

# **Appendix 3A-7: Annual Permit Compliance Monitoring Report for Non-Everglades Construction Project Discharge Structures**

Shi Kui Xue, Steven Hill and Richard Pfeuffer

---

## **INTRODUCTION**

---

The non-Everglades Construction Project (non-ECP) permit [Florida Department of Environmental Protection No. 06,502590709] authorizes the South Florida Water Management District to operate and maintain structures (currently 37 structures), in compliance with the reporting requirements stated in Specific Conditions 5 and 12 of the non-ECP permit.

---

## **METHODS**

---

### **WATER QUALITY AND HYDROLOGIC DATA**

The water quality and hydrologic data evaluated in this appendix were retrieved from the South Florida Water Management District's (District or SFWMD) DBHYDRO database. Before water quality data are entered into the database, the District follows strict quality assurance/quality control (QA/QC) procedures outlined in the District's Chemistry Laboratory Quality Manual and Field Sampling Quality Manual (SFWMD, 2005a,b). The laboratory manual was developed in accordance with the National Laboratory Accreditation Conference (NELAC) requirements and the field manual in accordance with Florida Department of Environmental Protection (FDEP) Quality Assurance Rule [Chapter 62-160, Florida Administrative Code (F.A.C.)]. The quality manuals provide assurances that the water quality monitoring program is providing accurate data and that sufficient progress is being made toward achieving water quality standards.

The standards used to evaluate the accuracy of the rating are consistent with SFWMD Standard Operating Procedures (SOP) for Flow Data Management in the District Hydrologic Database (2003) and U.S. Geological Survey approach as outlined by Novak (1985). Four accuracy classifications are adopted to assess a rating's accuracy. The rating is classified as (1) excellent when about 95 percent of the predicted flow rates are within  $\pm 5$  percent of the measured discharges, (2) good if they are within  $\pm 10$  percent, (3) fair if they are within  $\pm 15$ , and (4) poor when they are not within  $\pm 15$  percent.

This appendix includes documentation to satisfy the remaining monitoring requirements of the non-Everglades Construction Project (non-ECP). A signed copy of these statements is provided in Appendix 5-5 of this volume.

### **PERMIT SAMPLING SITES**

In addition to authorizing the operation and maintenance of non-ECP structures, the non-ECP permit requires a routine water quality monitoring program to characterize the quality of water discharged through District structures. Currently, the non-ECP permit requires monitoring at four additional C-111 basin structures (upstream) that are controlled by the District, two structures that are controlled by the Village of Wellington (VOW), and one structure that is controlled by the North Springs Improvement District (NSID).

The District typically collects water quality samples on the upstream side of a structure or at a nearby location representative of the quality of water flowing through a structure. Structure locations are shown in **Figure 1**. In accordance with Specific Condition 16, the District previously submitted a Monitoring Locations Report to the FDEP on July 15, 1998, that included detailed information on the specific locations for sample collection for 44 structures. On August 9, 2001, the District submitted a minor modification to the non-ECP permit to include Phase I of the Western C-11 Basin Critical Restoration Project (including operation and maintenance of the S-9A pump station). The current monitoring program encompasses 37 locations that provide the representative information to characterize the quality of water discharged through the 44 structures. The structure names, representative water quality monitoring location names, and sampling frequencies of the various categories of chemical constituents and physical properties required by the monitoring schedule denoted in the permit are shown in Attachment A, Table 1 of this appendix.

## **PERMIT DATA ANALYSIS PERIODS**

Specific Condition 12 requires the District to submit annual monitoring reports providing updates on water quality data and associated comparisons with state water quality standards. The water quality characterization includes an evaluation of compliance with Class III criteria for each monitoring location representative of a non-ECP structure.

This appendix provides the annual update of the non-ECP permit monitoring program (Specific Condition 12) and a comparison of water quality data at non-ECP structures to state water quality standards from Water Year 2008 (WY2008) (May 1, 2007–April 30, 2008), the eleventh year of non-ECP data. These comparisons fulfill the non-ECP permit requirements to measure progress toward achieving and maintaining compliance with state water quality standards.



**Figure 1.** Non-Everglades Construction Project (non-ECP) discharge structures and additional upstream structures.

## Method Detection Limits

Each water quality constituent has a method detection limit (MDL) that essentially defines the minimum concentration, or level, at which the presence of the constituent can be positively verified; it is usually twice the background noise level associated with a test. The MDL does not represent a level at which an exact measurement can be determined. The practical quantitation limit (PQL) represents the lowest level at which a measurement can be considered quantifiably reliable for a constituent that is achievable (among laboratories within specified limits during routine laboratory operations). Generally, the PQL is four times the MDL, although different laboratories may establish PQLs at two to five times the MDL. In this appendix, trace metal data that were reported to be less than the MDL were assigned a value equal to the MDL. Total phosphorus (TP) data that were less than the MDL of 2.0 micrograms per liter ( $\mu\text{g/L}$ ) [or parts per billion (ppb)] were assigned a value of 2.0 ppb to provide a conservative basis for statistical analysis. For pesticide detections, concentrations greater than the PQL were considered reliable.

## EXCURSION ANALYSIS FOR CLASS III CONSTITUENTS AND PESTICIDES

To evaluate compliance with water quality criteria in WY2008, constituent concentrations were compared to their respective Class III numeric criteria. If a constituent concentration exceeded its numeric criterion, then an excursion was recorded and the total number of excursions and the percent of excursions for the non-ECP structures were tabulated.

## Trace Metals and Un-ionized Ammonia

The un-ionized portion of dissolved ammonia measured in a water sample was calculated and compared to the 0.02 milligram per liter (mg/L) criterion only if temperature and pH values had been recorded for that sample. For trace metals, the most recent trace metal criteria were used for evaluating the data even if the criteria had changed over time. When comparing the calculated criteria with trace metal concentrations, compliance determinations were made only for water samples where hardness values were determined from that same sample, i.e., no extrapolations were made to samples without hardness data. The equations used in this appendix for calculated criteria for trace metals and un-ionized ammonia were derived from the equations listed in Rule 62-302.503, F.A.C.

## Total Phosphorus

The data for total phosphorus (TP) are presented in this appendix in time-series plots and statistical box plots. For TP, any site with data  $> 50$  ppb would be viewed as a concern, any site with data  $> 10$  ppb would be viewed as a potential concern, and any site with data  $< 10$  ppb would be viewed as no concern. This approach is consistent with the federal Settlement Agreement (i.e., Settlement Agreement dated July 26, 1991, entered in Case No. 88-1886-Civ-Hoeveler, U.S. District Court for the Southern District of Florida, as modified by the Omnibus Order entered in the case on April 27, 2001). The Settlement Agreement indicates that the District's Stormwater Treatment Areas (STAs) are located and sized to deliver a uniform, long-term, annual flow-weighted mean TP concentration of 50 ppb or less at each inflow point to the Everglades Protection Area (EPA). Additionally, the Everglades Forever Act (EFA) mandated that the default TP criterion shall be 10 ppb in the EPA in the event that the FDEP did not adopt by rule such a criterion by December 31, 2003. Because final agency action by the FDEP did not occur prior to December 31, 2003, as a result of unresolved administrative

challenges, a default TP criterion of 10 µg/L became effective as specified by the EFA. The default criterion was superseded by the FDEP's criterion when it was filed with the Florida Secretary of State on June 25, 2004.

There are additional TP concentration compliance limits for inflows to the Everglades National Park (ENP or Park) by way of Shark River Slough (S-12s and S-333), and the coastal basin (S-18C) outlined in Appendix A of the Settlement Agreement. However, this appendix does not track compliance with the interim or long-term TP concentration limits set forth in the Settlement Agreement.

The District's categories of concern, potential concern, and no concern are based on a common-sense understanding of water resources protection. These terms, however, are not intended to be interpretations of state water quality standards or state water quality law. The FDEP, not the District, is responsible for interpreting whether a given constituent violates the numeric criterion, the narrative criterion, a water body's designated uses, or the anti-degradation policy.

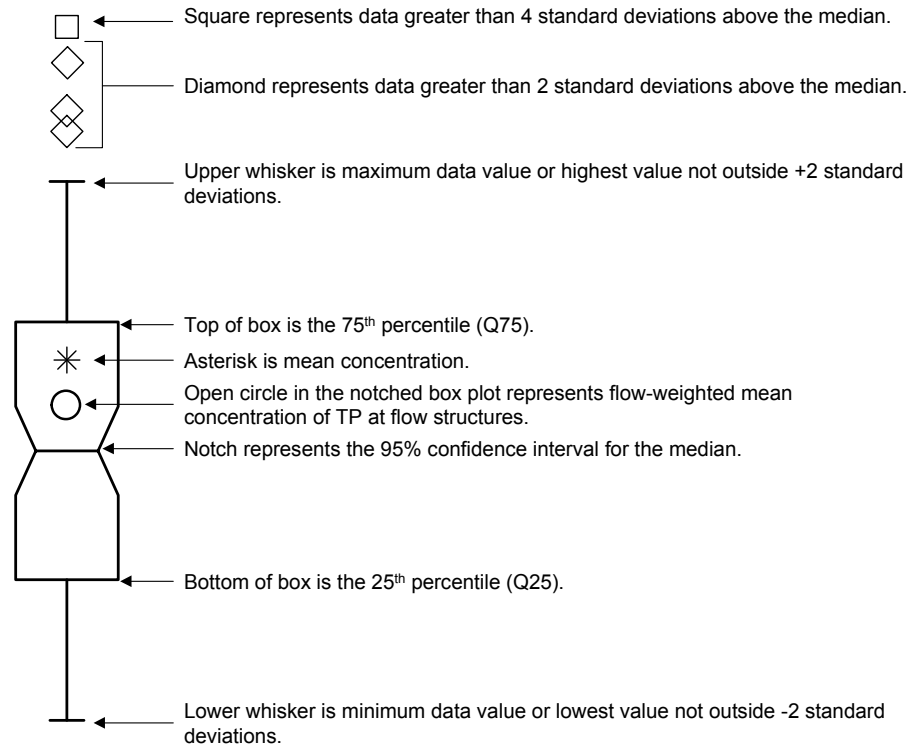
## **Pesticides**

The EPA pesticide monitoring program includes non-ECP permitted structures. For purposes of this appendix, the WY2008 surface water pesticide analyses are presented in tables for the non-ECP structures only. The sediment pesticide analyses for WY2008 are presented in a separate table. Five upstream structures in the C-111 basin are included in the pesticide monitoring program and represent potential warning sites for pesticides that might be discharged into the Park.

