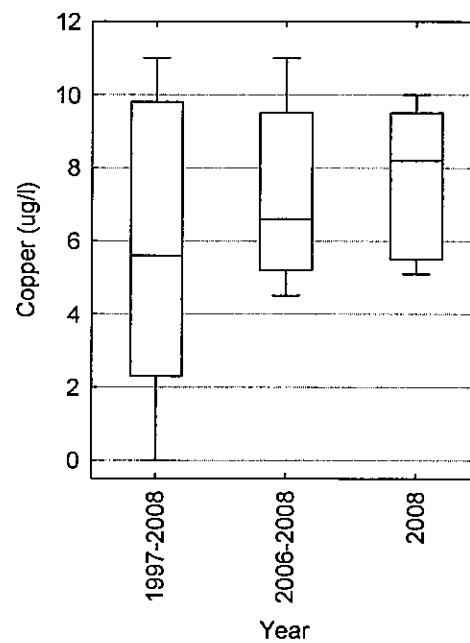
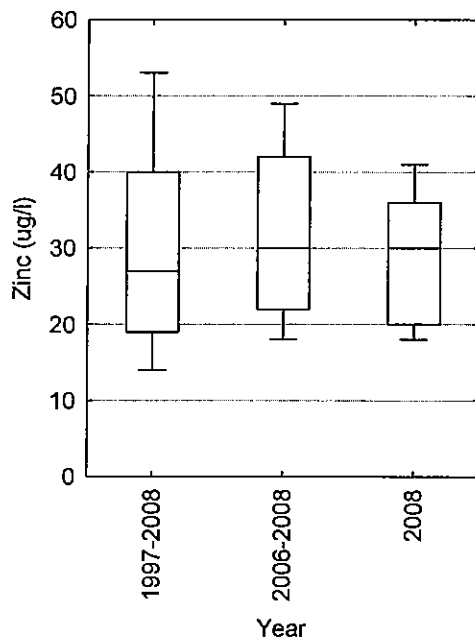
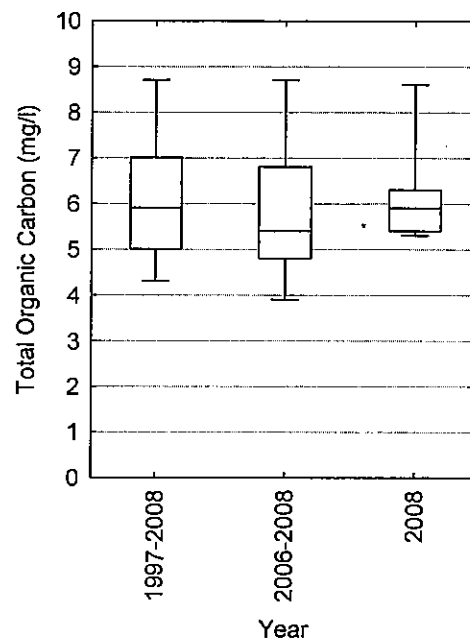
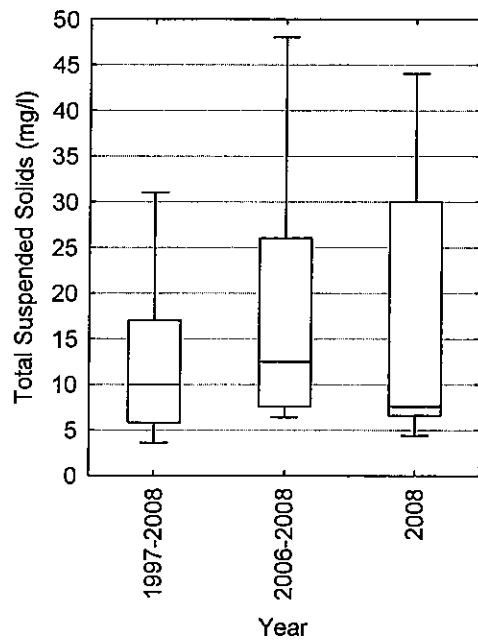
— Median □ 25%-75% ▤ 10%-90%
 --- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Lincoln Creek at 60th St., Site LC-01



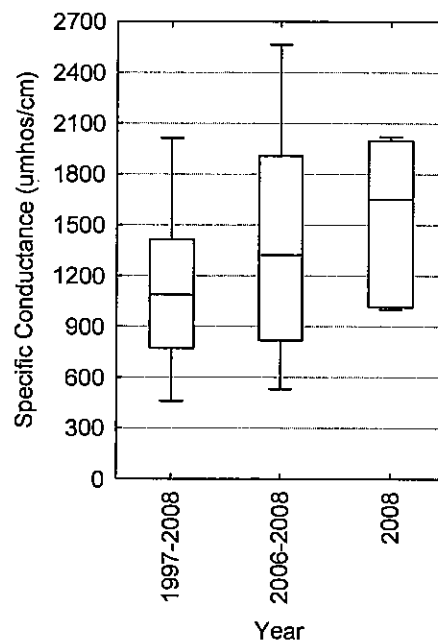
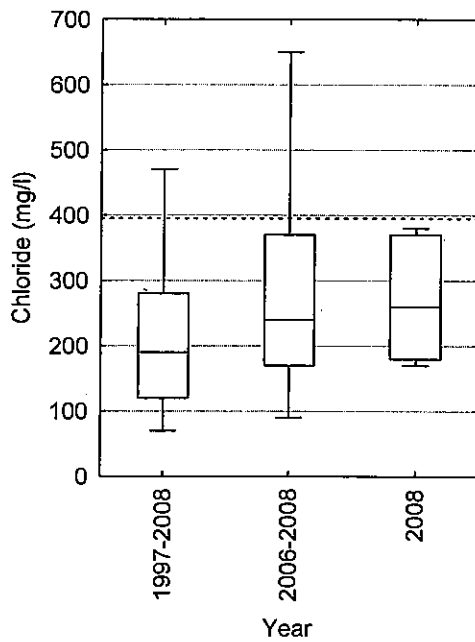
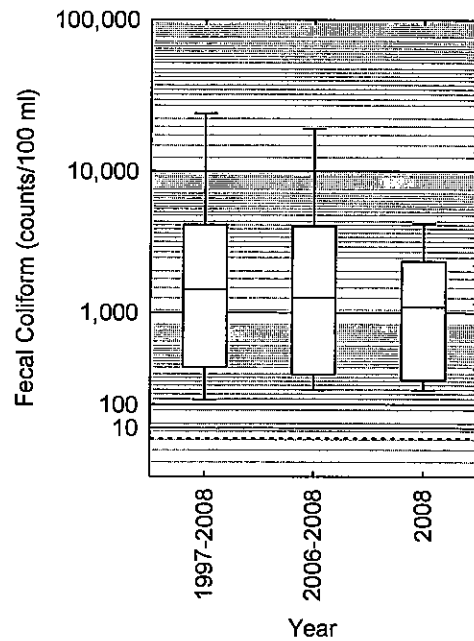
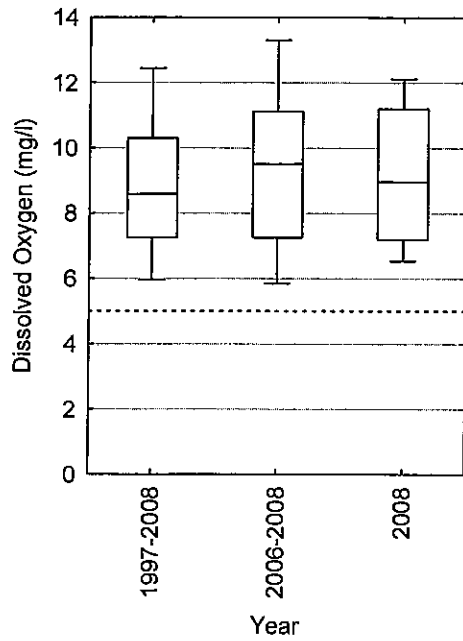
— Median □ 25%-75% ▮ 10%-90%
---- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Lincoln Creek at 60th St., Site LC-01



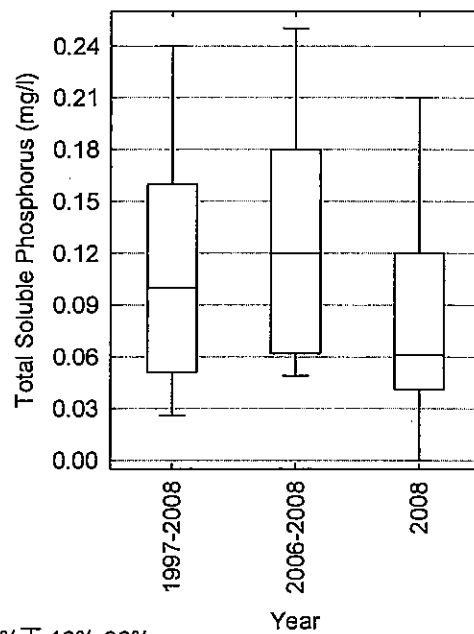
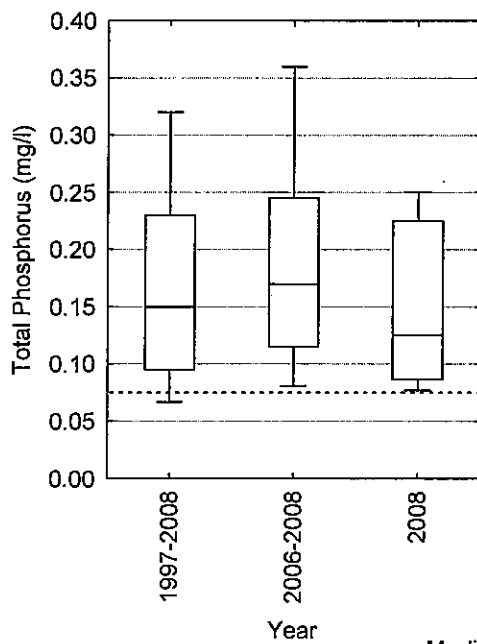
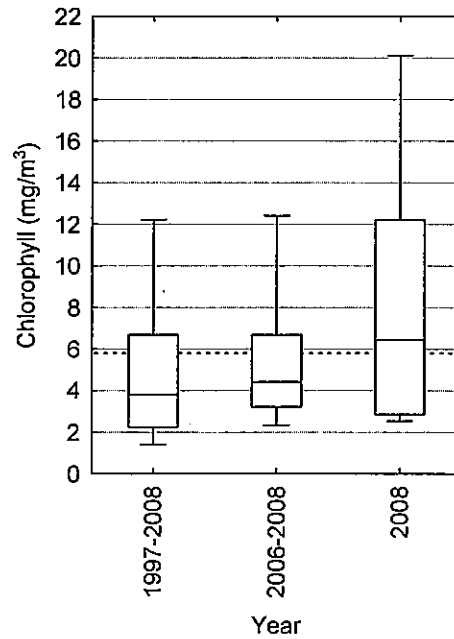
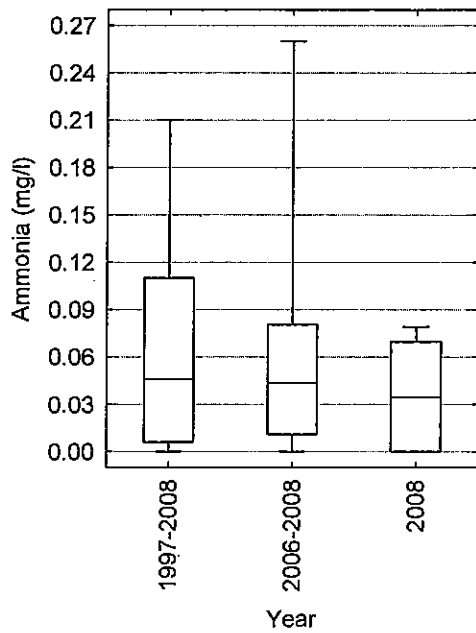
— Median □ 25%-75% ┘ 10%-90%

MMSD Water Quality Monitoring Program Data
Lincoln Creek at 47th St. and Congress, Site LC-04



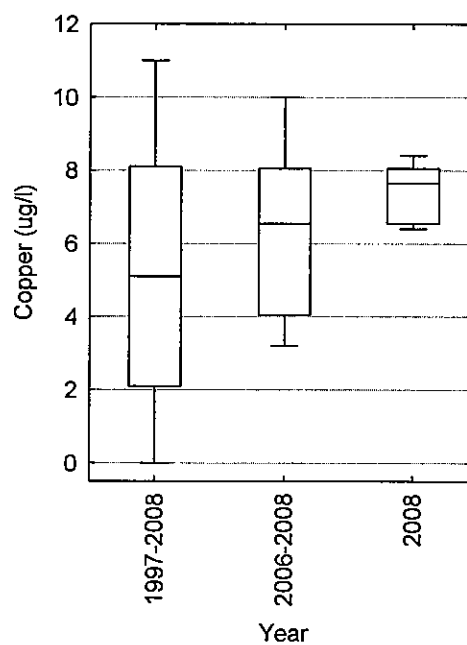
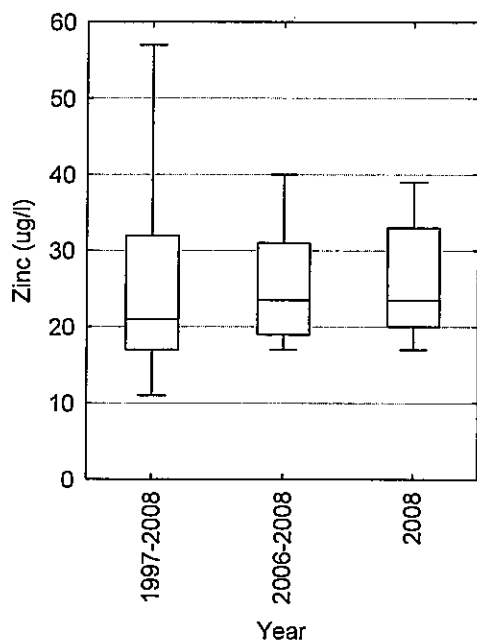
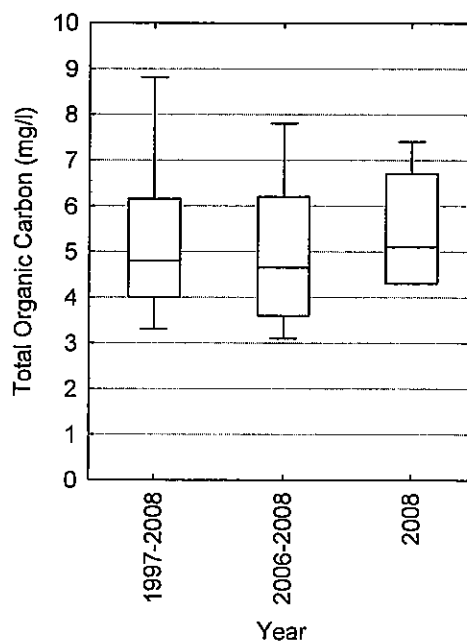
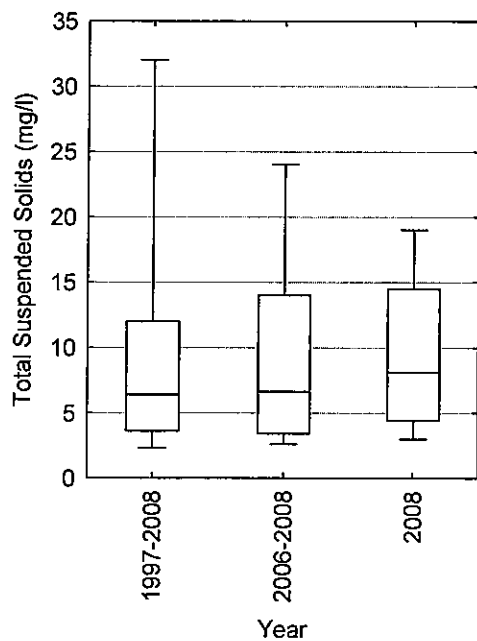
— Median □ 25%-75% ▮ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Lincoln Creek at 47th St. and Congress, Site LC-04



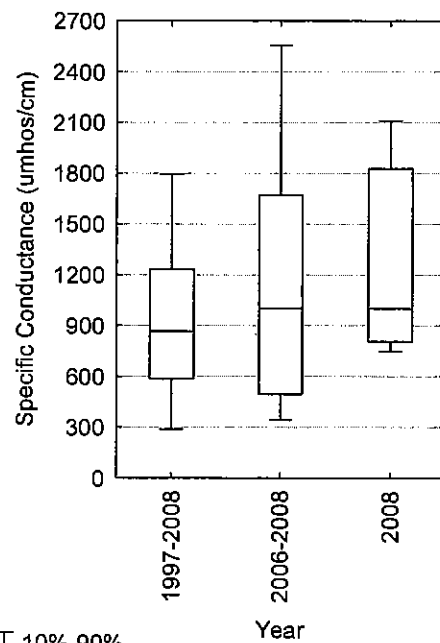
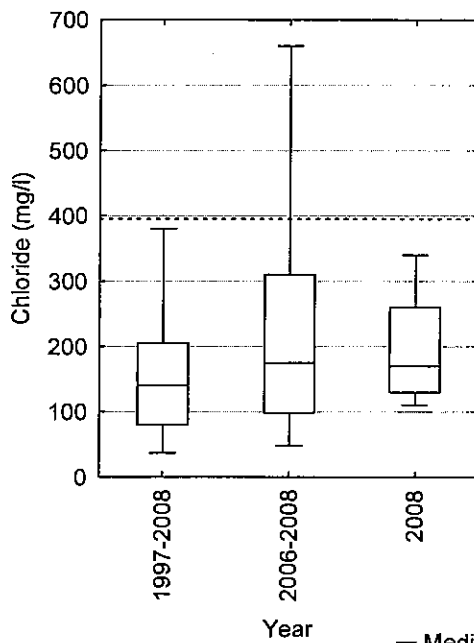
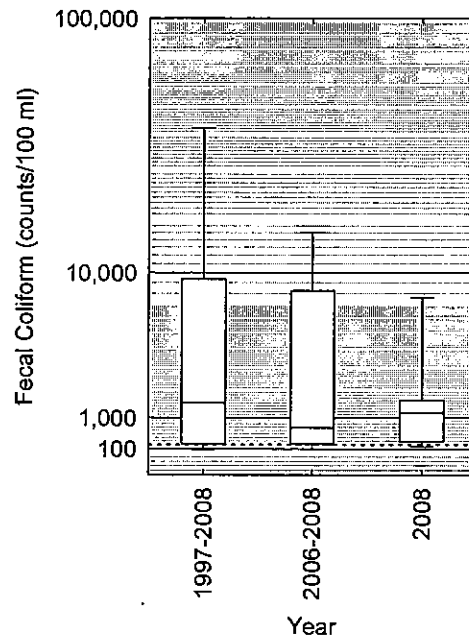
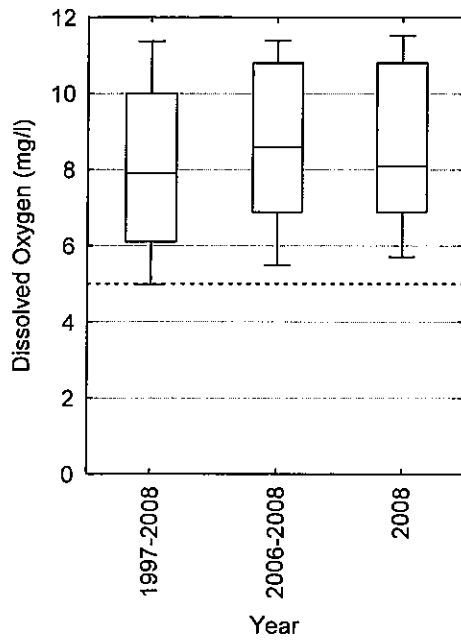
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--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Lincoln Creek at 47th St. and Congress, Site LC-04



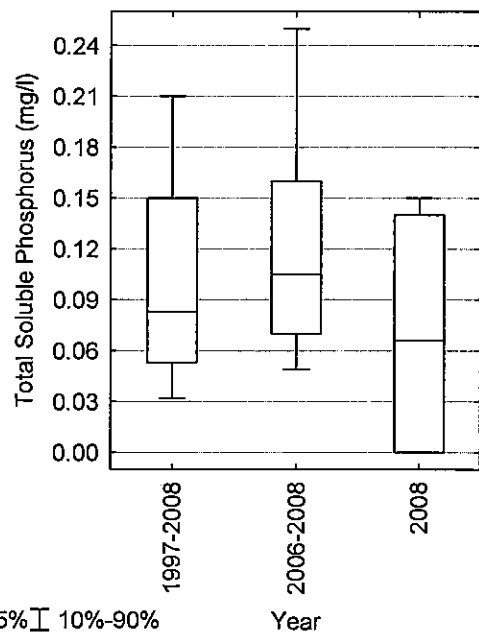
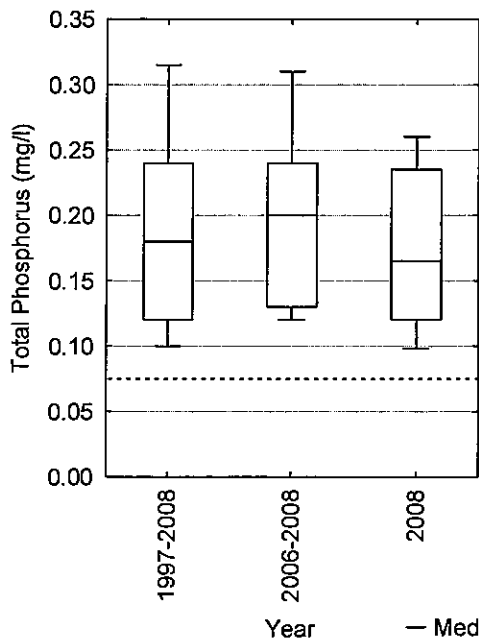
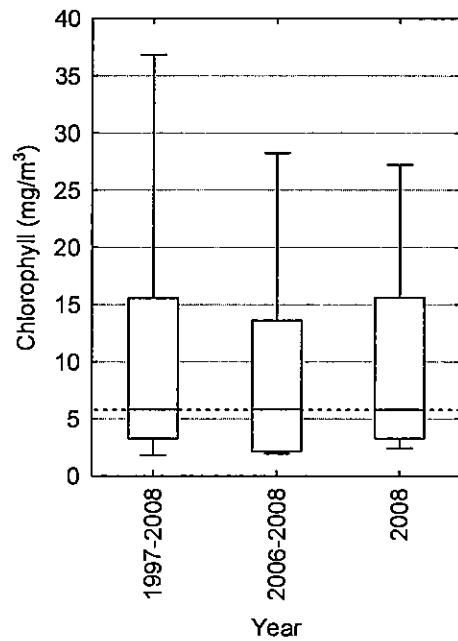
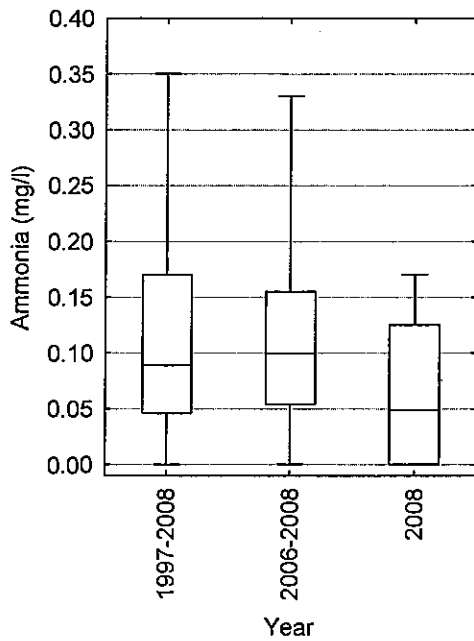
— Median □ 25%-75% ▮ 10%-90%

MMSD Water Quality Monitoring Program Data
Lincoln Creek at Green Bay Ave., Site LC-05



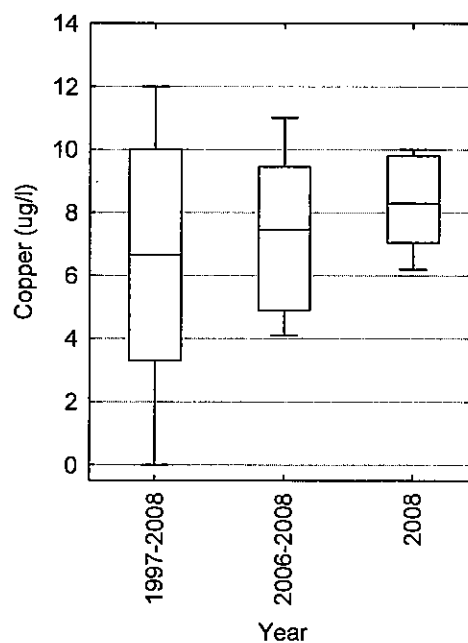
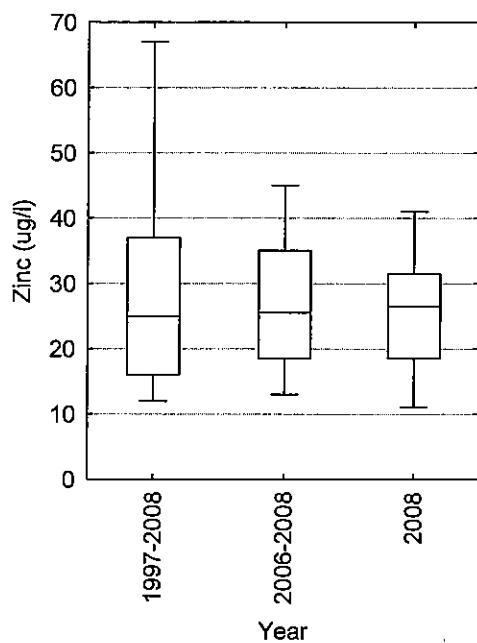
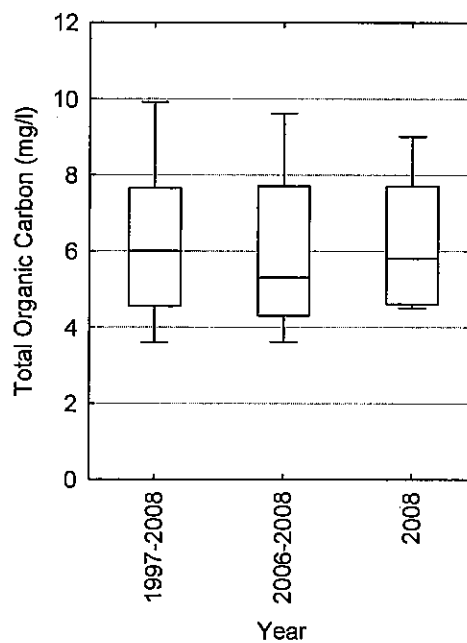
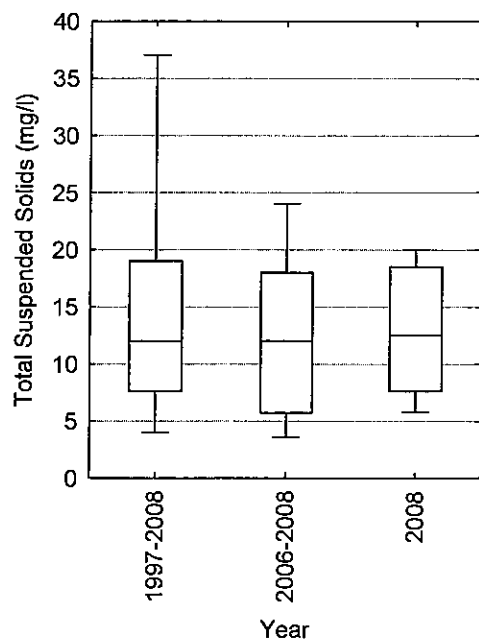
— Median □ 25%-75% ▮ 10%-90%
---- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Lincoln Creek at Green Bay Ave., Site LC-05



— Median □ 25%-75% ▤ 10%-90%
—— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Lincoln Creek at Green Bay Ave., Site LC-05



— Median □ 25%-75% ▮ 10%-90%

60TH STREET, NORTH OF GOOD HOPE ROAD - SITE 1
LINCOLN CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.7	13.6	9.2	16.06	0.39	0.022	0.35	0.084	0.94	0.112	0.025	ND
Standard Error	0.1	2.2	0.8	4.72	0.08	0.006	0.08	0.030	0.14	0.022	0.009	ND
Median	7.5	14.6	9.7	5.39	0.44	0.025	0.45	0.041	0.84	0.120	0.000	ND
Mode	7.8	ND	ND	ND	0.68	0.000	ND	0.000	ND	0.140	0.000	ND
Standard Deviation	0.3	7.4	2.7	15.66	0.24	0.018	0.26	0.099	0.45	0.072	0.030	ND
Sample Variance	0.1	54.3	7.1	245.26	0.06	0.000	0.07	0.010	0.21	0.005	0.001	ND
Kurtosis	-0.1	-1.8	-1.0	-1.02	-1.45	-0.374	-1.80	-1.107	3.97	-0.680	-1.683	ND
Skewness	0.8	-0.3	-0.2	0.89	-0.27	0.226	0.13	0.839	1.91	-0.367	0.489	ND
Range	1.1	18.8	8.2	40.72	0.60	0.054	0.67	0.240	1.56	0.220	0.075	0.00
Minimum	7.3	3.8	4.9	2.58	0.08	0.000	0.05	0.000	0.54	0.000	0.000	0.00
Maximum	8.3	22.6	13.1	43.30	0.68	0.054	0.72	0.240	2.10	0.220	0.075	0.00
Count	11	11	11	11	9	9	11	11	11	11	11	0
Confidence Level(95.0%)	0.2	4.9	1.8	10.52	0.18	0.014	0.17	0.066	0.31	0.049	0.020	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	391.8	375.0	6.2	16.8	17.1	658	112.8	814	1.7	ND
Standard Error	ND	ND	41.0	43.7	1.5	4.9	6.0	76	17.3	725	0.4	ND
Median	ND	ND	370.0	357.0	5.8	7.6	6.1	633	110.0	40	1.6	ND
Mode	ND	ND	ND	ND	2.2	7.6	ND	ND	ND	ND	ND	ND
Standard Deviation	ND	ND	136.1	145.0	4.8	16.4	19.8	253	57.5	2175	1.1	ND
Sample Variance	ND	ND	18516.4	21013.5	23.4	267.8	390.8	64098	3309.8	4729424	1.3	ND
Kurtosis	ND	ND	-1.4	-1.4	2.8	0.3	-0.5	-1	-1.1	9	0.8	ND
Skewness	ND	ND	0.5	0.4	1.5	1.3	1.2	0	0.1	3	0.5	ND
Range	0.0	0.0	360.0	392.4	16.4	45.4	49.4	724	174.0	6600	3.8	0
Minimum	0.0	0.0	230.0	191.0	1.6	3.6	4.3	296	26.0	0	0.0	0
Maximum	0.0	0.0	590.0	583.4	18.0	49.0	53.7	1020	200.0	6600	3.8	0
Count	0	0	11	11	11	11	11	11	11	9	9	0
Confidence Level(95.0%)	ND	ND	91.4	97.4	3.3	11.0	13.3	170	38.6	1672	0.9	ND

ND = No Data

Provisional MMSD Water Quality Data

60TH STREET, NORTH OF GOOD HOPE ROAD - SITE 1
LINCOLN CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	40.73	15.15	0.0	3.6	7.7	6.0	0.6	28.3	0.1	2.6	2.3	0.0
Standard Error	3.32	1.80	0.0	0.9	0.6	1.8	0.5	3.0	0.1	1.0	1.0	0.0
Median	40.00	13.00	0.0	4.4	8.2	4.1	0.0	30.0	0.0	0.0	0.0	0.0
Mode	ND	11.00	0.0	0.0	5.1	5.6	0.0	ND	0.0	0.0	0.0	0.0
Standard Deviation	11.02	5.96	0.0	3.0	2.1	5.9	1.6	10.1	0.3	3.2	3.2	0.0
Sample Variance	121.42	35.58	0.0	9.0	4.4	34.4	2.5	102.2	0.1	10.2	10.2	0.0
Kurtosis	-1.37	-0.78	ND	-1.8	-1.5	8.9	6.7	-1.4	11.0	-1.5	-1.4	ND
Skewness	0.26	0.78	ND	-0.3	0.1	2.9	2.6	-0.1	3.3	0.6	0.8	ND
Range	31.00	16.60	0.0	7.3	5.9	21.2	5.0	30.0	1.1	7.8	7.7	0.0
Minimum	27.00	8.40	0.0	0.0	5.1	1.8	0.0	12.0	0.0	0.0	0.0	0.0
Maximum	58.00	25.00	0.0	7.3	11.0	23.0	5.0	42.0	1.1	7.8	7.7	0.0
Count	11	11	11	11	11	11	11	11	11	11	11	4
Confidence Level(95.0%)	7.40	4.01	0.0	2.0	1.4	3.9	1.1	6.8	0.2	2.1	2.1	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	165	122	3.1	13.2	36.9	30.6	6.2	5.7
Standard Error	16	13	0.7	1.3	2.9	2.9	0.4	0.3
Median	150	110	3.3	12.5	37.0	28.0	5.9	5.7
Mode	150	110	0.0	ND	29.0	ND	5.4	5.0
Standard Deviation	51	42	2.5	4.0	9.6	9.6	1.4	0.9
Sample Variance	2647	1777	6.0	15.9	92.3	92.7	1.9	0.8
Kurtosis	-1	0	-0.7	-1.0	0.4	0.6	1.5	-0.6
Skewness	1	1	0.1	0.5	0.9	1.1	1.6	-0.2
Range	150	133	7.5	11.5	32.0	31.0	4.1	2.9
Minimum	100	77	0.0	8.5	25.0	20.0	5.0	4.1
Maximum	250	210	7.5	20.0	57.0	51.0	9.1	7.0
Count	11	11	11	10	11	11	11	11
Confidence Level(95.0%)	35	28	1.6	2.9	6.5	6.5	0.9	0.6

ND = No Data

Provisional MMSD Water Quality Data

51ST STREET AND WOOLWORTH AVENUE - SITE 2
LINCOLN CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.6	13.4	9.1	9.08	0.40	0.014	0.39	0.051	0.77	0.089	0.035	ND
Standard Error	0.1	2.2	1.1	2.17	0.12	0.002	0.12	0.015	0.24	0.020	0.012	ND
Median	7.6	14.7	9.5	6.06	0.22	0.013	0.22	0.046	0.51	0.085	0.034	ND
Mode	7.5	ND	ND	ND	ND	0.013	ND	0.000	0.00	0.000	0.000	ND
Standard Deviation	0.2	6.5	3.3	6.86	0.36	0.007	0.37	0.048	0.76	0.062	0.038	ND
Sample Variance	0.0	42.1	10.9	47.09	0.13	0.000	0.14	0.002	0.58	0.004	0.001	ND
Kurtosis	0.4	-1.9	-0.9	3.17	-0.56	0.025	0.11	-1.354	3.53	-1.140	-0.386	ND
Skewness	0.0	-0.1	-0.1	1.76	1.12	0.655	1.28	0.368	1.66	-0.220	0.843	ND
Range	0.6	15.9	10.1	22.29	0.89	0.022	1.04	0.130	2.60	0.170	0.100	0.00
Minimum	7.2	5.1	4.2	3.21	0.11	0.005	0.06	0.000	0.00	0.000	0.000	0.00
Maximum	7.9	21.0	14.3	25.50	1.00	0.027	1.10	0.130	2.60	0.170	0.100	0.00
Count	9	9	9	10	9	9	10	10	10	10	10	0
Confidence Level(95.0%)	0.1	5.0	2.5	4.91	0.27	0.005	0.27	0.035	0.54	0.044	0.027	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	616.0	604.3	3.8	11.7	12.4	1081	169.3	2838	3.1	ND
Standard Error	ND	ND	99.9	102.7	1.2	5.0	4.2	152	30.2	1886	0.2	ND
Median	ND	ND	480.0	465.5	2.8	5.0	3.6	782	135.0	1150	3.1	ND
Mode	ND	ND	1100.0	427.0	1.0	ND	ND	ND	98.0	ND	ND	ND
Standard Deviation	ND	ND	316.0	324.7	3.7	15.9	13.4	456	95.5	5334	0.5	ND
Sample Variance	ND	ND	99871.1	105443.6	13.4	252.1	178.9	207846	9112.5	28447907	0.3	ND
Kurtosis	ND	ND	-1.0	-1.0	4.6	5.8	-0.8	-2	-1.1	8	3.5	ND
Skewness	ND	ND	0.7	0.6	2.0	2.4	0.9	1	0.3	3	1.2	ND
Range	0.0	0.0	890.0	938.2	12.0	51.0	35.2	1077	283.0	15790	1.9	0
Minimum	0.0	0.0	210.0	157.0	1.0	2.0	1.7	685	27.0	210	2.3	0
Maximum	0.0	0.0	1100.0	1095.2	13.0	53.0	36.8	1762	310.0	16000	4.2	0
Count	0	0	10	10	10	10	10	9	10	8	8	0
Confidence Level(95.0%)	ND	ND	226.1	232.3	2.6	11.4	9.6	350	68.3	4459	0.4	ND

ND = No Data

Provisional MMSD Water Quality Data

51ST STREET AND WOOLWORTH AVENUE - SITE 2
LINCOLN CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	62.30	24.21	0.0	2.6	7.2	7.3	0.7	20.5	0.2	2.2	3.9	0.0
Standard Error	8.52	4.16	0.0	0.8	0.4	1.8	0.5	2.5	0.2	1.1	1.4	0.0
Median	53.50	18.50	0.0	4.1	7.7	5.9	0.0	21.0	0.0	0.0	2.6	0.0
Mode	ND	ND	0.0	0.0	7.7	4.1	0.0	25.0	0.0	0.0	0.0	0.0
Standard Deviation	26.94	13.16	0.0	2.5	1.4	5.6	1.7	7.8	0.5	3.6	4.4	0.0
Sample Variance	726.01	173.15	0.0	6.2	1.9	31.6	2.8	61.0	0.2	12.7	19.1	0.0
Kurtosis	-0.52	-0.94	ND	-2.5	1.5	2.0	5.0	0.3	1.5	4.1	-1.5	ND
Skewness	0.66	0.75	ND	-0.2	-1.2	1.4	2.3	0.6	1.8	2.0	0.5	ND
Range	86.00	37.90	0.0	5.4	4.7	18.2	5.0	26.4	1.2	11.0	11.0	0.0
Minimum	24.00	8.10	0.0	0.0	4.2	1.8	0.0	9.6	0.0	0.0	0.0	0.0
Maximum	110.00	46.00	0.0	5.4	8.9	20.0	5.0	36.0	1.2	11.0	11.0	0.0
Count	10	10	10	9	10	10	10	10	10	10	10	3
Confidence Level(95.0%)	19.28	9.41	0.0	1.9	1.0	4.0	1.2	5.6	0.3	2.5	3.1	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	256	180	1.3	8.6	49.1	43.8	5.4	5.0
Standard Error	38	25	0.6	2.0	5.9	6.0	0.3	0.3
Median	210	150	0.0	6.0	41.5	36.0	5.1	5.1
Mode	ND	140	0.0	16.0	40.0	36.0	ND	5.6
Standard Deviation	121	79	1.8	5.9	18.6	19.0	1.1	0.9
Sample Variance	14753	6222	3.1	35.2	344.3	360.0	1.1	0.9
Kurtosis	-1	0	-1.4	-1.3	0.2	0.3	-0.8	0.0
Skewness	1	1	0.8	0.3	0.8	0.9	0.6	0.4
Range	368	270	4.1	16.0	62.0	63.0	3.1	3.1
Minimum	92	60	0.0	0.0	22.0	17.0	4.0	3.7
Maximum	460	330	4.1	16.0	84.0	80.0	7.1	6.8
Count	10	10	10	9	10	10	10	10
Confidence Level(95.0%)	87	56	1.3	4.6	13.3	13.6	0.8	0.7

ND = No Data

Provisional MMSD Water Quality Data

55TH STREET AND THURSTON AVENUE - SITE 3
LINCOLN CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.3	11.8	9.6	7.78	0.40	0.011	0.40	0.040	0.45	0.038	0.010	ND
Standard Error	0.0	1.8	0.5	1.50	0.13	0.003	0.11	0.016	0.08	0.016	0.007	ND
Median	7.4	13.0	9.2	6.56	0.19	0.011	0.20	0.018	0.48	0.000	0.000	ND
Mode	7.4	ND	ND	ND	ND	0.000	0.10	0.000	0.00	0.000	0.000	ND
Standard Deviation	0.2	5.7	1.5	4.98	0.37	0.009	0.36	0.051	0.27	0.055	0.024	ND
Sample Variance	0.0	32.2	2.3	24.83	0.14	0.000	0.13	0.003	0.07	0.003	0.001	ND
Kurtosis	-0.4	-1.9	-0.9	1.61	-1.56	-1.097	-1.33	-0.726	-0.17	2.374	6.106	ND
Skewness	-0.6	-0.2	-0.2	1.21	0.78	0.163	0.73	0.938	-0.84	1.557	2.509	ND
Range	0.5	13.8	4.5	16.30	0.88	0.025	0.90	0.130	0.74	0.170	0.074	0.00
Minimum	7.0	4.1	6.8	3.00	0.10	0.000	0.10	0.000	0.00	0.000	0.000	0.00
Maximum	7.6	17.9	11.4	19.30	0.98	0.025	1.00	0.130	0.74	0.170	0.074	0.00
Count	10	10	10	11	8	9	10	10	10	11	11	0
Confidence Level(95.0%)	0.1	4.1	1.1	3.35	0.31	0.007	0.25	0.036	0.19	0.037	0.016	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	869.1	857.3	4.1	11.8	10.0	1489	230.7	2136	3.0	ND
Standard Error	ND	ND	136.5	139.4	1.5	5.6	3.3	243	56.4	1030	0.2	ND
Median	ND	ND	860.0	857.6	2.4	4.2	3.7	1435	190.0	640	2.8	ND
Mode	ND	ND	460.0	ND	2.4	4.2	ND	ND	270.0	640	2.8	ND
Standard Deviation	ND	ND	452.6	462.3	4.9	18.5	11.0	768	187.2	2914	0.6	ND
Sample Variance	ND	ND	204849.1	213744.5	24.0	342.6	121.7	590206	35041.8	8489027	0.4	ND
Kurtosis	ND	ND	1.6	1.4	8.0	8.4	-0.4	4	7.0	2	-1.1	ND
Skewness	ND	ND	1.0	0.9	2.7	2.8	1.2	2	2.4	2	0.5	ND
Range	0.0	0.0	1610.0	1667.6	17.0	63.0	28.3	2697	710.0	8010	1.6	0
Minimum	0.0	0.0	290.0	225.0	1.0	2.0	2.0	696	40.0	190	2.3	0
Maximum	0.0	0.0	1900.0	1892.6	18.0	65.0	30.3	3393	750.0	8200	3.9	0
Count	0	0	11	11	11	11	11	10	11	8	8	0
Confidence Level(95.0%)	ND	ND	304.1	310.6	3.3	12.4	7.4	550	125.8	2436	0.5	ND

ND = No Data

Provisional MMSD Water Quality Data

55TH STREET AND THURSTON AVENUE - SITE 3
LINCOLN CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	91.64	36.73	0.0	2.8	6.6	4.4	1.1	17.7	0.2	1.1	5.4	0.0
Standard Error	11.11	5.12	0.0	0.8	0.5	0.8	0.8	2.5	0.2	0.8	1.4	0.0
Median	110.00	45.00	0.0	4.5	7.1	3.2	0.0	15.0	0.0	0.0	5.1	0.0
Mode	110.00	46.00	0.0	0.0	7.6	3.2	0.0	26.0	0.0	0.0	0.0	0.0
Standard Deviation	36.85	16.97	0.0	2.7	1.6	2.5	2.7	8.2	0.5	2.7	4.8	0.0
Sample Variance	1358.05	288.02	0.0	7.1	2.4	6.3	7.1	66.8	0.3	7.1	22.7	0.0
Kurtosis	-1.58	-1.53	ND	-2.3	3.8	5.0	7.8	0.5	11.0	6.0	-1.9	ND
Skewness	-0.28	-0.16	ND	-0.1	-1.7	2.1	2.8	1.1	3.3	2.5	-0.1	ND
Range	106.00	50.00	0.0	6.0	5.7	9.1	8.6	26.1	1.7	8.3	11.0	0.0
Minimum	34.00	11.00	0.0	0.0	2.7	1.9	0.0	8.9	0.0	0.0	0.0	0.0
Maximum	140.00	61.00	0.0	6.0	8.4	11.0	8.6	35.0	1.7	8.3	11.0	0.0
Count	11	11	11	11	11	11	11	11	11	11	11	4
Confidence Level(95.0%)	24.76	11.40	0.0	1.8	1.0	1.7	1.8	5.5	0.3	1.8	3.2	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	377	248	0.9	11.5	65.0	60.3	4.7	4.2
Standard Error	48	27	0.5	5.4	6.4	6.6	0.3	0.2
Median	450	280	0.0	6.9	71.0	65.0	4.5	3.8
Mode	450	310	0.0	0.0	91.0	87.0	4.0	3.8
Standard Deviation	160	90	1.5	17.0	21.2	21.8	1.1	0.8
Sample Variance	25582	8157	2.4	287.5	448.8	474.4	1.2	0.6
Kurtosis	-2	-1	0.5	7.2	-1.5	-1.4	0.6	0.3
Skewness	0	0	1.4	2.6	-0.2	-0.2	1.3	1.2
Range	470	266	4.0	57.0	59.0	62.0	3.2	2.4
Minimum	130	94	0.0	0.0	32.0	25.0	3.6	3.4
Maximum	600	360	4.0	57.0	91.0	87.0	6.8	5.8
Count	11	11	11	10	11	11	11	11
Confidence Level(95.0%)	107	61	1.0	12.1	14.2	14.6	0.7	0.5

ND = No Data

Provisional MMSD Water Quality Data

47TH STREET AND CONGRESS STREET - SITE 4
LINCOLN CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.7	12.1	9.4	11.36	0.85	0.016	0.77	0.053	0.69	0.146	0.087	ND
Standard Error	0.1	2.4	0.8	4.79	0.32	0.003	0.27	0.021	0.16	0.025	0.022	ND
Median	7.8	11.9	9.0	6.44	0.40	0.017	0.41	0.035	0.57	0.125	0.061	ND
Mode	7.8	ND	ND	ND	1.50	ND	1.50	0.000	0.51	ND	0.000	ND
Standard Deviation	0.2	8.0	2.8	15.88	0.97	0.008	0.89	0.072	0.52	0.086	0.073	ND
Sample Variance	0.1	64.8	7.6	252.29	0.94	0.000	0.80	0.005	0.27	0.007	0.005	ND
Kurtosis	1.2	-1.6	-0.4	7.88	2.23	-1.918	3.22	6.937	2.21	-0.741	-0.368	ND
Skewness	-0.5	0.1	0.5	2.73	1.61	0.111	1.82	2.420	0.99	0.188	0.714	ND
Range	0.9	21.5	9.0	54.16	2.86	0.020	2.90	0.260	1.90	0.290	0.210	0.00
Minimum	7.2	1.6	5.8	2.34	0.14	0.007	0.10	0.000	0.00	0.000	0.000	0.00
Maximum	8.1	23.0	14.8	56.50	3.00	0.027	3.00	0.260	1.90	0.290	0.210	0.00
Count	11	11	11	11	9	9	11	12	11	12	11	0
Confidence Level(95.0%)	0.2	5.4	1.9	10.67	0.75	0.006	0.60	0.046	0.35	0.055	0.049	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	953.6	944.1	3.5	9.9	8.2	1686	322.7	1668	2.9	1762
Standard Error	ND	ND	163.3	164.1	0.6	1.8	2.2	258	82.4	557	0.2	674
Median	ND	ND	760.0	757.0	2.6	8.1	4.4	1653	260.0	1100	3.0	675
Mode	ND	ND	1200.0	ND	2.6	19.0	ND	ND	ND	ND	ND	ND
Standard Deviation	ND	ND	541.7	544.4	1.9	6.1	7.3	857	273.4	1847	0.6	2334
Sample Variance	ND	ND	293465.5	296344.4	3.7	36.8	53.9	733675	74721.8	3411530	0.4	5449652
Kurtosis	ND	ND	3.2	3.2	-1.6	-1.4	0.0	4	8.0	1	-1.4	3
Skewness	ND	ND	1.6	1.6	0.3	0.3	1.1	2	2.7	1	-0.1	2
Range	0.0	0.0	1900.0	1912.2	5.2	16.4	21.6	3049	1010.0	5507	1.8	7600
Minimum	0.0	0.0	400.0	381.0	1.0	2.6	1.8	818	90.0	93	2.0	100
Maximum	0.0	0.0	2300.0	2293.2	6.2	19.0	23.4	3867	1100.0	5600	3.7	7700
Count	0	0	11	11	11	12	11	11	11	11	11	12
Confidence Level(95.0%)	ND	ND	363.9	365.7	1.3	3.9	4.9	575	183.6	1241	0.4	1483

ND = No Data

Provisional MMSD Water Quality Data

47TH STREET AND CONGRESS STREET - SITE 4
LINCOLN CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	71.00	28.50	0.1	3.8	7.3	6.5	0.7	26.3	0.1	2.6	3.4	0.0
Standard Error	5.98	3.52	0.1	0.8	0.5	2.0	0.5	2.7	0.1	1.1	1.3	0.0
Median	68.00	25.00	0.0	4.2	7.7	3.5	0.0	23.5	0.0	0.0	0.0	0.0
Mode	78.00	ND	0.0	0.0	7.8	ND	0.0	20.0	0.0	0.0	0.0	0.0
Standard Deviation	20.70	12.20	0.5	2.6	1.6	6.9	1.8	9.2	0.4	3.6	4.6	0.0
Sample Variance	428.55	148.82	0.2	6.9	2.6	47.4	3.2	84.4	0.2	13.2	21.0	0.0
Kurtosis	-0.61	-1.15	12.0	-0.5	3.1	2.6	6.1	-0.6	12.0	1.0	-0.3	ND
Skewness	0.62	0.64	3.5	-0.3	-1.0	1.9	2.5	0.6	3.5	1.3	1.0	ND
Range	64.00	33.00	1.6	8.0	6.7	21.1	5.7	30.0	1.4	11.0	13.0	0.0
Minimum	46.00	15.00	0.0	0.0	3.3	1.9	0.0	13.0	0.0	0.0	0.0	0.0
Maximum	110.00	48.00	1.6	8.0	10.0	23.0	5.7	43.0	1.4	11.0	13.0	0.0
Count	12	12	12	12	12	12	12	12	12	12	12	4
Confidence Level(95.0%)	13.15	7.75	0.3	1.7	1.0	4.4	1.1	5.8	0.3	2.3	2.9	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	296	196	2.0	12.1	53.8	47.5	6.2	5.6
Standard Error	29	16	1.0	2.5	3.6	3.9	0.9	0.8
Median	280	180	0.0	11.2	52.0	42.0	5.1	4.9
Mode	ND	140	0.0	15.0	47.0	37.0	5.1	4.3
Standard Deviation	100	52	3.5	7.8	11.8	12.9	3.1	2.6
Sample Variance	10081	2745	12.0	60.7	139.8	166.1	9.6	6.9
Kurtosis	-1	0.	7.2	2.3	-0.2	-0.3	7.8	7.3
Skewness	1	1	2.5	1.3	0.9	1.0	2.7	2.6
Range	280	150	12.0	25.8	33.0	36.0	11.0	9.4
Minimum	180	140	0.0	4.2	42.0	35.0	4.0	3.6
Maximum	460	290	12.0	30.0	75.0	71.0	15.0	13.0
Count	12	11	12	10	11	11	11	11
Confidence Level(95.0%)	64	35	2.2	5.6	7.9	8.7	2.1	1.8

ND = No Data

Provisional MMSD Water Quality Data

GREEN BAY AVENUE - SITE 5
LINCOLN CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.7	12.8	8.6	12.70	0.81	0.026	0.78	0.066	0.66	0.180	0.083	ND
Standard Error	0.1	2.5	0.8	4.88	0.26	0.003	0.22	0.021	0.11	0.022	0.023	ND
Median	7.6	12.5	8.1	5.81	0.43	0.027	0.45	0.049	0.67	0.165	0.066	ND
Mode	ND	ND	ND	ND	ND	0.037	0.87	0.000	0.67	0.120	0.000	ND
Standard Deviation	0.5	8.2	2.4	16.19	0.77	0.010	0.72	0.072	0.37	0.076	0.077	ND
Sample Variance	0.2	66.5	5.7	262.17	0.60	0.000	0.52	0.005	0.14	0.006	0.006	ND
Kurtosis	0.9	-1.7	-1.7	5.54	0.02	-1.637	0.42	-1.798	-0.06	-0.002	0.773	ND
Skewness	0.5	0.1	0.1	2.31	1.01	-0.266	1.11	0.335	0.09	0.808	0.897	ND
Range	1.7	22.7	6.8	54.15	2.25	0.026	2.24	0.170	1.30	0.244	0.250	0.00
Minimum	6.8	1.4	5.4	1.95	0.05	0.011	0.06	0.000	0.00	0.096	0.000	0.00
Maximum	8.5	24.1	12.1	56.10	2.30	0.037	2.30	0.170	1.30	0.340	0.250	0.00
Count	11	11	10	11	9	9	11	12	11	12	11	0
Confidence Level(95.0%)	0.3	5.5	1.7	10.88	0.59	0.008	0.48	0.046	0.25	0.048	0.052	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	810.9	797.9	5.4	13.0	11.8	1451	299.8	2179	3.0	2089
Standard Error	ND	ND	201.6	202.0	0.8	1.8	1.9	341	122.3	930	0.2	1045
Median	ND	ND	530.0	512.0	5.6	12.5	10.1	1000	170.0	1140	3.0	750
Mode	ND	ND	530.0	ND	ND	12.0	ND	ND	130.0	1600	3.2	ND
Standard Deviation	ND	ND	668.8	669.8	2.7	6.3	6.3	1132	405.7	2942	0.7	3467
Sample Variance	ND	ND	447229.1	448652.2	7.1	39.3	40.0	1280539	164592.4	8653921	0.4	12017750
Kurtosis	ND	ND	7.6	7.6	-0.6	-0.8	-1.6	6	9.9	2	-0.5	2
Skewness	ND	ND	2.6	2.6	0.3	0.2	0.5	2	3.1	2	-0.1	2
Range	0.0	0.0	2380.0	2381.0	8.6	20.4	16.6	4058	1432.0	8330	2.1	9215
Minimum	0.0	0.0	320.0	307.0	1.4	3.6	4.7	475	68.0	70	1.8	85
Maximum	0.0	0.0	2700.0	2688.0	10.0	24.0	21.3	4533	1500.0	8400	3.9	9300
Count	0	0	11	11	11	12	11	11	11	10	10	11
Confidence Level(95.0%)	ND	ND	449.3	450.0	1.8	4.0	4.2	760	272.6	2104	0.5	2329

ND = No Data

Provisional MMSD Water Quality Data

GREEN BAY AVENUE - SITE 5
LINCOLN CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	58.25	22.30	0.0	4.5	8.2	5.3	1.2	26.2	0.2	2.2	3.8	0.0
Standard Error	4.41	2.66	0.0	0.7	0.6	1.0	0.7	3.2	0.1	0.9	1.4	0.0
Median	56.50	19.50	0.0	4.7	8.3	4.1	0.0	26.5	0.0	0.0	0.0	0.0
Mode	58.00	20.00	0.0	4.8	ND	ND	0.0	24.0	0.0	0.0	0.0	0.0
Standard Deviation	15.29	9.21	0.0	2.5	2.0	3.5	2.3	11.0	0.5	3.0	4.9	0.0
Sample Variance	233.66	84.79	0.0	6.2	3.8	12.5	5.2	120.5	0.2	9.1	23.6	0.0
Kurtosis	0.10	-0.18	ND	0.5	0.1	5.3	1.9	-0.5	3.2	0.5	-1.9	ND
Skewness	0.48	0.83	ND	-0.6	-0.6	2.2	1.8	0.0	2.1	1.2	0.6	ND
Range	54.00	30.40	0.0	8.5	6.9	12.4	6.5	35.0	1.4	8.9	11.0	0.0
Minimum	32.00	9.60	0.0	0.0	4.1	2.6	0.0	10.0	0.0	0.0	0.0	0.0
Maximum	86.00	40.00	0.0	8.5	11.0	15.0	6.5	45.0	1.4	8.9	11.0	0.0
Count	12	12	12	12	12	12	12	12	12	12	12	4
Confidence Level(95.0%)	9.71	5.85	0.0	1.6	1.2	2.2	1.5	7.0	0.3	1.9	3.1	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	239	156	4.1	15.4	43.9	37.3	6.8	6.2
Standard Error	21	13	1.3	2.8	3.1	3.6	1.0	0.8
Median	225	150	3.4	13.2	41.0	34.0	5.8	5.5
Mode	230	150	0.0	18.0	41.0	32.0	ND	5.5
Standard Deviation	74	42	4.4	9.0	10.4	11.9	3.2	2.6
Sample Variance	5499	1806	19.3	80.3	107.9	141.2	10.1	6.9
Kurtosis	0	1	4.9	3.4	0.8	0.1	4.2	4.3
Skewness	1	1	1.9	1.7	0.4	0.7	1.9	2.0
Range	260	143	16.0	28.8	38.0	38.0	11.4	9.0
Minimum	120	87	0.0	8.2	25.0	21.0	3.6	4.0
Maximum	380	230	16.0	37.0	63.0	59.0	15.0	13.0
Count	12	11	12	10	11	11	11	11
Confidence Level(95.0%)	47	29	2.8	6.4	7.0	8.0	2.1	1.8

ND = No Data

Provisional MMSD Water Quality Data

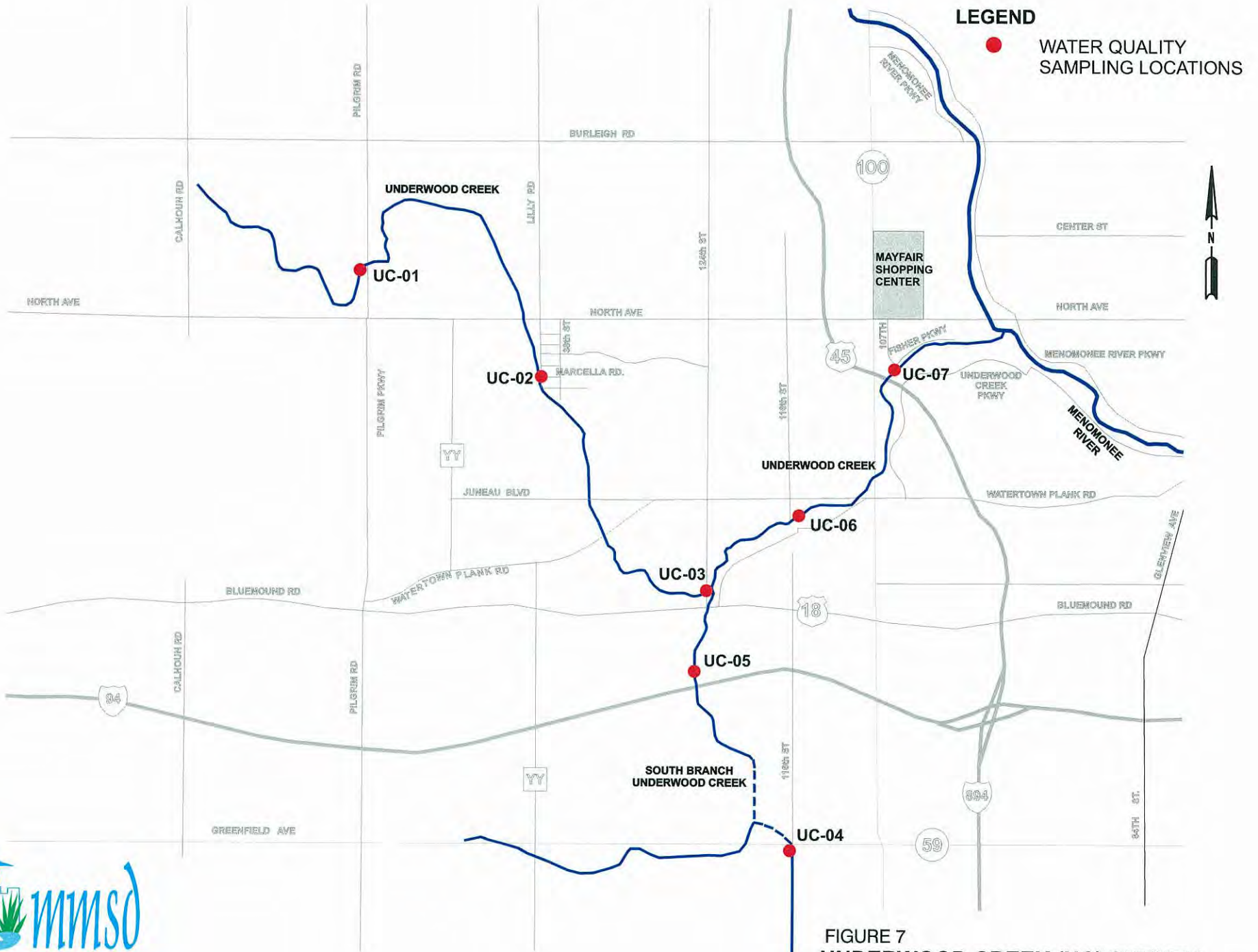
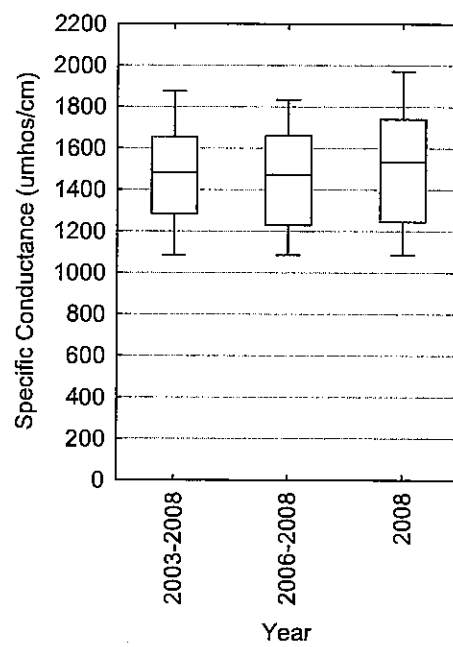
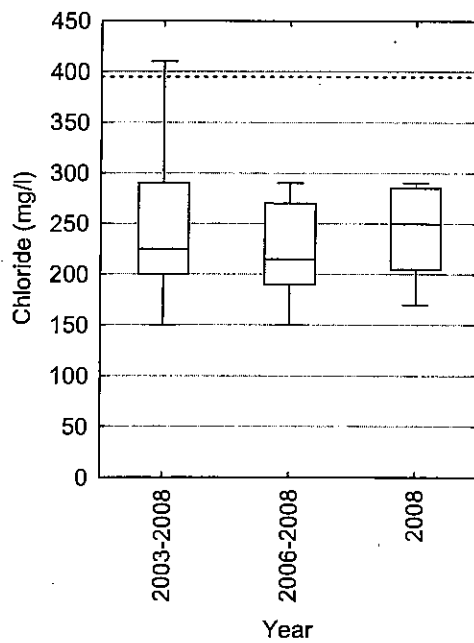
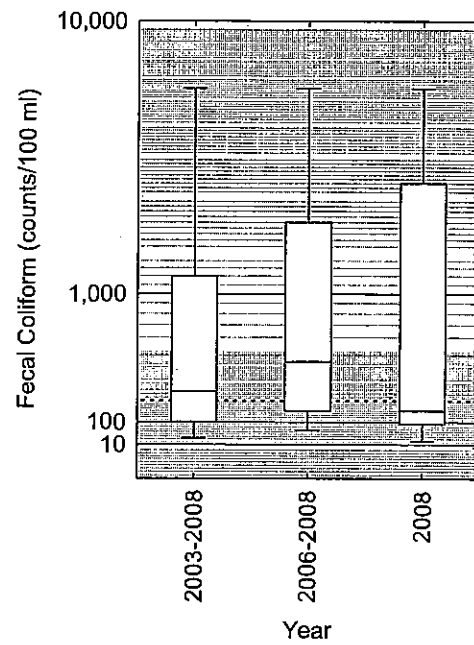
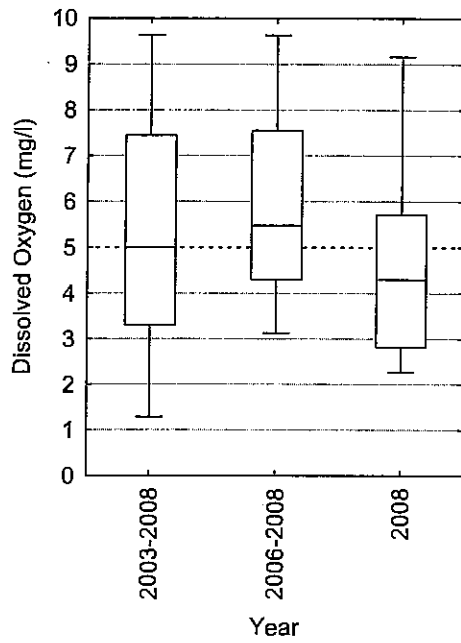


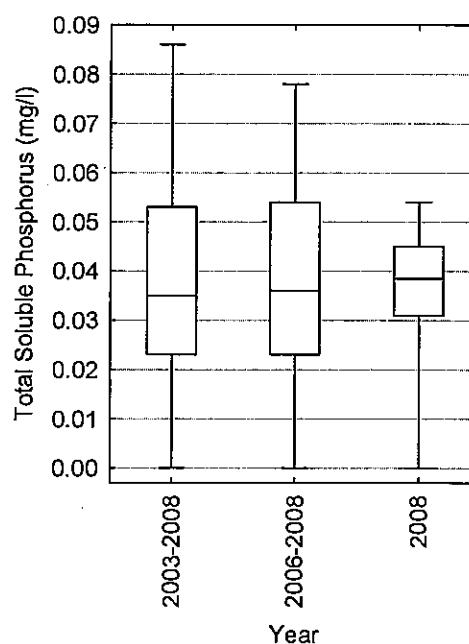
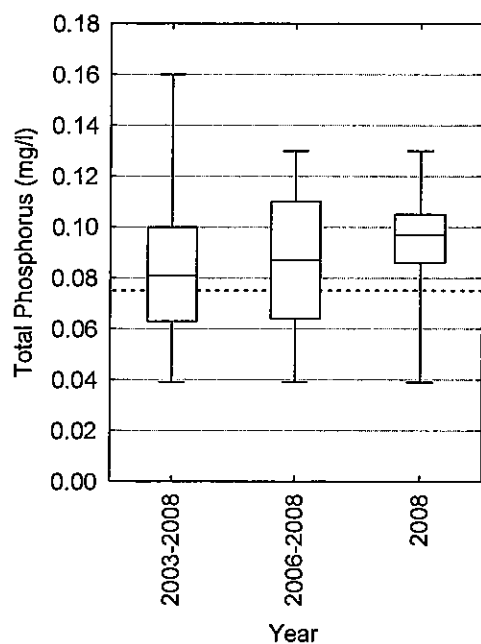
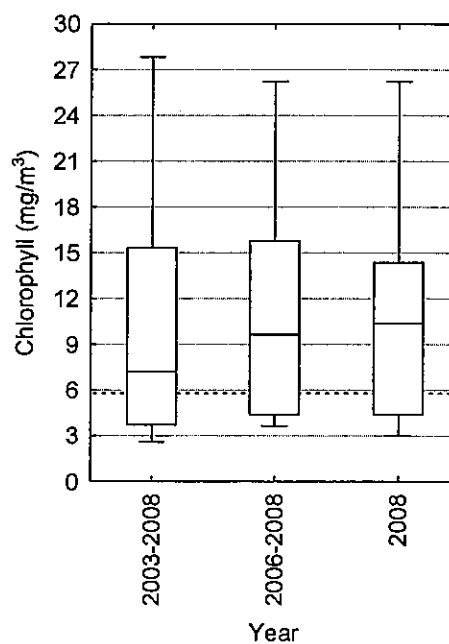
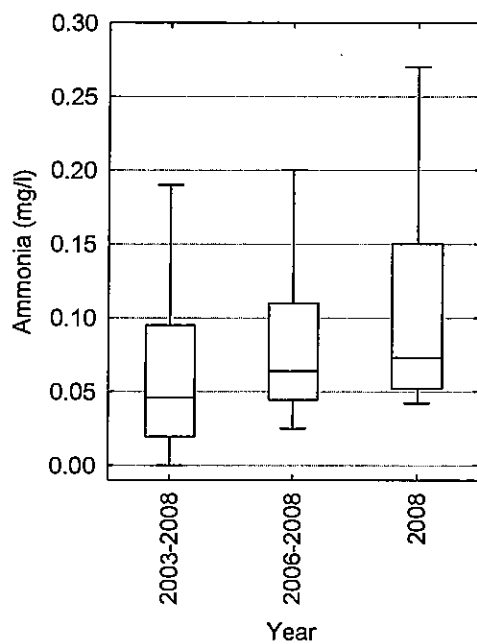
FIGURE 7
UNDERWOOD CREEK (UC) SURVEY
WATER QUALITY SAMPLING LOCATIONS
 11/21/07 03-144-UC REPORT

MMSD Water Quality Program Data
Underwood Creek at Wirth Park, Site UC-01



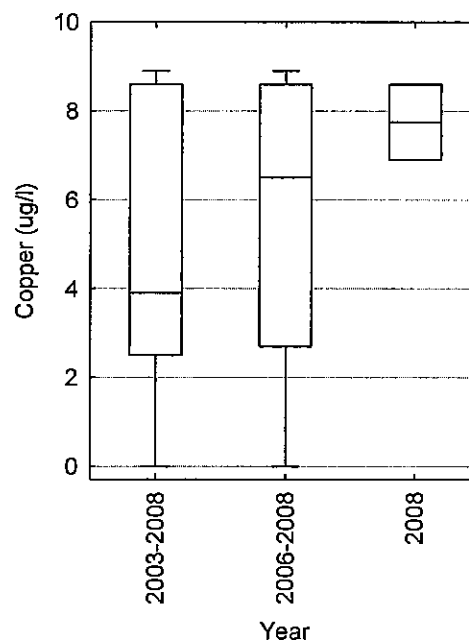
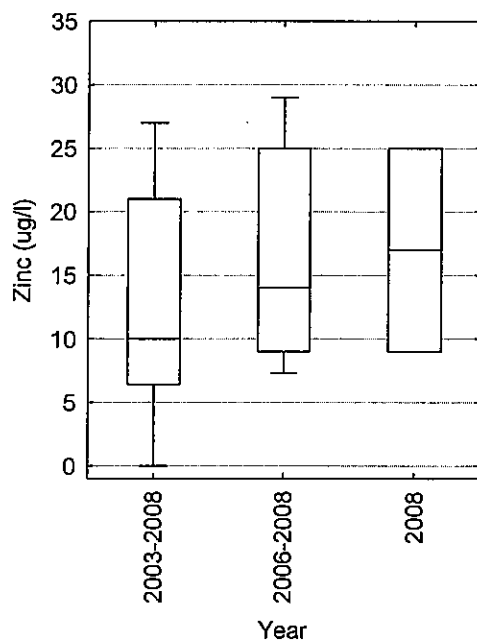
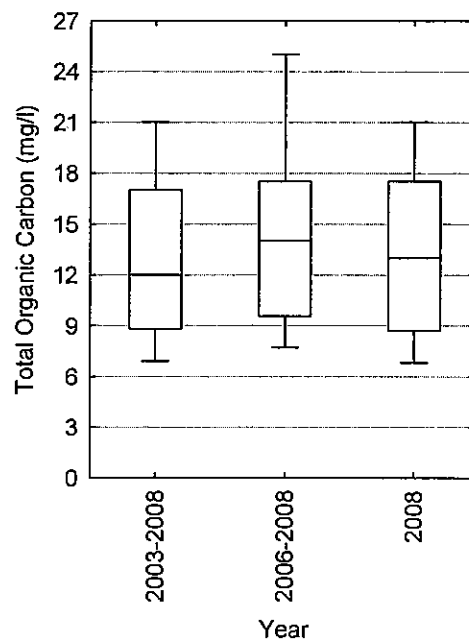
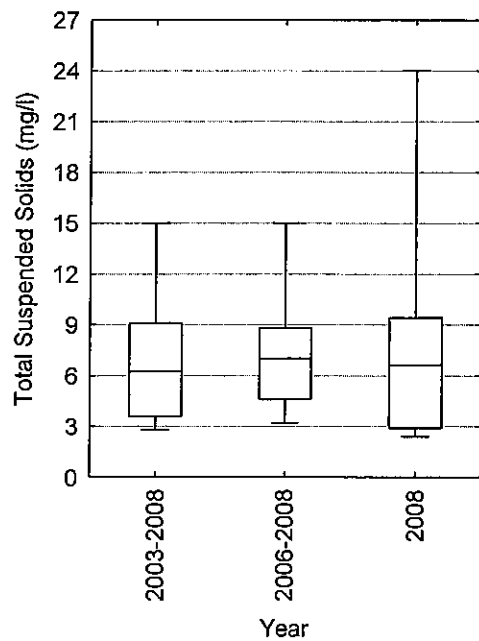
— Median □ 25%-75% ┘ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Program Data
Underwood Creek at Wirth Park, Site UC-01



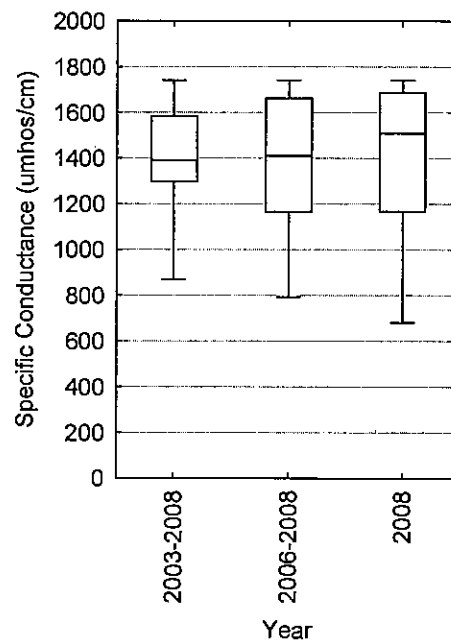
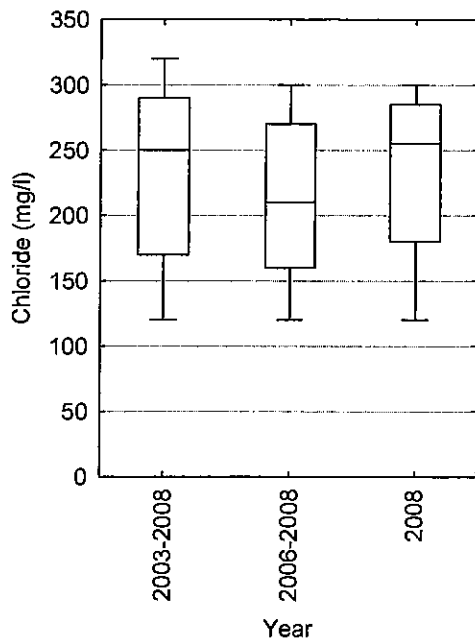
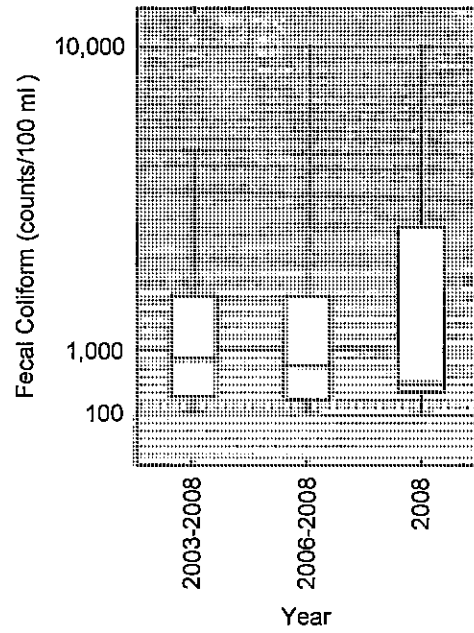
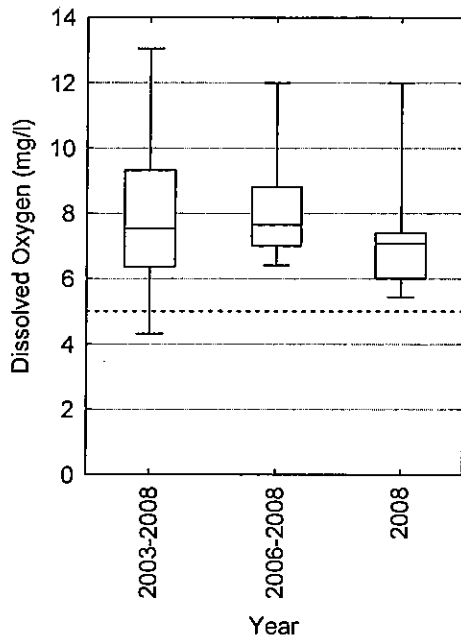
— Median □ 25%-75% ▮ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Program Data
Underwood Creek at Wirth Park, Site UC-01



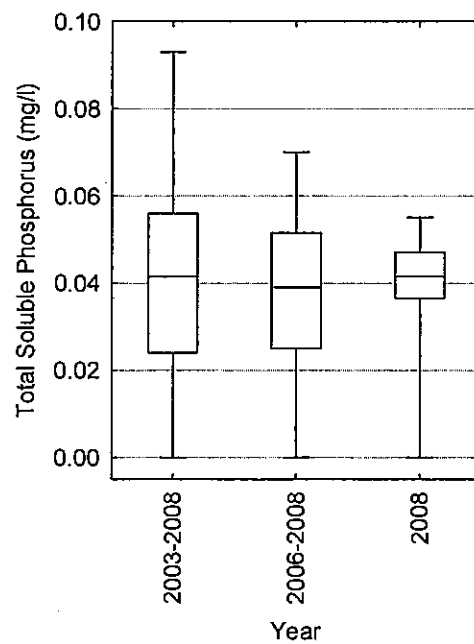
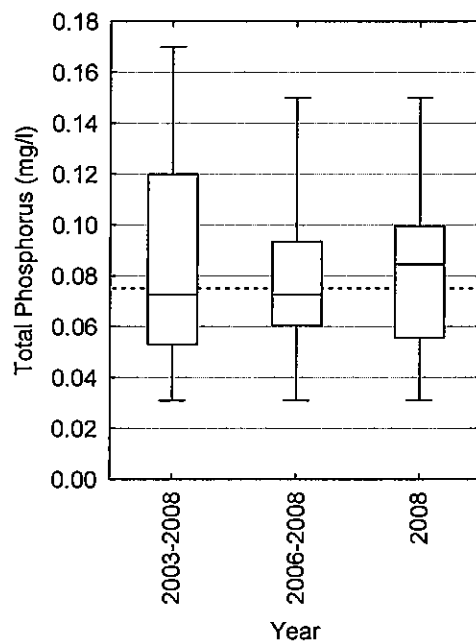
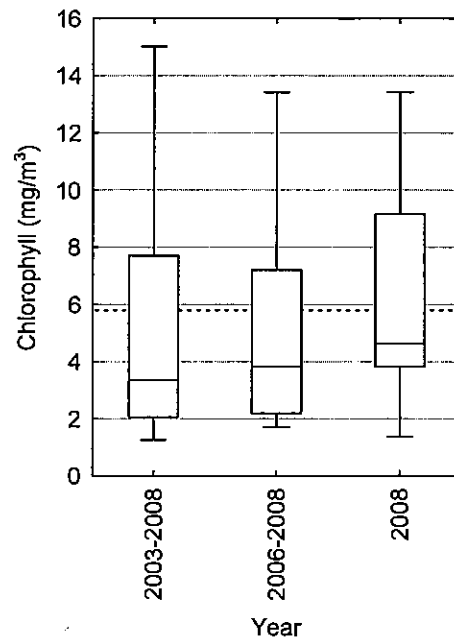
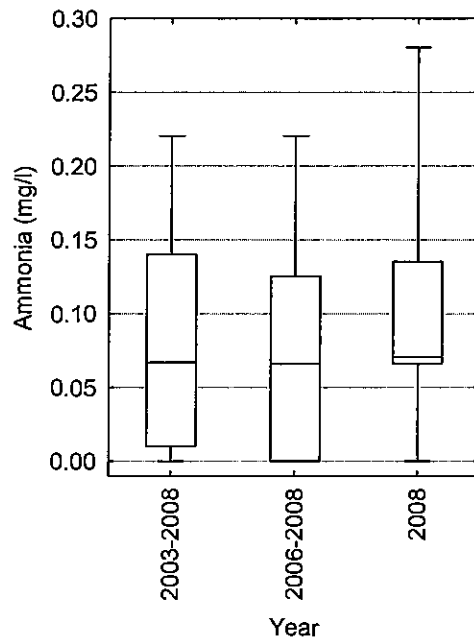
— Median □ 25%-75% ┘ 10%-90%

MMSD Water Quality Program Data
Underwood Creek at Marcella St., Site UC-02



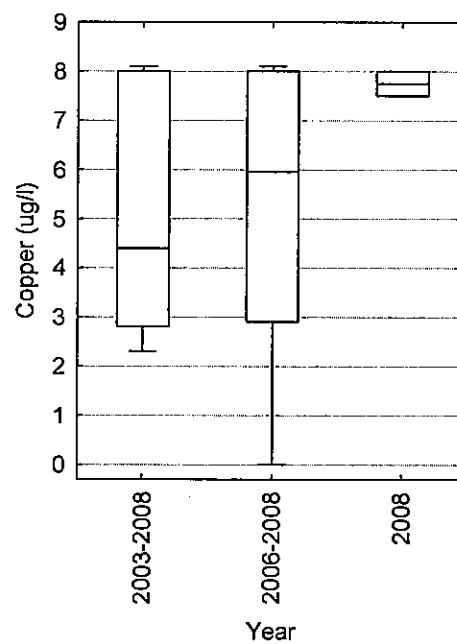
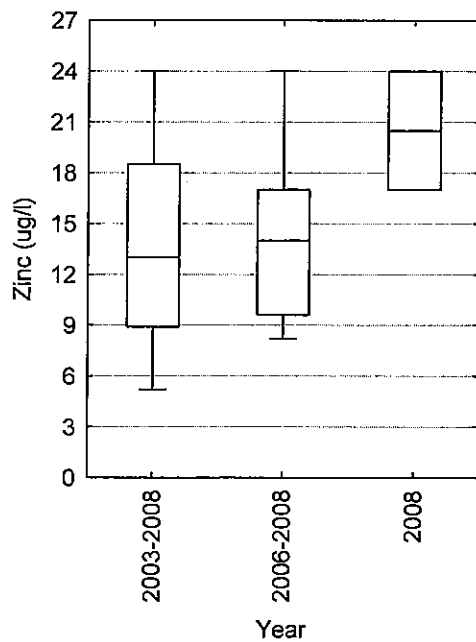
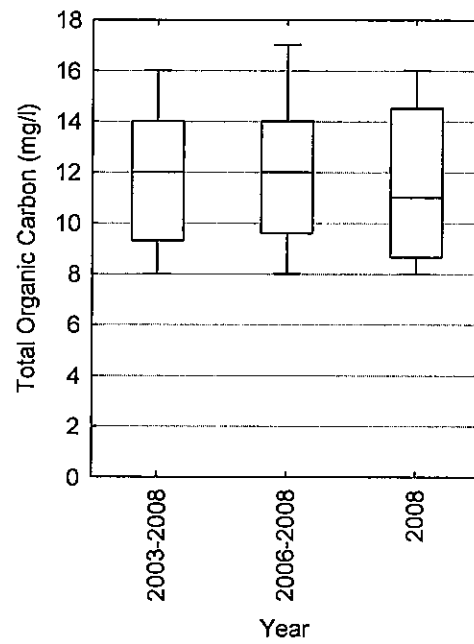
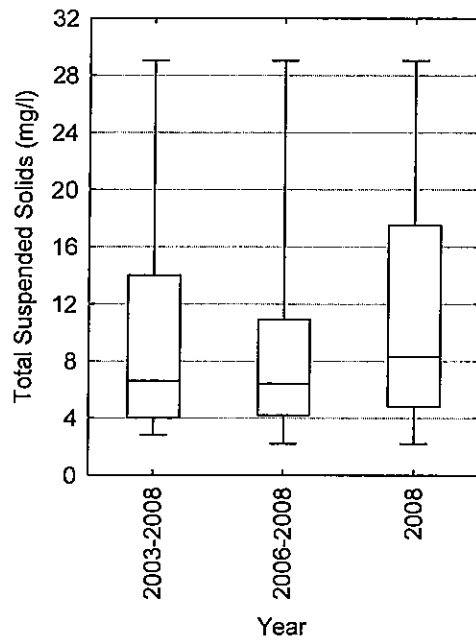
— Median □ 25%-75% ▮ 10%-90%
WQ Standard/Criterion

MMSD Water Quality Program Data
Underwood Creek at Marcella St., Site UC-02



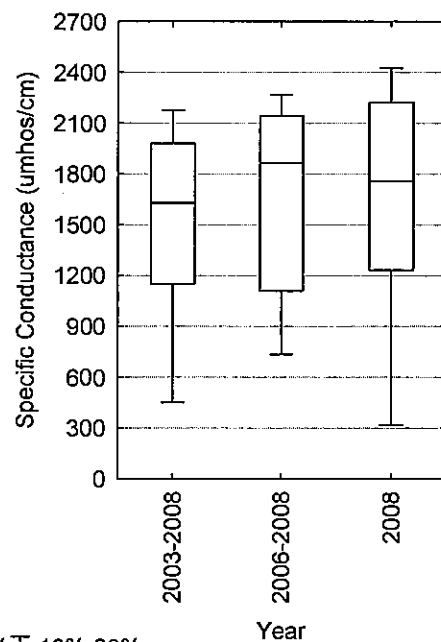
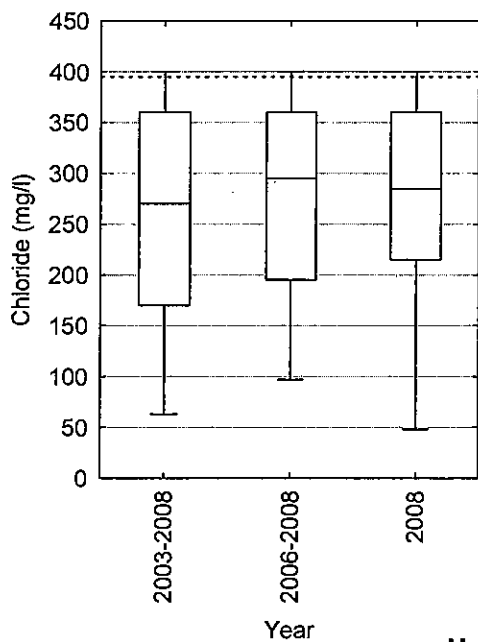
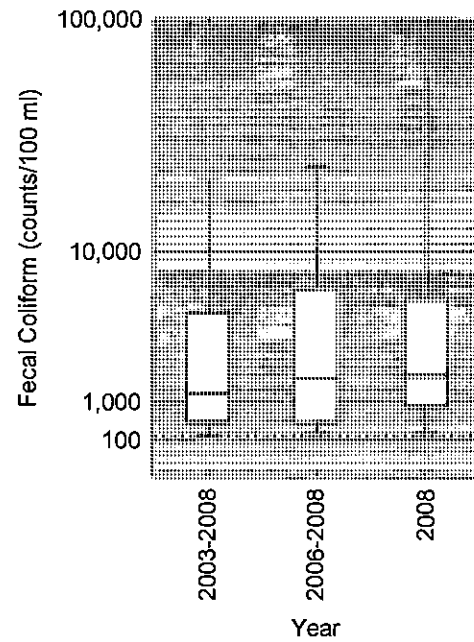
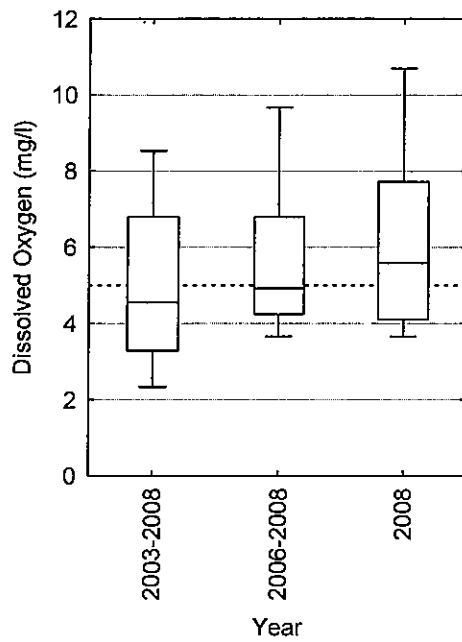
— Median □ 25%-75% ▮ 10%-90%
WQ Standard/Criterion