## **DESCRIPTION OF NOTCHED-BOX-AND-WHISKER PLOTS**

Notched-box-and-whisker plots were created to summarize data for each constituent that exceeded its numeric criteria. These plots also summarize the TP data collected at all monitoring locations. A notched-box-and-whisker plot summarizes selected statistical properties of the datasets. Notched-box-and-whisker plots can be used to test for statistical significance between datasets at roughly a 95 percent confidence interval to detect changes in constituent concentration variability over time and to determine if trends exist. The notched-box-and-whisker plots used for these summaries are based on McGill et al. (1978) (**Table 1**).

It is recognized that using notched-box-and-whisker plots to determine differences between datasets with large differences in sample size may cause apparently significant findings that are artifacts of the number of samples and the amount of variation in the datasets. The objective of providing the plots was to compare data from WY2008 to those in previous individual permit water years (WY1998–WY2007) and previously established baseline datasets for the non-ECP discharge structures.

**Table 1.** Description of notched box-and-whisker plots used in Appendix 3A-7.

1. Notches surrounding the medians provide a measure of the significance of differences between notched box plots. If the notches about two medians do not overlap, then the medians are significantly different at about a 95 percent confidence level.
2. At times, the variability in a data set may be quite high. When highly variable data are presented in a notched box and whisker plot, the width of the notch may be greater than the 25<sup>th</sup> or 75<sup>th</sup> percentile. When this occurs, the box plot appears as if it is folded from the end of the notch back towards the median. This is done automatically by the statistics program to save space within the figure being presented.
3. Notches are calculated using the following equation:

$$Notch = Median \pm \frac{1.58(Q75 - Q25)}{\sqrt{n}}$$

Where n = number of data points

---

## **RESULTS: WATER QUALITY EVALUATION AND EXCURSION ANALYSIS**

---

In accordance with Specific Conditions 5 and 12(h) of the non-ECP permit, this section presents an update of constituent concentrations and physical properties measured during WY2008, the tenth year of non-ECP permit monitoring. For standards with numeric criteria, the data from the structures were assessed for compliance with those standards using the procedures in Rule 62-4.246, F.A.C. For parameters that have narrative water quality criteria, the concentrations obtained at each structure were reported using plots and summary statistics.

### **MONITORING OF PHYSICAL PARAMETERS, NUTRIENTS, MAJOR IONS AND TRACE METALS**

#### **Descriptive Statistics**

A summary of the data begins with a presentation of descriptive statistics for all water quality constituent concentrations and physical properties (excluding pesticides and priority pollutants) measured for non-ECP monitoring locations during WY2008 (Attachment B, Table 2). The descriptive statistics (summary tables) are presented by monitoring location for each water quality parameter collected for the site. A reference is also provided in Attachment B, Table 1, reflecting current state Class III criteria.

The statistical summary tables report the range of constituent concentrations, median values, the number of sample observations, selected data percentiles (25<sup>th</sup> and 75<sup>th</sup>), and flag parameters exhibiting excursions from Class III numeric criteria. Concentrations observed to be less than the lower limit of the analytical method (MDL) were set equal to the MDL for statistical analysis.

For parameters such as nutrients that have only narrative criteria, the tables provide basic information to assist with identifying water quality constituents that might be of concern. TP is the nutrient deemed to be of particular concern for the non-ECP structures.

#### **Excursions from Class III Criteria (Numeric)**

Further analysis of excursions from Class III criteria was accomplished by summarizing the excursions, plotting the data for parameters exhibiting the excursions, discussing the parameters, and noting which ones are a concern. The excursion analysis is based on 11 water quality parameters (with numeric criteria), shown in **Table 2**, that were collected for the non-ECP monitoring program and can be compared with applicable Class III water quality criteria listed in Rule 62-302.530, F.A.C.

**Table 2.** Summary of total number of excursions from state Class III criteria for all non-ECP monitoring sites during Water Year 2008 (WY2008) (May 1, 2007–April 30, 2008) and previous periods.

| Parameter        | Total Alkalinity | Dissolved Oxygen | Specific Conductance | pH        | Turbidity | Un-Ionized Ammonia | Total Iron | Total Cadmium | Total Lead | Total Copper | Total Zinc |
|------------------|------------------|------------------|----------------------|-----------|-----------|--------------------|------------|---------------|------------|--------------|------------|
| EFA Baseline     | (1:2677)         | (1694:2615)      | (59:2615)            | (6:2586)  | (10:2637) | (12:2548)          | (5:836)    | (9:362)       | (1:364)    | (1:373)      | (3:363)    |
| Non-ECP Baseline | (0:2845)         | (2177:3018)      | (12:3058)            | (37:3008) | (12:2842) | (10:2661)          | (5:1655)   | (4:785)       | (2:785)    | (0:779)      | (2:786)    |
| WY1998           | (0:525)          | (459:551)        | (3:551)              | (12:551)  | (0:527)   | (7:448)            | (0:261)    | (1:127)       | (0:120)    | (0:127)      | (0:127)    |
| WY1999           | (0:502)          | (485:581)        | (0:589)              | (10:589)  | (4:504)   | (20:501)           | (1:244)    | (0:126)       | (0:112)    | (0:126)      | (0:125)    |
| WY2000           | (0:559)          | (558:697)        | (5:698)              | (1:698)   | (3:645)   | (1:622)            | (0:270)    | (0:133)       | (0:119)    | (0:132)      | (0:129)    |
| WY2001           | (0:490)          | (455:637)        | (2:637)              | (1:637)   | (1:489)   | (3:485)            | (1:186)    | (0:101)       | (0:77)     | (0:101)      | (0:100)    |
| WY2002           | (0:475)          | (456:597)        | (0:600)              | (1:611)   | (2:479)   | (0:478)            | (0:74)     | (0:30)        | (ND)       | (0:29)       | (0:25)     |
| WY2003           | (1:471)          | (436:649)        | (1:664)              | (2:666)   | (1:470)   | (0:477)            | (0:72)     | (0:31)        | (ND)       | (0:35)       | (0:31)     |
| WY2004           | (0:506)          | (577:793)        | (3:761)              | (1:812)   | (0:519)   | (0:522)            | (0:70)     | (0:31)        | (ND)       | (0:35)       | (0:31)     |
| WY2005           | (0:447)          | (584:886)        | (0:862)              | (4:485)   | (2:523)   | (1:514)            | (0:89)     | (0:38)        | (0:2)      | (0:40)       | (0:36)     |
| WY2006           | (0:443)          | (718:905)        | (1:907)              | (1:919)   | (0:569)   | (0:562)            | (0:74)     | (0:32)        | (ND)       | (0:32)       | (0:32)     |
| WY2007           | (0:373)          | (543:927)        | (0:929)              | (0:943)   | (2:462)   | (0:541)            | (0:62)     | (0:28)        | (ND)       | (0:28)       | (0:44)     |
| WY2008           | (0:154)          | (510:872)        | (0:900)              | (2:902)   | (3:354)   | (0:229)            | (0:16)     | (ND)          | (ND)       | (ND)         | (ND)       |

First number indicates number of excursions; 2<sup>nd</sup> number indicates total number of samples collected.

ND = no data

WY2008 (May 1, 2007 through April 30, 2008); WY2007 (May 1, 2006 through April 30, 2007); WY2006 (May 1, 2005 through April 30, 2006); WY2005 (May 1, 2004 through April 30, 2005); WY2004 (May 1, 2003 through April 30, 2004); WY2003 (May 1, 2002 through April 30, 2003); WY2002 (May 1, 2001 through April 30, 2002); WY2001 (May 1, 2000 through April 30, 2001); WY2000 (May 1, 1999 through April 30, 2000); WY1999 (May 1, 1998 through April 30, 1999); WY1998 (May 1, 1997 through April 30, 1998); non-ECP Baseline (October 1, 1988 through April 30, 1997); and EFA Baseline (October 1, 1978 through September 30, 1988). See 2000-2004 Everglades Consolidated Reports and 2005-2008 South Florida Environmental Reports (SFWRD, 2000-2008) for previous periods.

Of the 11 parameters listed in **Table 2**, dissolved oxygen (DO) and pH exhibited two excursions at S-190 and NSIDSP01 stations, and turbidity exhibited three excursions at S-178 during WY2008. Non-ECP annual monitoring summary tables that show the total number of excursions by individual monitoring location were presented in previous reports. **Table 2** summarizes the previously reported information and compares the results with WY2008. A summary of observed excursions from Class III criteria for individual non-ECP monitoring locations during WY2008 is presented in **Table 3**. The monitoring locations are categorized in the table as either into, within, from, or C-111 basin locations as defined by the non-ECP permit.

Calculated criteria for the parameters were derived from the equations listed in Rule 62-302.530, F.A.C. When comparing the calculated criteria with trace metal or major ion concentrations, the only samples used were those in which hardness values were determined in the same sample as that of the trace metal or major ion.

**Table 3.** Summary of excursions from state Class III surface water criteria for individual non-ECP monitoring sites and additional upstream monitoring locations during WY2008.

| AREA       | STRUCTURE                      | SAMPLING SITE | PARAMETERS                       |           |                      |           |           |                    |          |         |      |        |      |
|------------|--------------------------------|---------------|----------------------------------|-----------|----------------------|-----------|-----------|--------------------|----------|---------|------|--------|------|
|            |                                |               | Alkalinity                       | DO        | Specific Conductance | pH        | Turbidity | Un-ionized Ammonia | Iron     | Cadmium | Lead | Copper | Zinc |
| INTO       | ACME1DS                        | ACME1DS       | (0 : 11)                         | (2 : 11)  | (0 : 11)             | (0 : 11)  | (0 : 11)  | (0 : 19)           | (0 : 1)  | -ND-    | -ND- | -ND-   | -ND- |
|            | ACME1<br>(Upstream of ACME1DS) | VOW1          | -ND-                             | -ND-      | -ND-                 | -ND-      | -ND-      | -ND-               | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            | ACME2<br>(Upstream of G94D)    | VOW2          | -ND-                             | -ND-      | -ND-                 | -ND-      | -ND-      | (0 : 0)            | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            | G-123                          | G123          | (0 : 5)                          | (49 : 53) | (0 : 53)             | (0 : 53)  | (0 : 12)  | (0 : 5)            | (0 : 1)  | -ND-    | -ND- | -ND-   | -ND- |
|            | S-9                            | S9            | (0 : 6)                          | (53 : 53) | (0 : 53)             | (0 : 53)  | (0 : 13)  | (0 : 6)            | (0 : 1)  | -ND-    | -ND- | -ND-   | -ND- |
|            | S-9A                           | S9A           | (0 : 1)                          | (51 : 52) | (0 : 52)             | (0 : 52)  | (0 : 21)  | (0 : 8)            | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            | S-18C                          | S18C          | (0 : 9)                          | (16 : 49) | (0 : 50)             | (0 : 51)  | (0 : 12)  | (0 : 9)            | (0 : 1)  | -ND-    | -ND- | -ND-   | -ND- |
|            | S-174                          | S174          | -ND-                             | (9 : 18)  | (0 : 21)             | (0 : 22)  | -ND-      | (0 : 0)            | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            | S-332D                         | S332D         | (0 : 2)                          | (11 : 18) | (0 : 21)             | (0 : 22)  | (0 : 7)   | (0 : 8)            | (0 : 2)  | -ND-    | -ND- | -ND-   | -ND- |
|            | S-140                          | S140          | (0 : 10)                         | (22 : 53) | (0 : 53)             | (0 : 53)  | (0 : 18)  | (0 : 10)           | (0 : 1)  | -ND-    | -ND- | -ND-   | -ND- |
|            | S-190                          | S190          | (0 : 2)                          | (13 : 53) | (0 : 53)             | (1 : 52)  | (0 : 14)  | (0 : 12)           | (0 : 1)  | -ND-    | -ND- | -ND-   | -ND- |
| WITHIN     | NSID1                          | S38B          | -ND-                             | -ND-      | -ND-                 | -ND-      | -ND-      | -ND-               | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            |                                | NSIDSP01      | -ND-                             | (4 : 30)  | (0 : 30)             | (1 : 30)  | (0 : 3)   | -ND-               | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            | G-64                           | G64           | No Data (Structure Closed)       |           |                      |           |           |                    |          |         |      |        |      |
|            | S-346, S-347                   | S12D          | (0 : 6)                          | (15 : 26) | (0 : 26)             | (0 : 25)  | (0 : 6)   | (0 : 6)            | (0 : 1)  | -ND-    | -ND- | -ND-   | -ND- |
|            | S-141                          | S34           | Same as Data for S34 Shown Below |           |                      |           |           |                    |          |         |      |        |      |
|            | S-142                          | S142          | -ND-                             | (8 : 12)  | (0 : 12)             | (0 : 12)  | (0 : 12)  | (0 : 0)            | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            | S-143                          | S11A          | (0 : 5)                          | (2 : 14)  | (0 : 14)             | (0 : 14)  | (0 : 14)  | (0 : 5)            | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            | S-144                          | S144          | -ND-                             | -ND-      | -ND-                 | -ND-      | -ND-      | -ND-               | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            | S-145                          | S145          | (0 : 8)                          | (15 : 18) | (0 : 18)             | (0 : 18)  | (0 : 18)  | (0 : 8)            | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            | S-146                          | S146          | -ND-                             | -ND-      | -ND-                 | -ND-      | -ND-      | -ND-               | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            | S-151                          | S151          | (0 : 5)                          | (7 : 13)  | (0 : 14)             | (0 : 14)  | (0 : 14)  | (0 : 5)            | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            | S-333                          | S333          | (0 : 7)                          | (32 : 52) | (0 : 53)             | (0 : 52)  | (0 : 10)  | (0 : 20)           | (0 : 1)  | -ND-    | -ND- | -ND-   | -ND- |
|            | S-339, S-340                   | C123SR84      | (0 : 6)                          | (6 : 13)  | (0 : 13)             | (0 : 13)  | (0 : 13)  | (0 : 6)            | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            | S-175                          | S175          |                                  |           |                      |           |           |                    | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            | S-332                          | S332          |                                  |           |                      |           |           |                    | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
| FROM       | BERMB3                         | BERMB3        | -ND-                             | (1 : 1)   | (0 : 1)              | (0 : 1)   | (0 : 1)   | (0 : 0)            | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            | G-94A, G-94B, G-94C            | G94B          | (0 : 12)                         | (7 : 12)  | (0 : 12)             | (0 : 12)  | (0 : 12)  | (0 : 12)           | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            | G-94D                          | G94D          | (0 : 11)                         | (8 : 11)  | (0 : 11)             | (0 : 11)  | (0 : 11)  | (0 : 9)            | (0 : 1)  | -ND-    | -ND- | -ND-   | -ND- |
|            | S-31, S-337                    | S31           | (0 : 5)                          | (9 : 12)  | (0 : 13)             | (0 : 13)  | (0 : 13)  | (0 : 5)            | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            | S-34                           | S34           | (0 : 5)                          | (4 : 15)  | (0 : 15)             | (0 : 15)  | (0 : 15)  | (0 : 5)            | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            | S-38                           | S38           | (0 : 5)                          | (12 : 13) | (0 : 13)             | (0 : 13)  | (0 : 13)  | (0 : 5)            | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            | S-39                           | S39           | (0 : 3)                          | (2 : 13)  | (0 : 13)             | (0 : 13)  | (0 : 13)  | (0 : 9)            | (0 : 1)  | -ND-    | -ND- | -ND-   | -ND- |
|            | S-197                          | S197          | -ND-                             | (0 : 4)   | (0 : 4)              | (0 : 4)   | (0 : 4)   | (0 : 0)            | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            | S-334                          | S334          | -ND-                             | (3 : 8)   | (0 : 9)              | (0 : 9)   | (0 : 7)   | (0 : 0)            | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            | S-343A, S-343B                 | US41-25       | (0 : 6)                          | (16 : 18) | (0 : 18)             | (0 : 18)  | (0 : 9)   | (0 : 6)            | (0 : 1)  | -ND-    | -ND- | -ND-   | -ND- |
|            | S-344                          | S344          | -ND-                             | (3 : 4)   | (0 : 4)              | (0 : 4)   | (0 : 4)   | (0 : 0)            | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
| C111 Basin | S-176                          | S176          | (0 : 5)                          | (9 : 17)  | (0 : 19)             | (0 : 20)  | (0 : 5)   | (0 : 18)           | (0 : 1)  | -ND-    | -ND- | -ND-   | -ND- |
|            | S-177                          | S177          | (0 : 9)                          | (17 : 40) | (0 : 41)             | (0 : 42)  | (0 : 12)  | (0 : 19)           | (0 : 1)  | -       | -    | -      | -    |
|            | S-178                          | S178          | (0 : 5)                          | (14 : 24) | (0 : 26)             | (0 : 26)  | (3 : 8)   | (0 : 5)            | (0 : 1)  | -ND-    | -ND- | -ND-   | -ND- |
|            |                                | S178Auto      | -ND-                             | -ND-      | -ND-                 | -ND-      | -ND-      | -ND-               | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            | S-331, S-173                   | S331-173      | (0 : 5)                          | (27 : 47) | (0 : 51)             | (0 : 51)  | (0 : 9)   | (0 : 20)           | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            |                                | S331-173A     |                                  | (1 : 1)   |                      | (0 : 1)   |           | (0 : 0)            |          | -ND-    | -ND- | -ND-   | -ND- |
|            | S-332B                         | S332B         | -ND-                             | (34 : 47) | (0 : 51)             | (0 : 51)  | (0 : 9)   | (0 : 0)            | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
|            | S-332C                         | S332C         | -ND-                             | (29 : 48) | (0 : 52)             | (0 : 52)  | (0 : 11)  | (0 : 0)            | -ND-     | -ND-    | -ND- | -ND-   | -ND- |
| Totals     |                                |               | (0 : 154)                        | 510 : 872 | (0 : 900)            | (2 : 902) | (3 : 354) | (0 : 229)          | (0 : 16) | -ND-    | -ND- | -ND-   | -ND- |

1<sup>st</sup> number in parenthesis indicates number of excursions. 2<sup>nd</sup> number in parenthesis indicates total number of samples collected. Bold numbers indicate excursions from state class III criteria. -ND- indicates that no data was collected.

For parameters that exceeded Class III criteria during WY2008, time-series plots and box-whisker plots are provided in Attachment C. These plots report the range of the data and the magnitude of the excursions and assist with detecting whether there are any increasing or decreasing trends observed in the data. To assess how far a physical parameter, major ion, or trace metal deviated above or below a Class III numeric criterion, a percent-departure line was added to the time-series plots and box-and-whisker plots. These departure lines indicate whether a parameter value ranges more than 1, 10, or 100 percent beyond the numeric criteria. The physical parameters appear as horizontal lines across the plots. For the major ions and trace metals, the criteria change from sample to sample because the criteria for each parameter for a particular sample were calculated based on the hardness data calculated from the same sample. For data that show an excursion, the percentage departure is annotated on the plot above the value.

### ***Dissolved Oxygen***

DO concentrations exhibited consistent excursions from Class III criteria during WY2008 (**Table 3**). About 58 percent (510 out of 872 samples) of DO concentrations measured at the non-ECP monitoring locations were less than the minimum criterion of 5 mg/L. The DO concentrations measured for WY2008 are consistent with the concentration levels and the frequency of excursions observed in previous water years, and there is a slight decrease (58 percent versus 59 percent) for DO excursions in WY2008 compared with WY2007. The DO excursions occurred at most locations. The DO time-series and box-and-whisker plots are shown in Attachment C.

It should be noted that even unimpacted areas of the Everglades commonly have DO concentrations that are below the 5 mg/L standard as part of the natural water conditions found in South Florida. Because natural levels commonly fall below the existing standard, the FDEP has recently adopted a site-specific alternative criterion (SSAC) for DO in the EPA that better reflects naturally occurring conditions.

### ***Specific Conductance***

Specific conductance was measured in 900 samples collected from the monitoring sites. None of these samples exhibited an excursion exceeding the Class III criteria for specific conductance. The criteria for Class III waters requires that specific conductance not exceed a level greater than 50 percent above background, or 1,275 microhms per centimeter ( $\mu\text{mhos/cm}$ ), whichever is greater.

### ***pH***

The pH of a solution is defined as the negative base-10 logarithm of the hydrogen ion activity and can range from 0 (very acidic) to 14 (very alkaline). For freshwater systems, the Class III criterion for pH ranges from 6.0 to 8.5 units. For WY2008, there were two excursions for the pH criterion among 902 samples collected.

### ***Alkalinity***

The criterion for Class III waters requires that alkalinity not measure below 20 mg/L. Alkalinity was measured in 154 samples taken during WY2008. None of the sample values were flagged as a potential excursion. Alkalinity does not appear to be a parameter of concern, as excursions have only occurred once during the past 11 water years.