MMSD Water Quality Program Data
Underwood Creek at Marcella St., Site UC-02



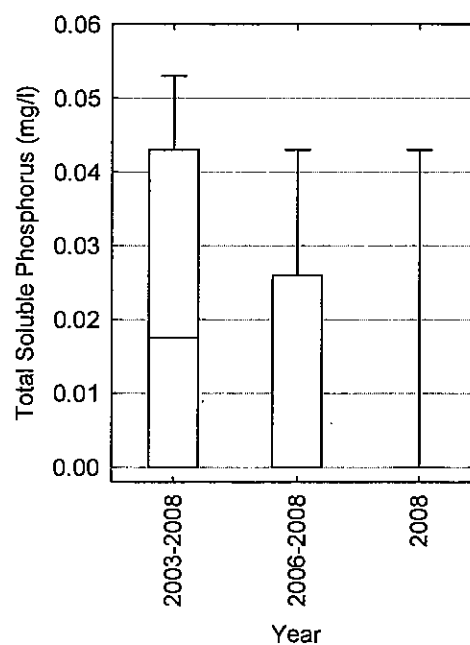
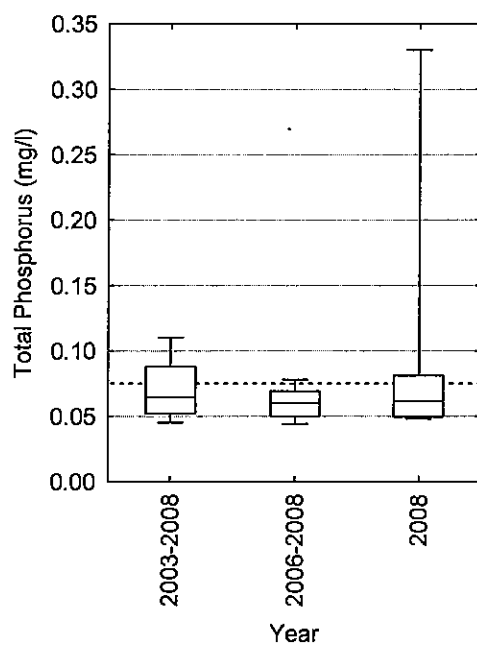
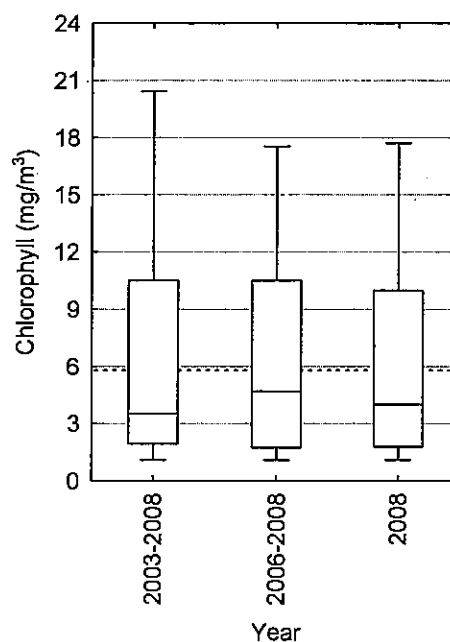
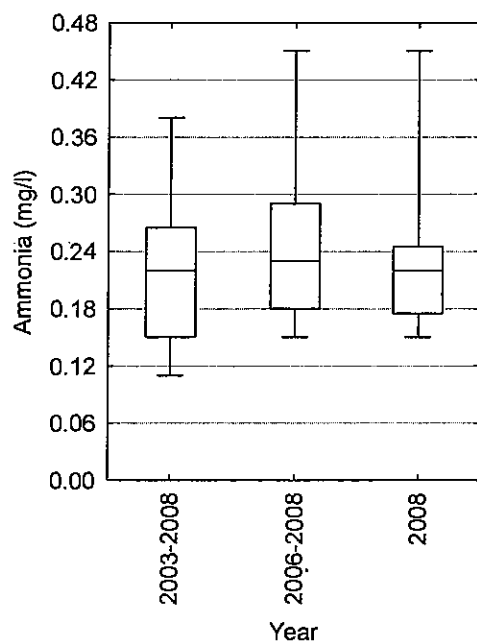
— Median □ 25%-75% ┘ 10%-90%

MMSD Water Quality Monitoring Program Data
Underwood Creek at 116th St. and Greenfield, Site UC-04



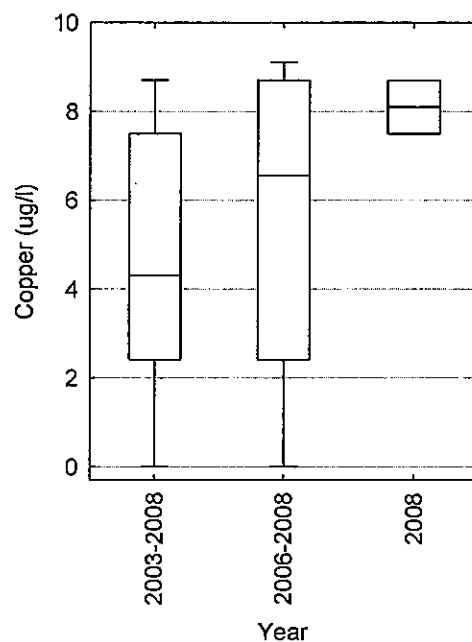
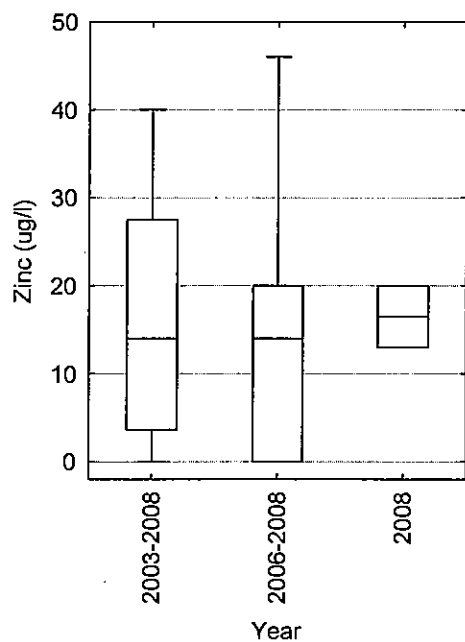
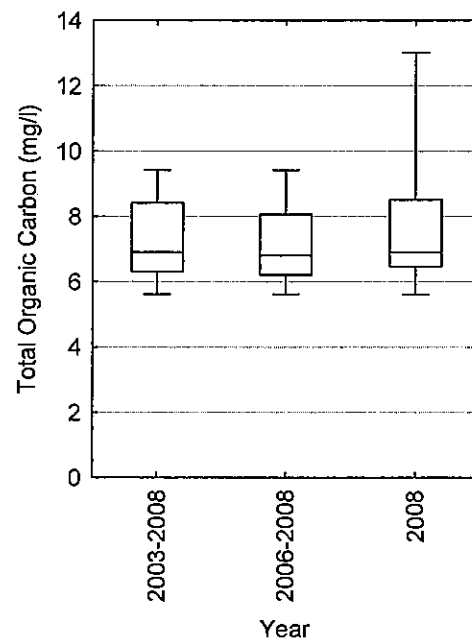
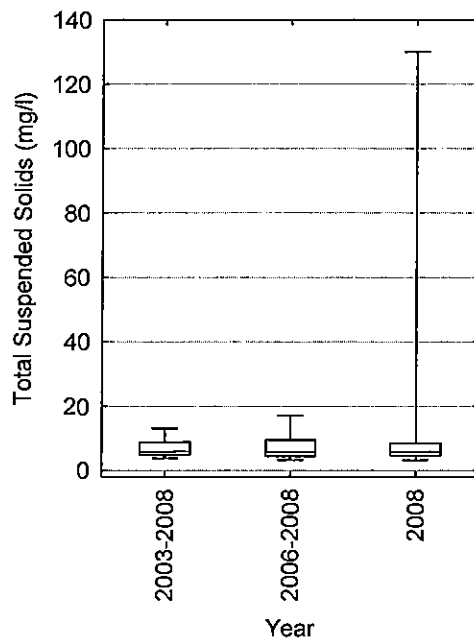
— Median □ 25%-75% ▮ 10%-90%
WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Underwood Creek at 116th St. and Greenfield, Site UC-04



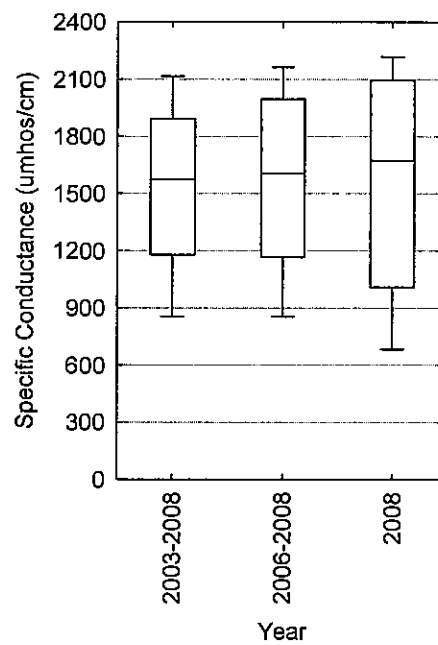
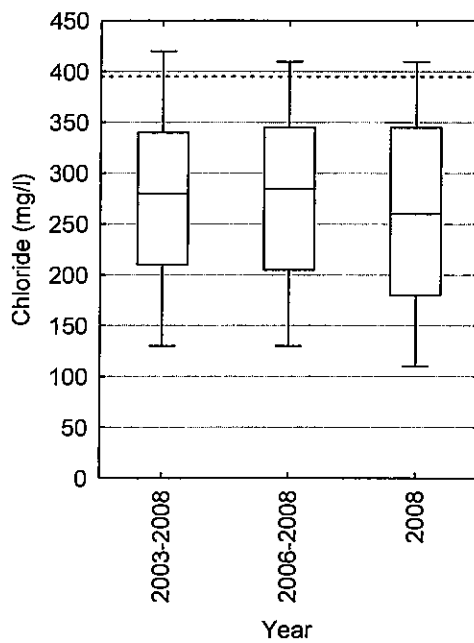
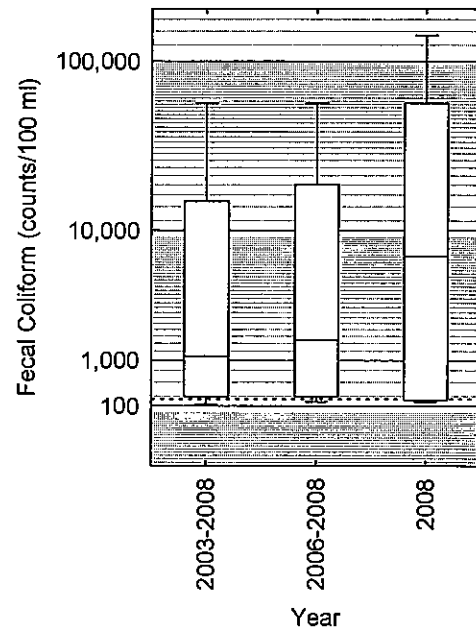
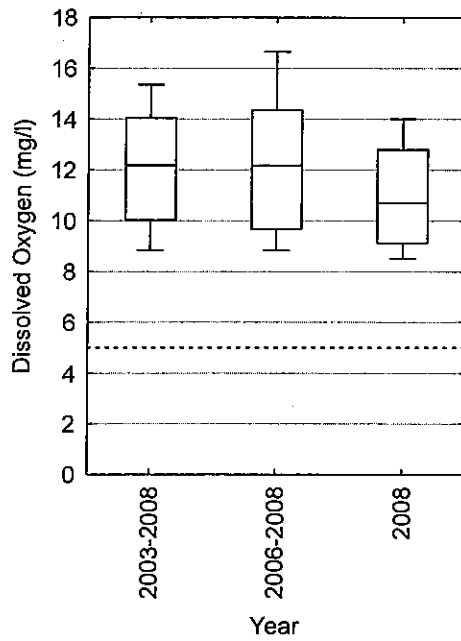
— Median □ 25%-75% ▮ 10%-90%
---- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Underwood Creek at 116th St. and Greenfield, Site UC-04



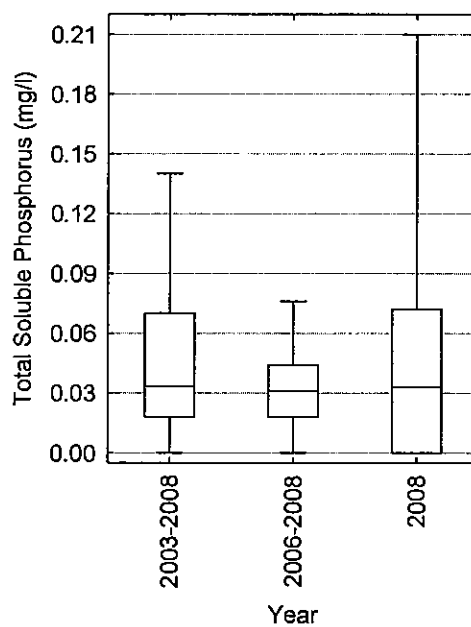
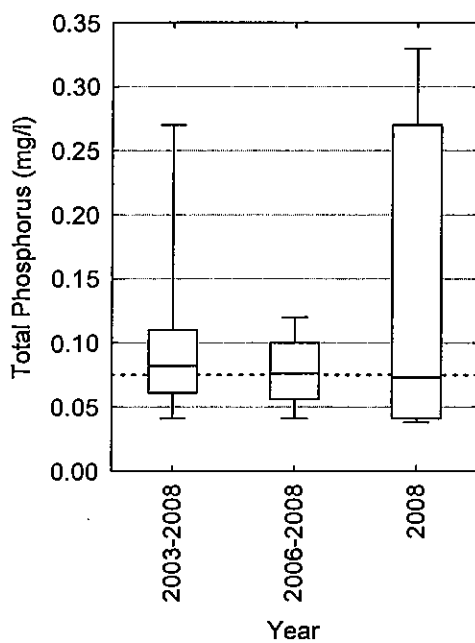
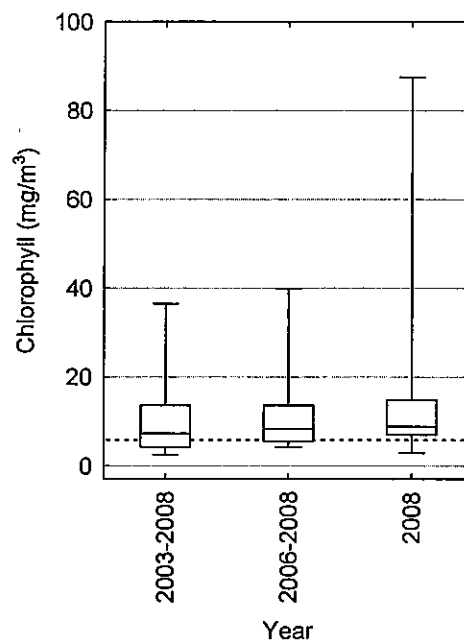
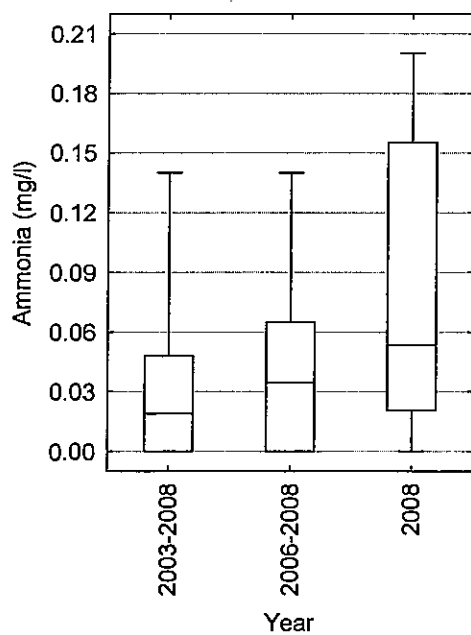
— Median □ 25%-75% ┘ 10%-90%

MMSD Water Quality Program Data
Underwood Creek at 107th St. and Fisher Pkwy., Site UC-07



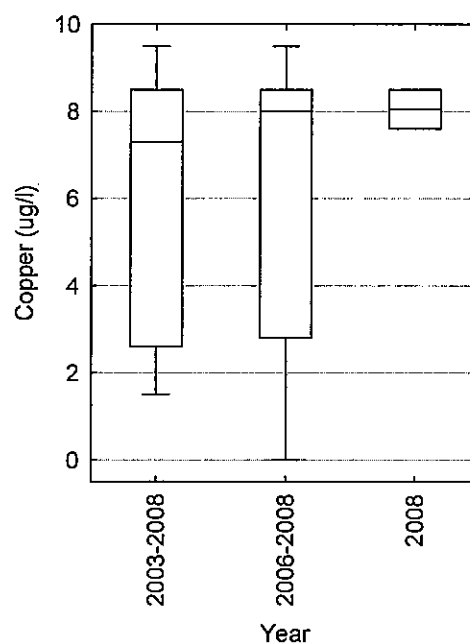
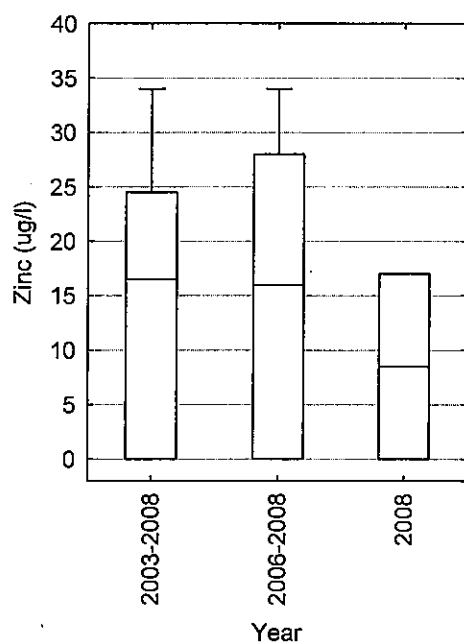
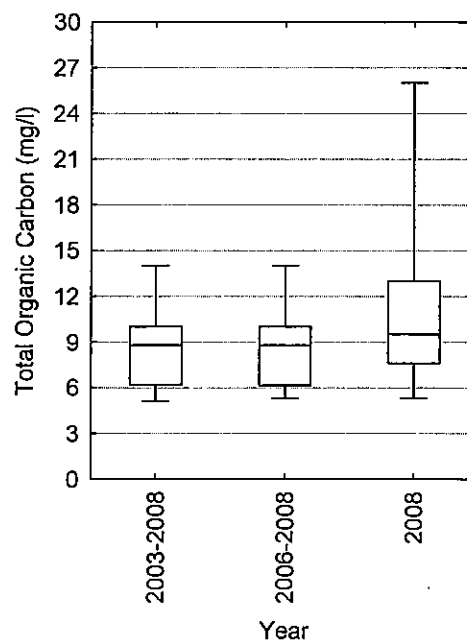
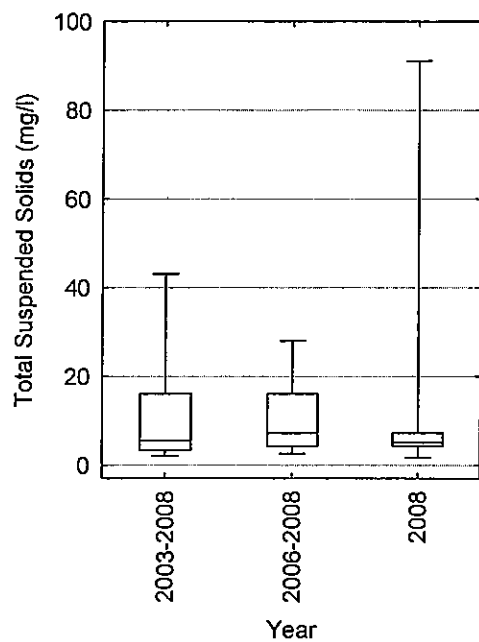
— Median □ 25%-75% ▤ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Program Data
Underwood Creek at 107th St. and Fisher Pkwy., Site UC-07



— Median □ 25%-75% ▤ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Program Data
Underwood Creek at 107th St. and Fisher Pkwy., Site UC-07



— Median □ 25%-75% I 10%-90%

WIRTH PARK - SITE 1
UNDERWOOD CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.1	15.8	4.6	10.93	0.64	0.028	0.59	0.108	0.92	0.093	0.035	ND
Standard Error	0.1	1.5	0.8	2.71	0.38	0.009	0.32	0.029	0.17	0.009	0.006	ND
Median	7.1	17.2	4.3	10.38	0.28	0.028	0.29	0.073	0.96	0.097	0.039	ND
Mode	ND	ND	ND	ND	ND	ND	ND	ND	1.10	0.100	0.031	ND
Standard Deviation	0.2	4.4	2.3	7.66	0.92	0.021	0.85	0.083	0.48	0.026	0.016	ND
Sample Variance	0.0	19.0	5.2	58.68	0.85	0.000	0.73	0.007	0.23	0.001	0.000	ND
Kurtosis	-0.9	-1.1	1.3	1.33	5.54	0.746	6.43	0.995	0.92	2.860	3.423	ND
Skewness	-0.3	-0.3	1.2	1.10	2.33	0.886	2.51	1.450	-0.82	-1.110	-1.586	ND
Range	0.5	12.7	6.9	23.20	2.39	0.056	2.38	0.228	1.50	0.091	0.054	0.00
Minimum	6.9	9.1	2.3	3.00	0.11	0.007	0.12	0.042	0.00	0.039	0.000	0.00
Maximum	7.4	21.8	9.2	26.20	2.50	0.063	2.50	0.270	1.50	0.130	0.054	0.00
Count	8	8	8	8	6	6	7	8	8	8	8	0
Confidence Level(95.0%)	0.2	3.6	1.9	6.40	0.97	0.022	0.79	0.069	0.40	0.022	0.014	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	992.5	984.5	3.2	8.0	5.0	1512	242.5	1513	2.5	636
Standard Error	ND	ND	63.2	64.0	0.8	2.5	1.0	110	15.9	776	0.3	340
Median	ND	ND	995.0	990.0	2.8	6.6	3.8	1535	250.0	150	2.2	110
Mode	ND	ND	1100.0	ND	2.0	ND	ND	ND	290.0	ND	ND	ND
Standard Deviation	ND	ND	178.9	181.0	2.1	7.1	2.9	310	45.0	2196	0.9	963
Sample Variance	ND	ND	31992.9	32752.2	4.6	50.0	8.6	96271	2021.4	4821588	0.8	927108
Kurtosis	ND	ND	-1.7	-1.7	1.1	4.4	1.7	-1	-1.2	2	-1.6	4
Skewness	ND	ND	-0.1	-0.1	0.6	1.9	1.6	0	-0.5	1	0.4	2
Range	0.0	0.0	470.0	477.4	7.2	21.6	8.1	888	120.0	5977	2.4	2785
Minimum	0.0	0.0	730.0	720.0	0.0	2.4	3.0	1084	170.0	23	1.4	15
Maximum	0.0	0.0	1200.0	1197.4	7.2	24.0	11.0	1972	290.0	6000	3.8	2800
Count	0	0	8	8	8	8	8	8	8	8	8	8
Confidence Level(95.0%)	ND	ND	149.5	151.3	1.8	5.9	2.4	259	37.6	1836	0.7	805

ND = No Data

Provisional MMSD Water Quality Data

WIRTH PARK - SITE 1
UNDERWOOD CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	96.50	38.00	0.0	3.1	7.8	4.3	0.0	17.0	0.0	2.3	0.0	0.0
Standard Error	23.50	11.00	0.0	3.1	0.8	0.8	0.0	8.0	0.0	2.3	0.0	0.0
Median	96.50	38.00	0.0	3.1	7.8	4.3	0.0	17.0	0.0	2.3	0.0	0.0
Mode	ND	ND	0.0	ND	ND	ND	0.0	ND	0.0	ND	ND	0.0
Standard Deviation	33.23	15.56	0.0	4.4	1.2	1.1	0.0	11.3	0.0	3.2	ND	0.0
Sample Variance	1104.50	242.00	0.0	19.2	1.4	1.3	0.0	128.0	0.0	10.1	ND	0.0
Kurtosis	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Skewness	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Range	47.00	22.00	0.0	6.2	1.7	1.6	0.0	16.0	0.0	4.5	0.0	0.0
Minimum	73.00	27.00	0.0	0.0	6.9	3.5	0.0	9.0	0.0	0.0	0.0	0.0
Maximum	120.00	49.00	0.0	6.2	8.6	5.1	0.0	25.0	0.0	4.5	0.0	0.0
Count	2	2	2	2	2	2	2	2	2	2	1	2
Confidence Level(95.0%)	298.60	139.77	0.0	39.4	10.8	10.2	0.0	101.6	0.0	28.6	ND	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	395	264	2.2	10.9	76.5	63.1	13.3	12.8
Standard Error	105	17	1.0	2.3	4.0	4.0	1.8	1.8
Median	395	275	1.2	13.0	76.0	67.0	13.0	12.5
Mode	ND	280	0.0	14.0	ND	66.0	ND	ND
Standard Deviation	148	47	2.9	6.1	11.5	11.4	5.2	5.1
Sample Variance	22050	2198	8.4	37.8	131.1	130.4	27.1	26.3
Kurtosis	ND	4	2.0	0.4	2.2	3.5	-1.6	-1.0
Skewness	ND	-2	1.4	-1.0	-1.1	-1.9	0.2	0.4
Range	210	150	8.2	18.0	37.0	34.0	14.2	14.7
Minimum	290	160	0.0	0.0	53.0	38.0	6.8	6.3
Maximum	500	310	8.2	18.0	90.0	72.0	21.0	21.0
Count	2	8	8	7	8	8	8	8
Confidence Level(95.0%)	1334	39	2.4	5.7	9.6	9.5	4.4	4.3

ND = No Data

Provisional MMSD Water Quality Data

MARCELLA STREET - SITE 2
UNDERWOOD CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.7	16.2	7.3	6.24	0.66	0.023	0.59	0.103	0.92	0.083	0.038	ND
Standard Error	0.1	1.8	0.7	1.43	0.30	0.005	0.26	0.030	0.16	0.013	0.006	ND
Median	7.7	17.7	7.1	4.62	0.41	0.022	0.36	0.071	0.89	0.085	0.042	ND
Mode	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Standard Deviation	0.2	5.0	2.0	4.03	0.72	0.013	0.69	0.084	0.46	0.037	0.017	ND
Sample Variance	0.0	25.1	4.2	16.26	0.52	0.000	0.47	0.007	0.21	0.001	0.000	ND
Kurtosis	0.4	-1.4	5.0	-0.17	5.12	1.382	5.69	2.861	1.85	0.400	4.617	ND
Skewness	-0.3	-0.5	2.0	0.86	2.21	1.013	2.31	1.426	-0.92	0.426	-1.937	ND
Range	0.6	13.3	6.6	12.03	1.96	0.037	2.00	0.280	1.50	0.119	0.055	0.00
Minimum	7.3	8.2	5.4	1.37	0.14	0.008	0.10	0.000	0.00	0.031	0.000	0.00
Maximum	8.0	21.5	12.0	13.40	2.10	0.045	2.10	0.280	1.50	0.150	0.055	0.00
Count	8	8	8	8	6	6	7	8	8	8	8	0
Confidence Level(95.0%)	0.2	4.2	1.7	3.37	0.76	0.013	0.63	0.070	0.38	0.031	0.014	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	925.0	913.5	3.0	11.6	9.0	1393	232.5	2378	2.9	1300
Standard Error	ND	ND	86.4	87.6	0.9	3.3	2.3	131	23.2	1268	0.2	377
Median	ND	ND	970.0	957.9	2.0	8.3	7.2	1508	255.0	515	2.7	1060
Mode	ND	ND	1100.0	ND	1.6	ND	ND	ND	ND	ND	ND	820
Standard Deviation	ND	ND	244.4	247.7	2.5	9.4	6.5	371	65.6	3587	0.7	1066
Sample Variance	ND	ND	59714.3	61357.9	6.2	88.2	42.1	137632	4307.1	12869279	0.4	1136573
Kurtosis	ND	ND	0.1	0.5	-0.5	0.3	-1.1	1	-0.7	3	-0.4	2
Skewness	ND	ND	-0.8	-0.9	0.8	1.1	0.6	-1	-0.8	2	0.5	1
Range	0.0	0.0	730.0	746.0	7.2	26.8	17.0	1061	180.0	9900	2.0	3404
Minimum	0.0	0.0	470.0	441.0	0.0	2.2	1.8	680	120.0	100	2.0	96
Maximum	0.0	0.0	1200.0	1187.0	7.2	29.0	18.8	1741	300.0	10000	4.0	3500
Count	0	0	8	8	8	8	8	8	8	8	8	8
Confidence Level(95.0%)	ND	ND	204.3	207.1	2.1	7.9	5.4	310	54.9	2999	0.6	891

ND = No Data

Provisional MMSD Water Quality Data

MARCELLA STREET - SITE 2
UNDERWOOD CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	83.00	33.00	0.0	5.5	7.8	4.7	0.0	20.5	0.0	1.4	3.1	0.0
Standard Error	37.00	16.00	0.0	1.6	0.3	0.0	0.0	3.5	0.0	1.4	3.1	0.0
Median	83.00	33.00	0.0	5.5	7.8	4.7	0.0	20.5	0.0	1.4	3.1	0.0
Mode	ND	ND	0.0	ND	ND	ND	0.0	ND	0.0	ND	ND	0.0
Standard Deviation	52.33	22.63	0.0	2.2	0.4	0.1	0.0	4.9	0.0	1.9	4.4	0.0
Sample Variance	2738.00	512.00	0.0	4.8	0.1	0.0	0.0	24.5	0.0	3.6	19.2	0.0
Kurtosis	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Skewness	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Range	74.00	32.00	0.0	3.1	0.5	0.1	0.0	7.0	0.0	2.7	6.2	0.0
Minimum	46.00	17.00	0.0	3.9	7.5	4.6	0.0	17.0	0.0	0.0	0.0	0.0
Maximum	120.00	49.00	0.0	7.0	8.0	4.7	0.0	24.0	0.0	2.7	6.2	0.0
Count	2	2	2	2	2	2	2	2	2	2	2	2
Confidence Level(95.0%)	470.13	203.30	0.0	19.7	3.2	0.6	0.0	44.5	0.0	17.2	39.4	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	340	256	1.5	10.0	71.8	60.6	11.5	11.0
Standard Error	150	22	0.6	2.1	5.4	5.3	1.1	1.0
Median	340	265	1.2	9.1	75.5	64.5	11.0	10.7
Mode	ND	260	0.0	ND	77.0	63.0	ND	ND
Standard Deviation	212	62	1.6	5.7	15.2	14.9	3.2	2.9
Sample Variance	45000	3855	2.7	32.2	229.6	221.1	10.0	8.1
Kurtosis	ND	6	-2.6	0.5	6.0	5.4	-1.8	-2.0
Skewness	ND	-2	0.1	-0.7	-2.3	-2.2	0.3	0.2
Range	300	200	3.4	17.0	49.0	46.0	8.0	7.1
Minimum	190	110	0.0	0.0	36.0	26.0	8.0	7.9
Maximum	490	310	3.4	17.0	85.0	72.0	16.0	15.0
Count	2	8	8	7	8	8	8	8
Confidence Level(95.0%)	1906	52	1.4	5.3	12.7	12.4	2.7	2.4

ND = No Data

Provisional MMSD Water Quality Data

124TH STREET AND BLUEMOUND ROAD - SITE 3
UNDERWOOD CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.7	15.8	9.0	9.00	0.66	0.025	0.62	0.103	0.82	0.078	0.019	ND
Standard Error	0.1	1.6	0.6	1.53	0.26	0.005	0.25	0.028	0.14	0.012	0.010	ND
Median	7.8	17.7	8.5	8.82	0.52	0.028	0.42	0.098	0.86	0.087	0.000	ND
Mode	ND	ND	ND	ND	ND	ND	ND	0.000	1.10	0.120	0.000	ND
Standard Deviation	0.3	4.6	1.6	4.32	0.64	0.012	0.65	0.078	0.40	0.035	0.028	ND
Sample Variance	0.1	21.1	2.6	18.63	0.42	0.000	0.42	0.006	0.16	0.001	0.001	ND
Kurtosis	-0.3	-1.3	2.2	-1.21	3.92	-0.704	4.55	-1.167	2.28	-1.555	0.049	ND
Skewness	-0.5	-0.7	1.4	0.29	1.88	-0.712	2.04	-0.120	-1.25	-0.164	1.156	ND
Range	0.9	12.3	5.1	12.13	1.78	0.031	1.87	0.200	1.30	0.091	0.071	0.00
Minimum	7.2	8.4	7.4	3.77	0.12	0.007	0.13	0.000	0.00	0.029	0.000	0.00
Maximum	8.2	20.7	12.4	15.90	1.90	0.038	2.00	0.200	1.30	0.120	0.071	0.00
Count	8	8	8	8	6	6	7	8	8	8	8	0
Confidence Level(95.0%)	0.3	3.8	1.4	3.61	0.68	0.013	0.60	0.065	0.33	0.029	0.023	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	981.3	967.0	5.0	14.3	8.9	1508	253.8	6990	3.3	7835
Standard Error	ND	ND	62.4	65.4	1.0	4.0	2.0	89	9.6	4797	0.3	5932
Median	ND	ND	945.0	936.2	4.6	10.3	7.4	1386	250.0	1125	3.0	1010
Mode	ND	ND	1100.0	ND	ND	ND	ND	ND	240.0	ND	ND	ND
Standard Deviation	ND	ND	176.4	185.0	2.9	11.3	5.7	252	27.2	13568	0.7	16778
Sample Variance	ND	ND	31126.8	34225.4	8.4	127.6	32.4	63694	741.1	184100886	0.5	281508857
Kurtosis	ND	ND	-0.3	-0.4	2.7	0.6	-0.8	-2	0.6	7	-0.1	8
Skewness	ND	ND	0.8	0.7	1.2	1.1	0.7	0	0.3	3	0.7	3
Range	0.0	0.0	510.0	530.8	9.8	33.8	15.6	663	90.0	39760	2.2	48670
Minimum	0.0	0.0	790.0	767.0	1.2	2.2	3.2	1167	210.0	240	2.4	330
Maximum	0.0	0.0	1300.0	1297.8	11.0	36.0	18.8	1830	300.0	40000	4.6	49000
Count	0	0	8	8	8	8	8	8	8	8	8	8
Confidence Level(95.0%)	ND	ND	147.5	154.7	2.4	9.4	4.8	211	22.8	11343	0.6	14027

ND = No Data

Provisional MMSD Water Quality Data

124TH STREET AND BLUEMOUND ROAD - SITE 3
UNDERWOOD CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	108.50	44.00	0.0	4.2	8.4	7.3	0.0	23.0	0.0	1.5	9.0	0.0
Standard Error	21.50	11.00	0.0	4.2	1.2	2.5	0.0	8.0	0.0	1.5	0.0	0.0
Median	108.50	44.00	0.0	4.2	8.4	7.3	0.0	23.0	0.0	1.5	9.0	0.0
Mode	ND	ND	0.0	ND	ND	ND	0.0	ND	0.0	ND	ND	0.0
Standard Deviation	30.41	15.56	0.0	5.9	1.6	3.5	0.0	11.3	0.0	2.1	ND	0.0
Sample Variance	924.50	242.00	0.0	34.4	2.6	12.5	0.0	128.0	0.0	4.5	ND	0.0
Kurtosis	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Skewness	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Range	43.00	22.00	0.0	8.3	2.3	5.0	0.0	16.0	0.0	3.0	0.0	0.0
Minimum	87.00	33.00	0.0	0.0	7.2	4.8	0.0	15.0	0.0	0.0	9.0	0.0
Maximum	130.00	55.00	0.0	8.3	9.5	9.8	0.0	31.0	0.0	3.0	9.0	0.0
Count	2	2	2	2	2	2	2	2	2	2	1	2
Confidence Level(95.0%)	273.18	139.77	0.0	52.7	14.6	31.8	0.0	101.6	0.0	19.1	ND	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	450	259	2.8	10.0	72.0	61.0	10.8	10.4
Standard Error	100	18	0.9	2.5	3.9	4.1	1.0	0.9
Median	450	275	3.0	8.9	75.0	64.0	11.5	11.0
Mode	ND	290	0.0	ND	82.0	68.0	12.0	11.0
Standard Deviation	141	50	2.6	6.7	11.1	11.6	2.8	2.5
Sample Variance	20000	2470	7.0	44.5	124.3	133.7	7.6	6.4
Kurtosis	ND	-1	-1.3	-1.0	-1.8	-1.2	-1.2	-1.0
Skewness	ND	0	0.3	-0.1	-0.4	-0.3	-0.4	-0.7
Range	200	140	6.7	19.0	28.0	32.0	7.1	6.4
Minimum	350	190	0.0	0.0	56.0	45.0	6.9	6.6
Maximum	550	330	6.7	19.0	84.0	77.0	14.0	13.0
Count	2	8	8	7	8	8	8	8
Confidence Level(95.0%)	1271	42	2.2	6.2	9.3	9.7	2.3	2.1

ND = No Data

Provisional MMSD Water Quality Data

116TH STREET AND GREENFIELD AVENUE - SITE 4
UNDERWOOD CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.4	16.1	6.0	6.29	0.52	0.038	0.55	0.235	0.88	0.095	0.005	ND
Standard Error	0.1	1.6	0.9	2.06	0.12	0.007	0.10	0.034	0.20	0.034	0.005	ND
Median	7.3	17.3	5.6	4.01	0.48	0.036	0.50	0.220	0.92	0.062	0.000	ND
Mode	ND	ND	ND	ND	0.48	ND	0.50	0.150	ND	ND	0.000	ND
Standard Deviation	0.2	4.7	2.5	5.83	0.29	0.017	0.26	0.095	0.57	0.096	0.015	ND
Sample Variance	0.0	21.6	6.2	34.02	0.08	0.000	0.07	0.009	0.32	0.009	0.000	ND
Kurtosis	1.3	-0.5	1.1	0.77	1.64	-0.100	2.05	4.536	0.86	7.482	8.000	ND
Skewness	0.9	-0.8	1.2	1.18	0.35	0.312	0.27	1.924	0.35	2.709	2.828	ND
Range	0.6	12.6	7.0	16.62	0.89	0.049	0.87	0.300	1.90	0.282	0.043	0.00
Minimum	7.1	8.0	3.7	1.08	0.10	0.015	0.13	0.150	0.00	0.048	0.000	0.00
Maximum	7.7	20.5	10.7	17.70	0.99	0.064	1.00	0.450	1.90	0.330	0.043	0.00
Count	8	8	7	8	6	6	7	8	8	8	8	0
Confidence Level(95.0%)	0.1	3.9	2.3	4.88	0.30	0.018	0.24	0.079	0.47	0.080	0.013	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	1043.8	1022.4	7.9	21.4	20.3	1646	271.0	9369	3.3	15078
Standard Error	ND	ND	140.9	152.4	5.5	15.5	12.0	252	41.2	7012	0.3	8360
Median	ND	ND	1045.0	1038.6	2.7	5.8	8.7	1758	285.0	1800	3.2	2850
Mode	ND	ND	1400.0	ND	ND	ND	ND	ND	360.0	ND	ND	ND
Standard Deviation	ND	ND	398.5	430.9	15.5	43.9	33.9	712	116.5	19833	0.8	23645
Sample Variance	ND	ND	158769.6	185717.0	239.9	1929.9	1150.9	507425	13568.0	393366784	0.6	559085336
Kurtosis	ND	ND	-0.4	0.3	7.7	8.0	7.8	0	0.7	8	0.8	1
Skewness	ND	ND	-0.6	-0.9	2.8	2.8	2.8	-1	-1.1	3	0.7	2
Range	0.0	0.0	1150.0	1276.8	46.0	126.8	99.1	2106	352.0	57770	2.4	60730
Minimum	0.0	0.0	350.0	220.0	0.0	3.2	5.0	318	48.0	230	2.4	270
Maximum	0.0	0.0	1500.0	1496.8	46.0	130.0	104.0	2424	400.0	58000	4.8	61000
Count	0	0	8	8	8	8	8	8	8	8	8	8
Confidence Level(95.0%)	ND	ND	333.1	360.3	12.9	36.7	28.4	596	97.4	16581	0.6	19768

ND = No Data

Provisional MMSD Water Quality Data

116TH STREET AND GREENFIELD AVENUE - SITE 4
UNDERWOOD CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	118.00	41.00	0.0	5.3	8.1	4.3	0.0	16.5	0.0	0.0	0.0	0.0
Standard Error	42.00	14.00	0.0	0.2	0.6	0.1	0.0	3.5	0.0	0.0	0.0	0.0
Median	118.00	41.00	0.0	5.3	8.1	4.3	0.0	16.5	0.0	0.0	0.0	0.0
Mode	ND	ND	0.0	ND	ND	ND	0.0	ND	0.0	0.0	ND	0.0
Standard Deviation	59.40	19.80	0.0	0.2	0.8	0.1	0.0	4.9	0.0	0.0	ND	0.0
Sample Variance	3528.00	392.00	0.0	0.0	0.7	0.0	0.0	24.5	0.0	0.0	ND	0.0
Kurtosis	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Skewness	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Range	84.00	28.00	0.0	0.3	1.2	0.2	0.0	7.0	0.0	0.0	0.0	0.0
Minimum	76.00	27.00	0.0	5.1	7.5	4.2	0.0	13.0	0.0	0.0	0.0	0.0
Maximum	160.00	55.00	0.0	5.4	8.7	4.4	0.0	20.0	0.0	0.0	0.0	0.0
Count	2	2	2	2	2	2	2	2	2	2	1	2
Confidence Level(95.0%)	533.66	177.89	0.0	1.9	7.6	1.3	0.0	44.5	0.0	0.0	ND	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	465	277	4.1	16.1	75.6	68.3	7.8	7.3
Standard Error	165	39	1.5	3.5	8.6	9.3	0.8	0.9
Median	465	305	2.6	15.0	81.5	74.0	6.9	6.7
Mode	ND	300	ND	15.0	ND	74.0	6.9	6.9
Standard Deviation	233	110	4.3	9.3	24.3	26.4	2.4	2.4
Sample Variance	54450	12112	18.8	86.1	591.7	695.1	5.7	5.9
Kurtosis	ND	3	4.9	5.0	1.3	1.9	3.3	5.7
Skewness	ND	-2	2.1	2.1	-1.3	-1.4	1.8	2.3
Range	330	323	14.0	28.5	73.0	80.0	7.4	7.6
Minimum	300	37	0.0	7.5	27.0	14.0	5.6	5.4
Maximum	630	360	14.0	36.0	100.0	94.0	13.0	13.0
Count	2	8	8	7	8	8	8	8
Confidence Level(95.0%)	2097	92	3.6	8.6	20.3	22.0	2.0	2.0

ND = No Data

Provisional MMSD Water Quality Data

PARKWAY IN KRUEGER PARK - SITE 5
UNDERWOOD CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.7	15.2	9.9	14.47	0.79	0.042	0.83	0.208	0.89	0.338	0.199	ND
Standard Error	0.1	1.4	0.6	6.43	0.20	0.011	0.16	0.058	0.42	0.066	0.023	ND
Median	7.6	16.5	9.5	8.90	0.77	0.032	0.84	0.155	0.54	0.290	0.190	ND
Mode	ND	ND	ND	ND	ND	0.032	ND	ND	0.00	ND	ND	ND
Standard Deviation	0.2	3.8	1.7	18.18	0.48	0.027	0.43	0.163	1.18	0.185	0.065	ND
Sample Variance	0.0	14.7	3.0	330.35	0.23	0.001	0.18	0.027	1.39	0.034	0.004	ND
Kurtosis	4.2	-0.3	0.1	7.53	2.35	1.067	2.66	1.013	1.73	4.636	0.034	ND
Skewness	1.5	-0.9	0.9	2.72	0.48	1.304	0.29	1.259	1.53	2.042	0.813	ND
Range	0.8	10.8	5.2	54.43	1.51	0.072	1.47	0.467	3.30	0.570	0.190	0.00
Minimum	7.4	8.2	7.8	4.57	0.09	0.017	0.13	0.063	0.00	0.190	0.130	0.00
Maximum	8.2	19.0	13.0	59.00	1.60	0.089	1.60	0.530	3.30	0.760	0.320	0.00
Count	8	8	8	8	6	6	7	8	8	8	8	0
Confidence Level(95.0%)	0.2	3.2	1.4	15.20	0.51	0.028	0.40	0.136	0.98	0.155	0.055	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	910.0	866.9	14.8	43.1	22.9	1375	245.0	12822	3.4	6825
Standard Error	ND	ND	79.0	97.2	8.9	28.7	12.7	163	32.1	5276	0.4	3266
Median	ND	ND	900.0	894.8	4.0	11.0	6.4	1323	245.0	6950	3.7	1550
Mode	ND	ND	ND	ND	3.2	11.0	ND	ND	ND	ND	ND	12000
Standard Deviation	ND	ND	223.5	275.0	25.1	81.2	36.0	461	90.9	14922	1.1	9237
Sample Variance	ND	ND	49942.9	75613.5	629.4	6593.5	1298.5	212067	8257.1	222665871	1.3	85320629
Kurtosis	ND	ND	-0.5	-0.2	6.6	7.0	4.5	0	1.2	-1	-1.5	2
Skewness	ND	ND	0.6	-0.1	2.5	2.6	2.2	0	0.3	1	-0.5	2
Range	0.0	0.0	640.0	873.8	72.6	236.2	101.6	1470	310.0	38955	2.9	25890
Minimum	0.0	0.0	660.0	420.0	2.4	3.8	3.4	715	100.0	45	1.7	110
Maximum	0.0	0.0	1300.0	1293.8	75.0	240.0	105.0	2185	410.0	39000	4.6	26000
Count	0	0	8	8	8	8	8	8	8	8	8	8
Confidence Level(95.0%)	ND	ND	186.8	229.9	21.0	67.9	30.1	385	76.0	12475	0.9	7722

ND = No Data

Provisional MMSD Water Quality Data

PARKWAY IN KRUEGER PARK - SITE 5
UNDERWOOD CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	81.50	27.50	0.0	3.4	7.8	3.9	0.0	16.5	0.0	0.0	0.0	0.0
Standard Error	2.50	1.50	0.0	3.4	0.9	2.0	0.0	5.5	0.0	0.0	0.0	0.0
Median	81.50	27.50	0.0	3.4	7.8	3.9	0.0	16.5	0.0	0.0	0.0	0.0
Mode	ND	ND	0.0	ND	ND	ND	0.0	ND	0.0	0.0	ND	0.0
Standard Deviation	3.54	2.12	0.0	4.8	1.3	2.8	0.0	7.8	0.0	0.0	ND	0.0
Sample Variance	12.50	4.50	0.0	23.1	1.8	7.6	0.0	60.5	0.0	0.0	ND	0.0
Kurtosis	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Skewness	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Range	5.00	3.00	0.0	6.8	1.9	3.9	0.0	11.0	0.0	0.0	0.0	0.0
Minimum	79.00	26.00	0.0	0.0	6.8	1.9	0.0	11.0	0.0	0.0	0.0	0.0
Maximum	84.00	29.00	0.0	6.8	8.7	5.8	0.0	22.0	0.0	0.0	0.0	0.0
Count	2	2	2	2	2	2	2	2	2	2	1	2
Confidence Level(95.0%)	31.77	19.06	0.0	43.2	12.1	24.8	0.0	69.9	0.0	0.0	ND	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	315	186	5.1	17.1	50.5	43.6	6.7	6.5
Standard Error	15	23	2.3	6.0	3.1	4.9	2.3	2.2
Median	315	210	2.5	13.0	49.5	46.5	3.8	3.7
Mode	ND	220	0.0	13.0	ND	ND	ND	ND
Standard Deviation	21	64	6.5	15.8	8.7	13.8	6.5	6.3
Sample Variance	450	4055	42.3	248.3	75.7	191.1	42.5	40.1
Kurtosis	ND	-1	-0.1	6.0	-1.6	-0.7	3.3	4.8
Skewness	ND	-1	1.3	2.4	0.2	-0.6	1.9	2.2
Range	30	190	16.0	47.6	23.0	40.0	18.4	18.4
Minimum	300	80	0.0	4.4	40.0	20.0	2.6	2.6
Maximum	330	270	16.0	52.0	63.0	60.0	21.0	21.0
Count	2	8	8	7	8	8	8	8
Confidence Level(95.0%)	191	53	5.4	14.6	7.3	11.6	5.5	5.3

ND = No Data

Provisional MMSD Water Quality Data

115TH STREET, SOUTH OF WATERTOWN PLANK ROAD - SITE 6
UNDERWOOD CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.9	17.1	12.7	63.09	0.68	0.039	0.68	0.116	1.74	0.286	0.049	ND
Standard Error	0.1	1.6	1.6	44.03	0.26	0.012	0.22	0.040	1.03	0.175	0.013	ND
Median	8.0	18.5	12.8	12.25	0.59	0.028	0.50	0.083	0.96	0.098	0.042	ND
Mode	ND	ND	ND	ND	ND	ND	0.15	0.000	0.00	0.098	ND	ND
Standard Deviation	0.4	4.4	4.7	124.53	0.63	0.029	0.58	0.114	2.90	0.495	0.037	ND
Sample Variance	0.1	19.3	21.7	15506.61	0.40	0.001	0.33	0.013	8.43	0.245	0.001	ND
Kurtosis	-0.3	-1.3	-0.1	7.64	1.59	4.783	1.91	-1.826	7.17	7.554	4.178	ND
Skewness	-0.7	-0.5	0.2	2.75	1.24	2.131	1.33	0.441	2.63	2.731	1.562	ND
Range	1.1	12.1	14.7	361.05	1.69	0.080	1.65	0.280	8.80	1.457	0.130	0.00
Minimum	7.4	10.4	5.9	7.95	0.11	0.017	0.15	0.000	0.00	0.043	0.000	0.00
Maximum	8.4	22.4	20.6	369.00	1.80	0.097	1.80	0.280	8.80	1.500	0.130	0.00
Count	8	8	8	8	6	6	7	8	8	8	8	0
Confidence Level(95.0%)	0.3	3.7	3.9	104.11	0.66	0.031	0.53	0.096	2.43	0.414	0.031	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	1022.5	914.1	30.4	108.4	43.8	1486	252.5	34729	3.6	35014
Standard Error	ND	ND	75.1	132.9	25.7	98.8	37.6	138	24.6	24778	0.4	29484
Median	ND	ND	995.0	989.2	4.7	7.5	4.7	1516	270.0	4600	3.7	2050
Mode	ND	ND	ND	ND	ND	ND	ND	ND	280.0	ND	ND	ND
Standard Deviation	ND	ND	212.5	375.9	72.6	279.6	106.5	390	69.6	65555	1.1	83394
Sample Variance	ND	ND	45164.3	141304.7	5275.5	78149.7	11332.4	152090	4850.0	4297489348	1.3	6954510570
Kurtosis	ND	ND	0.2	2.0	8.0	8.0	8.0	0	0.0	6	-1.5	8
Skewness	ND	ND	0.5	-1.1	2.8	2.8	2.8	-1	-0.5	2	0.1	3
Range	0.0	0.0	660.0	1243.8	209.0	797.6	304.2	1113	220.0	179830	3.0	239830
Minimum	0.0	0.0	740.0	150.0	1.0	2.4	2.8	797	130.0	170	2.2	170
Maximum	0.0	0.0	1400.0	1393.8	210.0	800.0	307.0	1910	350.0	180000	5.3	240000
Count	0	0	8	8	8	8	8	8	8	7	7	8
Confidence Level(95.0%)	ND	ND	177.7	314.3	60.7	233.7	89.0	326	58.2	60628	1.1	69719

ND = No Data

Provisional MMSD Water Quality Data

115TH STREET, SOUTH OF WATERTOWN PLANK ROAD - SITE 6
UNDERWOOD CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	113.50	43.50	0.0	4.8	8.0	4.7	0.0	8.5	0.0	0.0	0.0	0.0
Standard Error	26.50	10.50	0.0	0.4	0.4	1.7	0.0	8.5	0.0	0.0	0.0	0.0
Median	113.50	43.50	0.0	4.8	8.0	4.7	0.0	8.5	0.0	0.0	0.0	0.0
Mode	ND	ND	0.0	ND	ND	ND	0.0	ND	0.0	0.0	ND	0.0
Standard Deviation	37.48	14.85	0.0	0.6	0.6	2.4	0.0	12.0	0.0	0.0	ND	0.0
Sample Variance	1404.50	220.50	0.0	0.3	0.3	5.8	0.0	144.5	0.0	0.0	ND	0.0
Kurtosis	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Skewness	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Range	53.00	21.00	0.0	0.8	0.8	3.4	0.0	17.0	0.0	0.0	0.0	0.0
Minimum	87.00	33.00	0.0	4.4	7.6	3.0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	140.00	54.00	0.0	5.2	8.4	6.4	0.0	17.0	0.0	0.0	0.0	0.0
Count	2	2	2	2	2	2	2	2	2	2	1	2
Confidence Level(95.0%)	336.71	133.42	0.0	5.1	5.1	21.6	0.0	108.0	0.0	0.0	ND	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	455	239	8.6	23.9	67.6	56.1	11.3	10.6
Standard Error	105	24	5.4	14.5	3.9	5.3	1.8	1.6
Median	455	270	2.5	9.2	69.5	61.5	11.0	10.8
Mode	ND	280	0.0	ND	ND	66.0	ND	12.0
Standard Deviation	148	68	15.1	38.4	11.0	14.9	5.2	4.4
Sample Variance	22050	4670	229.0	1471.1	120.0	222.1	27.4	19.5
Kurtosis	ND	2	4.5	6.6	0.3	0.9	0.5	-0.2
Skewness	ND	-1	2.1	2.5	-0.9	-1.1	0.6	0.2
Range	210	210	43.0	110.0	32.0	46.0	16.2	13.5
Minimum	350	100	0.0	0.0	47.0	27.0	4.8	4.5
Maximum	560	310	43.0	110.0	79.0	73.0	21.0	18.0
Count	2	8	8	7	8	8	8	8
Confidence Level(95.0%)	1334	57	12.7	35.5	9.2	12.5	4.4	3.7

ND = No Data

Provisional MMSD Water Quality Data

107TH STREET AND FISHER PARKWAY - SITE 7
UNDERWOOD CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	18.0	11.0	18.93	0.52	0.027	0.52	0.082	0.89	0.130	0.055	ND
Standard Error	0.1	1.5	0.7	9.89	0.23	0.008	0.20	0.027	0.37	0.045	0.028	ND
Median	8.3	19.9	10.7	8.84	0.36	0.024	0.38	0.054	0.67	0.073	0.033	ND
Mode	ND	ND	ND	ND	ND	ND	ND	0.041	0.00	ND	0.000	ND
Standard Deviation	0.3	4.3	2.1	27.98	0.57	0.021	0.52	0.078	1.04	0.119	0.073	ND
Sample Variance	0.1	18.3	4.4	782.61	0.32	0.000	0.27	0.006	1.07	0.014	0.005	ND
Kurtosis	-1.5	-1.7	-1.6	7.48	3.45	1.473	3.85	-1.487	-0.28	-0.400	4.522	ND
Skewness	-0.6	-0.6	0.3	2.71	1.79	0.754	1.85	0.508	1.02	1.207	2.037	ND
Range	0.8	11.0	5.5	84.52	1.54	0.062	1.54	0.200	2.70	0.292	0.210	0.00
Minimum	7.7	12.0	8.5	2.88	0.06	0.000	0.06	0.000	0.00	0.038	0.000	0.00
Maximum	8.5	22.9	14.0	87.40	1.60	0.062	1.60	0.200	2.70	0.330	0.210	0.00
Count	8	8	8	8	6	6	7	8	8	7	7	0
Confidence Level(95.0%)	0.3	3.6	1.8	23.39	0.60	0.022	0.48	0.065	0.87	0.110	0.067	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	997.5	908.5	6.5	17.2	10.4	1557	261.3	33431	3.7	19368
Standard Error	ND	ND	132.8	134.8	3.6	12.3	5.8	210	36.8	19465	0.5	12510
Median	ND	ND	1050.0	992.8	3.6	5.0	3.6	1674	260.0	6800	3.8	2700
Mode	ND	ND	1300.0	ND	3.6	ND	ND	ND	ND	ND	ND	ND
Standard Deviation	ND	ND	375.8	356.6	9.5	32.6	16.4	595	104.1	51500	1.2	35384
Sample Variance	ND	ND	141192.9	127161.2	90.1	1061.6	269.8	354365	10841.1	2652241581	1.4	1252053707
Kurtosis	ND	ND	-1.2	-1.7	6.9	6.9	6.9	-2	-1.2	3	-2.0	5
Skewness	ND	ND	-0.3	-0.3	2.6	2.6	2.6	0	-0.1	2	-0.1	2
Range	0.0	0.0	1080.0	885.2	26.4	89.4	48.2	1534	300.0	139840	2.9	99880
Minimum	0.0	0.0	420.0	413.2	1.6	1.6	1.9	683	110.0	160	2.2	120
Maximum	0.0	0.0	1500.0	1298.4	28.0	91.0	50.1	2217	410.0	140000	5.1	100000
Count	0	0	8	7	7	7	8	8	8	7	7	8
Confidence Level(95.0%)	ND	ND	314.1	329.8	8.8	30.1	13.7	498	87.0	47629	1.1	29582

ND = No Data

Provisional MMSD Water Quality Data

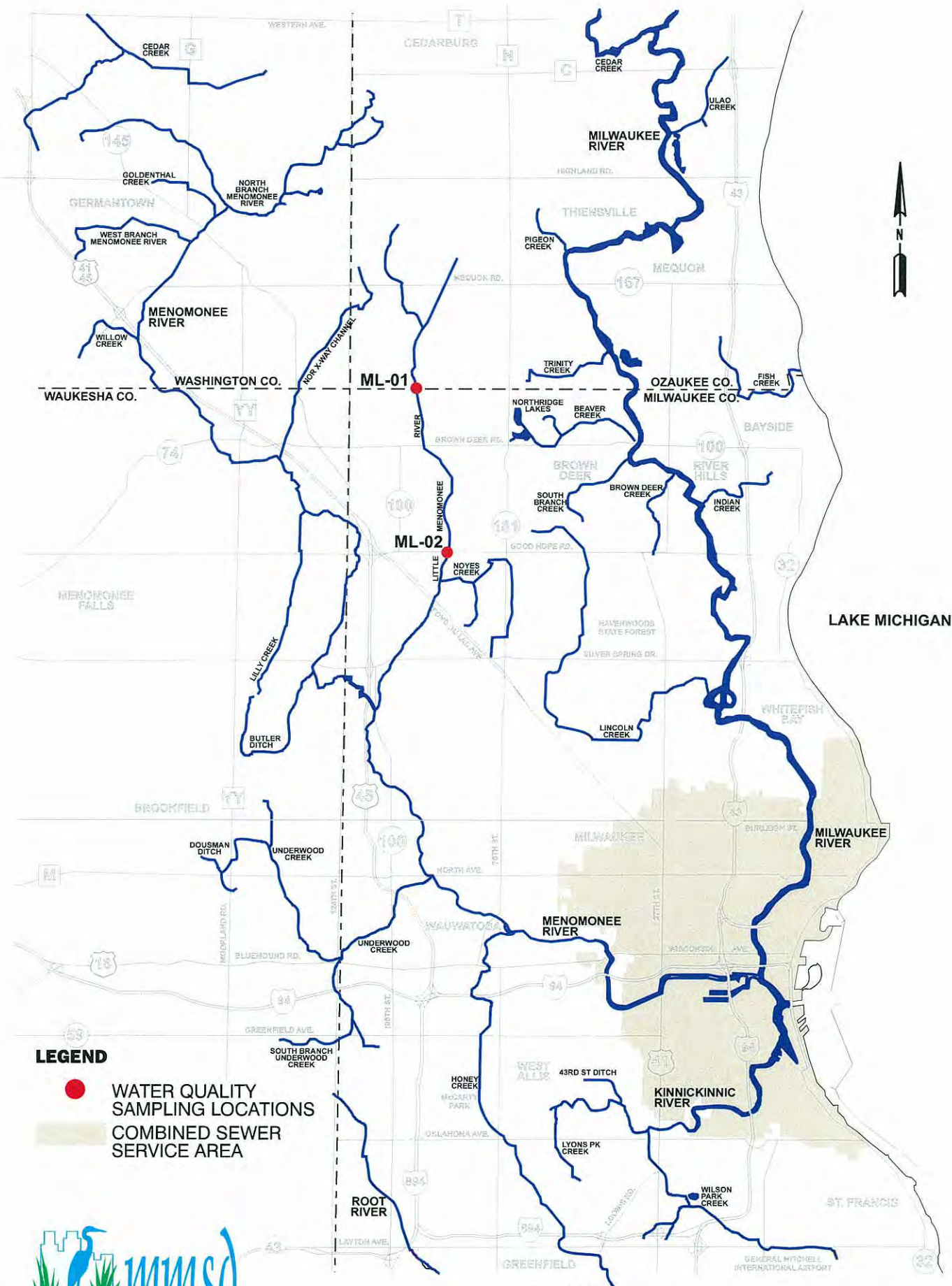
107TH STREET AND FISHER PARKWAY - SITE 7
UNDERWOOD CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	103.50	42.00	0.0	3.2	8.1	4.8	0.0	8.5	0.0	0.0	0.0	0.0
Standard Error	26.50	13.00	0.0	3.2	0.4	2.0	0.0	8.5	0.0	0.0	0.0	0.0
Median	103.50	42.00	0.0	3.2	8.1	4.8	0.0	8.5	0.0	0.0	0.0	0.0
Mode	ND	ND	0.0	ND	ND	ND	0.0	ND	0.0	0.0	ND	0.0
Standard Deviation	37.48	18.38	0.0	4.5	0.6	2.8	0.0	12.0	0.0	0.0	ND	0.0
Sample Variance	1404.50	338.00	0.0	19.8	0.4	7.6	0.0	144.5	0.0	0.0	ND	0.0
Kurtosis	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Skewness	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Range	53.00	26.00	0.0	6.3	0.9	3.9	0.0	17.0	0.0	0.0	0.0	0.0
Minimum	77.00	29.00	0.0	0.0	7.6	2.8	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	130.00	55.00	0.0	6.3	8.5	6.7	0.0	17.0	0.0	0.0	0.0	0.0
Count	2	2	2	2	2	2	2	2	2	2	1	2
Confidence Level(95.0%)	336.71	165.18	0.0	40.0	5.7	24.8	0.0	108.0	0.0	0.0	ND	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	435	218	7.4	13.3	61.0	49.8	11.4	10.9
Standard Error	125	29	4.3	5.3	5.1	6.5	2.3	2.4
Median	435	235	2.4	8.9	61.0	53.5	9.5	9.2
Mode	ND	280	0.0	ND	ND	25.0	ND	ND
Standard Deviation	177	82	12.0	14.0	14.4	18.3	6.5	6.7
Sample Variance	31250	6707	144.7	196.7	207.7	336.2	42.4	44.4
Kurtosis	ND	-1	4.8	5.5	-1.4	-1.2	4.1	4.4
Skewness	ND	0	2.2	2.3	-0.2	-0.3	1.9	2.0
Range	250	220	35.0	39.8	41.0	50.0	20.7	21.1
Minimum	310	100	0.0	4.2	39.0	25.0	5.3	4.9
Maximum	560	320	35.0	44.0	80.0	75.0	26.0	26.0
Count	2	8	8	7	8	8	8	8
Confidence Level(95.0%)	1588	68	10.1	13.0	12.0	15.3	5.4	5.6

ND = No Data

Provisional MMSD Water Quality Data



LEGEND



WATER QUALITY
SAMPLING LOCATIONS
COMBINED SEWER
SERVICE AREA



FIGURE 8
LITTLE MENOMONEE RIVER (ML) SURVEY
WATER QUALITY SAMPLING LOCATIONS
10/24/07
02-034(ML)REPORT

COUNTY LINE ROAD - SITE 1
LITTLE MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.6	9.3	9.2	4.97	2.14	0.028	1.96	0.080	1.09	0.090	0.043	ND
Standard Error	0.0	1.3	0.5	1.41	0.16	0.003	0.15	0.015	0.25	0.012	0.009	ND
Median	7.6	9.9	8.6	2.55	2.00	0.024	1.80	0.060	0.86	0.090	0.042	ND
Mode	7.7	ND	11.6	ND	2.40	0.023	1.80	0.000	0.87	0.048	0.000	ND
Standard Deviation	0.2	6.3	2.6	6.75	0.67	0.013	0.72	0.069	1.13	0.058	0.042	ND
Sample Variance	0.0	39.5	6.7	45.62	0.45	0.000	0.52	0.005	1.28	0.003	0.002	ND
Kurtosis	-0.6	-1.5	-1.0	8.02	7.34	-0.194	5.26	-1.216	17.03	1.590	2.879	ND
Skewness	-0.4	-0.1	-0.2	2.82	2.35	0.916	1.68	0.488	3.96	1.123	1.393	ND
Range	0.6	18.5	9.7	28.24	2.90	0.045	3.62	0.190	5.42	0.250	0.170	0.00
Minimum	7.3	0.5	3.9	0.66	1.50	0.011	0.78	0.000	0.38	0.000	0.000	0.00
Maximum	7.9	18.9	13.6	28.90	4.40	0.056	4.40	0.190	5.80	0.250	0.170	0.00
Count	23	23	23	23	18	18	23	21	21	22	22	0
Confidence Level(95.0%)	0.1	2.7	1.1	2.92	0.33	0.007	0.31	0.031	0.51	0.026	0.019	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	524.8	513.9	3.4	10.9	9.0	802	54.7	870	2.5	749
Standard Error	ND	ND	16.0	16.4	0.4	1.4	1.5	19	3.1	265	0.2	247
Median	ND	ND	530.0	527.0	3.6	11.0	7.3	815	51.0	260	2.4	190
Mode	ND	ND	530.0	527.0	3.6	13.0	ND	844	50.0	260	2.4	170
Standard Deviation	ND	ND	76.6	78.5	1.7	6.8	7.1	89	14.7	1216	0.7	1182
Sample Variance	ND	ND	5862.5	6158.0	3.0	46.7	50.2	7981	215.8	1478463	0.5	1398281
Kurtosis	ND	ND	1.6	1.7	0.8	-1.1	-0.7	1	9.6	2	-0.2	4
Skewness	ND	ND	-0.9	-1.1	0.9	0.3	0.8	-1	2.9	2	-0.2	2
Range	0.0	0.0	320.0	321.2	6.8	22.0	21.5	351	71.0	4191	2.7	4481
Minimum	0.0	0.0	310.0	292.0	1.2	2.0	1.8	584	39.0	9	1.0	19
Maximum	0.0	0.0	630.0	613.2	8.0	24.0	23.3	935	110.0	4200	3.6	4500
Count	0	0	23	23	23	23	23	23	23	21	21	23
Confidence Level(95.0%)	ND	ND	33.1	33.9	0.7	3.0	3.1	39	6.4	553	0.3	511

ND = No Data

Provisional MMSD Water Quality Data

COUNTY LINE ROAD - SITE 1
LITTLE MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	82.52	36.74	0.0	4.3	6.1	3.9	0.5	13.3	0.2	2.6	3.7	ND
Standard Error	2.16	1.24	0.0	0.5	0.4	0.5	0.2	2.4	0.1	0.8	1.0	ND
Median	84.00	38.00	0.0	4.3	6.2	2.9	0.0	12.0	0.0	0.0	0.0	ND
Mode	88.00	35.00	0.0	4.4	5.4	2.7	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	10.36	5.96	0.0	2.6	1.7	2.2	1.1	11.3	0.5	3.8	4.8	ND
Sample Variance	107.26	35.57	0.0	6.8	3.0	4.8	1.1	128.6	0.2	14.6	23.0	ND
Kurtosis	0.49	1.19	ND	3.8	3.6	0.5	2.6	3.3	2.2	-0.5	-1.0	ND
Skewness	-0.57	-0.72	ND	1.1	-0.9	1.1	2.0	1.3	2.0	1.1	0.8	ND
Range	43.00	27.00	0.0	12.0	8.6	8.1	3.4	49.0	1.4	9.9	14.0	0.0
Minimum	57.00	22.00	0.0	0.0	0.9	1.2	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	100.00	49.00	0.0	12.0	9.5	9.3	3.4	49.0	1.4	9.9	14.0	0.0
Count	23	23	23	23	22	23	23	23	23	22	22	0
Confidence Level(95.0%)	4.48	2.58	0.0	1.1	0.8	0.9	0.5	4.9	0.2	1.7	2.1	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	359	282	1.2	5.9	73.3	66.1	7.4	7.2
Standard Error	10	6	0.3	0.3	2.1	2.2	0.5	0.6
Median	360	290	1.0	6.2	77.0	69.0	7.1	6.9
Mode	360	290	0.0	6.2	72.0	73.0	8.7	8.2
Standard Deviation	47	29	1.3	1.1	10.3	10.4	2.6	3.0
Sample Variance	2248	863	1.7	1.2	105.7	108.0	6.8	8.7
Kurtosis	1	3	-2.0	-0.5	0.3	1.0	4.3	7.6
Skewness	-1	-1	0.1	0.1	-1.0	-1.3	1.5	2.2
Range	220	140	3.2	4.1	35.0	39.0	12.0	14.2
Minimum	240	190	0.0	4.1	50.0	40.0	4.0	3.8
Maximum	460	330	3.2	8.2	85.0	79.0	16.0	18.0
Count	23	23	22	17	23	23	23	23
Confidence Level(95.0%)	21	13	0.6	0.6	4.4	4.5	1.1	1.3

ND = No Data

Provisional MMSD Water Quality Data

GRANVILLE ROAD - SITE 2
LITTLE MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.6	11.0	9.4	9.86	1.07	0.046	1.02	0.147	1.02	0.113	0.050	ND
Standard Error	0.0	1.6	0.6	1.59	0.16	0.012	0.13	0.031	0.08	0.014	0.008	ND
Median	7.6	13.1	8.8	8.43	1.05	0.034	0.97	0.110	0.97	0.110	0.051	ND
Mode	ND	ND	ND	ND	1.20	0.034	1.80	0.000	1.40	0.140	0.000	ND
Standard Deviation	0.2	7.7	3.1	7.61	0.66	0.050	0.64	0.143	0.36	0.066	0.039	ND
Sample Variance	0.0	58.6	9.5	57.97	0.44	0.002	0.40	0.020	0.13	0.004	0.002	ND
Kurtosis	-0.8	-1.3	-1.2	8.09	0.58	12.227	1.35	1.094	-0.88	-0.563	0.535	ND
Skewness	0.0	0.0	-0.2	2.63	0.75	3.300	1.03	1.338	0.17	0.115	0.580	ND
Range	0.7	24.2	10.3	36.02	2.53	0.219	2.62	0.490	1.30	0.240	0.150	0.00
Minimum	7.3	0.6	3.7	1.48	0.17	0.011	0.18	0.000	0.40	0.000	0.000	0.00
Maximum	7.9	24.8	13.9	37.50	2.70	0.230	2.80	0.490	1.70	0.240	0.150	0.00
Count	23	23	23	23	18	18	23	21	21	22	22	0
Confidence Level(95.0%)	0.1	3.3	1.3	3.29	0.33	0.025	0.27	0.065	0.17	0.029	0.017	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	581.7	563.0	4.5	18.7	17.6	946	129.8	2338	2.7	1659
Standard Error	ND	ND	43.3	43.3	0.9	3.2	2.8	86	24.0	1316	0.1	804
Median	ND	ND	590.0	579.0	3.2	13.0	12.6	935	96.0	360	2.6	370
Mode	ND	ND	480.0	ND	2.4	13.0	ND	ND	110.0	1100	3.0	1200
Standard Deviation	ND	ND	207.9	207.8	4.1	15.1	13.5	413	115.0	6029	0.7	3855
Sample Variance	ND	ND	43215.0	43192.0	16.6	229.2	182.3	170842	13230.8	36352386	0.4	14863687
Kurtosis	ND	ND	1.0	0.9	5.2	2.1	1.8	6	6.9	13	1.9	16
Skewness	ND	ND	0.7	0.6	2.1	1.6	1.5	2	2.7	4	1.4	4
Range	0.0	0.0	910.0	914.8	18.0	57.6	50.7	2084	480.0	25930	2.6	17943
Minimum	0.0	0.0	190.0	177.0	0.0	2.4	3.1	267	30.0	70	1.8	57
Maximum	0.0	0.0	1100.0	1091.8	18.0	60.0	53.8	2351	510.0	26000	4.4	18000
Count	0	0	23	23	22	23	23	23	23	21	21	23
Confidence Level(95.0%)	ND	ND	89.9	89.9	1.8	6.5	5.8	179	49.7	2745	0.3	1667

ND = No Data

Provisional MMSD Water Quality Data

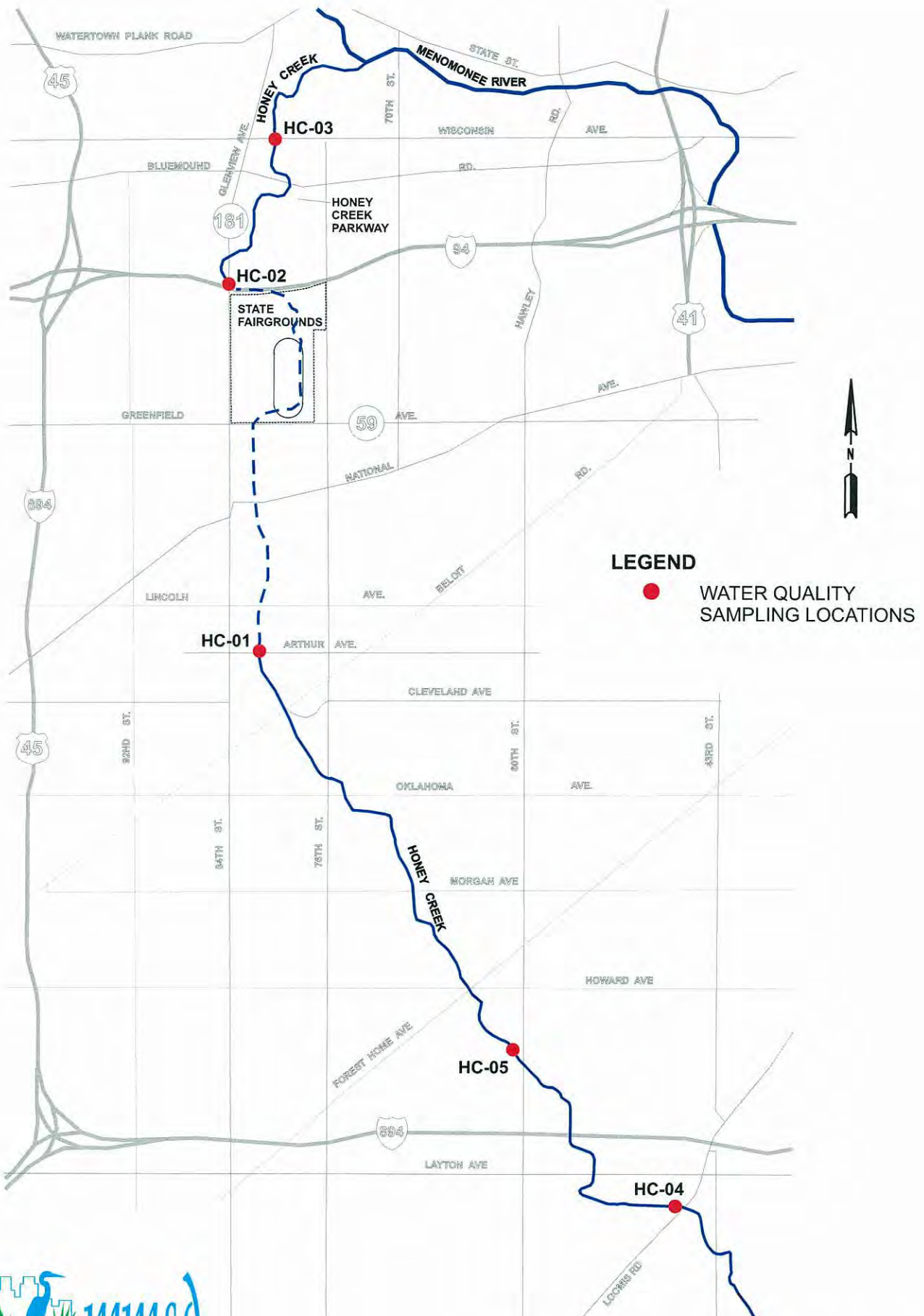
GRANVILLE ROAD - SITE 2
LITTLE MENOMONEE RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	70.65	31.76	0.0	5.1	10.2	3.8	0.8	31.1	0.1	2.1	4.2	ND
Standard Error	4.61	2.36	0.0	0.6	1.4	0.3	0.3	6.5	0.1	0.6	1.1	ND
Median	75.00	36.00	0.0	4.9	8.4	3.7	0.0	21.0	0.0	0.0	0.0	ND
Mode	61.00	39.00	0.0	4.9	7.3	2.9	0.0	15.0	0.0	0.0	0.0	ND
Standard Deviation	22.12	11.31	0.0	2.7	6.9	1.5	1.5	31.3	0.3	3.1	5.1	ND
Sample Variance	489.51	128.00	0.0	7.4	47.3	2.3	2.2	978.9	0.1	9.7	25.9	ND
Kurtosis	0.42	-0.24	23.0	0.5	9.1	2.1	0.1	9.8	23.0	0.2	-0.9	ND
Skewness	-0.65	-0.74	4.8	0.1	2.8	1.1	1.4	3.0	4.8	1.2	0.7	ND
Range	91.00	41.60	0.2	11.0	32.5	6.5	4.0	141.6	1.3	9.4	15.0	0.0
Minimum	19.00	6.40	0.0	0.0	3.5	1.8	0.0	8.4	0.0	0.0	0.0	0.0
Maximum	110.00	48.00	0.2	11.0	36.0	8.3	4.0	150.0	1.3	9.4	15.0	0.0
Count	23	23	23	23	23	23	23	23	23	23	22	0
Confidence Level(95.0%)	9.57	4.89	0.0	1.2	3.0	0.7	0.6	13.5	0.1	1.3	2.3	ND

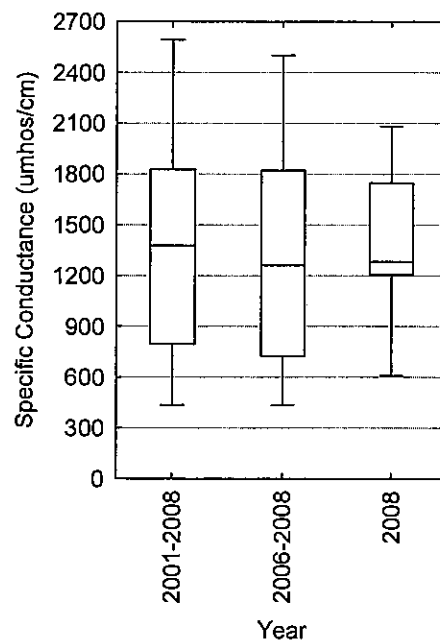
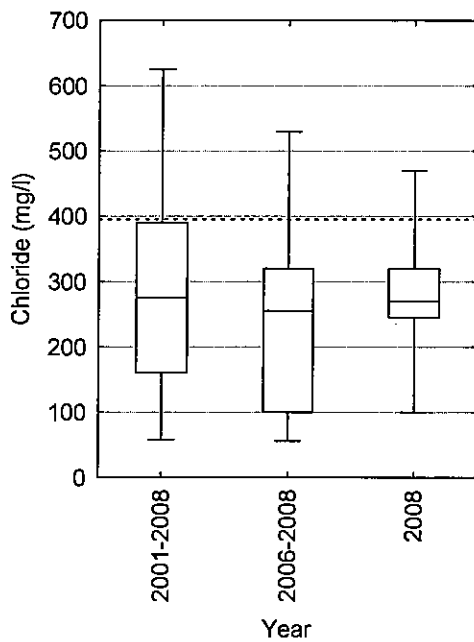
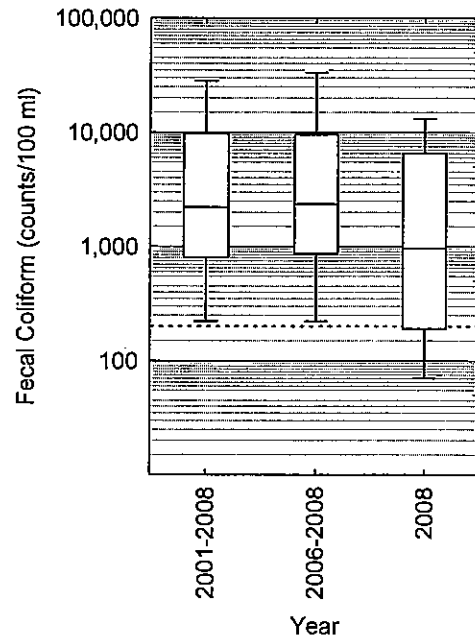
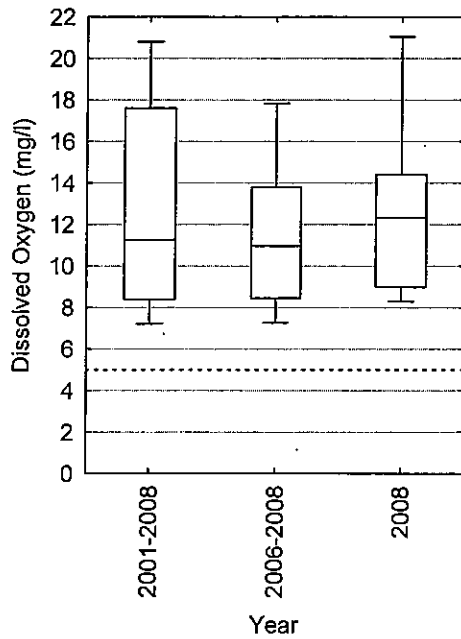
VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	307	231	2.5	7.9	61.9	53.3	8.2	7.8
Standard Error	21	16	0.8	0.7	4.1	4.3	0.6	0.6
Median	330	240	2.2	7.6	68.0	59.5	7.6	7.4
Mode	350	240	0.0	7.6	50.0	69.0	8.4	5.7
Standard Deviation	100	77	3.6	2.9	19.8	20.1	3.0	3.0
Sample Variance	9999	5899	12.9	8.3	391.5	405.1	9.3	9.2
Kurtosis	0	0	9.3	3.2	-0.3	-0.2	7.1	6.2
Skewness	-1	-1	2.7	1.7	-0.8	-0.9	2.3	2.3
Range	395	274	16.0	10.8	67.0	68.0	14.4	13.0
Minimum	75	56	0.0	5.2	19.0	10.0	4.6	5.0
Maximum	470	330	16.0	16.0	86.0	78.0	19.0	18.0
Count	23	23	22	17	23	22	22	22
Confidence Level(95.0%)	43	33	1.6	1.5	8.6	8.9	1.3	1.3

ND = No Data

Provisional MMSD Water Quality Data

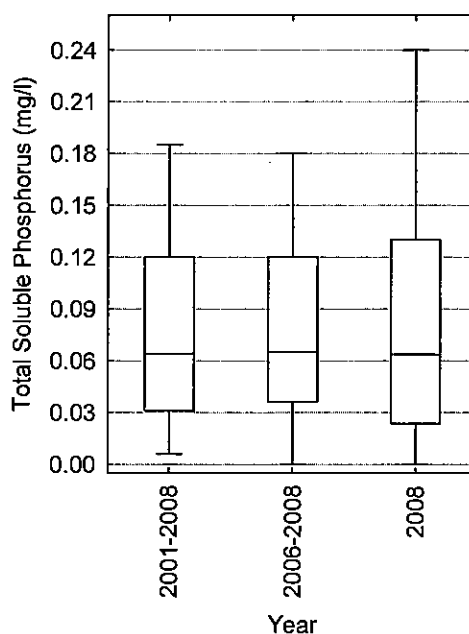
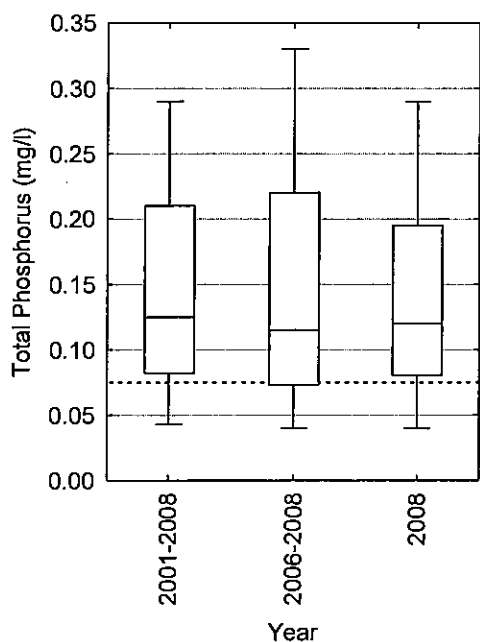
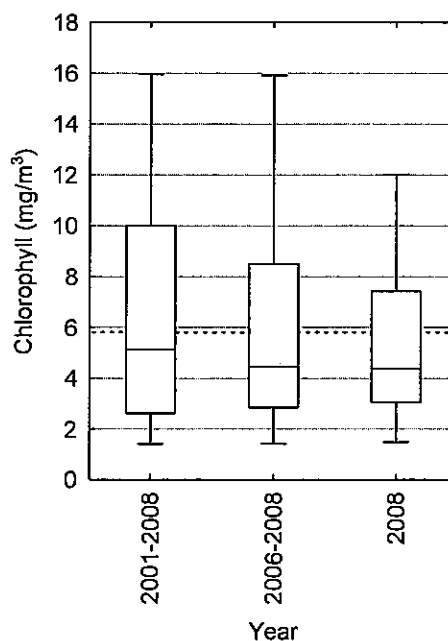
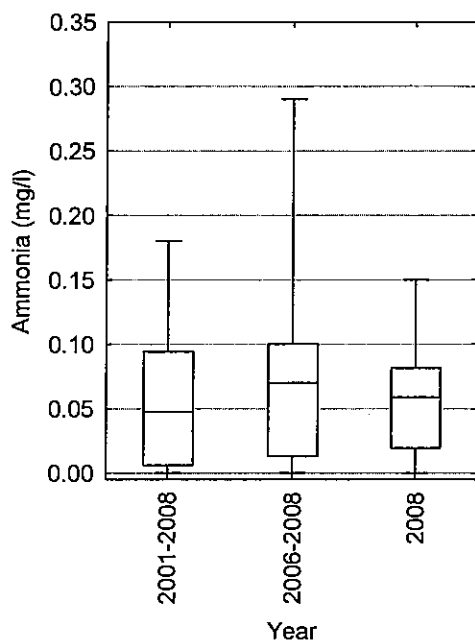


MMSD Water Quality Monitoring Program Data
Honey Creek at Arthur Ave., Site HC-01