### ***Turbidity***

The criterion for Class III waters requires that turbidity not exceed 29 nephelometric turbidity units (NTU) above natural background conditions. In general, the median value can be used to determine the average background levels on a site-to-site basis for the non-ECP monitoring locations to compare the measured turbidity at a site with Class III criteria. For instance, if background levels at a particular location indicate a median turbidity level of approximately 3 NTU and a turbidity measurement of 30 NTU was measured, then this would indicate that the measurement is 27 NTU above background levels. This measurement would not be considered an excursion, although the 30 NTU measurement might be construed as exceeding the criterion in the absence of sufficient background data to calculate a median value for comparison.

Turbidity was measured in 354 samples collected during WY2008. The majority of the data are characterized by low turbidity values. As shown in **Table 3**, out of 354 samples, only three samples were flagged as a potential excursion at S-178 stations. The turbidity data at S-178 are plotted in Attachment C.

### ***Un-Ionized Ammonia***

The Class III surface water quality criterion for ammonia was established for the un-ionized portion of dissolved ammonia. The un-ionized portion of dissolved ammonia measured in a water sample can be calculated and compared to the Class III criterion only if temperature and pH have been recorded for that sample. Un-ionized ammonia was not detected at concentrations that exceeded its criterion of 0.02 mg/L among 229 samples at all locations during WY2008. In previous non-ECP monitoring reports, this parameter was identified as a potential concern once in the last seven years.

### ***Trace Metals and Total Iron***

Quarterly monitoring of trace metals cadmium, copper, and zinc were eliminated in WY2008 in accordance with the monitoring modification of the non-ECP permit because no excursions occurred since WY1998. The iron was monitored at 16 samples and there was no observed iron concentration in WY2008 that exceeded their respective Class III criteria. These metals are not parameters of concern for the non-ECP monitoring locations.

## Evaluation of Total Phosphorus

The non-ECP permit established the monitoring schedule shown in Attachment A for the collection of TP at non-ECP structures. Sample collection is accomplished mainly through a grab-sample collection program. Grab samples are collected biweekly for a majority of the structures when flow is occurring at the structure; otherwise, collection is conducted at least once a month. A few exceptions exist for some non-ECP structures, where sampling is conducted biweekly only during flow events. Nutrients are the most frequently sampled parameters in the non-ECP monitoring program.

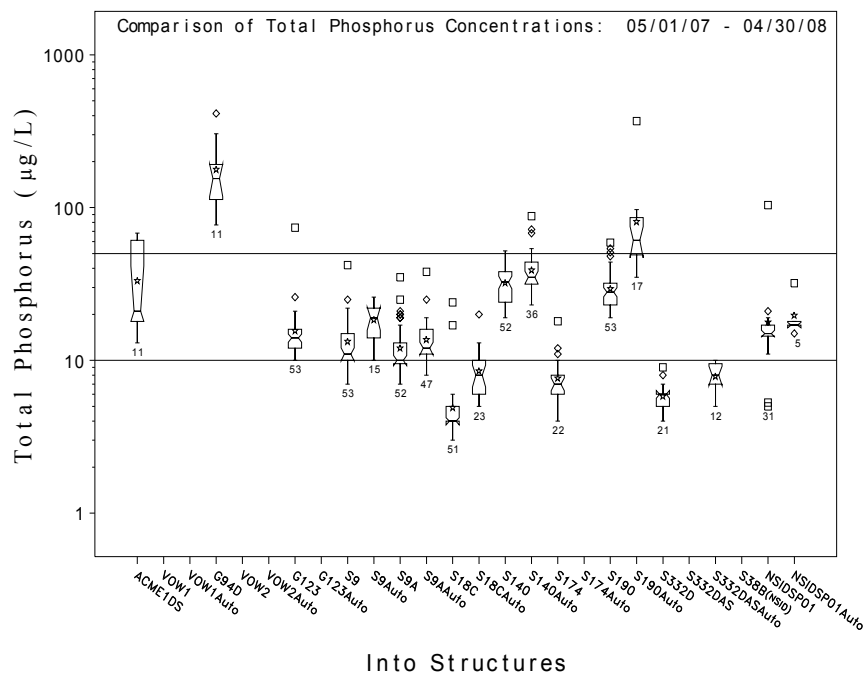
During WY2008, autosamplers collected TP samples at the S-9, S-9A, S-18C, S-190, S-140, NSID1 (NSIDSP01), and S-332D structures. The samples collected at the NSID1 were not associated with flow, as there was no flow at these stations in WY2008. Deployment of the autosamplers at these locations was previously identified as an improvement in the monitoring program for collecting TP data at into structures. Autosamplers also collected samples at the S-332B and S-332C structures located in the C-111 basin that discharge water into the detention areas east of the Park.

The TP concentration data collected for all monitoring locations during WY2008 (the eleventh year of non-ECP permit monitoring) are plotted in time-series and notched-box-and-whisker plots in Attachment D. The plots are designed to provide a comparison of TP concentration data between WY2008 and previous periods (WY2007, WY2006, WY2005, WY2004, WY2003, WY2002, WY2001, WY2000, WY1999, WY1998, EFA baseline, and non-ECP baseline) to detect changes and trends in TP concentrations at non-ECP monitoring locations. To assist with evaluation of the TP concentration data for a particular location discharging into, within, or from the EPA, horizontal lines representing the 10 ppb and 50 ppb concentration levels were added to the TP time-series and notched-box-and-whisker plots. TP concentrations are reported in ppb (or  $\mu\text{g/L}$ ), unless otherwise noted.

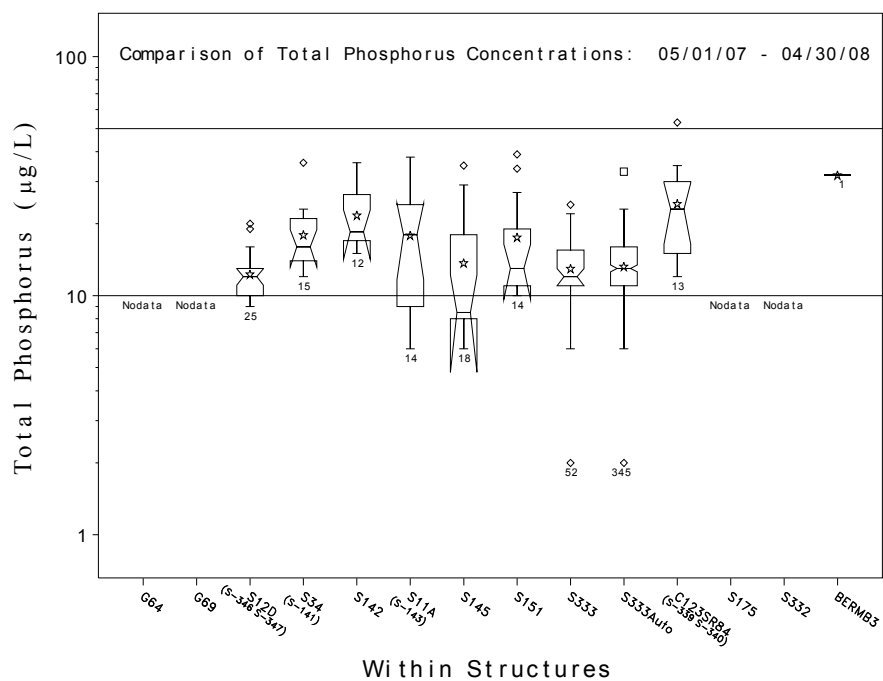
For WY2008, a statistical comparison of TP concentration data for all monitoring locations is presented as notched box and whisker plots in **Figures 2a** through **2d**. The figures represent into (**Figure 2a**), within (**Figure 2b**), and from (**Figure 2c**) monitoring locations. Additionally, notched-box-and-whisker plots were constructed for TP concentration data for the upstream C-111 basin monitoring locations (**Figure 2d**). Summary statistics of TP data collected for all monitoring locations are presented separately as Attachment B, Table 3. (Grab and autosampler data are reported separately.) A discussion of the TP concentration data observed during WY2008 is provided below.

### ***Into Structures***

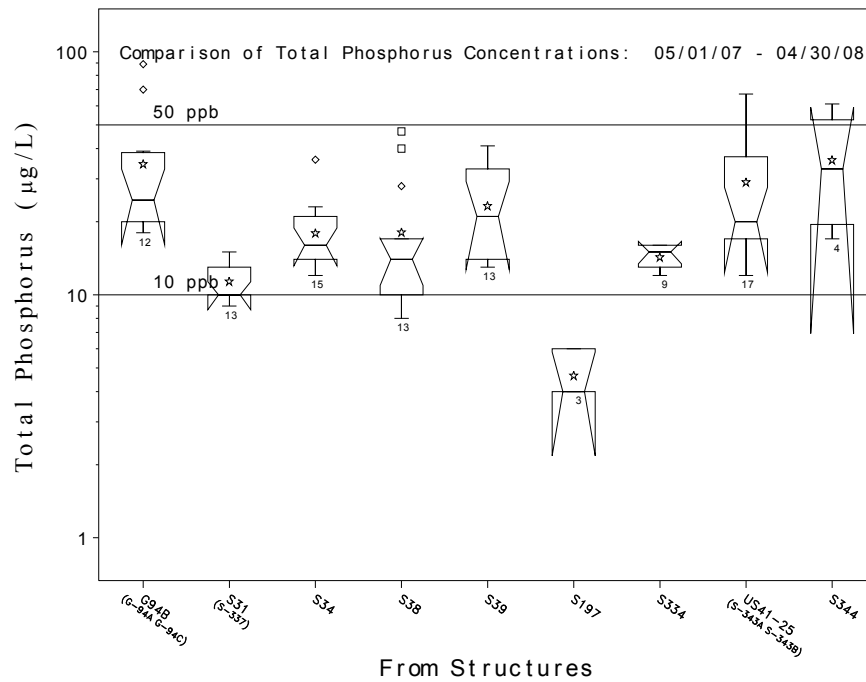
Some of the highest TP concentrations for non-ECP structures discharging directly to the EPA during WY2008 were observed for the monitoring locations at Feeder Canal (S-190). The sample collection at VOW1 and VOW2 ended on January 2, 2007.