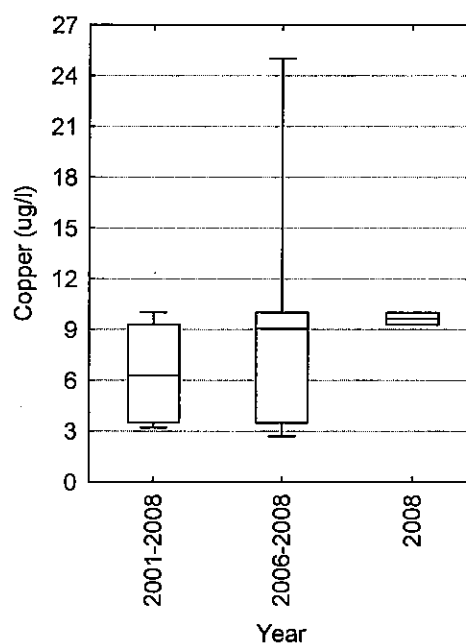
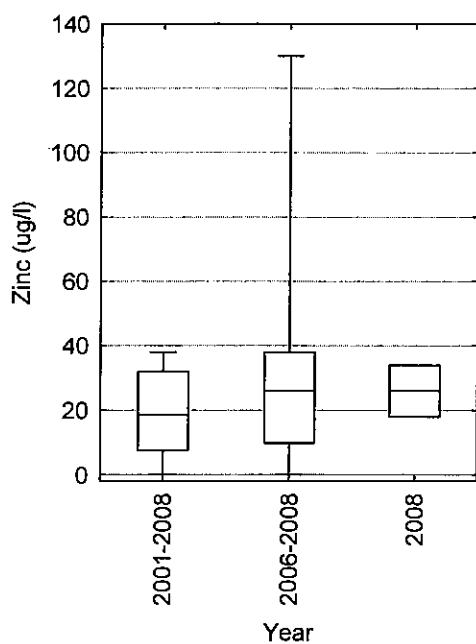
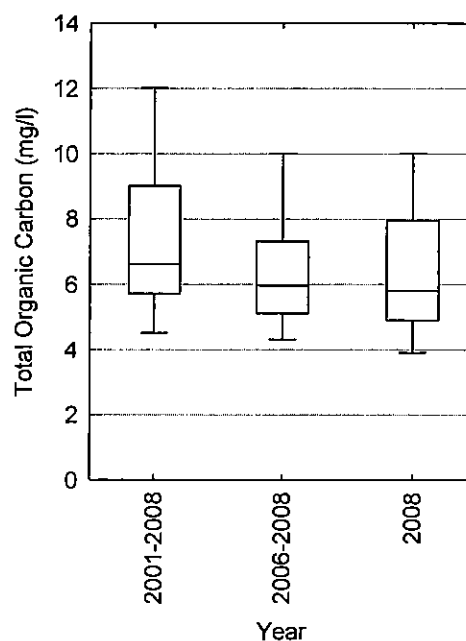
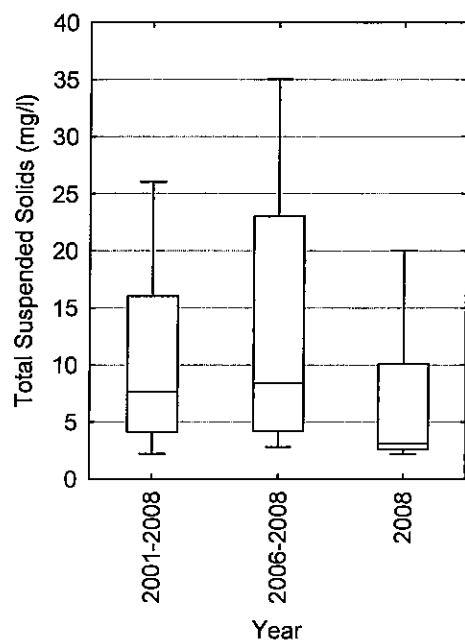
— Median □ 25%-75% ▬ 10%-90%
 — WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Honey Creek at Arthur Ave., Site HC-01



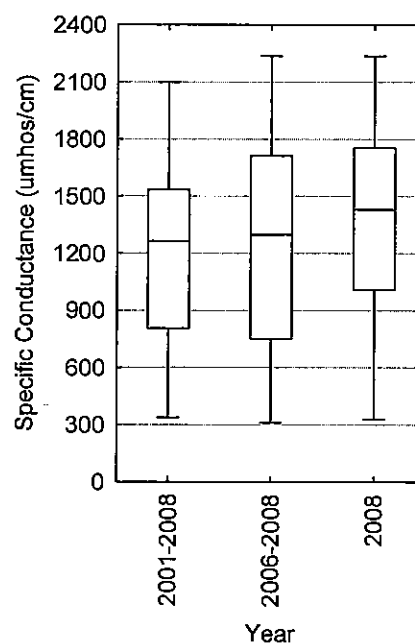
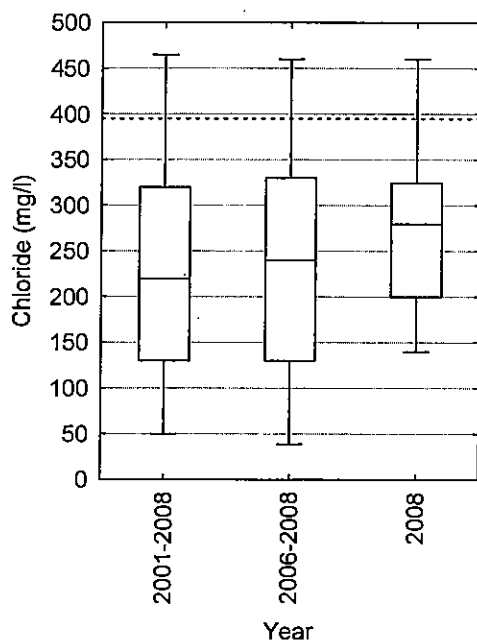
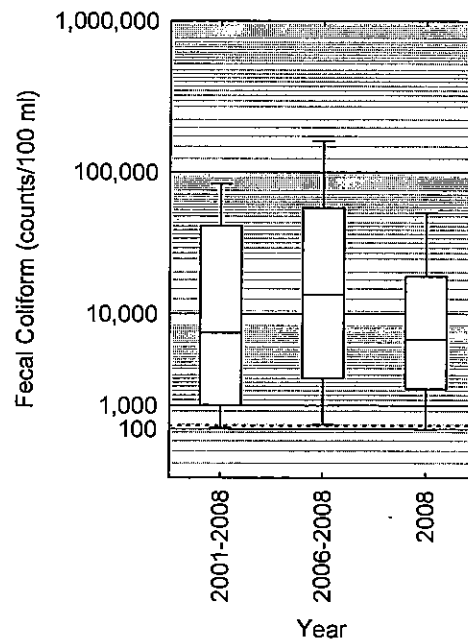
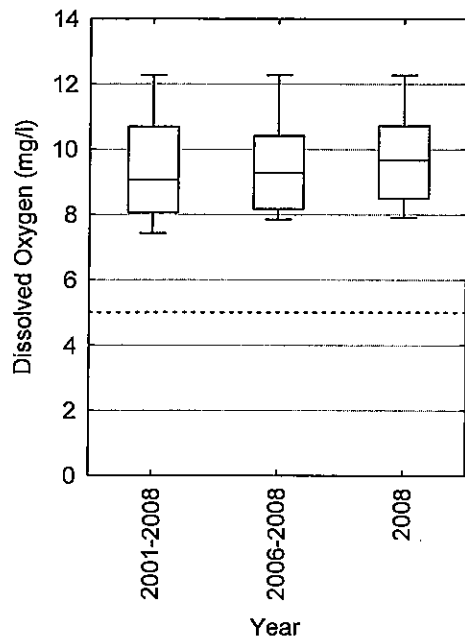
— Median □ 25%-75% ▮ 10%-90%
 --- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Honey Creek at Arthur Ave., Site HC-01



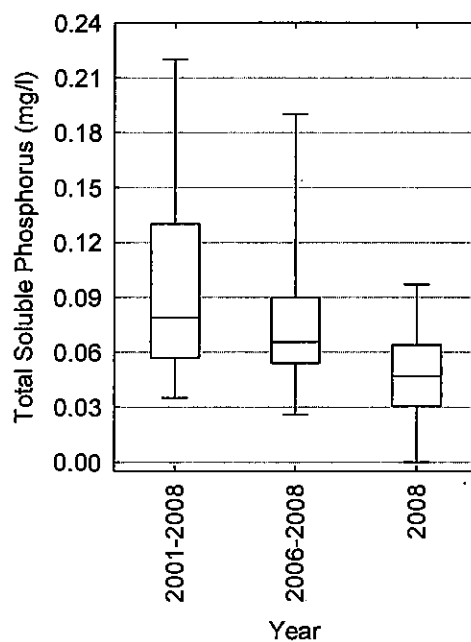
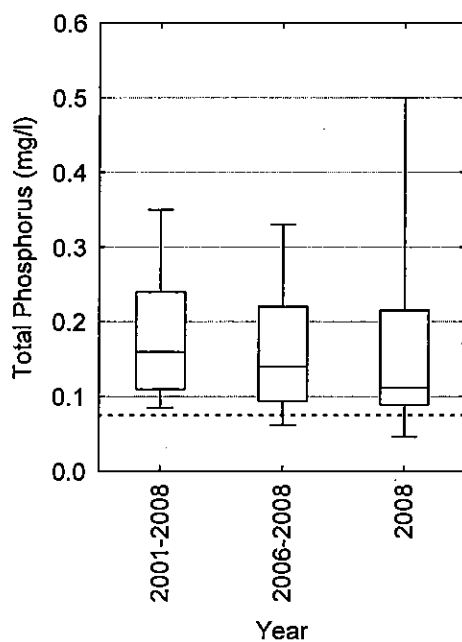
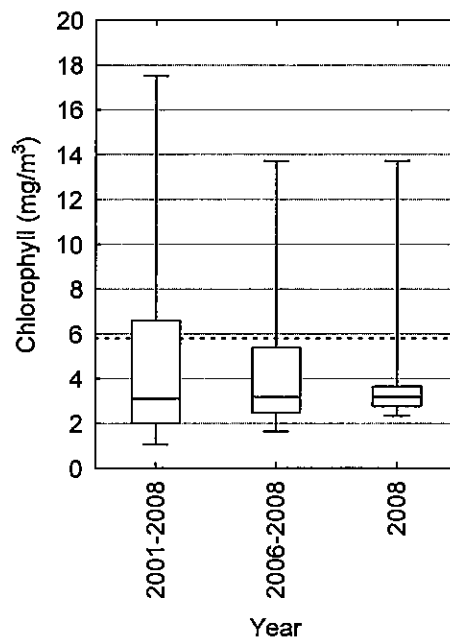
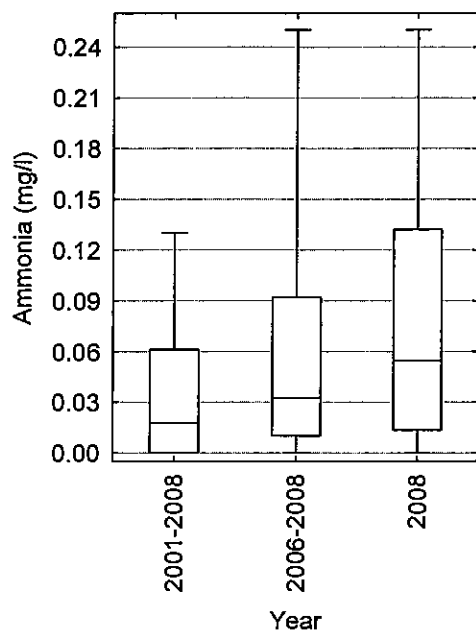
— Median □ 25%-75% ┘ 10%-90%

MMSD Water Quality Monitoring Program Data
Honey Creek at 84th St., Site HC-02



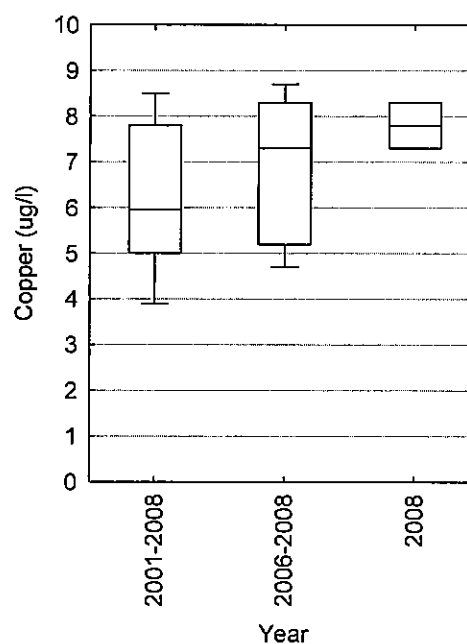
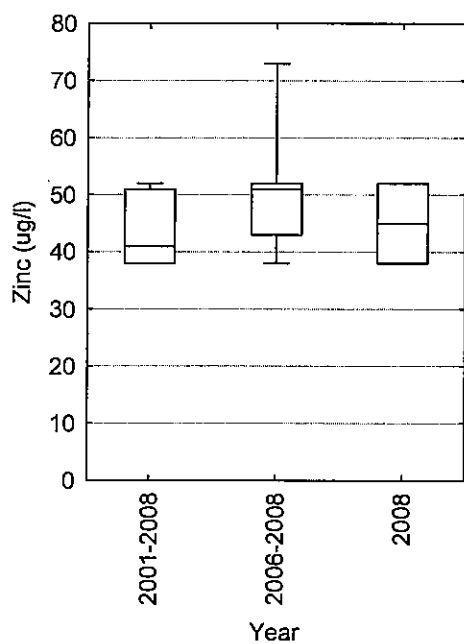
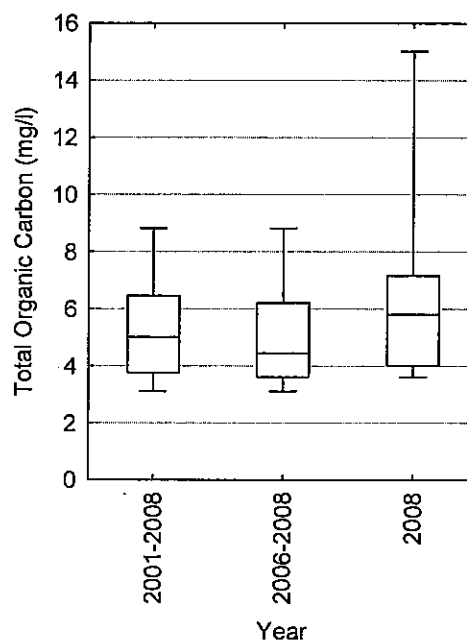
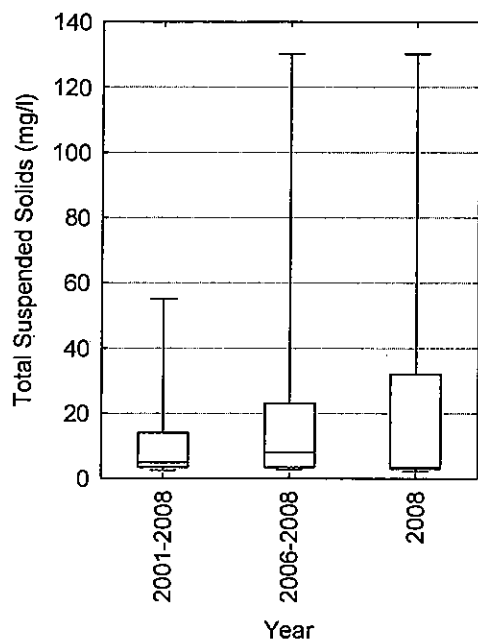
— Median □ 25%-75% ⊢ 10%-90%
 — WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Honey Creek at 84th St., Site HC-02



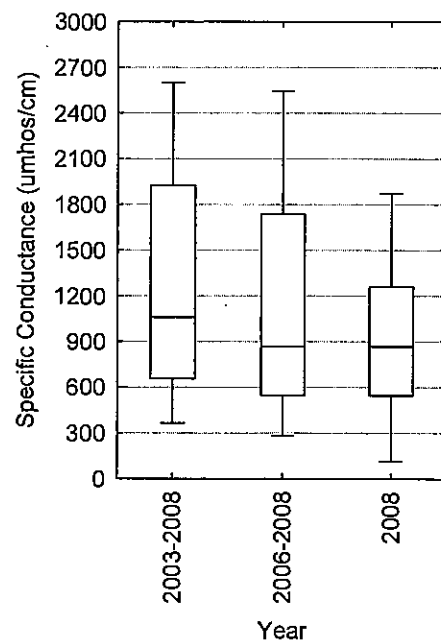
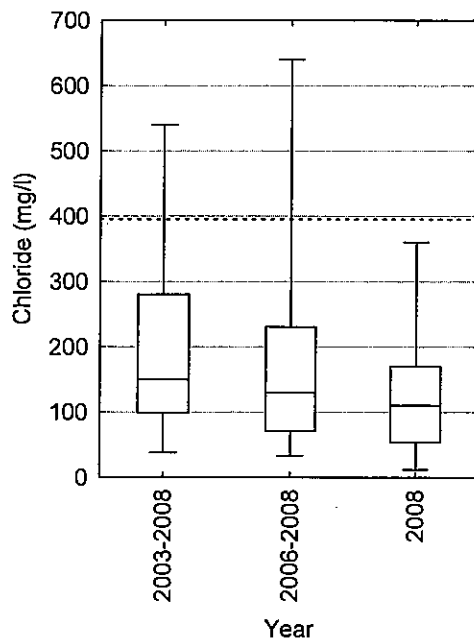
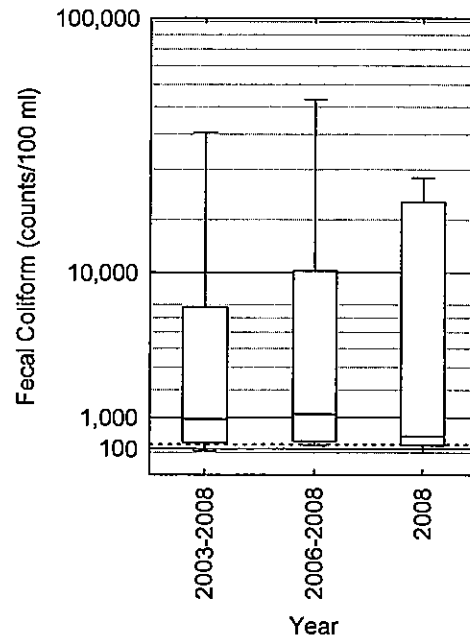
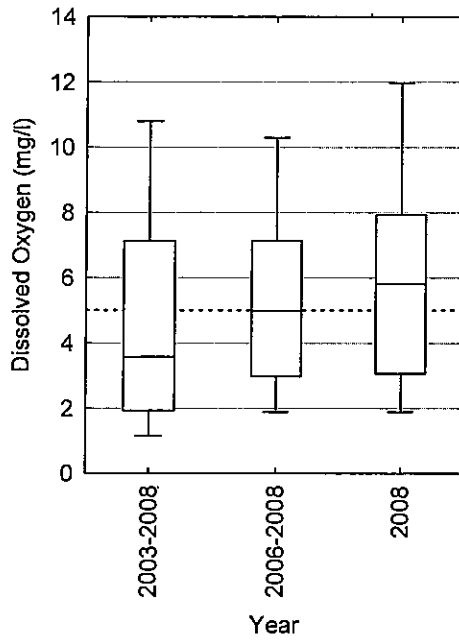
— Median □ 25%-75% ▮ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Honey Creek at 84th St., Site HC-02



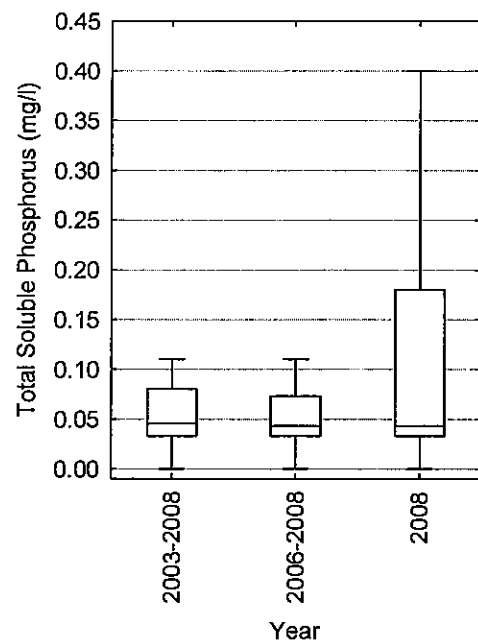
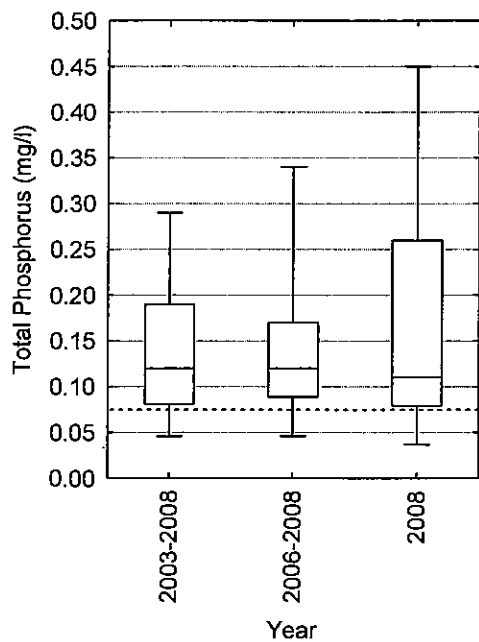
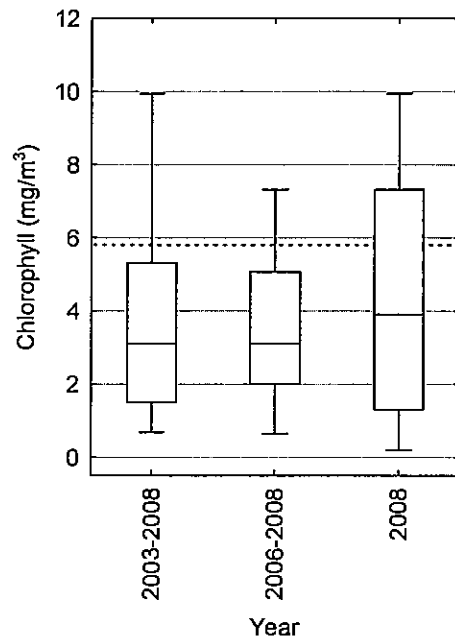
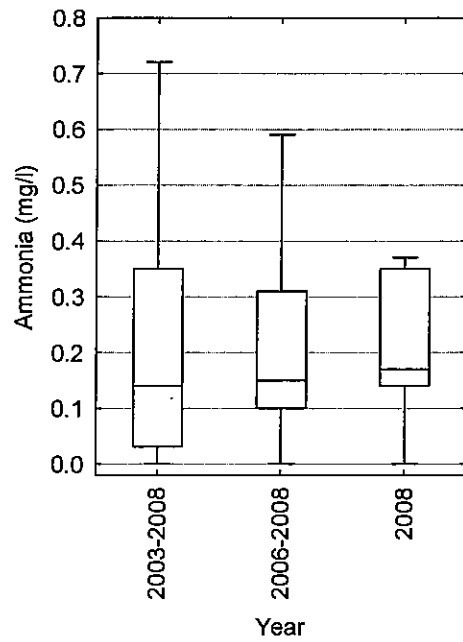
— Median □ 25%-75% ┘ 10%-90%

MMSD Water Quality Monitoring Program Data
Honey Creek at Loomis Rd., Site HC-04



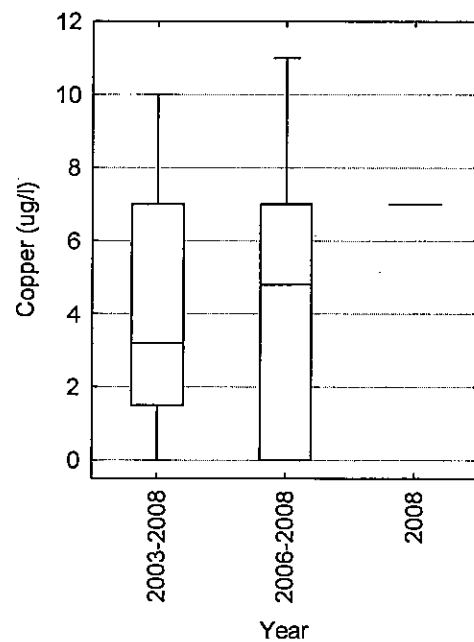
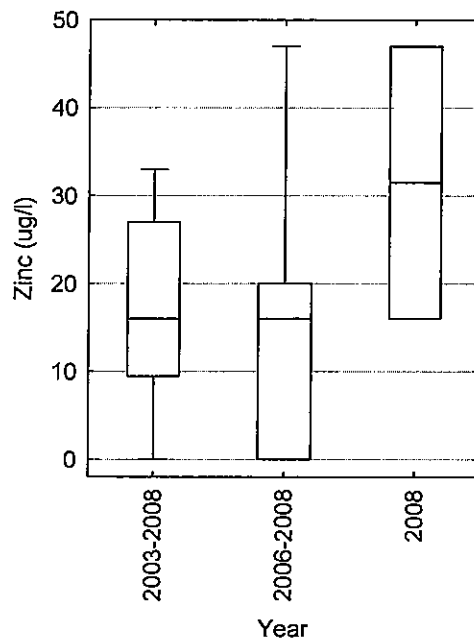
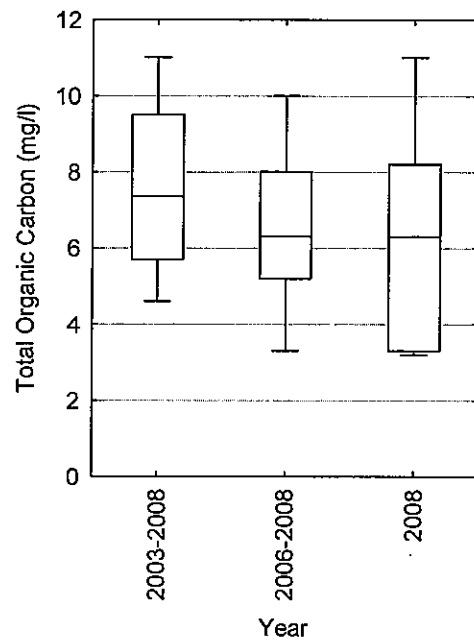
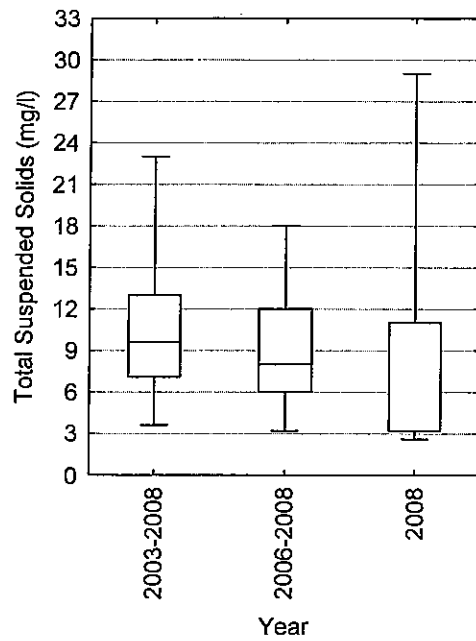
— Median □ 25%-75% ± 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Honey Creek at Loomis Rd., Site HC-04



— Median □ 25%-75% ▤ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Honey Creek at Loomis Rd., Site HC-04



— Median □ 25%-75% ▮ 10%-90%

81ST STREET AND ARTHUR AVENUE (MCCARTY PARK) - SITE 1
HONEY CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.2	17.3	12.6	5.39	0.58	0.023	0.53	0.059	0.63	0.140	0.084	ND
Standard Error	0.2	2.4	1.5	1.22	0.32	0.005	0.28	0.017	0.21	0.030	0.028	ND
Median	8.1	18.7	12.3	4.37	0.28	0.025	0.19	0.059	0.71	0.120	0.064	ND
Mode	ND	ND	13.8	ND	ND	ND	ND	ND	0.00	0.110	0.000	ND
Standard Deviation	0.6	6.9	4.3	3.46	0.78	0.012	0.73	0.048	0.58	0.084	0.080	ND
Sample Variance	0.3	47.3	18.2	11.99	0.61	0.000	0.53	0.002	0.34	0.007	0.006	ND
Kurtosis	3.7	-0.4	1.1	0.66	4.20	-0.635	4.88	0.675	-1.49	-0.047	0.865	ND
Skewness	1.6	0.3	1.1	1.09	2.02	-0.705	2.17	0.774	0.12	0.682	0.996	ND
Range	1.9	20.9	12.7	10.52	2.07	0.031	2.06	0.150	1.50	0.250	0.240	0.00
Minimum	7.5	8.1	8.3	1.48	0.03	0.004	0.04	0.000	0.00	0.040	0.000	0.00
Maximum	9.4	29.0	21.0	12.00	2.10	0.035	2.10	0.150	1.50	0.290	0.240	0.00
Count	8	8	8	8	6	6	7	8	8	8	8	0
Confidence Level(95.0%)	0.5	5.8	3.6	2.89	0.82	0.012	0.67	0.040	0.49	0.070	0.067	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	851.3	844.5	2.9	6.7	5.2	1395	280.0	3545	3.0	2654
Standard Error	ND	ND	107.1	109.0	0.8	2.5	2.0	161	36.5	1673	0.3	1201
Median	ND	ND	855.0	852.1	2.2	3.1	3.9	1283	270.0	955	2.9	765
Mode	ND	ND	ND	ND	2.2	ND	ND	ND	ND	ND	ND	73
Standard Deviation	ND	ND	302.9	308.4	2.2	7.1	5.8	455	103.4	4732	0.8	3397
Sample Variance	ND	ND	91726.8	95082.8	4.7	49.9	33.6	207452	10685.7	22389257	0.7	11536823
Kurtosis	ND	ND	1.0	0.9	-0.2	0.6	6.7	0	2.2	1	-1.7	0
Skewness	ND	ND	0.4	0.3	0.7	1.5	2.5	0	0.2	1	0.0	1
Range	0.0	0.0	1020.0	1037.6	6.4	17.8	18.0	1473	370.0	12930	2.3	8748
Minimum	0.0	0.0	380.0	360.0	0.0	2.2	1.1	608	100.0	70	1.8	52
Maximum	0.0	0.0	1400.0	1397.6	6.4	20.0	19.1	2081	470.0	13000	4.1	8800
Count	0	0	8	8	8	8	8	8	8	8	8	8
Confidence Level(95.0%)	ND	ND	253.2	257.8	1.8	5.9	4.8	381	86.4	3956	0.7	2840

ND = No Data

Provisional MMSD Water Quality Data

81ST STREET AND ARTHUR AVENUE (MCCARTY PARK) - SITE 1
HONEY CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	39.00	24.00	0.0	2.2	9.7	3.7	0.0	26.0	0.0	0.0	5.0	0.0
Standard Error	7.00	11.00	0.0	2.2	0.4	0.3	0.0	8.0	0.0	0.0	5.0	0.0
Median	39.00	24.00	0.0	2.2	9.7	3.7	0.0	26.0	0.0	0.0	5.0	0.0
Mode	ND	ND	0.0	ND	ND	ND	0.0	ND	0.0	0.0	ND	0.0
Standard Deviation	9.90	15.56	0.0	3.1	0.5	0.4	0.0	11.3	0.0	0.0	7.1	0.0
Sample Variance	98.00	242.00	0.0	9.7	0.2	0.2	0.0	128.0	0.0	0.0	50.0	0.0
Kurtosis	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Skewness	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Range	14.00	22.00	0.0	4.4	0.7	0.6	0.0	16.0	0.0	0.0	10.0	0.0
Minimum	32.00	13.00	0.0	0.0	9.3	3.4	0.0	18.0	0.0	0.0	0.0	0.0
Maximum	46.00	35.00	0.0	4.4	10.0	4.0	0.0	34.0	0.0	0.0	10.0	0.0
Count	2	2	2	2	2	2	2	2	2	2	2	2
Confidence Level(95.0%)	88.94	139.77	0.0	28.0	4.4	3.8	0.0	101.6	0.0	0.0	63.5	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	195	193	2.3	9.6	50.9	44.5	6.4	6.0
Standard Error	65	21	0.6	2.2	4.7	4.9	0.8	0.7
Median	195	200	2.6	10.0	53.0	47.0	5.8	5.7
Mode	ND	210	0.0	ND	ND	ND	ND	5.7
Standard Deviation	92	60	1.7	5.7	13.3	13.7	2.2	2.0
Sample Variance	8450	3593	2.8	32.7	176.7	188.6	4.7	3.8
Kurtosis	ND	1	-0.1	-0.3	-0.2	-0.2	-0.4	1.8
Skewness	ND	0	-0.2	-0.7	-0.7	-0.4	0.9	1.3
Range	130	190	5.0	16.0	40.0	42.0	6.1	6.0
Minimum	130	110	0.0	0.0	29.0	23.0	3.9	4.0
Maximum	260	300	5.0	16.0	69.0	65.0	10.0	10.0
Count	2	8	8	7	8	8	8	8
Confidence Level(95.0%)	826	50	1.4	5.3	11.1	11.5	1.8	1.6

ND = No Data

Provisional MMSD Water Quality Data

84TH STREET AND O'CONNER STREET - SITE 2
HONEY CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.8	17.0	9.7	4.40	0.95	0.023	0.96	0.081	0.64	0.172	0.048	ND
Standard Error	0.1	1.9	0.5	1.34	0.27	0.006	0.23	0.031	0.23	0.052	0.010	ND
Median	7.8	18.0	9.7	3.17	0.87	0.023	0.78	0.055	0.66	0.112	0.047	ND
Mode	7.9	ND	ND	ND	ND	0.020	ND	ND	0.00	ND	ND	ND
Standard Deviation	0.2	5.5	1.5	3.79	0.67	0.015	0.62	0.088	0.66	0.147	0.029	ND
Sample Variance	0.0	30.2	2.3	14.33	0.45	0.000	0.38	0.008	0.43	0.022	0.001	ND
Kurtosis	3.1	0.4	-0.7	7.66	2.01	1.910	1.96	0.669	0.66	3.882	0.674	ND
Skewness	-1.1	-0.1	0.5	2.75	0.81	0.002	0.80	1.214	0.85	1.915	0.094	ND
Range	0.7	18.2	4.4	11.37	2.03	0.046	2.01	0.250	1.90	0.454	0.097	0.00
Minimum	7.4	7.9	7.9	2.33	0.07	0.000	0.09	0.000	0.00	0.046	0.000	0.00
Maximum	8.1	26.1	12.3	13.70	2.10	0.046	2.10	0.250	1.90	0.500	0.097	0.00
Count	8	8	8	8	6	6	7	8	8	8	8	0
Confidence Level(95.0%)	0.2	4.6	1.3	3.17	0.70	0.016	0.57	0.073	0.55	0.123	0.024	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	938.8	912.7	7.1	26.1	21.0	1369	276.3	13366	3.6	6233
Standard Error	ND	ND	104.0	111.2	3.4	16.1	11.5	214	35.1	6319	0.3	2325
Median	ND	ND	925.0	921.8	2.2	3.5	4.5	1430	280.0	6100	3.7	4150
Mode	ND	ND	ND	ND	1.8	ND	ND	ND	280.0	ND	ND	16000
Standard Deviation	ND	ND	294.2	314.4	9.7	45.7	32.6	604	99.3	17874	0.9	6577
Sample Variance	ND	ND	86555.4	98876.1	93.8	2085.6	1062.9	364930	9855.4	319482770	0.8	43253061
Kurtosis	ND	ND	-0.2	-0.9	1.0	4.5	3.9	0	0.6	4	0.8	-1
Skewness	ND	ND	0.0	0.1	1.6	2.2	2.0	-1	0.6	2	-0.9	1
Range	0.0	0.0	930.0	936.6	24.6	127.8	91.2	1906	320.0	52930	2.9	15948
Minimum	0.0	0.0	470.0	461.2	1.4	2.2	2.7	330	140.0	70	1.8	52
Maximum	0.0	0.0	1400.0	1397.8	26.0	130.0	93.9	2236	460.0	53000	4.7	16000
Count	0	0	8	8	8	8	8	8	8	8	8	8
Confidence Level(95.0%)	ND	ND	246.0	262.9	8.1	38.2	27.3	505	83.0	14943	0.8	5498

ND = No Data

Provisional MMSD Water Quality Data

84TH STREET AND O'CONNER STREET - SITE 2
HONEY CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	67.00	34.50	0.0	4.7	7.8	4.1	0.0	45.0	0.0	0.0	7.0	0.0
Standard Error	23.00	17.50	0.0	0.7	0.5	0.8	0.0	7.0	0.0	0.0	7.0	0.0
Median	67.00	34.50	0.0	4.7	7.8	4.1	0.0	45.0	0.0	0.0	7.0	0.0
Mode	ND	ND	0.0	ND	ND	ND	0.0	ND	0.0	0.0	ND	0.0
Standard Deviation	32.53	24.75	0.0	0.9	0.7	1.1	0.0	9.9	0.0	0.0	9.9	0.0
Sample Variance	1058.00	612.50	0.0	0.8	0.5	1.3	0.0	98.0	0.0	0.0	98.0	0.0
Kurtosis	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Skewness	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Range	46.00	35.00	0.0	1.3	1.0	1.6	0.0	14.0	0.0	0.0	14.0	0.0
Minimum	44.00	17.00	0.0	4.0	7.3	3.3	0.0	38.0	0.0	0.0	0.0	0.0
Maximum	90.00	52.00	0.0	5.3	8.3	4.9	0.0	52.0	0.0	0.0	14.0	0.0
Count	2	2	2	2	2	2	2	2	2	2	2	2
Confidence Level(95.0%)	292.24	222.36	0.0	8.3	6.4	10.2	0.0	88.9	0.0	0.0	88.9	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	310	216	3.2	12.5	57.4	50.9	6.6	6.2
Standard Error	130	21	1.8	5.4	3.6	4.5	1.3	1.3
Median	310	230	1.0	9.4	58.5	55.0	5.8	5.5
Mode	ND	230	0.0	0.0	ND	55.0	ND	ND
Standard Deviation	184	59	5.2	14.2	10.3	12.7	3.7	3.7
Sample Variance	33800	3484	27.4	202.7	106.6	162.1	13.8	13.6
Kurtosis	ND	0	4.3	3.7	0.2	-0.8	4.5	6.5
Skewness	ND	0	2.1	1.7	-0.6	-0.6	2.0	2.5
Range	260	180	15.0	42.0	32.0	35.0	11.4	11.8
Minimum	180	130	0.0	0.0	39.0	32.0	3.6	3.2
Maximum	440	310	15.0	42.0	71.0	67.0	15.0	15.0
Count	2	8	8	7	8	8	8	8
Confidence Level(95.0%)	1652	49	4.4	13.2	8.6	10.6	3.1	3.1

ND = No Data

Provisional MMSD Water Quality Data

80TH STREET AND WISCONSIN AVENUE - SITE 3
HONEY CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	17.1	11.9	6.35	0.75	0.035	0.80	0.133	1.31	0.189	0.058	ND
Standard Error	0.1	2.0	1.5	2.23	0.25	0.004	0.23	0.069	0.66	0.080	0.028	ND
Median	8.1	18.0	10.2	3.57	0.64	0.033	0.75	0.043	0.58	0.086	0.031	ND
Mode	ND	ND	ND	ND	ND	ND	ND	0.000	0.00	ND	0.000	ND
Standard Deviation	0.3	5.5	4.1	6.30	0.62	0.010	0.60	0.196	1.87	0.226	0.079	ND
Sample Variance	0.1	30.6	17.1	39.68	0.39	0.000	0.36	0.038	3.49	0.051	0.006	ND
Kurtosis	0.6	-0.6	3.3	3.62	0.60	1.236	1.05	0.109	4.04	3.596	1.706	ND
Skewness	0.5	-0.1	1.8	1.96	0.94	1.108	0.99	1.384	2.02	1.989	1.432	ND
Range	1.0	17.0	12.5	18.13	1.72	0.029	1.80	0.480	5.50	0.658	0.220	0.00
Minimum	7.7	8.7	8.5	2.17	0.08	0.024	0.10	0.000	0.00	0.032	0.000	0.00
Maximum	8.7	25.6	21.0	20.30	1.80	0.053	1.90	0.480	5.50	0.690	0.220	0.00
Count	8	8	8	8	6	6	7	8	8	8	8	0
Confidence Level(95.0%)	0.3	4.6	3.5	5.27	0.65	0.011	0.56	0.164	1.56	0.189	0.066	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	911.3	868.5	13.4	42.7	17.3	1431	253.8	11635	3.7	9366
Standard Error	ND	ND	111.0	126.9	8.1	30.0	8.3	230	39.4	4911	0.3	4667
Median	ND	ND	1015.0	1010.8	2.3	6.4	8.4	1602	265.0	7550	3.9	3750
Mode	ND	ND	1200.0	ND	1.8	5.2	ND	ND	350.0	ND	ND	ND
Standard Deviation	ND	ND	313.9	359.0	22.9	84.8	23.6	650	111.5	13891	0.8	13200
Sample Variance	ND	ND	98555.4	128849.6	524.1	7195.6	556.6	422615	12426.8	192957314	0.6	174246370
Kurtosis	ND	ND	-1.8	-1.8	6.3	7.4	5.7	-1	-1.7	3	-0.7	2
Skewness	ND	ND	-0.5	-0.6	2.5	2.7	2.3	0	-0.1	2	-0.7	2
Range	0.0	0.0	760.0	847.4	66.8	247.4	69.7	1915	290.0	41690	2.1	36710
Minimum	0.0	0.0	440.0	350.0	1.2	2.6	3.0	434	110.0	310	2.5	290
Maximum	0.0	0.0	1200.0	1197.4	68.0	250.0	72.7	2349	400.0	42000	4.6	37000
Count	0	0	8	8	8	8	8	8	8	8	8	8
Confidence Level(95.0%)	ND	ND	262.5	300.1	19.1	70.9	19.7	543	93.2	11613	0.6	11036

ND = No Data

Provisional MMSD Water Quality Data

80TH STREET AND WISCONSIN AVENUE - SITE 3
HONEY CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	56.50	33.00	0.0	4.3	7.9	4.7	0.0	30.0	0.0	0.0	2.6	0.0
Standard Error	17.50	18.00	0.0	0.2	0.0	1.6	0.0	5.0	0.0	0.0	2.6	0.0
Median	56.50	33.00	0.0	4.3	7.9	4.7	0.0	30.0	0.0	0.0	2.6	0.0
Mode	ND	ND	0.0	ND	7.9	ND	0.0	ND	0.0	0.0	ND	0.0
Standard Deviation	24.75	25.46	0.0	0.3	0.0	2.3	0.0	7.1	0.0	0.0	3.6	0.0
Sample Variance	612.50	648.00	0.0	0.1	0.0	5.1	0.0	50.0	0.0	0.0	13.0	0.0
Kurtosis	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Skewness	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Range	35.00	36.00	0.0	0.4	0.0	3.2	0.0	10.0	0.0	0.0	5.1	0.0
Minimum	39.00	15.00	0.0	4.1	7.9	3.1	0.0	25.0	0.0	0.0	0.0	0.0
Maximum	74.00	51.00	0.0	4.5	7.9	6.3	0.0	35.0	0.0	0.0	5.1	0.0
Count	2	2	2	2	2	2	2	2	2	2	2	2
Confidence Level(95.0%)	222.36	228.71	0.0	2.5	0.0	20.3	0.0	63.5	0.0	0.0	32.4	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	280	190	6.6	20.0	55.1	42.8	12.5	7.5
Standard Error	120	30	3.5	10.8	4.9	7.8	5.3	2.0
Median	280	200	2.4	9.8	58.5	45.0	5.7	5.7
Mode	ND	240	0.0	ND	ND	36.0	ND	ND
Standard Deviation	170	84	10.0	28.4	13.7	22.2	14.9	5.6
Sample Variance	28800	7024	99.8	809.1	188.7	491.6	222.9	31.9
Kurtosis	ND	0	1.7	6.7	-0.8	0.9	4.0	6.6
Skewness	ND	0	1.7	2.6	-0.1	-0.9	2.1	2.5
Range	240	267	27.0	79.1	41.0	71.0	42.1	17.4
Minimum	160	53	0.0	4.9	35.0	0.0	3.9	3.6
Maximum	400	320	27.0	84.0	76.0	71.0	46.0	21.0
Count	2	8	8	7	8	8	8	8
Confidence Level(95.0%)	1525	70	8.4	26.3	11.5	18.5	12.5	4.7

ND = No Data

Provisional MMSD Water Quality Data

45TH STREET AND LOOMIS ROAD - SITE 4
HONEY CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.3	15.5	5.8	4.32	0.81	0.036	0.78	0.206	1.35	0.165	0.110	ND
Standard Error	0.1	2.0	1.3	1.30	0.42	0.017	0.35	0.049	0.61	0.054	0.053	ND
Median	7.3	16.0	5.8	3.90	0.39	0.017	0.42	0.170	0.79	0.110	0.043	ND
Mode	ND	ND	ND	ND	ND	ND	0.41	ND	ND	ND	ND	ND
Standard Deviation	0.2	5.3	3.5	3.43	0.95	0.037	0.85	0.130	1.62	0.143	0.140	ND
Sample Variance	0.0	27.7	12.1	11.75	0.90	0.001	0.72	0.017	2.61	0.021	0.020	ND
Kurtosis	-0.4	0.7	0.3	-0.48	4.81	3.032	5.87	-0.548	5.57	2.358	3.476	ND
Skewness	-0.1	-1.0	0.8	0.58	2.18	1.782	2.42	-0.170	2.33	1.639	1.891	ND
Range	0.6	15.1	10.1	9.74	2.19	0.088	2.14	0.370	4.47	0.413	0.400	0.00
Minimum	7.0	5.9	1.9	0.19	0.31	0.012	0.36	0.000	0.43	0.037	0.000	0.00
Maximum	7.7	21.0	12.0	9.93	2.50	0.100	2.50	0.370	4.90	0.450	0.400	0.00
Count	7	7	7	7	5	5	6	7	7	7	7	0
Confidence Level(95.0%)	0.2	4.9	3.2	3.17	1.18	0.046	0.89	0.120	1.50	0.133	0.130	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	531.4	520.7	3.7	10.8	9.4	894	140.9	6873	2.8	4627
Standard Error	ND	ND	115.9	118.6	0.7	3.3	2.6	212	42.5	4081	0.6	2633
Median	ND	ND	500.0	489.0	3.2	11.0	6.8	868	110.0	430	2.6	290
Mode	ND	ND	ND	ND	ND	11.0	ND	ND	170.0	ND	ND	ND
Standard Deviation	ND	ND	306.6	313.8	1.8	8.8	6.9	560	112.4	10797	1.5	6965
Sample Variance	ND	ND	94014.3	98451.3	3.1	77.8	48.1	313562	12629.1	116582357	2.2	48516024
Kurtosis	ND	ND	-0.6	-0.5	0.2	3.7	-0.2	1	2.3	0	1.3	0
Skewness	ND	ND	0.2	0.2	0.9	1.7	1.0	1	1.3	1	-0.9	1
Range	0.0	0.0	900.0	925.8	5.0	26.4	18.9	1760	348.0	25000	4.4	17000
Minimum	0.0	0.0	100.0	71.0	1.8	2.6	2.2	113	12.0	0	0.0	0
Maximum	0.0	0.0	1000.0	996.8	6.8	29.0	21.1	1873	360.0	25000	4.4	17000
Count	0	0	7	7	7	7	7	7	7	7	7	7
Confidence Level(95.0%)	ND	ND	283.6	290.2	1.6	8.2	6.4	518	103.9	9986	1.4	6442

ND = No Data

Provisional MMSD Water Quality Data

45TH STREET AND LOOMIS ROAD - SITE 4
HONEY CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	31.80	16.65	0.0	4.6	7.0	7.9	1.5	31.5	0.0	1.5	0.0	0.0
Standard Error	23.20	13.35	0.0	0.3	0.0	0.7	1.5	15.5	0.0	1.5	0.0	0.0
Median	31.80	16.65	0.0	4.6	7.0	7.9	1.5	31.5	0.0	1.5	0.0	0.0
Mode	ND	ND	0.0	ND	7.0	ND	ND	ND	0.0	ND	0.0	0.0
Standard Deviation	32.81	18.88	0.0	0.5	0.0	0.9	2.1	21.9	0.0	2.1	0.0	0.0
Sample Variance	1076.48	356.45	0.0	0.2	0.0	0.8	4.5	480.5	0.0	4.2	0.0	0.0
Kurtosis	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Skewness	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Range	46.40	26.70	0.0	0.7	0.0	1.3	3.0	31.0	0.0	2.9	0.0	0.0
Minimum	8.60	3.30	0.0	4.2	7.0	7.2	0.0	16.0	0.0	0.0	0.0	0.0
Maximum	55.00	30.00	0.0	4.9	7.0	8.5	3.0	47.0	0.0	2.9	0.0	0.0
Count	2	2	2	2	2	2	2	2	2	2	2	2
Confidence Level(95.0%)	294.78	169.63	0.0	4.4	0.0	8.3	19.1	196.9	0.0	18.4	0.0	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	148	173	2.8	13.6	47.7	41.4	6.3	6.0
Standard Error	113	42	0.8	3.2	9.8	9.5	1.1	0.9
Median	148	140	3.1	15.0	45.0	34.0	6.3	6.0
Mode	ND	ND	0.0	ND	ND	ND	ND	ND
Standard Deviation	159	112	2.2	8.0	26.0	25.3	2.9	2.5
Sample Variance	25313	12540	4.8	63.4	678.6	637.9	8.2	6.1
Kurtosis	ND	-1	-1.0	1.0	-1.0	-1.0	-0.7	-0.9
Skewness	ND	0	-0.2	-1.0	0.1	0.3	0.5	0.3
Range	225	320	5.9	22.0	71.0	70.4	7.8	6.7
Minimum	35	20	0.0	0.0	10.0	6.6	3.2	3.2
Maximum	260	340	5.9	22.0	81.0	77.0	11.0	9.9
Count	2	7	7	6	7	7	7	7
Confidence Level(95.0%)	1429	104	2.0	8.4	24.1	23.4	2.6	2.3

ND = No Data

Provisional MMSD Water Quality Data

MARCY LANE AND 61ST STREET - SITE 5
HONEY CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.9	15.7	9.5	18.12	0.46	0.042	0.44	0.130	0.85	0.167	0.107	ND
Standard Error	0.1	2.1	1.0	14.43	0.21	0.005	0.18	0.035	0.12	0.033	0.027	ND
Median	7.9	16.7	9.0	3.74	0.29	0.037	0.28	0.133	0.77	0.170	0.097	ND
Mode	7.9	ND	ND	ND	ND	0.033	ND	ND	1.30	0.170	ND	ND
Standard Deviation	0.3	6.0	2.8	40.80	0.52	0.012	0.48	0.099	0.35	0.094	0.076	ND
Sample Variance	0.1	35.5	7.6	1665.00	0.27	0.000	0.23	0.010	0.12	0.009	0.006	ND
Kurtosis	-0.5	-1.6	2.0	7.95	5.13	2.431	5.71	-1.339	-1.61	-0.584	2.839	ND
Skewness	-0.2	-0.3	1.2	2.82	2.22	1.626	2.33	0.100	0.31	-0.087	1.536	ND
Range	0.9	16.2	9.0	117.84	1.38	0.030	1.38	0.280	0.90	0.275	0.236	0.00
Minimum	7.5	6.8	6.1	1.16	0.12	0.033	0.12	0.000	0.40	0.035	0.034	0.00
Maximum	8.3	23.0	15.1	119.00	1.50	0.063	1.50	0.280	1.30	0.310	0.270	0.00
Count	8	8	8	8	6	6	7	8	8	8	8	0
Confidence Level(95.0%)	0.2	5.0	2.3	34.11	0.55	0.012	0.44	0.083	0.29	0.079	0.064	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	732.5	716.6	3.8	15.9	15.3	1226	219.3	4522	2.9	3626
Standard Error	ND	ND	101.1	108.3	1.2	10.0	8.9	187	37.8	2178	0.5	1443
Median	ND	ND	720.0	709.2	2.6	5.2	4.8	1197	225.0	2350	3.4	2750
Mode	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Standard Deviation	ND	ND	286.0	306.4	3.5	28.1	25.2	528	106.9	6161	1.4	4082
Sample Variance	ND	ND	81792.9	93860.1	12.5	792.4	636.7	279175	11427.4	37956370	1.9	16661016
Kurtosis	ND	ND	-0.6	0.0	5.4	7.6	7.1	0	-0.3	2	2.3	0
Skewness	ND	ND	-0.3	-0.6	2.2	2.7	2.6	-1	-0.4	2	-1.5	1
Range	0.0	0.0	850.0	931.8	11.0	82.0	72.9	1539	316.0	17000	4.2	10964
Minimum	0.0	0.0	250.0	165.0	1.0	3.0	3.6	282	34.0	0	0.0	36
Maximum	0.0	0.0	1100.0	1096.8	12.0	85.0	76.5	1821	350.0	17000	4.2	11000
Count	0	0	8	8	8	8	8	8	8	8	8	8
Confidence Level(95.0%)	ND	ND	239.1	256.1	3.0	23.5	21.1	442	89.4	5151	1.2	3412

ND = No Data

Provisional MMSD Water Quality Data

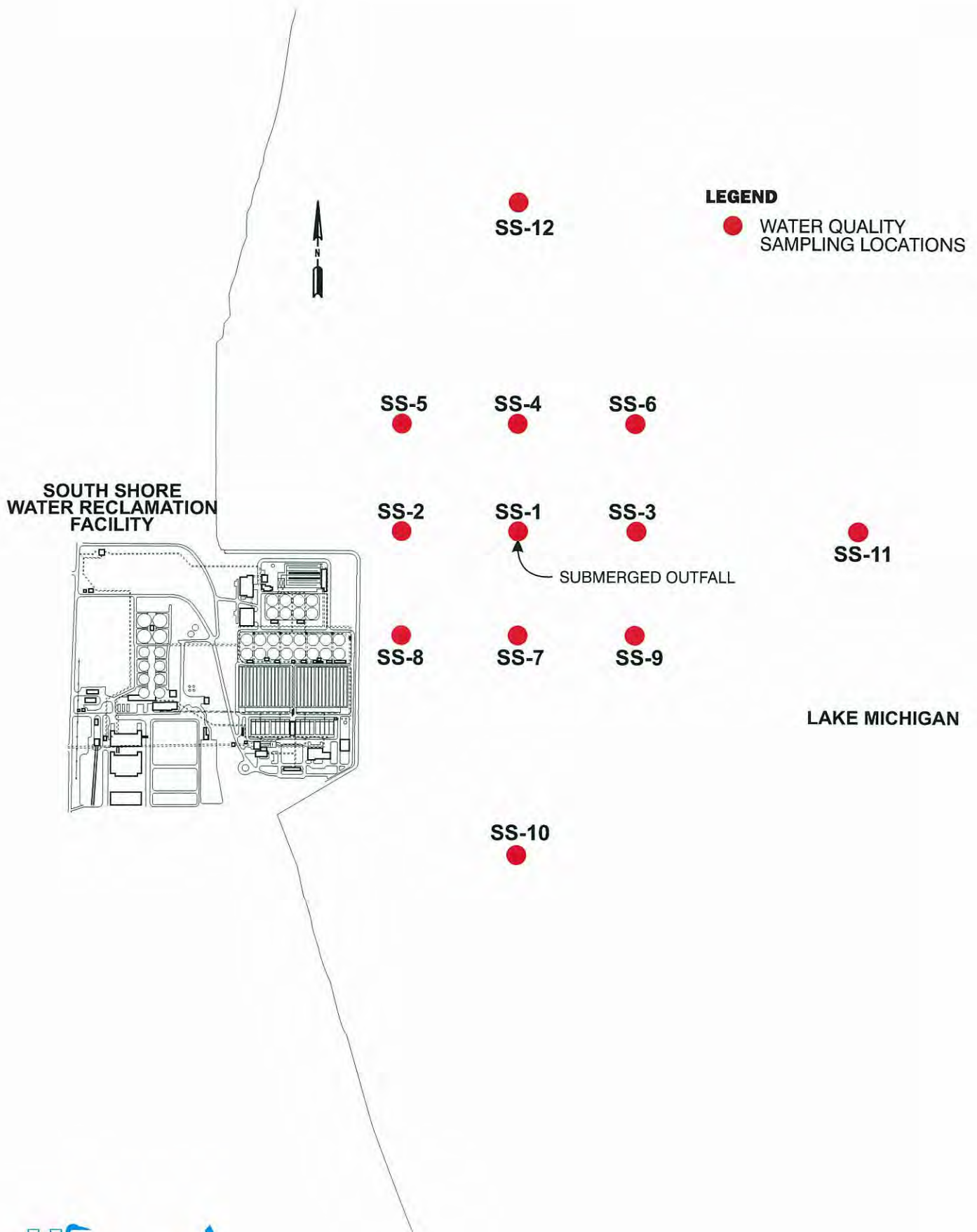
MARCY LANE AND 61ST STREET - SITE 5
HONEY CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	38.00	22.75	0.0	6.9	8.8	5.8	0.0	36.5	0.6	0.0	3.9	0.0
Standard Error	19.00	15.25	0.0	2.0	2.2	0.4	0.0	15.5	0.6	0.0	3.9	0.0
Median	38.00	22.75	0.0	6.9	8.8	5.8	0.0	36.5	0.6	0.0	3.9	0.0
Mode	ND	ND	0.0	ND	ND	ND	0.0	ND	ND	0.0	ND	0.0
Standard Deviation	26.87	21.57	0.0	2.8	3.1	0.6	0.0	21.9	0.8	0.0	5.5	0.0
Sample Variance	722.00	465.13	0.0	7.6	9.7	0.3	0.0	480.5	0.6	0.0	30.4	0.0
Kurtosis	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Skewness	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Range	38.00	30.50	0.0	3.9	4.4	0.8	0.0	31.0	1.1	0.0	7.8	0.0
Minimum	19.00	7.50	0.0	4.9	6.6	5.4	0.0	21.0	0.0	0.0	0.0	0.0
Maximum	57.00	38.00	0.0	8.8	11.0	6.2	0.0	52.0	1.1	0.0	7.8	0.0
Count	2	2	2	2	2	2	2	2	2	2	2	2
Confidence Level(95.0%)	241.42	193.77	0.0	24.8	28.0	5.1	0.0	196.9	7.0	0.0	49.6	0.0

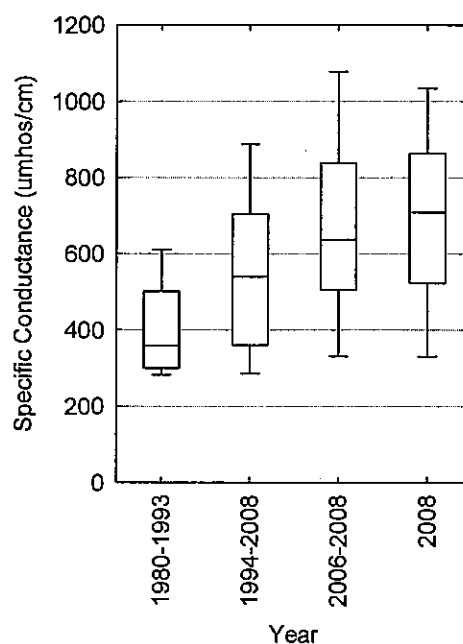
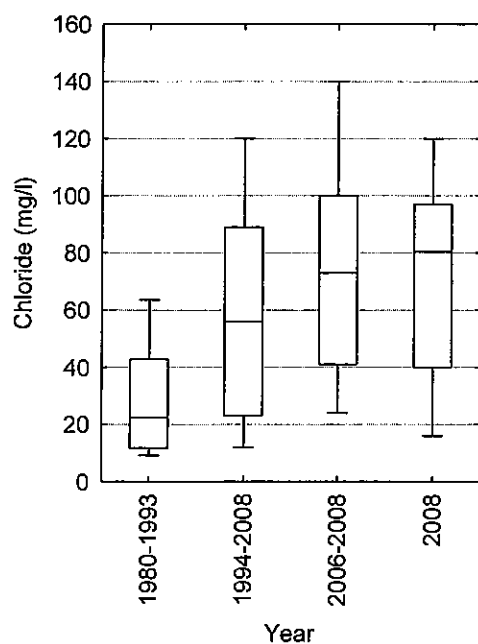
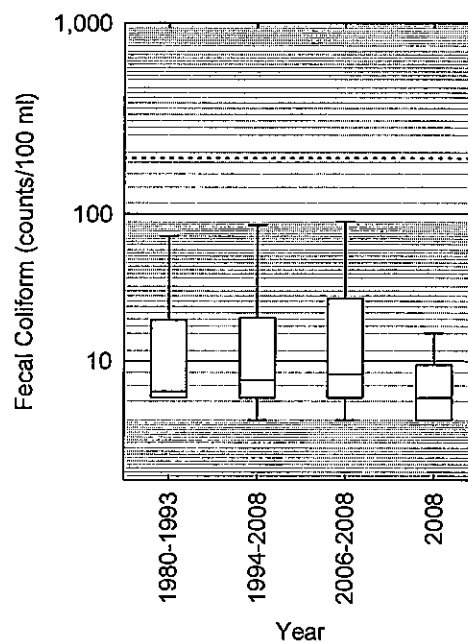
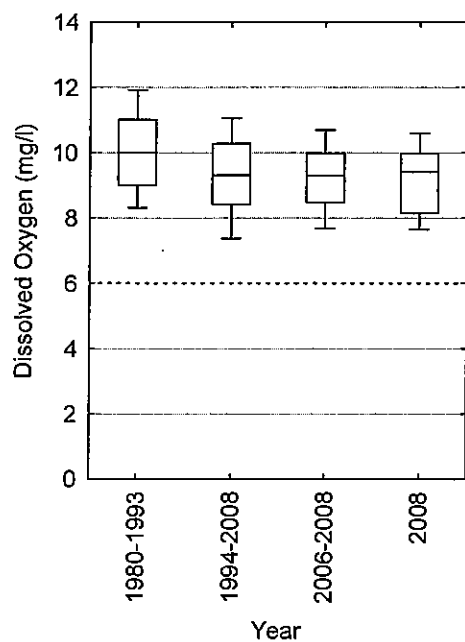
VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	190	189	1.9	12.5	52.1	44.8	7.1	6.8
Standard Error	110	28	1.1	1.8	6.0	5.5	0.6	0.6
Median	190	185	0.0	14.0	53.0	46.0	7.3	6.9
Mode	ND	180	0.0	14.0	56.0	ND	7.3	6.9
Standard Deviation	156	80	3.2	4.7	16.8	15.6	1.7	1.6
Sample Variance	24200	6375	10.5	22.5	283.8	244.5	2.7	2.7
Kurtosis	ND	3	3.9	-0.6	3.0	2.8	-1.3	-0.1
Skewness	ND	0	2.0	-1.1	-0.3	-0.3	0.1	0.8
Range	220	295	9.1	12.2	62.0	57.0	4.5	4.6
Minimum	80	45	0.0	4.8	20.0	15.0	5.1	5.0
Maximum	300	340	9.1	17.0	82.0	72.0	9.6	9.6
Count	2	8	8	7	8	8	8	7
Confidence Level(95.0%)	1398	67	2.7	4.4	14.1	13.1	1.4	1.5

ND = No Data

Provisional MMSD Water Quality Data

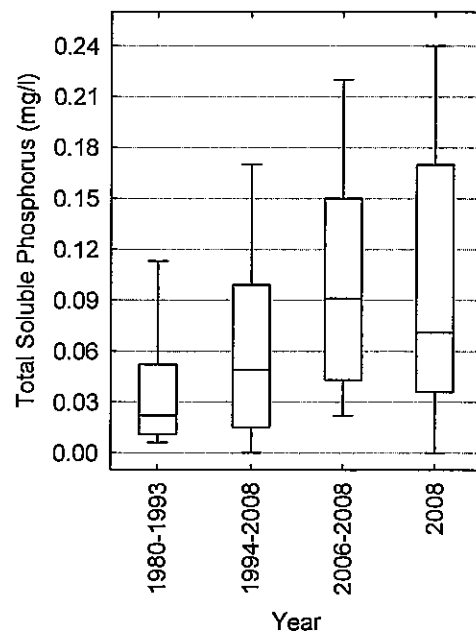
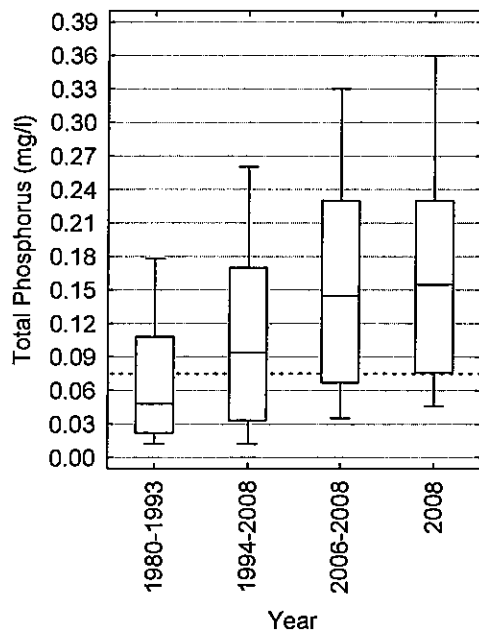
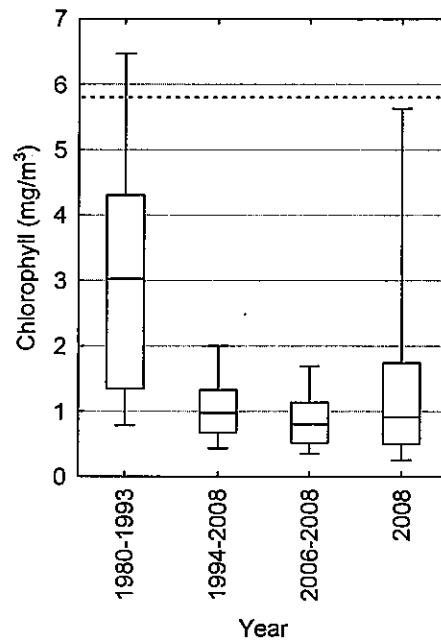
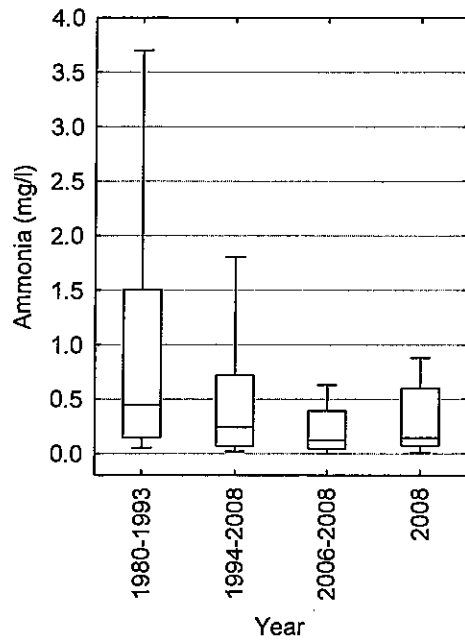


MMSD Water Quality Monitoring Program Data South Shore, Site SS-01



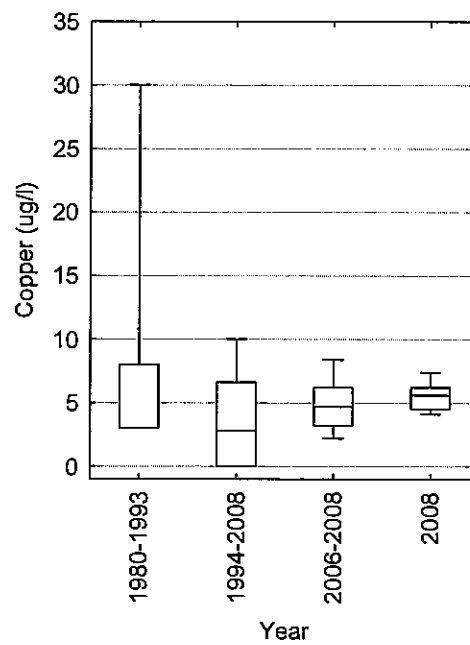
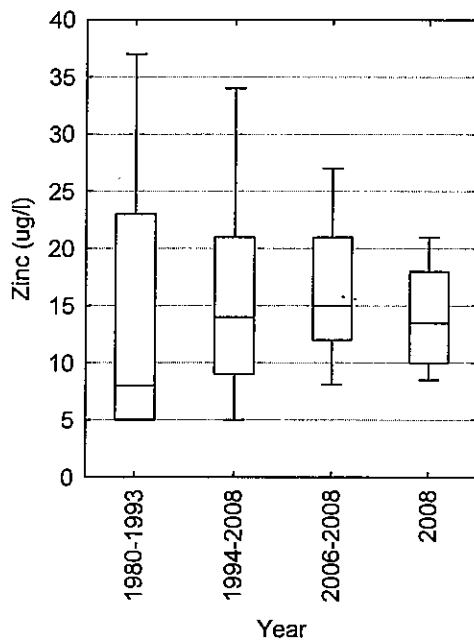
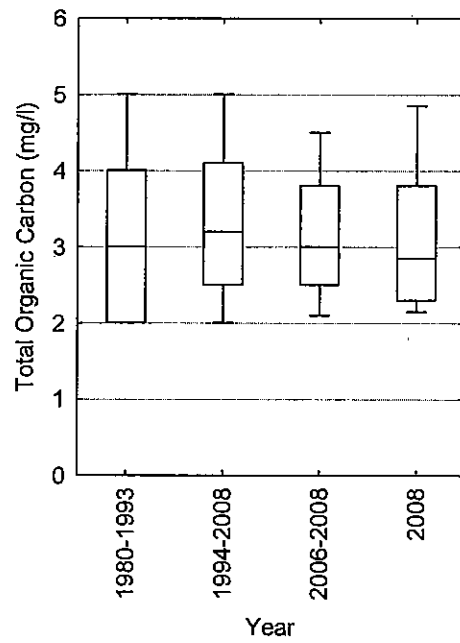
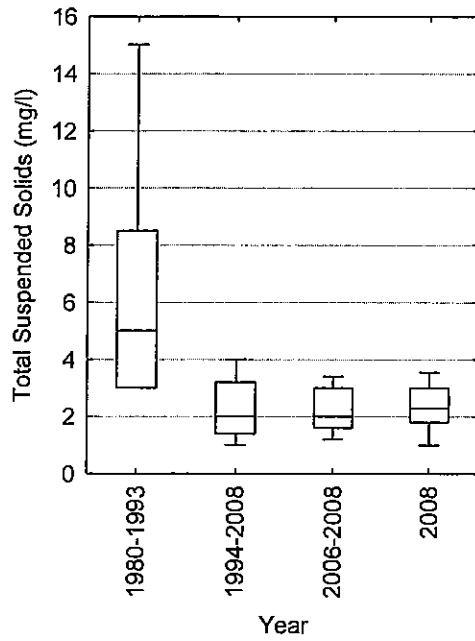
— Median □ 25%-75% ▤ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
South Shore, Site SS-01



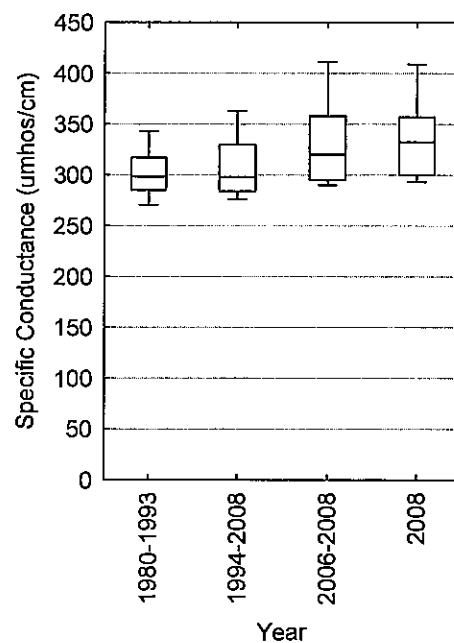
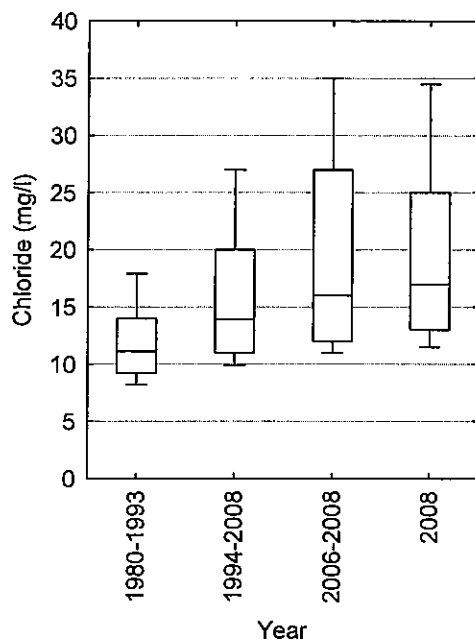
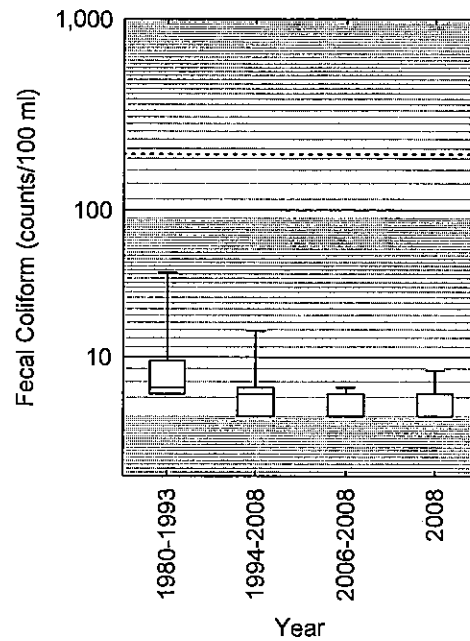
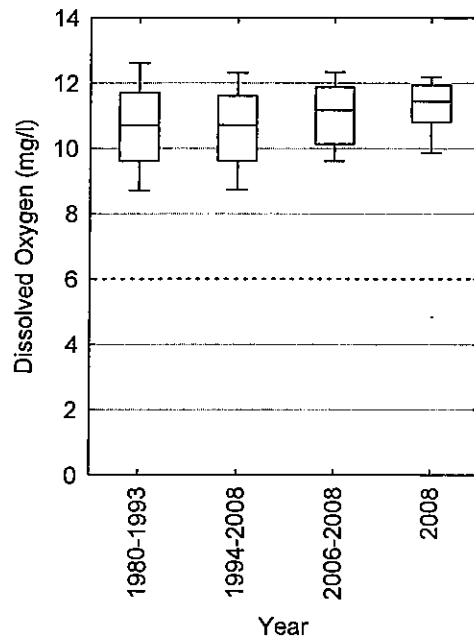
— Median □ 25%-75% ▮ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
South Shore, Site SS-01



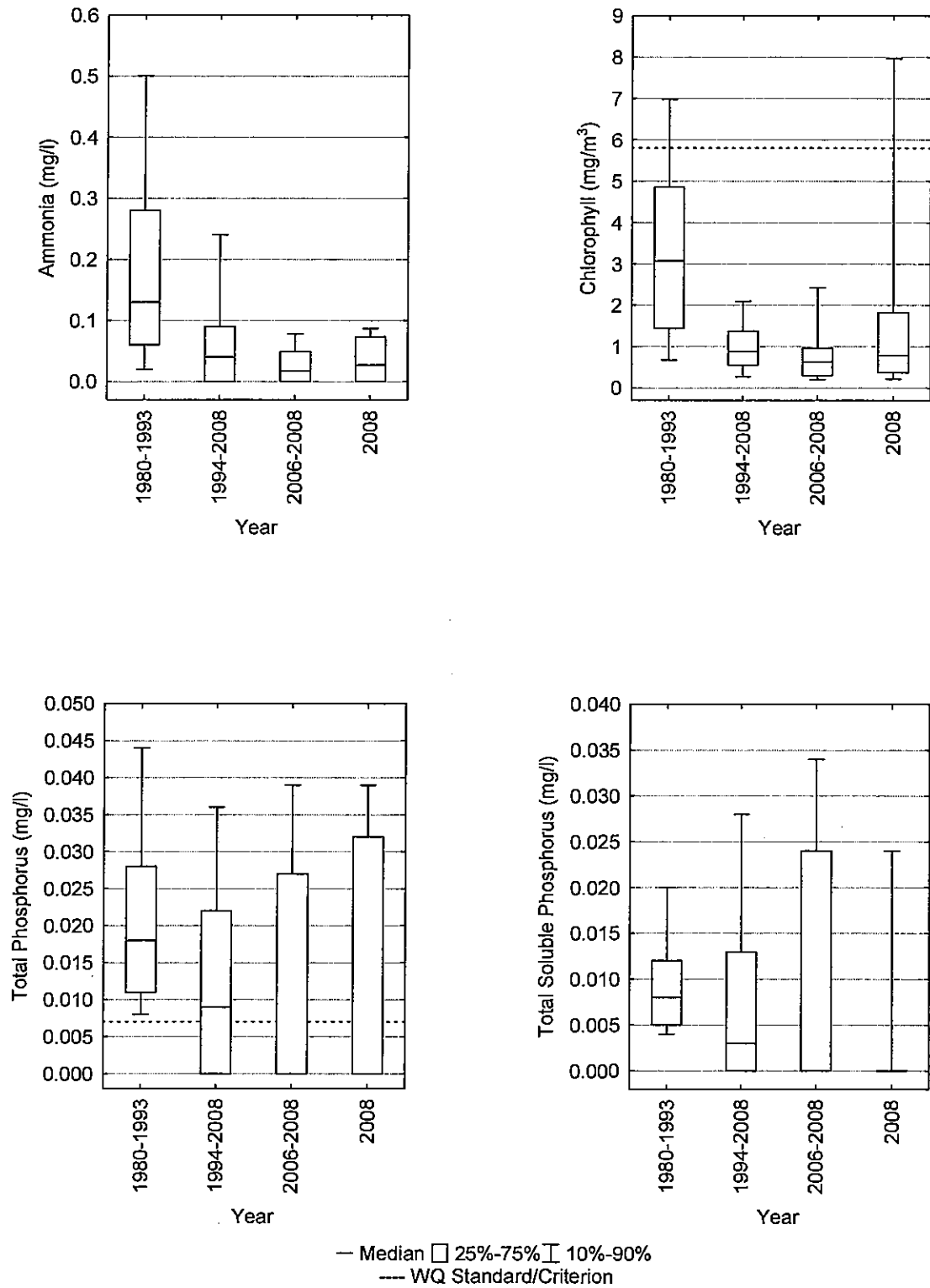
— Median □ 25%-75% ┘ 10%-90%

MMSD Water Quality Monitoring Program Data South Shore, Site SS-10

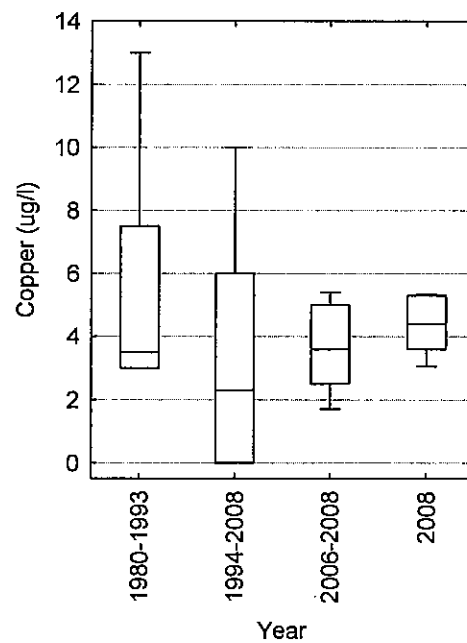
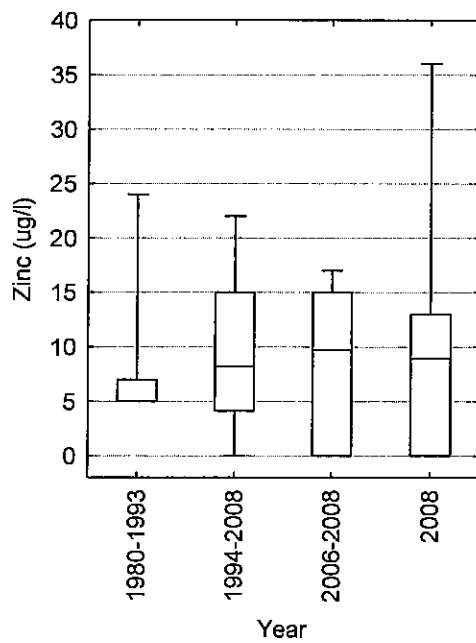
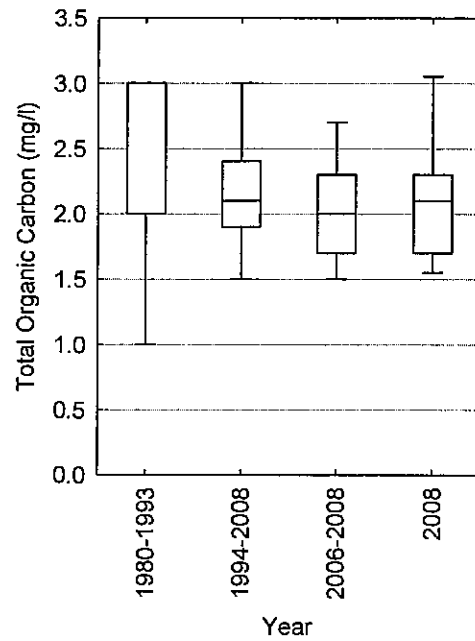
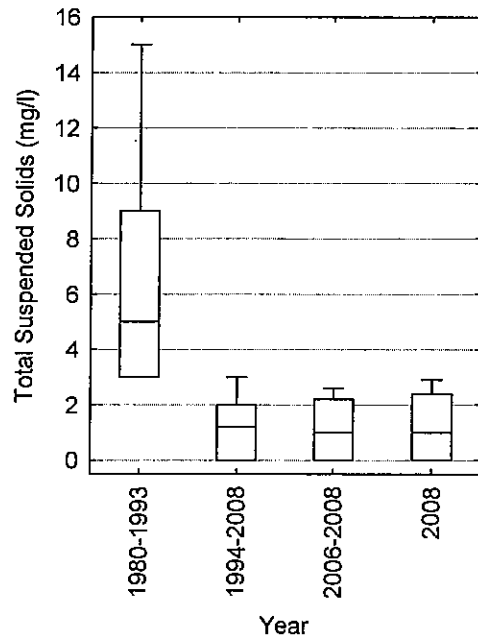


— Median □ 25%-75% ▤ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
South Shore, Site SS-10

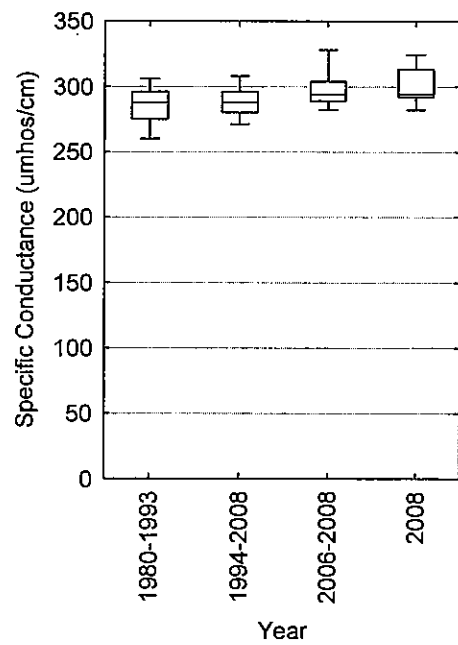
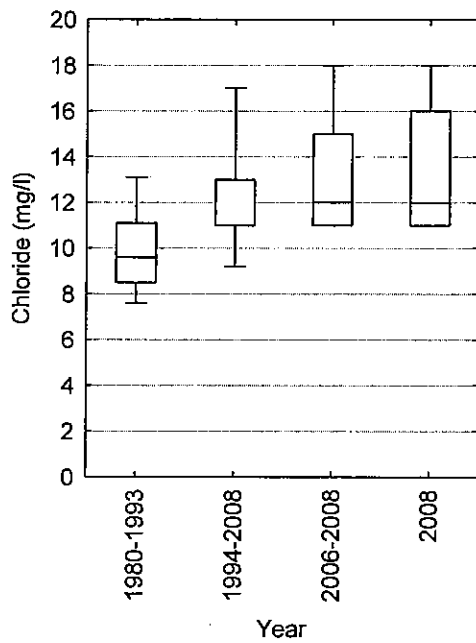
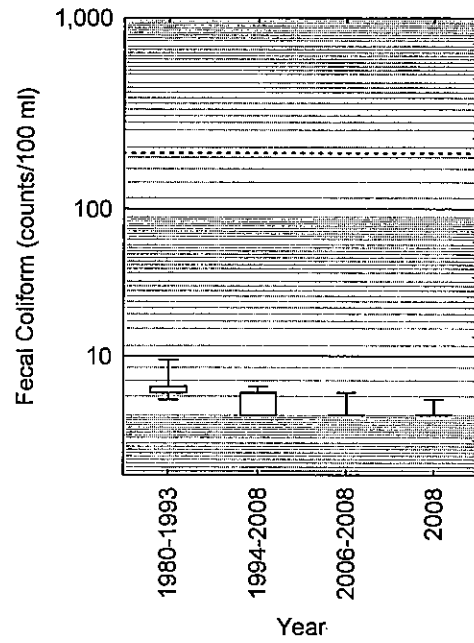
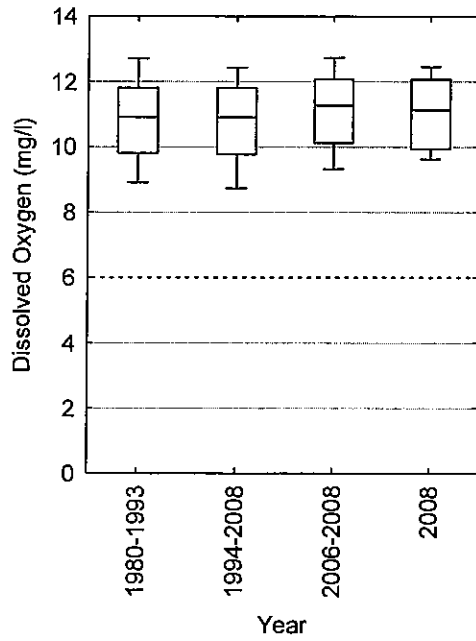


MMSD Water Quality Monitoring Program Data
South Shore, Site SS-10



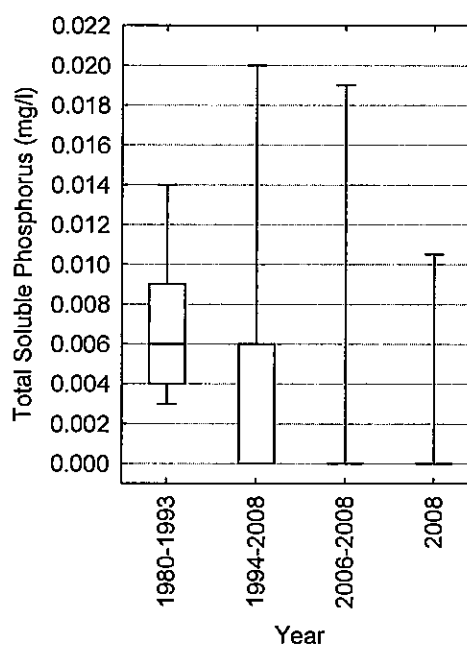
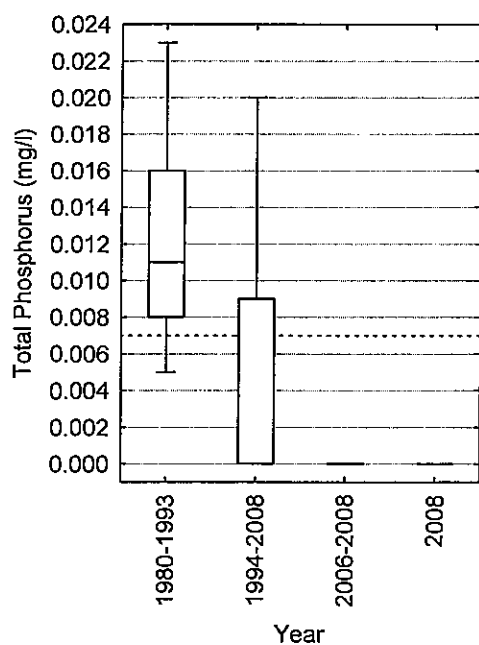
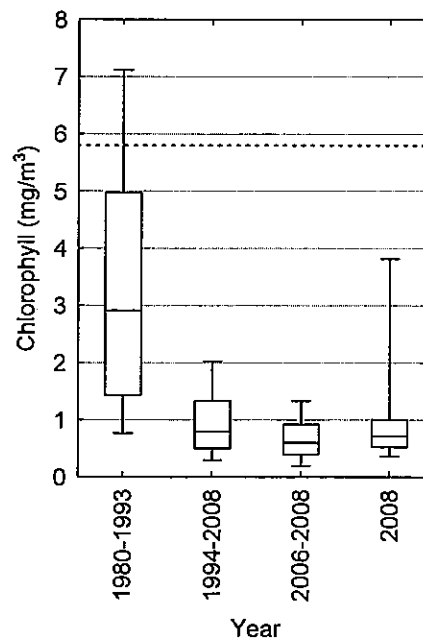
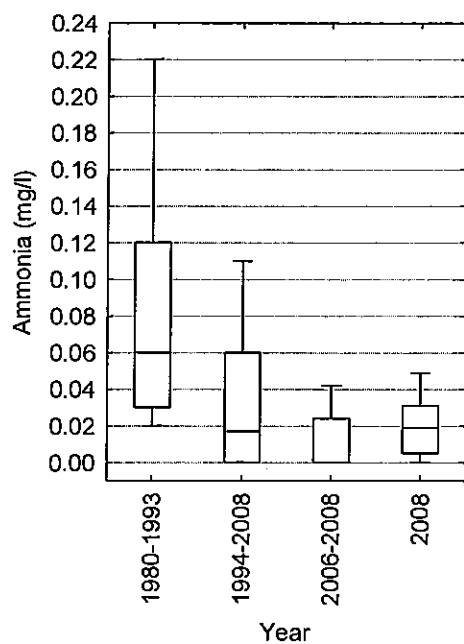
— Median □ 25%-75% ▮ 10%-90%

MMSD Water Quality Monitoring Program Data
South Shore, Site SS-11



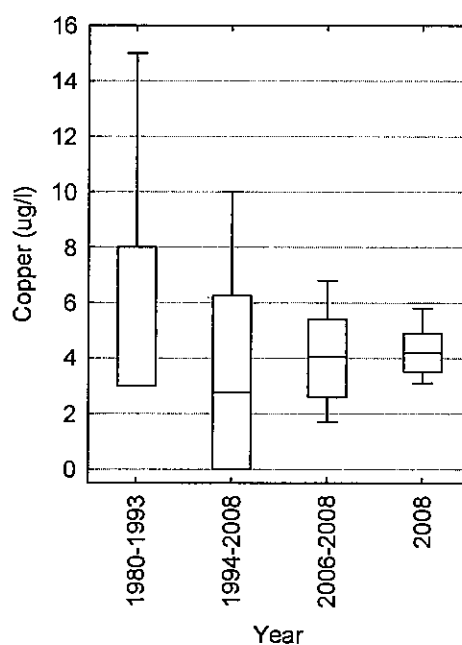
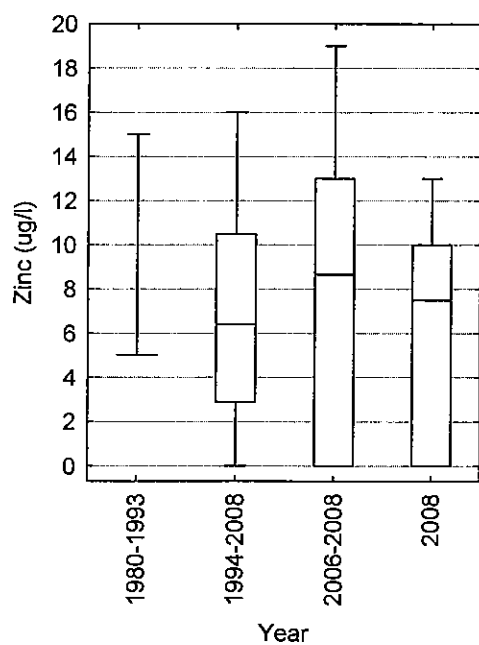
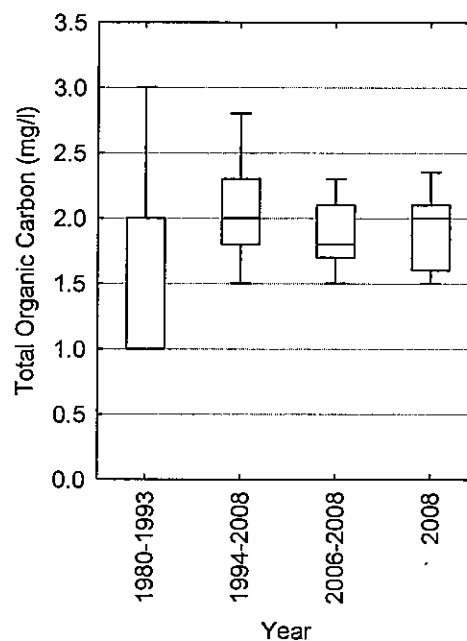
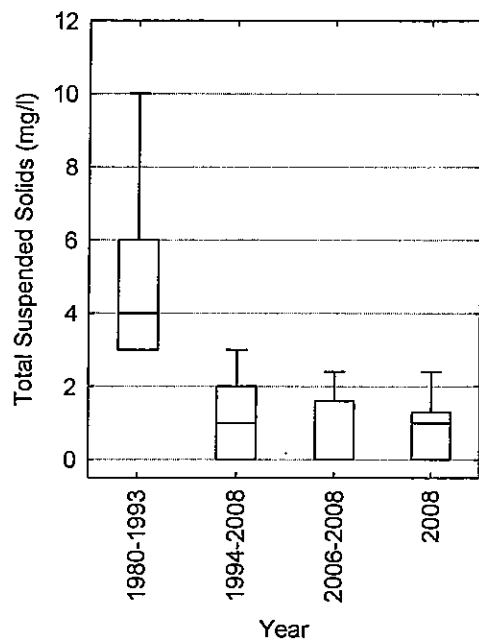
— Median □ 25%-75% ▮ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
South Shore, Site SS-11



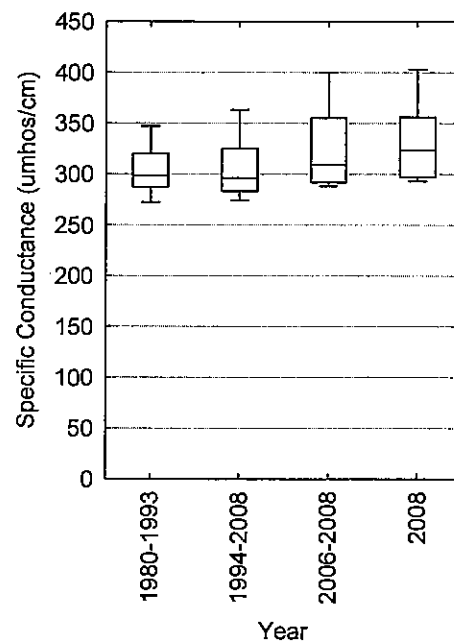
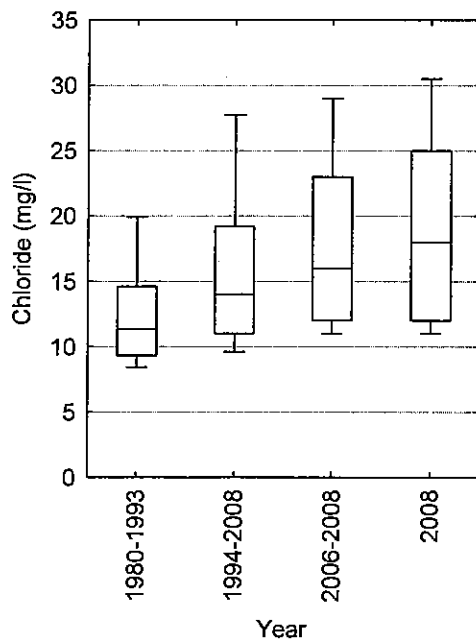
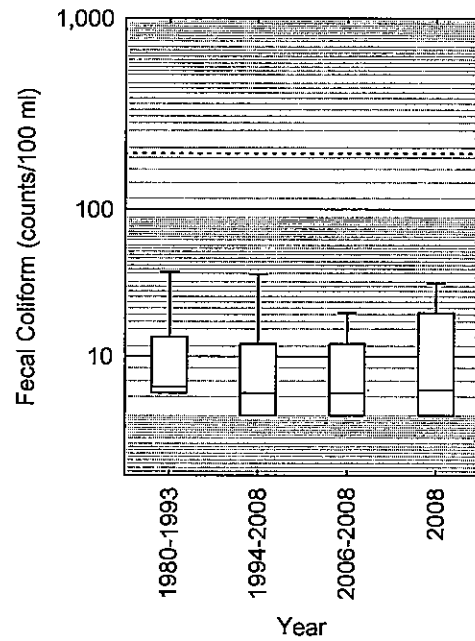
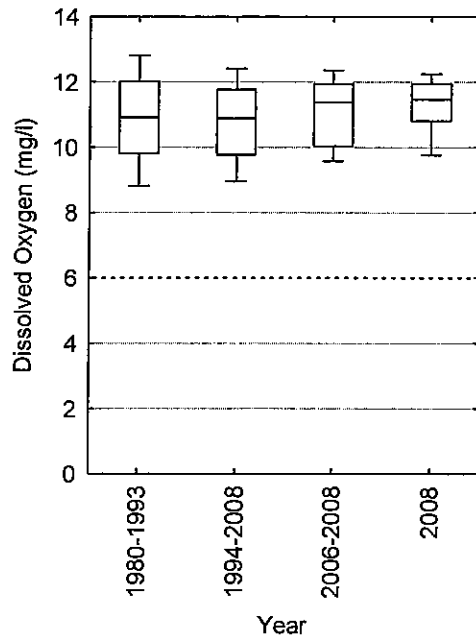
— Median □ 25%-75% ▤ 10%-90%
---- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
South Shore, Site SS-11



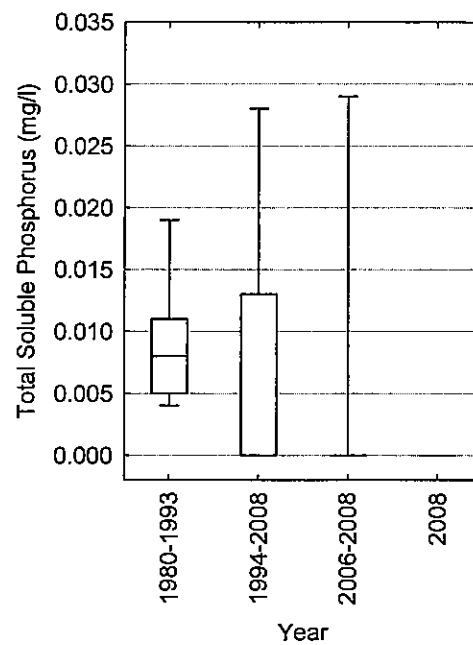
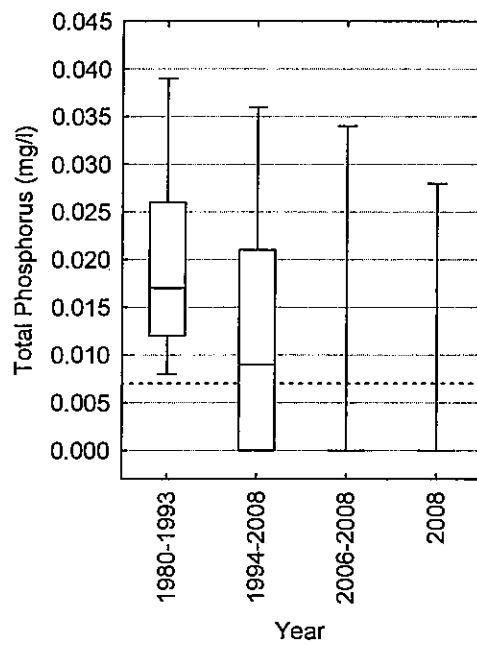
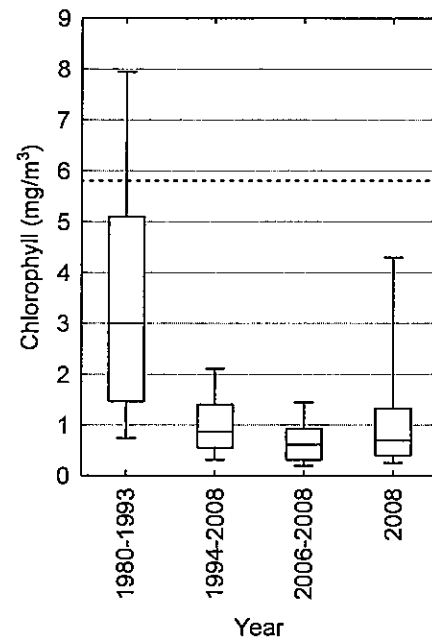
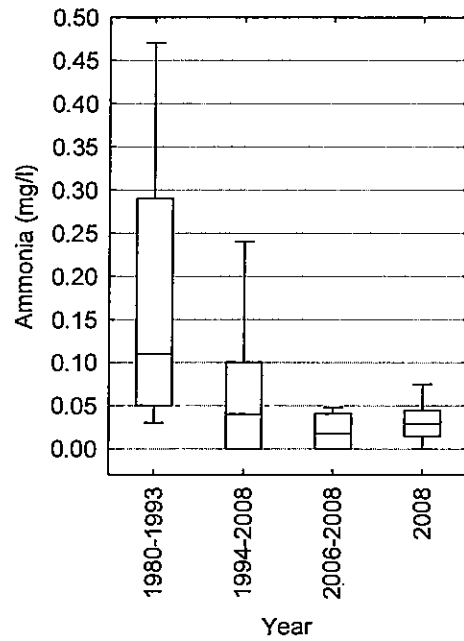
— Median □ 25%-75% ▤ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
South Shore, Site SS-12



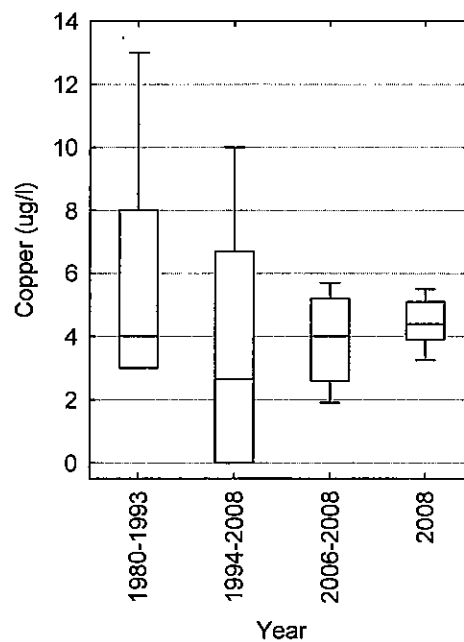
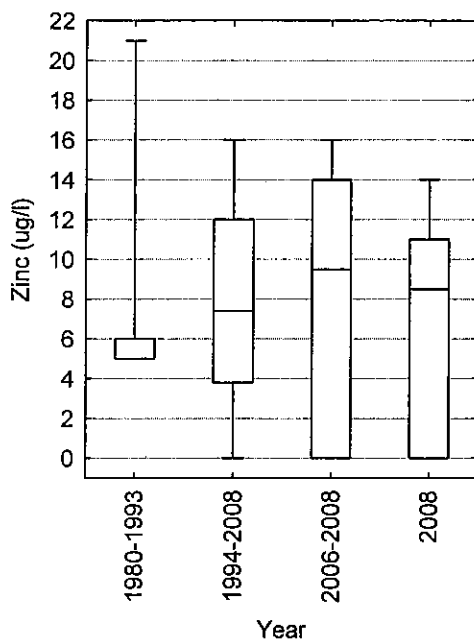
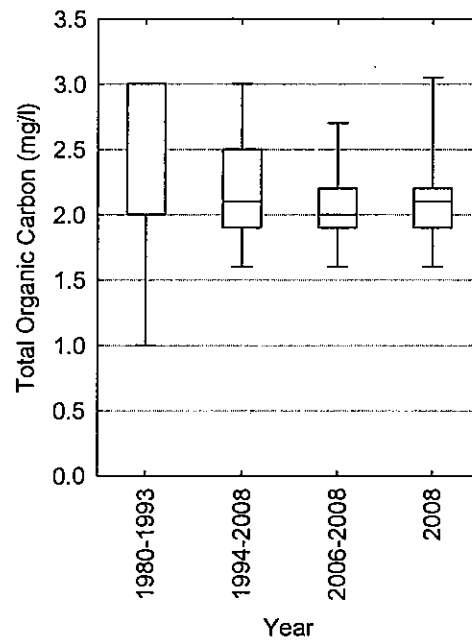
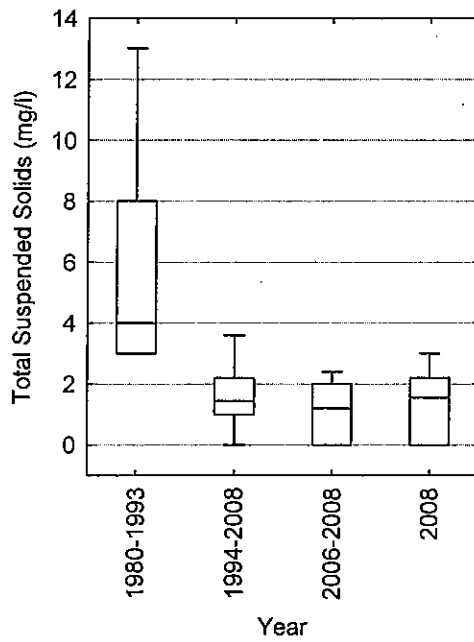
— Median □ 25%-75% I 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
South Shore, Site SS-12



— Median □ 25%-75% ▮ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
South Shore, Site SS-12



— Median □ 25%-75% ± 10%-90%

SOUTH SHORE - SITE 1
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.4	13.0	9.1	1.87	1.64	0.197	1.86	0.340	0.77	0.169	0.114	3.26
Standard Error	0.1	0.6	0.3	0.50	0.16	0.044	0.19	0.062	0.13	0.025	0.022	0.29
Median	7.3	12.4	9.4	0.91	1.60	0.140	1.80	0.145	0.79	0.150	0.071	3.30
Mode	7.4	ND	ND	0.91	2.20	0.160	1.90	0.000	0.00	0.160	0.000	2.10
Standard Deviation	0.4	3.6	1.6	2.75	0.84	0.230	1.02	0.340	0.66	0.130	0.114	1.52
Sample Variance	0.2	12.6	2.5	7.57	0.70	0.053	1.03	0.116	0.44	0.017	0.013	2.31
Kurtosis	0.8	-0.7	3.0	6.02	0.76	3.375	0.87	-0.518	-0.43	1.587	1.142	0.43
Skewness	1.1	0.4	0.4	2.59	0.71	1.737	0.86	0.809	0.50	1.250	1.251	0.47
Range	1.9	12.1	8.9	11.13	3.50	0.960	4.09	1.100	2.30	0.550	0.420	6.72
Minimum	6.7	8.3	5.1	0.17	0.30	0.000	0.31	0.000	0.00	0.000	0.000	0.48
Maximum	8.5	20.3	14.0	11.30	3.80	0.960	4.40	1.100	2.30	0.550	0.420	7.20
Count	30	30	30	30	27	27	30	30	27	27	27	27
Confidence Level(95.0%)	0.2	1.3	0.6	1.03	0.33	0.091	0.38	0.127	0.26	0.052	0.045	0.60

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	3.1	9.6	340.0	337.7	1.7	2.4	1.4	713	74.8	6	0.5	ND
Standard Error	0.5	0.9	29.5	29.3	0.2	0.3	0.1	51	8.0	2	0.2	ND
Median	2.9	11.0	345.0	342.5	1.6	2.3	1.4	709	80.5	3	0.5	ND
Mode	3.4	12.0	370.0	368.0	1.2	1.0	ND	704	120.0	0	0.0	ND
Standard Deviation	1.5	2.7	93.2	92.6	0.6	0.9	0.6	280	43.9	7	0.5	ND
Sample Variance	2.3	7.4	8688.9	8567.8	0.4	0.9	0.3	78481	1930.6	49	0.3	ND
Kurtosis	4.9	-1.0	-0.5	-0.5	1.3	-1.0	-0.4	2	1.0	0	-1.5	ND
Skewness	1.9	-0.7	-0.1	-0.1	1.2	-0.1	0.4	1	0.7	1	0.4	ND
Range	5.5	7.4	310.0	307.7	2.0	2.8	2.0	1291	188.0	19	1.3	0
Minimum	1.4	4.6	180.0	179.0	1.0	1.0	0.6	289	12.0	0	0.0	0
Maximum	6.9	12.0	490.0	486.7	3.0	3.8	2.6	1580	200.0	19	1.3	0
Count	10	10	10	10	10	10	30	30	30	10	10	0
Confidence Level(95.0%)	1.1	1.9	66.7	66.2	0.4	0.7	0.2	105	16.4	5	0.4	ND

ND = No Data

Provisional MMSD Water Quality Data

SOUTH SHORE - SITE 1
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	45.77	17.10	0.0	2.5	5.9	3.8	0.6	15.5	0.2	1.2	3.3	ND
Standard Error	1.58	0.75	0.0	0.5	0.4	0.4	0.2	2.0	0.1	0.4	0.8	ND
Median	44.50	16.50	0.0	3.8	5.6	3.7	0.0	13.5	0.0	0.0	0.0	ND
Mode	42.00	15.00	0.0	0.0	4.5	3.7	0.0	14.0	0.0	0.0	0.0	ND
Standard Deviation	8.66	4.12	0.0	2.6	2.4	2.0	1.3	11.1	0.4	2.4	4.2	ND
Sample Variance	75.08	16.99	0.0	6.6	5.8	3.8	1.8	122.8	0.2	5.7	18.0	ND
Kurtosis	-0.88	-0.88	ND	-0.4	16.0	1.1	3.7	16.8	3.6	1.4	-1.2	ND
Skewness	0.35	0.33	ND	0.5	3.5	0.9	2.2	3.6	2.3	1.8	0.7	ND
Range	30.00	15.00	0.0	9.3	13.5	8.6	4.9	67.0	1.3	7.2	12.0	0.0
Minimum	34.00	11.00	0.0	0.0	3.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	64.00	26.00	0.0	9.3	17.0	9.6	4.9	67.0	1.3	7.2	12.0	0.0
Count	30	30	30	30	30	30	30	30	30	30	29	0
Confidence Level(95.0%)	3.24	1.54	0.0	1.0	0.9	0.7	0.5	4.1	0.2	0.9	1.6	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	185	138	2.2	6.7	36.8	33.5	3.2	ND
Standard Error	7	5	0.7	0.7	1.3	1.2	0.2	ND
Median	180	130	2.4	7.2	36.5	32.5	2.9	ND
Mode	180	110	0.0	ND	32.0	30.0	2.3	ND
Standard Deviation	38	27	2.1	2.1	7.4	6.7	1.1	ND
Sample Variance	1481	704	4.4	4.3	54.2	44.4	1.2	ND
Kurtosis	-1	-1	-1.5	-0.3	-0.8	-0.9	0.1	ND
Skewness	0	1	0.2	-0.5	0.3	0.4	0.9	ND
Range	140	100	5.5	6.3	26.0	22.0	4.4	0.0
Minimum	130	100	0.0	3.2	26.0	24.0	1.6	0.0
Maximum	270	200	5.5	9.5	52.0	46.0	6.0	0.0
Count	30	30	10	8	30	30	30	0
Confidence Level(95.0%)	14	10	1.5	1.7	2.7	2.5	0.4	ND

ND = No Data

Provisional MMSD Water Quality Data

SOUTH SHORE - SITE 2
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	12.6	10.9	2.10	0.62	0.035	0.64	0.075	0.24	0.030	0.023	1.66
Standard Error	0.1	0.7	0.2	0.97	0.07	0.009	0.07	0.020	0.12	0.008	0.006	0.15
Median	8.0	11.3	11.2	0.89	0.49	0.014	0.45	0.041	0.00	0.000	0.000	1.40
Mode	7.5	7.8	11.3	ND	0.42	0.011	0.43	0.000	0.00	0.000	0.000	1.20
Standard Deviation	0.3	4.0	1.3	3.06	0.35	0.046	0.37	0.111	0.63	0.044	0.032	0.77
Sample Variance	0.1	16.3	1.6	9.34	0.12	0.002	0.13	0.012	0.39	0.002	0.001	0.59
Kurtosis	0.0	0.0	1.2	6.54	3.93	1.860	5.62	7.618	15.00	1.633	0.651	0.83
Skewness	-0.8	0.8	-0.2	2.49	1.78	1.675	2.07	2.500	3.66	1.561	1.257	1.16
Range	1.3	13.9	6.3	10.00	1.53	0.160	1.72	0.510	3.00	0.150	0.100	3.26
Minimum	7.2	7.8	7.9	0.20	0.27	0.000	0.28	0.000	0.00	0.000	0.000	0.44
Maximum	8.5	21.7	14.2	10.20	1.80	0.160	2.00	0.510	3.00	0.150	0.100	3.70
Count	30	30	30	10	27	27	30	30	27	27	27	27
Confidence Level(95.0%)	0.1	1.5	0.5	2.19	0.14	0.018	0.14	0.041	0.25	0.017	0.013	0.30

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	3.8	9.1	217.0	215.4	0.9	1.6	1.3	389	27.5	4	0.3	ND
Standard Error	0.4	0.4	12.7	12.8	0.2	0.5	0.1	19	3.3	3	0.2	ND
Median	3.8	9.5	215.0	213.4	1.0	1.2	0.9	343	21.5	0	0.0	ND
Mode	5.5	9.4	270.0	ND	1.0	0.0	2.2	300	12.0	0	0.0	ND
Standard Deviation	1.3	1.3	40.3	40.6	0.7	1.5	0.8	105	18.1	8	0.5	ND
Sample Variance	1.6	1.6	1623.3	1646.6	0.5	2.1	0.6	11078	328.7	66	0.3	ND
Kurtosis	-1.5	8.5	-1.4	-1.3	-1.2	-0.7	-0.8	3	8.0	5	0.0	ND
Skewness	0.2	-2.8	0.1	0.1	-0.2	0.6	0.8	2	2.3	2	1.3	ND
Range	3.4	4.4	110.0	113.2	1.8	4.2	2.5	428	88.0	25	1.4	0
Minimum	2.1	5.6	160.0	155.8	0.0	0.0	0.4	297	12.0	0	0.0	0
Maximum	5.5	10.0	270.0	269.0	1.8	4.2	3.0	725	100.0	25	1.4	0
Count	10	10	10	10	10	10	30	30	30	10	10	0
Confidence Level(95.0%)	0.9	0.9	28.8	29.0	0.5	1.0	0.3	39	6.8	6	0.4	ND

ND = No Data

Provisional MMSD Water Quality Data

SOUTH SHORE - SITE 2
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	36.60	12.90	0.0	0.8	4.6	2.0	0.7	6.7	0.1	1.1	5.0	ND
Standard Error	1.24	0.60	0.0	0.5	0.3	0.2	0.5	1.9	0.1	0.7	1.5	ND
Median	35.50	12.50	0.0	0.0	4.4	2.0	0.0	8.4	0.0	0.0	5.3	ND
Mode	35.00	11.00	0.0	0.0	ND	2.0	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	3.92	1.91	0.0	1.7	0.9	0.7	1.5	6.1	0.4	2.2	4.8	ND
Sample Variance	15.38	3.66	0.0	2.8	0.7	0.5	2.3	37.4	0.1	4.9	23.4	ND
Kurtosis	-0.37	-0.64	ND	1.4	-1.5	1.2	2.3	-1.7	10.0	1.6	-1.7	ND
Skewness	0.76	0.77	ND	1.8	0.4	1.1	1.9	0.0	3.2	1.8	0.2	ND
Range	12.00	5.00	0.0	4.0	2.4	2.5	4.1	16.0	1.2	5.6	12.0	0.0
Minimum	32.00	11.00	0.0	0.0	3.5	1.1	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	44.00	16.00	0.0	4.0	5.9	3.6	4.1	16.0	1.2	5.6	12.0	0.0
Count	10	10	10	10	10	10	10	10	10	10	10	0
Confidence Level(95.0%)	2.81	1.37	0.0	1.2	0.6	0.5	1.1	4.4	0.3	1.6	3.5	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNOC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	145	118	ND	ND	30.2	27.9	2.3	ND
Standard Error	5	2	ND	ND	0.7	0.6	0.1	ND
Median	140	110	ND	ND	29.0	27.0	2.2	ND
Mode	140	110	ND	ND	34.0	25.0	2.2	ND
Standard Deviation	17	14	ND	ND	3.8	3.5	0.6	ND
Sample Variance	294	184	ND	ND	14.6	12.1	0.4	ND
Kurtosis	-1	0	ND	ND	-0.5	-0.4	0.7	ND
Skewness	0	1	ND	ND	0.7	0.7	1.1	ND
Range	50	53	0.0	0.0	13.0	12.0	2.3	0.0
Minimum	120	97	0.0	0.0	26.0	24.0	1.6	0.0
Maximum	170	150	0.0	0.0	39.0	36.0	3.9	0.0
Count	10	30	0	0	30	30	30	0
Confidence Level(95.0%)	12	5	ND	ND	1.4	1.3	0.2	ND

ND = No Data

Provisional MMSD Water Quality Data

SOUTH SHORE - SITE 3
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	12.0	11.2	1.66	0.42	0.015	0.42	0.047	0.02	0.012	0.011	1.41
Standard Error	0.0	0.8	0.2	0.83	0.03	0.004	0.03	0.012	0.02	0.005	0.005	0.08
Median	8.1	9.9	11.2	0.72	0.37	0.007	0.37	0.031	0.00	0.000	0.000	1.30
Mode	8.1	9.9	ND	ND	0.55	0.000	0.35	0.000	0.00	0.000	0.000	1.30
Standard Deviation	0.2	4.4	1.1	2.64	0.13	0.021	0.14	0.066	0.10	0.027	0.026	0.40
Sample Variance	0.0	19.3	1.1	6.96	0.02	0.000	0.02	0.004	0.01	0.001	0.001	0.16
Kurtosis	-0.6	-0.4	-0.2	8.46	-0.65	5.475	0.00	4.550	27.00	4.673	7.540	0.62
Skewness	-0.5	0.7	-0.2	2.85	0.61	2.379	0.89	2.040	5.20	2.351	2.723	-0.17
Range	0.8	14.7	4.4	8.70	0.44	0.086	0.52	0.280	0.54	0.099	0.110	1.69
Minimum	7.6	6.7	9.0	0.25	0.25	0.000	0.25	0.000	0.00	0.000	0.000	0.41
Maximum	8.4	21.4	13.5	8.95	0.69	0.086	0.77	0.280	0.54	0.099	0.110	2.10
Count	30	30	30	10	27	27	30	30	27	27	27	27
Confidence Level(95.0%)	0.1	1.6	0.4	1.89	0.05	0.008	0.05	0.024	0.04	0.011	0.010	0.16

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	6.1	11.3	177.9	177.0	0.4	0.9	0.9	323	17.6	8	0.4	ND
Standard Error	1.0	0.5	14.4	14.3	0.2	0.3	0.1	6	1.1	6	0.2	ND
Median	5.5	11.8	190.0	188.8	0.0	0.6	0.9	316	16.5	0	0.0	ND
Mode	5.5	12.0	220.0	ND	0.0	0.0	1.3	294	12.0	0	0.0	ND
Standard Deviation	3.3	1.6	45.4	45.1	0.6	1.0	0.4	35	5.8	18	0.6	ND
Sample Variance	10.6	2.6	2061.9	2037.7	0.3	1.0	0.1	1211	33.2	330	0.4	ND
Kurtosis	0.2	9.0	1.3	1.3	-2.1	-1.8	-1.2	3	-0.8	8	0.7	ND
Skewness	1.1	-3.0	-1.3	-1.3	0.5	0.4	0.2	2	0.6	3	1.4	ND
Range	9.4	5.2	141.0	141.0	1.2	2.4	1.2	162	19.0	58	1.8	0
Minimum	2.4	6.8	79.0	79.0	0.0	0.0	0.3	279	11.0	0	0.0	0
Maximum	11.8	12.0	220.0	220.0	1.2	2.4	1.6	441	30.0	58	1.8	0
Count	10	10	10	10	10	10	30	30	30	10	10	0
Confidence Level(95.0%)	2.3	1.1	32.5	32.3	0.4	0.7	0.1	13	2.2	13	0.5	ND

ND = No Data

Provisional MMSD Water Quality Data

SOUTH SHORE - SITE 3
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	35.30	12.30	0.0	1.7	4.7	2.0	0.1	11.9	0.1	1.3	4.2	ND
Standard Error	0.83	0.37	0.0	0.7	0.3	0.2	0.1	5.3	0.1	0.7	1.4	ND
Median	35.00	12.00	0.0	0.0	4.7	1.9	0.0	8.0	0.0	0.0	3.4	ND
Mode	38.00	11.00	0.0	0.0	ND	1.8	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	2.63	1.16	0.0	2.3	0.9	0.6	0.4	16.7	0.4	2.3	4.5	ND
Sample Variance	6.90	1.34	0.0	5.1	0.9	0.4	0.2	278.8	0.1	5.2	20.5	ND
Kurtosis	-1.71	-1.23	ND	-2.2	0.3	-0.5	10.0	8.4	10.0	0.7	-2.3	ND
Skewness	0.05	0.34	ND	0.5	-0.5	0.1	3.2	2.8	3.2	1.5	0.1	ND
Range	7.00	3.00	0.0	4.7	3.1	2.0	1.4	58.0	1.2	6.0	9.8	0.0
Minimum	32.00	11.00	0.0	0.0	2.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	39.00	14.00	0.0	4.7	6.0	2.9	1.4	58.0	1.2	6.0	9.8	0.0
Count	10	10	10	10	10	10	10	10	10	10	10	0
Confidence Level(95.0%)	1.88	0.83	0.0	1.6	0.7	0.5	0.3	11.9	0.3	1.6	3.2	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	138	112	ND	ND	28.4	26.3	2.1	ND
Standard Error	4	2	ND	ND	0.3	0.3	0.1	ND
Median	135	110	ND	ND	29.0	27.0	2.0	ND
Mode	150	110	ND	ND	29.0	27.0	1.6	ND
Standard Deviation	11	9	ND	ND	1.7	1.7	0.5	ND
Sample Variance	129	79	ND	ND	2.9	3.0	0.2	ND
Kurtosis	-2	0	ND	ND	-1.2	-1.1	-0.7	ND
Skewness	0	1	ND	ND	-0.2	0.1	0.5	ND
Range	30	30	0.0	0.0	5.0	5.0	1.6	0.0
Minimum	120	100	0.0	0.0	26.0	24.0	1.4	0.0
Maximum	150	130	0.0	0.0	31.0	29.0	3.0	0.0
Count	10	30	0	0	30	30	30	0
Confidence Level(95.0%)	8	3	ND	ND	0.6	0.7	0.2	ND

ND = No Data

Provisional MMSD Water Quality Data

SOUTH SHORE - SITE 4
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	12.2	11.0	1.56	0.52	0.034	0.60	0.064	0.07	0.028	0.030	1.58
Standard Error	0.1	0.8	0.2	0.67	0.05	0.013	0.06	0.018	0.03	0.008	0.011	0.11
Median	8.0	10.3	11.1	0.68	0.43	0.006	0.49	0.038	0.00	0.000	0.000	1.40
Mode	8.4	ND	10.0	ND	0.27	0.000	0.70	0.000	0.00	0.000	0.000	1.30
Standard Deviation	0.3	4.1	1.2	2.12	0.25	0.065	0.31	0.100	0.17	0.043	0.058	0.57
Sample Variance	0.1	17.2	1.3	4.49	0.06	0.004	0.10	0.010	0.03	0.002	0.003	0.32
Kurtosis	-0.3	-0.1	2.4	5.29	0.49	7.716	-0.14	12.553	4.14	2.847	3.439	-0.63
Skewness	-0.5	0.9	-0.4	2.26	1.12	2.834	0.93	3.198	2.32	1.882	2.038	0.17
Range	1.1	13.9	6.1	6.82	0.83	0.260	1.03	0.500	0.60	0.150	0.200	2.15
Minimum	7.3	7.4	7.6	0.18	0.27	0.000	0.27	0.000	0.00	0.000	0.000	0.35
Maximum	8.4	21.3	13.7	7.00	1.10	0.260	1.30	0.500	0.60	0.150	0.200	2.50
Count	30	30	30	10	27	27	30	30	27	27	27	27
Confidence Level(95.0%)	0.1	1.5	0.4	1.52	0.10	0.026	0.12	0.037	0.07	0.017	0.023	0.22

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	5.7	10.1	229.0	227.7	0.8	1.4	1.1	353	23.1	4	0.4	ND
Standard Error	1.1	0.7	14.4	14.5	0.2	0.3	0.1	13	1.9	2	0.2	ND
Median	4.6	11.0	215.0	214.2	1.0	1.6	0.9	338	19.5	0	0.0	ND
Mode	ND	12.0	230.0	ND	0.0	0.0	0.5	353	33.0	0	0.0	ND
Standard Deviation	3.4	2.3	45.6	45.8	0.8	1.1	0.5	69	10.7	7	0.5	ND
Sample Variance	11.3	5.5	2076.7	2094.8	0.6	1.2	0.3	4824	114.0	44	0.3	ND
Kurtosis	-0.1	1.4	0.5	0.5	-1.6	-0.7	-1.3	10	1.3	0	-1.3	ND
Skewness	1.0	-1.6	1.2	1.3	0.0	0.0	0.5	3	1.2	1	0.9	ND
Range	9.5	6.7	130.0	131.8	2.0	3.2	1.6	358	44.0	18	1.3	0
Minimum	2.5	5.3	180.0	178.2	0.0	0.0	0.3	286	11.0	0	0.0	0
Maximum	12.0	12.0	310.0	310.0	2.0	3.2	1.9	644	55.0	18	1.3	0
Count	10	10	10	10	10	10	30	30	30	10	10	0
Confidence Level(95.0%)	2.4	1.7	32.6	32.7	0.5	0.8	0.2	26	4.0	5	0.4	ND

ND = No Data

Provisional MMSD Water Quality Data

SOUTH SHORE - SITE 4
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	37.10	13.00	0.0	0.0	4.5	1.9	0.4	6.8	0.1	1.1	2.7	ND
Standard Error	1.18	0.60	0.0	0.0	0.3	0.2	0.3	1.5	0.1	0.7	1.4	ND
Median	36.50	12.50	0.0	0.0	4.4	1.9	0.0	9.3	0.0	0.0	0.0	ND
Mode	40.00	11.00	0.0	0.0	5.4	ND	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	3.73	1.89	0.0	0.0	0.9	0.6	0.9	4.9	0.4	2.4	4.1	ND
Sample Variance	13.88	3.56	0.0	0.0	0.9	0.4	0.9	23.7	0.2	5.6	16.8	ND
Kurtosis	-1.33	-1.51	ND	ND	-1.6	0.1	4.0	-1.3	10.0	1.6	-1.6	ND
Skewness	0.19	0.37	ND	ND	-0.1	0.5	2.2	-0.8	3.2	1.8	0.9	ND
Range	11.00	5.00	0.0	0.0	2.6	2.2	2.7	12.0	1.3	6.0	8.7	0.0
Minimum	32.00	11.00	0.0	0.0	3.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	43.00	16.00	0.0	0.0	5.7	3.1	2.7	12.0	1.3	6.0	8.7	0.0
Count	10	10	10	10	10	10	10	10	10	10	9	0
Confidence Level(95.0%)	2.66	1.35	0.0	0.0	0.7	0.5	0.7	3.5	0.3	1.7	3.2	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	145	114	ND	ND	29.6	27.3	2.2	ND
Standard Error	5	2	ND	ND	0.5	0.5	0.1	ND
Median	140	110	ND	ND	29.0	27.0	2.1	ND
Mode	160	110	ND	ND	33.0	27.0	2.1	ND
Standard Deviation	16	9	ND	ND	2.7	2.5	0.6	ND
Sample Variance	272	80	ND	ND	7.6	6.4	0.3	ND
Kurtosis	-1	0	ND	ND	-0.8	-0.8	0.2	ND
Skewness	0	1	ND	ND	0.5	0.5	1.0	ND
Range	50	30	0.0	0.0	10.0	9.0	2.0	0.0
Minimum	120	100	0.0	0.0	26.0	24.0	1.5	0.0
Maximum	170	130	0.0	0.0	36.0	33.0	3.5	0.0
Count	10	30	0	0	30	30	30	0
Confidence Level(95.0%)	12	3	ND	ND	1.0	0.9	0.2	ND

ND = No Data

Provisional MMSD Water Quality Data

SOUTH SHORE - SITE 5
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	12.6	11.1	ND	0.51	0.030	0.53	0.056	0.04	0.020	0.010	1.51
Standard Error	0.1	0.7	0.2	ND	0.05	0.009	0.05	0.013	0.02	0.005	0.003	0.11
Median	8.1	11.6	11.2	ND	0.42	0.009	0.45	0.036	0.00	0.000	0.000	1.20
Mode	8.4	10.4	11.3	ND	0.41	0.007	0.37	0.000	0.00	0.000	0.000	1.20
Standard Deviation	0.3	4.1	1.1	ND	0.24	0.044	0.25	0.072	0.13	0.027	0.016	0.58
Sample Variance	0.1	16.5	1.2	ND	0.06	0.002	0.06	0.005	0.02	0.001	0.000	0.33
Kurtosis	-0.2	-0.1	1.7	ND	6.58	2.665	6.92	2.352	5.59	-0.204	1.704	-0.37
Skewness	-0.7	0.8	0.6	ND	2.20	1.975	2.20	1.762	2.66	0.965	1.529	0.97
Range	1.1	13.8	5.0	0.00	1.13	0.150	1.23	0.250	0.44	0.088	0.060	1.97
Minimum	7.4	7.9	9.3	0.00	0.27	0.000	0.27	0.000	0.00	0.000	0.000	0.83
Maximum	8.5	21.8	14.3	0.00	1.40	0.150	1.50	0.250	0.44	0.088	0.060	2.80
Count	30	30	30	0	27	27	30	30	27	27	27	27
Confidence Level(95.0%)	0.1	1.5	0.4	ND	0.09	0.017	0.09	0.027	0.05	0.011	0.007	0.23

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	5.3	9.4	210.0	208.8	0.7	1.3	1.3	364	23.4	7	0.4	ND
Standard Error	1.0	0.1	12.0	11.9	0.3	0.4	0.1	13	2.5	4	0.2	ND
Median	4.6	9.2	200.0	199.4	0.0	1.2	0.8	333	19.5	0	0.0	ND
Mode	2.2	9.0	190.0	190.0	0.0	0.0	ND	323	12.0	0	0.0	ND
Standard Deviation	3.1	0.4	38.0	37.6	0.9	1.3	0.8	70	13.5	12	0.6	ND
Sample Variance	9.7	0.2	1444.4	1412.2	0.8	1.6	0.6	4913	182.8	153	0.4	ND
Kurtosis	-1.4	-0.5	0.1	0.1	-1.9	-1.3	-0.3	1	3.9	5	-0.5	ND
Skewness	0.6	1.0	1.0	1.0	0.6	0.4	1.0	1	1.8	2	1.0	ND
Range	7.8	1.0	110.0	111.4	2.0	3.4	2.5	258	60.0	38	1.6	0
Minimum	2.2	9.0	170.0	166.6	0.0	0.0	0.5	297	11.0	0	0.0	0
Maximum	10.0	10.0	280.0	278.0	2.0	3.4	3.0	555	71.0	38	1.6	0
Count	10	10	10	10	10	10	30	30	30	10	10	0
Confidence Level(95.0%)	2.2	0.3	27.2	26.9	0.7	0.9	0.3	26	5.0	9	0.4	ND

ND = No Data

Provisional MMSD Water Quality Data

SOUTH SHORE - SITE 5
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	40.40	14.10	0.0	0.4	4.4	1.6	0.3	5.7	0.1	1.1	2.8	ND
Standard Error	4.07	1.43	0.0	0.4	0.4	0.1	0.3	1.6	0.1	0.8	1.4	ND
Median	36.00	12.50	0.0	0.0	4.1	1.7	0.0	7.5	0.0	0.0	0.0	ND
Mode	36.00	12.00	0.0	0.0	3.8	2.2	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	12.89	4.53	0.0	1.3	1.1	0.4	1.0	5.1	0.4	2.4	4.2	ND
Sample Variance	166.04	20.54	0.0	1.7	1.3	0.2	1.1	26.4	0.1	5.7	17.6	ND
Kurtosis	8.45	6.19	ND	10.0	-1.1	-1.4	10.0	-1.9	10.0	2.5	-1.3	ND
Skewness	2.84	2.42	ND	3.2	0.1	0.1	3.2	-0.2	3.2	1.9	1.0	ND
Range	44.00	15.00	0.0	4.1	3.4	1.2	3.3	12.0	1.2	6.5	9.8	0.0
Minimum	32.00	11.00	0.0	0.0	2.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	76.00	26.00	0.0	4.1	6.1	2.2	3.3	12.0	1.2	6.5	9.8	0.0
Count	10	10	10	10	10	10	10	10	10	10	9	0
Confidence Level(95.0%)	9.22	3.24	0.0	0.9	0.8	0.3	0.7	3.7	0.3	1.7	3.2	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	158	116	ND	ND	29.5	27.2	2.3	ND
Standard Error	16	2	ND	ND	0.6	0.6	0.2	ND
Median	140	110	ND	ND	28.0	27.0	2.2	ND
Mode	140	110	ND	ND	27.0	25.0	1.6	ND
Standard Deviation	52	12	ND	ND	3.3	3.2	0.8	ND
Sample Variance	2707	144	ND	ND	10.9	10.4	0.7	ND
Kurtosis	8	0	ND	ND	-1.1	-0.8	5.2	ND
Skewness	3	1	ND	ND	0.7	0.5	2.1	ND
Range	180	41	0.0	0.0	9.0	12.0	3.8	0.0
Minimum	120	99	0.0	0.0	26.0	21.0	1.5	0.0
Maximum	300	140	0.0	0.0	35.0	33.0	5.3	0.0
Count	10	30	0	0	30	30	30	0
Confidence Level(95.0%)	37	4	ND	ND	1.2	1.2	0.3	ND

ND = No Data

Provisional MMSD Water Quality Data

SOUTH SHORE - SITE 6
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	11.9	11.3	ND	0.40	0.015	0.41	0.052	0.02	0.020	0.018	1.29
Standard Error	0.0	0.8	0.2	ND	0.04	0.005	0.04	0.016	0.02	0.008	0.006	0.09
Median	8.1	9.9	11.5	ND	0.35	0.007	0.36	0.023	0.00	0.000	0.000	1.30
Mode	8.1	6.7	11.5	ND	0.35	0.000	0.36	0.000	0.00	0.000	0.000	1.30
Standard Deviation	0.2	4.5	1.1	ND	0.22	0.025	0.22	0.085	0.09	0.043	0.033	0.46
Sample Variance	0.0	19.9	1.1	ND	0.05	0.001	0.05	0.007	0.01	0.002	0.001	0.21
Kurtosis	-0.5	-0.5	-0.2	ND	17.69	13.022	20.40	6.380	27.00	9.993	7.007	0.15
Skewness	-0.2	0.7	-0.3	ND	3.89	3.329	4.20	2.455	5.20	3.014	2.518	-0.28
Range	0.7	14.7	4.3	0.00	1.16	0.120	1.25	0.370	0.47	0.190	0.140	1.84
Minimum	7.7	6.7	9.2	0.00	0.24	0.000	0.25	0.000	0.00	0.000	0.000	0.36
Maximum	8.4	21.4	13.6	0.00	1.40	0.120	1.50	0.370	0.47	0.190	0.140	2.20
Count	30	30	30	0	27	27	30	30	27	27	27	27
Confidence Level(95.0%)	0.1	1.7	0.4	ND	0.09	0.010	0.08	0.032	0.04	0.017	0.013	0.18

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	5.6	11.6	200.0	198.7	0.9	1.3	1.0	315	16.8	7	0.3	ND
Standard Error	0.8	0.5	11.5	11.6	0.3	0.3	0.1	4	1.5	5	0.2	ND
Median	5.3	12.0	190.0	188.9	0.5	1.1	0.9	309	15.0	0	0.0	ND
Mode	ND	12.0	200.0	ND	0.0	1.0	1.5	295	15.0	0	0.0	ND
Standard Deviation	2.7	1.4	36.5	36.6	1.1	0.9	0.4	23	8.2	17	0.6	ND
Sample Variance	7.2	2.1	1333.3	1340.4	1.2	0.8	0.2	531	67.2	276	0.4	ND
Kurtosis	1.5	8.2	8.1	8.1	0.0	-0.5	-0.9	-1	16.9	9	3.0	ND
Skewness	1.2	-2.7	2.7	2.7	1.1	0.3	0.4	1	3.7	3	1.9	ND
Range	8.7	5.4	130.0	130.0	3.0	2.8	1.4	82	44.0	53	1.7	0
Minimum	2.8	7.6	170.0	169.0	0.0	0.0	0.4	279	11.0	0	0.0	0
Maximum	11.5	13.0	300.0	299.0	3.0	2.8	1.8	361	55.0	53	1.7	0
Count	10	10	10	10	10	10	30	30	30	10	10	0
Confidence Level(95.0%)	1.9	1.0	26.1	26.2	0.8	0.7	0.1	9	3.1	12	0.4	ND

ND = No Data

Provisional MMSD Water Quality Data

SOUTH SHORE - SITE 6
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	36.10	12.20	0.0	2.3	5.1	2.3	0.6	8.4	0.1	1.1	3.9	ND
Standard Error	1.32	0.57	0.0	1.0	0.5	0.4	0.6	2.0	0.1	0.8	1.3	ND
Median	35.00	11.50	0.0	0.0	4.8	2.0	0.0	9.6	0.0	0.0	4.8	ND
Mode	34.00	11.00	0.0	0.0	5.4	2.9	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	4.18	1.81	0.0	3.1	1.5	1.2	1.8	6.4	0.4	2.4	4.0	ND
Sample Variance	17.43	3.29	0.0	9.9	2.3	1.3	3.2	40.5	0.1	5.9	15.7	ND
Kurtosis	0.07	-1.01	ND	-0.4	2.0	2.7	10.0	-1.3	10.0	2.4	-2.0	ND
Skewness	0.91	0.75	ND	1.0	1.4	1.5	3.2	-0.4	3.2	1.9	0.1	ND
Range	13.00	5.00	0.0	8.4	4.9	3.9	5.7	16.0	1.2	6.6	9.5	0.0
Minimum	31.00	10.00	0.0	0.0	3.6	1.1	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	44.00	15.00	0.0	8.4	8.5	5.0	5.7	16.0	1.2	6.6	9.5	0.0
Count	10	10	10	10	10	10	10	10	10	10	9	0
Confidence Level(95.0%)	2.99	1.30	0.0	2.2	1.1	0.8	1.3	4.6	0.3	1.7	3.0	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	140	112	ND	ND	28.0	25.9	2.2	ND
Standard Error	6	1	ND	ND	0.3	0.3	0.1	ND
Median	135	110	ND	ND	28.0	26.0	2.2	ND
Mode	130	110	ND	ND	29.0	27.0	2.2	ND
Standard Deviation	18	6	ND	ND	1.8	1.8	0.5	ND
Sample Variance	333	37	ND	ND	3.2	3.3	0.3	ND
Kurtosis	0	0	ND	ND	-0.7	-0.5	-0.1	ND
Skewness	1	0	ND	ND	0.5	0.5	0.4	ND
Range	50	20	0.0	0.0	6.0	7.0	2.0	0.0
Minimum	120	100	0.0	0.0	26.0	23.0	1.3	0.0
Maximum	170	120	0.0	0.0	32.0	30.0	3.3	0.0
Count	10	30	0	0	30	30	30	0
Confidence Level(95.0%)	13	2	ND	ND	0.7	0.7	0.2	ND

ND = No Data

Provisional MMSD Water Quality Data

SOUTH SHORE - SITE 7
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	13.0	10.6	1.36	0.58	0.028	0.63	0.081	0.13	0.022	0.023	1.67
Standard Error	0.0	0.6	0.2	0.31	0.05	0.007	0.05	0.018	0.04	0.005	0.005	0.11
Median	8.1	11.6	10.6	0.95	0.43	0.010	0.45	0.045	0.00	0.000	0.000	1.40
Mode	8.1	7.4	11.9	0.80	1.20	0.000	0.39	0.000	0.00	0.000	0.000	1.30
Standard Deviation	0.3	4.2	1.2	1.81	0.34	0.046	0.40	0.130	0.29	0.034	0.038	0.74
Sample Variance	0.1	17.5	1.5	3.29	0.12	0.002	0.16	0.017	0.08	0.001	0.001	0.55
Kurtosis	-0.4	-0.5	1.1	24.61	0.09	8.355	0.25	12.850	7.45	0.770	8.953	1.10
Skewness	-0.7	0.7	0.2	4.65	1.11	2.833	1.18	3.294	2.60	1.383	2.604	1.16
Range	1.2	14.3	6.1	10.66	1.15	0.220	1.45	0.740	1.40	0.110	0.200	3.29
Minimum	7.3	7.4	8.0	0.24	0.25	0.000	0.25	0.000	0.00	0.000	0.000	0.41
Maximum	8.5	21.7	14.1	10.90	1.40	0.220	1.70	0.740	1.40	0.110	0.200	3.70
Count	54	54	54	34	48	48	54	54	51	50	50	48
Confidence Level(95.0%)	0.1	1.1	0.3	0.63	0.10	0.013	0.11	0.035	0.08	0.010	0.011	0.22

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	5.4	10.2	217.0	215.4	1.1	1.7	1.2	373	25.4	3	0.2	ND
Standard Error	0.7	0.2	14.5	14.4	0.5	0.4	0.1	14	2.4	2	0.1	ND
Median	4.7	10.5	205.0	204.0	0.5	1.5	1.0	323	20.0	0	0.0	ND
Mode	ND	10.5	230.0	ND	0.0	0.0	2.1	297	11.0	0	0.0	ND
Standard Deviation	3.0	1.1	45.7	45.4	1.7	1.2	0.6	104	17.7	7	0.5	ND
Sample Variance	9.0	1.1	2090.0	2059.6	2.9	1.5	0.4	10756	312.9	48	0.2	ND
Kurtosis	-0.7	13.4	1.9	2.0	6.2	-0.4	2.6	1	3.1	11	1.8	ND
Skewness	0.8	-3.5	1.4	1.4	2.4	0.3	1.3	1	1.8	3	1.7	ND
Range	8.6	4.8	150.0	148.7	5.5	3.8	3.2	378	77.0	28	1.4	0
Minimum	2.1	6.2	170.0	169.0	0.0	0.0	0.4	281	11.0	0	0.0	0
Maximum	10.7	11.0	320.0	317.7	5.5	3.8	3.7	659	88.0	28	1.4	0
Count	18	18	10	10	10	10	54	54	54	18	18	0
Confidence Level(95.0%)	1.5	0.5	32.7	32.5	1.2	0.9	0.2	28	4.8	3	0.2	ND

ND = No Data

Provisional MMSD Water Quality Data

SOUTH SHORE - SITE 7
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	36.67	12.72	0.0	1.6	4.5	2.2	0.0	4.7	0.2	1.2	3.6	ND
Standard Error	1.01	0.52	0.0	0.6	0.3	0.3	0.0	1.3	0.1	0.5	1.2	ND
Median	35.50	12.00	0.0	0.0	4.3	1.9	0.0	0.0	0.0	0.0	0.0	ND
Mode	35.00	12.00	0.0	0.0	4.5	1.7	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	4.28	2.19	0.0	2.5	1.3	1.2	0.0	5.5	0.5	2.0	4.9	ND
Sample Variance	18.35	4.80	0.0	6.3	1.8	1.4	0.0	30.2	0.3	3.8	24.3	ND
Kurtosis	3.62	2.31	ND	0.2	5.5	1.9	ND	-2.0	7.6	-0.5	-1.0	ND
Skewness	1.88	1.76	ND	1.2	1.9	1.4	ND	0.4	2.9	1.2	0.8	ND
Range	17.00	7.00	0.0	7.8	5.9	4.4	0.0	13.0	1.9	4.9	13.0	0.0
Minimum	32.00	11.00	0.0	0.0	2.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	49.00	18.00	0.0	7.8	8.7	5.3	0.0	13.0	1.9	4.9	13.0	0.0
Count	18	18	18	18	18	18	18	18	18	18	18	0
Confidence Level(95.0%)	2.13	1.09	0.0	1.3	0.7	0.6	0.0	2.7	0.3	1.0	2.5	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	144	118	ND	ND	30.0	27.7	2.3	ND
Standard Error	5	2	ND	ND	0.7	0.7	0.1	ND
Median	140	110	ND	ND	29.0	27.5	2.2	ND
Mode	140	110	ND	ND	26.0	24.0	2.1	ND
Standard Deviation	21	13	ND	ND	3.9	3.8	0.5	ND
Sample Variance	426	175	ND	ND	14.8	14.1	0.3	ND
Kurtosis	3	3	ND	ND	0.6	1.2	1.4	ND
Skewness	2	2	ND	ND	1.0	1.2	1.2	ND
Range	80	50	0.0	0.0	14.0	14.0	2.1	0.0
Minimum	120	110	0.0	0.0	26.0	24.0	1.5	0.0
Maximum	200	160	0.0	0.0	40.0	38.0	3.6	0.0
Count	18	30	0	0	30	30	30	0
Confidence Level(95.0%)	10	5	ND	ND	1.4	1.4	0.2	ND

ND = No Data

Provisional MMSD Water Quality Data

SOUTH SHORE - SITE 8
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	12.7	10.8	ND	0.67	0.036	0.68	0.068	0.26	0.021	0.036	1.72
Standard Error	0.1	0.7	0.2	ND	0.07	0.009	0.07	0.014	0.11	0.008	0.011	0.16
Median	8.1	11.5	11.2	ND	0.57	0.015	0.53	0.037	0.00	0.000	0.023	1.40
Mode	8.3	ND	11.5	ND	1.30	0.014	0.40	0.000	0.00	0.000	0.000	1.20
Standard Deviation	0.4	3.9	1.3	ND	0.37	0.046	0.39	0.079	0.60	0.043	0.055	0.82
Sample Variance	0.1	15.2	1.8	ND	0.14	0.002	0.15	0.006	0.35	0.002	0.003	0.67
Kurtosis	-0.1	0.0	1.1	ND	-0.39	0.947	-0.21	4.231	18.53	4.447	3.590	0.48
Skewness	-0.9	0.8	-0.5	ND	0.93	1.526	1.02	1.847	4.04	2.300	2.001	1.09
Range	1.2	13.5	6.2	0.00	1.22	0.160	1.22	0.350	3.00	0.150	0.200	3.15
Minimum	7.2	7.9	7.4	0.00	0.28	0.000	0.28	0.000	0.00	0.000	0.000	0.55
Maximum	8.4	21.4	13.6	0.00	1.50	0.160	1.50	0.350	3.00	0.150	0.200	3.70
Count	30	30	30	0	27	27	30	30	27	27	27	27
Confidence Level(95.0%)	0.1	1.5	0.5	ND	0.15	0.018	0.14	0.030	0.24	0.017	0.022	0.32

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	4.1	9.0	236.0	234.4	1.3	1.6	1.4	407	28.8	4	0.3	ND
Standard Error	0.7	0.5	16.5	16.5	0.4	0.4	0.1	21	3.0	3	0.2	ND
Median	4.2	9.1	225.0	223.4	1.2	1.5	1.0	366	25.0	0	0.0	ND
Mode	ND	9.0	210.0	ND	0.0	0.0	1.0	391	13.0	0	0.0	ND
Standard Deviation	2.1	1.5	52.3	52.3	1.2	1.4	0.8	115	16.6	8	0.5	ND
Sample Variance	4.3	2.3	2737.8	2732.8	1.5	1.9	0.6	13203	276.4	63	0.3	ND
Kurtosis	3.0	6.1	-1.3	-1.2	2.0	-1.7	-0.7	0	-0.6	1	-0.1	ND
Skewness	1.5	-2.1	0.3	0.4	1.2	0.1	0.8	1	0.7	2	1.3	ND
Range	6.9	5.9	150.0	151.8	4.0	3.4	2.6	381	55.0	20	1.3	0
Minimum	2.1	5.1	170.0	166.6	0.0	0.0	0.5	296	11.0	0	0.0	0
Maximum	9.0	11.0	320.0	318.4	4.0	3.4	3.1	677	66.0	20	1.3	0
Count	10	10	10	10	10	10	30	30	30	10	10	0
Confidence Level(95.0%)	1.5	1.1	37.4	37.4	0.9	1.0	0.3	43	6.2	6	0.4	ND

ND = No Data

Provisional MMSD Water Quality Data

SOUTH SHORE - SITE 8
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	37.60	13.10	0.0	1.9	4.9	2.3	0.7	7.1	0.2	0.9	3.2	ND
Standard Error	1.62	0.75	0.0	0.8	0.3	0.3	0.6	1.7	0.2	0.6	1.4	ND
Median	36.00	12.00	0.0	0.0	4.8	2.1	0.0	8.7	0.0	0.0	0.0	ND
Mode	34.00	12.00	0.0	0.0	ND	3.1	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	5.13	2.38	0.0	2.5	0.9	0.8	1.8	5.2	0.5	1.9	4.2	ND
Sample Variance	26.27	5.66	0.0	6.4	0.8	0.7	3.4	27.4	0.3	3.5	17.3	ND
Kurtosis	-0.46	-0.67	ND	-2.0	-0.6	-0.5	8.2	-1.3	1.7	1.6	-0.4	ND
Skewness	0.77	0.97	ND	0.6	0.3	0.7	2.8	-0.5	1.8	1.8	0.9	ND
Range	16.00	6.00	0.0	5.7	2.9	2.5	5.8	14.0	1.3	4.8	11.0	0.0
Minimum	31.00	11.00	0.0	0.0	3.6	1.3	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	47.00	17.00	0.0	5.7	6.5	3.8	5.8	14.0	1.3	4.8	11.0	0.0
Count	10	10	10	10	10	10	10	10	10	10	9	0
Confidence Level(95.0%)	3.67	1.70	0.0	1.8	0.7	0.6	1.3	3.7	0.4	1.3	3.2	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	148	119	ND	ND	30.9	28.5	2.4	ND
Standard Error	8	3	ND	ND	0.9	0.8	0.1	ND
Median	140	120	ND	ND	29.5	27.0	2.3	ND
Mode	130	120	ND	ND	26.0	24.0	2.2	ND
Standard Deviation	24	15	ND	ND	4.9	4.6	0.6	ND
Sample Variance	573	216	ND	ND	24.4	20.8	0.4	ND
Kurtosis	-1	0	ND	ND	0.8	1.2	0.4	ND
Skewness	1	1	ND	ND	1.1	1.2	0.9	ND
Range	70	50	0.0	0.0	18.0	17.0	2.3	0.0
Minimum	120	100	0.0	0.0	26.0	24.0	1.5	0.0
Maximum	190	150	0.0	0.0	44.0	41.0	3.8	0.0
Count	10	30	0	0	30	30	30	0
Confidence Level(95.0%)	17	5	ND	ND	1.8	1.7	0.2	ND

ND = No Data

Provisional MMSD Water Quality Data

SOUTH SHORE - SITE 9
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	12.1	11.2	ND	0.46	0.014	0.46	0.037	0.03	0.012	0.019	1.39
Standard Error	0.0	0.8	0.2	ND	0.06	0.002	0.05	0.008	0.02	0.007	0.006	0.09
Median	8.1	10.1	11.2	ND	0.39	0.008	0.39	0.027	0.00	0.000	0.000	1.40
Mode	8.2	10.0	11.2	ND	0.35	0.016	0.36	0.000	0.00	0.000	0.000	1.40
Standard Deviation	0.3	4.4	1.3	ND	0.30	0.010	0.28	0.045	0.12	0.035	0.032	0.48
Sample Variance	0.1	19.1	1.6	ND	0.09	0.000	0.08	0.002	0.02	0.001	0.001	0.23
Kurtosis	-0.2	-0.4	0.8	ND	16.52	0.306	17.49	1.157	10.80	13.073	4.741	0.41
Skewness	-0.4	0.7	0.4	ND	3.75	1.114	3.83	1.425	3.46	3.492	2.148	0.09
Range	1.0	14.7	5.7	0.00	1.56	0.037	1.56	0.160	0.48	0.160	0.130	2.08
Minimum	7.5	6.8	8.7	0.00	0.24	0.000	0.24	0.000	0.00	0.000	0.000	0.32
Maximum	8.6	21.5	14.4	0.00	1.80	0.037	1.80	0.160	0.48	0.160	0.130	2.40
Count	30	30	30	0	27	27	30	30	27	27	27	27
Confidence Level(95.0%)	0.1	1.6	0.5	ND	0.12	0.004	0.11	0.017	0.05	0.014	0.013	0.19

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	5.5	11.6	195.0	193.7	0.4	1.3	1.0	340	18.3	6	0.5	ND
Standard Error	0.8	0.5	4.5	4.5	0.3	0.4	0.1	12	1.4	2	0.2	ND
Median	4.6	12.0	190.0	190.0	0.0	1.3	1.0	331	16.0	3	0.5	ND
Mode	4.6	12.0	190.0	190.0	0.0	0.0	1.4	284	11.0	0	0.0	ND
Standard Deviation	2.6	1.6	14.3	14.1	0.9	1.2	0.5	67	7.8	7	0.5	ND
Sample Variance	6.9	2.6	205.6	199.3	0.9	1.3	0.2	4447	61.2	45	0.3	ND
Kurtosis	2.2	8.4	-1.0	-0.8	1.7	0.2	-1.1	9	2.5	1	-1.8	ND
Skewness	1.4	-2.8	0.6	0.5	1.8	0.6	0.2	3	1.6	1	0.2	ND
Range	9.1	5.8	40.0	41.2	2.4	3.6	1.6	327	31.0	20	1.3	0
Minimum	2.4	7.2	180.0	177.6	0.0	0.0	0.3	284	11.0	0	0.0	0
Maximum	11.5	13.0	220.0	218.8	2.4	3.6	1.9	611	42.0	20	1.3	0
Count	10	10	10	10	10	10	30	30	30	10	10	0
Confidence Level(95.0%)	1.9	1.1	10.3	10.1	0.7	0.8	0.2	25	2.9	5	0.4	ND

ND = No Data

Provisional MMSD Water Quality Data

SOUTH SHORE - SITE 9
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	35.50	12.20	0.0	2.3	4.7	2.1	0.1	3.8	0.1	1.0	3.3	ND
Standard Error	0.86	0.39	0.0	1.1	0.6	0.5	0.1	1.6	0.1	0.7	1.7	ND
Median	35.50	12.00	0.0	0.0	4.3	1.9	0.0	0.0	0.0	0.0	0.0	ND
Mode	35.00	12.00	0.0	0.0	4.0	1.9	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	2.72	1.23	0.0	3.4	2.0	1.5	0.4	5.0	0.4	2.2	5.4	ND
Sample Variance	7.39	1.51	0.0	11.6	4.1	2.2	0.2	25.3	0.1	4.8	29.7	ND
Kurtosis	-0.72	2.21	ND	1.8	6.2	5.4	10.0	-2.0	10.0	3.2	-0.4	ND
Skewness	0.25	1.33	ND	1.5	2.3	2.1	3.2	0.6	3.2	2.0	1.2	ND
Range	8.00	4.00	0.0	10.0	7.4	5.1	1.3	11.0	1.2	6.2	13.0	0.0
Minimum	32.00	11.00	0.0	0.0	2.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	40.00	15.00	0.0	10.0	10.0	5.9	1.3	11.0	1.2	6.2	13.0	0.0
Count	10	10	10	10	10	10	10	10	10	10	10	0
Confidence Level(95.0%)	1.94	0.88	0.0	2.4	1.4	1.1	0.3	3.6	0.3	1.6	3.9	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	137	113	ND	ND	28.8	26.6	2.2	ND
Standard Error	4	1	ND	ND	0.5	0.5	0.1	ND
Median	135	110	ND	ND	29.0	27.0	2.1	ND
Mode	130	110	ND	ND	26.0	24.0	1.8	ND
Standard Deviation	13	8	ND	ND	2.5	2.6	0.5	ND
Sample Variance	179	63	ND	ND	6.4	6.6	0.2	ND
Kurtosis	-1	0	ND	ND	-1.5	-1.1	0.7	ND
Skewness	0	1	ND	ND	0.1	0.4	1.0	ND
Range	40	30	0.0	0.0	8.0	9.0	1.9	0.0
Minimum	120	100	0.0	0.0	25.0	23.0	1.5	0.0
Maximum	160	130	0.0	0.0	33.0	32.0	3.4	0.0
Count	10	30	0	0	30	30	30	0
Confidence Level(95.0%)	10	3	ND	ND	0.9	1.0	0.2	ND

ND = No Data

Provisional MMSD Water Quality Data

SOUTH SHORE - SITE 10
WATER QUALITY DATA 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.2	12.4	11.4	2.16	0.48	0.015	0.47	0.042	0.01	0.013	0.005	1.41
Standard Error	0.0	0.8	0.2	1.28	0.03	0.002	0.03	0.009	0.01	0.003	0.002	0.09
Median	8.2	10.5	11.4	0.79	0.42	0.011	0.45	0.028	0.00	0.000	0.000	1.30
Mode	8.2	7.3	11.9	ND	0.42	0.000	0.45	0.000	0.00	0.000	0.000	1.30
Standard Deviation	0.2	4.2	1.2	4.05	0.17	0.012	0.17	0.047	0.07	0.017	0.012	0.48
Sample Variance	0.0	17.7	1.4	16.40	0.03	0.000	0.03	0.002	0.01	0.000	0.000	0.23
Kurtosis	1.0	-0.3	5.1	9.15	-0.95	0.813	-0.77	6.035	27.00	-1.465	6.264	0.42
Skewness	0.8	0.7	1.2	2.99	0.69	1.043	0.79	1.985	5.20	0.701	2.606	0.30
Range	0.9	14.2	6.5	13.36	0.55	0.050	0.56	0.220	0.38	0.041	0.048	2.12
Minimum	7.9	7.3	9.1	0.14	0.25	0.000	0.26	0.000	0.00	0.000	0.000	0.28
Maximum	8.7	21.5	15.6	13.50	0.80	0.050	0.82	0.220	0.38	0.041	0.048	2.40
Count	30	30	30	10	27	27	30	30	27	27	27	27
Confidence Level(95.0%)	0.1	1.6	0.4	2.90	0.07	0.005	0.06	0.017	0.03	0.007	0.005	0.19

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	5.5	10.5	200.0	198.9	0.6	1.2	1.0	336	20.0	2	0.3	ND
Standard Error	1.0	0.2	8.6	8.5	0.3	0.4	0.1	8	1.5	1	0.1	ND
Median	5.1	10.5	195.0	193.4	0.0	1.0	0.9	333	17.0	0	0.0	ND
Mode	ND	11.0	170.0	ND	0.0	0.0	1.7	334	20.0	0	0.0	ND
Standard Deviation	3.1	0.6	27.1	26.8	0.8	1.2	0.5	43	8.5	3	0.4	ND
Sample Variance	9.7	0.4	733.3	715.9	0.7	1.5	0.2	1850	71.9	10	0.1	ND
Kurtosis	-0.2	-0.8	-0.6	-0.5	-0.1	-1.2	-1.2	0	-0.8	4	0.2	ND
Skewness	0.9	0.0	0.6	0.7	1.1	0.6	0.4	1	0.8	2	1.1	ND
Range	8.7	2.0	80.0	80.3	2.2	3.2	1.6	141	26.0	10	1.0	0
Minimum	2.3	9.5	170.0	168.7	0.0	0.0	0.3	285	11.0	0	0.0	0
Maximum	11.0	11.5	250.0	249.0	2.2	3.2	1.9	426	37.0	10	1.0	0
Count	10	10	10	10	10	10	30	30	30	10	10	0
Confidence Level(95.0%)	2.2	0.4	19.4	19.1	0.6	0.9	0.2	16	3.2	2	0.3	ND

ND = No Data

Provisional MMSD Water Quality data

SOUTH SHORE - SITE 10
WATER QUALITY DATA 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	35.70	12.20	0.0	1.1	4.4	2.0	0.5	12.0	0.1	1.2	3.2	ND
Standard Error	1.00	0.53	0.0	0.7	0.3	0.3	0.4	5.1	0.1	0.8	1.4	ND
Median	35.00	11.50	0.0	0.0	4.4	1.7	0.0	9.0	0.0	0.0	0.0	ND
Mode	34.00	11.00	0.0	0.0	5.3	ND	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	3.16	1.69	0.0	2.3	0.9	1.0	1.1	16.2	0.4	2.6	4.3	ND
Sample Variance	10.01	2.84	0.0	5.3	0.9	1.0	1.2	261.6	0.2	6.5	18.7	ND
Kurtosis	-0.58	1.86	ND	1.7	-1.3	0.6	3.6	6.8	10.0	2.5	-1.0	ND
Skewness	0.45	1.52	ND	1.8	-0.4	1.2	2.1	2.4	3.2	1.9	0.9	ND
Range	10.00	5.00	0.0	5.9	2.4	3.1	3.2	55.0	1.4	7.0	11.0	0.0
Minimum	31.00	11.00	0.0	0.0	3.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	41.00	16.00	0.0	5.9	5.4	3.9	3.2	55.0	1.4	7.0	11.0	0.0
Count	10	10	10	10	10	10	10	10	10	10	10	0
Confidence Level(95.0%)	2.26	1.21	0.0	1.7	0.7	0.7	0.8	11.6	0.3	1.8	3.1	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	140	114	0.0	3.4	29.0	26.9	2.2	ND
Standard Error	5	1	0.0	0.4	0.5	0.5	0.1	ND
Median	135	110	0.0	3.2	29.0	27.0	2.1	ND
Mode	130	110	0.0	3.0	32.0	24.0	2.3	ND
Standard Deviation	16	8	0.0	1.1	2.7	2.7	0.6	ND
Sample Variance	244	67	0.0	1.1	7.6	7.2	0.3	ND
Kurtosis	0	2	ND	4.6	-1.8	-1.7	0.7	ND
Skewness	1	1	ND	1.9	0.0	0.1	1.1	ND
Range	50	40	0.0	3.6	7.0	8.0	2.0	0.0
Minimum	120	100	0.0	2.2	25.0	23.0	1.5	0.0
Maximum	170	140	0.0	5.8	32.0	31.0	3.5	0.0
Count	10	30	10	8	30	30	30	0
Confidence Level(95.0%)	11	3	0.0	0.9	1.0	1.0	0.2	ND

ND = No Data

Provisional MMSD Water Quality data

SOUTH SHORE - SITE 11
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.2	12.6	11.0	1.17	0.33	0.005	0.33	0.023	0.06	0.003	0.007	1.40
Standard Error	0.0	0.6	0.2	0.23	0.01	0.001	0.01	0.004	0.02	0.001	0.004	0.04
Median	8.2	10.8	11.1	0.71	0.33	0.005	0.33	0.019	0.00	0.000	0.000	1.40
Mode	8.2	6.4	12.1	0.52	0.33	0.000	0.34	0.000	0.00	0.000	0.000	1.40
Standard Deviation	0.1	4.8	1.2	1.35	0.07	0.008	0.07	0.026	0.17	0.010	0.029	0.27
Sample Variance	0.0	22.6	1.5	1.82	0.00	0.000	0.00	0.001	0.03	0.000	0.001	0.07
Kurtosis	-0.4	-1.0	-0.7	5.58	0.05	17.913	1.24	10.212	8.67	19.280	40.072	0.18
Skewness	0.0	0.4	-0.3	2.45	0.52	3.714	0.86	2.695	3.11	4.270	6.084	-0.59
Range	0.6	15.3	4.7	6.04	0.31	0.048	0.35	0.150	0.77	0.058	0.200	1.17
Minimum	7.9	6.2	8.4	0.00	0.21	0.000	0.21	0.000	0.00	0.000	0.000	0.63
Maximum	8.5	21.4	13.0	6.04	0.52	0.048	0.56	0.150	0.77	0.058	0.200	1.80
Count	54	54	54	34	48	48	54	54	51	51	51	48
Confidence Level(95.0%)	0.0	1.3	0.3	0.47	0.02	0.002	0.02	0.007	0.05	0.003	0.008	0.08

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	6.0	13.0	169.1	168.1	0.7	1.0	0.8	301	13.6	7	0.1	ND
Standard Error	0.6	0.2	13.3	13.1	0.4	0.3	0.1	2	0.4	7	0.1	ND
Median	6.3	13.0	180.0	179.5	0.0	1.0	0.7	294	12.0	0	0.0	ND
Mode	7.5	14.0	180.0	ND	0.0	0.0	1.0	293	11.0	0	0.0	ND
Standard Deviation	2.7	0.8	42.0	41.5	1.3	1.0	0.5	16	3.2	28	0.5	ND
Sample Variance	7.1	0.6	1765.9	1720.2	1.7	1.0	0.3	255	10.1	799	0.2	ND
Kurtosis	-0.2	-1.3	2.9	2.9	4.5	-1.5	5.7	0	0.5	18	17.1	ND
Skewness	0.3	0.3	-1.5	-1.6	2.1	0.3	2.0	1	1.1	4	4.1	ND
Range	9.6	2.0	149.0	146.5	4.0	2.5	2.6	57	13.0	120	2.1	0
Minimum	2.4	12.0	71.0	71.0	0.0	0.0	0.3	279	10.0	0	0.0	0
Maximum	12.0	14.0	220.0	217.5	4.0	2.5	2.9	336	23.0	120	2.1	0
Count	18	17	10	10	10	10	54	54	54	18	18	0
Confidence Level(95.0%)	1.3	0.4	30.1	29.7	0.9	0.7	0.1	4	0.9	14	0.2	ND

ND = No Data

Provisional MMSD Water Quality Data

SOUTH SHORE - SITE 11
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	34.61	11.61	0.0	0.9	4.3	1.9	0.1	6.0	0.2	1.0	2.5	ND
Standard Error	0.55	0.23	0.0	0.4	0.3	0.2	0.1	1.2	0.1	0.5	1.0	ND
Median	34.50	11.00	0.0	0.0	4.2	1.7	0.0	7.5	0.0	0.0	0.0	ND
Mode	36.00	11.00	0.0	0.0	4.2	1.3	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	2.33	0.98	0.0	1.8	1.1	0.8	0.4	5.2	0.5	2.0	4.4	ND
Sample Variance	5.43	0.96	0.0	3.3	1.2	0.7	0.1	26.7	0.2	4.0	19.2	ND
Kurtosis	0.62	0.79	ND	0.3	0.9	3.3	18.0	-1.8	2.2	1.2	0.9	ND
Skewness	0.25	0.92	ND	1.5	0.9	1.8	4.2	-0.2	2.0	1.7	1.5	ND
Range	10.00	4.00	0.0	4.7	4.4	3.3	1.6	13.0	1.3	5.5	13.0	0.0
Minimum	30.00	10.00	0.0	0.0	2.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	40.00	14.00	0.0	4.7	7.1	4.3	1.6	13.0	1.3	5.5	13.0	0.0
Count	18	18	18	18	18	18	18	18	18	18	18	0
Confidence Level(95.0%)	1.16	0.49	0.0	0.9	0.6	0.4	0.2	2.6	0.2	1.0	2.2	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	134	111	0.0	2.7	27.8	25.8	1.9	ND
Standard Error	2	1	0.0	0.5	0.4	0.4	0.1	ND
Median	130	110	0.0	2.6	27.0	25.0	2.0	ND
Mode	130	110	0.0	ND	26.0	24.0	2.0	ND
Standard Deviation	9	5	0.0	1.4	2.0	2.2	0.3	ND
Sample Variance	85	30	0.0	2.0	4.2	4.8	0.1	ND
Kurtosis	2	1	ND	1.2	-1.2	-1.5	-1.1	ND
Skewness	1	0	ND	-0.6	0.4	0.4	0.0	ND
Range	40	20	0.0	4.5	6.0	6.0	1.2	0.0
Minimum	120	100	0.0	0.0	25.0	23.0	1.4	0.0
Maximum	160	120	0.0	4.5	31.0	29.0	2.6	0.0
Count	18	30	10	8	30	30	30	0
Confidence Level(95.0%)	5	2	0.0	1.2	0.8	0.8	0.1	ND

ND = No Data

Provisional MMSD Water Quality Data

SOUTH SHORE - SITE 12
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	12.1	11.3	1.36	0.40	0.015	0.50	0.036	0.03	0.006	0.010	1.41
Standard Error	0.0	0.8	0.2	0.50	0.03	0.005	0.05	0.006	0.02	0.003	0.008	0.10
Median	8.2	10.2	11.5	0.70	0.36	0.006	0.38	0.029	0.00	0.000	0.000	1.30
Mode	8.2	10.0	11.6	ND	0.36	0.000	0.67	0.000	0.00	0.000	0.000	1.30
Standard Deviation	0.2	4.2	1.0	1.59	0.13	0.023	0.30	0.032	0.13	0.015	0.040	0.51
Sample Variance	0.0	17.9	1.1	2.52	0.02	0.001	0.09	0.001	0.02	0.000	0.002	0.26
Kurtosis	-1.5	-0.2	0.3	1.16	-0.31	3.942	2.79	2.973	11.59	8.224	22.089	-0.23
Skewness	-0.2	0.8	0.0	1.62	0.86	2.251	1.82	1.551	3.54	2.867	4.615	0.37
Range	0.6	14.3	4.3	4.32	0.43	0.083	1.06	0.140	0.52	0.064	0.200	1.97
Minimum	7.8	7.3	9.3	0.20	0.24	0.000	0.24	0.000	0.00	0.000	0.000	0.43
Maximum	8.4	21.5	13.6	4.52	0.67	0.083	1.30	0.140	0.52	0.064	0.200	2.40
Count	30	30	30	10	27	27	30	30	27	27	27	27
Confidence Level(95.0%)	0.1	1.6	0.4	1.13	0.05	0.009	0.11	0.012	0.05	0.006	0.016	0.20

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	5.0	9.9	214.0	212.6	0.7	1.4	1.4	333	19.2	11	0.7	ND
Standard Error	0.9	0.8	11.0	10.7	0.3	0.4	0.2	7	1.3	5	0.2	ND
Median	3.9	11.0	195.0	194.1	0.0	1.6	1.0	324	18.0	4	0.5	ND
Mode	ND	11.0	190.0	190.0	0.0	0.0	ND	297	18.0	0	0.0	ND
Standard Deviation	2.8	2.5	34.7	33.8	1.0	1.2	1.0	40	7.2	15	0.7	ND
Sample Variance	8.1	6.5	1204.4	1140.1	1.0	1.4	1.0	1631	51.2	230	0.4	ND
Kurtosis	0.7	1.4	-1.5	-1.4	-0.8	-1.5	2.5	-1	-1.3	0	-1.7	ND
Skewness	1.0	-1.8	0.6	0.6	0.9	0.0	1.6	1	0.5	1	0.3	ND
Range	9.5	6.4	90.0	89.0	2.5	3.0	3.8	128	20.0	40	1.6	0
Minimum	1.5	5.1	180.0	179.0	0.0	0.0	0.4	284	11.0	0	0.0	0
Maximum	11.0	11.5	270.0	268.0	2.5	3.0	4.2	412	31.0	40	1.6	0
Count	10	10	10	10	10	10	30	30	30	10	10	0
Confidence Level(95.0%)	2.0	1.8	24.8	24.2	0.7	0.8	0.4	15	2.7	11	0.5	ND

ND = No Data

Provisional MMSD Water Quality Data

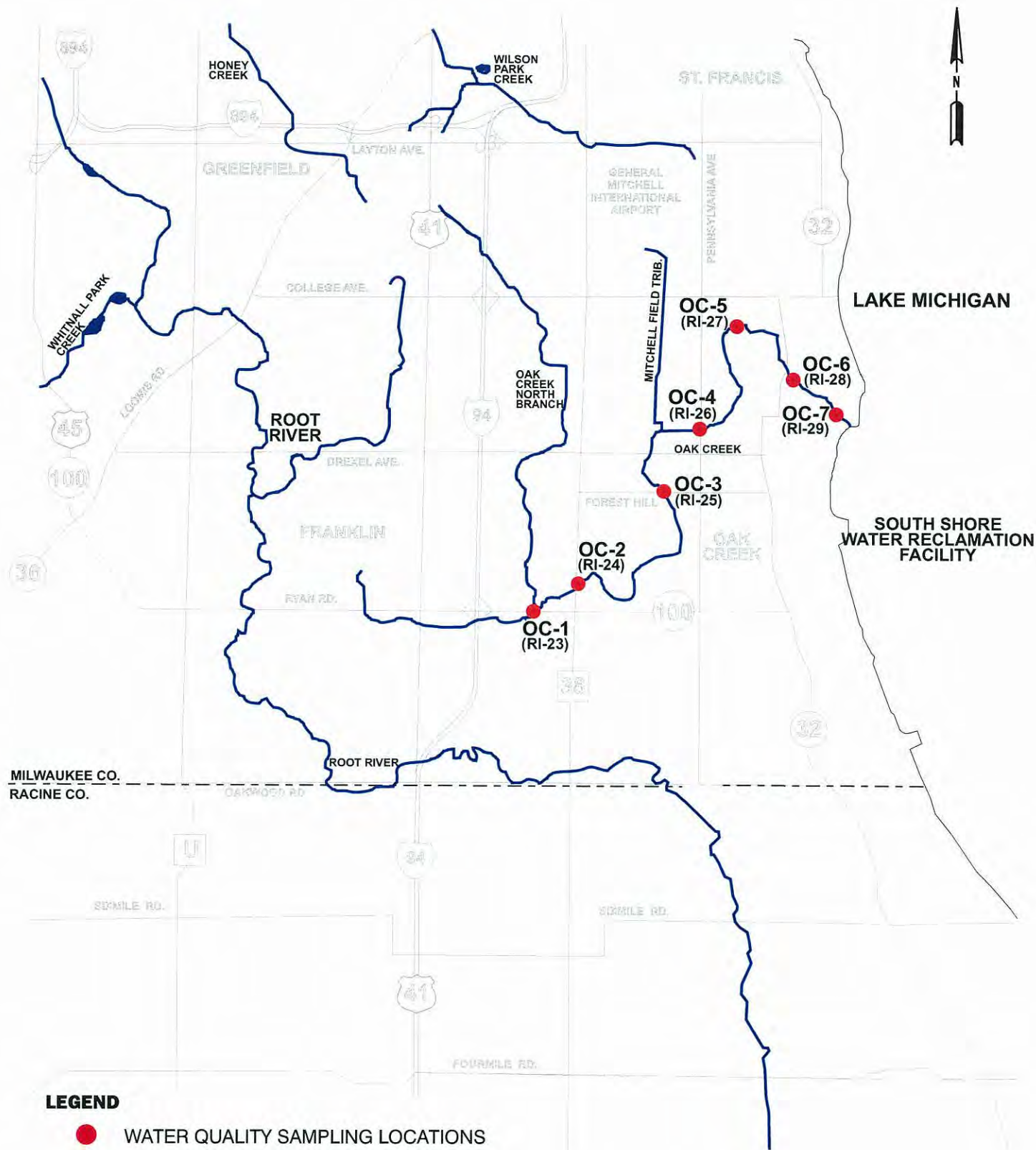
SOUTH SHORE - SITE 12
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	36.20	12.60	0.0	2.4	4.4	2.0	1.2	7.4	0.1	1.1	3.3	ND
Standard Error	0.83	0.37	0.0	0.8	0.3	0.3	1.1	1.7	0.1	0.7	1.4	ND
Median	36.50	13.00	0.0	1.9	4.4	1.6	0.0	8.5	0.0	0.0	0.0	ND
Mode	37.00	13.00	0.0	0.0	ND	1.6	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	2.62	1.17	0.0	2.6	0.8	1.0	3.5	5.5	0.4	2.1	4.1	ND
Sample Variance	6.84	1.38	0.0	7.0	0.7	1.0	12.0	30.2	0.1	4.6	17.1	ND
Kurtosis	0.51	1.03	ND	-1.9	-0.9	4.0	9.5	-1.3	10.0	4.4	-1.4	ND
Skewness	-0.55	0.47	ND	0.3	-0.1	1.8	3.1	-0.5	3.2	2.1	0.7	ND
Range	9.00	4.00	0.0	6.3	2.4	3.5	11.0	14.0	1.2	6.5	9.4	0.0
Minimum	31.00	11.00	0.0	0.0	3.2	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	40.00	15.00	0.0	6.3	5.6	4.4	11.0	14.0	1.2	6.5	9.4	0.0
Count	10	10	10	10	10	10	10	10	10	10	9	0
Confidence Level(95.0%)	1.87	0.84	0.0	1.9	0.6	0.7	2.5	3.9	0.3	1.5	3.2	ND