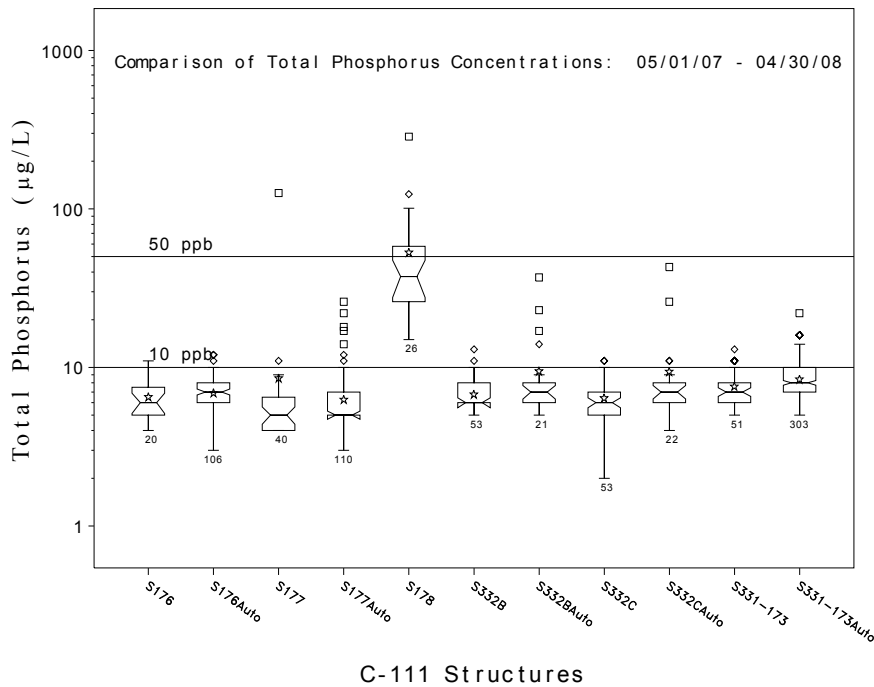
**Figure 2a.** Comparison of TP concentrations for into structures during WY2008.



**Figure 2b.** Comparison of TP concentrations for within structures during WY2008.



**Figure 2c.** Comparison of TP concentrations for from structures during WY2008.



**Figure 2d.** Comparison of TP concentrations for C-111 structures during WY2008.

The ACME1DS and G-94D culverts, operated by VOW, closed after January 18, 2007, and stopped discharging to the Arthur R. Marshall Loxahatchee National Wildlife Refuge (Refuge) when upstream pump stations ACME1 or ACME2 are operating.

There were no discharges for the ACME1DS and G-94D culverts, or the upstream pump stations during WY2008 for ACME1 and ACME2. Additionally, high TP concentrations were observed for structures S-190 (Feeder Canal Basin) and S-140 (L-28 basin), with median TP concentrations of 28 ppb (grab) and 61 ppb (auto) at S-190; 33 ppb (grab) and 35 ppb (auto) at S-140. During WY2008, structure S-190 discharged 25,310 ac-ft, and S-140 discharged 90,340 ac-ft into the western portion of Water Conservation Area (WCA) 3A.

The lowest TP concentrations were observed at structures in the C-111 basin at S-177, S-331 S-173, S-332D, and S-174. S-174 and S-332D structures are now modified as into structures and S-174 was plugged in September 2007; S-175, S-332, and BERMB3 are modified as within structures. These structures discharge to the southeastern portion of the Park by way of the C-111 canal and Taylor Slough. The TP data for these monitoring locations had median concentrations of 4 ppb (grab) and 8 ppb (auto) for S-18C, and 6 ppb (grab) and 8 ppb (auto) for S-332D, with 75 percent of the samples having concentrations below 5 ppb (grab) and 10 ppb (auto) for S-18C, and 6 ppb (grab) and 10 ppb (auto) for S-332D. During WY2008, the structures did not discharge at S-174 and discharged 32,689 ac-ft from S-332D to the Park. The S-18C structure discharged approximately 124,381 ac-ft to the lower C-111 canal, which was significantly increased from last year (80,357 ac-ft). S-178 had a median concentration of 38 ppb for the grab samples, the highest TP concentration in the C-111 basin, with a discharge of 2,514 ac-ft.

Structures S-9, S-9A (C-11 West Basin), and G-123 (North New River Basin) discharge directly to the eastern side of WCA-3A. The notched-box-and-whisker plot for S-9, which is based on grab-sample data, indicates a TP concentration of less than 15 ppb for 75 percent of the data, a median concentration of 11 ppb, and a maximum concentration of 42 ppb (**Figure 2a**). Seventy-five percent of the data collected by the autosampler at S-9 was below 22 ppb, with a median concentration of 19 ppb and a maximum concentration of 26 ppb. The notched-box-and-whisker plot for S-9A, which is based on grab-sample data, indicates a TP concentration of less than 13 ppb for 75 percent of the data, a median concentration of 10 ppb, and a maximum concentration of 35 ppb (**Figure 2a**). Seventy-five percent of the data collected by the autosampler at S-9A was below 16 ppb, with a median concentration of 12 ppb and a maximum concentration of 38 ppb. The monitoring schedule for structure G-123 requires biweekly grab sampling during flow events; otherwise, the samples are collected monthly. There was no flow during WY2008 at G-123; therefore, there was no sample collected from the autosampler. During WY2008, 53 grab samples were collected. The grab samples at G-123 had a median TP concentration of 14 ppb. Seventy-five percent of the data collected by grab samples at G-123 was below 16 ppb, with a maximum concentration of 74 ppb.

The NSID operates several pumps at two pump stations to remove excess runoff from the basin, but only NSID pump station 1 is capable of discharge to the EPA. The flow-proportional autosampler and data recorder monitor flow both to the EPA and to the Hillsboro Canal. The surface water quality monitoring program has continued at the water quality monitoring station S-38B, downstream of the NSID pump station 1, there was no flow at NSID into WCA-2A during WY2008. Results from S-38B and upstream data from NSIDSP01 are reported in Chapter 3A of this volume (**Table 4**). A more complete presentation of the results from these stations can be found in this volume's Attachment B, Table 3. During WY2008, there was no TP data at S-38B. Total phosphorus concentration for grab samples at the NSIDSP01 site during WY2008 varied between 5 ppb and 104 ppb for grab samples and varied between 15 ppb and 32 ppb for autosampler data. The data at this pump station is representative of flow to the EPA and also to

the Hillsboro Canal. Flow-weighted mean TP concentrations cannot be calculated because there was no flow during WY2008.

During WY2008, 16 water quality samples were collected in the Boynton Farm Basin. The Refuge headquarters property is owned by SFWMD and operated by the U.S. Fish and Wildlife Service and is bordered by several farms immediately east of the property boundary that discharge onto the property. The headquarters property is identified in the EFA as being within the EPA boundary, but the property is east of the protective levee has no connection to discharge westward to WCA-1, and is an isolated parcel. The following water quality monitoring sites each relate to a pump station operated by the farm operators: BFBAFCP, BFBAFNP, BFBAFSP, BFBDFCP, BFBDFNP, BFBDFSP, BFBDFWP, and BFBMFSP. In September 2005, the Gayler property pumps relating to monitoring stations BFBMFNP and BFBMFSP were voluntarily removed. Another station, BFBWNCP, was removed from the basin prior to WY2004 by the owner voluntarily relocating the pump. In WY2004, the TP data consist of event-driven grab samples that have no associated flow measurements. Although access limitations and other boundary issues still exist, surface water quality samples for most of the identified structures discharging in or adjacent to the EPA have been obtained during times of flow. The data are stored in DBHYDRO and can be obtained on request. During WY2008, this basin showed extremely high TP concentrations (mean concentrations of 1,099 ppb for the 16 samples collected). The District is conducting an evaluation of alternatives to reduce or eliminate discharge of elevated levels of nutrients from the Boynton Farms Basin to the EPA.

**Table 4.** Annual flow-weighted mean TP concentrations for WY2008.

| Hydrologic Basin                   | Structure             | Water Quality Station ID  | Total Flow Volume (acre-feet) | Number of Days with Positive Flow | Sample Type                           | Sample Size (Grab) | Arithmetic Average (Grab)(ppb) | Sample Size (Comp) | Flow-Weighted <sup>1</sup> Mean Concentration (ppb) | Flow-Weighted <sup>2</sup> Mean Concentration (ppb) | TP Load (kg)      |
|------------------------------------|-----------------------|---------------------------|-------------------------------|-----------------------------------|---------------------------------------|--------------------|--------------------------------|--------------------|-----------------------------------------------------|-----------------------------------------------------|-------------------|
| ACME Improvement District          | ACME1DS               | ACME1DS                   | 0 <sup>8</sup>                | 0 <sup>8</sup>                    | Grab <sup>4</sup>                     | 11                 | 33                             | 0                  | N/F <sup>9</sup>                                    | N/F <sup>9</sup>                                    | 0                 |
|                                    | ACME1                 | VOW1                      | 0                             | 0                                 |                                       | 0                  | 0                              | 0                  | N/F <sup>9</sup>                                    | N/F <sup>9</sup>                                    | 0                 |
|                                    | ACME2                 | VOW2                      | 0                             | 0                                 |                                       | 0                  | 0                              | 0                  | N/F <sup>9</sup>                                    | N/F <sup>9</sup>                                    | 0                 |
| North Springs Improvement District | NSID1                 | NSIDSP01                  | 0                             | 0                                 | Auto <sup>6</sup> & Grab <sup>4</sup> | 30                 | 18                             | 5                  | NDF <sup>7</sup>                                    | NDF <sup>7</sup>                                    | 0                 |
|                                    |                       | S-38B (WCA-2A near NSID1) | 0 <sup>8</sup>                | 0 <sup>8</sup>                    |                                       | 0                  | 0                              | 0                  | NDF <sup>7</sup>                                    | NDF <sup>7</sup>                                    | 0                 |
| North New River                    | G-123                 | G123                      | 0                             | 0                                 | Auto <sup>6</sup> & Grab <sup>4</sup> | 52                 | 16                             | 0                  | N/F <sup>9</sup>                                    | N/F <sup>9</sup>                                    | 0                 |
| C-11 West                          | S-9                   | S9                        | 52,632                        | 42                                | Auto <sup>6</sup> & Grab <sup>4</sup> | 53                 | 13                             | 15                 | 20                                                  | 20                                                  | 1,282             |
|                                    | S-9A                  | S9A                       | 87,799                        | 314                               | Auto <sup>6</sup> & Grab <sup>4</sup> | 53                 | 12                             | 47                 | 14                                                  | 14                                                  | 1,523             |
| C-111                              | S-174                 | S174                      | 0                             | 0                                 | Auto <sup>6</sup> & Grab <sup>4</sup> | 53                 | 7                              | 0                  | N/F <sup>9</sup>                                    | N/F <sup>9</sup>                                    | 0                 |
|                                    | S-332D                | S332D                     | 32,689                        | 134                               | Auto <sup>6</sup> & Grab <sup>4</sup> | 52                 | 6                              | 41                 | 6                                                   | 6                                                   | 262               |
|                                    | S-18C                 | S18C                      | 124,381                       | 197                               | Auto <sup>6</sup> & Grab <sup>4</sup> | 51                 | 5                              | 23                 | 8                                                   | 8                                                   | 1,163             |
| L-28                               | S-140                 | S140                      | 90,340                        | 217                               | Auto <sup>6</sup> & Grab <sup>4</sup> | 52                 | 32                             | 36                 | 36                                                  | 36                                                  | 4,046             |
| Feeder Canal                       | S-190                 | S190                      | 25,310                        | 150                               | Auto <sup>6</sup> & Grab <sup>4</sup> | 53                 | 30                             | 17                 | 97                                                  | 101                                                 | 3,151             |
| Boynton Farms                      | Various <sup>10</sup> | Various <sup>10</sup>     | N/D <sup>11</sup>             | N/D <sup>11</sup>                 | Grab <sup>4</sup>                     | 16                 | 1099                           | N/D <sup>11</sup>  | N/D <sup>11</sup>                                   | N/D <sup>11</sup>                                   | N/D <sup>11</sup> |

## Notes:

- 1) Flow-weighted mean concentration based on days of flow and monitored TP data only.
- 2) Flow-weighted mean concentration based on estimation algorithm to determine TP concentration on non monitored days combined with monitored days.
- 3) Flow data from upstream pump structures, ACME1 and ACME2, is representative of the flow through the ACME1DS and G94D culverts, respectively.
- 4) Grab indicates samples collected by grab sampling methodology.
- 5) Flow-weighted mean concentrations were calculated using the flow data at upstream structures.
- 6) Auto indicates that samples were collected by automatic composite samples.
- 7) NDF no data with flow available.
- 8) Flow data from upstream structure NSIDSP01 is representative of flow into the EPA at S-38B.
- 9) N/F no flow.
- 10) Sites include BFBAFCP, BFBAFNP, BFBAFSP, BFBDFCP, BFBDFNP, BFBDFSP, BFBDFWP, and BFBMFSP. These sites are pumps that have no flow recording devices attributed to them.
- 11) N/D no data available

### ***Within Structures***

For structures discharging within the EPA during WY2008, low TP concentrations were observed for structures S-12D and S-333, which convey discharges from WCA-3A to the Park (**Figure 2b**). The monitoring location for S-12D serves as a surrogate monitoring location for the non-ECP permit structures S-346 and S-347. The median TP concentrations at these monitoring locations were 12 ppb at both S-12D and S-333, with 75 percent of the data below 13 ppb at S-12D and 16 ppb at S-333. The maximum concentration observed was 20 ppb for S-12D and 24 ppb at S-333, respectively. The discharge volumes for the period were 19,336 ac-ft for S-12D, and 66,584 ac-ft for S-333, respectively.

Structures S-145 and S-146 convey discharges from WCA-2A to WCA-2B. The structures usually operate simultaneously. Maximum concentration was 35 ppb, median value was 9 ppb, and 75 percent of the data (18 samples) were below 18 ppb at S-145. Discharge volumes ranged from 34,823 ac-ft at S-145 to 19,175 ac-ft at S-146.

In addition to monitoring the water quality at structure S-34, the data from the location are representative of the water quality conditions for structure S-141, which conveys discharges from WCA-2B to the North New River Canal just upstream of S-34. The TP concentrations from the S-34 location ranged from 12 ppb to 36 ppb, with a median value of 16 ppb.

The highest TP concentrations were observed at the monitoring site C123SR84, the surrogate location for structures S-339 and S-340. TP concentrations at C123SR84 ranged from 12 ppb to 53 ppb, with a median value of 23 ppb. Structure S-151 discharged approximately 68,715 ac-ft during WY2008. TP concentrations ranged from 10 ppb to 39 ppb, with a median value of 13 ppb. Structures S-339 and S-340, located upstream of S-151 in the Miami Canal, did not have discharge in WY2008.

TP concentration was not monitored at S-332 and S-175 because there was no flow at these sites during WY2008. One grab sample was collected at BERMB3 with a TP concentration of 32 ppb. There was no discharge at BERMB3 during WY2008.

### ***From Structures***

The TP concentrations observed during WY2008 for the structures classified as from are summarized in the box-and-whisker plot shown in **Figure 2c**. Structure G-94B exhibited the highest TP concentrations, which ranged from 18 ppb to 89 ppb. The median TP concentration at this structure was 25 ppb, with 75 percent of the data below 39 ppb. G-94B is also the surrogate sampling site for structures G-94A and G-94C. All three structures, which are owned and maintained by the District but operated by the Lake Worth Drainage District (LWDD), are located at the L-40 levee on the eastern side of the Refuge and provide water supply releases from the Refuge to the LWDD. The G-94A, G-94B, and G-94C structures, when open, allow interior LWDD canals to fill. The direction of flow always has been toward the LWDD canal system.

The G-94C structure was used intermittently for water supply. The total discharge from the Refuge to the LWDD system was approximately 267 ac-ft (Attachment A, **Table 2**). Water supply releases to LWDD canals during WY2008 were 557 ac-ft at G-94A and 6 ac-ft at G-94B.

The TP concentrations observed at S-39 ranged from 13 ppb to 41 ppb, with a median value of 21 ppb. The structure discharged approximately 353 ac-ft during WY2008. During that period,

nine samples were collected at S-334. The TP concentrations ranged from 12 ppb to 16 ppb and the median concentration for the nine samples was 15 ppb.

For the remainder of the from structure monitoring locations (S-31, S-34, S-38, S-344, S-337, S-343A, and S-343B), 75 percent of the observed TP concentrations were below 53 ppb, with median values ranging from 10 ppb to 33 ppb.

### ***C-111 Basin Upstream Structures***

Structures S-176, S-177, S-178, S-332B, S-332C, and S-331/S-173, shown in **Figure 2d**, are C-111 basin structures located upstream of into structures S-18C, S-332D, and S-174. Autosamplers were installed at S-176, S-177, S-178, S-331-173, S-332B, and S-332C sites. For S-331/S-173, S-176, and S-177, 75 percent of the TP concentration data collected for these structures was below 10 ppb, with the median values ranging between 5 ppb and 8 ppb. The maximum TP measured at S-178 was 286 ppb, with a median TP concentration of 38 ppb for grab samples, which was significantly higher than the rest of the C-111 basin upstream structures. S-332B discharged 26,499 ac-ft of water to the detention area, with median TP concentration of 6 ppb for grab samples and 7 ppb for autosamplers. S-332C discharged 49,156 ac-ft water to the detention area, with a median TP concentration of 6 ppb for grab samples and 7 ppb for autosamplers.

### ***Flow-Weighted Mean Total Phosphorus Concentrations for All Structures***

Extending the analysis from previous water years, flow-weighted mean (FWM) TP concentrations were calculated for all the structures during WY2008. The non-ECP permit does not require an annual FWM concentration to be calculated. However, the analysis is useful for determining whether additional sampling is required during flow events and provides a more accurate depiction of expected concentrations during flow events. Only those structures having sufficient TP data and available flow data for WY2008 had calculations performed for FWM TP concentrations.

There are several common methods that can be used to calculate FWM. The most common method is to multiply the measured TP concentration by the flow volume on days with available flow and concentration values to obtain a daily load, add the results to obtain total daily loads, and then divide the sum by the total accumulated flow for those days. This method uses only the data that were collected and does not involve estimating concentration data for other days when flow occurred but no TP analyses are available. The annual FWM TP concentrations and monthly and annual flow volumes for the into, within, from, and C-111 basin structures during WY2008 are provided in Attachment A, Table 2.

A more detailed analysis of the WY2008 annual FWM TP concentration data for each into structure is shown in **Table 4**. The calculations were based on two methods for determining FWM concentrations. The first method calculates the FWM TP concentration using only days of flow and associated TP data. The second method uses an estimation algorithm to determine TP concentrations on all days with positive flow for which no observed values are available.

The two calculation methods resulted in similar values for the FWM concentration at most of the into structures. The same value was obtained at S-9 (20 ppb), S-9A (14 ppb), S-332D (6 ppb), S-18C (8 ppb), and S-140 (36 ppb), but slightly different values were obtained for the S-190 site (97 ppb versus 101 ppb).

**Table 4** presents the results for the FWM TP concentrations at into sites during WY2008. The highest FWM TP concentration for the into structures during WY2008 was observed at S-190 (101 ppb in the Feeder Canal), and S-140 at the L-28 basin (36 ppb). The S-9 and S-9A structures had FWM TP concentrations of 20 ppb and 14 ppb, respectively. These sites are designated as sites of concern and potential concern for TP.

The lowest FWM TP concentrations were observed at S-332D (6 ppb) and S-18C (8 ppb) monitoring locations. These locations are the subject of interim and long-term compliance limits stipulated in the federal Settlement Agreement and there is no concern for TP.