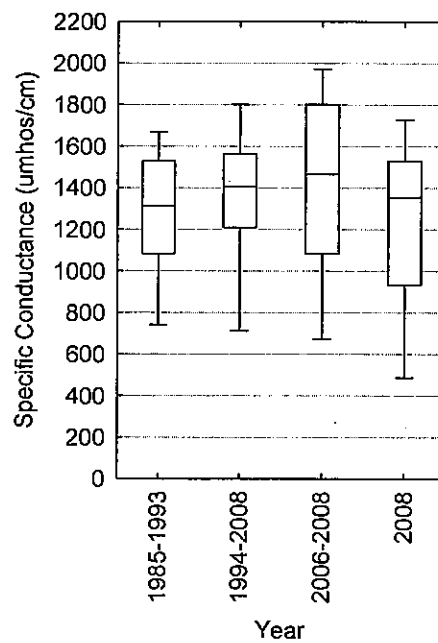
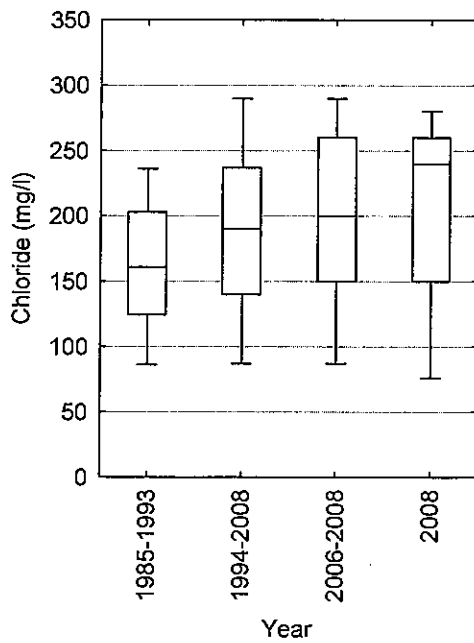
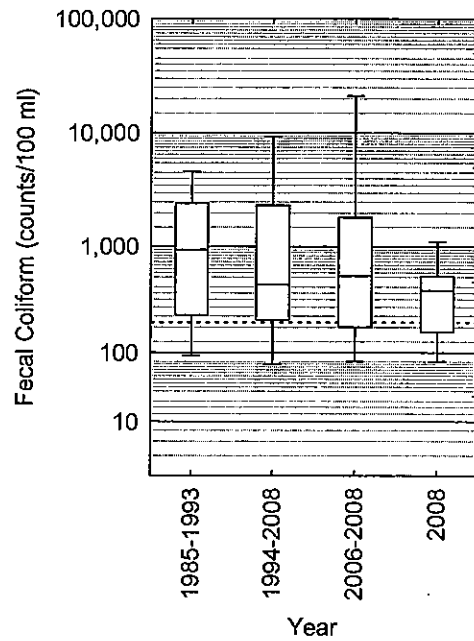
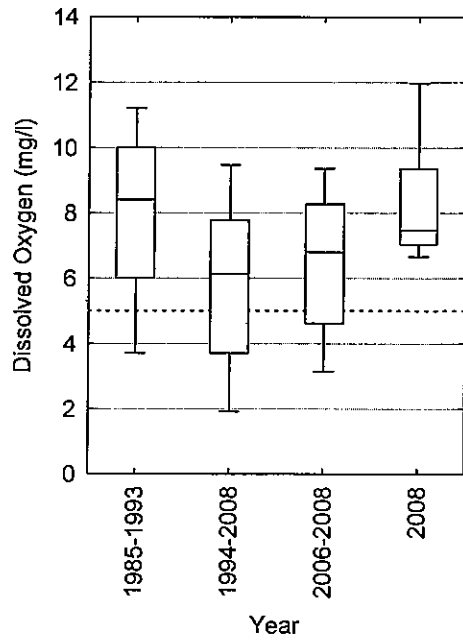
VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	141	115	0.0	3.3	29.1	26.9	2.2	ND
Standard Error	4	1	0.0	0.4	0.5	0.5	0.1	ND
Median	140	110	0.0	2.8	29.0	27.0	2.1	ND
Mode	140	110	0.0	2.6	26.0	29.0	2.1	ND
Standard Deviation	12	8	0.0	1.1	2.9	2.8	0.5	ND
Sample Variance	143	60	0.0	1.1	8.4	8.1	0.2	ND
Kurtosis	0	0	ND	2.5	-1.3	-1.2	1.4	ND
Skewness	0	0	ND	1.6	0.3	0.3	1.2	ND
Range	40	30	0.0	3.0	9.0	9.0	1.9	0.0
Minimum	120	100	0.0	2.6	25.0	23.0	1.5	0.0
Maximum	160	130	0.0	5.6	34.0	32.0	3.4	0.0
Count	10	30	10	8	30	30	30	0
Confidence Level(95.0%)	9	3	0.0	0.9	1.1	1.1	0.2	ND

ND = No Data

Provisional MMSD Water Quality Data

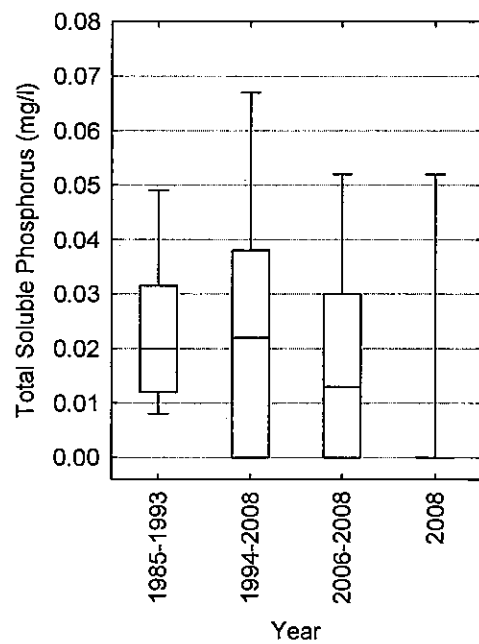
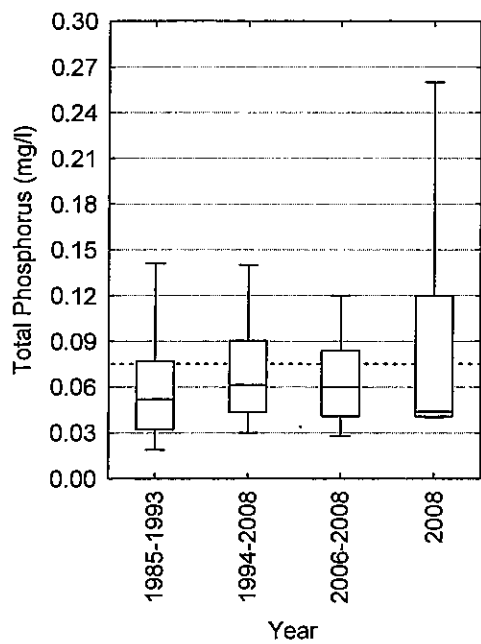
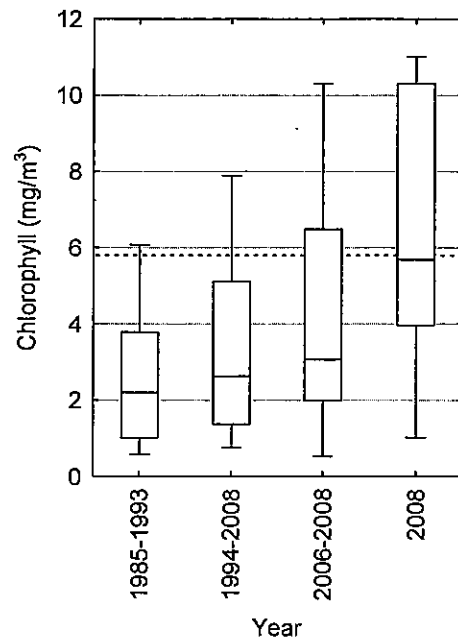
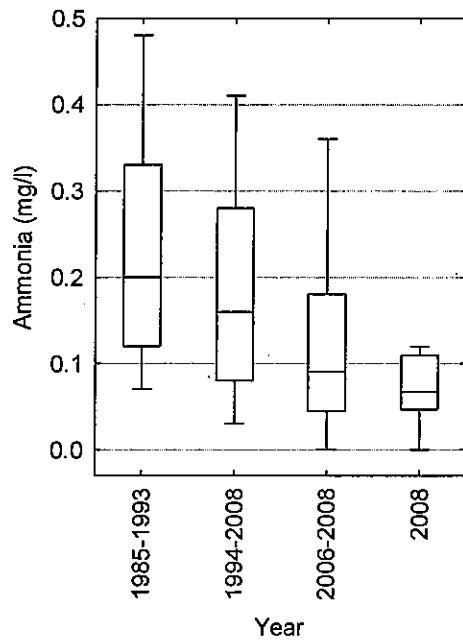


MMSD Water Quality Monitoring Program Data
Oak Creek at Ryan Rd., Site OC-01



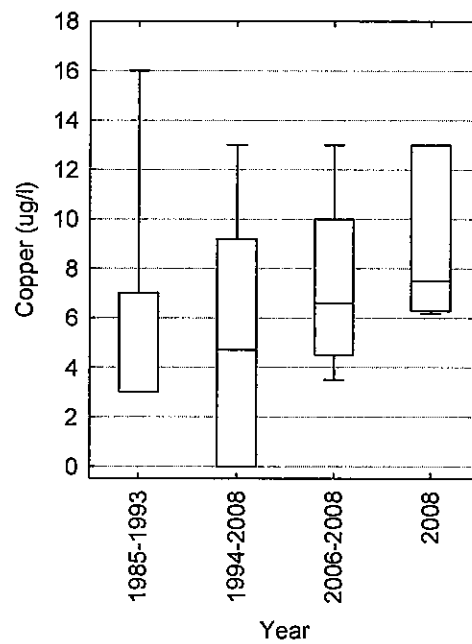
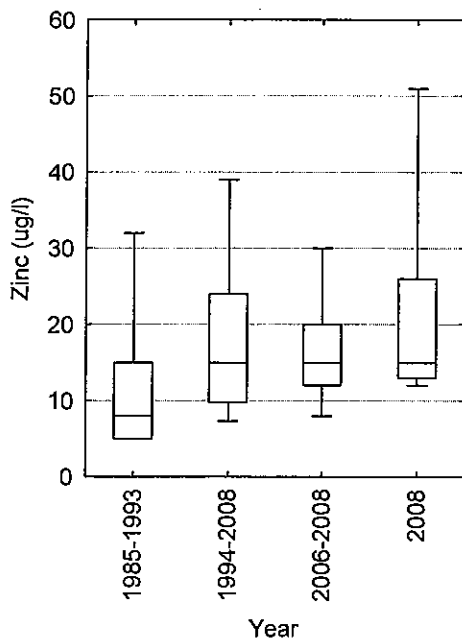
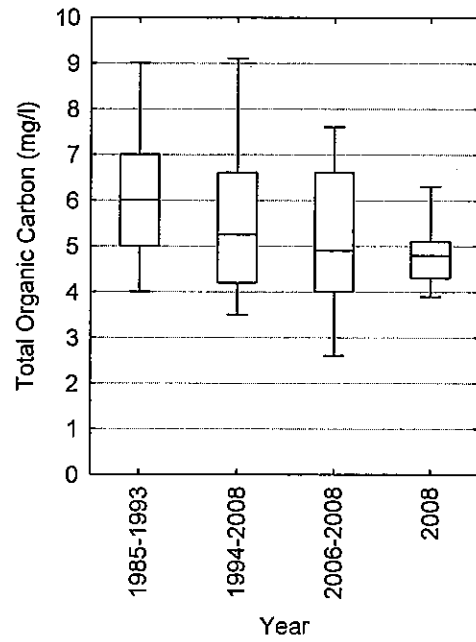
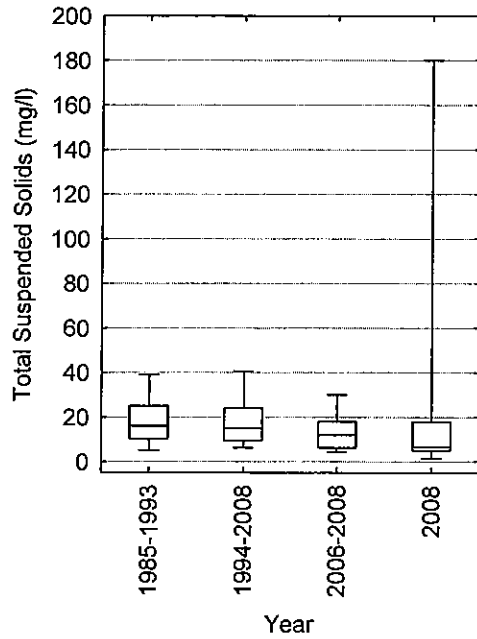
— Median □ 25%-75% ▤ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Oak Creek at Ryan Rd., Site OC-01



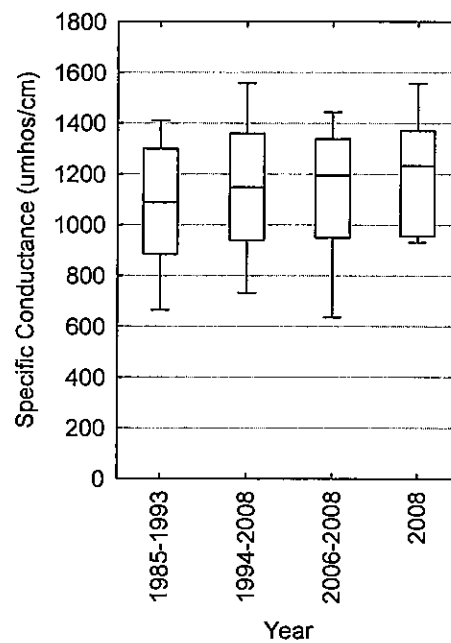
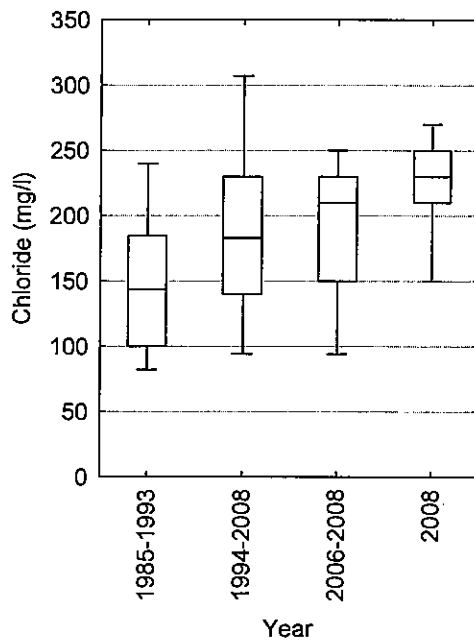
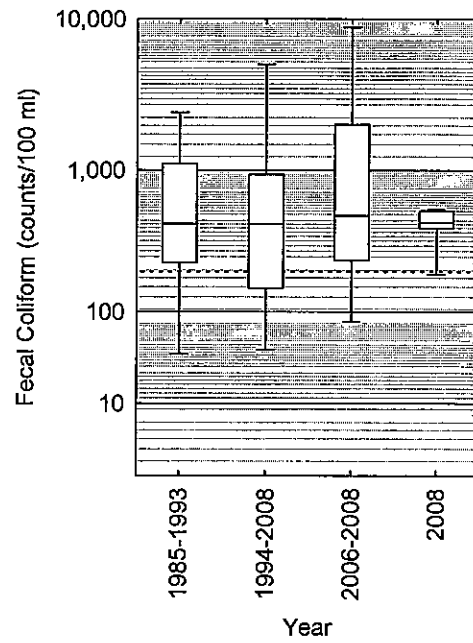
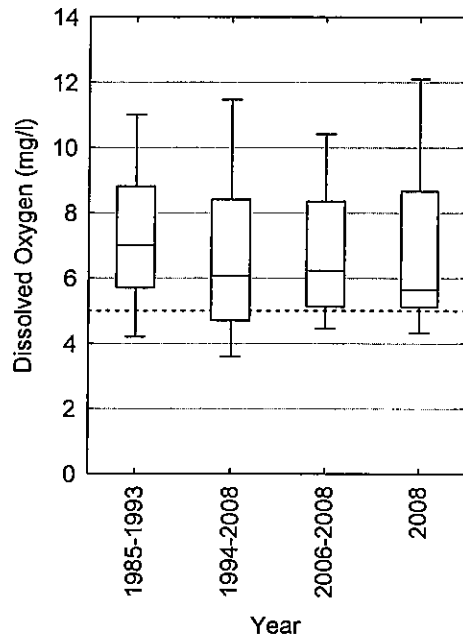
— Median □ 25%-75% ▤ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Oak Creek at Ryan Rd., Site OC-01



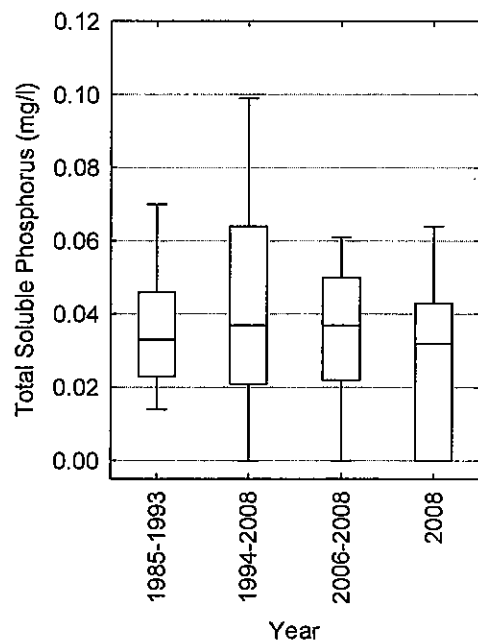
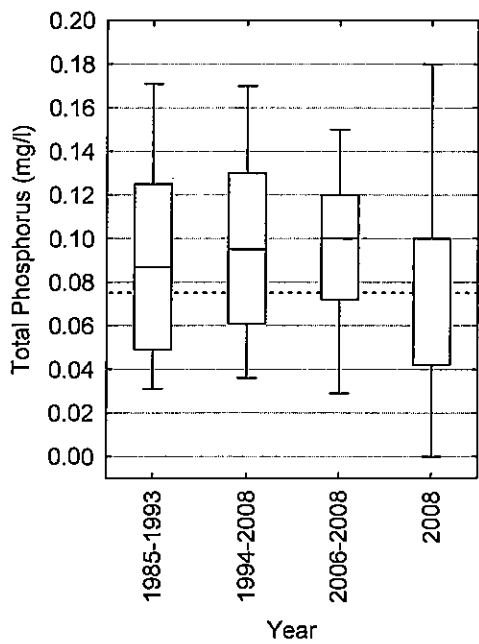
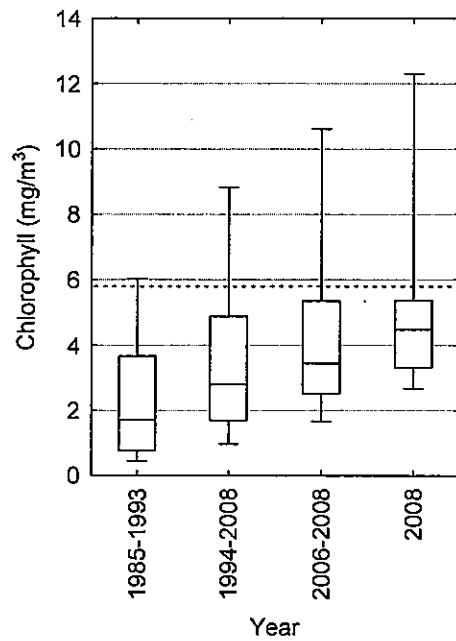
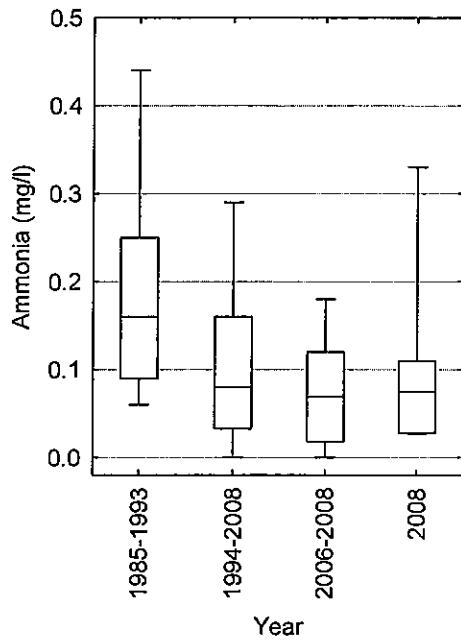
— Median □ 25%-75% ▤ 10%-90%

MMSD Water Quality Monitoring Program Data
Oak Creek at Forest Hill Rd., Site OC-03



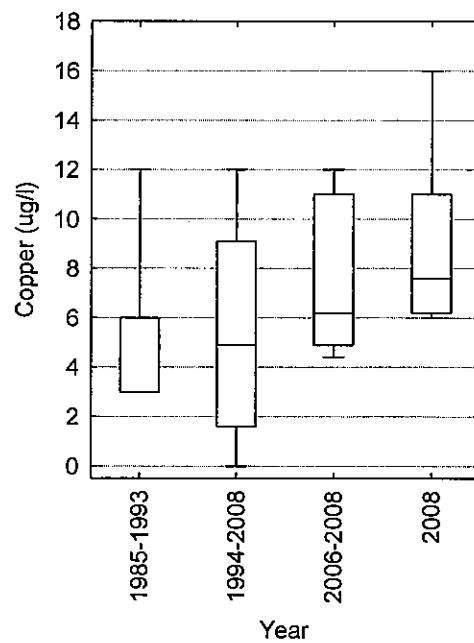
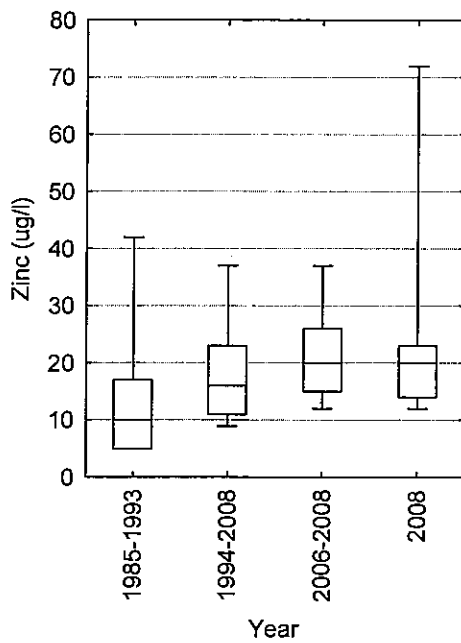
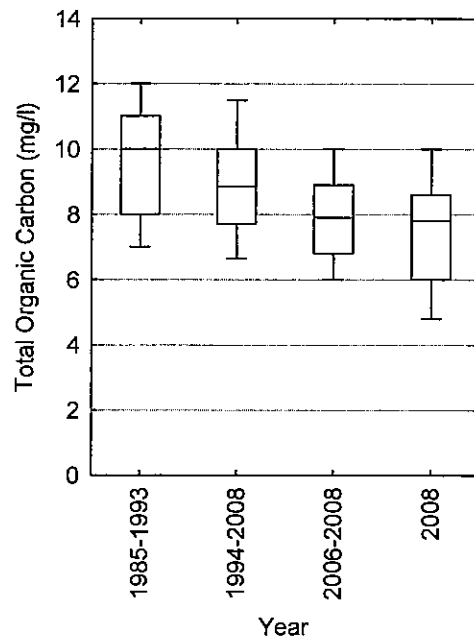
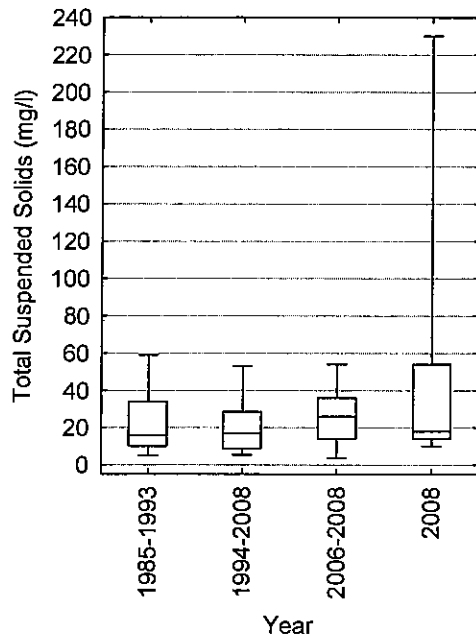
— Median □ 25%-75% ▮ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Oak Creek at Forest Hill Rd., Site OC-03



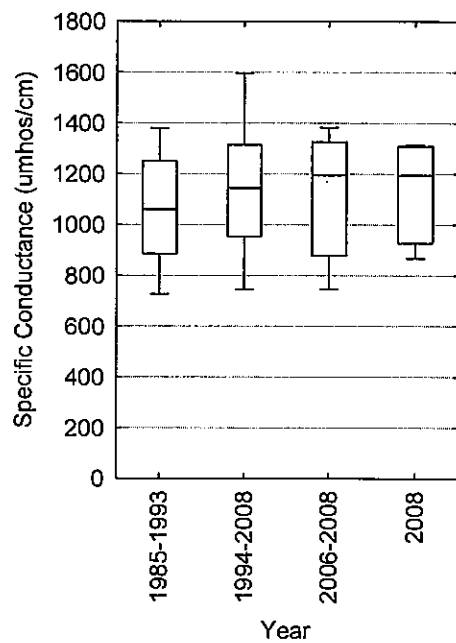
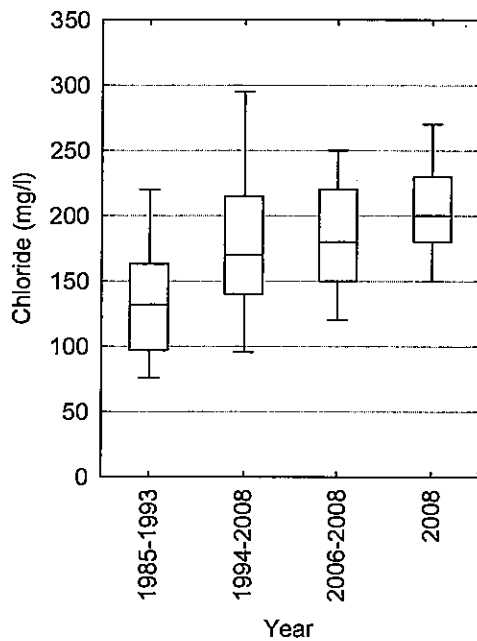
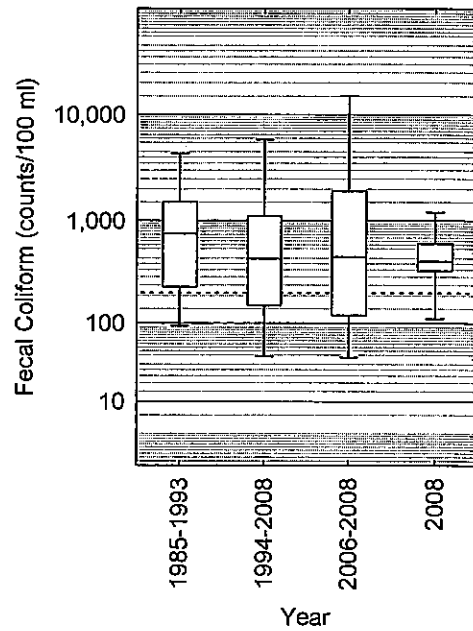
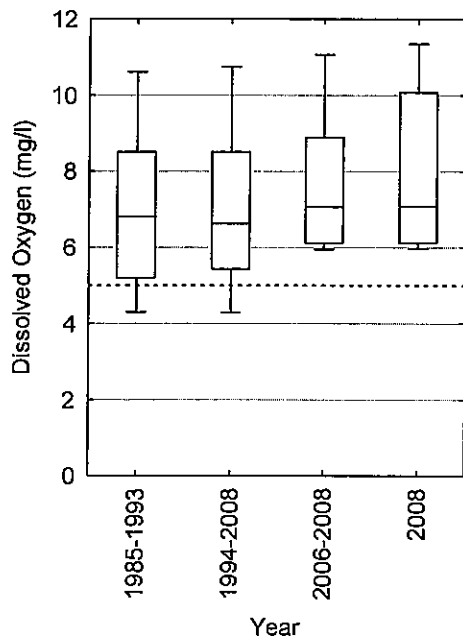
— Median □ 25%-75% ▮ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Oak Creek at Forest Hill Rd., Site OC-03



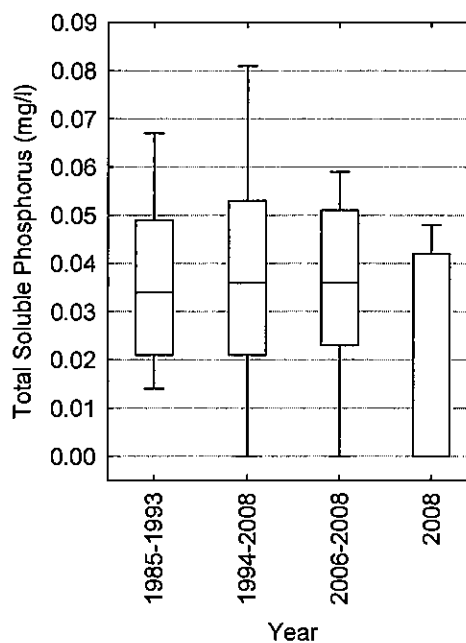
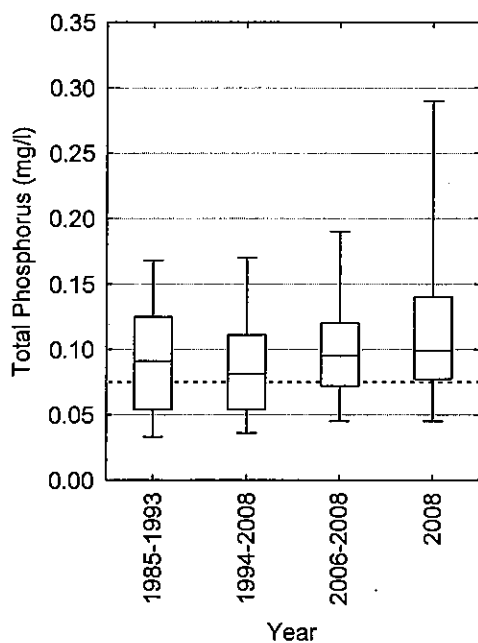
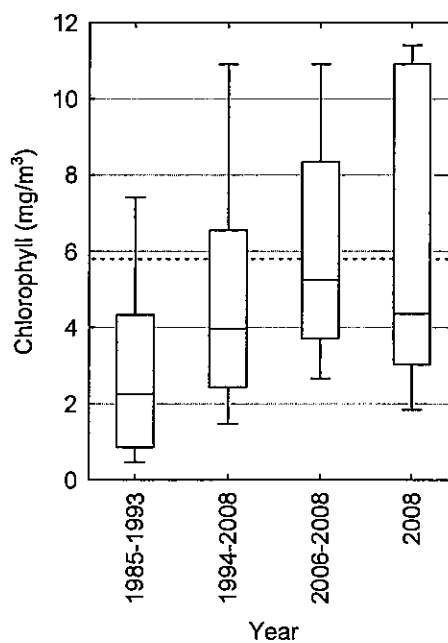
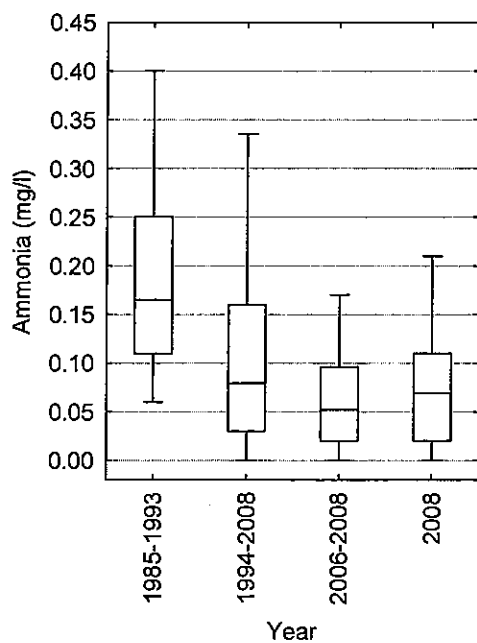
— Median □ 25%-75% ▮ 10%-90%

MMSD Water Quality Monitoring Program Data
Oak Creek at Pennsylvania Ave., Site OC-04



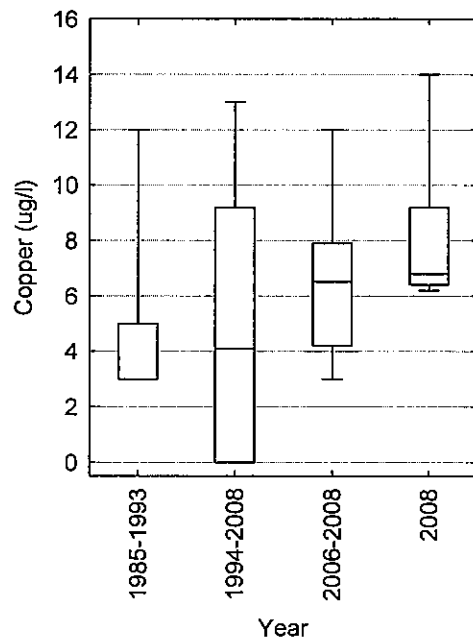
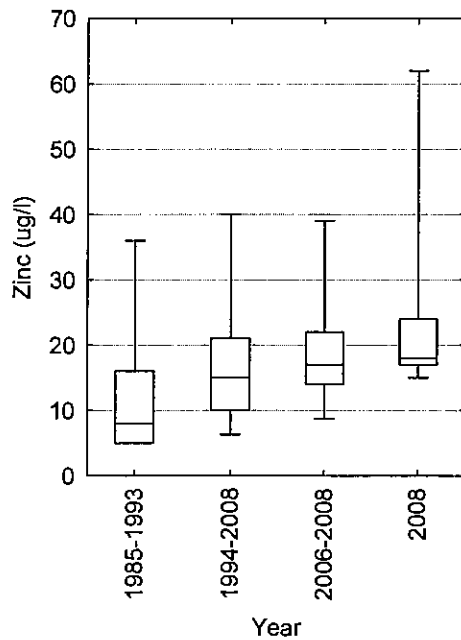
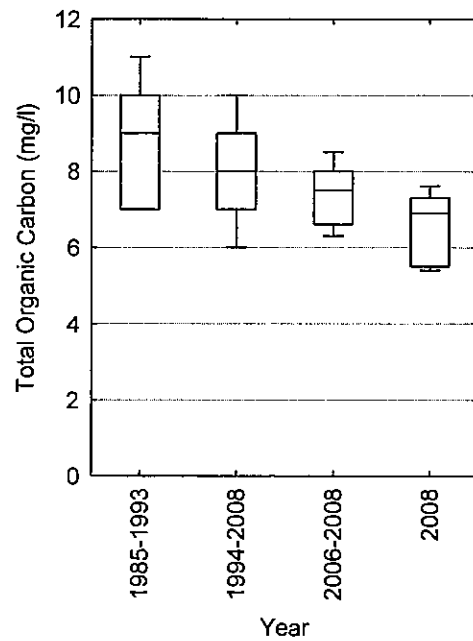
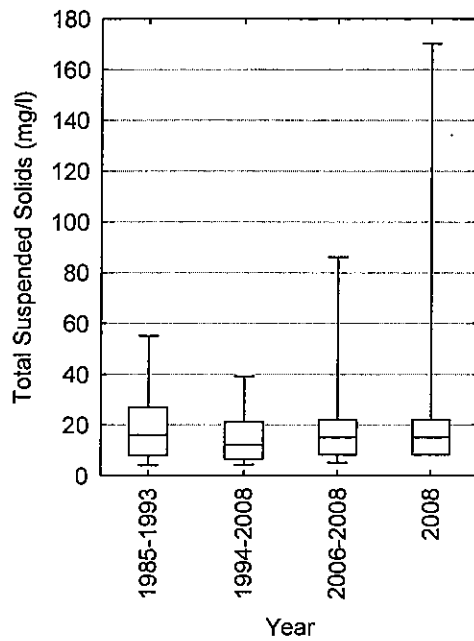
— Median □ 25%-75% ▤ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Oak Creek at Pennsylvania Ave., Site OC-04



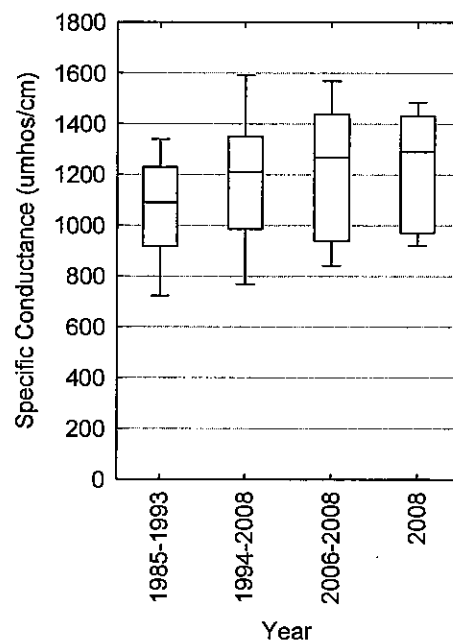
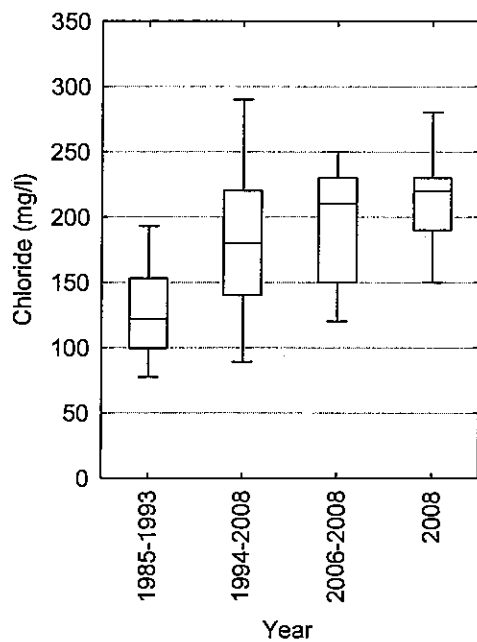
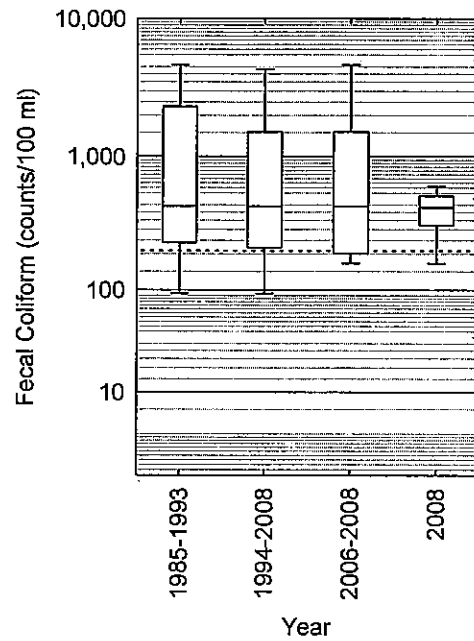
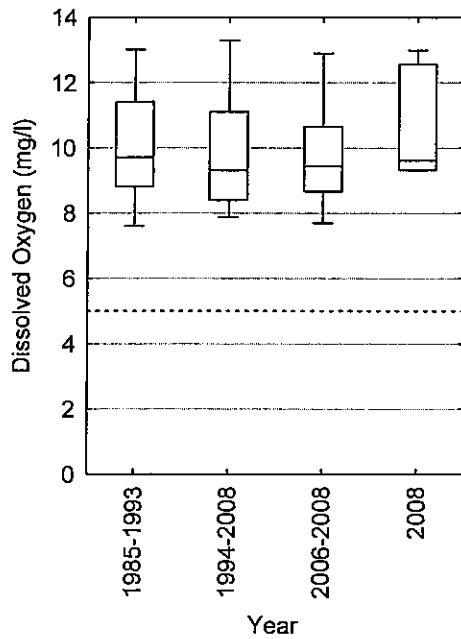
— Median □ 25%-75% ▤ 10%-90%
 — WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Oak Creek at Pennsylvania Ave., Site OC-04



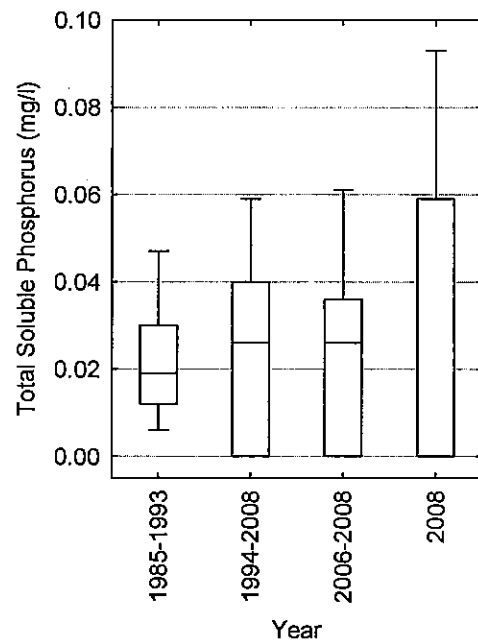
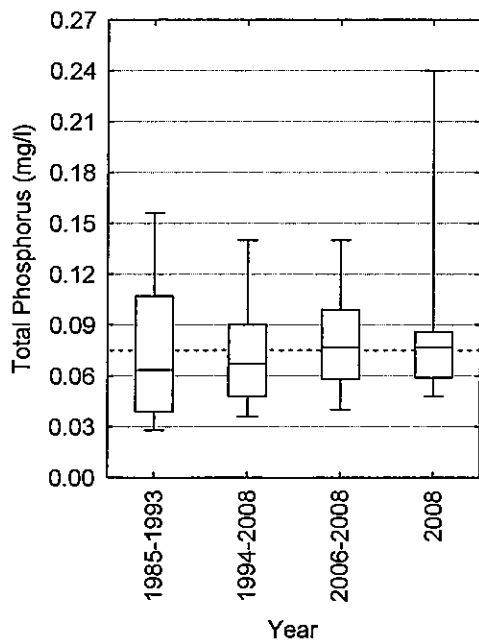
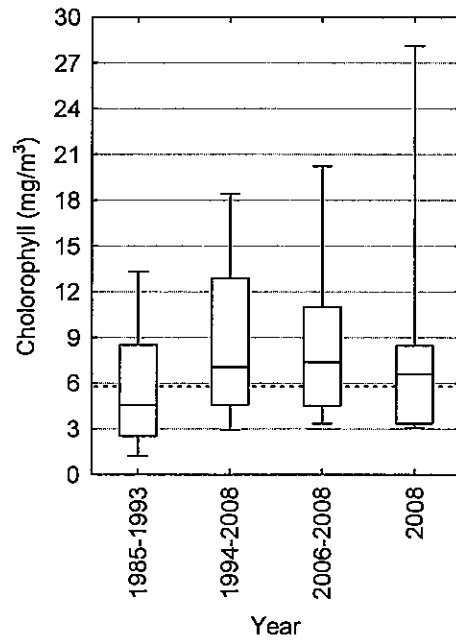
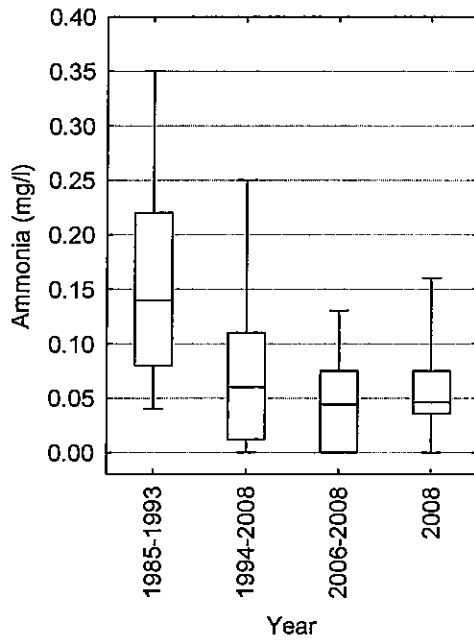
— Median □ 25%-75% ± 10%-90%

MMSD Water Quality Monitoring Program Data
Oak Creek at Oak Creek Pkwy., Site OC-07



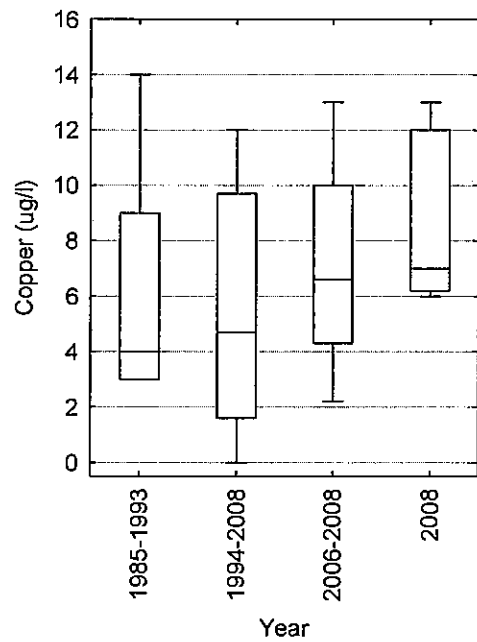
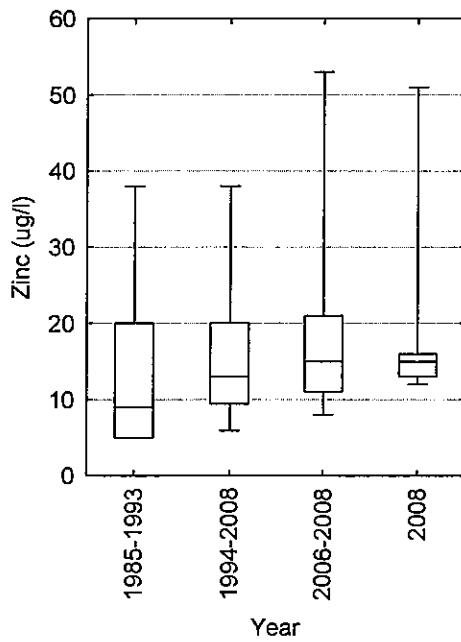
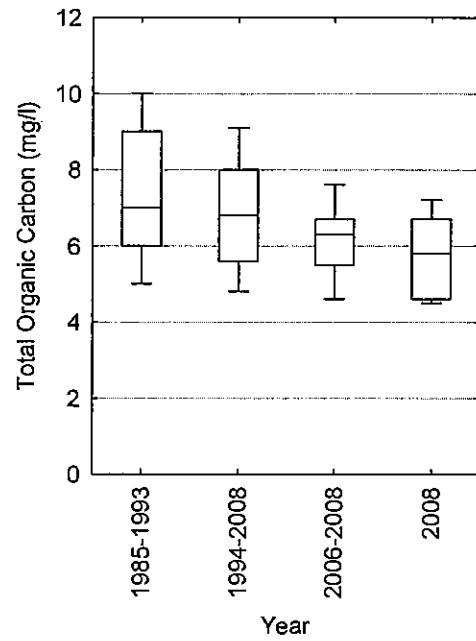
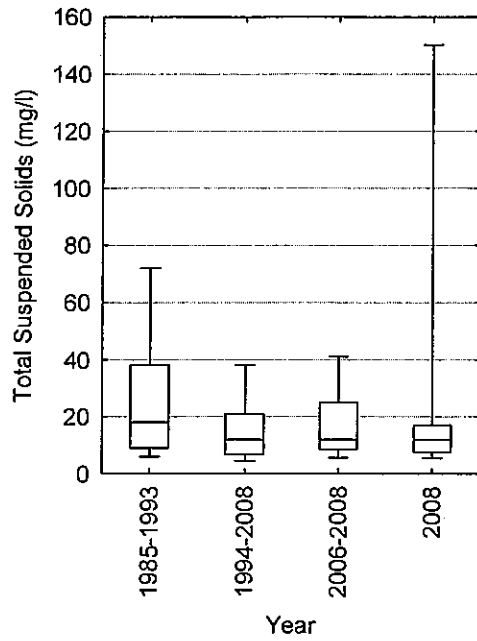
— Median □ 25%-75% ▤ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Oak Creek at Oak Creek Pkwy., Site OC-07



— Median □ 25%-75% ▮ 10%-90%
---- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Oak Creek at Oak Creek Pkwy., Site OC-07



— Median □ 25%-75% ▤ 10%-90%

RYAN ROAD - SITE 1
OAK CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.5	14.0	8.3	6.32	0.65	0.027	0.63	0.070	1.03	0.088	0.007	ND
Standard Error	0.0	2.2	0.7	1.32	0.08	0.011	0.10	0.016	0.57	0.031	0.007	ND
Median	7.5	15.6	7.5	5.68	0.64	0.015	0.68	0.067	0.50	0.044	0.000	ND
Mode	7.5	ND	ND	ND	ND	ND	ND	ND	0.00	ND	0.000	ND
Standard Deviation	0.1	5.9	1.9	3.49	0.21	0.028	0.26	0.043	1.51	0.081	0.020	ND
Sample Variance	0.0	34.4	3.5	12.17	0.04	0.001	0.07	0.002	2.28	0.007	0.000	ND
Kurtosis	-1.5	2.2	1.8	-0.51	1.90	4.832	1.06	-0.566	5.11	4.266	7.000	ND
Skewness	-0.2	-1.6	1.4	0.01	0.66	2.177	0.63	-0.478	2.20	2.075	2.646	ND
Range	0.3	16.4	5.3	9.98	0.63	0.073	0.80	0.120	4.30	0.220	0.052	0.00
Minimum	7.3	2.4	6.7	1.02	0.37	0.010	0.30	0.000	0.00	0.040	0.000	0.00
Maximum	7.6	18.8	12.0	11.00	1.00	0.082	1.10	0.120	4.30	0.260	0.052	0.00
Count	7	7	7	7	6	6	7	7	7	7	7	0
Confidence Level(95.0%)	0.1	5.4	1.7	3.23	0.22	0.029	0.24	0.039	1.40	0.075	0.018	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	791.4	758.1	5.8	33.3	39.6	1248	209.4	434	2.5	ND
Standard Error	ND	ND	58.9	77.7	3.3	24.6	30.3	156	27.4	126	0.1	ND
Median	ND	ND	790.0	783.8	4.0	6.6	6.8	1354	240.0	400	2.6	ND
Mode	ND	ND	ND	ND	4.0	ND	ND	ND	ND	ND	ND	ND
Standard Deviation	ND	ND	155.7	205.5	8.6	65.0	80.2	414	72.4	333	0.4	ND
Sample Variance	ND	ND	24247.6	42212.7	74.5	4220.0	6427.3	171276	5242.3	110895	0.1	ND
Kurtosis	ND	ND	-0.7	1.4	6.2	6.8	6.9	1	0.8	3	0.4	ND
Skewness	ND	ND	-0.3	-1.2	2.5	2.6	2.6	-1	-1.2	1	-0.5	ND
Range	0.0	0.0	440.0	602.0	25.0	178.6	216.4	1242	204.0	1020	1.1	0
Minimum	0.0	0.0	550.0	370.0	0.0	1.4	4.6	486	76.0	80	1.9	0
Maximum	0.0	0.0	990.0	972.0	25.0	180.0	221.0	1728	280.0	1100	3.0	0
Count	0	0	7	7	7	7	7	7	7	7	7	0
Confidence Level(95.0%)	ND	ND	144.0	190.0	8.0	60.1	74.1	383	67.0	308	0.3	ND

ND = No Data

Provisional MMSD Water Quality Data

RYAN ROAD - SITE 1
OAK CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	78.43	36.29	0.0	4.7	8.8	5.0	0.9	21.4	0.8	1.5	4.2	ND
Standard Error	8.47	4.09	0.0	1.9	1.1	1.1	0.4	5.3	0.4	1.1	2.0	ND
Median	84.00	40.00	0.0	4.5	7.5	3.4	0.0	15.0	0.0	0.0	0.0	ND
Mode	ND	ND	0.0	4.6	13.0	ND	0.0	ND	0.0	0.0	0.0	ND
Standard Deviation	22.40	10.83	0.0	5.0	3.0	3.0	1.2	13.9	1.1	2.9	5.3	ND
Sample Variance	501.62	117.24	0.0	25.1	8.7	9.0	1.3	193.0	1.2	8.1	28.0	ND
Kurtosis	0.88	0.17	ND	3.7	-1.0	-0.9	-2.0	4.4	0.2	2.6	-2.5	ND
Skewness	-1.21	-1.08	ND	1.6	1.0	1.1	0.6	2.1	1.1	1.8	0.5	ND
Range	63.00	29.00	0.0	15.0	6.8	6.8	2.6	39.0	2.8	7.3	11.0	0.0
Minimum	37.00	17.00	0.0	0.0	6.2	2.7	0.0	12.0	0.0	0.0	0.0	0.0
Maximum	100.00	46.00	0.0	15.0	13.0	9.5	2.6	51.0	2.8	7.3	11.0	0.0
Count	7	7	7	7	7	7	7	7	7	7	7	0
Confidence Level(95.0%)	20.71	10.01	0.0	4.6	2.7	2.8	1.1	12.8	1.0	2.6	4.9	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	346	231	1.2	5.5	63.0	58.4	4.8	4.8
Standard Error	38	28	1.2	0.7	6.6	6.9	0.3	0.4
Median	370	250	0.0	5.0	65.0	61.0	4.8	4.5
Mode	420	250	0.0	ND	65.0	ND	ND	ND
Standard Deviation	101	74	3.1	1.6	17.5	18.4	0.8	0.9
Sample Variance	10129	5414	9.4	2.7	307.0	337.0	0.6	0.9
Kurtosis	1	3	7.0	4.0	1.8	1.3	2.3	3.6
Skewness	-1	-2	2.6	1.9	-0.8	-0.6	1.1	1.7
Range	280	220	8.1	4.4	57.0	59.0	2.4	2.9
Minimum	160	80	0.0	4.3	31.0	26.0	3.9	3.8
Maximum	440	300	8.1	8.7	88.0	85.0	6.3	6.7
Count	7	7	7	6	7	7	7	7
Confidence Level(95.0%)	93	68	2.8	1.7	16.2	17.0	0.7	0.9

ND = No Data

Provisional MMSD Water Quality Data

HIGHWAY 38 - SITE 2
OAK CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.6	14.0	8.5	5.04	0.38	0.023	0.37	0.051	0.51	0.054	0.010	ND
Standard Error	0.1	2.4	1.0	1.64	0.06	0.008	0.06	0.019	0.06	0.014	0.006	ND
Median	7.6	14.7	7.0	3.06	0.41	0.015	0.35	0.043	0.45	0.070	0.000	ND
Mode	7.6	ND	ND	ND	ND	0.013	0.35	ND	0.45	0.000	0.000	ND
Standard Deviation	0.1	6.3	2.6	4.35	0.14	0.019	0.15	0.050	0.16	0.037	0.017	ND
Sample Variance	0.0	40.2	6.5	18.92	0.02	0.000	0.02	0.003	0.03	0.001	0.000	ND
Kurtosis	2.8	1.1	-1.1	5.22	0.89	4.582	-1.40	2.373	5.11	-0.889	-0.645	ND
Skewness	-0.3	-1.2	0.9	2.23	-1.16	2.126	-0.37	1.481	2.16	-1.153	1.261	ND
Range	0.5	17.6	6.0	12.34	0.35	0.048	0.40	0.150	0.48	0.084	0.037	0.00
Minimum	7.3	2.2	6.4	2.16	0.14	0.012	0.15	0.000	0.38	0.000	0.000	0.00
Maximum	7.8	19.8	12.4	14.50	0.49	0.060	0.55	0.150	0.86	0.084	0.037	0.00
Count	7	7	7	7	6	6	7	7	7	7	7	0
Confidence Level(95.0%)	0.1	5.9	2.4	4.02	0.14	0.020	0.14	0.046	0.15	0.034	0.016	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	785.7	748.6	8.1	37.1	33.2	1265	240.0	315	2.4	ND
Standard Error	ND	ND	61.8	75.7	4.4	22.4	17.7	129	23.7	70	0.1	ND
Median	ND	ND	800.0	782.0	3.0	18.0	19.9	1336	270.0	290	2.5	ND
Mode	ND	ND	920.0	ND	3.0	ND	ND	ND	280.0	ND	ND	ND
Standard Deviation	ND	ND	163.6	200.3	11.7	59.2	46.8	343	62.7	185	0.3	ND
Sample Variance	ND	ND	26761.9	40100.2	135.9	3499.1	2187.9	117346	3933.3	34399	0.1	ND
Kurtosis	ND	ND	-1.5	-0.4	6.1	6.6	6.5	0	-1.3	-2	-0.7	ND
Skewness	ND	ND	-0.5	-0.9	2.4	2.5	2.5	-1	-0.7	0	-0.7	ND
Range	0.0	0.0	400.0	521.0	32.6	166.2	134.2	983	160.0	463	0.8	0
Minimum	0.0	0.0	560.0	410.0	1.4	3.8	3.8	706	150.0	77	1.9	0
Maximum	0.0	0.0	960.0	931.0	34.0	170.0	138.0	1689	310.0	540	2.7	0
Count	0	0	7	7	7	7	7	7	7	7	7	0
Confidence Level(95.0%)	ND	ND	151.3	185.2	10.8	54.7	43.3	317	58.0	172	0.3	ND

ND = No Data

Provisional MMSD Water Quality Data

HIGHWAY 38 - SITE 2
OAK CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	70.57	31.57	0.0	5.7	9.1	4.9	0.7	24.0	0.5	1.1	3.0	ND
Standard Error	6.02	2.96	0.0	1.1	1.1	0.8	0.5	7.6	0.4	0.8	1.5	ND
Median	72.00	34.00	0.0	4.8	7.6	3.9	0.0	18.0	0.0	0.0	0.0	ND
Mode	72.00	ND	0.0	ND	ND	ND	0.0	18.0	0.0	0.0	0.0	ND
Standard Deviation	15.93	7.83	0.0	2.9	3.0	2.1	1.3	20.1	0.9	2.0	3.9	ND
Sample Variance	253.62	61.29	0.0	8.2	8.8	4.2	1.8	404.0	0.9	4.0	15.1	ND
Kurtosis	1.42	-0.06	ND	5.7	-0.8	-1.8	3.3	6.5	1.1	1.0	-2.1	ND
Skewness	-1.00	-0.89	ND	2.4	0.9	0.7	1.9	2.5	1.5	1.5	0.6	ND
Range	49.00	22.00	0.0	8.1	7.5	4.7	3.5	59.0	2.3	4.9	8.3	0.0
Minimum	41.00	18.00	0.0	3.9	6.5	3.1	0.0	10.0	0.0	0.0	0.0	0.0
Maximum	90.00	40.00	0.0	12.0	14.0	7.8	3.5	69.0	2.3	4.9	8.3	0.0
Count	7	7	7	7	7	7	7	7	7	7	7	0
Confidence Level(95.0%)	14.73	7.24	0.0	2.6	2.7	1.9	1.2	18.6	0.9	1.9	3.6	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	307	211	0.9	5.6	58.7	53.1	5.6	5.5
Standard Error	26	24	0.9	0.6	6.3	6.3	0.3	0.3
Median	330	220	0.0	5.0	62.0	56.0	5.6	5.6
Mode	330	220	0.0	5.0	ND	ND	ND	ND
Standard Deviation	70	64	2.4	1.4	16.8	16.8	0.7	0.7
Sample Variance	4857	4045	5.7	1.9	282.2	282.1	0.5	0.5
Kurtosis	1	2	7.0	3.6	1.1	1.0	-1.2	-0.2
Skewness	-1	-1	2.6	1.9	-0.4	-0.3	0.1	-0.1
Range	210	194	6.3	3.7	54.0	54.0	1.9	2.2
Minimum	180	86	0.0	4.5	30.0	25.0	4.7	4.4
Maximum	390	280	6.3	8.2	84.0	79.0	6.6	6.6
Count	7	7	7	6	7	7	7	7
Confidence Level(95.0%)	64	59	2.2	1.4	15.5	15.5	0.6	0.7

ND = No Data

Provisional MMSD Water Quality Data

FOREST HILL ROAD - SITE 3
OAK CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.5	14.6	7.1	5.29	0.39	0.032	0.38	0.103	0.76	0.085	0.025	ND
Standard Error	0.0	2.4	1.0	1.22	0.07	0.010	0.08	0.039	0.13	0.021	0.010	ND
Median	7.5	16.0	5.6	4.47	0.41	0.020	0.43	0.075	0.61	0.100	0.032	ND
Mode	ND	ND	ND	ND	ND	0.019	ND	ND	ND	0.100	0.000	ND
Standard Deviation	0.1	6.4	2.7	3.22	0.17	0.025	0.20	0.104	0.34	0.056	0.025	ND
Sample Variance	0.0	41.0	7.5	10.38	0.03	0.001	0.04	0.011	0.12	0.003	0.001	ND
Kurtosis	2.3	1.0	0.6	5.32	-0.38	1.503	-1.13	5.298	0.91	1.042	-1.292	ND
Skewness	-1.4	-1.2	1.1	2.20	-0.49	1.496	0.01	2.208	1.24	0.227	0.325	ND
Range	0.3	18.0	7.8	9.64	0.46	0.064	0.55	0.303	0.94	0.180	0.064	0.00
Minimum	7.3	2.7	4.3	2.66	0.13	0.012	0.12	0.027	0.46	0.000	0.000	0.00
Maximum	7.6	20.8	12.1	12.30	0.59	0.076	0.67	0.330	1.40	0.180	0.064	0.00
Count	7	7	7	7	6	6	7	7	7	7	7	0
Confidence Level(95.0%)	0.1	5.9	2.5	2.98	0.18	0.026	0.19	0.097	0.32	0.052	0.023	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	788.6	735.1	10.0	53.4	56.7	1226	224.3	431	2.6	ND
Standard Error	ND	ND	46.1	54.3	5.3	30.0	33.5	85	14.3	45	0.1	ND
Median	ND	ND	770.0	728.0	4.2	18.0	22.0	1234	230.0	440	2.6	ND
Mode	ND	ND	ND	ND	ND	ND	ND	ND	230.0	ND	ND	ND
Standard Deviation	ND	ND	121.9	143.8	14.1	79.3	88.6	225	37.8	119	0.2	ND
Sample Variance	ND	ND	14847.6	20665.1	198.8	6289.0	7855.7	50741	1428.6	14048	0.0	ND
Kurtosis	ND	ND	0.0	-1.6	5.7	6.2	6.6	-1	2.7	3	5.0	ND
Skewness	ND	ND	-0.3	-0.2	2.3	2.5	2.6	0	-1.3	-2	-2.1	ND
Range	0.0	0.0	370.0	366.0	41.0	220.0	247.4	626	120.0	350	0.5	0
Minimum	0.0	0.0	590.0	540.0	0.0	10.0	8.6	932	150.0	190	2.3	0
Maximum	0.0	0.0	960.0	906.0	41.0	230.0	256.0	1558	270.0	540	2.7	0
Count	0	0	7	7	7	7	7	7	7	7	7	0
Confidence Level(95.0%)	ND	ND	112.7	133.0	13.0	73.3	82.0	208	35.0	110	0.1	ND

ND = No Data

Provisional MMSD Water Quality Data

FOREST HILL ROAD - SITE 3
OAK CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	69.00	30.14	0.0	6.4	8.9	5.2	0.6	25.7	0.5	1.4	3.7	ND
Standard Error	5.40	2.38	0.0	1.3	1.3	0.9	0.6	7.9	0.3	1.0	1.8	ND
Median	68.00	32.00	0.0	4.9	7.6	4.2	0.0	20.0	0.0	0.0	0.0	ND
Mode	ND	32.00	0.0	4.9	ND	ND	0.0	ND	0.0	0.0	0.0	ND
Standard Deviation	14.28	6.31	0.0	3.5	3.5	2.5	1.5	20.8	0.9	2.6	4.6	ND
Sample Variance	204.00	39.81	0.0	12.3	12.6	6.0	2.2	432.9	0.8	6.9	21.4	ND
Kurtosis	-0.78	-1.10	ND	5.0	2.7	-0.9	7.0	6.2	1.3	4.0	-2.6	ND
Skewness	0.30	-0.40	ND	2.2	1.7	1.0	2.6	2.4	1.6	2.1	0.4	ND
Range	39.00	17.00	0.0	10.0	10.0	6.1	3.9	60.0	2.2	6.9	9.3	0.0
Minimum	52.00	21.00	0.0	4.0	6.0	2.8	0.0	12.0	0.0	0.0	0.0	0.0
Maximum	91.00	38.00	0.0	14.0	16.0	8.9	3.9	72.0	2.2	6.9	9.3	0.0
Count	7	7	7	7	7	7	7	7	7	7	7	0
Confidence Level(95.0%)	13.21	5.84	0.0	3.2	3.3	2.3	1.4	19.2	0.8	2.4	4.3	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	296	207	1.2	6.5	60.3	52.6	7.4	7.2
Standard Error	22	22	0.9	0.6	6.8	6.0	0.7	0.7
Median	290	220	0.0	6.5	61.0	55.0	7.8	7.2
Mode	290	220	0.0	4.9	ND	55.0	ND	ND
Standard Deviation	58	59	2.5	1.6	18.0	16.0	1.8	1.8
Sample Variance	3395	3490	6.2	2.5	322.9	256.0	3.1	3.3
Kurtosis	-1	1	4.8	0.7	1.4	1.2	-0.7	-0.3
Skewness	0	-1	2.2	0.8	0.5	0.6	-0.1	0.0
Range	160	180	6.6	4.2	58.0	51.0	5.2	5.5
Minimum	220	100	0.0	4.9	34.0	30.0	4.8	4.5
Maximum	380	280	6.6	9.1	92.0	81.0	10.0	10.0
Count	7	7	7	6	7	7	7	7
Confidence Level(95.0%)	54	55	2.3	1.6	16.6	14.8	1.6	1.7

ND = No Data

Provisional MMSD Water Quality Data

PENNSYLVANIA AVENUE - SITE 4
OAK CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.5	14.5	7.9	5.66	0.42	0.031	0.41	0.076	0.84	0.122	0.018	ND
Standard Error	0.0	2.3	0.8	1.47	0.05	0.009	0.06	0.027	0.18	0.030	0.009	ND
Median	7.6	14.9	7.1	4.36	0.45	0.021	0.48	0.069	0.72	0.099	0.000	ND
Mode	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000	ND
Standard Deviation	0.1	6.1	2.1	3.88	0.13	0.023	0.17	0.071	0.48	0.080	0.023	ND
Sample Variance	0.0	37.3	4.3	15.04	0.02	0.001	0.03	0.005	0.23	0.006	0.001	ND
Kurtosis	-0.8	1.2	-0.7	-0.98	2.63	-1.795	-0.97	1.536	2.76	4.067	-2.609	ND
Skewness	-0.4	-1.3	0.9	0.97	-1.53	0.867	-0.79	1.170	1.66	1.870	0.426	ND
Range	0.4	17.0	5.4	9.56	0.36	0.050	0.45	0.210	1.38	0.245	0.048	0.00
Minimum	7.4	3.0	6.0	1.84	0.18	0.012	0.15	0.000	0.42	0.045	0.000	0.00
Maximum	7.7	20.0	11.3	11.40	0.54	0.062	0.60	0.210	1.80	0.290	0.048	0.00
Count	7	7	7	7	6	6	7	7	7	7	7	0
Confidence Level(95.0%)	0.1	5.6	1.9	3.59	0.14	0.024	0.16	0.065	0.44	0.074	0.021	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	721.4	685.4	6.8	36.1	31.0	1148	204.3	490	2.6	ND
Standard Error	ND	ND	35.2	48.4	3.5	22.4	16.6	68	14.9	131	0.1	ND
Median	ND	ND	700.0	681.0	3.8	15.0	16.2	1195	200.0	410	2.6	ND
Mode	ND	ND	ND	ND	ND	8.2	ND	ND	180.0	330	2.5	ND
Standard Deviation	ND	ND	93.2	128.0	9.4	59.3	43.8	180	39.5	346	0.3	ND
Sample Variance	ND	ND	8681.0	16388.4	88.1	3517.3	1917.8	32261	1561.9	119967	0.1	ND
Kurtosis	ND	ND	-1.5	0.0	6.8	6.8	6.8	-1	0.1	4	1.9	ND
Skewness	ND	ND	0.6	-0.5	2.6	2.6	2.6	-1	0.4	2	-0.5	ND
Range	0.0	0.0	230.0	371.8	26.2	161.8	121.3	449	120.0	1090	1.0	0
Minimum	0.0	0.0	620.0	470.0	1.8	8.2	8.8	866	150.0	110	2.0	0
Maximum	0.0	0.0	850.0	841.8	28.0	170.0	130.0	1315	270.0	1200	3.1	0
Count	0	0	7	7	7	7	7	7	7	7	7	0
Confidence Level(95.0%)	ND	ND	86.2	118.4	8.7	54.8	40.5	166	36.6	320	0.3	ND

ND = No Data

Provisional MMSD Water Quality Data

PENNSYLVANIA AVENUE - SITE 4
OAK CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	68.57	29.57	0.0	5.9	8.1	4.7	0.5	25.0	0.5	2.0	5.4	ND
Standard Error	5.43	2.28	0.0	1.1	1.1	0.7	0.5	6.3	0.3	1.3	1.7	ND
Median	69.00	29.00	0.0	5.0	6.8	5.0	0.0	18.0	0.0	0.0	5.3	ND
Mode	ND	22.00	0.0	4.2	ND	ND	0.0	17.0	0.0	0.0	0.0	ND
Standard Deviation	14.37	6.02	0.0	2.8	2.8	1.9	1.3	16.6	0.9	3.4	4.4	ND
Sample Variance	206.62	36.29	0.0	8.0	7.8	3.6	1.8	276.0	0.7	11.5	19.5	ND
Kurtosis	-0.92	-1.37	ND	5.2	4.1	-1.0	7.0	6.2	1.0	-0.8	-0.7	ND
Skewness	0.07	-0.19	ND	2.2	2.0	0.2	2.6	2.5	1.5	1.2	0.0	ND
Range	40.00	15.00	0.0	7.9	7.8	5.3	3.5	47.0	2.1	7.2	12.0	0.0
Minimum	49.00	22.00	0.0	4.1	6.2	2.3	0.0	15.0	0.0	0.0	0.0	0.0
Maximum	89.00	37.00	0.0	12.0	14.0	7.6	3.5	62.0	2.1	7.2	12.0	0.0
Count	7	7	7	7	7	7	7	7	7	7	7	0
Confidence Level(95.0%)	13.29	5.57	0.0	2.6	2.6	1.7	1.2	15.4	0.8	3.1	4.1	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	291	214	1.9	6.5	59.3	52.7	6.6	6.5
Standard Error	23	22	1.3	0.6	5.3	5.4	0.3	0.3
Median	290	230	0.0	6.1	60.0	54.0	6.9	7.0
Mode	ND	230	0.0	ND	ND	ND	7.3	5.3
Standard Deviation	62	58	3.4	1.6	14.0	14.2	0.9	0.9
Sample Variance	3848	3362	11.3	2.4	195.6	201.2	0.8	0.8
Kurtosis	-1	1	5.1	0.5	0.9	0.4	-1.7	-1.6
Skewness	0	-1	2.2	1.1	-0.6	-0.4	-0.5	-0.6
Range	160	170	9.2	4.1	44.0	44.0	2.2	2.2
Minimum	210	110	0.0	5.0	35.0	29.0	5.4	5.3
Maximum	370	280	9.2	9.1	79.0	73.0	7.6	7.5
Count	7	7	7	6	7	7	7	7
Confidence Level(95.0%)	57	54	3.1	1.6	12.9	13.1	0.8	0.8

ND = No Data

Provisional MMSD Water Quality Data

15TH AVENUE - SITE 5
OAK CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.5	14.0	8.5	6.01	0.63	0.028	0.62	0.073	1.00	0.132	0.044	ND
Standard Error	0.1	2.2	0.7	1.31	0.02	0.007	0.05	0.030	0.51	0.030	0.029	ND
Median	7.5	14.8	8.3	4.72	0.65	0.023	0.64	0.053	0.51	0.090	0.000	ND
Mode	ND	ND	ND	ND	0.66	ND	ND	ND	ND	ND	0.000	ND
Standard Deviation	0.1	5.9	1.9	3.47	0.06	0.018	0.13	0.080	1.36	0.079	0.077	ND
Sample Variance	0.0	34.9	3.7	12.01	0.00	0.000	0.02	0.006	1.85	0.006	0.006	ND
Kurtosis	-1.3	2.0	-0.8	-0.72	-0.82	-2.159	2.58	3.820	5.78	-0.995	4.953	ND
Skewness	0.2	-1.5	0.9	0.79	-0.24	0.546	-1.44	1.847	2.35	1.053	2.176	ND
Range	0.4	16.9	4.9	9.08	0.16	0.040	0.41	0.240	4.00	0.185	0.210	0.00
Minimum	7.3	2.4	6.7	2.62	0.55	0.011	0.35	0.000	0.00	0.065	0.000	0.00
Maximum	7.7	19.4	11.7	11.70	0.71	0.051	0.76	0.240	4.00	0.250	0.210	0.00
Count	7	7	7	7	6	6	7	7	7	7	7	0
Confidence Level(95.0%)	0.1	5.5	1.8	3.20	0.06	0.019	0.12	0.074	1.26	0.073	0.071	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	771.4	738.7	6.2	32.7	26.1	1219	212.9	697	2.8	ND
Standard Error	ND	ND	53.6	66.7	3.0	21.3	14.5	78	13.0	105	0.1	ND
Median	ND	ND	720.0	713.8	4.0	14.0	12.7	1267	220.0	645	2.8	ND
Mode	ND	ND	720.0	ND	4.0	ND	ND	ND	200.0	1000	3.0	ND
Standard Deviation	ND	ND	141.7	176.5	8.0	56.4	38.4	207	34.5	258	0.2	ND
Sample Variance	ND	ND	20081.0	31157.6	63.5	3181.1	1476.4	42734	1190.5	66667	0.0	ND
Kurtosis	ND	ND	-1.6	-0.3	6.3	6.8	6.9	-1	1.0	-2	-1.6	ND
Skewness	ND	ND	0.3	-0.4	2.5	2.6	2.6	-1	-0.8	0	-0.1	ND
Range	0.0	0.0	360.0	514.4	22.6	154.4	105.2	504	100.0	610	0.4	0
Minimum	0.0	0.0	610.0	450.0	1.4	5.6	7.8	923	150.0	390	2.6	0
Maximum	0.0	0.0	970.0	964.4	24.0	160.0	113.0	1427	250.0	1000	3.0	0
Count	0	0	7	7	7	7	7	7	7	6	6	0
Confidence Level(95.0%)	ND	ND	131.1	163.2	7.4	52.2	35.5	191	31.9	271	0.2	ND

ND = No Data

Provisional MMSD Water Quality Data

15TH AVENUE - SITE 5
OAK CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	75.57	31.43	0.0	5.7	8.1	4.2	0.3	22.4	0.5	1.5	2.7	ND
Standard Error	7.28	2.97	0.0	0.9	1.2	0.6	0.3	6.0	0.3	1.0	1.8	ND
Median	77.00	32.00	0.0	5.1	7.2	3.9	0.0	15.0	0.0	0.0	0.0	ND
Mode	ND	ND	0.0	ND	ND	ND	0.0	15.0	0.0	0.0	0.0	ND
Standard Deviation	19.26	7.85	0.0	2.4	3.1	1.6	0.8	15.8	0.9	2.6	4.7	ND
Sample Variance	370.95	61.62	0.0	5.7	9.8	2.6	0.7	250.6	0.7	6.9	21.9	ND
Kurtosis	-1.81	-1.59	ND	5.9	6.0	0.2	7.0	5.4	1.0	-0.6	0.2	ND
Skewness	-0.23	-0.31	ND	2.3	2.4	0.7	2.6	2.3	1.5	1.3	1.4	ND
Range	47.00	20.00	0.0	7.2	9.0	4.7	2.2	45.0	2.1	5.8	11.0	0.0
Minimum	50.00	21.00	0.0	3.8	6.0	2.3	0.0	12.0	0.0	0.0	0.0	0.0
Maximum	97.00	41.00	0.0	11.0	15.0	7.0	2.2	57.0	2.1	5.8	11.0	0.0
Count	7	7	7	7	7	7	7	7	7	7	7	0
Confidence Level(95.0%)	17.81	7.26	0.0	2.2	2.9	1.5	0.8	14.6	0.8	2.4	4.3	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	317	227	1.0	6.3	60.3	54.3	6.0	5.8
Standard Error	31	23	0.7	1.1	5.2	5.4	0.4	0.3
Median	320	240	0.0	5.0	65.0	60.0	6.0	5.8
Mode	ND	290	0.0	5.0	ND	ND	ND	5.8
Standard Deviation	82	60	1.9	2.6	13.7	14.3	1.1	0.9
Sample Variance	6657	3590	3.5	6.7	187.9	203.6	1.2	0.8
Kurtosis	-2	-1	2.9	2.1	0.2	-0.4	-1.0	-1.2
Skewness	0	-1	1.9	1.6	-0.9	-0.9	0.1	-0.3
Range	200	160	4.8	6.8	39.0	39.0	2.9	2.3
Minimum	210	130	0.0	4.2	36.0	30.0	4.7	4.6
Maximum	410	290	4.8	11.0	75.0	69.0	7.6	6.9
Count	7	7	7	6	7	7	7	7
Confidence Level(95.0%)	75	55	1.7	2.7	12.7	13.2	1.0	0.8

ND = No Data

Provisional MMSD Water Quality Data

PARKWAY (E. of HWY 32) - SITE 6
OAK CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.7	14.1	9.4	6.67	0.57	0.024	0.55	0.073	1.91	0.116	0.038	ND
Standard Error	0.0	2.1	0.5	2.16	0.04	0.007	0.06	0.021	0.79	0.031	0.030	ND
Median	7.7	15.2	9.0	4.24	0.60	0.017	0.59	0.063	0.97	0.078	0.000	ND
Mode	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.000	ND
Standard Deviation	0.1	5.7	1.4	5.71	0.11	0.016	0.16	0.056	2.09	0.083	0.079	ND
Sample Variance	0.0	32.3	1.9	32.58	0.01	0.000	0.03	0.003	4.39	0.007	0.006	ND
Kurtosis	-0.3	2.2	-1.1	1.49	-0.72	-1.607	-0.25	3.949	-0.61	-0.623	5.554	ND
Skewness	0.4	-1.6	0.9	1.39	-0.12	0.840	-0.50	1.749	1.13	1.145	2.342	ND
Range	0.3	16.1	3.4	15.90	0.29	0.038	0.47	0.176	5.30	0.209	0.210	0.00
Minimum	7.6	2.9	8.0	1.70	0.43	0.009	0.29	0.014	0.00	0.041	0.000	0.00
Maximum	7.8	19.0	11.4	17.60	0.72	0.047	0.76	0.190	5.30	0.250	0.210	0.00
Count	7	7	7	7	6	6	7	7	7	7	7	0
Confidence Level(95.0%)	0.1	5.3	1.3	5.28	0.11	0.017	0.15	0.052	1.94	0.077	0.073	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	798.6	771.5	4.9	27.1	19.9	1256	227.1	627	2.8	ND
Standard Error	ND	ND	51.8	59.7	2.6	18.9	10.4	82	18.7	112	0.1	ND
Median	ND	ND	740.0	736.8	3.0	8.4	10.2	1295	220.0	690	2.8	ND
Mode	ND	ND	ND	ND	3.0	3.2	ND	ND	220.0	ND	ND	ND
Standard Deviation	ND	ND	136.9	157.9	6.9	50.0	27.6	217	49.6	296	0.2	ND
Sample Variance	ND	ND	18747.6	24927.7	47.6	2502.4	762.8	46979	2457.1	87390	0.0	ND
Kurtosis	ND	ND	-1.4	-1.7	5.7	6.8	6.6	-1	1.1	-1	-1.6	ND
Skewness	ND	ND	0.2	0.0	2.3	2.6	2.6	0	0.2	0	-0.3	ND
Range	0.0	0.0	370.0	394.0	20.0	136.8	76.3	608	160.0	810	0.6	0
Minimum	0.0	0.0	610.0	570.0	0.0	3.2	5.7	939	150.0	290	2.5	0
Maximum	0.0	0.0	980.0	964.0	20.0	140.0	82.0	1547	310.0	1100	3.0	0
Count	0	0	7	7	7	7	7	7	7	7	7	0
Confidence Level(95.0%)	ND	ND	126.6	146.0	6.4	46.3	25.5	200	45.8	273	0.2	ND

ND = No Data

Provisional MMSD Water Quality Data

PARKWAY (E. of HWY 32) - SITE 6
OAK CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	82.00	33.71	0.0	3.5	8.1	3.5	0.3	20.3	0.5	2.5	3.6	ND
Standard Error	7.99	3.11	0.0	1.5	1.0	0.7	0.3	6.0	0.3	1.4	1.8	ND
Median	83.00	34.00	0.0	4.3	7.4	2.9	0.0	13.0	0.0	0.0	0.0	ND
Mode	ND	40.00	0.0	0.0	ND	ND	0.0	12.0	0.0	0.0	0.0	ND
Standard Deviation	21.13	8.22	0.0	4.0	2.5	1.7	0.8	15.8	0.9	3.8	4.8	ND
Sample Variance	446.33	67.57	0.0	16.0	6.4	3.0	0.6	249.2	0.9	14.2	22.8	ND
Kurtosis	-1.74	-1.42	ND	1.2	1.6	2.0	7.0	5.7	1.6	1.4	-1.4	ND
Skewness	-0.05	-0.30	ND	1.1	1.4	1.5	2.6	2.3	1.6	1.5	0.8	ND
Range	54.00	22.00	0.0	11.0	7.2	5.1	2.0	44.0	2.3	9.7	11.0	0.0
Minimum	56.00	22.00	0.0	0.0	5.8	1.8	0.0	11.0	0.0	0.0	0.0	0.0
Maximum	110.00	44.00	0.0	11.0	13.0	6.9	2.0	55.0	2.3	9.7	11.0	0.0
Count	7	7	7	7	7	7	7	7	7	7	7	0
Confidence Level(95.0%)	19.54	7.60	0.0	3.7	2.3	1.6	0.7	14.6	0.9	3.5	4.4	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	343	241	1.3	6.0	63.0	57.4	5.8	5.4
Standard Error	32	24	0.7	0.9	5.1	5.4	0.4	0.4
Median	350	260	0.0	5.8	67.0	62.0	5.9	5.7
Mode	ND	310	0.0	ND	ND	ND	6.7	ND
Standard Deviation	86	63	1.8	2.3	13.6	14.3	1.2	1.1
Sample Variance	7324	3948	3.3	5.3	185.0	205.3	1.4	1.2
Kurtosis	-2	-2	0.0	0.2	-0.6	-1.1	-2.1	-2.0
Skewness	0	0	1.1	0.9	-0.6	-0.5	0.0	-0.2
Range	220	160	4.6	6.1	38.0	38.0	2.9	2.8
Minimum	230	150	0.0	3.7	41.0	35.0	4.4	4.0
Maximum	450	310	4.6	9.8	79.0	73.0	7.3	6.8
Count	7	7	7	6	7	7	7	7
Confidence Level(95.0%)	79	58	1.7	2.4	12.6	13.3	1.1	1.0

ND = No Data

Provisional MMSD Water Quality Data

PARKWAY (E. of LAKE DR. EXTENDED) - SITE 7
OAK CREEK
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.9	14.9	10.4	8.88	0.54	0.025	0.52	0.058	1.23	0.094	0.022	ND
Standard Error	0.0	2.3	0.6	3.31	0.05	0.007	0.06	0.019	0.72	0.025	0.014	ND
Median	7.9	15.6	9.6	6.59	0.53	0.018	0.53	0.046	0.57	0.077	0.000	ND
Mode	7.9	ND	ND	ND	ND	ND	ND	ND	0.00	ND	0.000	ND
Standard Deviation	0.1	6.2	1.6	8.75	0.12	0.016	0.16	0.050	1.91	0.066	0.038	ND
Sample Variance	0.0	37.8	2.6	76.56	0.02	0.000	0.03	0.003	3.63	0.004	0.001	ND
Kurtosis	1.8	2.0	-0.7	5.66	0.64	-1.910	0.06	3.445	5.45	6.177	0.821	ND
Skewness	1.0	-1.4	1.2	2.31	0.45	0.771	0.23	1.558	2.28	2.429	1.500	ND
Range	0.4	17.7	3.7	25.06	0.36	0.036	0.49	0.160	5.40	0.192	0.093	0.00
Minimum	7.7	2.9	9.3	3.04	0.37	0.010	0.29	0.000	0.00	0.048	0.000	0.00
Maximum	8.1	20.6	13.0	28.10	0.73	0.046	0.78	0.160	5.40	0.240	0.093	0.00
Count	7	7	7	7	6	6	7	7	7	7	7	0
Confidence Level(95.0%)	0.1	5.7	1.5	8.09	0.13	0.017	0.15	0.046	1.76	0.061	0.035	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	797.1	765.9	6.8	31.3	23.7	1252	214.3	413	2.6	ND
Standard Error	ND	ND	58.5	70.1	3.2	19.8	11.0	84	14.9	55	0.1	ND
Median	ND	ND	830.0	822.4	3.8	12.0	13.1	1291	220.0	420	2.6	ND
Mode	ND	ND	ND	ND	3.8	12.0	ND	ND	220.0	ND	ND	ND
Standard Deviation	ND	ND	154.7	185.4	8.6	52.5	29.1	223	39.5	146	0.2	ND
Sample Variance	ND	ND	23923.8	34389.5	73.1	2756.2	848.9	49871	1561.9	21190	0.0	ND
Kurtosis	ND	ND	-1.6	-1.0	6.6	6.9	6.5	-1	1.5	0	2.5	ND
Skewness	ND	ND	-0.2	-0.6	2.5	2.6	2.5	-1	0.0	-1	-1.5	ND
Range	0.0	0.0	410.0	505.0	24.8	144.6	81.5	565	130.0	440	0.6	0
Minimum	0.0	0.0	590.0	480.0	1.2	5.4	7.5	920	150.0	160	2.2	0
Maximum	0.0	0.0	1000.0	985.0	26.0	150.0	89.0	1485	280.0	600	2.8	0
Count	0	0	7	7	7	7	7	7	7	7	7	0
Confidence Level(95.0%)	ND	ND	143.0	171.5	7.9	48.6	26.9	207	36.6	135	0.2	ND

ND = No Data

Provisional MMSD Water Quality Data

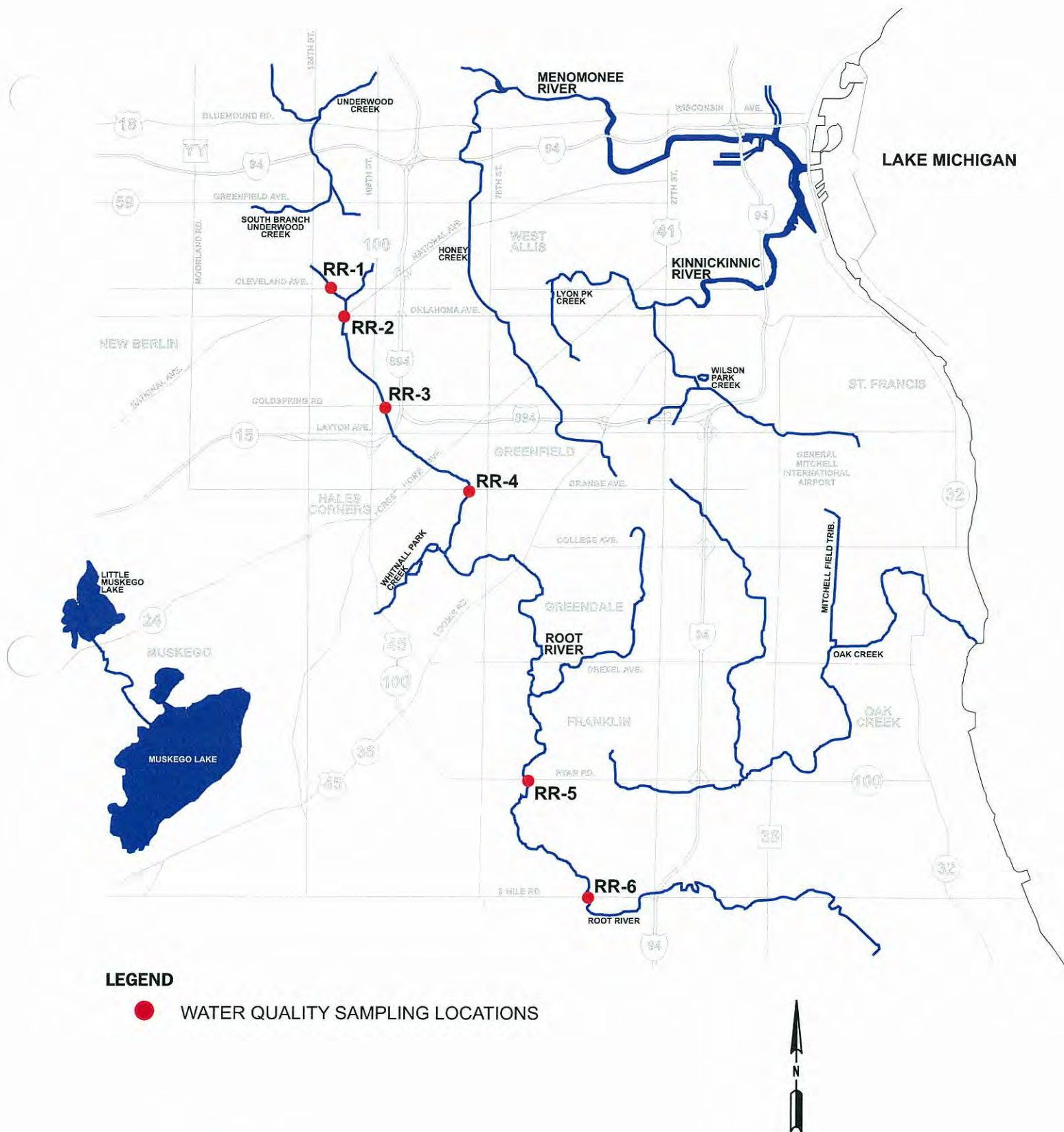
PARKWAY (E. of LAKE DR. EXTENDED) - SITE 7
OAK CREEK
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	79.29	33.57	0.0	5.7	8.4	3.8	0.4	19.4	0.5	1.9	2.9	ND
Standard Error	7.03	3.01	0.0	0.9	1.1	0.5	0.4	5.3	0.3	1.0	1.4	ND
Median	77.00	34.00	0.0	5.1	7.0	3.5	0.0	15.0	0.0	0.0	0.0	ND
Mode	ND	ND	0.0	3.8	ND	ND	0.0	16.0	0.0	0.0	0.0	ND
Standard Deviation	18.60	7.98	0.0	2.3	2.9	1.4	0.9	14.0	0.8	2.7	3.8	ND
Sample Variance	345.90	63.62	0.0	5.2	8.4	1.9	0.9	196.3	0.7	7.5	14.1	ND
Kurtosis	-1.59	-0.83	ND	1.2	-0.7	2.5	7.0	6.7	1.5	1.3	-1.9	ND
Skewness	-0.25	-0.50	ND	1.3	1.1	1.4	2.6	2.6	1.6	1.4	0.6	ND
Range	47.00	22.00	0.0	6.2	7.0	4.2	2.5	39.0	2.1	7.1	8.5	0.0
Minimum	53.00	21.00	0.0	3.8	6.0	2.3	0.0	12.0	0.0	0.0	0.0	0.0
Maximum	100.00	43.00	0.0	10.0	13.0	6.5	2.5	51.0	2.1	7.1	8.5	0.0
Count	7	7	7	7	7	7	7	7	7	7	7	0
Confidence Level(95.0%)	17.20	7.38	0.0	2.1	2.7	1.3	0.9	13.0	0.8	2.5	3.5	ND

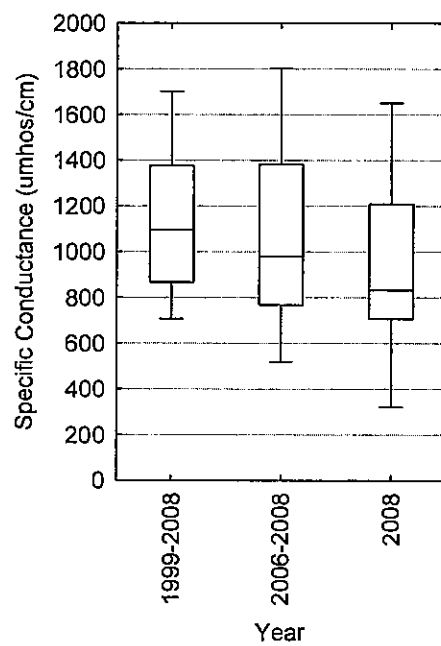
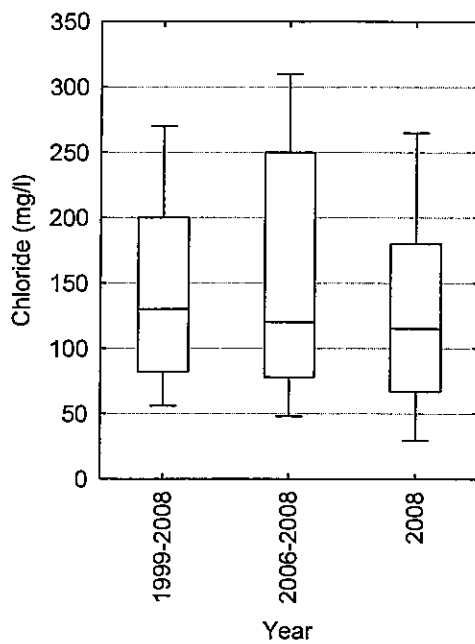
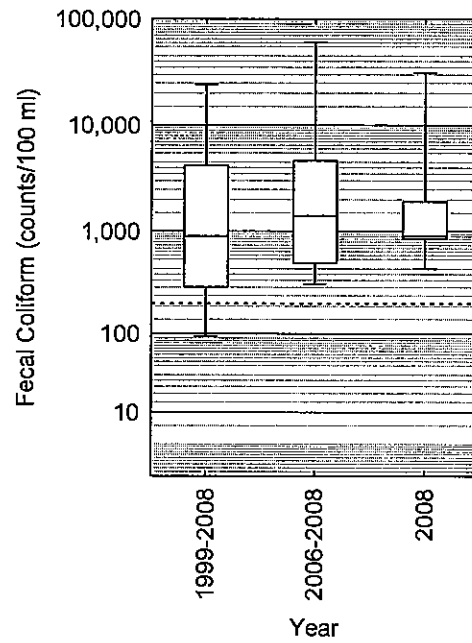
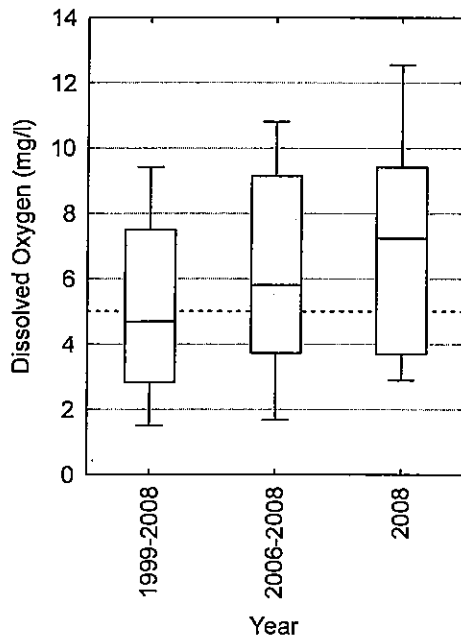
VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	334	240	0.9	6.1	62.6	56.9	5.7	5.4
Standard Error	30	21	0.6	0.7	4.7	4.8	0.4	0.4
Median	320	250	0.0	5.7	65.0	61.0	5.8	5.2
Mode	320	ND	0.0	ND	ND	61.0	ND	ND
Standard Deviation	80	56	1.7	1.8	12.4	12.8	1.1	1.0
Sample Variance	6395	3133	2.8	3.2	153.0	164.1	1.2	0.9
Kurtosis	-2	-1	2.1	0.6	-0.4	-0.7	-1.9	-1.8
Skewness	0	0	1.7	0.9	-0.5	-0.6	0.1	0.2
Range	200	150	4.2	5.0	36.0	36.0	2.7	2.5
Minimum	220	160	0.0	4.1	43.0	37.0	4.5	4.2
Maximum	420	310	4.2	9.1	79.0	73.0	7.2	6.7
Count	7	7	7	6	7	7	7	7
Confidence Level(95.0%)	74	52	1.5	1.9	11.4	11.8	1.0	0.9

ND = No Data

Provisional MMSD Water Quality Data

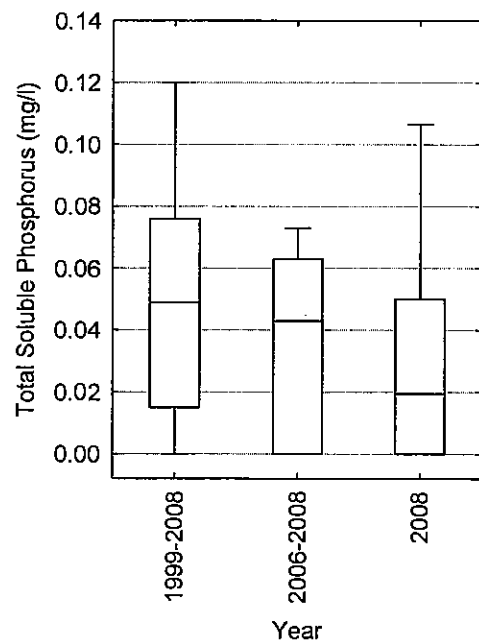
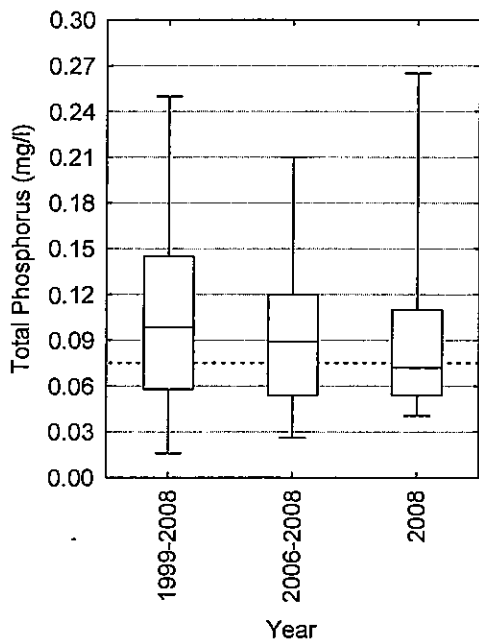
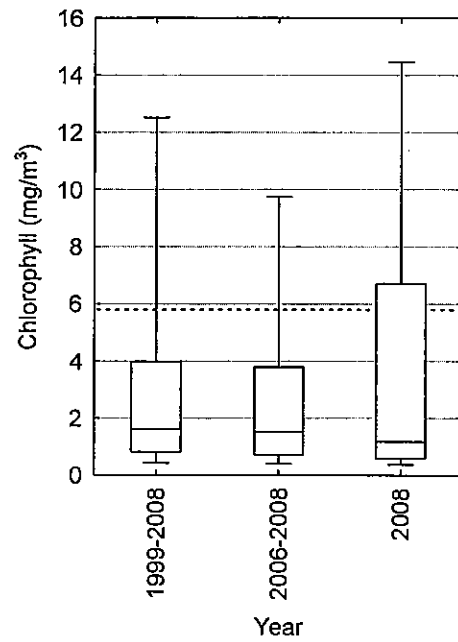
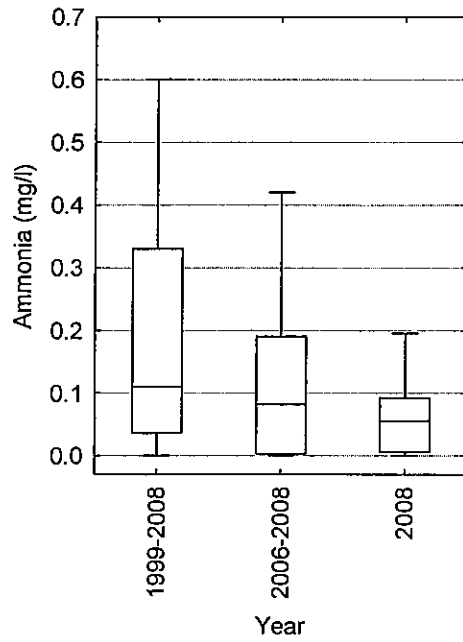


MMSD Water Quality Monitoring Program Data
Root River at Cleveland Ave., Site RR-01



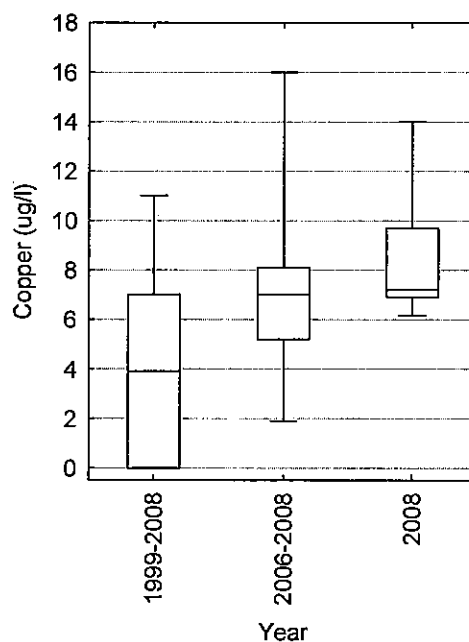
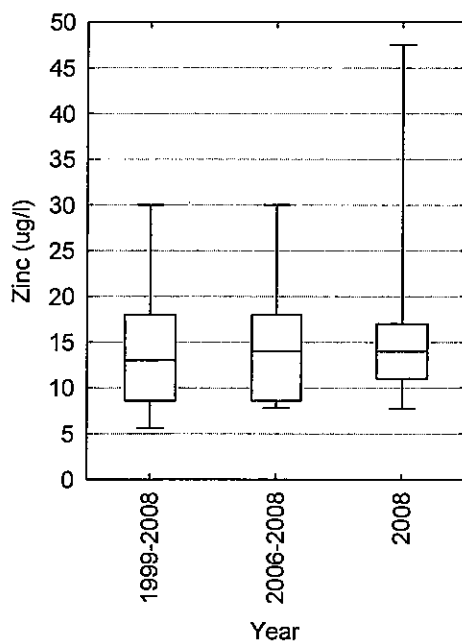
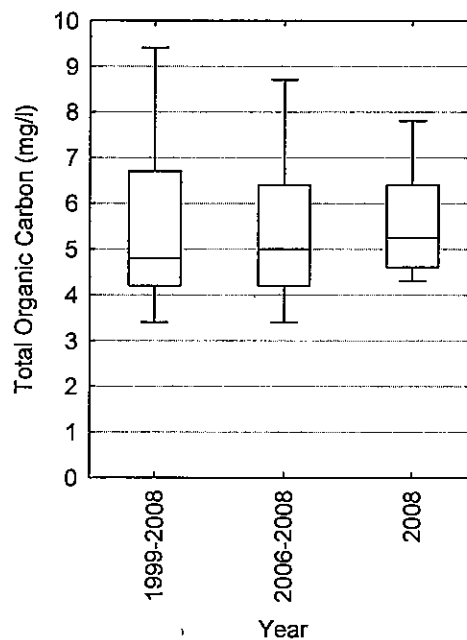
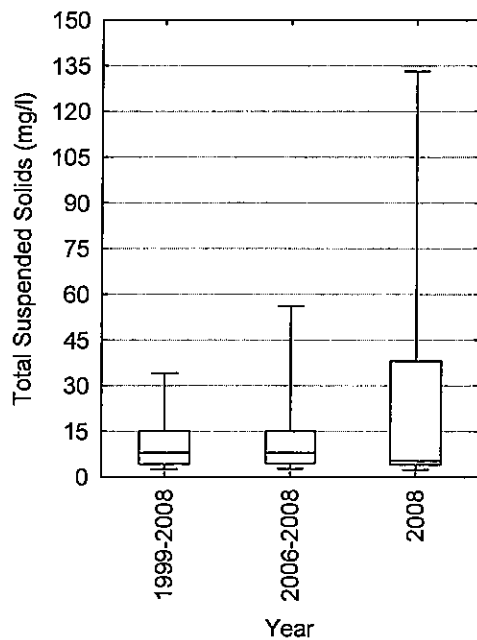
— Median □ 25%-75% ▮ 10%-90%
---- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Root River at Cleveland Ave., Site RR-01



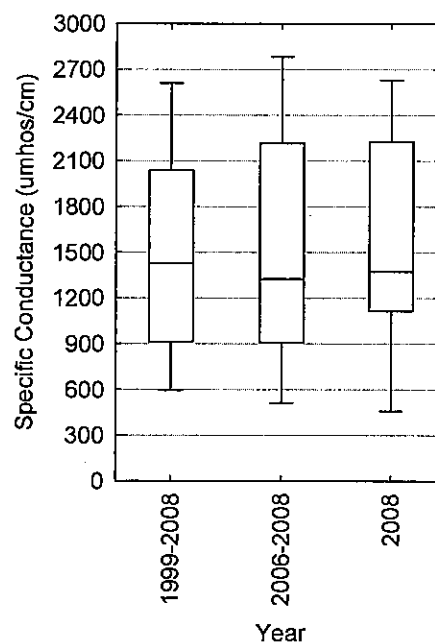
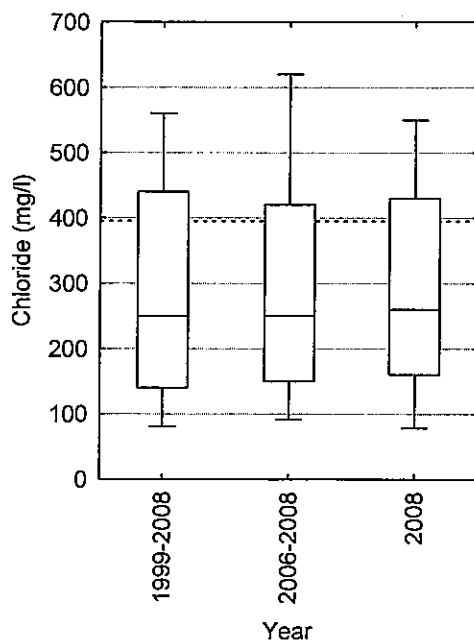
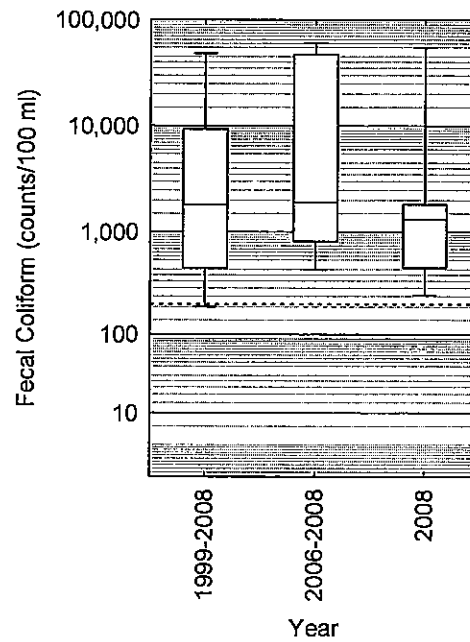
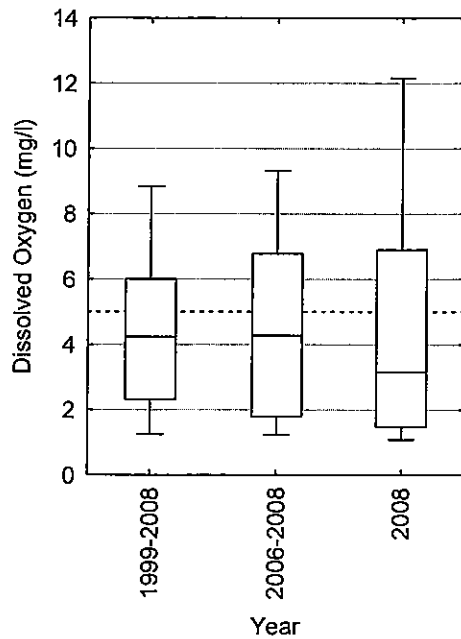
— Median □ 25%-75% ▤ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Root River at Cleveland Ave., Site RR-01



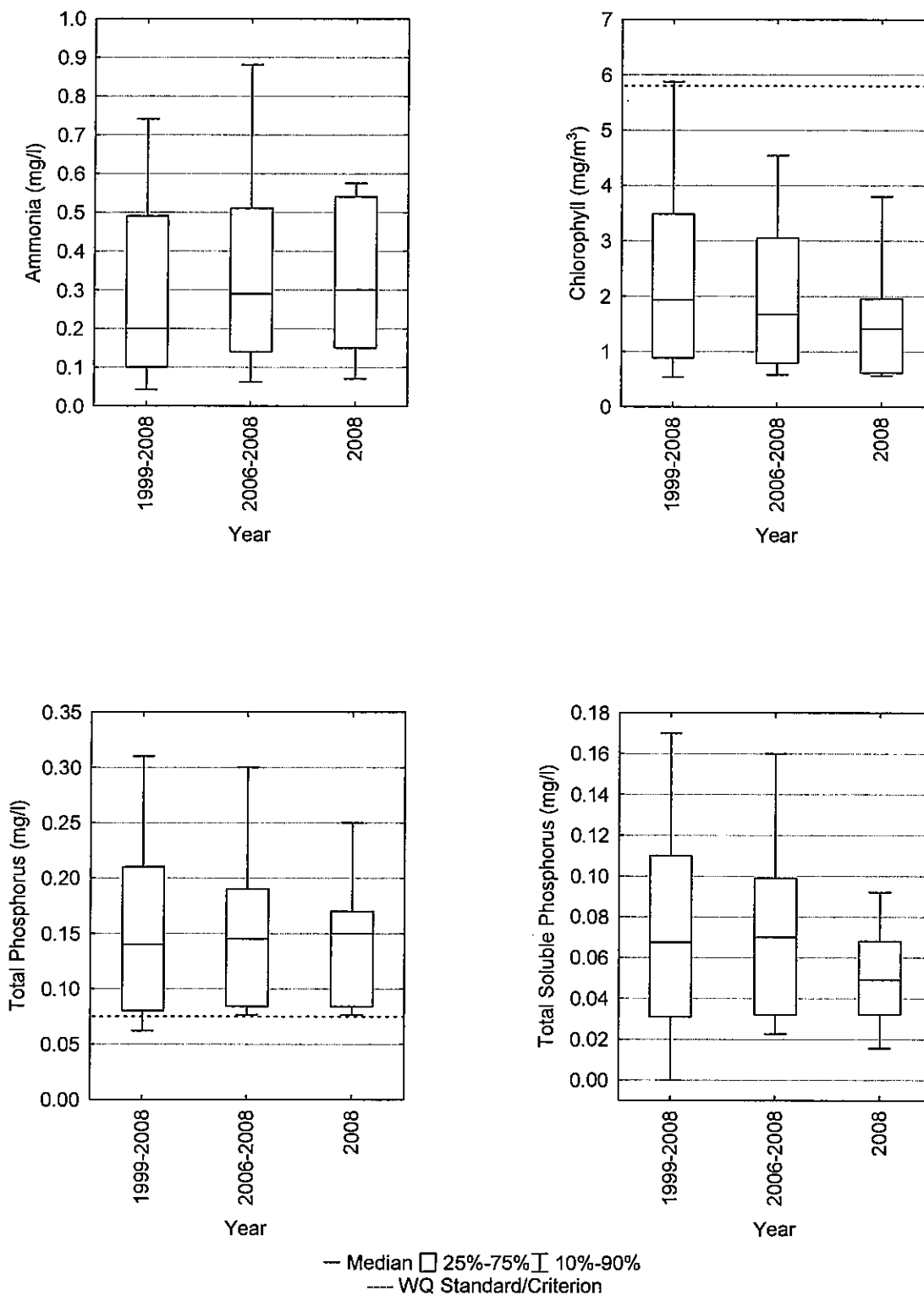
— Median □ 25%-75% ┘ 10%-90%

MMSD Water Quality Monitoring Program Data
Root River at National and Oklahoma Ave., Site RR-02

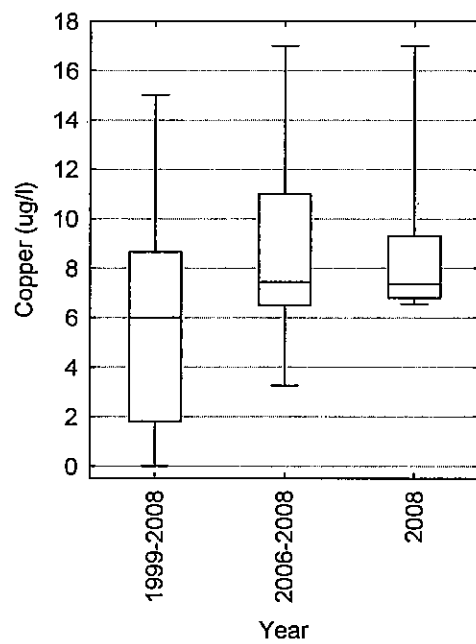
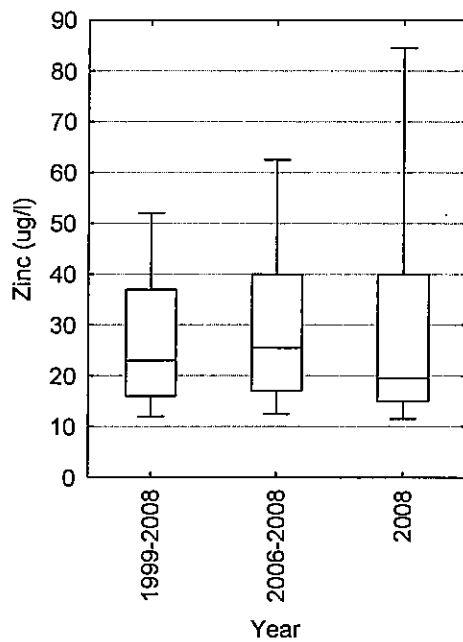
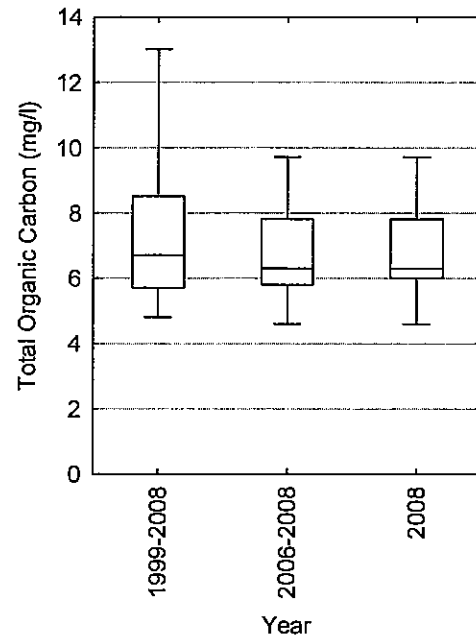
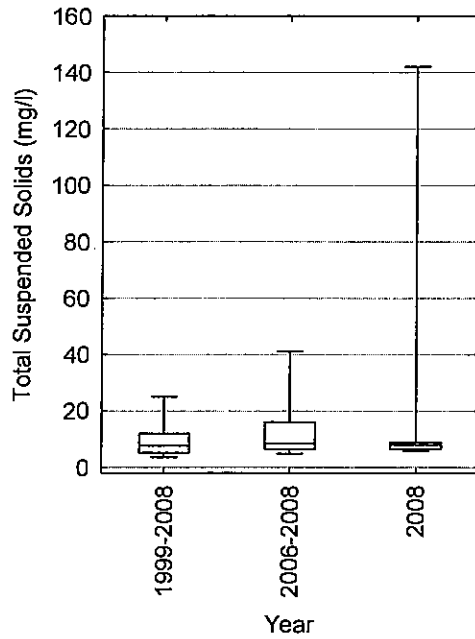


— Median □ 25%-75% ⊢ 10%-90%
 — WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Root River at National and Oklahoma Ave., Site RR-02

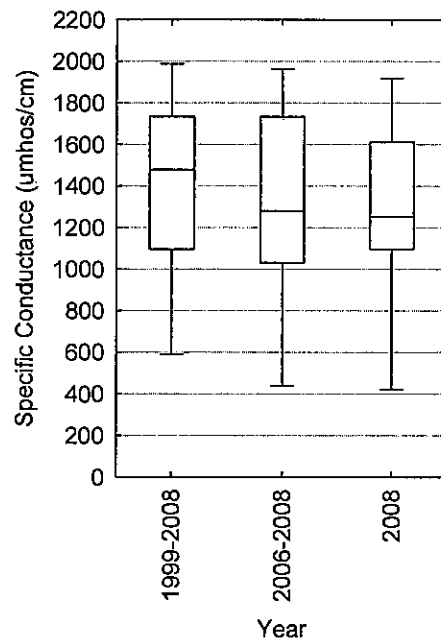
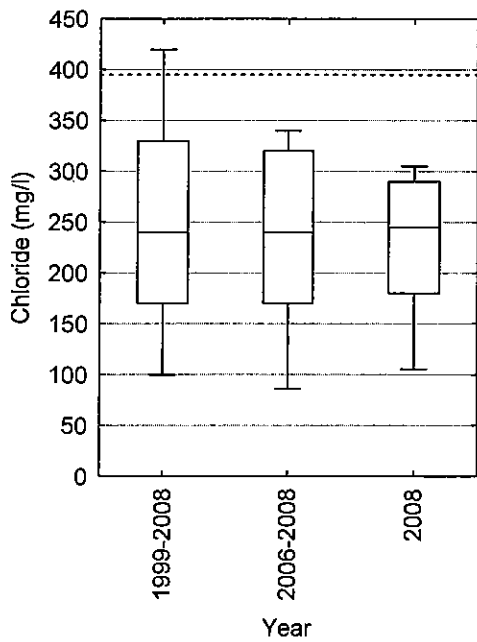
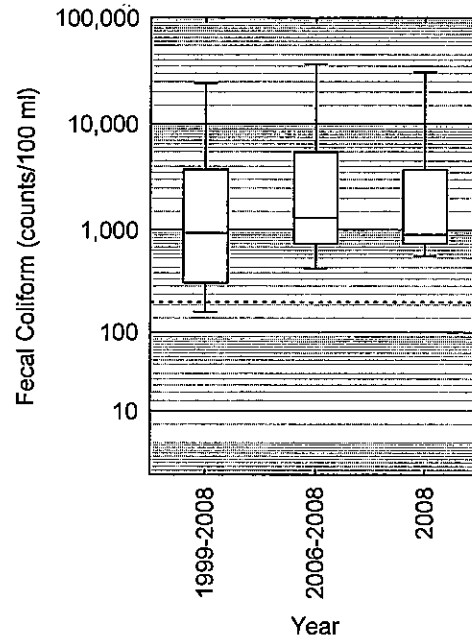
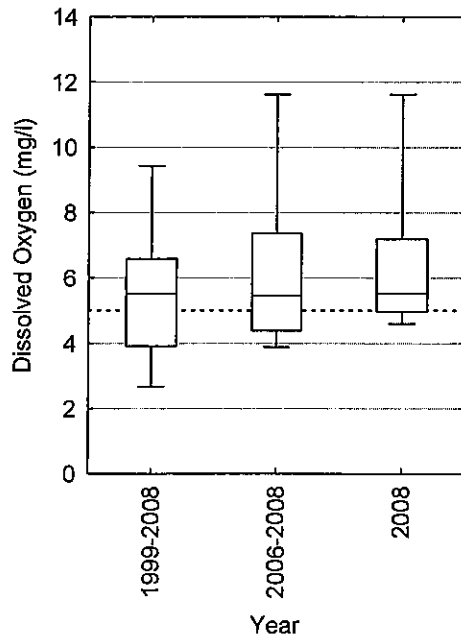


MMSD Water Quality Monitoring Program Data
Root River at National and Oklahoma Ave., Site RR-02



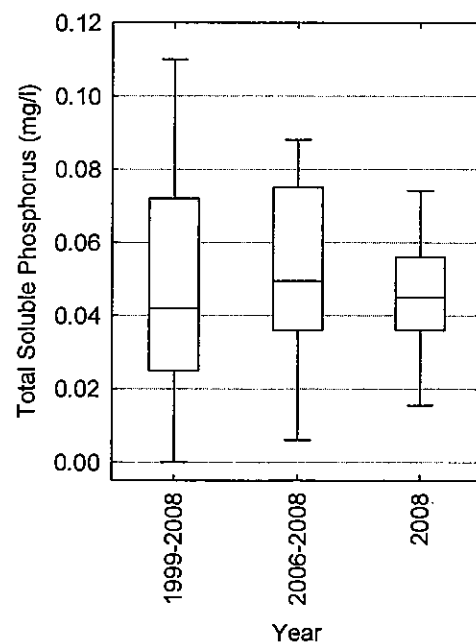
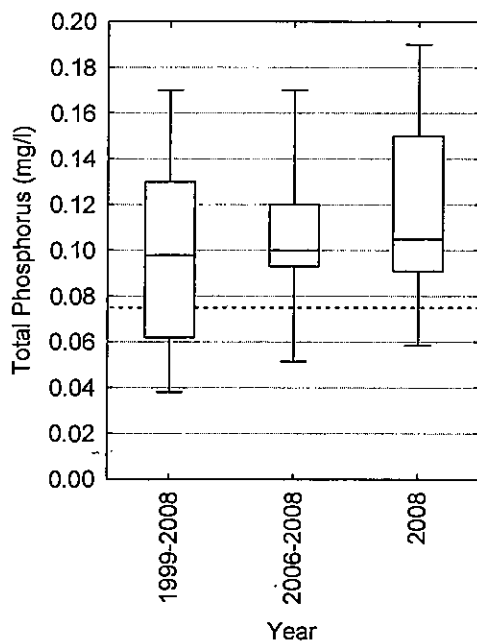
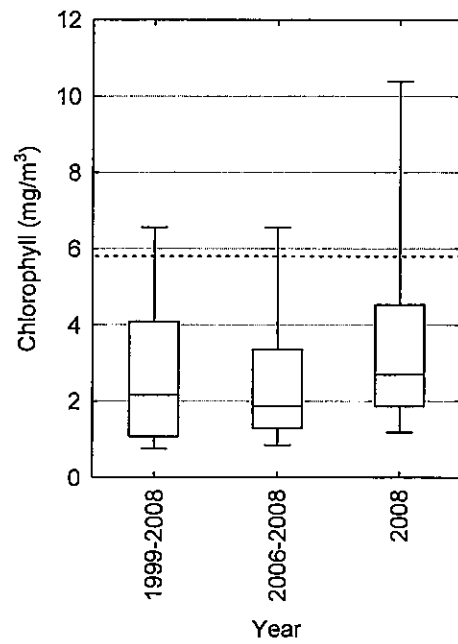
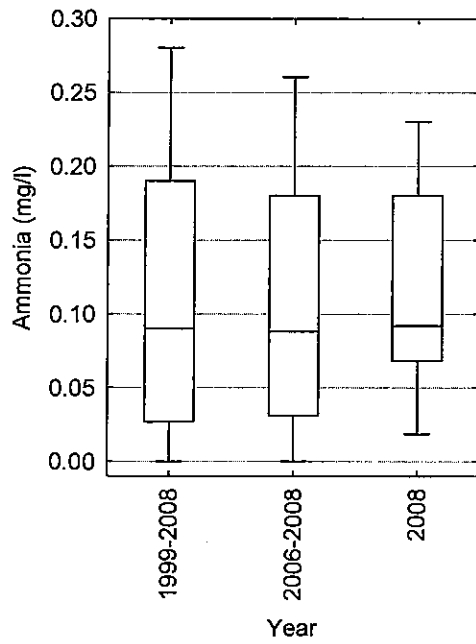
— Median □ 25%-75% ┘ 10%-90%

MMSD Water Quality Monitoring Program Data
Root River at Grange Ave., Site RR-04



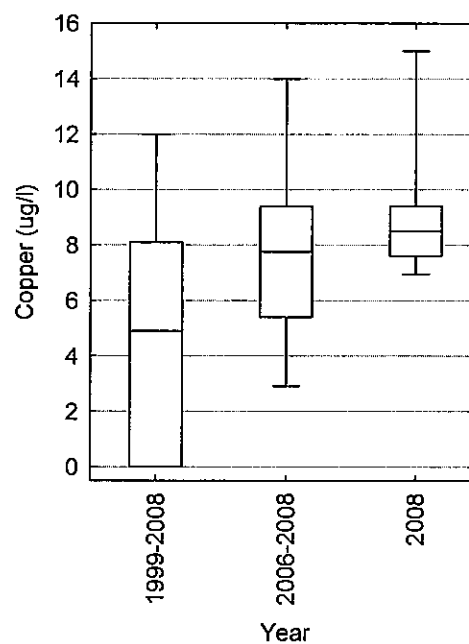
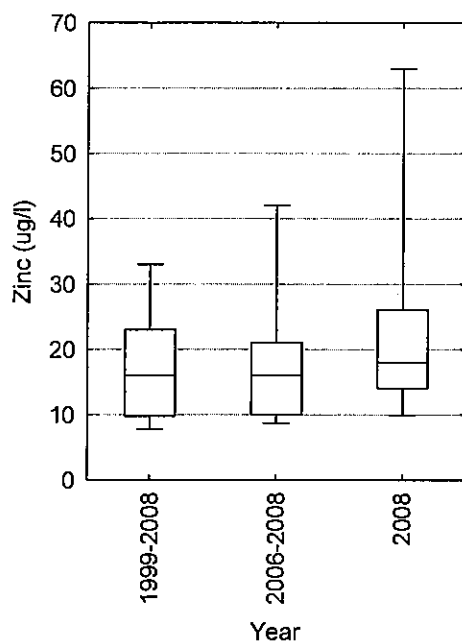
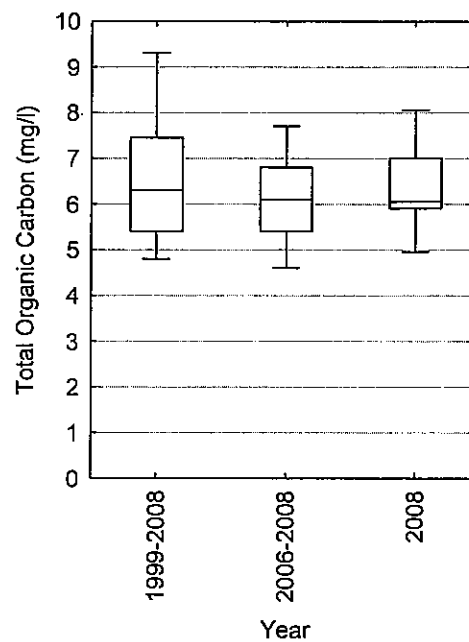
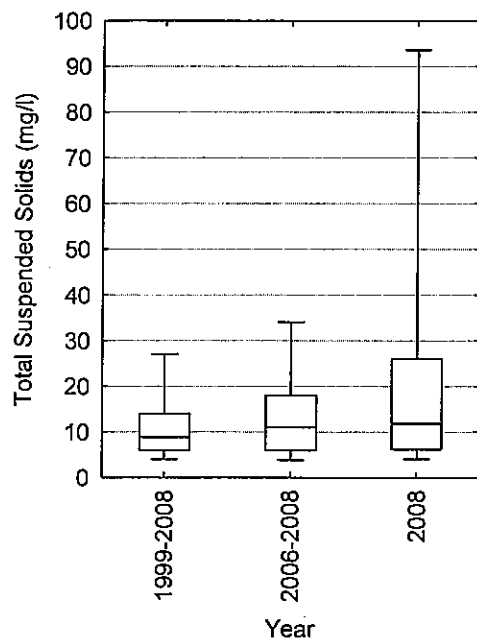
— Median □ 25%-75% ▮ 10%-90%
—— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Root River at Grange Ave., Site RR-04



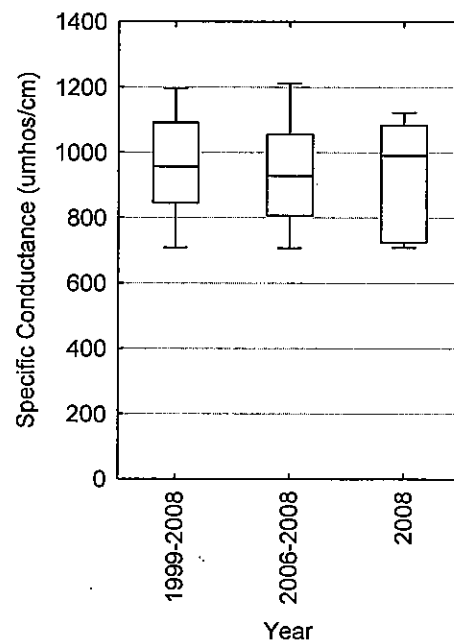
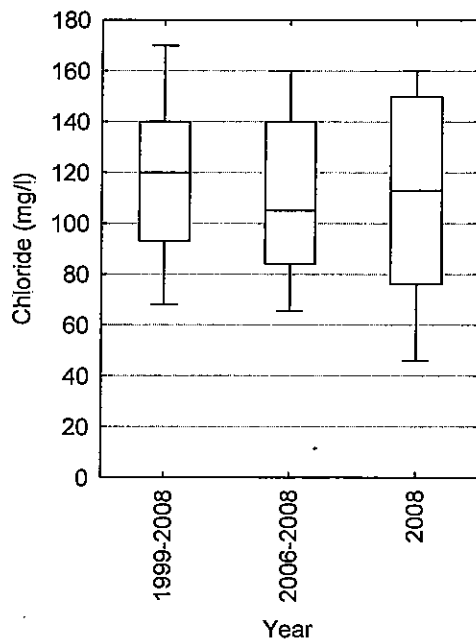
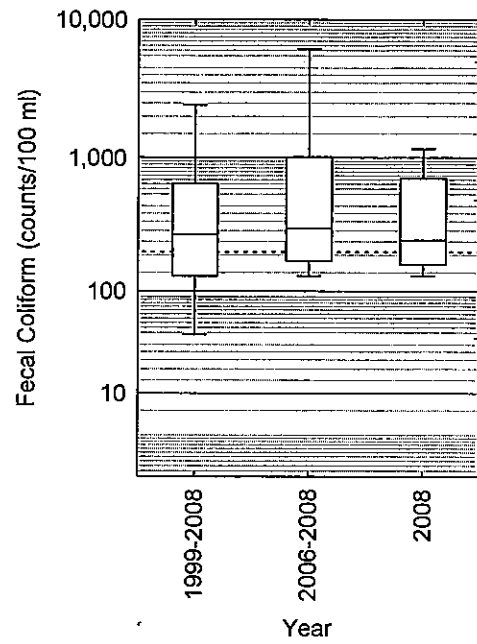
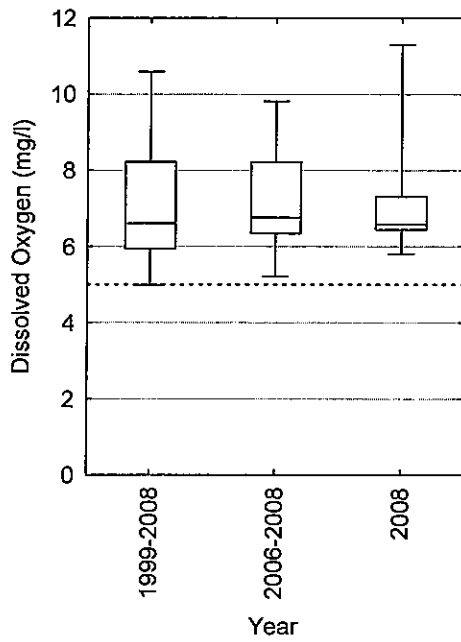
— Median □ 25%-75% ▮ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Root River at Grange Ave., Site RR-04



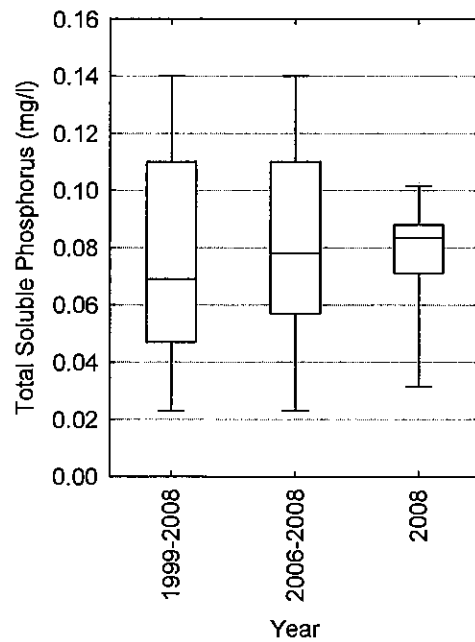
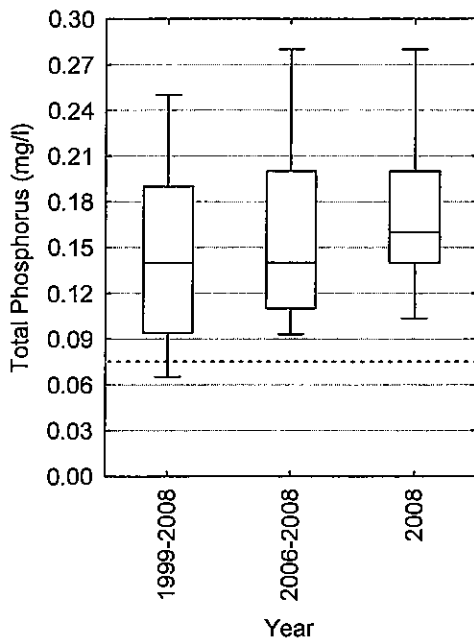
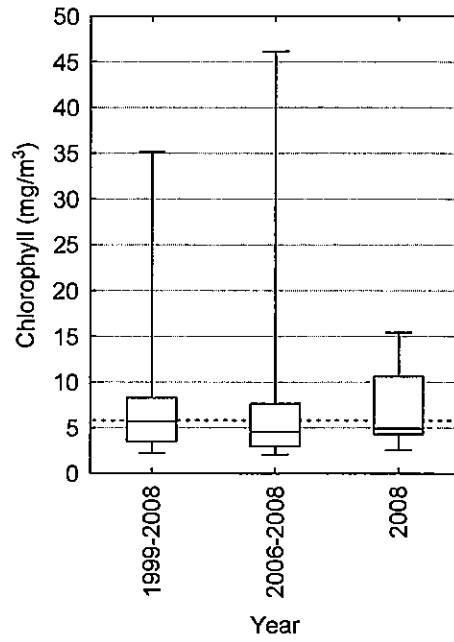
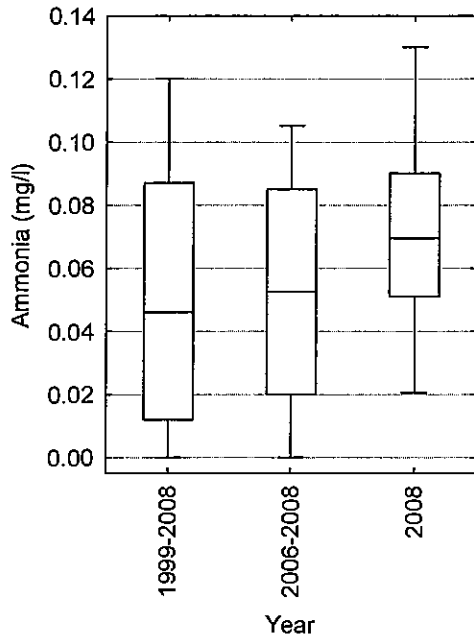
— Median □ 25%-75% I 10%-90%

MMSD Water Quality Monitoring Program Data
Root River at County Line Rd., Site RR-06



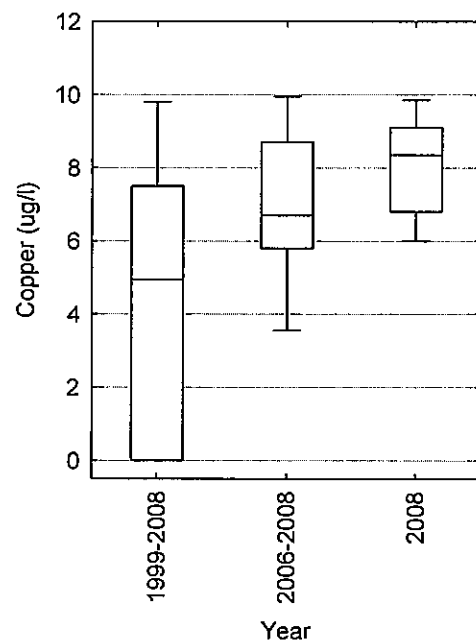
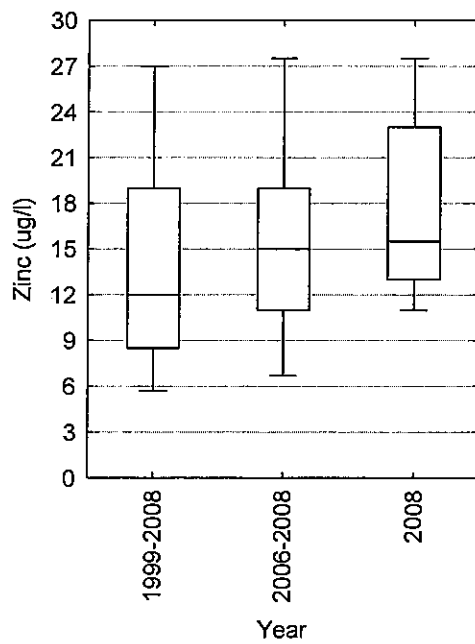
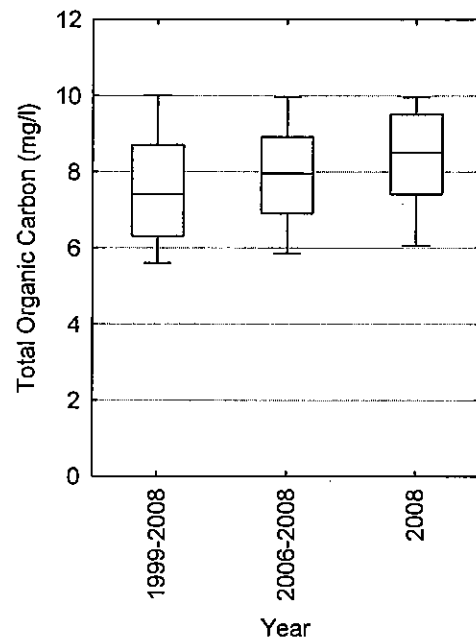
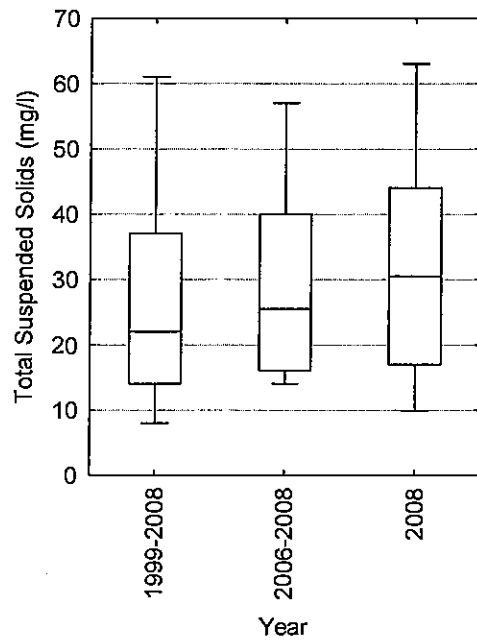
— Median □ 25%-75% ▤ 10%-90%
 ---- WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Root River at County Line Rd., Site RR-06



— Median □ 25%-75% ▮ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Monitoring Program Data
Root River at County Line Rd., Site RR-06



— Median □ 25%-75% ┘ 10%-90%

CLEVELAND AVENUE, EAST OF 124TH STREET - SITE 1
ROOT RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.6	15.6	7.3	4.40	0.83	0.024	0.85	0.073	0.59	0.108	0.035	ND
Standard Error	0.1	1.9	1.1	1.79	0.29	0.006	0.29	0.025	0.17	0.028	0.015	ND
Median	7.7	17.7	7.2	1.17	0.53	0.017	0.57	0.056	0.53	0.072	0.020	ND
Mode	ND	ND	ND	ND	1.10	0.012	1.10	0.000	0.00	ND	0.000	ND
Standard Deviation	0.2	6.0	3.6	5.67	0.93	0.018	0.92	0.078	0.54	0.090	0.048	ND
Sample Variance	0.1	35.7	13.2	32.16	0.86	0.000	0.85	0.006	0.29	0.008	0.002	ND
Kurtosis	1.2	2.0	-1.2	0.24	6.72	0.642	6.79	3.266	-0.57	3.145	3.487	ND
Skewness	-1.1	-1.5	0.2	1.33	2.47	1.381	2.48	1.632	0.61	1.875	1.740	ND
Range	0.8	19.0	10.0	14.46	3.17	0.050	3.15	0.260	1.50	0.290	0.150	0.00
Minimum	7.1	2.1	2.8	0.24	0.13	0.010	0.15	0.000	0.00	0.030	0.000	0.00
Maximum	7.9	21.1	12.8	14.70	3.30	0.060	3.30	0.260	1.50	0.320	0.150	0.00
Count	10	10	10	10	10	10	10	10	10	10	10	0
Confidence Level(95.0%)	0.2	4.3	2.6	4.06	0.66	0.013	0.66	0.056	0.39	0.064	0.034	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	594.0	560.6	5.0	33.4	27.9	928	129.2	7006	3.2	ND
Standard Error	ND	ND	72.6	82.0	2.0	20.5	15.1	149	26.9	5891	0.2	ND
Median	ND	ND	575.0	553.0	2.1	5.3	5.3	833	115.0	890	2.9	ND
Mode	ND	ND	ND	ND	2.0	ND	ND	ND	ND	ND	ND	ND
Standard Deviation	ND	ND	229.6	259.4	6.2	64.7	47.8	471	85.1	18629	0.6	ND
Sample Variance	ND	ND	52693.3	67314.1	38.9	4187.8	2289.4	221979	7242.6	347050782	0.4	ND
Kurtosis	ND	ND	-0.1	-0.6	3.4	7.8	3.7	0	-0.5	10	6.1	ND
Skewness	ND	ND	0.1	0.0	1.9	2.7	2.1	0	0.6	3	2.2	ND
Range	0.0	0.0	740.0	794.2	20.0	208.2	141.2	1525	254.0	59670	2.3	0
Minimum	0.0	0.0	200.0	144.0	0.0	1.8	2.9	206	16.0	330	2.5	0
Maximum	0.0	0.0	940.0	938.2	20.0	210.0	144.0	1731	270.0	60000	4.8	0
Count	0	0	10	10	10	10	10	10	10	10	10	0
Confidence Level(95.0%)	ND	ND	164.2	185.6	4.5	46.3	34.2	337	60.9	13327	0.4	ND

ND = No Data

Provisional MMSD Water Quality Data

CLEVELAND AVENUE, EAST OF 124TH STREET - SITE 1
ROOT RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	68.70	31.99	0.0	4.6	8.6	4.4	0.6	19.7	0.3	0.4	2.7	0.0
Standard Error	7.48	3.69	0.0	1.2	1.1	0.7	0.5	4.8	0.2	0.4	1.5	0.0
Median	73.00	34.00	0.0	4.7	7.2	3.9	0.0	14.0	0.0	0.0	0.0	0.0
Mode	81.00	36.00	0.0	0.0	ND	3.9	0.0	17.0	0.0	0.0	0.0	0.0
Standard Deviation	23.66	11.66	0.0	3.9	3.3	2.2	1.6	15.2	0.7	1.1	4.5	0.0
Sample Variance	560.01	135.87	0.0	15.1	11.1	5.0	2.5	230.2	0.5	1.1	20.0	0.0
Kurtosis	0.76	0.89	ND	-0.8	4.7	0.6	8.2	1.6	3.3	9.0	1.0	ND
Skewness	-0.86	-0.81	ND	0.2	2.1	1.1	2.8	1.7	2.1	3.0	1.4	ND
Range	80.00	40.10	0.0	11.0	11.1	6.8	5.0	44.6	2.1	3.2	12.0	0.0
Minimum	20.00	7.90	0.0	0.0	5.9	2.0	0.0	7.4	0.0	0.0	0.0	0.0
Maximum	100.00	48.00	0.0	11.0	17.0	8.8	5.0	52.0	2.1	3.2	12.0	0.0
Count	10	10	10	10	10	9	10	10	10	9	9	2
Confidence Level(95.0%)	16.93	8.34	0.0	2.8	2.4	1.7	1.1	10.9	0.5	0.8	3.4	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	303	255	1.0	6.2	65.6	57.2	5.6	4.9
Standard Error	34	34	0.7	1.0	7.5	7.0	0.4	0.5
Median	320	285	0.0	4.9	70.5	61.0	5.3	4.5
Mode	ND	ND	0.0	4.6	ND	61.0	ND	4.5
Standard Deviation	106	107	2.1	3.1	23.8	22.1	1.3	1.6
Sample Variance	11302	11536	4.6	9.9	568.5	490.6	1.8	2.4
Kurtosis	1	1	2.1	4.1	0.1	0.7	-0.3	1.7
Skewness	-1	-1	1.9	2.0	-0.8	-1.1	0.9	0.8
Range	368	345	5.7	10.4	77.0	72.0	3.9	5.8
Minimum	82	35	0.0	3.6	20.0	12.0	4.2	2.4
Maximum	450	380	5.7	14.0	97.0	84.0	8.1	8.2
Count	10	10	10	10	10	10	10	10
Confidence Level(95.0%)	76	77	1.5	2.3	17.1	15.8	1.0	1.1

ND = No Data

Provisional MMSD Water Quality Data

NATIONAL and OKLAHOMA, approx. 116TH STREET - SITE 2
ROOT RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.3	16.0	4.8	1.68	0.70	0.055	0.75	0.323	1.35	0.152	0.052	ND
Standard Error	0.1	1.8	1.4	0.41	0.18	0.004	0.18	0.067	0.14	0.023	0.009	ND
Median	7.2	18.0	3.2	1.41	0.52	0.053	0.59	0.300	1.15	0.150	0.049	ND
Mode	7.6	ND	ND	ND	ND	ND	ND	0.150	1.10	0.150	ND	ND
Standard Deviation	0.2	5.6	4.4	1.29	0.58	0.013	0.58	0.212	0.44	0.071	0.029	ND
Sample Variance	0.0	31.6	19.1	1.66	0.34	0.000	0.34	0.045	0.20	0.005	0.001	ND
Kurtosis	-0.9	2.6	-0.4	1.67	-0.62	3.067	-0.51	-1.595	-1.39	3.135	-0.122	ND
Skewness	0.7	-1.5	1.0	1.37	0.83	1.351	0.84	-0.022	0.59	1.388	-0.110	ND
Range	0.5	18.9	11.3	3.99	1.62	0.048	1.68	0.600	1.17	0.247	0.095	0.00
Minimum	7.0	2.9	0.9	0.55	0.08	0.037	0.12	0.000	0.83	0.073	0.000	0.00
Maximum	7.6	21.8	12.3	4.54	1.70	0.085	1.80	0.600	2.00	0.320	0.095	0.00
Count	10	10	10	10	10	10	10	10	10	10	10	0
Confidence Level(95.0%)	0.1	4.0	3.1	0.92	0.42	0.009	0.42	0.152	0.32	0.051	0.021	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	967.0	932.7	6.5	34.3	45.2	1560	298.7	11648	3.2	ND
Standard Error	ND	ND	155.4	166.0	2.6	22.2	32.0	265	58.4	7231	0.3	ND
Median	ND	ND	810.0	801.7	3.3	8.0	8.8	1372	260.0	1300	3.1	ND
Mode	ND	ND	1300.0	ND	3.2	8.0	ND	ND	260.0	1300	3.1	ND
Standard Deviation	ND	ND	491.5	525.0	8.2	70.3	101.3	839	184.6	22867	0.9	ND
Sample Variance	ND	ND	241556.7	275600.1	67.4	4946.5	10264.7	703718	34094.7	522894396	0.7	ND
Kurtosis	ND	ND	-0.3	-0.5	6.1	8.8	9.5	-1	-0.4	2	0.4	ND
Skewness	ND	ND	0.6	0.4	2.5	2.9	3.1	0	0.5	2	1.1	ND
Range	0.0	0.0	1610.0	1658.6	26.8	224.6	325.1	2631	603.0	61840	2.6	0
Minimum	0.0	0.0	290.0	236.0	1.2	5.4	5.9	288	37.0	160	2.2	0
Maximum	0.0	0.0	1900.0	1894.6	28.0	230.0	331.0	2919	640.0	62000	4.8	0
Count	0	0	10	10	10	10	10	10	10	10	10	0
Confidence Level(95.0%)	ND	ND	351.6	375.5	5.9	50.3	72.5	600	132.1	16358	0.6	ND

ND = No Data

Provisional MMSD Water Quality Data

NATIONAL and OKLAHOMA, approx. 116TH STREET - SITE 2
ROOT RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	80.90	35.29	0.0	5.8	9.4	5.4	1.4	32.7	0.8	1.3	2.3	0.0
Standard Error	10.80	5.11	0.0	1.6	1.3	0.9	0.8	9.0	0.3	0.9	1.2	0.0
Median	83.50	34.50	0.0	4.8	7.4	4.9	0.0	19.5	0.6	0.0	0.0	0.0
Mode	100.00	ND	0.0	0.0	ND	ND	0.0	ND	0.0	0.0	0.0	0.0
Standard Deviation	34.15	16.16	0.0	5.0	4.1	2.6	2.6	28.6	1.0	2.8	3.7	0.0
Sample Variance	1166.10	261.06	0.0	25.3	17.2	6.9	6.8	815.1	1.0	7.6	13.8	0.0
Kurtosis	-0.17	0.06	ND	0.4	1.3	-0.4	2.8	0.7	-0.4	2.4	0.9	ND
Skewness	-0.02	0.07	ND	1.0	1.6	1.0	1.9	1.5	0.9	1.9	1.4	ND
Range	116.00	56.10	0.0	15.0	11.5	7.0	7.5	76.0	2.7	7.4	10.0	0.0
Minimum	24.00	7.90	0.0	0.0	6.5	3.0	0.0	11.0	0.0	0.0	0.0	0.0
Maximum	140.00	64.00	0.0	15.0	18.0	10.0	7.5	87.0	2.7	7.4	10.0	0.0
Count	10	10	10	10	10	9	10	10	10	9	9	2
Confidence Level(95.0%)	24.43	11.56	0.0	3.6	3.0	2.0	1.9	20.4	0.7	2.1	2.9	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	346	230	3.1	10.6	63.5	59.0	6.4	6.5
Standard Error	48	33	0.9	1.3	7.7	8.6	0.6	0.5
Median	350	265	2.4	8.9	70.5	64.0	6.3	6.1
Mode	270	ND	0.0	8.8	78.0	83.0	ND	5.9
Standard Deviation	150	104	2.7	4.0	24.4	27.2	1.9	1.5
Sample Variance	22647	10841	7.4	16.1	595.8	738.8	3.5	2.3
Kurtosis	0	1	1.7	-0.5	0.1	0.0	0.8	2.9
Skewness	0	-1	1.2	0.6	-1.0	-0.8	-0.1	1.4
Range	508	318	9.1	12.7	72.0	86.7	6.8	5.6
Minimum	92	22	0.0	5.3	17.0	7.3	2.9	4.4
Maximum	600	340	9.1	18.0	89.0	94.0	9.7	10.0
Count	10	10	10	10	10	10	10	10
Confidence Level(95.0%)	108	74	1.9	2.9	17.5	19.4	1.3	1.1

ND = No Data

Provisional MMSD Water Quality Data

COLDSPRING ROAD, EAST OF 108TH STREET - SITE 3
ROOT RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.4	15.9	6.5	2.88	0.64	0.046	0.68	0.156	0.74	0.135	0.059	ND
Standard Error	0.1	1.8	1.0	1.08	0.12	0.006	0.12	0.032	0.12	0.017	0.009	ND
Median	7.3	18.1	5.4	1.27	0.55	0.040	0.58	0.140	0.79	0.130	0.061	ND
Mode	ND	ND	ND	ND	ND	0.030	ND	0.150	ND	0.130	0.040	ND
Standard Deviation	0.2	5.6	3.1	3.42	0.39	0.020	0.37	0.100	0.39	0.053	0.030	ND
Sample Variance	0.0	31.8	9.9	11.69	0.15	0.000	0.14	0.010	0.15	0.003	0.001	ND
Kurtosis	-1.1	2.3	-0.2	1.14	1.49	-1.355	1.34	3.833	1.58	0.537	1.095	ND
Skewness	0.8	-1.5	1.1	1.65	1.19	0.437	1.19	1.727	0.08	0.645	-0.270	ND
Range	0.5	18.5	8.5	8.82	1.26	0.056	1.18	0.344	1.50	0.184	0.110	0.00
Minimum	7.2	3.0	3.6	0.70	0.24	0.020	0.32	0.056	0.00	0.056	0.000	0.00
Maximum	7.6	21.5	12.2	9.52	1.50	0.076	1.50	0.400	1.50	0.240	0.110	0.00
Count	10	10	10	10	10	10	10	10	10	10	10	0
Confidence Level(95.0%)	0.1	4.0	2.2	2.45	0.28	0.014	0.27	0.072	0.28	0.038	0.021	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	669.0	645.2	5.7	23.8	21.4	1047	174.5	5896	3.0	ND
Standard Error	ND	ND	73.0	77.6	2.5	12.5	9.6	117	20.9	5142	0.2	ND
Median	ND	ND	610.0	600.6	2.6	6.6	8.6	1029	170.0	560	2.7	ND
Mode	ND	ND	ND	ND	2.4	6.6	ND	ND	170.0	ND	ND	ND
Standard Deviation	ND	ND	230.9	245.3	8.0	39.6	30.5	370	66.1	15427	0.7	ND
Sample Variance	ND	ND	53321.1	60161.4	64.5	1564.4	928.3	136773	4369.2	237994853	0.5	ND
Kurtosis	ND	ND	0.8	0.6	6.6	7.1	5.1	1	0.6	9	5.0	ND
Skewness	ND	ND	0.7	0.6	2.5	2.6	2.3	0	-0.3	3	2.1	ND
Range	0.0	0.0	810.0	848.4	27.0	130.0	95.1	1345	225.0	46750	2.3	0
Minimum	0.0	0.0	290.0	245.0	0.0	0.0	3.9	315	45.0	250	2.4	0
Maximum	0.0	0.0	1100.0	1093.4	27.0	130.0	99.0	1660	270.0	47000	4.7	0
Count	0	0	10	10	10	10	10	10	10	9	9	0
Confidence Level(95.0%)	ND	ND	165.2	175.5	5.7	28.3	21.8	265	47.3	11858	0.5	ND

ND = No Data

Provisional MMSD Water Quality Data

COLDSPRING ROAD, EAST OF 108TH STREET - SITE 3
ROOT RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	68.10	29.79	0.0	5.9	8.7	4.1	1.8	29.2	0.4	1.4	1.2	0.0
Standard Error	7.49	3.66	0.0	1.1	1.4	0.5	1.3	8.4	0.3	0.9	1.2	0.0
Median	67.50	29.00	0.0	5.3	7.0	4.0	0.0	17.5	0.0	0.0	0.0	0.0
Mode	ND	27.00	0.0	ND	ND	4.8	0.0	11.0	0.0	0.0	0.0	0.0
Standard Deviation	23.69	11.58	0.0	3.3	4.3	1.5	4.1	26.4	0.8	2.7	3.7	0.0
Sample Variance	560.99	134.00	0.0	11.1	18.5	2.3	16.7	698.2	0.7	7.4	13.4	0.0
Kurtosis	0.28	-0.01	ND	0.6	6.4	0.9	4.4	1.8	4.5	0.8	9.0	ND
Skewness	-0.60	-0.34	ND	0.2	2.4	0.7	2.2	1.6	2.2	1.6	3.0	ND
Range	76.00	38.10	0.0	12.0	14.7	5.0	12.0	78.9	2.5	6.4	11.0	0.0
Minimum	21.00	7.90	0.0	0.0	5.3	2.1	0.0	9.1	0.0	0.0	0.0	0.0
Maximum	97.00	46.00	0.0	12.0	20.0	7.1	12.0	88.0	2.5	6.4	11.0	0.0
Count	10	10	10	10	10	9	10	10	10	9	9	2
Confidence Level(95.0%)	16.94	8.28	0.0	2.4	3.1	1.2	2.9	18.9	0.6	2.1	2.8	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	294	216	2.0	7.1	58.2	52.3	6.9	6.7
Standard Error	33	28	0.8	1.0	6.6	6.8	0.4	0.5
Median	290	230	1.0	5.6	59.5	52.5	7.0	6.8
Mode	270	ND	0.0	ND	ND	71.0	6.4	6.8
Standard Deviation	106	90	2.5	3.3	20.8	21.4	1.1	1.4
Sample Variance	11189	8018	6.2	10.6	431.5	458.8	1.2	2.0
Kurtosis	0	1	1.2	3.5	0.2	0.4	3.0	3.6
Skewness	-1	-1	1.2	1.8	-0.9	-1.0	0.0	1.0
Range	345	293	7.4	10.4	64.0	65.8	4.5	5.7
Minimum	85	27	0.0	4.6	18.0	9.2	4.6	4.3
Maximum	430	320	7.4	15.0	82.0	75.0	9.1	10.0
Count	10	10	10	10	10	10	10	10
Confidence Level(95.0%)	76	64	1.8	2.3	14.9	15.3	0.8	1.0

ND = No Data

Provisional MMSD Water Quality Data

GRANGE AVENUE, WEST OF 76TH STREET - SITE 4
ROOT RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.4	15.6	6.4	4.06	0.74	0.036	0.77	0.111	1.01	0.117	0.045	ND
Standard Error	0.0	2.0	0.7	1.24	0.11	0.005	0.11	0.025	0.24	0.016	0.007	ND
Median	7.4	17.7	5.5	2.70	0.60	0.033	0.65	0.092	0.70	0.105	0.045	ND
Mode	ND	ND	ND	ND	ND	0.033	ND	ND	0.59	ND	0.049	ND
Standard Deviation	0.1	5.9	2.2	3.92	0.36	0.014	0.34	0.080	0.75	0.050	0.022	ND
Sample Variance	0.0	35.3	5.0	15.40	0.13	0.000	0.12	0.006	0.56	0.003	0.001	ND
Kurtosis	-0.3	1.2	3.7	5.61	1.00	1.794	1.02	0.387	1.20	1.196	1.906	ND
Skewness	0.8	-1.3	1.9	2.27	1.35	1.204	1.30	0.790	1.62	0.721	-0.139	ND
Range	0.4	18.1	7.0	13.36	1.08	0.049	1.06	0.270	2.13	0.182	0.087	0.00
Minimum	7.3	3.3	4.6	0.84	0.42	0.019	0.44	0.000	0.37	0.038	0.000	0.00
Maximum	7.7	21.4	11.6	14.20	1.50	0.068	1.50	0.270	2.50	0.220	0.087	0.00
Count	9	9	9	10	10	10	10	10	10	10	10	0
Confidence Level(95.0%)	0.1	4.6	1.7	2.81	0.26	0.010	0.25	0.057	0.54	0.036	0.016	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	807.0	779.4	6.9	27.6	24.0	1319	229.1	7047	3.2	ND
Standard Error	ND	ND	85.0	90.7	2.3	11.9	8.6	151	24.5	5464	0.2	ND
Median	ND	ND	700.0	695.9	3.9	11.8	12.3	1252	245.0	900	3.0	ND
Mode	ND	ND	680.0	ND	2.2	ND	ND	ND	290.0	960	3.0	ND
Standard Deviation	ND	ND	268.7	287.0	7.4	37.6	27.3	454	77.6	17277	0.6	ND
Sample Variance	ND	ND	72178.9	82355.0	55.2	1412.9	747.7	206002	6019.2	298503912	0.4	ND
Kurtosis	ND	ND	-0.8	-0.7	3.8	4.0	1.7	1	0.5	10	3.4	ND
Skewness	ND	ND	0.0	-0.1	2.0	2.1	1.7	-1	-1.0	3	1.9	ND
Range	0.0	0.0	850.0	910.8	22.8	116.8	78.8	1495	249.0	55460	2.0	0
Minimum	0.0	0.0	350.0	283.0	2.2	3.2	4.2	422	71.0	540	2.7	0
Maximum	0.0	0.0	1200.0	1193.8	25.0	120.0	83.0	1917	320.0	56000	4.7	0
Count	0	0	10	10	10	10	10	9	10	10	10	0
Confidence Level(95.0%)	ND	ND	192.2	205.3	5.3	26.9	19.6	349	55.5	12359	0.5	ND

ND = No Data

Provisional MMSD Water Quality Data

GRANGE AVENUE, WEST OF 76TH STREET - SITE 4
ROOT RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	72.80	33.60	0.0	6.2	9.5	4.8	2.0	25.9	0.4	1.3	2.4	0.0
Standard Error	6.73	3.59	0.0	0.8	1.0	0.9	1.2	6.4	0.3	0.9	1.2	0.0
Median	73.50	32.00	0.0	5.2	8.5	3.4	0.0	18.0	0.0	0.0	0.0	0.0
Mode	ND	30.00	0.0	10.0	ND	ND	0.0	18.0	0.0	0.0	0.0	0.0
Standard Deviation	21.28	11.36	0.0	2.5	3.1	2.8	3.7	20.2	0.9	2.5	3.7	0.0
Sample Variance	452.84	129.16	0.0	6.3	9.4	7.8	13.7	409.5	0.8	6.1	13.9	0.0
Kurtosis	1.25	0.40	ND	-1.2	1.5	2.4	5.1	1.2	4.3	0.0	-0.3	ND
Skewness	-0.97	-0.54	ND	0.9	1.6	1.6	2.2	1.6	2.2	1.4	1.2	ND
Range	72.00	39.00	0.0	6.1	9.2	8.6	11.0	57.2	2.6	5.4	9.3	0.0
Minimum	27.00	11.00	0.0	3.9	6.8	2.4	0.0	9.8	0.0	0.0	0.0	0.0
Maximum	99.00	50.00	0.0	10.0	16.0	11.0	11.0	67.0	2.6	5.4	9.3	0.0
Count	10	10	10	10	10	9	9	10	10	8	9	2
Confidence Level(95.0%)	15.22	8.13	0.0	1.8	2.2	2.1	2.8	14.5	0.6	2.1	2.9	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	319	237	1.3	6.7	62.8	56.4	6.3	5.6
Standard Error	31	26	0.6	1.0	6.2	6.4	0.4	0.8
Median	315	260	0.0	5.7	68.5	62.0	6.1	5.8
Mode	290	260	0.0	ND	ND	76.0	6.0	5.8
Standard Deviation	99	83	1.9	3.2	19.6	20.2	1.2	2.4
Sample Variance	9854	6969	3.6	9.9	383.7	406.5	1.5	5.8
Kurtosis	1	2	1.0	6.4	1.0	1.3	2.9	3.6
Skewness	-1	-2	1.4	2.4	-1.3	-1.3	1.1	-1.1
Range	340	274	5.4	10.6	60.0	63.0	4.7	9.6
Minimum	110	46	0.0	4.4	22.0	13.0	4.4	0.0
Maximum	450	320	5.4	15.0	82.0	76.0	9.1	9.6
Count	10	10	10	10	10	10	10	10
Confidence Level(95.0%)	71	60	1.4	2.3	14.0	14.4	0.9	1.7

ND = No Data

Provisional MMSD Water Quality Data

RYAN ROAD, WEST OF 60TH STREET - SITE 5
ROOT RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.7	17.4	7.7	6.97	0.51	0.023	0.53	0.065	0.57	0.097	0.031	ND
Standard Error	0.0	2.2	0.6	0.99	0.05	0.004	0.05	0.017	0.12	0.012	0.007	ND
Median	7.7	19.9	6.9	6.17	0.46	0.021	0.49	0.050	0.58	0.096	0.040	ND
Mode	7.7	ND	ND	ND	0.65	0.011	0.40	ND	0.00	0.096	0.000	ND
Standard Deviation	0.1	6.7	1.7	3.12	0.16	0.013	0.17	0.054	0.37	0.039	0.023	ND
Sample Variance	0.0	45.3	3.0	9.75	0.02	0.000	0.03	0.003	0.14	0.002	0.001	ND
Kurtosis	-0.1	1.6	5.7	-0.63	0.58	-0.776	0.58	2.812	0.10	3.886	-1.376	ND
Skewness	1.1	-1.4	2.3	0.24	1.01	0.687	1.02	1.579	-0.24	1.362	-0.651	ND
Range	0.4	20.7	5.4	9.87	0.52	0.036	0.56	0.190	1.20	0.151	0.058	0.00
Minimum	7.6	3.1	6.6	1.93	0.31	0.010	0.32	0.000	0.00	0.039	0.000	0.00
Maximum	8.0	23.8	12.0	11.80	0.83	0.046	0.88	0.190	1.20	0.190	0.058	0.00
Count	9	9	9	10	10	10	10	10	10	10	10	0
Confidence Level(95.0%)	0.1	5.2	1.3	2.23	0.11	0.009	0.12	0.039	0.26	0.028	0.016	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	644.0	622.6	5.1	21.4	21.9	1026	141.3	384	2.5	ND
Standard Error	ND	ND	55.9	57.5	1.4	8.8	8.0	59	14.7	80	0.1	ND
Median	ND	ND	655.0	646.4	4.0	11.5	12.2	1074	155.0	360	2.5	ND
Mode	ND	ND	ND	ND	4.0	10.0	ND	ND	160.0	150	2.2	ND
Standard Deviation	ND	ND	176.9	181.7	4.3	27.8	25.4	178	46.5	253	0.3	ND
Sample Variance	ND	ND	31293.3	33029.0	18.5	773.3	645.6	31513	2165.8	63960	0.1	ND
Kurtosis	ND	ND	0.0	-0.4	8.6	9.0	8.4	-2	1.3	-2	-2.4	ND
Skewness	ND	ND	-0.4	-0.3	2.9	3.0	2.8	0	-0.9	0	0.0	ND
Range	0.0	0.0	570.0	576.0	15.2	91.8	85.5	464	167.0	650	0.8	0
Minimum	0.0	0.0	310.0	293.0	1.8	7.2	6.5	776	43.0	130	2.1	0
Maximum	0.0	0.0	880.0	869.0	17.0	99.0	92.0	1240	210.0	780	2.9	0
Count	0	0	10	10	10	10	10	9	10	10	10	0
Confidence Level(95.0%)	ND	ND	126.5	130.0	3.1	19.9	18.2	136	33.3	181	0.2	ND

ND = No Data

Provisional MMSD Water Quality Data

RYAN ROAD, WEST OF 60TH STREET - SITE 5
ROOT RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	67.20	33.40	0.0	6.1	7.3	5.0	0.2	16.8	0.4	0.0	1.7	0.0
Standard Error	4.46	3.32	0.0	0.9	0.4	0.8	0.2	2.6	0.3	0.0	1.1	0.0
Median	70.50	34.00	0.0	6.6	7.0	5.0	0.0	13.5	0.0	0.0	0.0	0.0
Mode	ND	37.00	0.0	4.5	6.6	ND	0.0	14.0	0.0	0.0	0.0	0.0
Standard Deviation	14.12	10.51	0.0	2.9	1.3	2.4	0.7	8.3	1.0	0.0	3.5	0.0
Sample Variance	199.29	110.49	0.0	8.4	1.7	5.8	0.4	69.1	1.0	0.0	12.5	0.0
Kurtosis	-0.40	-0.17	ND	0.9	0.3	1.2	10.0	-0.5	5.9	ND	1.6	ND
Skewness	-0.71	0.29	ND	-0.8	0.8	1.1	3.2	1.0	2.5	ND	1.8	ND
Range	44.00	35.00	0.0	9.8	4.3	7.6	2.1	24.6	3.1	0.0	8.9	0.0
Minimum	41.00	17.00	0.0	0.0	5.6	2.4	0.0	7.4	0.0	0.0	0.0	0.0
Maximum	85.00	52.00	0.0	9.8	9.9	10.0	2.1	32.0	3.1	0.0	8.9	0.0
Count	10	10	10	10	10	9	10	10	10	7	10	2
Confidence Level(95.0%)	10.10	7.52	0.0	2.1	0.9	1.9	0.5	5.9	0.7	0.0	2.5	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	305	227	0.8	6.1	59.1	52.9	6.2	6.1
Standard Error	25	13	0.4	0.4	2.7	2.8	0.3	0.3
Median	315	235	0.0	5.7	61.5	55.5	6.3	6.1
Mode	ND	260	0.0	5.7	66.0	60.0	ND	4.8
Standard Deviation	79	42	1.4	1.1	8.5	8.9	1.0	0.9
Sample Variance	6228	1757	1.9	1.3	73.0	78.5	1.0	0.9
Kurtosis	0	-1	-0.6	3.9	-0.8	-1.2	-1.8	-0.7
Skewness	0	-1	1.2	1.7	-0.8	-0.7	-0.2	0.2
Range	260	130	3.4	4.0	25.0	24.0	2.5	2.9
Minimum	170	150	0.0	4.8	44.0	39.0	4.9	4.8
Maximum	430	280	3.4	8.8	69.0	63.0	7.4	7.7
Count	10	10	10	10	10	10	10	10
Confidence Level(95.0%)	56	30	1.0	0.8	6.1	6.3	0.7	0.7

ND = No Data

Provisional MMSD Water Quality Data

COUNTY LINE ROAD (8 MILE ROAD), approx. 47TH STREET - SITE 6
ROOT RIVER
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	7.7	17.4	7.3	7.22	1.24	0.034	1.29	0.072	0.92	0.176	0.076	ND
Standard Error	0.1	2.2	0.6	1.56	0.19	0.009	0.20	0.013	0.10	0.020	0.009	ND
Median	7.7	19.9	6.6	4.92	1.18	0.023	1.24	0.070	0.87	0.160	0.084	ND
Mode	7.9	ND	ND	ND	ND	ND	1.80	0.054	0.88	0.140	0.086	ND
Standard Deviation	0.2	6.5	1.7	4.95	0.61	0.030	0.64	0.040	0.32	0.065	0.029	ND
Sample Variance	0.0	42.3	3.0	24.45	0.37	0.001	0.41	0.002	0.11	0.004	0.001	ND
Kurtosis	-0.6	1.5	2.9	-0.15	-1.76	5.435	-1.77	0.055	7.56	-0.093	5.642	ND
Skewness	0.5	-1.4	1.8	1.05	0.05	2.204	0.05	0.494	2.53	0.576	-2.095	ND
Range	0.5	19.8	5.5	14.57	1.65	0.102	1.74	0.130	1.22	0.203	0.110	0.00
Minimum	7.5	3.6	5.8	2.03	0.45	0.008	0.46	0.020	0.58	0.077	0.000	0.00
Maximum	8.0	23.4	11.3	16.60	2.10	0.110	2.20	0.150	1.80	0.280	0.110	0.00
Count	9	9	9	10	10	10	10	10	10	10	10	0
Confidence Level(95.0%)	0.1	5.0	1.3	3.54	0.44	0.021	0.46	0.029	0.23	0.046	0.021	ND

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	ND	ND	586.0	554.1	6.0	31.9	49.1	923	108.5	459	2.5	ND
Standard Error	ND	ND	46.4	50.9	0.9	6.6	19.8	60	14.8	131	0.1	ND
Median	ND	ND	610.0	578.0	6.0	30.5	33.6	990	113.0	245	2.4	ND
Mode	ND	ND	610.0	ND	6.0	ND	ND	ND	160.0	ND	ND	ND
Standard Deviation	ND	ND	146.6	160.9	3.0	21.0	62.6	180	46.7	414	0.4	ND
Sample Variance	ND	ND	21493.3	25886.0	8.8	439.6	3913.8	32494	2179.4	171766	0.1	ND
Kurtosis	ND	ND	0.1	0.2	0.4	1.9	8.8	-2	-0.5	0	-1.4	ND
Skewness	ND	ND	0.0	-0.3	0.7	1.3	2.9	0	-0.6	1	0.5	ND
Range	0.0	0.0	510.0	558.0	9.4	70.2	212.4	413	140.0	1180	1.0	0
Minimum	0.0	0.0	330.0	251.0	2.6	8.8	10.6	708	20.0	120	2.1	0
Maximum	0.0	0.0	840.0	809.0	12.0	79.0	223.0	1121	160.0	1300	3.1	0
Count	0	0	10	10	10	10	10	9	10	10	10	0
Confidence Level(95.0%)	ND	ND	104.9	115.1	2.1	15.0	44.8	139	33.4	296	0.3	ND