## PESTICIDE MONITORING

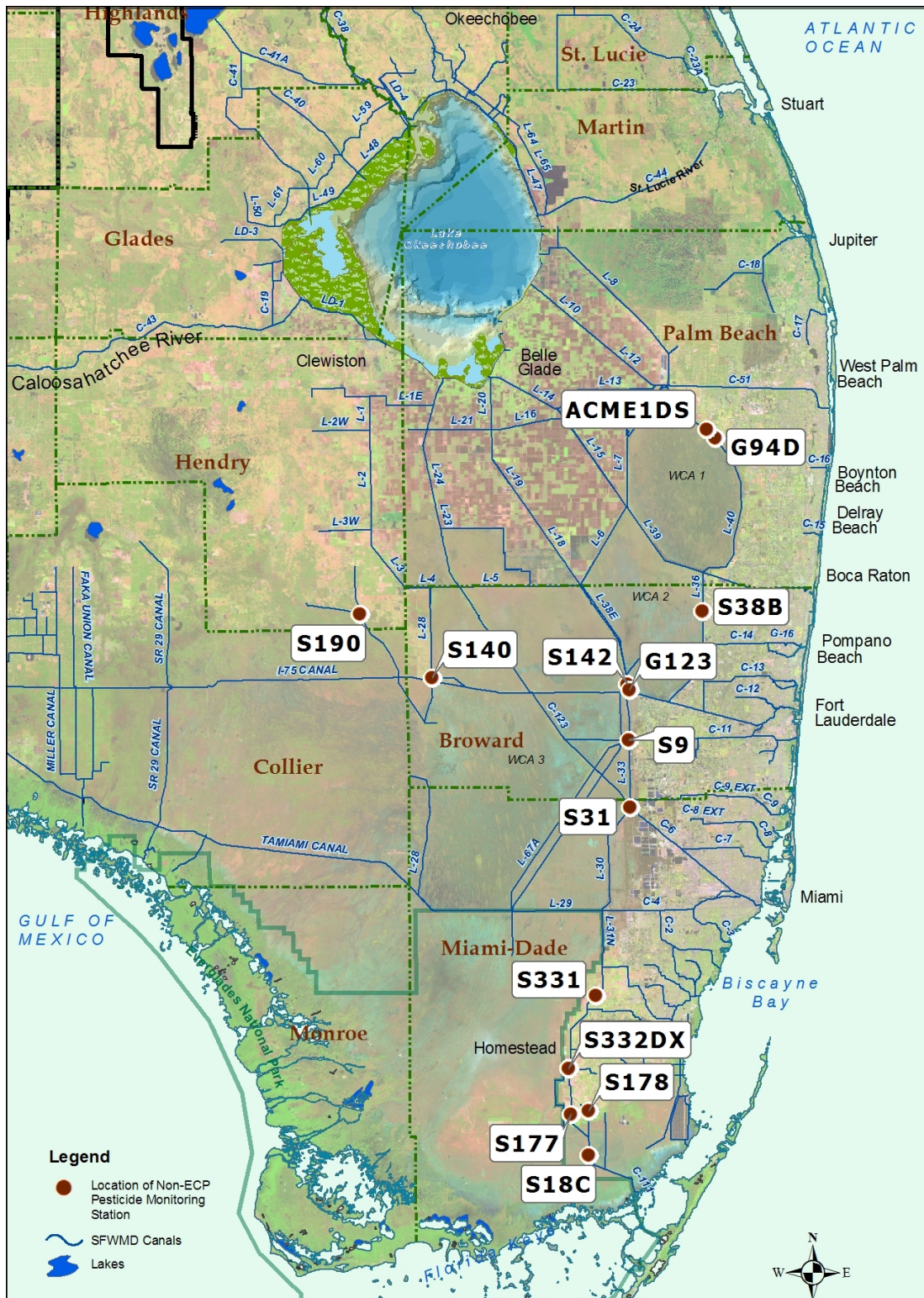
### Pesticides in Surface Water and Sediment

The quarterly surface water and semiannual sediment pesticide sampling events at the 14 non-ECP sites (**Figure 3**) for WY2008 were conducted during May 2007, September 2007, December 2007, and March 2008. The upstream sampling site at S-176 was moved to a platform on the west side of the canal just upstream of the S-332D pump inflow canal and is identified as S332DX, starting with the September 2007 sampling event. Modifications to the non-ECP permit changed the requirement for sampling at S-142 and S-38B to only during discharge or flow events. For this reporting period, samples were not collected for the December 2007 and March 2008 sampling events. Representative MDLs and PQLs for the pesticide analytes are listed in **Table 5**. The FDEP Central Laboratory performed all the pesticide analyses. Refer to the Quality Assurance Evaluation section of the individual pesticide event reports (available upon request) for a summary of any limitations on data validity that might influence the utility of these data.

To evaluate potential impacts on aquatic life resulting from intermittent pesticide exposure, the maximum observed concentration is compared to the criterion maximum concentration published by the U.S. Environmental Protection Agency (USEPA) under Section 304 (a) of the Clean Water Act (CWA), and as promulgated in Chapter 62-302, F.A.C. For compounds not specifically listed, Rule 62-302.200, F.A.C., allows for acute and chronic toxicity standards. These standards are calculated as one-third and one-twentieth, respectively, of the amount lethal to 50 percent of the test organisms in 96 hours, where the 96-hour EC<sub>50</sub> or LC<sub>50</sub> is the lowest value determined for a species significant to the indigenous aquatic community. **Table 6** lists representative toxicity levels for selected freshwater aquatic invertebrates and fishes.

**Table 7** lists the pesticides detected in surface water samples collected during WY2008. Four surface water samples were collected at each site and were analyzed for all parameters. Pesticides with concentrations greater than their respective Class III criteria or toxicity limits were assigned to the concern excursion category, whereas those higher than the PQL were assigned to the potential concern excursion category. The only pesticide detection of concern was the chlorpyrifos ethyl concentration of 0.0094 µg/L at S-177. This concentration should not have an acute, harmful impact on fish. However, for aquatic invertebrates, this level is greater than the calculated chronic toxicity for water flea (*Daphnia magna*) (**Table 6**). At this level, exposure can cause impacts to macroinvertebrate populations, but the pulsed nature of agricultural runoff releases to the canal system precludes drawing any conclusions about the effects of long-term average exposures.

**Table 8** lists the pesticides detected in the sediment samples collected during WY2008. Three sediment samples were collected at each site and were analyzed for all parameters. Pesticides with concentrations greater than the PQL were assigned to the potential concern excursion category. Dichlorodiphenyltrichloroethane (DDT) and dichlorodiphenyldichloroethylene (DDE), the environmental dehydrochlorination product of DDT were detected at S-178 and S-331/S-173; endosulfan and endosulfan sulfate were detected at S-178 at levels of potential concern.



**Figure 3.** Pesticide monitoring network for non-ECP structures.

**Table 5.** Method detection limits (MDLs) and practical quantitation limits (PQLs) for pesticides determined in December 2007.

| Pesticide or metabolite    | Water: range of MDLs-PQLs<br>(µg/L) | Sediment: range of MDLs-PQLs<br>(µg/Kg) | Pesticide or metabolite | Water: range of MDLs-PQLs<br>(µg/L) |
|----------------------------|-------------------------------------|-----------------------------------------|-------------------------|-------------------------------------|
| 2,4-D                      | 0.2 - 0.6                           | 8.9 - 210                               | endosulfan sulfate      | 0.0045 - 0.021                      |
| 2,4,5-T                    | 0.2 - 0.6                           | 8.9 - 210                               | endrin                  | 0.0094 - 0.044                      |
| 2,4,5-TP (silvex)          | 0.2 - 0.6                           | 8.9 - 210                               | endrin aldehyde         | 0.0042 - 0.02                       |
| acifluorfen                | 0.2 - 0.6                           | 8.9 - 210                               | ethion                  | 0.0094 - 0.044                      |
| alachlor                   | 0.057 - 0.27                        | 27 - 840                                | ethoprop                | 0.0094 - 0.044                      |
| aldrin                     | 0.0019 - 0.0088                     | 0.46 - 14                               | fenamiphos (nema-cur)   | 0.038 - 0.18                        |
| ametryn                    | 0.0094 - 0.044                      | 2.3 - 72                                | fonofos (dyfonate)      | 0.0094 - 0.044                      |
| atrazine                   | 0.0094 - 0.14                       | 2.3 - 72                                | heptachlor              | 0.0023 - 0.011                      |
| atrazine desethyl          | 0.0094 - 0.044                      | N/A                                     | heptachlor epoxide      | 0.0019 - 0.0088                     |
| atrazine desisopropyl      | 0.0094 - 0.11                       | N/A                                     | hexazinone              | 0.019 - 0.096                       |
| azinphos methyl (guthion)  | 0.028 - 0.13                        | 6.8 - 220                               | imidacloprid            | 0.2 - 0.6                           |
| α-BHC (alpha)              | 0.0021 - 0.013                      | 0.46 - 14                               | linuron                 | 0.2 - 0.6                           |
| β-BHC (beta)               | 0.0032 - 0.027                      | 0.46 - 14                               | malathion               | 0.028 - 0.13                        |
| δ-BHC (delta)              | 0.0019 - 0.0088                     | 0.91 - 28                               | metaxyl                 | 0.047 - 0.22                        |
| γ-BHC (gamma) (lindane)    | 0.0019 - 0.0088                     | 0.46 - 14                               | methamidophos           | N/A                                 |
| bromacil                   | 0.047 - 0.22                        | 9.1 - 280                               | methoxychlor            | 0.0094 - 0.044                      |
| butylate                   | 0.019 - 0.088                       | N/A                                     | metolachlor             | 0.057 - 0.27                        |
| carbophenothion (trithion) | 0.015 - 0.072                       | 2.3 - 72                                | metribuzin              | 0.019 - 0.088                       |
| chlordane                  | 0.019 - 0.088                       | 6.8 - 220                               | mevinphos               | 0.057 - 0.27                        |
| chlorothalonil             | 0.015 - 0.072                       | 2.3 - 72                                | mirex                   | 0.011 - 0.052                       |
| chlorpyrifos ethyl         | 0.0094 - 0.044                      | 2.3 - 72                                | monocrotophos (azodrin) | N/A                                 |
| chlorpyrifos methyl        | 0.019 - 0.088                       | 4.6 - 140                               | naled                   | 0.075 - 0.36                        |
| cypermethrin               | 0.019 - 0.088                       | 2.3 - 72                                | norflurazon             | 0.019 - 0.088                       |
| DDD-P,P'                   | 0.0045 - 0.021                      | 0.91 - 28                               | parathion ethyl         | 0.019 - 0.088                       |
| DDE-P,P'                   | 0.0038 - 0.018                      | 0.91 - 28                               | parathion methyl        | 0.019 - 0.088                       |
| DDT-P,P'                   | 0.0057 - 0.027                      | 1.4 - 44                                | PCB                     | 0.019 - 0.088                       |
| demeton                    | 0.028 - 0.13                        | 46 - 1400                               | permethrin              | 0.015 - 0.072                       |
| diazinon                   | 0.019 - 0.088                       | 4.6 - 140                               | phorate                 | 0.0094 - 0.044                      |
| dicofol (kelthane)         | 0.042 - 0.2                         | 6.8 - 220                               | prometon                | 0.019 - 0.088                       |
| dieldrin                   | 0.0019 - 0.0088                     | 0.46 - 14                               | prometryn               | 0.019 - 0.088                       |
| disulfoton                 | 0.019 - 0.088                       | 4.6 - 140                               | simazine                | 0.0094 - 0.044                      |
| diuron                     | 0.2 - 0.6                           | 8.8 - 200                               | toxaphene               | 0.094 - 0.44                        |
| α-endosulfan (alpha)       | 0.0038 - 0.018                      | 0.46 - 14                               | trifluralin             | 0.0075 - 0.036                      |
| β-endosulfan (beta)        | 0.0038 - 0.018                      | 0.46 - 14                               |                         |                                     |