ND = No Data

Provisional MMSD Water Quality Data

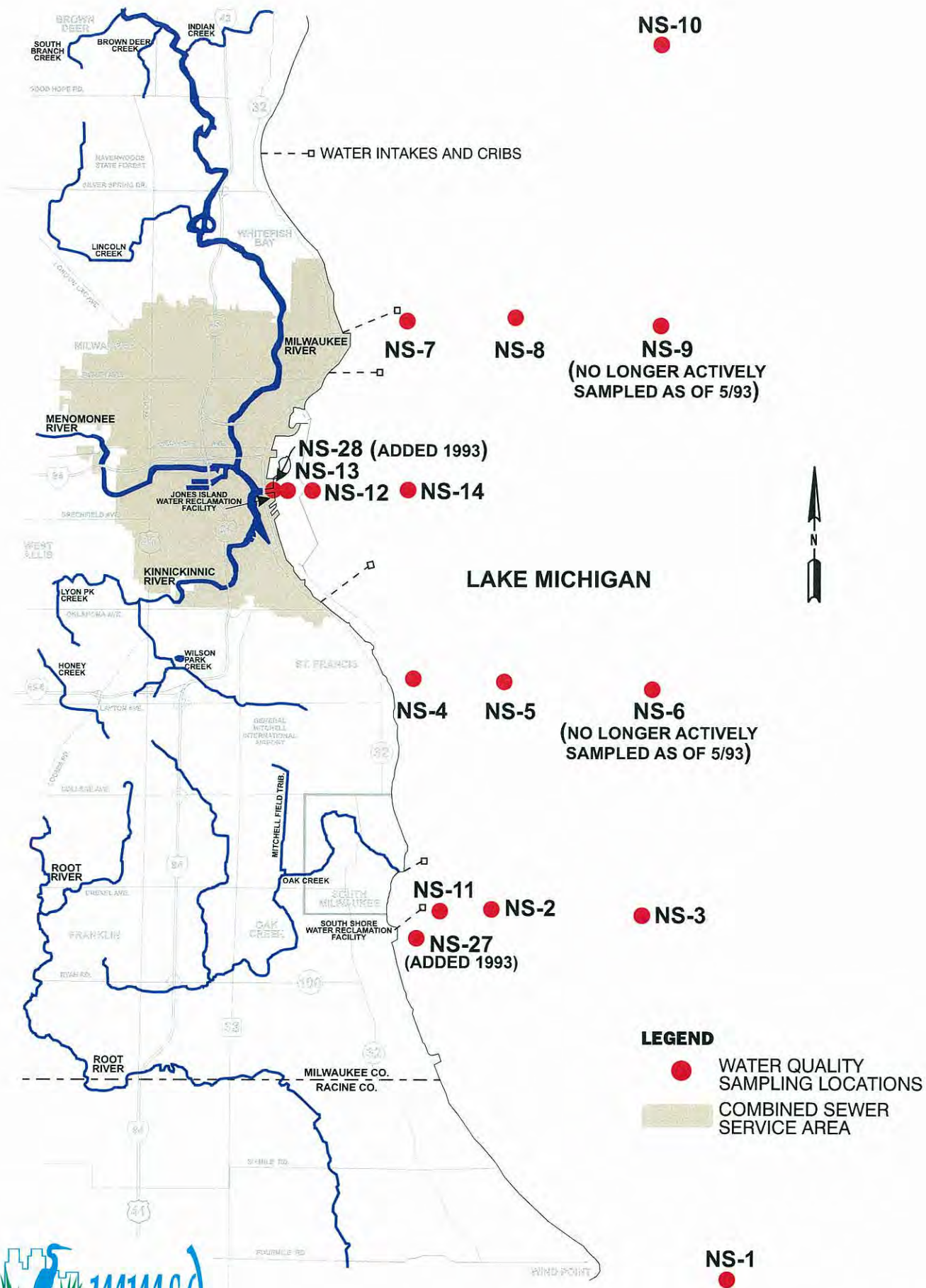
COUNTY LINE ROAD (8 MILE ROAD), approx. 47TH STREET - SITE 6
ROOT RIVER
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	66.00	31.90	0.0	6.6	8.1	5.5	0.4	17.8	0.4	1.0	3.6	0.0
Standard Error	5.58	3.12	0.0	0.7	0.5	0.7	0.4	2.0	0.3	0.7	1.5	0.0
Median	69.00	32.50	0.0	5.9	8.4	4.4	0.0	15.5	0.0	0.0	0.0	0.0
Mode	ND	ND	0.0	ND	ND	ND	0.0	15.0	0.0	0.0	0.0	0.0
Standard Deviation	17.63	9.86	0.0	2.3	1.5	2.2	1.2	6.4	0.9	2.1	4.7	0.0
Sample Variance	310.89	97.21	0.0	5.4	2.1	4.9	1.4	40.6	0.7	4.4	22.3	0.0
Kurtosis	1.13	0.03	ND	-0.1	-1.3	-1.8	10.0	-0.2	2.8	1.5	-1.9	ND
Skewness	-1.14	-0.50	ND	1.0	-0.3	0.4	3.2	0.8	2.0	1.7	0.6	ND
Range	57.00	32.00	0.0	6.8	4.1	5.9	3.7	20.0	2.4	5.4	10.0	0.0
Minimum	28.00	13.00	0.0	4.2	5.8	2.9	0.0	10.0	0.0	0.0	0.0	0.0
Maximum	85.00	45.00	0.0	11.0	9.9	8.8	3.7	30.0	2.4	5.4	10.0	0.0
Count	10	10	10	10	10	9	10	10	10	9	10	2
Confidence Level(95.0%)	12.61	7.05	0.0	1.7	1.0	1.7	0.8	4.6	0.6	1.6	3.4	0.0

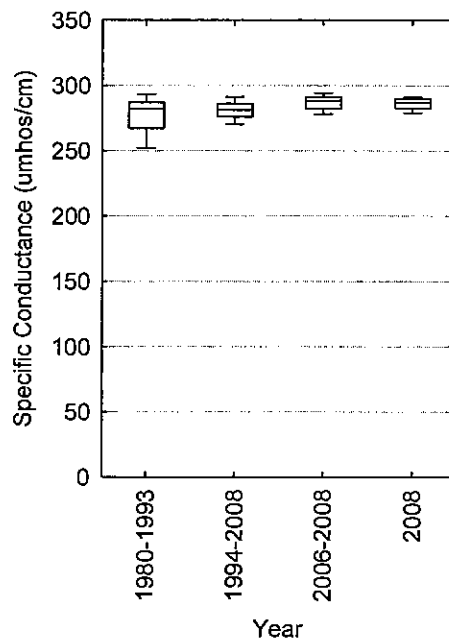
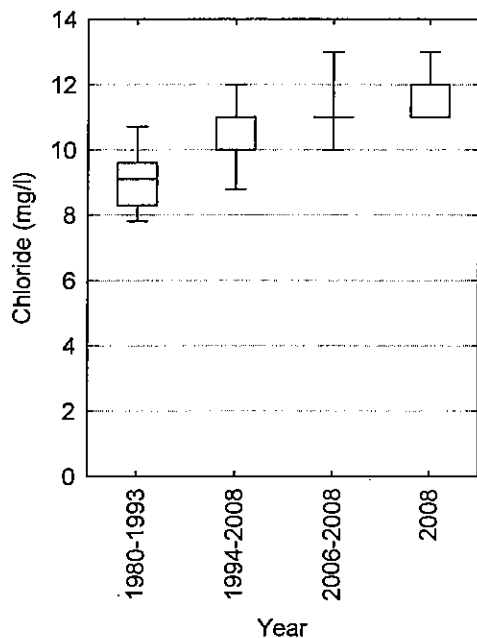
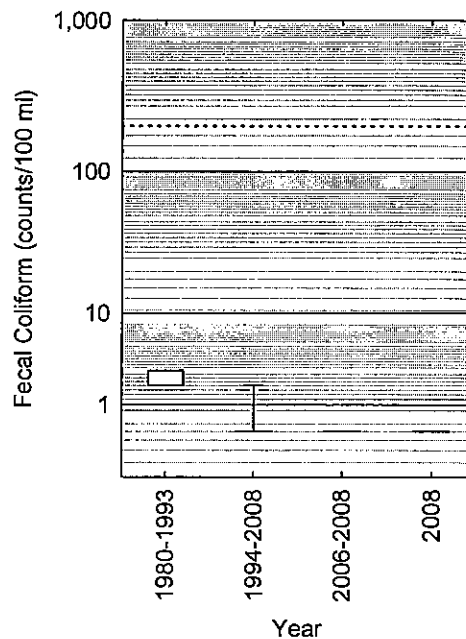
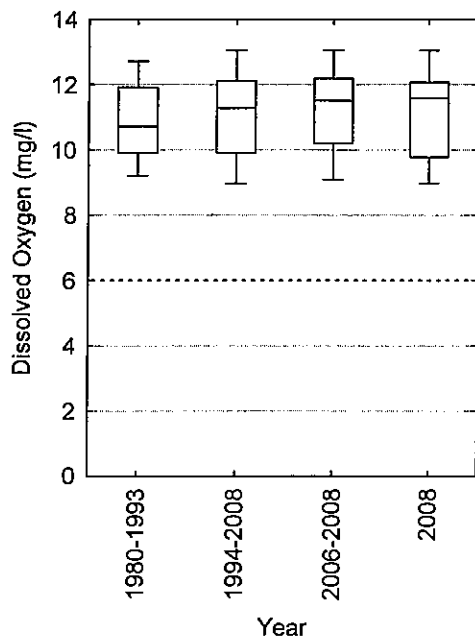
VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	295	219	1.1	6.0	60.7	52.3	8.3	8.0
Standard Error	27	20	0.4	0.2	4.0	3.9	0.5	0.5
Median	305	230	1.0	6.1	64.0	55.0	8.5	8.0
Mode	350	230	0.0	5.0	ND	65.0	ND	ND
Standard Deviation	84	63	1.2	0.7	12.8	12.3	1.5	1.4
Sample Variance	7094	3977	1.4	0.5	163.1	151.3	2.2	2.0
Kurtosis	1	3	-2.4	-1.1	0.0	0.0	0.6	0.3
Skewness	-1	-2	0.1	-0.2	-0.9	-0.9	-0.9	-0.8
Range	270	213	2.6	2.0	38.0	37.0	4.8	4.6
Minimum	120	67	0.0	5.0	36.0	28.0	5.2	5.2
Maximum	390	280	2.6	7.0	74.0	65.0	10.0	9.8
Count	10	10	10	10	10	10	10	10
Confidence Level(95.0%)	60	45	0.9	0.5	9.1	8.8	1.1	1.0

ND = No Data

Provisional MMSD Water Quality Data

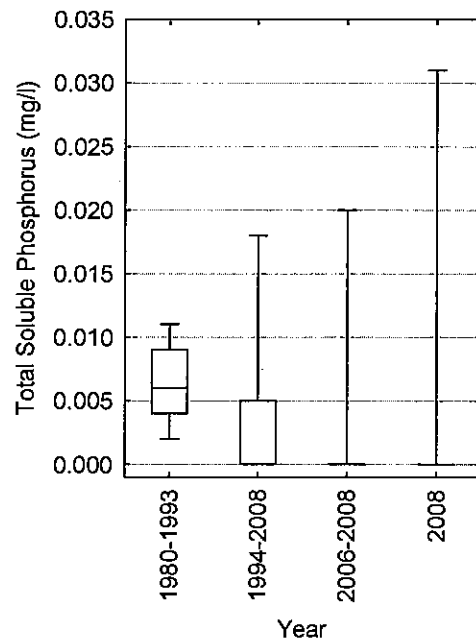
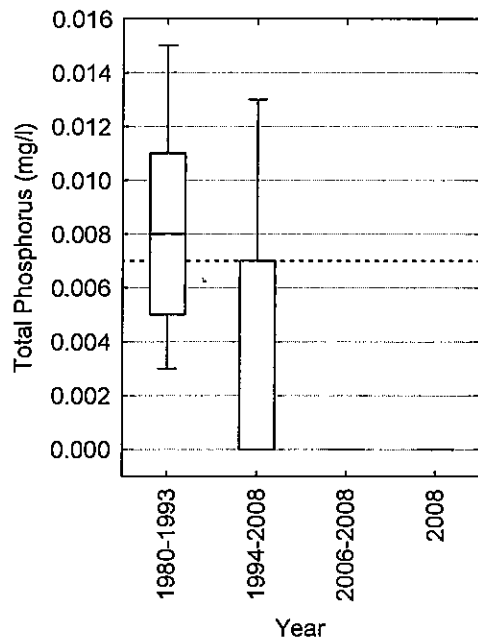
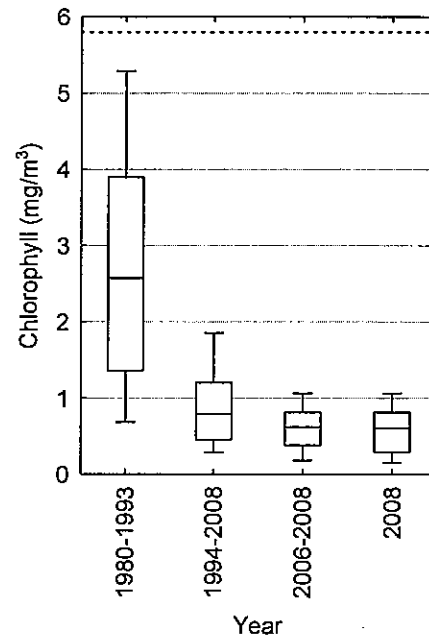
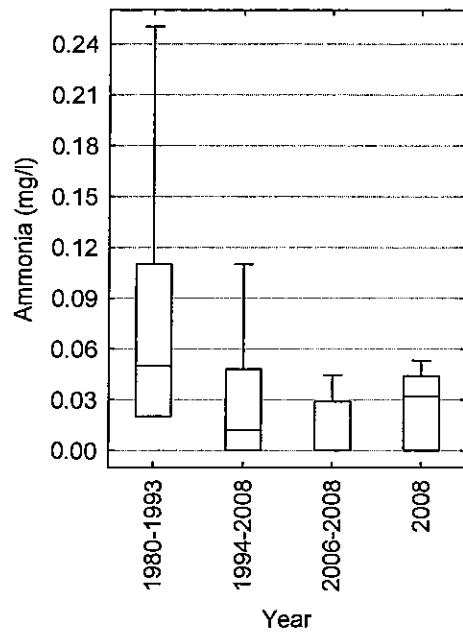


MMSD Water Quality Program Data
Nearshore survey, Site NS-1



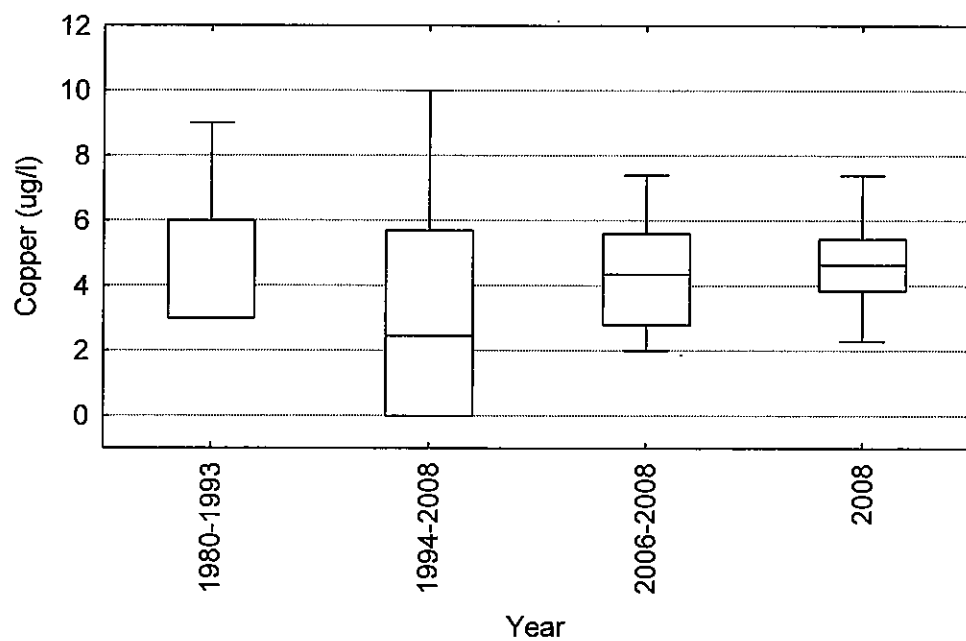
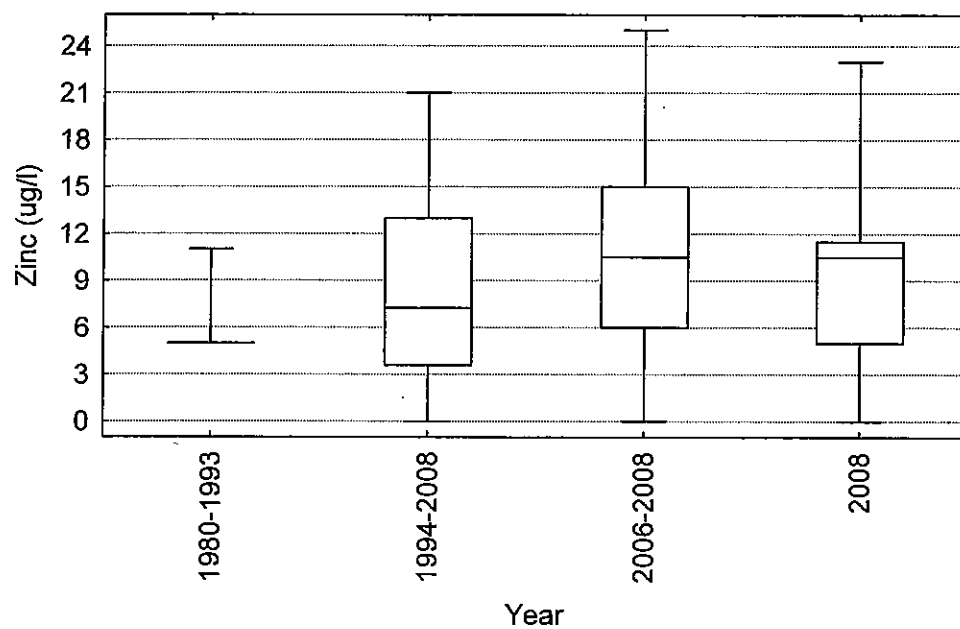
— Median □ 25%-75% ▮ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Program Data
Nearshore survey, Site NS-1



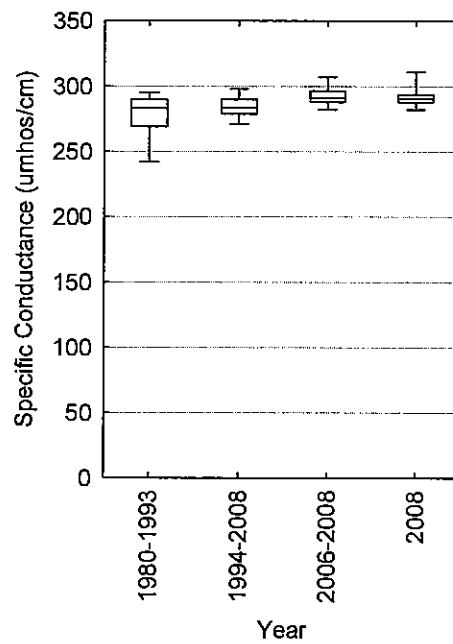
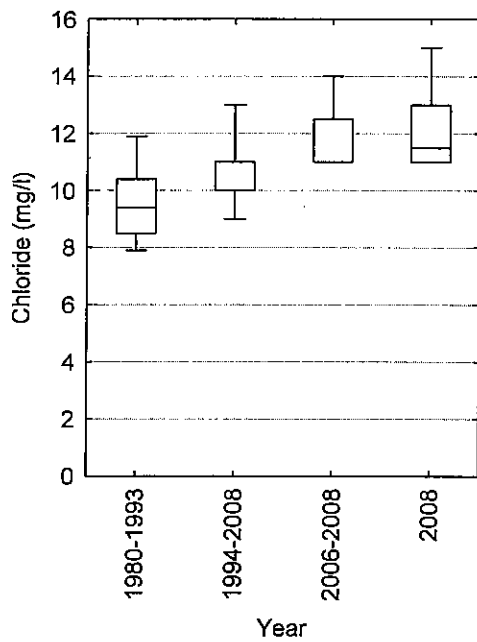
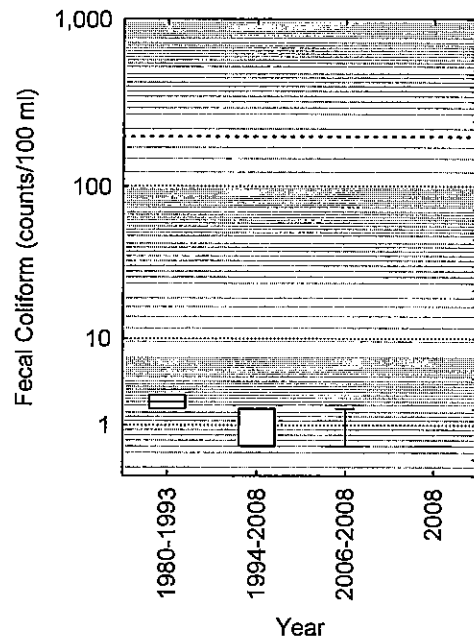
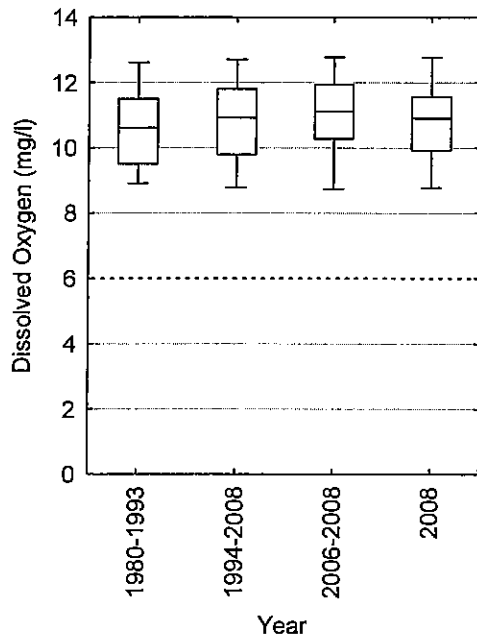
— Median □ 25%-75% ▮ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Program Data
Nearshore survey, Site NS-1



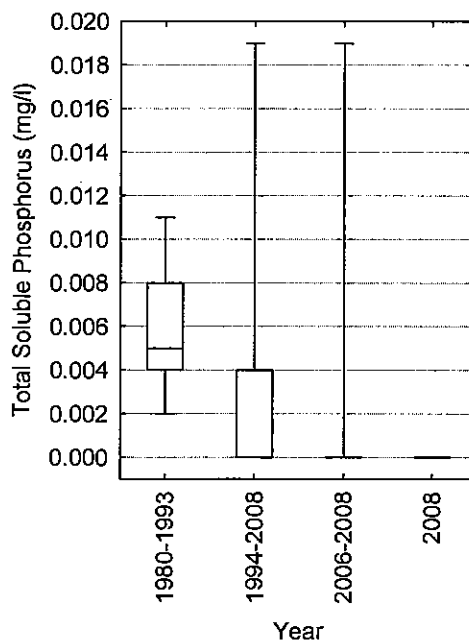
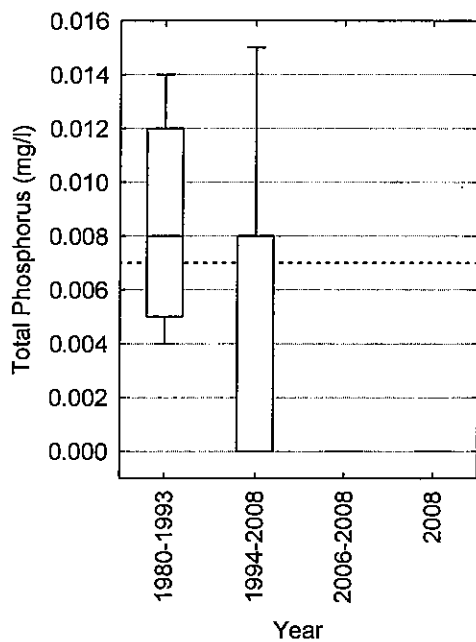
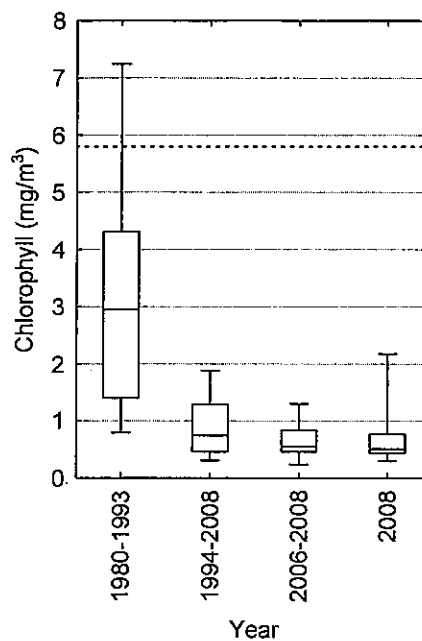
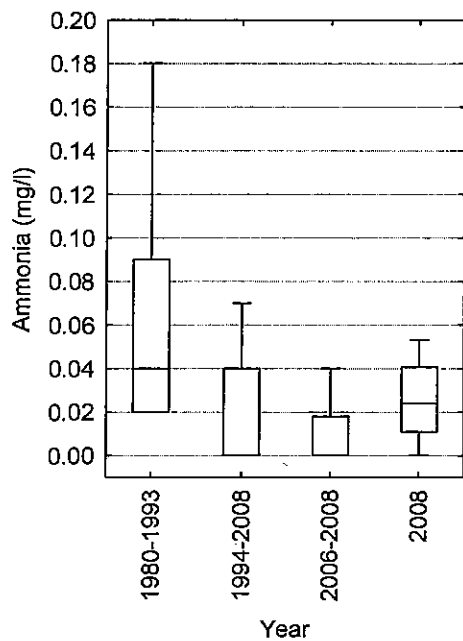
— Median □ 25%-75% ┘ 10%-90%

MMSD Water Quality Program Data
Nearshore survey, Site NS-2



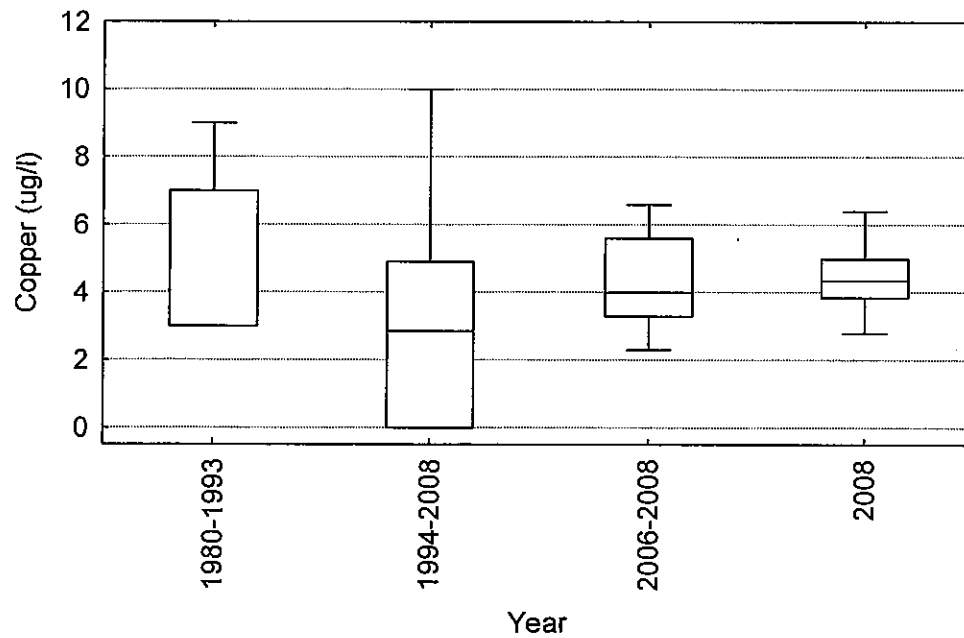
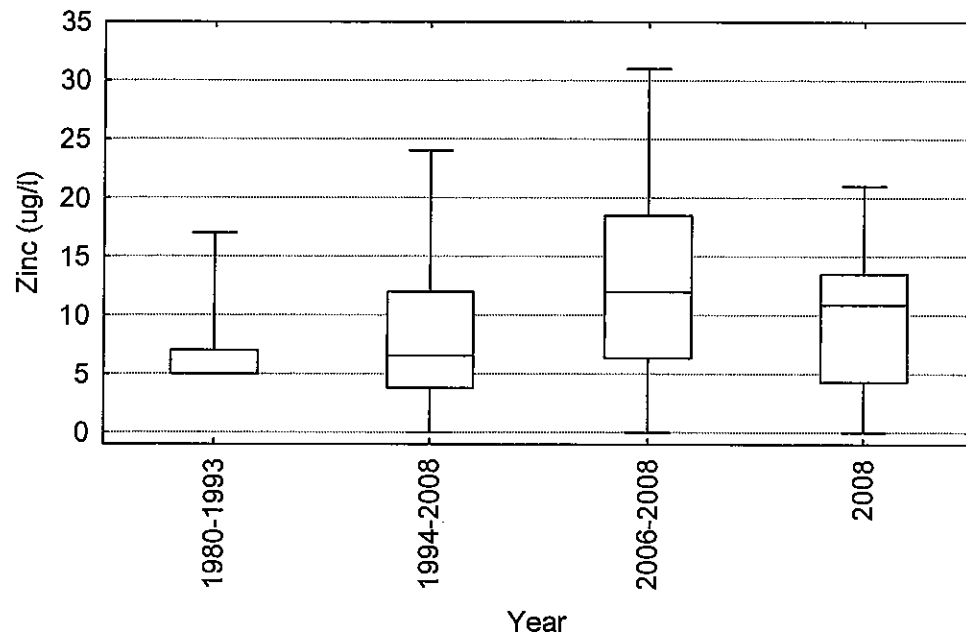
— Median □ 25%-75% ▤ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Program Data
Nearshore survey, Site NS-2



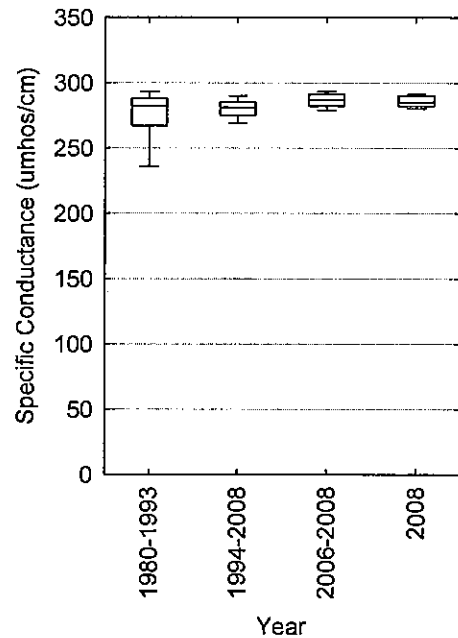
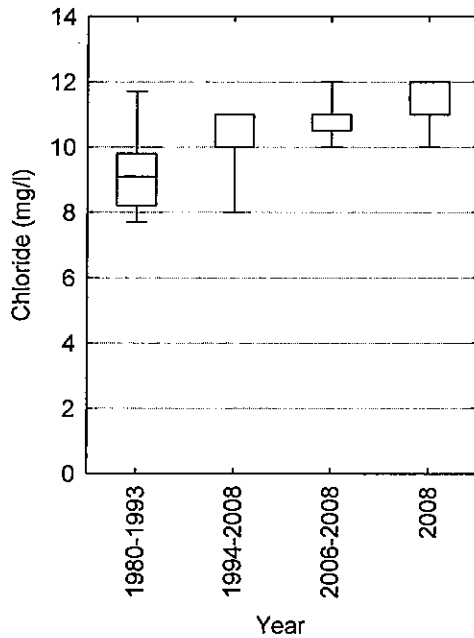
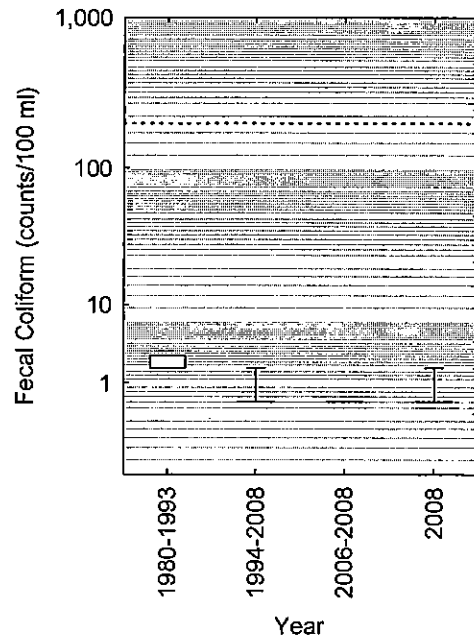
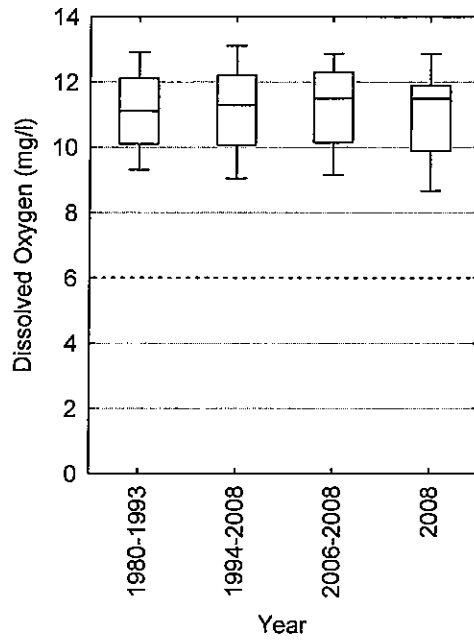
— Median □ 25%-75% ▮ 10%-90%
---- WQ Standard/Criterion

MMSD Water Quality Program Data
Nearshore survey, Site NS-2



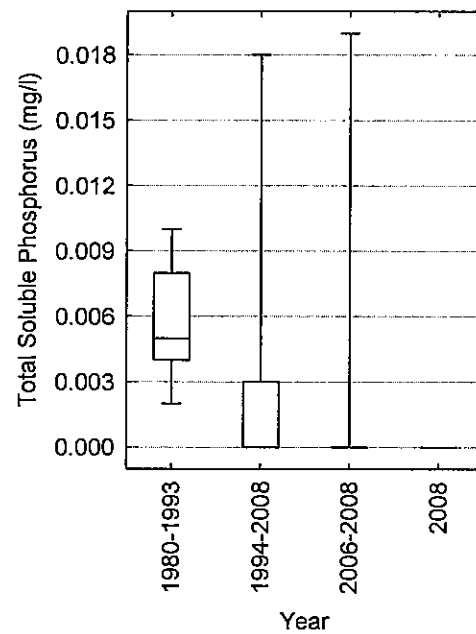
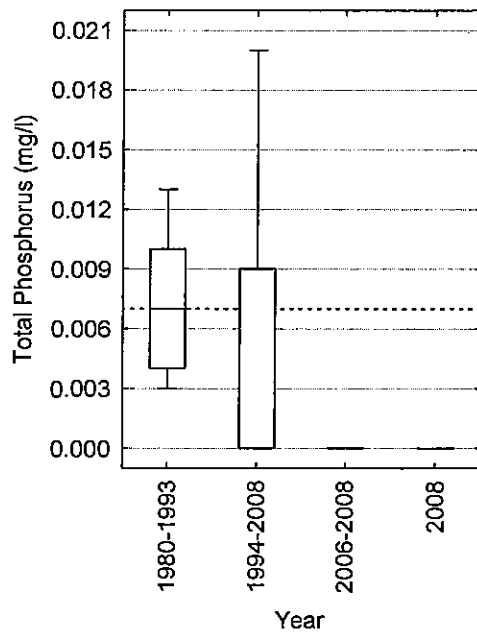
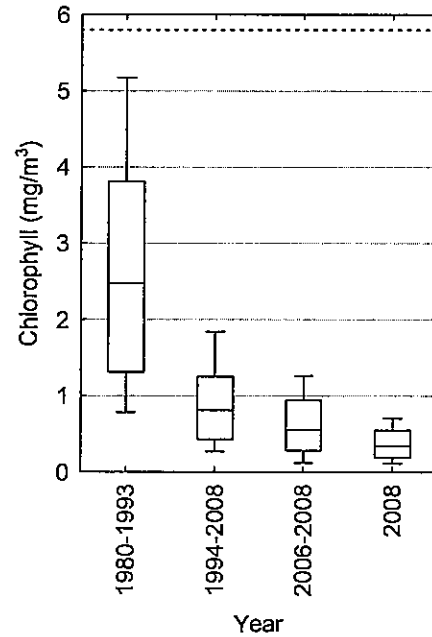
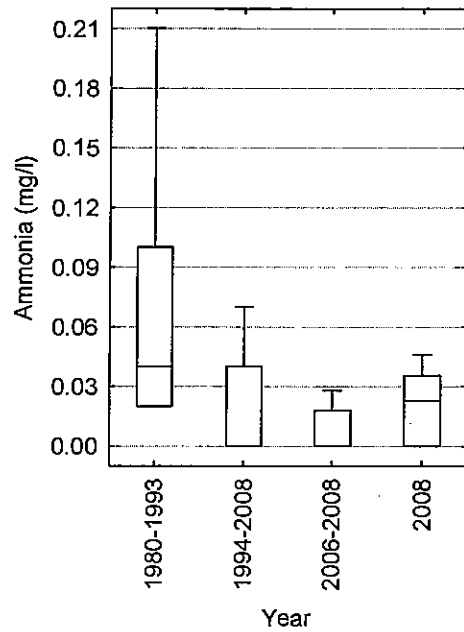
— Median □ 25%-75% ┘ 10%-90%

MMSD Water Quality Program Data
Nearshore survey, Site NS-3



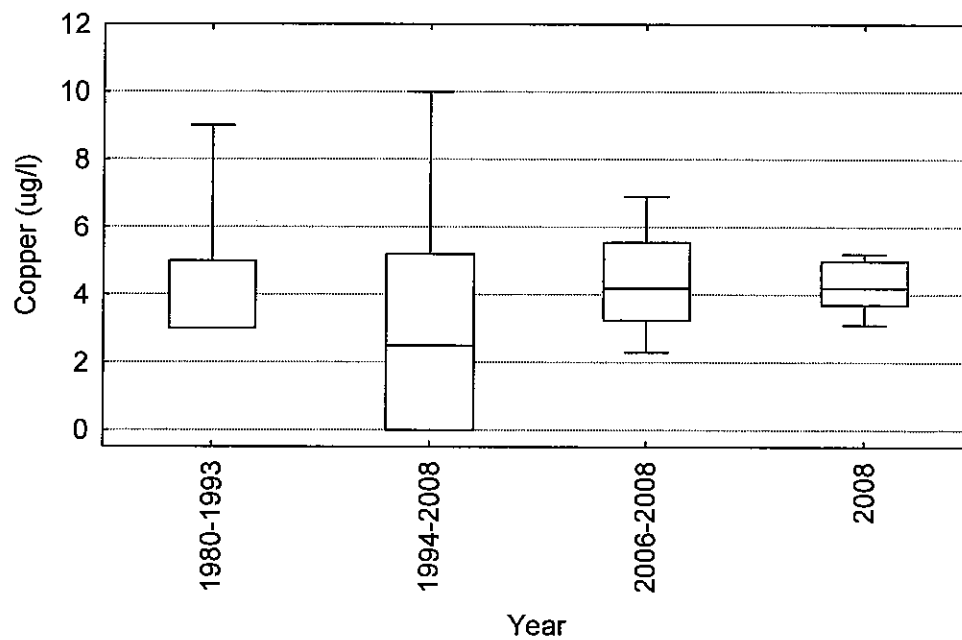
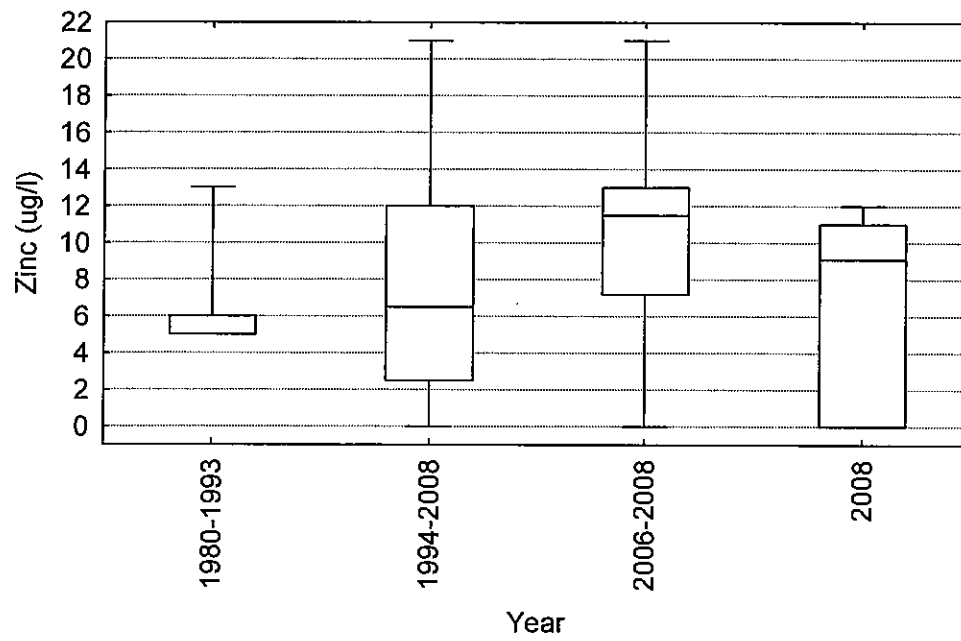
— Median □ 25%-75% ▤ 10%-90%
---- WQ Standard/Criterion

MMSD Water Quality Program Data
Nearshore survey, Site NS-3



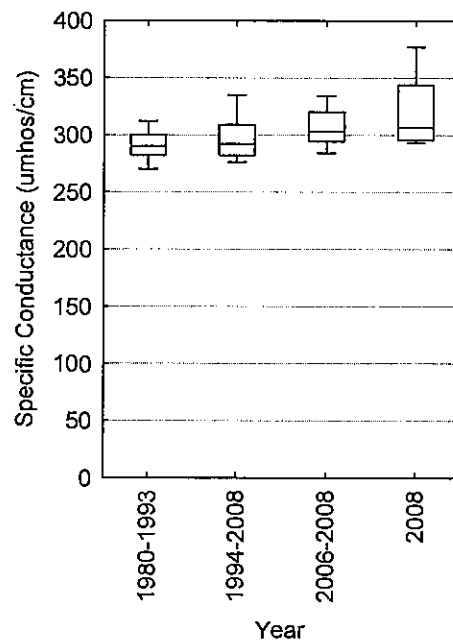
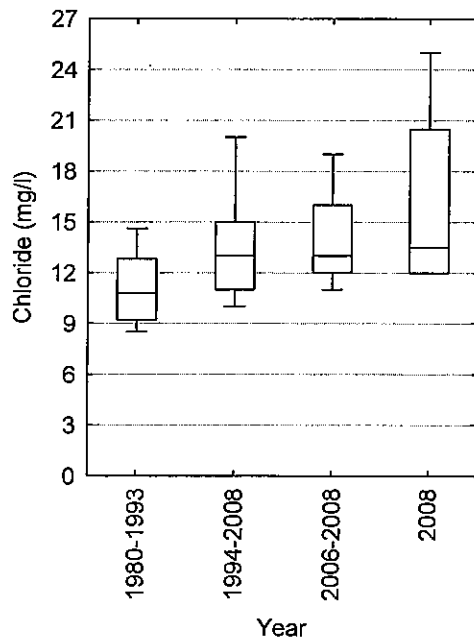
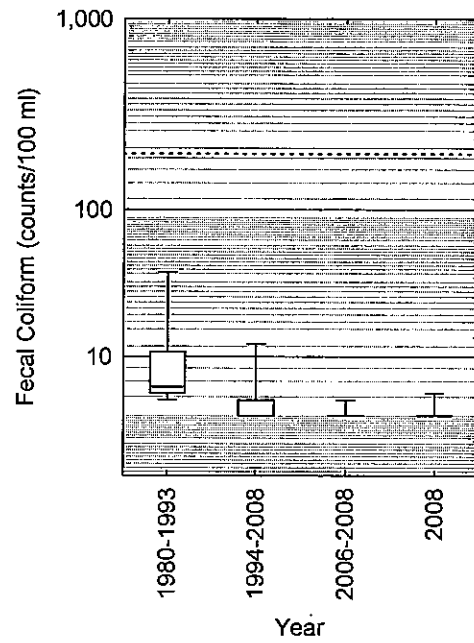
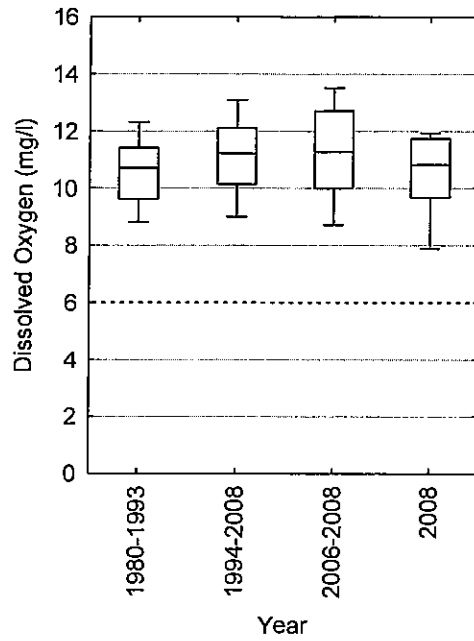
— Median 25%-75% 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Program Data
Nearshore survey, Site NS-3



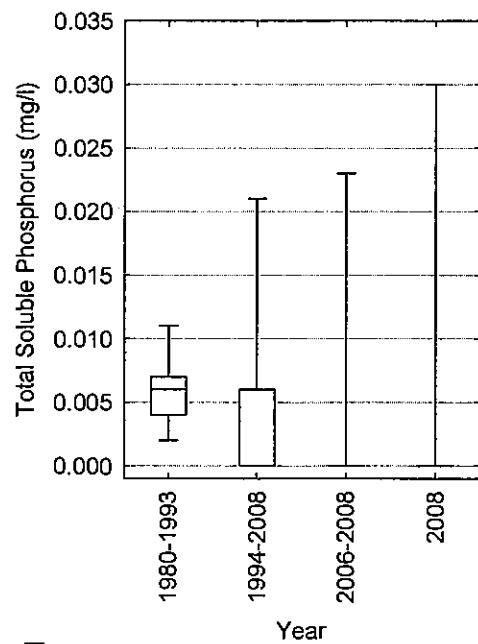
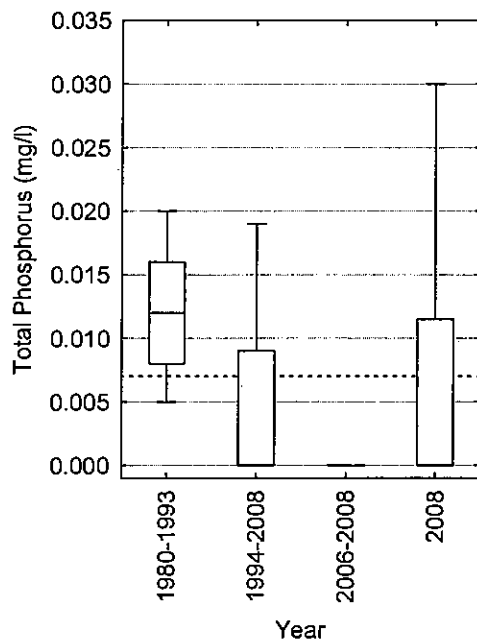
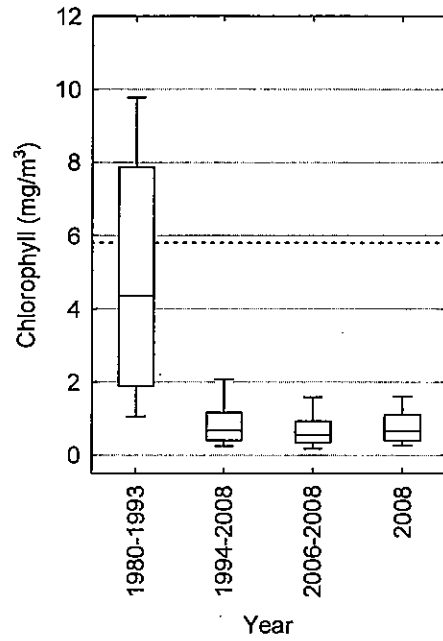
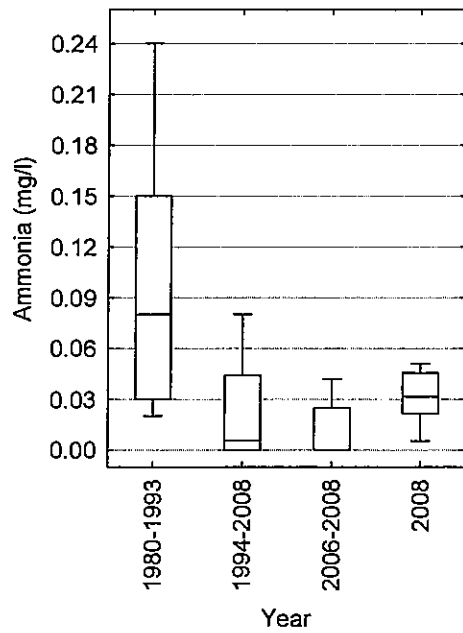
— Median □ 25%-75% ┘ 10%-90%

MMSD Water Quality Program Data
Nearshore survey, Site NS-4



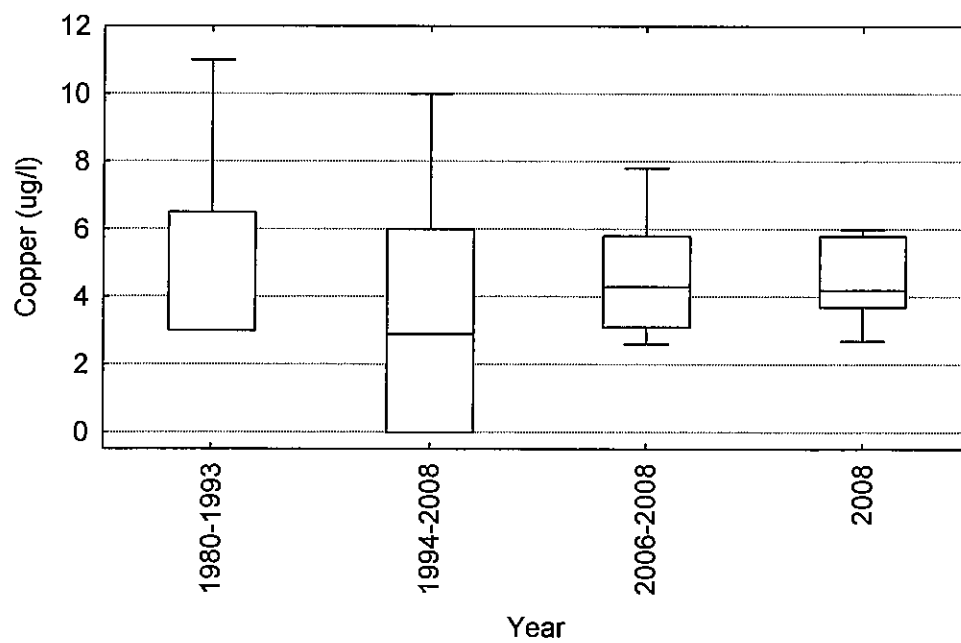
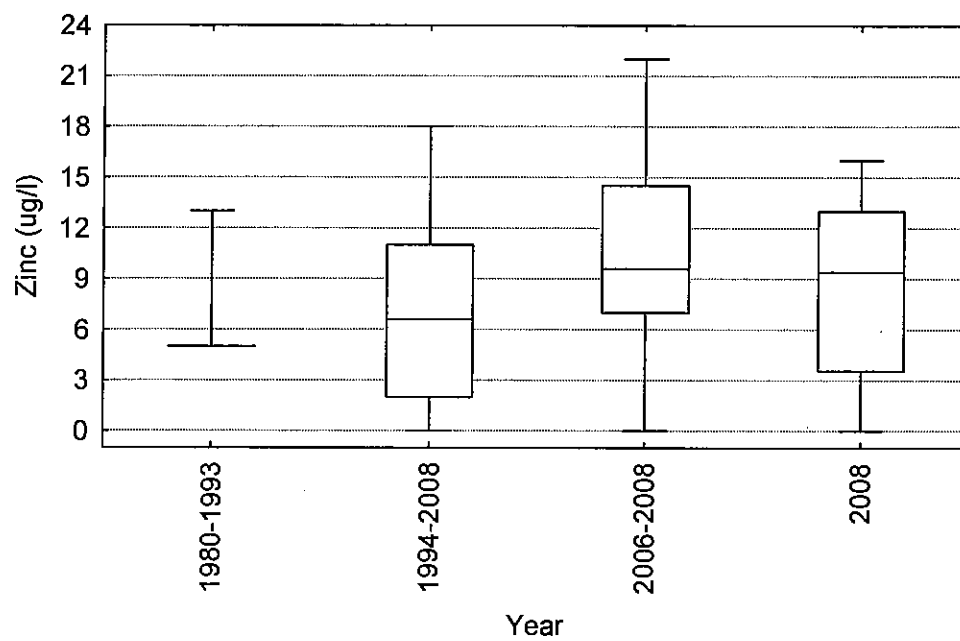
— Median □ 25%-75% ▤ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Program Data
Nearshore survey, Site NS-4



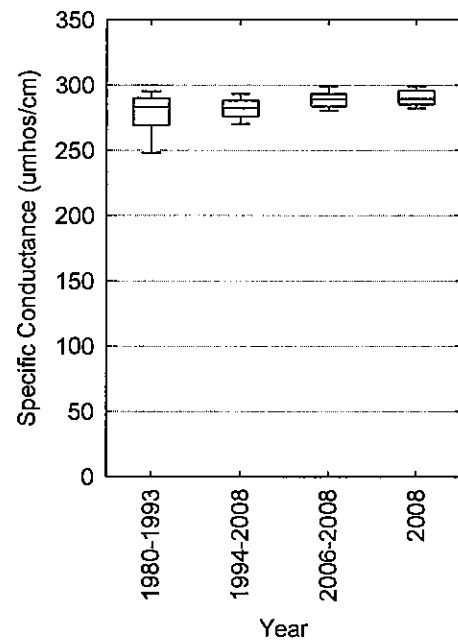
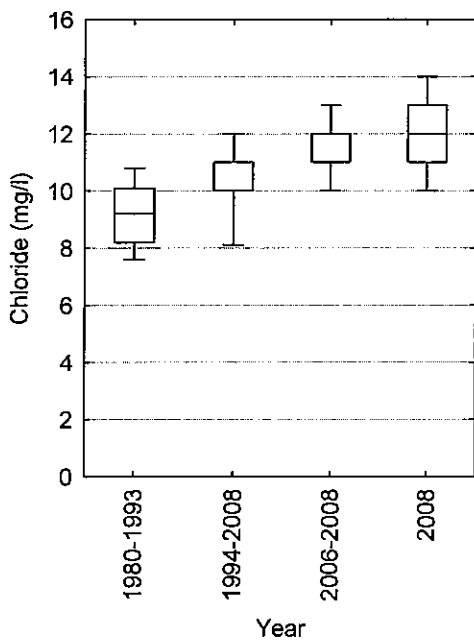
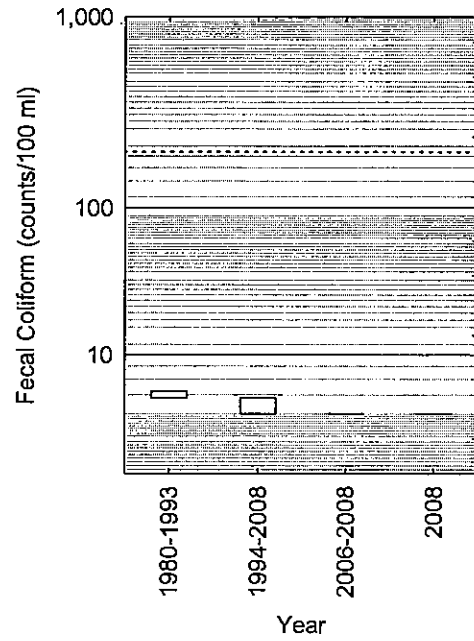
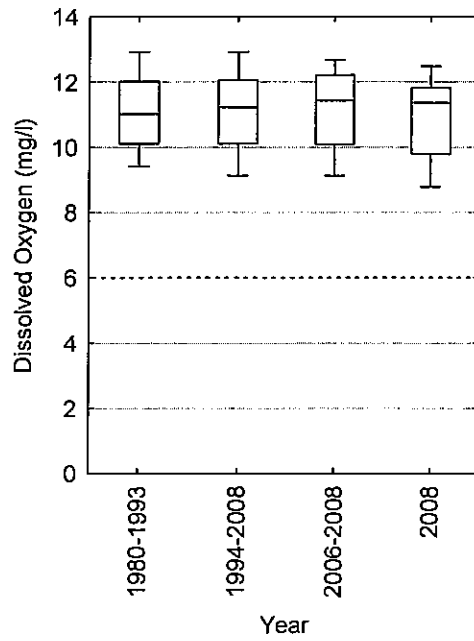
— Median □ 25%-75% ▮ 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Program Data
Nearshore survey, Site NS-4



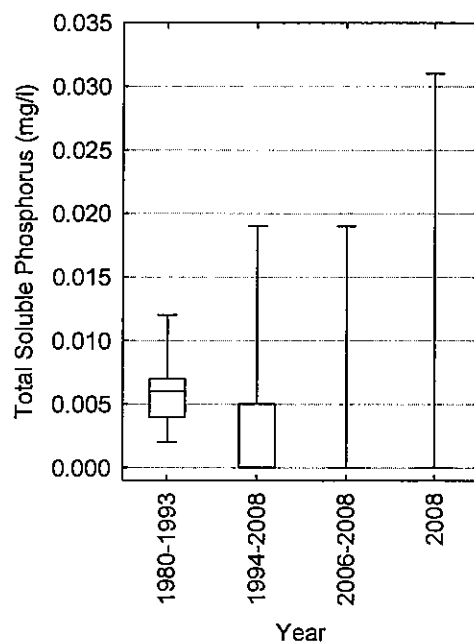
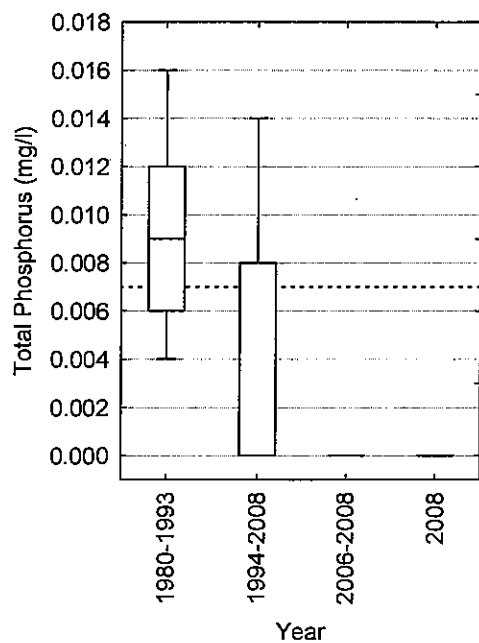
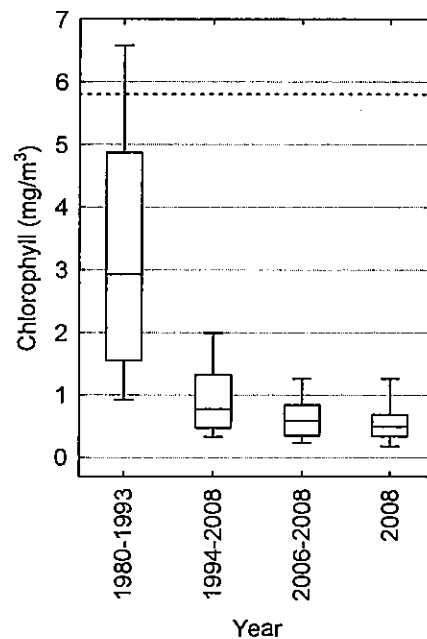
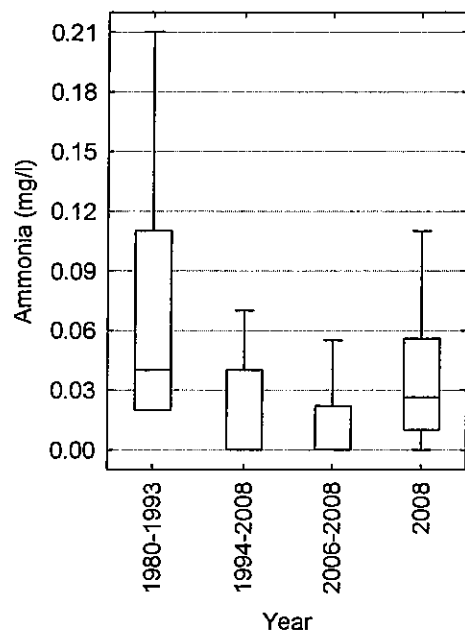
— Median □ 25%-75% ┘ 10%-90%

MMSD Water Quality Program Data
Nearshore survey, Site NS-5



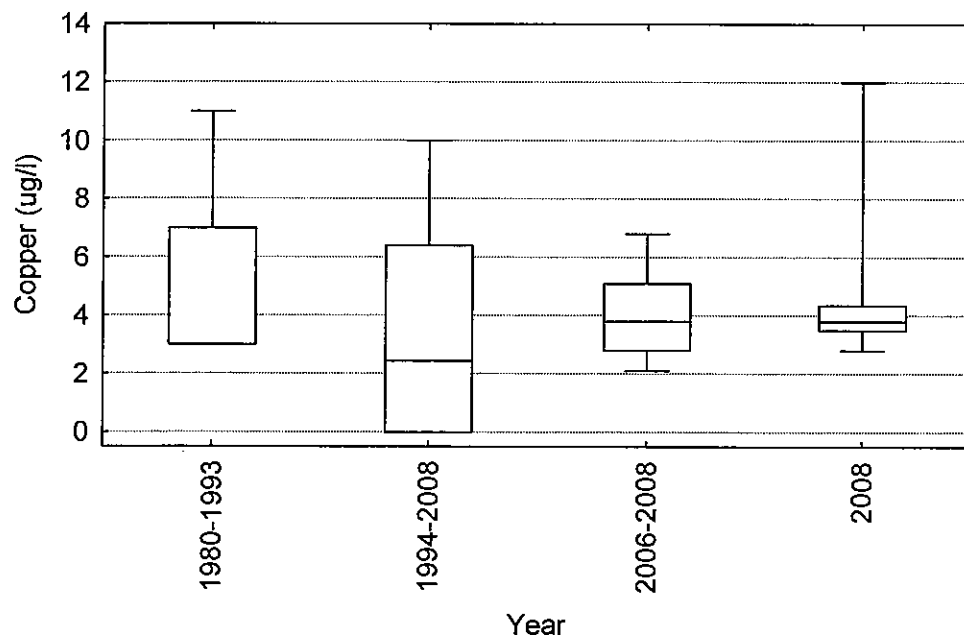
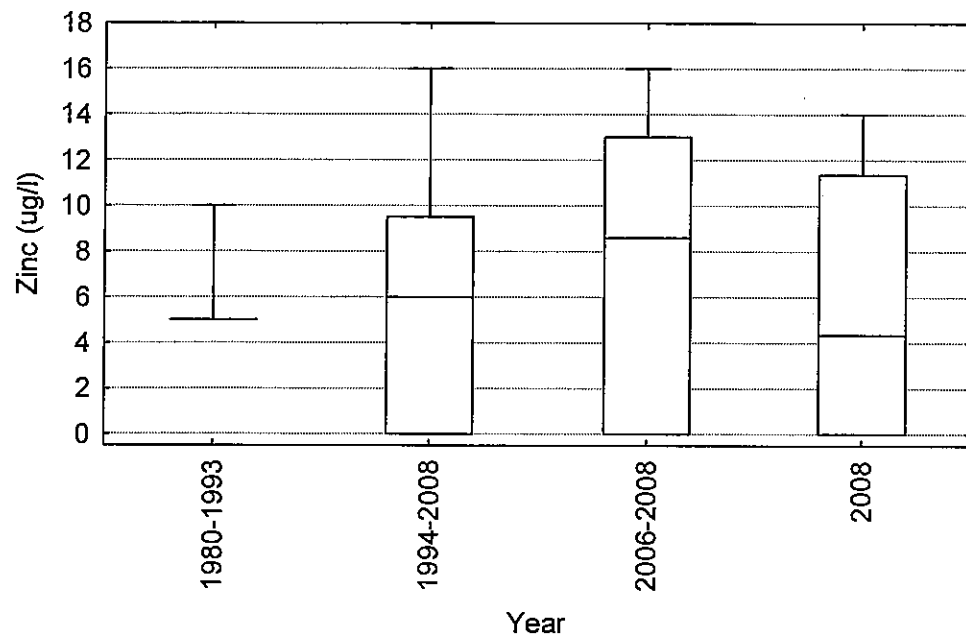
— Median □ 25%-75% ▤ 10%-90%
 ---- WQ Standard/Criterion

MMSD Water Quality Program Data
Nearshore survey, Site NS-5



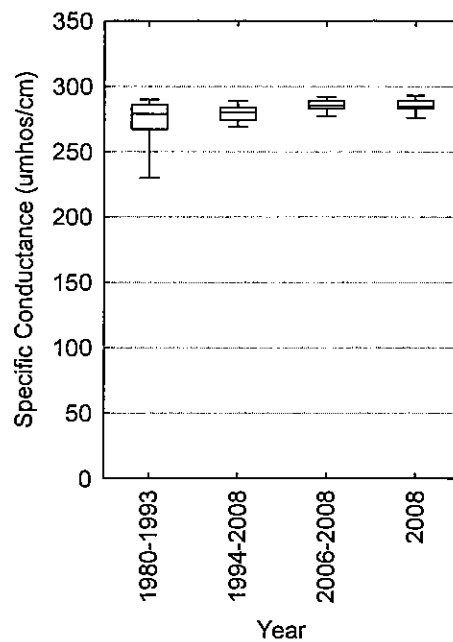
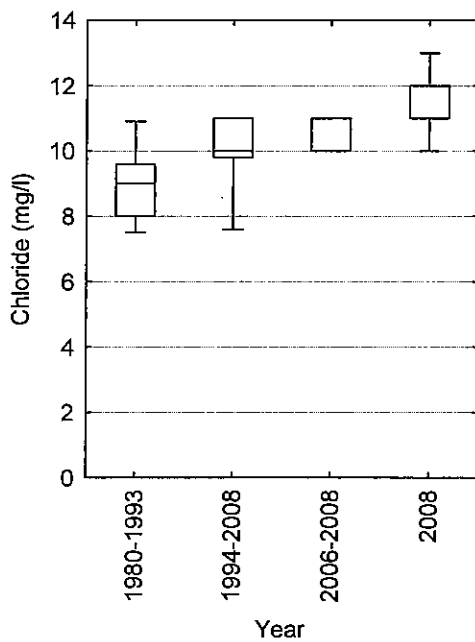
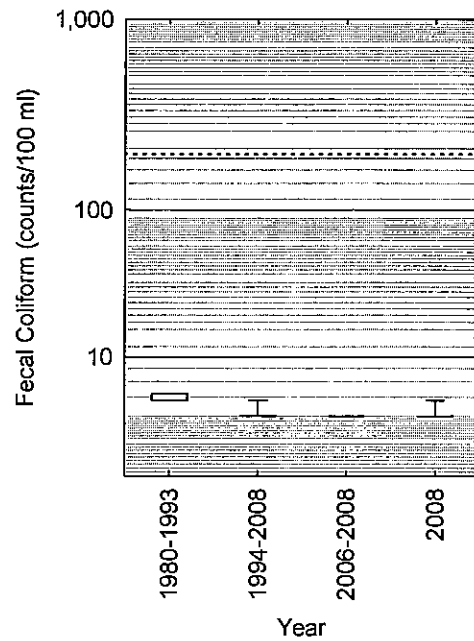
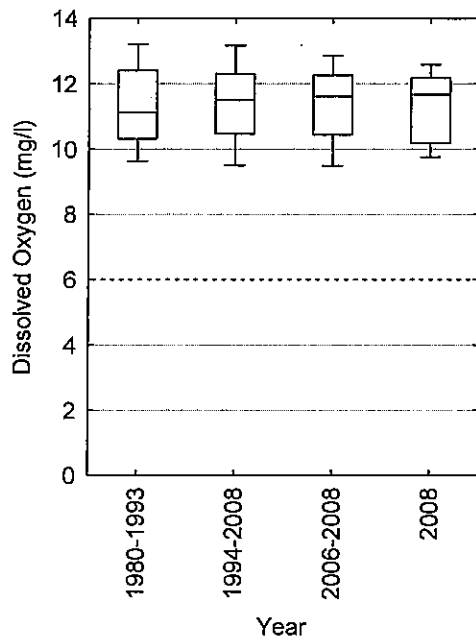
— Median □ 25%-75% ▮ 10%-90%
—— WQ Standard/Criterion

MMSD Water Quality Program Data
Nearshore survey, Site NS-5



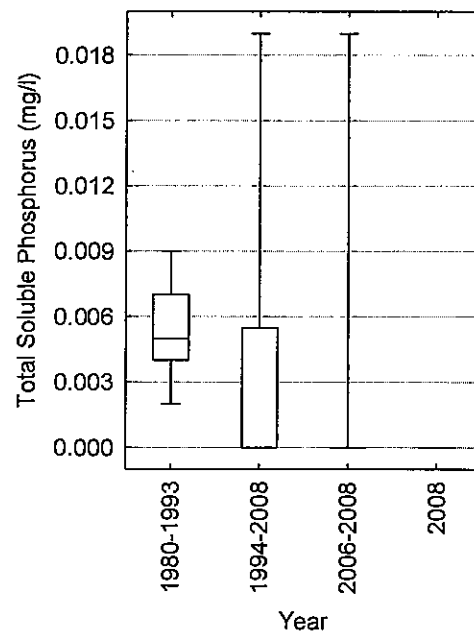
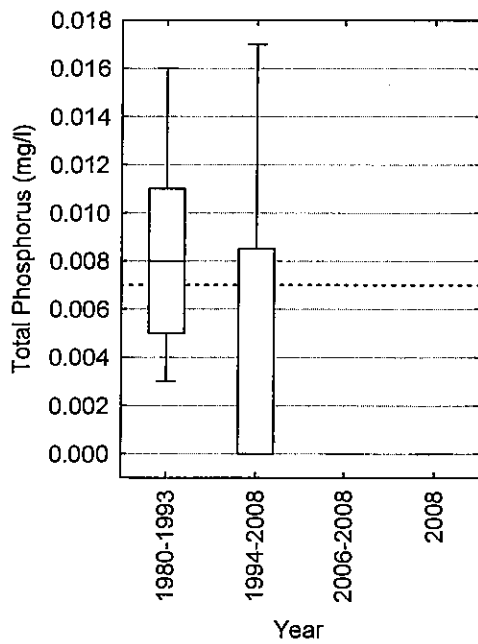
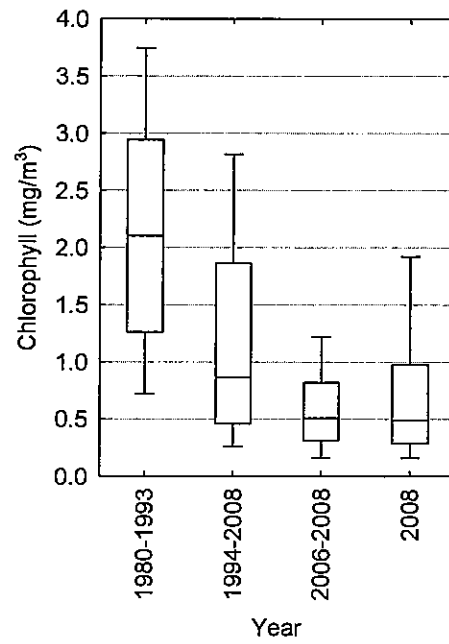
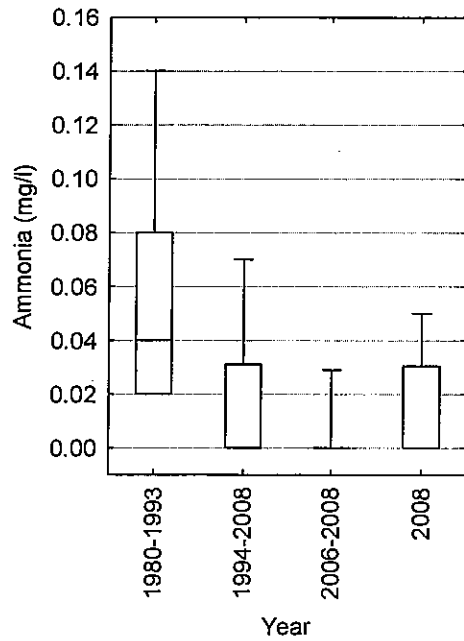
— Median □ 25%-75% ┘ 10%-90%

MMSD Water Quality Program Data
Nearshore survey, Site NS-8



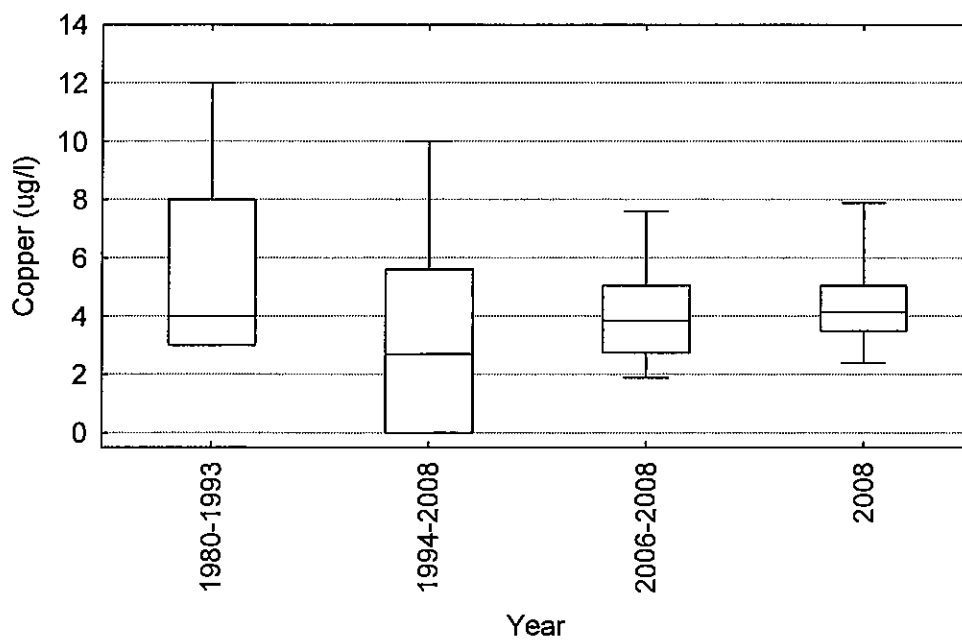
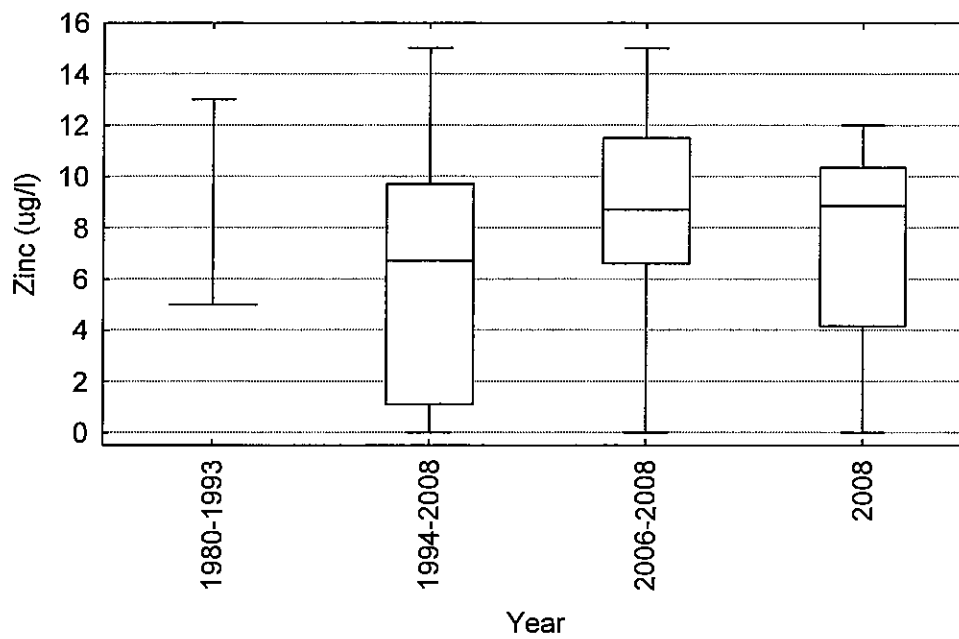
— Median □ 25%-75% ± 10%-90%
--- WQ Standard/Criterion

MMSD Water Quality Program Data
Nearshore survey, Site NS-8

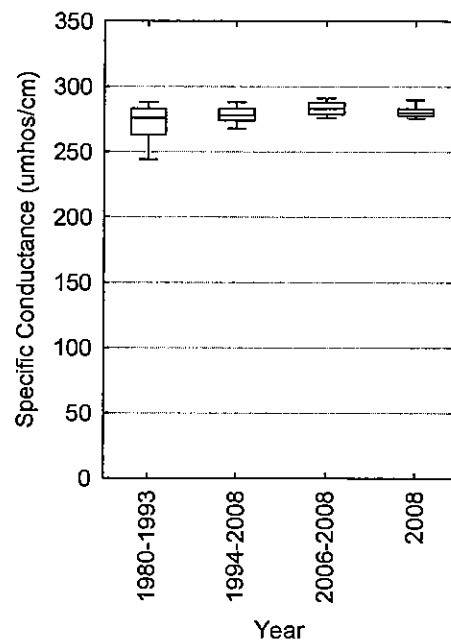
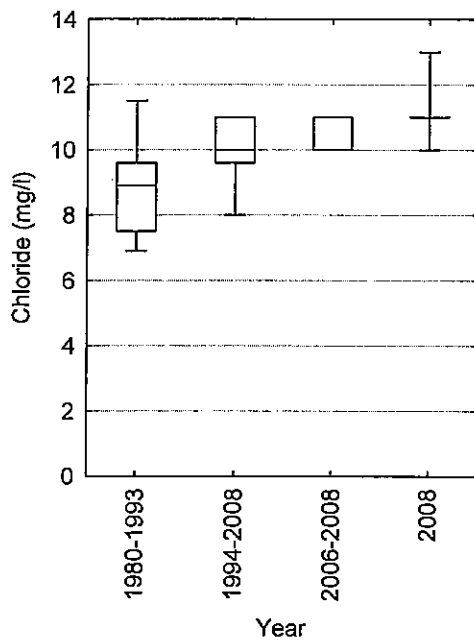
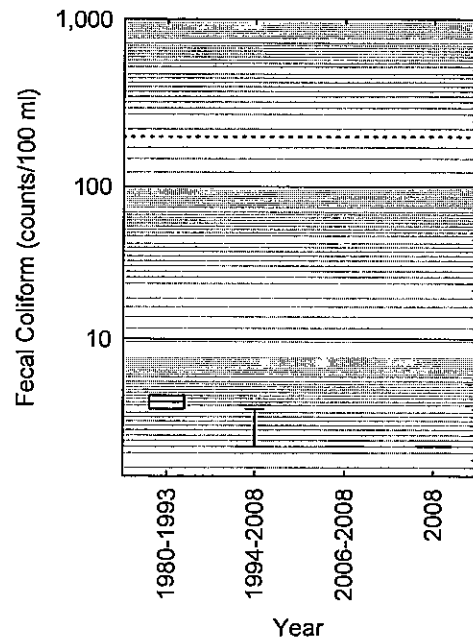
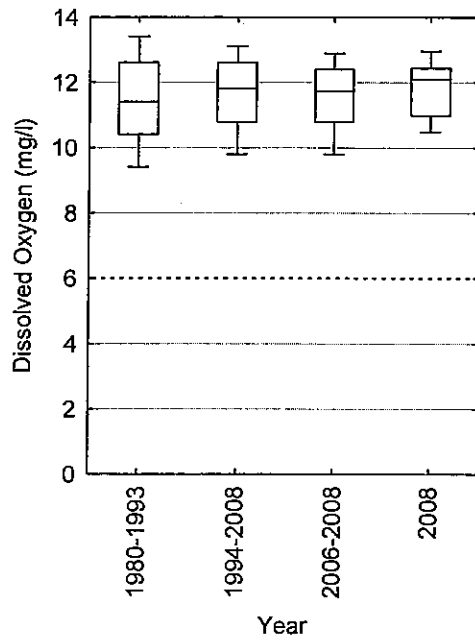


— Median □ 25%-75% ▮ 10%-90%
---- WQ Standard/Criterion

MMSD Water Quality Program Data
Nearshore survey, Site NS-8

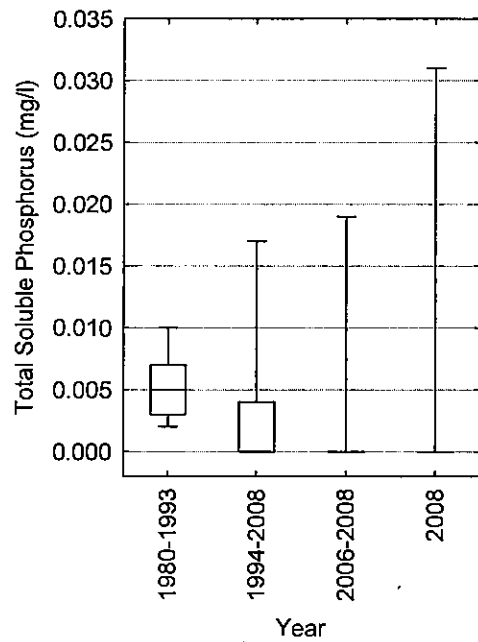
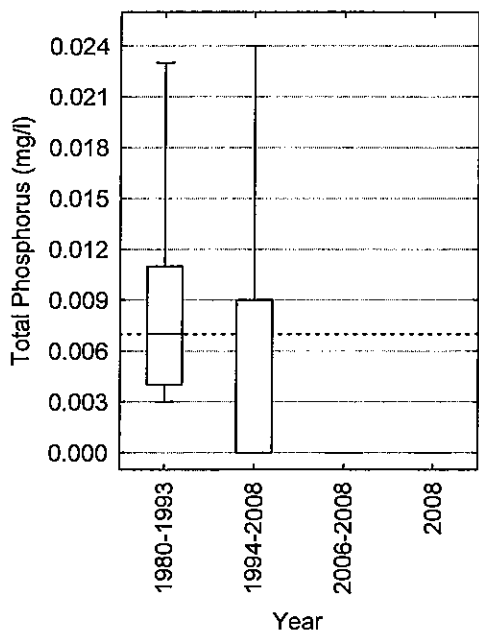
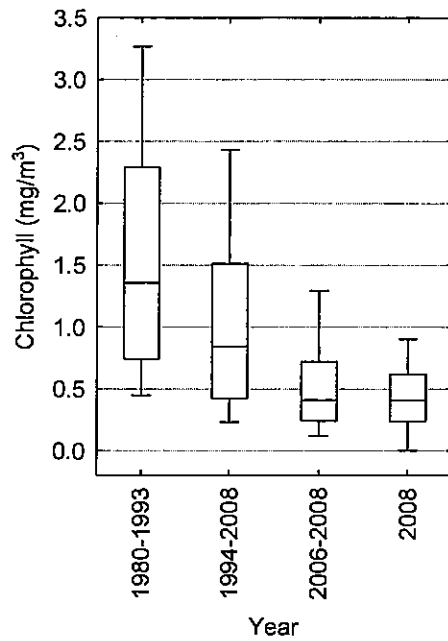
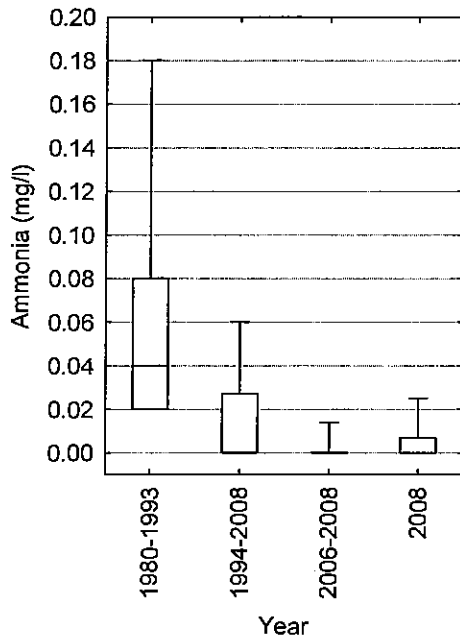


MMSD Water Quality Program Data
Nearshore survey, Site NS-10



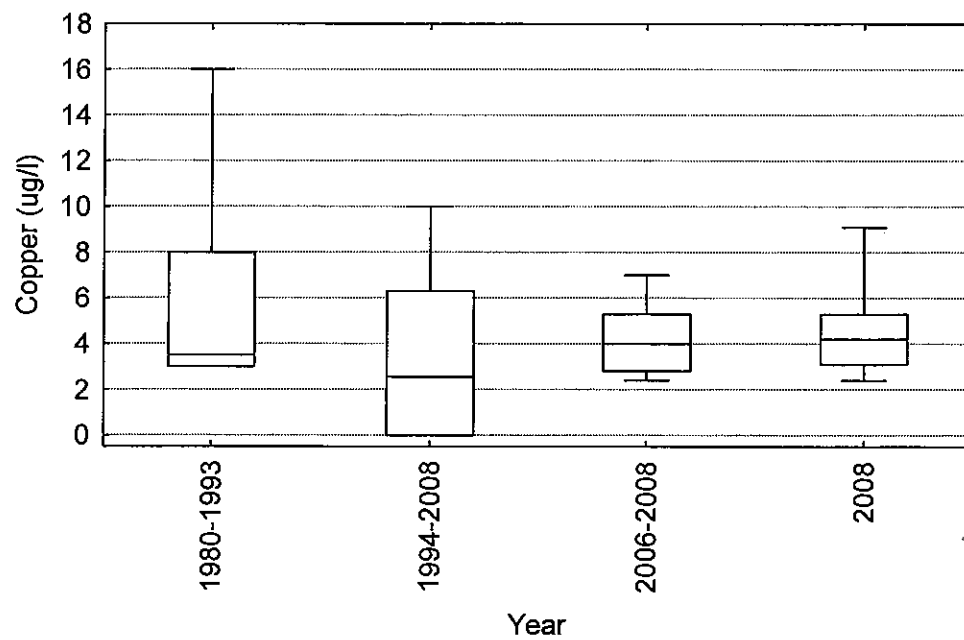
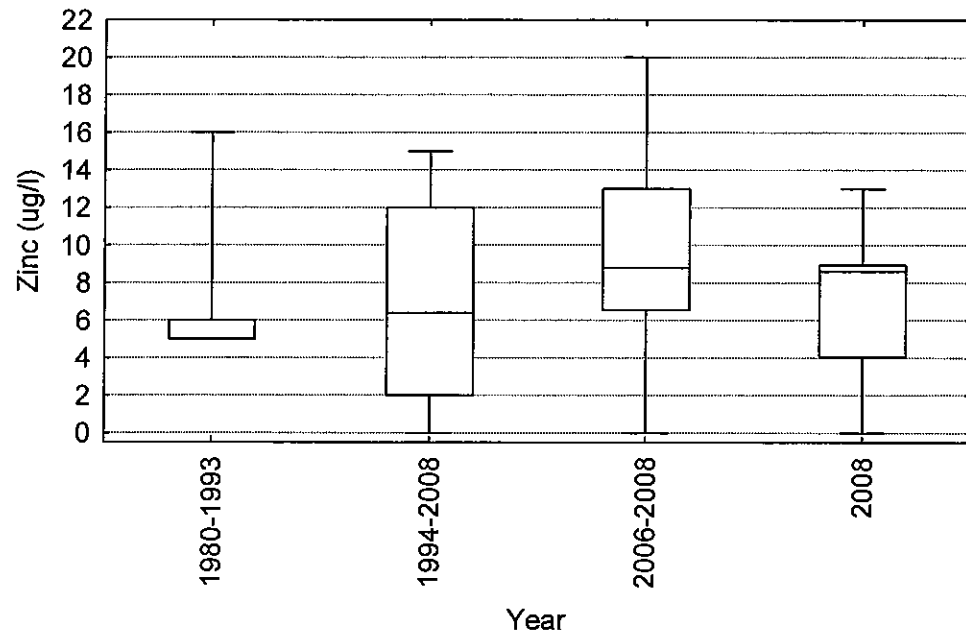
— Median 25%-75% 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Program Data
Nearshore survey, Site NS-10



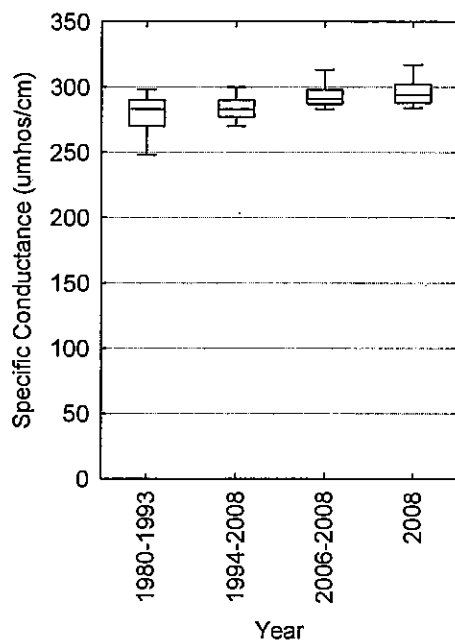
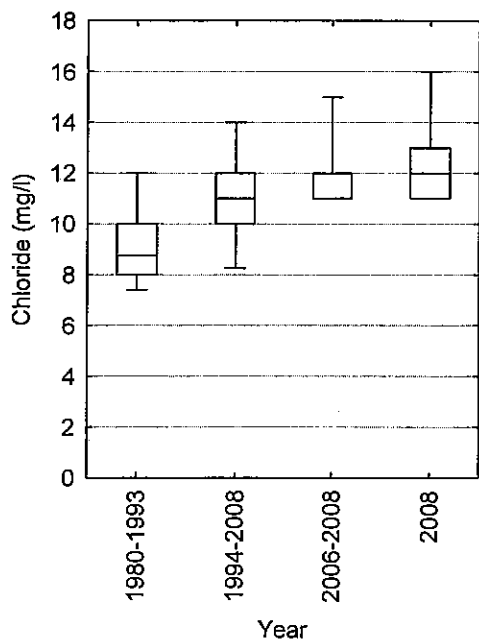
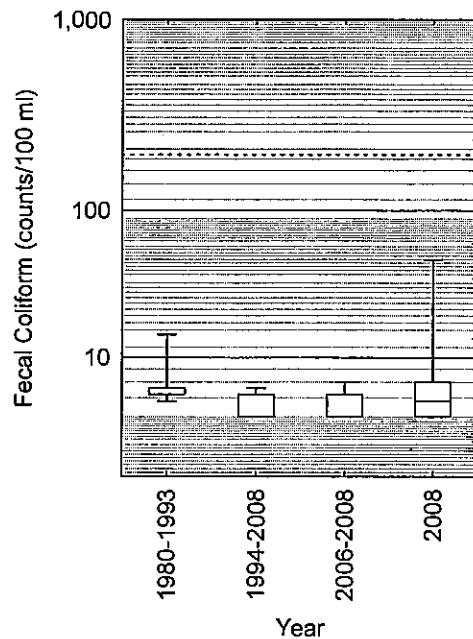
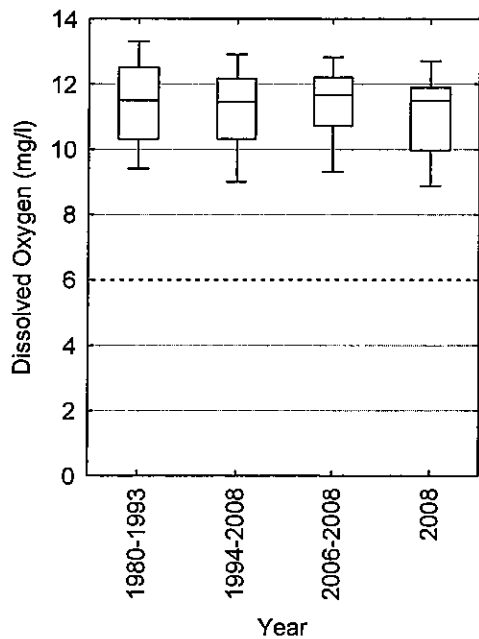
— Median □ 25%-75% ⊢ 10%-90%
---- WQ Standard/Criterion

MMSD Water Quality Program Data
Nearshore survey, Site NS-10



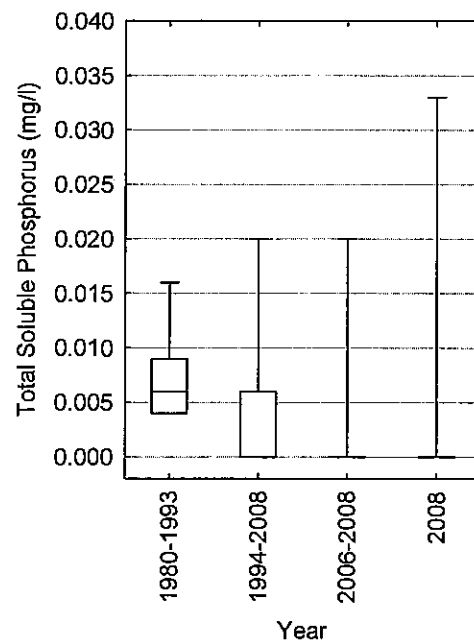
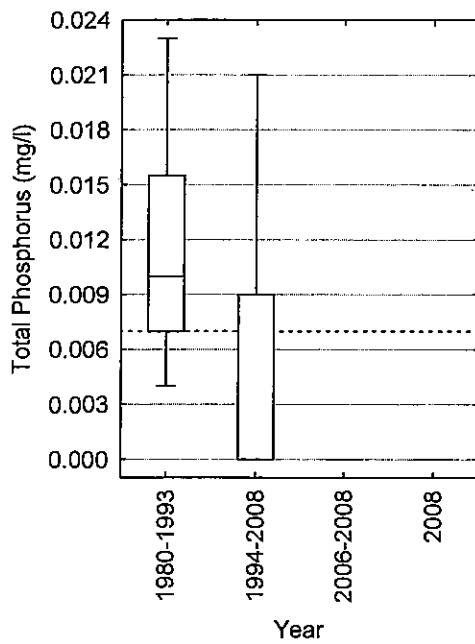
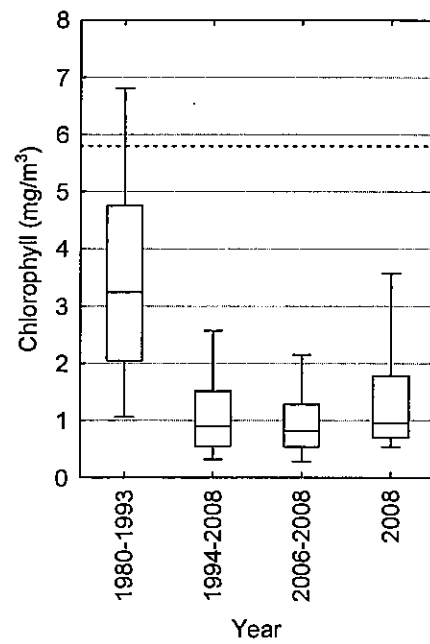
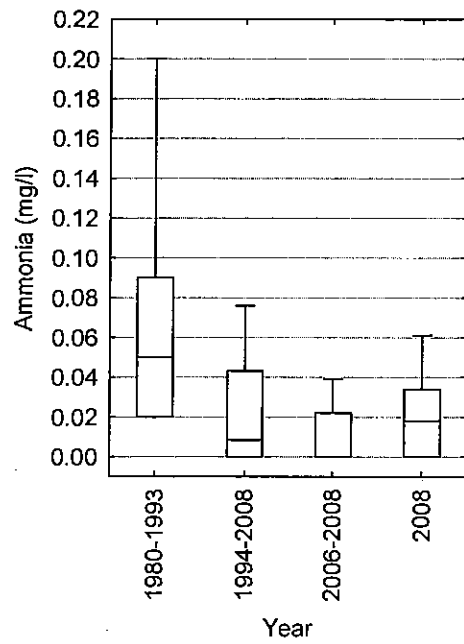
— Median □ 25%-75% I 10%-90%

MMSD Water Quality Program Data
Nearshore survey, Site NS-14



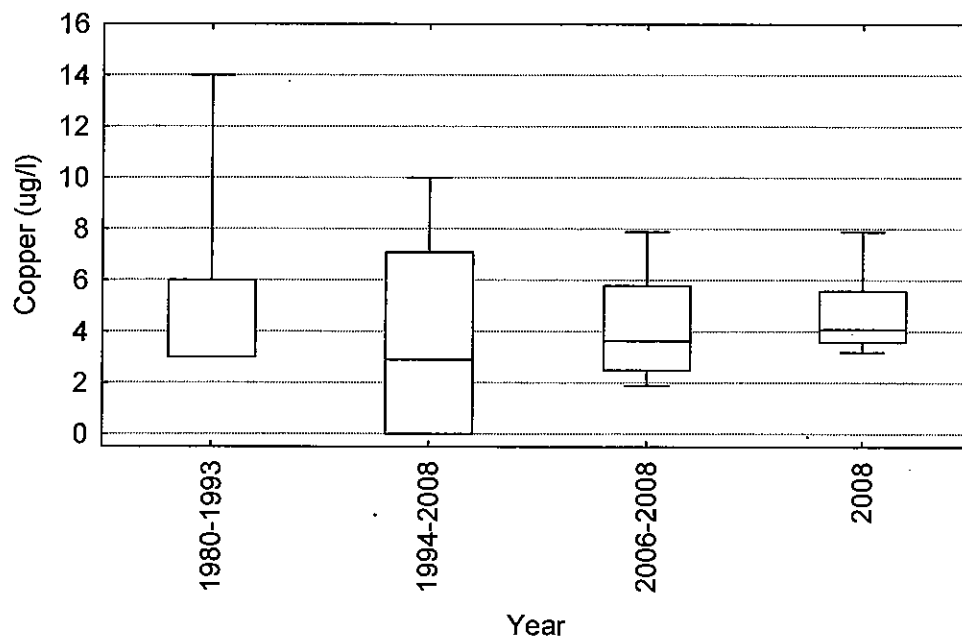
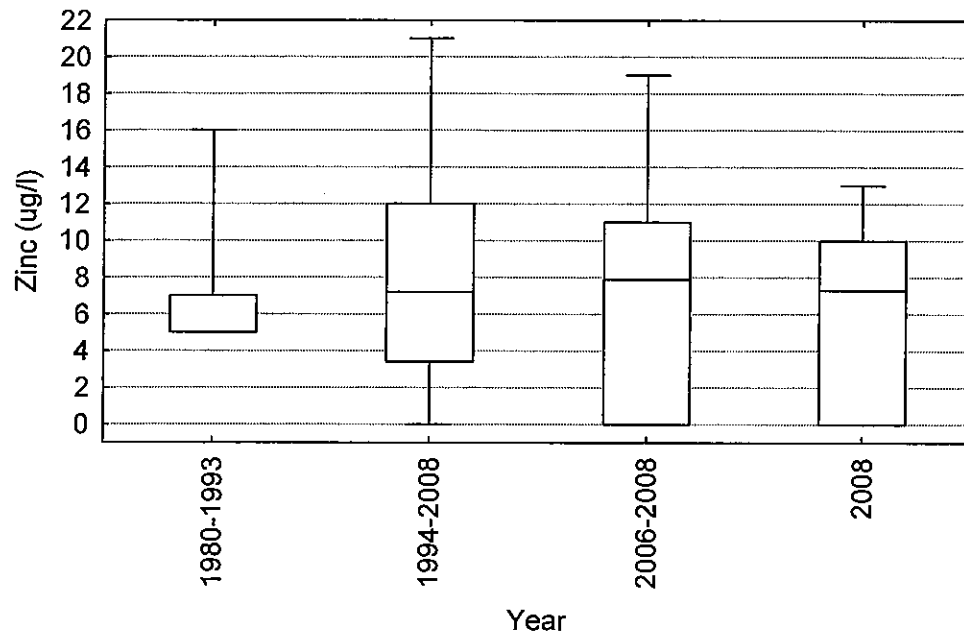
— Median □ 25%-75% ▤ 10%-90%
---- WQ Standard/Criterion

MMSD Water Quality Program Data
Nearshore survey, Site NS-14



— Median □ 25%-75% ▤ 10%-90%
— WQ Standard/Criterion

MMSD Water Quality Program Data
Nearshore survey, Site NS-14



— Median □ 25%-75% I 10%-90%

NEAR SHORE - SITE 1
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.2	10.9	11.1	0.72	0.29	0.001	0.29	0.028	0.00	0.000	0.004	1.57
Standard Error	0.0	1.1	0.3	0.15	0.01	0.001	0.01	0.005	0.00	0.000	0.002	0.10
Median	8.2	8.7	11.6	0.61	0.29	0.000	0.30	0.032	0.00	0.000	0.000	1.60
Mode	8.0	ND	ND	0.30	0.32	0.000	0.32	0.000	0.00	0.000	0.000	1.70
Standard Deviation	0.2	5.6	1.4	0.72	0.04	0.003	0.04	0.023	0.00	0.000	0.012	0.47
Sample Variance	0.0	31.0	2.0	0.52	0.00	0.000	0.00	0.001	0.00	0.000	0.000	0.22
Kurtosis	-0.7	-0.8	-0.8	7.46	1.16	3.064	1.46	-0.135	ND	ND	5.023	-0.24
Skewness	0.2	0.7	-0.5	2.59	-1.43	1.910	-1.49	0.475	ND	ND	2.525	0.24
Range	0.8	17.2	4.9	3.19	0.12	0.009	0.12	0.081	0.00	0.000	0.042	1.73
Minimum	7.8	4.0	8.4	0.12	0.20	0.000	0.20	0.000	0.00	0.000	0.000	0.77
Maximum	8.5	21.2	13.3	3.31	0.32	0.009	0.32	0.081	0.00	0.000	0.042	2.50
Count	24	24	24	24	21	21	24	23	23	24	24	21
Confidence Level(95.0%)	0.1	2.4	0.6	0.31	0.02	0.001	0.02	0.010	0.00	0.000	0.005	0.21

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	10.7	23.3	ND	ND	ND	ND	0.5	286	11.4	0	0.0	ND
Standard Error	1.8	2.2	ND	ND	ND	ND	0.1	1	0.2	0	0.0	ND
Median	11.8	27.4	ND	ND	ND	ND	0.4	287	11.0	0	0.0	ND
Mode	ND	27.8	ND	ND	ND	ND	ND	286	11.0	0	0.0	ND
Standard Deviation	5.1	6.2	ND	ND	ND	ND	0.3	5	0.9	0	0.0	ND
Sample Variance	26.3	38.7	ND	ND	ND	ND	0.1	24	0.9	0	0.0	ND
Kurtosis	-1.6	-1.3	ND	ND	ND	ND	-0.1	-1	-0.4	ND	ND	ND
Skewness	-0.4	-0.9	ND	ND	ND	ND	1.0	-1	0.8	ND	ND	ND
Range	13.2	14.5	0.0	0.0	0.0	0.0	0.9	17	3.0	0	0.0	0
Minimum	2.8	13.5	0.0	0.0	0.0	0.0	0.2	277	10.0	0	0.0	0
Maximum	16.0	28.0	0.0	0.0	0.0	0.0	1.1	294	13.0	0	0.0	0
Count	8	8	0	0	0	0	24	24	24	8	8	0
Confidence Level(95.0%)	4.3	5.2	ND	ND	ND	ND	0.1	2	0.4	0	0.0	ND

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 1
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	33.88	11.25	0.0	2.1	4.7	3.1	0.0	9.6	0.2	0.7	1.2	ND
Standard Error	0.55	0.25	0.0	1.1	0.5	0.6	0.0	2.6	0.2	0.7	1.2	ND
Median	34.00	11.00	0.0	0.0	4.7	2.9	0.0	10.5	0.0	0.0	0.0	ND
Mode	34.00	11.00	0.0	0.0	ND	ND	0.0	10.0	0.0	0.0	0.0	ND
Standard Deviation	1.55	0.71	0.0	3.0	1.5	1.6	0.0	7.3	0.4	1.9	3.3	ND
Sample Variance	2.41	0.50	0.0	8.9	2.4	2.7	0.0	53.4	0.2	3.6	10.6	ND
Kurtosis	0.59	-0.23	ND	-1.2	0.6	-1.6	ND	1.0	8.0	8.0	8.0	ND
Skewness	-0.64	-0.40	ND	0.9	0.3	0.3	ND	0.3	2.8	2.8	2.8	ND
Range	5.00	2.00	0.0	7.1	5.1	4.3	0.0	23.0	1.2	5.4	9.2	0.0
Minimum	31.00	10.00	0.0	0.0	2.3	1.1	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	36.00	12.00	0.0	7.1	7.4	5.4	0.0	23.0	1.2	5.4	9.2	0.0
Count	8	8	8	8	8	8	8	8	8	8	8	0
Confidence Level(95.0%)	1.30	0.59	0.0	2.5	1.3	1.4	0.0	6.1	0.4	1.6	2.7	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	131	ND	ND	ND	ND	ND	ND	ND
Standard Error	2	ND	ND	ND	ND	ND	ND	ND
Median	130	ND	ND	ND	ND	ND	ND	ND
Mode	130	ND	ND	ND	ND	ND	ND	ND
Standard Deviation	6	ND	ND	ND	ND	ND	ND	ND
Sample Variance	41	ND	ND	ND	ND	ND	ND	ND
Kurtosis	1	ND	ND	ND	ND	ND	ND	ND
Skewness	0	ND	ND	ND	ND	ND	ND	ND
Range	20	0	0.0	0.0	0.0	0.0	0.0	0.0
Minimum	120	0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	140	0	0.0	0.0	0.0	0.0	0.0	0.0
Count	8	0	0	0	0	0	0	0
Confidence Level(95.0%)	5	ND	ND	ND	ND	ND	ND	ND

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 2
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.2	12.8	10.8	0.95	0.29	0.002	0.29	0.025	0.02	0.000	0.003	1.35
Standard Error	0.0	1.0	0.3	0.25	0.01	0.001	0.01	0.004	0.02	0.000	0.002	0.07
Median	8.2	12.8	10.9	0.51	0.29	0.000	0.29	0.024	0.00	0.000	0.000	1.30
Mode	8.0	ND	11.1	0.48	0.34	0.000	0.27	0.000	0.00	0.000	0.000	1.30
Standard Deviation	0.2	4.8	1.3	1.22	0.05	0.003	0.05	0.019	0.08	0.000	0.010	0.33
Sample Variance	0.0	23.0	1.7	1.50	0.00	0.000	0.00	0.000	0.01	0.000	0.000	0.11
Kurtosis	-0.8	-0.8	-0.6	6.82	-0.25	-0.704	-0.15	-1.179	24.00	ND	9.685	0.62
Skewness	0.4	0.3	-0.2	2.75	-0.61	1.016	-0.42	0.181	4.90	ND	3.277	-0.31
Range	0.6	15.6	4.7	4.57	0.16	0.008	0.17	0.059	0.40	0.000	0.040	1.35
Minimum	8.0	5.7	8.1	0.18	0.20	0.000	0.20	0.000	0.00	0.000	0.000	0.65
Maximum	8.5	21.2	12.8	4.75	0.36	0.008	0.37	0.059	0.40	0.000	0.040	2.00
Count	24	24	24	24	21	21	24	24	24	24	24	21
Confidence Level(95.0%)	0.1	2.0	0.6	0.52	0.02	0.001	0.02	0.008	0.03	0.000	0.004	0.15

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	8.2	15.0	ND	ND	ND	ND	0.7	292	12.3	0	0.0	ND
Standard Error	1.5	0.3	ND	ND	ND	ND	0.1	2	0.3	0	0.0	ND
Median	6.9	14.9	ND	ND	ND	ND	0.5	291	11.5	0	0.0	ND
Mode	ND	15.0	ND	ND	ND	ND	1.1	288	11.0	0	0.0	ND
Standard Deviation	4.4	0.8	ND	ND	ND	ND	0.3	9	1.7	0	0.0	ND
Sample Variance	19.0	0.7	ND	ND	ND	ND	0.1	77	2.9	0	0.0	ND
Kurtosis	0.4	-0.6	ND	ND	ND	ND	-1.1	1	-0.2	ND	ND	ND
Skewness	0.8	0.6	ND	ND	ND	ND	0.6	1	0.9	ND	ND	ND
Range	13.4	2.3	0.0	0.0	0.0	0.0	1.0	33	6.0	0	0.0	0
Minimum	2.9	14.0	0.0	0.0	0.0	0.0	0.2	279	10.0	0	0.0	0
Maximum	16.3	16.3	0.0	0.0	0.0	0.0	1.2	312	16.0	0	0.0	0
Count	8	8	0	0	0	0	24	24	24	8	8	0
Confidence Level(95.0%)	3.6	0.7	ND	ND	ND	ND	0.1	4	0.7	0	0.0	ND

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 2
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	34.38	11.50	0.0	1.6	4.5	2.1	0.0	9.8	0.0	0.0	3.7	ND
Standard Error	0.75	0.19	0.0	0.8	0.4	0.3	0.0	2.5	0.0	0.0	1.9	ND
Median	34.50	11.50	0.0	0.0	4.4	1.9	0.0	10.9	0.0	0.0	0.0	ND
Mode	35.00	12.00	0.0	0.0	ND	1.9	0.0	12.0	0.0	0.0	0.0	ND
Standard Deviation	2.13	0.53	0.0	2.2	1.1	0.9	0.0	7.1	0.0	0.0	5.3	ND
Sample Variance	4.55	0.29	0.0	4.9	1.1	0.8	0.0	50.8	0.0	0.0	28.6	ND
Kurtosis	0.34	-2.80	ND	-2.1	0.9	1.5	ND	-0.3	ND	ND	-1.3	ND
Skewness	0.17	0.00	ND	0.7	0.4	0.7	ND	-0.2	ND	ND	0.9	ND
Range	7.00	1.00	0.0	4.5	3.6	3.0	0.0	21.0	0.0	0.0	12.0	0.0
Minimum	31.00	11.00	0.0	0.0	2.8	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	38.00	12.00	0.0	4.5	6.4	3.7	0.0	21.0	0.0	0.0	12.0	0.0
Count	8	8	8	8	8	8	8	8	8	8	8	0
Confidence Level(95.0%)	1.78	0.45	0.0	1.9	0.9	0.7	0.0	6.0	0.0	0.0	4.5	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	134	ND	ND	ND	ND	ND	ND	ND
Standard Error	3	ND	ND	ND	ND	ND	ND	ND
Median	135	ND	ND	ND	ND	ND	ND	ND
Mode	140	ND	ND	ND	ND	ND	ND	ND
Standard Deviation	7	ND	ND	ND	ND	ND	ND	ND
Sample Variance	55	ND	ND	ND	ND	ND	ND	ND
Kurtosis	0	ND	ND	ND	ND	ND	ND	ND
Skewness	-1	ND	ND	ND	ND	ND	ND	ND
Range	20	0	0.0	0.0	0.0	0.0	0.0	0.0
Minimum	120	0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	140	0	0.0	0.0	0.0	0.0	0.0	0.0
Count	8	0	0	0	0	0	0	0
Confidence Level(95.0%)	6	ND	ND	ND	ND	ND	ND	ND

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 3
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.2	11.5	11.0	0.91	0.30	0.000	0.30	0.022	0.00	0.002	0.000	1.63
Standard Error	0.0	1.1	0.3	0.40	0.01	0.000	0.01	0.004	0.00	0.002	0.000	0.07
Median	8.1	8.9	11.5	0.34	0.31	0.000	0.31	0.023	0.00	0.000	0.000	1.70
Mode	7.9	ND	ND	0.00	0.31	0.000	0.31	0.000	0.00	0.000	0.000	1.30
Standard Deviation	0.2	5.6	1.4	1.94	0.07	0.001	0.07	0.019	0.00	0.010	0.000	0.34
Sample Variance	0.0	31.5	2.0	3.78	0.00	0.000	0.00	0.000	0.00	0.000	0.000	0.12
Kurtosis	-0.9	-1.3	-0.7	8.88	7.48	7.624	7.97	-0.277	ND	24.000	ND	-1.10
Skewness	-0.2	0.4	-0.5	3.16	1.88	2.981	1.93	0.497	ND	4.899	ND	0.33
Range	0.8	16.7	4.8	7.21	0.34	0.005	0.34	0.068	0.00	0.051	0.000	1.00
Minimum	7.7	4.2	8.3	0.00	0.20	0.000	0.20	0.000	0.00	0.000	0.000	1.20
Maximum	8.5	20.9	13.1	7.21	0.54	0.005	0.54	0.068	0.00	0.051	0.000	2.20
Count	24	24	24	24	21	21	24	24	24	24	24	21
Confidence Level(95.0%)	0.1	2.4	0.6	0.82	0.03	0.001	0.03	0.008	0.00	0.004	0.000	0.15

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	11.2	21.0	ND	ND	ND	ND	0.4	286	11.3	0	0.0	ND
Standard Error	1.4	2.4	ND	ND	ND	ND	0.0	1	0.2	0	0.0	ND
Median	12.7	23.4	ND	ND	ND	ND	0.4	285	11.0	0	0.0	ND
Mode	13.5	26.0	ND	ND	ND	ND	ND	282	11.0	0	0.0	ND
Standard Deviation	4.1	6.9	ND	ND	ND	ND	0.2	5	0.8	1	0.1	ND
Sample Variance	16.7	47.1	ND	ND	ND	ND	0.1	22	0.7	1	0.0	ND
Kurtosis	2.3	0.8	ND	ND	ND	ND	4.3	-1	0.2	8	8.0	ND
Skewness	-1.5	-1.2	ND	ND	ND	ND	2.1	0	0.5	3	2.8	ND
Range	12.7	19.5	0.0	0.0	0.0	0.0	0.9	16	3.0	2	0.3	0
Minimum	2.6	7.5	0.0	0.0	0.0	0.0	0.2	277	10.0	0	0.0	0
Maximum	15.3	27.0	0.0	0.0	0.0	0.0	1.1	293	13.0	2	0.3	0
Count	8	8	0	0	0	0	24	24	24	8	8	0
Confidence Level(95.0%)	3.4	5.7	ND	ND	ND	ND	0.1	2	0.3	1	0.1	ND

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 3
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	34.00	11.25	0.0	1.6	4.3	1.9	0.0	6.5	0.0	0.9	4.4	ND
Standard Error	0.57	0.25	0.0	0.8	0.3	0.3	0.0	2.0	0.0	0.6	1.4	ND
Median	34.50	11.00	0.0	0.0	4.2	1.9	0.0	9.1	0.0	0.0	5.2	ND
Mode	35.00	11.00	0.0	0.0	ND	ND	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	1.60	0.71	0.0	2.2	0.8	0.7	0.0	5.5	0.0	1.7	4.1	ND
Sample Variance	2.57	0.50	0.0	4.9	0.6	0.5	0.0	30.5	0.0	2.8	16.5	ND
Kurtosis	0.39	-0.23	ND	-2.1	-1.3	1.1	ND	-2.1	ND	2.4	-1.0	ND
Skewness	-0.83	-0.40	ND	0.7	-0.2	0.8	ND	-0.5	ND	1.8	0.2	ND
Range	5.00	2.00	0.0	4.5	2.1	2.3	0.0	12.0	0.0	4.4	11.0	0.0
Minimum	31.00	10.00	0.0	0.0	3.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	36.00	12.00	0.0	4.5	5.2	3.3	0.0	12.0	0.0	4.4	11.0	0.0
Count	8	8	8	8	8	8	8	8	8	8	8	0
Confidence Level(95.0%)	1.34	0.59	0.0	1.9	0.6	0.6	0.0	4.6	0.0	1.4	3.4	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	131	ND	ND	ND	ND	ND	ND	ND
Standard Error	2	ND	ND	ND	ND	ND	ND	ND
Median	130	ND	ND	ND	ND	ND	ND	ND
Mode	130	ND	ND	ND	ND	ND	ND	ND
Standard Deviation	6	ND	ND	ND	ND	ND	ND	ND
Sample Variance	41	ND	ND	ND	ND	ND	ND	ND
Kurtosis	1	ND	ND	ND	ND	ND	ND	ND
Skewness	0	ND	ND	ND	ND	ND	ND	ND
Range	20	0	0.0	0.0	0.0	0.0	0.0	0.0
Minimum	120	0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	140	0	0.0	0.0	0.0	0.0	0.0	0.0
Count	8	0	0	0	0	0	0	0
Confidence Level(95.0%)	5	ND	ND	ND	ND	ND	ND	ND

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 4
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.2	13.3	10.4	0.79	0.37	0.005	0.37	0.031	0.04	0.007	0.005	1.62
Standard Error	0.0	0.9	0.3	0.10	0.02	0.000	0.02	0.003	0.02	0.003	0.002	0.15
Median	8.2	12.4	10.8	0.66	0.32	0.005	0.33	0.032	0.00	0.000	0.000	1.40
Mode	8.1	ND	11.9	0.65	0.26	0.004	0.33	0.030	0.00	0.000	0.000	1.80
Standard Deviation	0.2	4.4	1.4	0.50	0.11	0.002	0.11	0.017	0.12	0.013	0.012	0.71
Sample Variance	0.0	19.3	2.0	0.25	0.01	0.000	0.01	0.000	0.01	0.000	0.000	0.50
Kurtosis	0.8	-0.5	-0.4	-0.73	-1.32	2.269	-1.05	-0.633	9.65	0.691	1.816	3.14
Skewness	-0.1	0.7	-0.8	0.75	0.55	-0.986	0.70	-0.426	3.27	1.487	1.914	1.76
Range	0.8	13.9	4.6	1.57	0.31	0.009	0.30	0.056	0.47	0.041	0.032	2.74
Minimum	7.7	7.9	7.5	0.16	0.25	0.000	0.26	0.000	0.00	0.000	0.000	0.86
Maximum	8.6	21.8	12.1	1.73	0.56	0.009	0.56	0.056	0.47	0.041	0.032	3.60
Count	24	24	24	24	21	21	24	24	24	24	24	21
Confidence Level(95.0%)	0.1	1.9	0.6	0.21	0.05	0.001	0.04	0.007	0.05	0.006	0.005	0.32

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	8.4	9.6	ND	ND	ND	ND	0.7	320	16.2	0	0.1	ND
Standard Error	0.8	0.2	ND	ND	ND	ND	0.0	6	1.0	0	0.1	ND
Median	9.4	9.7	ND	ND	ND	ND	0.6	307	13.5	0	0.0	ND
Mode	10.0	10.0	ND	ND	ND	ND	0.6	378	12.0	0	0.0	ND
Standard Deviation	2.2	0.4	ND	ND	ND	ND	0.2	32	5.0	1	0.2	ND
Sample Variance	5.1	0.2	ND	ND	ND	ND	0.1	1011	25.2	1	0.0	ND
Kurtosis	1.0	-2.0	ND	ND	ND	ND	-0.3	-1	-0.7	8	8.0	ND
Skewness	-1.5	-0.3	ND	ND	ND	ND	0.8	1	1.0	3	2.8	ND
Range	6.0	1.0	0.0	0.0	0.0	0.0	0.8	90	14.0	3	0.5	0
Minimum	4.0	9.0	0.0	0.0	0.0	0.0	0.4	288	12.0	0	0.0	0
Maximum	10.0	10.0	0.0	0.0	0.0	0.0	1.3	378	26.0	3	0.5	0
Count	8	8	0	0	0	0	24	24	24	8	8	0
Confidence Level(95.0%)	1.9	0.4	ND	ND	ND	ND	0.1	13	2.1	1	0.1	ND

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 4
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	35.38	12.38	0.0	2.6	4.4	2.3	0.0	8.5	0.4	0.5	0.8	ND
Standard Error	0.96	0.38	0.0	1.0	0.4	0.8	0.0	2.1	0.4	0.5	0.8	ND
Median	35.00	12.00	0.0	3.8	4.2	1.6	0.0	9.4	0.0	0.0	0.0	ND
Mode	35.00	12.00	0.0	0.0	ND	ND	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	2.72	1.06	0.0	2.6	1.2	2.1	0.0	6.1	1.0	1.5	2.2	ND
Sample Variance	7.41	1.13	0.0	6.6	1.4	4.4	0.0	36.8	1.0	2.2	4.8	ND
Kurtosis	0.59	-0.13	ND	-2.0	-0.6	6.5	ND	-1.0	8.0	8.0	7.0	ND
Skewness	0.27	0.91	ND	0.0	0.3	2.5	ND	-0.4	2.8	2.8	2.6	ND
Range	9.00	3.00	0.0	6.2	3.3	6.1	0.0	16.0	2.8	4.2	5.8	0.0
Minimum	31.00	11.00	0.0	0.0	2.7	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	40.00	14.00	0.0	6.2	6.0	7.0	0.0	16.0	2.8	4.2	5.8	0.0
Count	8	8	8	7	7	7	8	8	8	8	7	0
Confidence Level(95.0%)	2.28	0.89	0.0	2.4	1.1	1.9	0.0	5.1	0.8	1.2	2.0	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	139	ND	ND	ND	ND	ND	ND	ND
Standard Error	4	ND	ND	ND	ND	ND	ND	ND
Median	140	ND	ND	ND	ND	ND	ND	ND
Mode	140	ND	ND	ND	ND	ND	ND	ND
Standard Deviation	12	ND	ND	ND	ND	ND	ND	ND
Sample Variance	155	ND	ND	ND	ND	ND	ND	ND
Kurtosis	0	ND	ND	ND	ND	ND	ND	ND
Skewness	0	ND	ND	ND	ND	ND	ND	ND
Range	40	0	0.0	0.0	0.0	0.0	0.0	0.0
Minimum	120	0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	160	0	0.0	0.0	0.0	0.0	0.0	0.0
Count	8	0	0	0	0	0	0	0
Confidence Level(95.0%)	10	ND	ND	ND	ND	ND	ND	ND

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 5
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	11.4	10.9	1.01	0.30	0.001	0.30	0.038	0.06	0.001	0.005	1.61
Standard Error	0.0	1.1	0.3	0.41	0.01	0.001	0.01	0.008	0.03	0.001	0.003	0.06
Median	8.1	8.7	11.4	0.50	0.31	0.000	0.33	0.027	0.00	0.000	0.000	1.60
Mode	8.1	ND	ND	0.59	0.33	0.000	0.33	0.000	0.00	0.000	0.000	1.70
Standard Deviation	0.2	5.4	1.3	2.00	0.05	0.003	0.05	0.041	0.15	0.004	0.014	0.28
Sample Variance	0.1	28.8	1.7	4.00	0.00	0.000	0.00	0.002	0.02	0.000	0.000	0.08
Kurtosis	-0.2	-0.9	-0.8	19.29	0.01	0.460	0.46	1.295	6.21	24.000	7.319	-0.82
Skewness	-0.1	0.7	-0.6	4.29	-0.90	1.483	-1.12	1.357	2.67	4.899	2.809	0.37
Range	0.9	16.6	4.3	9.82	0.16	0.007	0.16	0.150	0.58	0.022	0.055	0.90
Minimum	7.6	4.6	8.4	0.14	0.20	0.000	0.20	0.000	0.00	0.000	0.000	1.20
Maximum	8.5	21.2	12.7	9.96	0.36	0.007	0.36	0.150	0.58	0.022	0.055	2.10
Count	24	24	24	24	21	21	24	24	24	24	24	21
Confidence Level(95.0%)	0.1	2.3	0.6	0.84	0.02	0.001	0.02	0.017	0.07	0.002	0.006	0.13

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	8.8	16.9	ND	ND	ND	ND	0.6	290	11.9	0	0.0	ND
Standard Error	1.6	2.6	ND	ND	ND	ND	0.1	1	0.3	0	0.0	ND
Median	9.2	17.5	ND	ND	ND	ND	0.5	290	12.0	0	0.0	ND
Mode	ND	ND	ND	ND	ND	ND	0.3	296	11.0	0	0.0	ND
Standard Deviation	4.4	6.9	ND	ND	ND	ND	0.5	7	1.3	0	0.0	ND
Sample Variance	19.5	47.5	ND	ND	ND	ND	0.2	44	1.8	0	0.0	ND
Kurtosis	-1.3	-0.2	ND	ND	ND	ND	0.6	-1	-1.2	ND	ND	ND
Skewness	-0.1	-0.8	ND	ND	ND	ND	1.4	0	0.1	ND	ND	ND
Range	12.5	18.8	0.0	0.0	0.0	0.0	1.5	25	4.0	0	0.0	0
Minimum	2.5	5.0	0.0	0.0	0.0	0.0	0.2	278	10.0	0	0.0	0
Maximum	15.0	23.8	0.0	0.0	0.0	0.0	1.7	303	14.0	0	0.0	0
Count	8	7	0	0	0	0	24	24	24	8	8	0
Confidence Level(95.0%)	3.7	6.4	ND	ND	ND	ND	0.2	3	0.6	0	0.0	ND

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 5
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	34.38	11.50	0.0	1.0	4.8	1.5	0.0	5.7	0.0	0.3	1.5	ND
Standard Error	0.53	0.19	0.0	0.7	1.1	0.1	0.0	2.2	0.0	0.3	1.0	ND
Median	34.50	11.50	0.0	0.0	3.8	1.6	0.0	4.4	0.0	0.0	0.0	ND
Mode	35.00	12.00	0.0	0.0	3.7	1.1	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	1.51	0.53	0.0	1.9	3.0	0.3	0.0	6.3	0.0	0.9	2.8	ND
Sample Variance	2.27	0.29	0.0	3.4	8.8	0.1	0.0	39.6	0.0	0.8	7.7	ND
Kurtosis	0.66	-2.80	ND	0.1	7.3	-0.9	ND	-2.2	ND	8.0	0.1	ND
Skewness	0.15	0.00	ND	1.5	2.6	0.1	ND	0.3	ND	2.8	1.5	ND
Range	5.00	1.00	0.0	4.2	9.2	0.9	0.0	14.0	0.0	2.5	6.3	0.0
Minimum	32.00	11.00	0.0	0.0	2.8	1.1	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	37.00	12.00	0.0	4.2	12.0	2.0	0.0	14.0	0.0	2.5	6.3	0.0
Count	8	8	8	8	8	8	8	8	8	8	8	0
Confidence Level(95.0%)	1.26	0.45	0.0	1.6	2.5	0.3	0.0	5.3	0.0	0.7	2.3	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TN1C	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	133	ND	ND	ND	ND	ND	ND	ND
Standard Error	3	ND	ND	ND	ND	ND	ND	ND
Median	130	ND	ND	ND	ND	ND	ND	ND
Mode	130	ND	ND	ND	ND	ND	ND	ND
Standard Deviation	7	ND	ND	ND	ND	ND	ND	ND
Sample Variance	50	ND	ND	ND	ND	ND	ND	ND
Kurtosis	0	ND	ND	ND	ND	ND	ND	ND
Skewness	0	ND	ND	ND	ND	ND	ND	ND
Range	20	0	0.0	0.0	0.0	0.0	0.0	0.0
Minimum	120	0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	140	0	0.0	0.0	0.0	0.0	0.0	0.0
Count	8	0	0	0	0	0	0	0
Confidence Level(95.0%)	6	ND	ND	ND	ND	ND	ND	ND

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 7
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.2	11.4	11.1	0.86	0.29	0.001	0.30	0.021	0.08	0.003	0.008	1.50
Standard Error	0.0	1.0	0.3	0.15	0.01	0.001	0.01	0.006	0.05	0.002	0.004	0.07
Median	8.2	9.2	11.5	0.69	0.29	0.000	0.29	0.006	0.00	0.000	0.000	1.50
Mode	8.2	ND	ND	ND	0.28	0.000	0.28	0.000	0.00	0.000	0.000	1.40
Standard Deviation	0.2	5.0	1.3	0.75	0.05	0.003	0.05	0.031	0.23	0.012	0.020	0.32
Sample Variance	0.0	25.5	1.6	0.56	0.00	0.000	0.00	0.001	0.05	0.000	0.000	0.11
Kurtosis	0.1	-0.5	0.0	6.98	0.12	0.633	0.39	9.318	7.25	10.020	9.620	-0.21
Skewness	-0.3	0.8	-1.0	2.29	-0.70	1.519	-0.73	2.649	2.82	3.311	2.988	0.52
Range	0.8	17.1	4.3	3.46	0.19	0.007	0.19	0.140	0.89	0.046	0.083	1.11
Minimum	7.8	4.6	8.3	0.12	0.18	0.000	0.18	0.000	0.00	0.000	0.000	0.99
Maximum	8.6	21.8	12.5	3.58	0.37	0.007	0.37	0.140	0.89	0.046	0.083	2.10
Count	24	24	24	24	21	21	24	24	24	24	24	21
Confidence Level(95.0%)	0.1	2.1	0.5	0.31	0.02	0.001	0.02	0.013	0.10	0.005	0.008	0.15

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	5.6	20.2	ND	ND	ND	ND	0.7	289	11.9	0	0.0	ND
Standard Error	0.8	1.2	ND	ND	ND	ND	0.1	2	0.3	0	0.0	ND
Median	6.0	21.0	ND	ND	ND	ND	0.7	288	11.5	0	0.0	ND
Mode	3.5	21.0	ND	ND	ND	ND	ND	288	11.0	0	0.0	ND
Standard Deviation	2.2	3.4	ND	ND	ND	ND	0.4	8	1.3	0	0.0	ND
Sample Variance	4.7	11.9	ND	ND	ND	ND	0.2	67	1.6	0	0.0	ND
Kurtosis	-1.6	6.4	ND	ND	ND	ND	9.7	5	1.4	ND	ND	ND
Skewness	-0.1	-2.4	ND	ND	ND	ND	2.7	2	1.2	ND	ND	ND
Range	5.9	11.0	0.0	0.0	0.0	0.0	2.1	39	5.0	0	0.0	0
Minimum	2.6	12.0	0.0	0.0	0.0	0.0	0.3	278	10.0	0	0.0	0
Maximum	8.5	23.0	0.0	0.0	0.0	0.0	2.5	317	15.0	0	0.0	0
Count	8	8	0	0	0	0	24	24	24	8	8	0
Confidence Level(95.0%)	1.8	2.9	ND	ND	ND	ND	0.2	3	0.5	0	0.0	ND

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 7
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	34.13	11.63	0.0	1.6	6.4	2.0	0.0	6.5	0.1	0.6	3.6	ND
Standard Error	0.88	0.32	0.0	1.1	1.8	0.6	0.0	2.1	0.1	0.6	1.4	ND
Median	34.50	12.00	0.0	0.0	4.3	1.4	0.0	7.9	0.0	0.0	3.1	ND
Mode	35.00	12.00	0.0	0.0	3.2	ND	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	2.47	0.92	0.0	3.0	5.2	1.6	0.0	5.8	0.4	1.6	3.9	ND
Sample Variance	6.13	0.84	0.0	9.2	27.1	2.4	0.0	33.7	0.2	2.6	15.6	ND
Kurtosis	0.13	0.42	ND	2.6	1.6	1.6	ND	-1.5	8.0	8.0	-1.9	ND
Skewness	-0.19	-0.49	ND	1.8	1.6	1.5	ND	0.0	2.8	2.8	0.3	ND
Range	8.00	3.00	0.0	8.0	14.3	4.5	0.0	15.0	1.1	4.6	9.6	0.0
Minimum	30.00	10.00	0.0	0.0	2.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	38.00	13.00	0.0	8.0	17.0	5.2	0.0	15.0	1.1	4.6	9.6	0.0
Count	8	8	8	8	8	8	8	8	8	8	8	0
Confidence Level(95.0%)	2.07	0.77	0.0	2.5	4.3	1.3	0.0	4.9	0.3	1.4	3.3	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	135	ND	ND	ND	ND	ND	ND	ND
Standard Error	3	ND	ND	ND	ND	ND	ND	ND
Median	135	ND	ND	ND	ND	ND	ND	ND
Mode	140	ND	ND	ND	ND	ND	ND	ND
Standard Deviation	9	ND	ND	ND	ND	ND	ND	ND
Sample Variance	86	ND	ND	ND	ND	ND	ND	ND
Kurtosis	0	ND	ND	ND	ND	ND	ND	ND
Skewness	0	ND	ND	ND	ND	ND	ND	ND
Range	30	0	0.0	0.0	0.0	0.0	0.0	0.0
Minimum	120	0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	150	0	0.0	0.0	0.0	0.0	0.0	0.0
Count	8	0	0	0	0	0	0	0
Confidence Level(95.0%)	8	ND	ND	ND	ND	ND	ND	ND

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 8
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	9.6	11.3	0.92	0.29	0.001	0.29	0.016	0.15	0.000	0.003	1.72
Standard Error	0.1	1.2	0.3	0.31	0.01	0.001	0.01	0.004	0.06	0.000	0.002	0.08
Median	8.1	7.3	11.7	0.49	0.31	0.000	0.31	0.000	0.00	0.000	0.000	1.70
Mode	8.0	ND	ND	0.00	0.31	0.000	0.32	0.000	0.00	0.000	0.000	1.70
Standard Deviation	0.2	5.7	1.2	1.52	0.05	0.003	0.05	0.020	0.27	0.000	0.010	0.37
Sample Variance	0.1	32.6	1.6	2.30	0.00	0.000	0.00	0.000	0.07	0.000	0.000	0.13
Kurtosis	-0.6	-0.6	-0.5	17.13	0.90	9.902	1.60	-0.808	0.91	ND	9.178	-0.61
Skewness	-0.1	0.9	-0.7	3.94	-1.33	3.006	-1.48	0.787	1.55	ND	3.225	-0.30
Range	0.9	17.7	4.5	7.54	0.16	0.012	0.16	0.056	0.83	0.000	0.035	1.31
Minimum	7.7	3.8	8.7	0.00	0.18	0.000	0.18	0.000	0.00	0.000	0.000	0.99
Maximum	8.6	21.4	13.2	7.54	0.34	0.012	0.34	0.056	0.83	0.000	0.035	2.30
Count	24	24	24	24	21	21	24	24	24	24	24	21
Confidence Level(95.0%)	0.1	2.4	0.5	0.64	0.02	0.001	0.02	0.008	0.11	0.000	0.004	0.17

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	9.5	25.0	ND	ND	ND	ND	0.4	285	11.3	0	0.0	ND
Standard Error	1.7	2.6	ND	ND	ND	ND	0.0	1	0.2	0	0.0	ND
Median	9.3	25.0	ND	ND	ND	ND	0.4	285	11.0	0	0.0	ND
Mode	11.5	23.0	ND	ND	ND	ND	0.4	283	11.0	0	0.0	ND
Standard Deviation	4.8	7.3	ND	ND	ND	ND	0.2	5	1.0	1	0.1	ND
Sample Variance	22.9	52.6	ND	ND	ND	ND	0.0	29	0.9	1	0.0	ND
Kurtosis	1.4	-0.8	ND	ND	ND	ND	7.2	0	-0.3	8	8.0	ND
Skewness	0.5	-0.1	ND	ND	ND	ND	2.3	0	0.7	3	2.8	ND
Range	16.3	21.5	0.0	0.0	0.0	0.0	1.0	18	3.0	2	0.3	0
Minimum	2.2	14.1	0.0	0.0	0.0	0.0	0.2	276	10.0	0	0.0	0
Maximum	18.5	35.6	0.0	0.0	0.0	0.0	1.2	294	13.0	2	0.3	0
Count	8	8	0	0	0	0	24	24	24	8	8	0
Confidence Level(95.0%)	4.0	6.1	ND	ND	ND	ND	0.1	2	0.4	1	0.1	ND

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 8
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	33.63	11.25	0.0	1.3	4.5	1.6	0.0	7.3	0.2	0.5	2.2	ND
Standard Error	0.71	0.25	0.0	0.8	0.6	0.2	0.0	1.7	0.2	0.5	1.5	ND
Median	34.00	11.00	0.0	0.0	4.2	1.6	0.0	8.9	0.0	0.0	0.0	ND
Mode	35.00	11.00	0.0	0.0	3.5	ND	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	2.00	0.71	0.0	2.3	1.6	0.6	0.0	4.7	0.4	1.3	4.0	ND
Sample Variance	3.98	0.50	0.0	5.4	2.7	0.4	0.0	22.0	0.2	1.6	16.0	ND
Kurtosis	-0.09	-0.23	ND	0.0	2.6	0.0	ND	-0.3	8.0	8.0	1.4	ND
Skewness	-0.75	-0.40	ND	1.4	1.3	-0.6	ND	-1.1	2.8	2.8	1.6	ND
Range	6.00	2.00	0.0	5.1	5.5	1.8	0.0	12.0	1.2	3.6	9.9	0.0
Minimum	30.00	10.00	0.0	0.0	2.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	36.00	12.00	0.0	5.1	7.9	2.3	0.0	12.0	1.2	3.6	9.9	0.0
Count	8	8	8	8	8	8	8	8	8	8	7	0
Confidence Level(95.0%)	1.67	0.59	0.0	2.0	1.4	0.5	0.0	3.9	0.4	1.1	3.7	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	131	ND	ND	ND	ND	ND	ND	ND
Standard Error	3	ND	ND	ND	ND	ND	ND	ND
Median	130	ND	ND	ND	ND	ND	ND	ND
Mode	130	ND	ND	ND	ND	ND	ND	ND
Standard Deviation	8	ND	ND	ND	ND	ND	ND	ND
Sample Variance	70	ND	ND	ND	ND	ND	ND	ND
Kurtosis	-1	ND	ND	ND	ND	ND	ND	ND
Skewness	0	ND	ND	ND	ND	ND	ND	ND
Range	20	0	0.0	0.0	0.0	0.0	0.0	0.0
Minimum	120	0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	140	0	0.0	0.0	0.0	0.0	0.0	0.0
Count	8	0	0	0	0	0	0	0
Confidence Level(95.0%)	7	ND	ND	ND	ND	ND	ND	ND

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 10
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	6.8	11.8	0.48	0.30	0.001	0.30	0.006	0.07	0.000	0.004	1.90
Standard Error	0.0	1.1	0.2	0.08	0.00	0.000	0.01	0.003	0.03	0.000	0.002	0.08
Median	8.0	4.4	12.1	0.41	0.30	0.000	0.30	0.000	0.00	0.000	0.000	2.00
Mode	7.8	4.5	ND	0.00	0.30	0.000	0.30	0.000	0.00	0.000	0.000	2.00
Standard Deviation	0.2	5.5	1.1	0.39	0.02	0.002	0.03	0.012	0.17	0.000	0.011	0.35
Sample Variance	0.0	30.2	1.2	0.16	0.00	0.000	0.00	0.000	0.03	0.000	0.000	0.12
Kurtosis	0.2	1.3	0.1	5.15	0.56	1.594	1.49	3.835	2.73	ND	4.238	0.01
Skewness	0.8	1.7	-0.7	1.76	-0.56	1.801	0.70	2.027	2.06	ND	2.425	-0.68
Range	0.8	18.5	4.3	1.84	0.08	0.006	0.13	0.047	0.54	0.000	0.033	1.20
Minimum	7.8	2.7	9.2	0.00	0.25	0.000	0.25	0.000	0.00	0.000	0.000	1.20
Maximum	8.5	21.2	13.5	1.84	0.33	0.006	0.38	0.047	0.54	0.000	0.033	2.40
Count	24	24	24	24	21	21	24	24	24	24	24	21
Confidence Level(95.0%)	0.1	2.3	0.5	0.17	0.01	0.001	0.01	0.005	0.07	0.000	0.005	0.16

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	13.3	31.0	ND	ND	ND	ND	0.5	281	11.2	0	0.0	ND
Standard Error	2.1	2.3	ND	ND	ND	ND	0.1	1	0.2	0	0.0	ND
Median	14.5	30.3	ND	ND	ND	ND	0.3	280	11.0	0	0.0	ND
Mode	ND	ND	ND	ND	ND	ND	ND	279	11.0	0	0.0	ND
Standard Deviation	6.0	6.5	ND	ND	ND	ND	0.5	5	0.9	0	0.0	ND
Sample Variance	36.2	42.6	ND	ND	ND	ND	0.2	24	0.8	0	0.0	ND
Kurtosis	-0.6	1.9	ND	ND	ND	ND	9.7	0	0.8	ND	ND	ND
Skewness	0.1	1.1	ND	ND	ND	ND	3.0	1	1.0	ND	ND	ND
Range	18.0	21.2	0.0	0.0	0.0	0.0	2.1	17	3.0	0	0.0	0
Minimum	5.0	23.0	0.0	0.0	0.0	0.0	0.1	275	10.0	0	0.0	0
Maximum	23.0	44.2	0.0	0.0	0.0	0.0	2.2	292	13.0	0	0.0	0
Count	8	8	0	0	0	0	24	24	24	8	8	0
Confidence Level(95.0%)	5.0	5.5	ND	ND	ND	ND	0.2	2	0.4	0	0.0	ND

ND = No Data

Provisional MMSD Water Quality data

NEAR SHORE - SITE 10
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	33.88	11.00	0.0	2.2	4.6	1.8	0.0	7.0	0.0	0.7	2.9	ND
Standard Error	0.64	0.19	0.0	1.1	0.7	0.4	0.0	1.6	0.0	0.7	1.4	ND
Median	33.50	11.00	0.0	0.0	4.2	1.8	0.0	8.6	0.0	0.0	0.0	ND
Mode	33.00	11.00	0.0	0.0	ND	ND	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	1.81	0.53	0.0	3.0	2.1	1.0	0.0	4.6	0.0	2.0	3.7	ND
Sample Variance	3.27	0.29	0.0	8.8	4.5	1.0	0.0	21.1	0.0	4.1	14.0	ND
Kurtosis	0.51	3.50	ND	-2.2	2.7	-1.9	ND	-0.2	ND	8.0	-1.9	ND
Skewness	0.24	0.00	ND	0.7	1.5	0.2	ND	-0.9	ND	2.8	0.6	ND
Range	6.00	2.00	0.0	6.0	6.7	2.6	0.0	13.0	0.0	5.7	8.4	0.0
Minimum	31.00	10.00	0.0	0.0	2.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	37.00	12.00	0.0	6.0	9.1	3.3	0.0	13.0	0.0	5.7	8.4	0.0
Count	8	8	8	8	8	8	8	8	8	8	7	0
Confidence Level(95.0%)	1.51	0.45	0.0	2.5	1.8	0.9	0.0	3.8	0.0	1.7	3.5	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	130	ND	ND	ND	ND	ND	ND	ND
Standard Error	3	ND	ND	ND	ND	ND	ND	ND
Median	130	ND	ND	ND	ND	ND	ND	ND
Mode	130	ND	ND	ND	ND	ND	ND	ND
Standard Deviation	8	ND	ND	ND	ND	ND	ND	ND
Sample Variance	57	ND	ND	ND	ND	ND	ND	ND
Kurtosis	-1	ND	ND	ND	ND	ND	ND	ND
Skewness	0	ND	ND	ND	ND	ND	ND	ND
Range	20	0	0.0	0.0	0.0	0.0	0.0	0.0
Minimum	120	0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	140	0	0.0	0.0	0.0	0.0	0.0	0.0
Count	8	0	0	0	0	0	0	0
Confidence Level(95.0%)	6	ND	ND	ND	ND	ND	ND	ND

ND = No Data

Provisional MMSD Water Quality data

NEAR SHORE - SITE 11
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.2	12.6	11.0	1.17	0.33	0.005	0.33	0.023	0.06	0.003	0.007	1.40
Standard Error	0.0	0.6	0.2	0.23	0.01	0.001	0.01	0.004	0.02	0.001	0.004	0.04
Median	8.2	10.8	11.1	0.71	0.33	0.005	0.33	0.019	0.00	0.000	0.000	1.40
Mode	8.2	6.4	12.5	0.88	0.33	0.000	0.34	0.000	0.00	0.000	0.000	1.40
Standard Deviation	0.1	4.8	1.2	1.35	0.07	0.008	0.07	0.026	0.17	0.010	0.029	0.27
Sample Variance	0.0	22.6	1.5	1.82	0.00	0.000	0.00	0.001	0.03	0.000	0.001	0.07
Kurtosis	-0.4	-1.0	-0.7	5.58	0.05	17.913	1.24	10.212	8.67	19.280	40.072	0.18
Skewness	0.0	0.4	-0.3	2.45	0.52	3.714	0.86	2.695	3.11	4.270	6.084	-0.59
Range	0.6	15.3	4.7	6.04	0.31	0.048	0.35	0.150	0.77	0.058	0.200	1.17
Minimum	7.9	6.2	8.4	0.00	0.21	0.000	0.21	0.000	0.00	0.000	0.000	0.63
Maximum	8.5	21.4	13.0	6.04	0.52	0.048	0.56	0.150	0.77	0.058	0.200	1.80
Count	54	54	54	34	48	48	54	54	51	51	51	48
Confidence Level(95.0%)	0.0	1.3	0.3	0.47	0.02	0.002	0.02	0.007	0.05	0.003	0.008	0.08

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	6.0	13.0	169.1	168.1	0.7	1.0	0.8	301	13.6	7	0.1	ND
Standard Error	0.6	0.2	13.3	13.1	0.4	0.3	0.1	2	0.4	7	0.1	ND
Median	6.3	13.0	180.0	179.5	0.0	1.0	0.7	294	12.0	0	0.0	ND
Mode	7.5	14.0	180.0	ND	0.0	0.0	0.7	293	11.0	0	0.0	ND
Standard Deviation	2.7	0.8	42.0	41.5	1.3	1.0	0.5	16	3.2	28	0.5	ND
Sample Variance	7.1	0.6	1765.9	1720.2	1.7	1.0	0.3	255	10.1	799	0.2	ND
Kurtosis	-0.2	-1.3	2.9	2.9	4.5	-1.5	5.7	0	0.5	18	17.1	ND
Skewness	0.3	0.3	-1.5	-1.6	2.1	0.3	2.0	1	1.1	4	4.1	ND
Range	9.6	2.0	149.0	146.5	4.0	2.5	2.6	57	13.0	120	2.1	0
Minimum	2.4	12.0	71.0	71.0	0.0	0.0	0.3	279	10.0	0	0.0	0
Maximum	12.0	14.0	220.0	217.5	4.0	2.5	2.9	336	23.0	120	2.1	0
Count	18	17	10	10	10	10	54	54	54	18	18	0
Confidence Level(95.0%)	1.3	0.4	30.1	29.7	0.9	0.7	0.1	4	0.9	14	0.2	ND

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 11
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	34.61	11.61	0.0	0.9	4.3	1.9	0.1	6.0	0.2	1.0	2.5	ND
Standard Error	0.55	0.23	0.0	0.4	0.3	0.2	0.1	1.2	0.1	0.5	1.0	ND
Median	34.50	11.00	0.0	0.0	4.2	1.7	0.0	7.5	0.0	0.0	0.0	ND
Mode	36.00	11.00	0.0	0.0	4.2	1.6	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	2.33	0.98	0.0	1.8	1.1	0.8	0.4	5.2	0.5	2.0	4.4	ND
Sample Variance	5.43	0.96	0.0	3.3	1.2	0.7	0.1	26.7	0.2	4.0	19.2	ND
Kurtosis	0.62	0.79	ND	0.3	0.9	3.3	18.0	-1.8	2.2	1.2	0.9	ND
Skewness	0.25	0.92	ND	1.5	0.9	1.8	4.2	-0.2	2.0	1.7	1.5	ND
Range	10.00	4.00	0.0	4.7	4.4	3.3	1.6	13.0	1.3	5.5	13.0	0.0
Minimum	30.00	10.00	0.0	0.0	2.7	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	40.00	14.00	0.0	4.7	7.1	4.3	1.6	13.0	1.3	5.5	13.0	0.0
Count	18	18	18	18	18	18	18	18	18	18	18	0
Confidence Level(95.0%)	1.16	0.49	0.0	0.9	0.6	0.4	0.2	2.6	0.2	1.0	2.2	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	134	111	0.0	2.7	27.8	25.8	1.9	ND
Standard Error	2	1	0.0	0.5	0.4	0.4	0.1	ND
Median	130	110	0.0	2.6	27.0	25.0	2.0	ND
Mode	130	110	0.0	ND	26.0	24.0	2.0	ND
Standard Deviation	9	5	0.0	1.4	2.0	2.2	0.3	ND
Sample Variance	85	30	0.0	2.0	4.2	4.8	0.1	ND
Kurtosis	2	1	ND	1.2	-1.2	-1.5	-1.1	ND
Skewness	1	0	ND	-0.6	0.4	0.4	0.0	ND
Range	40	20	0.0	4.5	6.0	6.0	1.2	0.0
Minimum	120	100	0.0	0.0	25.0	23.0	1.4	0.0
Maximum	160	120	0.0	4.5	31.0	29.0	2.6	0.0
Count	18	30	10	8	30	30	30	0
Confidence Level(95.0%)	5	2	0.0	1.2	0.8	0.8	0.1	ND

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 12
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	13.0	9.8	8.14	0.74	0.014	0.83	0.052	0.30	0.054	0.020	3.39
Standard Error	0.0	0.6	0.2	0.95	0.03	0.001	0.03	0.005	0.04	0.005	0.003	0.24
Median	8.0	12.2	10.2	4.54	0.70	0.013	0.83	0.047	0.37	0.048	0.000	2.60
Mode	8.1	16.3	8.7	10.40	1.30	0.012	1.30	0.000	0.00	0.000	0.000	2.60
Standard Deviation	0.2	5.3	1.4	8.35	0.27	0.007	0.30	0.046	0.32	0.042	0.027	1.88
Sample Variance	0.0	28.0	2.0	69.75	0.07	0.000	0.09	0.002	0.11	0.002	0.001	3.55
Kurtosis	0.3	-0.9	0.1	4.29	-0.13	3.646	-0.87	0.372	-0.88	0.829	2.313	1.96
Skewness	0.0	0.1	-0.6	2.06	0.53	1.512	0.22	0.768	0.54	0.961	1.485	1.44
Range	1.1	20.1	7.4	39.18	1.11	0.038	1.10	0.190	1.10	0.170	0.120	8.50
Minimum	7.5	3.8	5.2	0.52	0.29	0.005	0.30	0.000	0.00	0.000	0.000	1.20
Maximum	8.6	24.0	12.6	39.70	1.40	0.043	1.40	0.190	1.10	0.170	0.120	9.70
Count	78	78	78	78	63	63	78	75	74	75	72	62
Confidence Level(95.0%)	0.0	1.2	0.3	1.88	0.07	0.002	0.07	0.011	0.08	0.010	0.006	0.48

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	1.3	3.8	295.0	284.6	2.9	10.4	8.0	464	40.7	991	1.6	3057
Standard Error	0.1	0.3	13.3	12.5	0.6	3.8	1.6	12	2.1	843	0.2	2662
Median	1.4	3.7	290.0	277.6	2.1	5.8	4.2	460	37.0	40	1.6	613
Mode	1.4	5.0	290.0	ND	2.2	6.0	4.2	469	34.0	0	0.0	ND
Standard Deviation	0.5	1.6	56.4	52.9	2.6	16.1	13.7	105	18.3	4299	0.9	5325
Sample Variance	0.2	2.4	3179.4	2796.2	6.9	258.7	188.1	11117	333.4	18479207	0.9	28353213
Kurtosis	1.0	-0.3	0.2	0.2	9.3	10.6	12.5	0	0.2	26	1.9	4
Skewness	-0.4	-0.3	0.7	0.7	3.0	3.2	3.6	0	0.8	5	0.8	2
Range	2.2	5.7	190.0	188.4	10.6	66.2	71.7	449	84.0	22000	4.3	10997
Minimum	0.2	0.5	220.0	214.4	1.4	1.8	0.8	292	12.0	0	0.0	3
Maximum	2.4	6.2	410.0	402.8	12.0	68.0	72.5	741	96.0	22000	4.3	11000
Count	26	25	18	18	18	18	78	78	78	26	26	4
Confidence Level(95.0%)	0.2	0.6	28.0	26.3	1.3	8.0	3.1	24	4.1	1736	0.4	8473

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 12
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	43.04	17.31	0.0	3.7	6.3	3.0	0.5	12.9	0.2	1.5	3.5	0.0
Standard Error	1.07	0.58	0.0	0.6	0.5	0.5	0.4	1.6	0.1	0.5	1.0	0.0
Median	42.00	16.00	0.0	4.0	5.7	2.2	0.0	11.0	0.0	0.0	0.0	0.0
Mode	42.00	15.00	0.0	0.0	11.0	1.9	0.0	11.0	0.0	0.0	0.0	0.0
Standard Deviation	5.47	2.98	0.0	3.2	2.3	2.4	1.8	7.9	0.5	2.4	5.1	0.0
Sample Variance	29.88	8.86	0.0	10.2	5.4	5.8	3.3	63.1	0.2	5.6	25.7	0.0
Kurtosis	-0.34	-0.74	ND	0.3	-0.2	7.3	18.1	3.8	9.8	-0.7	-0.1	ND
Skewness	0.76	0.69	ND	0.6	1.0	2.6	4.1	1.5	3.1	1.1	1.1	ND
Range	18.00	10.00	0.0	11.0	7.3	10.7	8.7	38.0	2.1	6.2	14.0	0.0
Minimum	36.00	13.00	0.0	0.0	3.7	1.3	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	54.00	23.00	0.0	11.0	11.0	12.0	8.7	38.0	2.1	6.2	14.0	0.0
Count	26	26	26	26	26	26	26	26	26	26	26	4
Confidence Level(95.0%)	2.21	1.20	0.0	1.3	0.9	1.0	0.7	3.2	0.2	1.0	2.0	0.0

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	179	143	0.7	4.9	38.2	33.7	4.5	ND
Standard Error	5	4	0.3	0.3	1.0	0.8	0.3	ND
Median	170	135	0.0	4.6	36.0	33.0	3.8	ND
Mode	170	130	0.0	4.7	34.0	31.0	2.6	ND
Standard Deviation	26	28	1.4	1.2	7.1	5.9	2.0	ND
Sample Variance	651	775	1.8	1.4	50.3	34.3	4.0	ND
Kurtosis	0	-1	1.9	0.2	0.9	0.9	0.5	ND
Skewness	1	0	1.7	0.8	0.9	0.8	1.1	ND
Range	90	111	4.3	4.2	34.0	28.0	8.1	0.0
Minimum	140	99	0.0	3.1	26.0	24.0	1.9	0.0
Maximum	230	210	4.3	7.3	60.0	52.0	10.0	0.0
Count	26	54	17	14	54	54	54	0
Confidence Level(95.0%)	10	8	0.7	0.7	1.9	1.6	0.5	ND

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 13
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.1	12.3	10.3	6.35	0.63	0.010	0.66	0.040	0.21	0.029	0.016	2.91
Standard Error	0.0	0.6	0.2	0.80	0.04	0.001	0.03	0.004	0.04	0.004	0.003	0.24
Median	8.0	10.9	10.5	3.68	0.60	0.010	0.64	0.036	0.00	0.031	0.000	2.25
Mode	8.2	10.9	10.5	1.40	1.10	0.012	1.10	0.000	0.00	0.000	0.000	1.60
Standard Deviation	0.2	5.3	1.4	6.46	0.27	0.005	0.26	0.033	0.33	0.035	0.025	1.79
Sample Variance	0.0	27.6	2.0	41.77	0.07	0.000	0.07	0.001	0.11	0.001	0.001	3.21
Kurtosis	0.2	-0.8	1.3	7.23	0.79	0.395	0.48	-0.693	1.88	3.003	3.421	3.52
Skewness	0.7	0.5	-0.8	2.30	1.06	-0.152	0.88	0.498	1.57	1.563	1.783	1.95
Range	0.8	20.8	8.1	35.60	1.11	0.023	1.11	0.110	1.30	0.150	0.110	7.85
Minimum	7.7	2.6	5.4	0.50	0.29	0.000	0.29	0.000	0.00	0.000	0.000	0.95
Maximum	8.6	23.4	13.5	36.10	1.40	0.023	1.40	0.110	1.30	0.150	0.110	8.80
Count	69	69	69	66	54	54	66	62	62	63	60	54
Confidence Level(95.0%)	0.0	1.3	0.3	1.59	0.07	0.001	0.06	0.008	0.08	0.009	0.007	0.49

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	2.0	4.5	262.1	258.7	1.3	3.5	3.1	419	31.7	121	1.4	144
Standard Error	0.2	0.4	12.6	12.4	0.2	0.4	0.3	12	2.0	65	0.2	112
Median	1.8	4.2	260.0	257.1	1.4	3.0	2.2	408	29.5	28	1.4	25
Mode	1.6	4.0	300.0	ND	1.4	3.0	2.1	512	51.0	3	0.5	40
Standard Deviation	1.0	1.6	47.1	46.4	0.9	1.4	2.3	102	16.1	304	0.7	432
Sample Variance	1.0	2.7	2218.1	2152.9	0.7	1.9	5.2	10458	257.8	92357	0.6	186541
Kurtosis	1.6	1.6	-0.8	-0.8	0.0	0.9	2.0	0	3.5	17	0.4	15
Skewness	1.1	0.8	0.1	0.1	0.0	1.2	1.6	1	1.5	4	0.2	4
Range	4.2	7.2	160.0	157.2	2.8	4.8	9.9	458	87.0	1400	3.1	1696
Minimum	0.3	1.8	180.0	177.0	0.0	1.8	0.5	283	12.0	0	0.0	4
Maximum	4.5	9.0	340.0	334.2	2.8	6.6	10.4	741	99.0	1400	3.1	1700
Count	23	21	14	14	14	14	66	69	66	22	22	15
Confidence Level(95.0%)	0.4	0.8	27.2	26.8	0.5	0.8	0.6	25	3.9	135	0.3	239

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 13
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	40.18	15.55	0.0	2.8	6.0	2.7	0.5	8.4	0.1	1.2	3.2	ND
Standard Error	1.04	0.56	0.0	0.6	0.7	0.4	0.3	1.4	0.1	0.5	1.1	ND
Median	40.00	15.00	0.0	3.9	5.0	2.2	0.0	8.9	0.0	0.0	0.0	ND
Mode	36.00	17.00	0.0	0.0	4.2	2.2	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	4.86	2.61	0.0	2.8	3.2	1.8	1.5	6.6	0.4	2.3	5.1	ND
Sample Variance	23.58	6.83	0.0	8.0	10.1	3.2	2.3	43.9	0.2	5.5	25.9	ND
Kurtosis	0.17	0.46	ND	-1.0	5.5	13.4	9.6	-0.1	22.0	1.0	0.0	ND
Skewness	0.84	0.97	ND	0.4	2.4	3.4	3.2	0.4	4.7	1.6	1.2	ND
Range	18.00	10.00	0.0	8.8	12.4	8.5	5.9	22.0	2.0	7.1	15.0	0.0
Minimum	34.00	12.00	0.0	0.0	3.6	1.4	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	52.00	22.00	0.0	8.8	16.0	9.9	5.9	22.0	2.0	7.1	15.0	0.0
Count	22	22	22	22	22	22	22	22	22	22	22	0
Confidence Level(95.0%)	2.15	1.16	0.0	1.3	1.4	0.8	0.7	2.9	0.2	1.0	2.3	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	165	136	0.2	4.5	35.8	32.0	3.8	ND
Standard Error	5	4	0.2	0.2	1.2	0.9	0.3	ND
Median	160	120	0.0	4.2	33.5	30.0	3.0	ND
Mode	140	110	0.0	4.0	31.0	26.0	3.3	ND
Standard Deviation	22	27	0.6	0.7	7.5	6.0	1.9	ND
Sample Variance	493	712	0.3	0.4	56.1	35.8	3.5	ND
Kurtosis	0	0	14.0	2.0	-1.0	-0.9	0.5	ND
Skewness	1	1	3.7	1.3	0.6	0.5	1.2	ND
Range	80	90	2.1	2.3	25.0	21.0	7.0	0.0
Minimum	140	110	0.0	3.8	26.0	24.0	1.9	0.0
Maximum	220	200	2.1	6.1	51.0	45.0	8.9	0.0
Count	22	42	14	11	42	42	42	0
Confidence Level(95.0%)	10	8	0.3	0.5	2.3	1.9	0.6	ND

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 14
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	10.5	11.1	1.58	0.32	0.003	0.33	0.023	0.06	0.006	0.005	1.84
Standard Error	0.0	0.7	0.2	0.18	0.01	0.001	0.01	0.003	0.02	0.003	0.002	0.08
Median	8.0	8.9	11.5	0.96	0.33	0.000	0.33	0.018	0.00	0.000	0.000	1.70
Mode	8.2	8.9	12.4	0.72	0.33	0.000	0.33	0.000	0.00	0.000	0.000	1.80
Standard Deviation	0.3	5.4	1.4	1.39	0.06	0.006	0.06	0.027	0.17	0.019	0.013	0.58
Sample Variance	0.1	28.9	2.0	1.93	0.00	0.000	0.00	0.001	0.03	0.000	0.000	0.34
Kurtosis	-0.7	-0.1	0.1	3.80	2.52	29.920	2.46	5.408	5.55	8.068	4.478	21.92
Skewness	-0.2	0.8	-0.6	1.91	0.48	4.927	0.64	1.925	2.61	3.105	2.383	3.96
Range	1.2	20.1	6.5	6.84	0.36	0.042	0.36	0.140	0.68	0.075	0.054	4.10
Minimum	7.3	1.7	7.5	0.34	0.19	0.000	0.20	0.000	0.00	0.000	0.000	1.10
Maximum	8.5	21.7	14.0	7.18	0.55	0.042	0.56	0.140	0.68	0.075	0.054	5.20
Count	63	63	63	63	51	51	63	59	56	58	56	51
Confidence Level(95.0%)	0.1	1.4	0.4	0.35	0.02	0.002	0.02	0.007	0.04	0.005	0.003	0.16

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	5.3	12.4	186.2	185.0	0.5	1.2	1.2	298	13.0	19	0.5	ND
Standard Error	0.5	1.0	4.9	5.0	0.2	0.3	0.2	2	0.3	11	0.2	ND
Median	5.5	12.0	190.0	187.0	0.0	1.0	0.7	294	12.0	2	0.3	ND
Mode	6.2	12.0	200.0	200.0	0.0	0.0	1.1	291	12.0	0	0.0	ND
Standard Deviation	2.3	4.6	17.6	17.9	0.8	1.2	1.3	16	2.7	49	0.7	ND
Sample Variance	5.4	21.4	309.0	319.4	0.6	1.5	1.6	243	7.4	2397	0.5	ND
Kurtosis	0.3	-0.7	-1.3	-1.3	0.3	0.2	5.8	7	6.6	16	0.5	ND
Skewness	0.2	0.4	-0.2	-0.2	1.3	0.9	2.5	2	2.3	4	1.3	ND
Range	9.1	15.9	50.0	52.8	2.2	3.8	5.7	92	15.0	220	2.3	0
Minimum	1.1	4.1	160.0	156.2	0.0	0.0	0.2	280	10.0	0	0.0	0
Maximum	10.2	20.0	210.0	209.0	2.2	3.8	5.9	372	25.0	220	2.3	0
Count	21	20	13	13	13	13	63	63	63	21	21	0
Confidence Level(95.0%)	1.1	2.2	10.6	10.8	0.5	0.7	0.3	4	0.7	22	0.3	ND

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 14
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	34.48	11.57	0.0	1.6	4.7	2.3	0.6	5.8	0.2	1.1	2.3	ND
Standard Error	0.57	0.18	0.0	0.7	0.4	0.3	0.5	1.2	0.1	0.5	0.8	ND
Median	34.00	12.00	0.0	0.0	4.1	2.1	0.0	7.3	0.0	0.0	0.0	ND
Mode	34.00	12.00	0.0	0.0	3.6	2.1	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	2.62	0.81	0.0	3.0	1.8	1.6	2.2	5.4	0.5	2.1	3.7	ND
Sample Variance	6.86	0.66	0.0	8.9	3.4	2.5	4.7	29.5	0.3	4.6	13.9	ND
Kurtosis	4.95	3.09	ND	3.7	0.6	5.6	19.4	-1.7	4.0	2.0	-0.4	ND
Skewness	1.58	0.99	ND	1.9	1.1	2.3	4.4	0.1	2.3	1.7	1.2	ND
Range	13.00	4.00	0.0	11.0	6.7	6.7	9.9	14.0	1.7	7.1	10.0	0.0
Minimum	30.00	10.00	0.0	0.0	2.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	43.00	14.00	0.0	11.0	9.0	7.5	9.9	14.0	1.7	7.1	10.0	0.0
Count	21	21	21	21	21	21	21	21	20	21	20	0
Confidence Level(95.0%)	1.19	0.37	0.0	1.4	0.8	0.7	1.0	2.5	0.2	1.0	1.7	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	135	109	0.3	2.7	27.9	25.8	2.1	ND
Standard Error	2	1	0.3	0.2	0.4	0.4	0.1	ND
Median	130	110	0.0	2.5	28.0	26.0	2.1	ND
Mode	130	110	0.0	2.0	29.0	24.0	1.8	ND
Standard Deviation	10	8	1.1	0.6	2.2	2.1	0.4	ND
Sample Variance	96	66	1.3	0.3	4.7	4.5	0.2	ND
Kurtosis	8	5	13.0	-1.4	0.6	-0.7	4.3	ND
Skewness	2	1	3.6	0.4	0.3	0.0	1.5	ND
Range	50	45	4.1	1.5	10.0	8.0	2.2	0.0
Minimum	120	95	0.0	2.0	24.0	22.0	1.4	0.0
Maximum	170	140	4.1	3.5	34.0	30.0	3.6	0.0
Count	21	39	13	10	37	36	36	0
Confidence Level(95.0%)	4	3	0.7	0.4	0.7	0.7	0.1	ND

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 27
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	13.0	10.6	1.36	0.58	0.028	0.63	0.081	0.13	0.022	0.023	1.67
Standard Error	0.0	0.6	0.2	0.31	0.05	0.007	0.05	0.018	0.04	0.005	0.005	0.11
Median	8.1	11.6	10.6	0.95	0.43	0.010	0.45	0.045	0.00	0.000	0.000	1.40
Mode	8.0	10.6	10.1	0.80	1.20	0.000	0.39	0.000	0.00	0.000	0.000	1.30
Standard Deviation	0.3	4.2	1.2	1.81	0.34	0.046	0.40	0.130	0.29	0.034	0.038	0.74
Sample Variance	0.1	17.5	1.5	3.29	0.12	0.002	0.16	0.017	0.08	0.001	0.001	0.55
Kurtosis	-0.4	-0.5	1.1	24.61	0.09	8.355	0.25	12.850	7.45	0.770	8.953	1.10
Skewness	-0.7	0.7	0.2	4.65	1.11	2.833	1.18	3.294	2.60	1.383	2.604	1.16
Range	1.2	14.3	6.1	10.66	1.15	0.220	1.45	0.740	1.40	0.110	0.200	3.29
Minimum	7.3	7.4	8.0	0.24	0.25	0.000	0.25	0.000	0.00	0.000	0.000	0.41
Maximum	8.5	21.7	14.1	10.90	1.40	0.220	1.70	0.740	1.40	0.110	0.200	3.70
Count	54	54	54	34	48	48	54	54	51	50	50	48
Confidence Level(95.0%)	0.1	1.1	0.3	0.63	0.10	0.013	0.11	0.035	0.08	0.010	0.011	0.22

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	5.4	10.2	217.0	215.4	1.1	1.7	1.2	373	25.4	3	0.2	ND
Standard Error	0.7	0.2	14.5	14.4	0.5	0.4	0.1	14	2.4	2	0.1	ND
Median	4.7	10.5	205.0	204.0	0.5	1.5	1.0	323	20.0	0	0.0	ND
Mode	ND	10.0	230.0	ND	0.0	0.0	2.1	297	11.0	0	0.0	ND
Standard Deviation	3.0	1.1	45.7	45.4	1.7	1.2	0.6	104	17.7	7	0.5	ND
Sample Variance	9.0	1.1	2090.0	2059.6	2.9	1.5	0.4	10756	312.9	48	0.2	ND
Kurtosis	-0.7	13.4	1.9	2.0	6.2	-0.4	2.6	1	3.1	11	1.8	ND
Skewness	0.8	-3.5	1.4	1.4	2.4	0.3	1.3	1	1.8	3	1.7	ND
Range	8.6	4.8	150.0	148.7	5.5	3.8	3.2	378	77.0	28	1.4	0
Minimum	2.1	6.2	170.0	169.0	0.0	0.0	0.4	281	11.0	0	0.0	0
Maximum	10.7	11.0	320.0	317.7	5.5	3.8	3.7	659	88.0	28	1.4	0
Count	18	18	10	10	10	10	54	54	54	18	18	0
Confidence Level(95.0%)	1.5	0.5	32.7	32.5	1.2	0.9	0.2	28	4.8	3	0.2	ND

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 27
WATER QUALITY DATA - 2008.

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	36.67	12.72	0.0	1.6	4.5	2.2	0.0	4.7	0.2	1.2	3.6	ND
Standard Error	1.01	0.52	0.0	0.6	0.3	0.3	0.0	1.3	0.1	0.5	1.2	ND
Median	35.50	12.00	0.0	0.0	4.3	1.9	0.0	0.0	0.0	0.0	0.0	ND
Mode	36.00	12.00	0.0	0.0	4.3	1.1	0.0	0.0	0.0	0.0	0.0	ND
Standard Deviation	4.28	2.19	0.0	2.5	1.3	1.2	0.0	5.5	0.5	2.0	4.9	ND
Sample Variance	18.35	4.80	0.0	6.3	1.8	1.4	0.0	30.2	0.3	3.8	24.3	ND
Kurtosis	3.62	2.31	ND	0.2	5.5	1.9	ND	-2.0	7.6	-0.5	-1.0	ND
Skewness	1.88	1.76	ND	1.2	1.9	1.4	ND	0.4	2.9	1.2	0.8	ND
Range	17.00	7.00	0.0	7.8	5.9	4.4	0.0	13.0	1.9	4.9	13.0	0.0
Minimum	32.00	11.00	0.0	0.0	2.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0
Maximum	49.00	18.00	0.0	7.8	8.7	5.3	0.0	13.0	1.9	4.9	13.0	0.0
Count	18	18	18	18	18	18	18	18	18	18	18	0
Confidence Level(95.0%)	2.13	1.09	0.0	1.3	0.7	0.6	0.0	2.7	0.3	1.0	2.5	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNIC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	144	118	ND	ND	30.0	27.7	2.3	ND
Standard Error	5	2	ND	ND	0.7	0.7	0.1	ND
Median	140	110	ND	ND	29.0	27.5	2.2	ND
Mode	140	110	ND	ND	26.0	24.0	2.1	ND
Standard Deviation	21	13	ND	ND	3.9	3.8	0.5	ND
Sample Variance	426	175	ND	ND	14.8	14.1	0.3	ND
Kurtosis	3	3	ND	ND	0.6	1.2	1.4	ND
Skewness	2	2	ND	ND	1.0	1.2	1.2	ND
Range	80	50	0.0	0.0	14.0	14.0	2.1	0.0
Minimum	120	110	0.0	0.0	26.0	24.0	1.5	0.0
Maximum	200	160	0.0	0.0	40.0	38.0	3.6	0.0
Count	18	30	0	0	30	30	30	0
Confidence Level(95.0%)	10	5	ND	ND	1.4	1.4	0.2	ND

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 28
WATER QUALITY DATA - 2008

VARIABLE	PH	TEMP	DO	CHLA	NITRATE	NITRITE	NO5	AMMONIA	TKN	PHOS	SOLPHOS	SOLSIL
units	su	C	mg/L	mg/m3	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS												
Mean	8.0	14.3	8.8	6.55	0.78	0.015	0.83	0.078	0.44	0.068	0.030	4.10
Standard Error	0.0	0.7	0.2	0.53	0.04	0.001	0.04	0.006	0.05	0.005	0.004	0.35
Median	8.0	13.2	8.7	5.77	0.75	0.014	0.83	0.082	0.51	0.062	0.033	3.25
Mode	8.0	9.7	8.7	5.77	1.20	0.014	1.20	0.110	0.00	0.000	0.000	1.20
Standard Deviation	0.2	5.3	1.7	4.30	0.31	0.006	0.29	0.048	0.40	0.038	0.033	2.56
Sample Variance	0.0	28.0	2.9	18.51	0.09	0.000	0.09	0.002	0.16	0.001	0.001	6.54
Kurtosis	0.1	-0.9	-0.4	2.52	0.62	1.836	0.80	-0.775	-0.16	2.880	2.239	0.36
Skewness	-0.4	0.1	0.4	1.32	0.90	0.775	0.73	-0.174	0.46	1.257	1.363	1.08
Range	0.8	20.9	7.1	22.85	1.42	0.036	1.49	0.170	1.60	0.190	0.140	9.80
Minimum	7.5	4.2	5.5	0.65	0.28	0.000	0.31	0.000	0.00	0.000	0.000	1.20
Maximum	8.3	25.1	12.6	23.50	1.70	0.036	1.80	0.170	1.60	0.190	0.140	11.00
Count	66	66	66	66	54	54	66	63	62	63	60	54
Confidence Level(95.0%)	0.0	1.3	0.4	1.06	0.08	0.002	0.07	0.012	0.10	0.010	0.009	0.70

VARIABLE	SCHII	IXLITE	TS	DS	VSS	SS	TURB	SPEC	CHLOR	FECAL	LFC	ECOLIQT
units	meters	meters	mg/L	mg/L	mg/L	mg/L	NTU	umhos/cm	mg/L	CFU/100 mL	CFU/100 mL	MPN/100 mL
STATISTICS												
Mean	1.1	2.7	334.3	325.4	2.5	8.9	7.1	542	51.5	144	1.9	75
Standard Error	0.1	0.1	20.9	20.6	0.2	1.0	0.3	19	2.9	57	0.1	15
Median	1.1	2.7	345.0	332.5	2.2	8.0	6.7	523	49.0	69	1.8	49
Mode	0.9	2.5	230.0	ND	2.0	10.0	6.8	522	49.0	120	2.1	ND
Standard Deviation	0.3	0.7	78.3	77.0	0.9	3.6	2.8	151	23.7	265	0.5	58
Sample Variance	0.1	0.5	6134.1	5935.1	0.8	13.1	7.9	22733	560.6	70358	0.2	3361
Kurtosis	-0.9	4.7	0.1	0.0	5.0	1.8	0.1	-1	-0.5	19	1.9	5
Skewness	0.1	1.5	0.3	0.3	2.0	1.3	0.8	0	0.5	4	0.2	2
Range	1.1	3.3	270.0	265.2	3.4	13.2	12.3	589	97.0	1293	2.3	221
Minimum	0.6	1.6	230.0	222.8	1.6	4.8	2.7	292	13.0	7	0.8	19
Maximum	1.7	4.9	500.0	488.0	5.0	18.0	15.0	881	110.0	1300	3.1	240
Count	22	21	14	14	14	14	66	66	66	22	22	14
Confidence Level(95.0%)	0.1	0.3	45.2	44.5	0.5	2.1	0.7	37	5.8	118	0.2	33

ND = No Data

Provisional MMSD Water Quality Data

NEAR SHORE - SITE 28
WATER QUALITY DATA - 2008

VARIABLE	CA	MG	CD	CR	CU	NI	PB	ZN	AG	AS	SE	HG
units	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
STATISTICS												
Mean	48.46	21.34	0.0	4.5	7.5	3.9	0.5	14.8	0.1	1.6	2.9	ND
Standard Error	1.25	0.81	0.0	0.2	0.4	0.6	0.2	0.9	0.1	0.4	0.6	ND
Median	46.00	20.00	0.0	4.5	6.7	2.4	0.0	13.0	0.0	0.0	0.0	ND
Mode	41.00	27.00	0.0	4.0	7.1	2.0	0.0	10.0	0.0	0.0	0.0	ND
Standard Deviation	8.86	5.70	0.0	1.4	2.8	4.3	1.3	6.1	0.5	2.6	4.1	ND
Sample Variance	78.54	32.51	0.0	2.1	7.8	18.3	1.6	36.9	0.2	7.0	16.7	ND
Kurtosis	-1.30	-0.90	ND	4.5	1.8	9.4	5.1	2.3	15.6	-0.2	-0.7	ND
Skewness	0.41	0.35	ND	-1.5	1.5	3.1	2.5	1.3	4.1	1.2	0.9	ND
Range	28.00	20.00	0.0	7.5	11.7	20.6	5.3	29.9	2.3	7.9	12.0	0.0
Minimum	37.00	13.00	0.0	0.0	4.3	1.4	0.0	7.1	0.0	0.0	0.0	0.0
Maximum	65.00	33.00	0.0	7.5	16.0	22.0	5.3	37.0	2.3	7.9	12.0	0.0
Count	50	50	50	50	50	50	50	50	50	50	50	0
Confidence Level(95.0%)	2.52	1.62	0.0	0.4	0.8	1.2	0.4	1.7	0.1	0.8	1.2	ND

VARIABLE	HARD	TALK	BOD5	BOD20	TC	TNOC	TNOC	TNDOC
units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
STATISTICS								
Mean	208	173	ND	ND	46.2	40.7	5.3	ND
Standard Error	6	6	ND	ND	1.8	1.5	0.4	ND
Median	200	180	ND	ND	47.5	41.5	4.4	ND
Mode	170	200	ND	ND	53.0	42.0	3.7	ND
Standard Deviation	45	38	ND	ND	11.4	9.7	2.5	ND
Sample Variance	2048	1471	ND	ND	128.8	93.7	6.5	ND
Kurtosis	-1	-1	ND	ND	-0.9	-0.6	-0.1	ND
Skewness	0	0	ND	ND	0.1	0.4	0.9	ND
Range	150	120	0.0	0.0	42.0	36.0	10.0	0.0
Minimum	150	110	0.0	0.0	26.0	24.0	2.0	0.0
Maximum	300	230	0.0	0.0	68.0	60.0	12.0	0.0
Count	50	42	0	0	42	42	42	0
Confidence Level(95.0%)	13	12	ND	ND	3.5	3.0	0.8	ND

ND = No Data

Provisional MMSD Water Quality Data