**Table 6.** Toxicity of pesticides (in µg/L) to selected freshwater aquatic invertebrates and fishes.

| Common Name  | 48 hr EC <sub>50</sub> |            |                    |                      | 96 hr LC <sub>50</sub>     |                    |                |                  | 96 hr LC <sub>50</sub>     |          |                |                  |
|--------------|------------------------|------------|--------------------|----------------------|----------------------------|--------------------|----------------|------------------|----------------------------|----------|----------------|------------------|
|              | <i>Daphnia magna</i>   | Water flea | acute toxicity (*) | chronic toxicity (*) | <i>Pimephales Promelas</i> | Fathead Minnow (#) | acute toxicity | chronic toxicity | <i>Lepomis macrochirus</i> | Bluegill | acute toxicity | chronic toxicity |
| 2,4-D        | 25,000                 | (7)        | 8,333              | 1,250                | 133,000                    | (7)                | 44,333         | 6,650            | 180,000                    | (8)      | 60,000         | 9,000            |
| ametryn      | 28,000                 | (7)        | 9,333              | 1,400                | -                          |                    | -              | -                | 4,100                      | (4)      | 1,367          | 205              |
| atrazine     | 6,900                  | (7)        | 2,300              | 345                  | 15,000                     | (7)                | 5,000          | 750              | 16,000                     | (4)      | 5,333          | 800              |
| chlorpyrifos | 1.7                    | (7)        | 0.57               | 0.085                | 203                        | (7)                | 68             | 10               | 2.6                        | (4)      | 0.87           | 0.13             |
| ethyl        | 0.1                    | (9)        | 0.03               | 0.005                | -                          |                    | -              | -                | 1.8                        | (9)      | 0.60           | 0.09             |
| DDE, p,p'    | -                      |            | -                  | -                    | -                          |                    | -              | -                | 240                        | (1)      | 80             | 12               |
| DDT, p,p'    | -                      |            | -                  | -                    | -                          |                    | -              | -                | -                          |          | -              | -                |
|              | 166                    | (7)        | 55                 | 8                    | 1                          | (1)                | 0.3            | 0.05             | 1                          | (1)      | 0.33           | 0.05             |
| endosulfan   | -                      |            | -                  | -                    | -                          |                    | -              | -                | 2                          | (3)      | 0.67           | 0.10             |
|              | -                      |            | -                  | -                    | -                          |                    | -              | -                | -                          |          | -              | -                |
|              | -                      |            | -                  | -                    | -                          |                    | -              | -                | -                          |          | -              | -                |
| hexazinone   | 151,600                | (7)        | 50,533             | 7,580                | 274,000                    | (4)                | 91,333         | 13,700           | 100,000                    | (7)      | 33,333         | 5,000            |
| norflurazon  | 15,000                 | (7)        | 5,000              | 750                  | -                          |                    | -              | -                | 16,300                     | (7)      | 5,433          | 815              |
| simazine     | 1,100                  | (7)        | 367                | 55                   | 100,000                    | (7)                | 33,333         | 5,000            | 90,000                     | (4)      | 30,000         | 4,500            |

Table 6. Continued.

| Common Name        | 96 hr LC <sub>50</sub><br>Largemouth Bass |                |                  | 96 hr LC <sub>50</sub><br>Rainbow Trout (#) |                |                  |       | 96 hr LC <sub>50</sub><br>Channel Catfish |                |                  |
|--------------------|-------------------------------------------|----------------|------------------|---------------------------------------------|----------------|------------------|-------|-------------------------------------------|----------------|------------------|
|                    | <i>Micropterus salmoides</i>              | acute toxicity | chronic toxicity | <i>Oncorhynchus mykiss</i>                  | acute toxicity | chronic toxicity |       | <i>Ictalurus punctatus</i>                | acute toxicity | chronic toxicity |
| 2,4-D              | -                                         | -              | -                | 100,000                                     | (4)            | 33,333           | 5,000 | -                                         | -              | -                |
| ametryn            | -                                         | -              | -                | 8,800                                       | (4)            | 2,933            | 440   | -                                         | -              | -                |
| atrazine           | -                                         | -              | -                | 8,800                                       | (4)            | 2,933            | 440   | 7,600                                     | (4)            | 2,533            |
| chlorpyrifos ethyl | -                                         | -              | -                | 11                                          | (4)            | 3.7              | 0.55  | 280                                       | (7)            | 93               |
| DDE, p,p'          | -                                         | -              | -                | 32                                          | (1)            | 10.7             | 1.6   | -                                         | -              | -                |
| DDT, p,p'          | -                                         | -              | -                | -                                           | -              | -                | -     | -                                         | -              | -                |
| endosulfan         | -                                         | -              | -                | 1                                           | (1)            | 0.33             | 0.050 | 1                                         | (1)            | 0.3              |
|                    | -                                         | -              | -                | 3                                           | (2)            | 1                | 0.15  | 1.5                                       | (7)            | 0.5              |
|                    | -                                         | -              | -                | 1                                           | (3)            | 0.33             | 0.050 | -                                         | -              | -                |
|                    | -                                         | -              | -                | 0.3                                         | (5)            | 0.10             | 0.015 | -                                         | -              | -                |
| hexazinone         | -                                         | -              | -                | 180,000                                     | (7)            | 60,000           | 9,000 | -                                         | -              | -                |
| norflurazon        | -                                         | -              | -                | 8,100                                       | (7)            | 2,700            | 405   | >200,000                                  | (4)            | >67,000          |
| simazine           | -                                         | -              | -                | 100,000                                     | (7)            | 33,333           | 5,000 | -                                         | -              | -                |

(\*) Chapter 62-302.200, F.A.C. for compounds not specifically listed, acute and chronic toxicity standards are calculated as one-third and one-twentieth, respectively, of the amount lethal to 50% of the test organisms in 96 hours, where the 96 hour LC<sub>50</sub> is the lowest value which has been determined for a species significant to the indigenous aquatic community.

(#) Species is not indigenous. Information is given for comparison purposes only.

(1) Johnson, W. W. and M.T. Finley. 1980. Handbook of Acute Toxicity of Chemicals to Fish and Aquatic Invertebrates. U.S. Department of the Interior, Fish and Wildlife Service Resource Publication 137. Washington, D.C.

(2) U.S. Environmental Protection Agency. 1977. Silvicultural Chemicals and Protection of Water Quality. Seattle, WA. EPA-910/9-77-036.

(3) Schneider, B.A., ed. 1979. Toxicology Handbook, Mammalian and Aquatic Data, Book 1: Toxicology Data. U.S. Environmental Protection Agency. U.S. Government Printing Office. Washington, DC. EPA-5400/9-79-003.

(4) Hartley, D. and H. Kidd., eds. 1987. The Agrochemicals Handbook. Second Edition, The Royal Society of Chemistry. Nottingham, England.

(5) Montgomery, J.H. 1993. Agrochemicals Desk Reference: Environmental Data. Lewis Publishers. Chelsea, MI.

(6) Verschueren, K. 1983. Handbook of Environmental Data on Organic Chemicals. Second Edition, Van Nostrand Reinhold Co. Inc. New York, NY.

(7) U.S. Environmental Protection Agency. 1991. Pesticide Ecological Effects Database, Ecological Effects Branch, Office of Pesticide Programs, Washington, D.C.

(8) Mayer, F.L., and M.R. Ellersieck. 1986. Manual of Acute Toxicity: Interpretation and Database for 410 Chemicals and 66 Species of Freshwater Animals. United States Fish and Wildlife Service Publication No. 160.

(9) U.S. Environmental Protection Agency. 2002. Interim Reregistration Eligibility Decision for Chlorpyrifos; EPA 738-R-01-007 February 2002.

**Table 7.** Pesticide detections and excursions for surface water samples collected in WY2008.<sup>1</sup>

| Structure    | Compound |          |             |            |                    |                 |                  |                    |                       |                   |          |         |       |
|--------------|----------|----------|-------------|------------|--------------------|-----------------|------------------|--------------------|-----------------------|-------------------|----------|---------|-------|
|              |          | simazine | norflurazon | hexazinone | endosulfan sulfate | beta endosulfan | alpha endosulfan | chlorpyrifos ethyl | atrazine desisopropyl | atrazine desethyl | atrazine | ametryn | 2,4-D |
| ACME1DS      |          | ---      | ---         | 3:0:0      | ---                | ---             | ---              | ---                | ---                   | 2:0:0             | 1:3:0    | 3:0:0*  | ---   |
| G-94D        |          | ---      | ---         | 2:2:0      | ---                | ---             | ---              | ---                | ---                   | 1:0:0             | 2:2:0    | 4:0:0   | 1:0:0 |
| G-123        |          | ---      | ---         | ---        | ---                | ---             | ---              | ---                | ---                   | ---               | 1:0:0    | ---     | ---   |
| S-9          |          | ---      | ---         | ---        | ---                | ---             | ---              | ---                | ---                   | 2:0:0             | 2:0:0    | ---     | ---   |
| S-18C        |          | ---      | ---         | ---        | ---                | ---             | ---              | ---                | ---                   | ---               | ---      | ---     | ---   |
| S-140        |          | ---      | 2:0:0       | ---        | ---                | ---             | ---              | ---                | ---                   | ---               | 0:1:0    | ---     | ---   |
| S-190        |          | ---      | 1:3:0       | ---        | ---                | ---             | ---              | ---                | ---                   | ---               | 0:1:0    | ---     | ---   |
| S-38B        |          | 1:0:0    | ---         | ---        | ---                | ---             | ---              | ---                | 2:0:0                 | 0:2:0             | 0:2:0    | 2:0:0   | ---   |
| S-142        |          | ---      | ---         | ---        | ---                | ---             | ---              | ---                | ---                   | ---               | 2:0:0    | 2:0:0   | ---   |
| S-31         |          | 1:0:0    | ---         | ---        | ---                | ---             | ---              | ---                | ---                   | 1:0:0             | 0:1:0    | 1:0:0   | ---   |
| S-176/S332DX |          | ---      | ---         | ---        | ---                | 1:1:0           | 1:1:0            | ---                | 1:0:0                 | 1:0:0             | 0:1:0    | 1:0:0   | ---   |
| S-177        |          | ---      | ---         | ---        | ---                | ---             | 2:0:0            | 0:0:1              | ---                   | ---               | 1:0:0    | ---     | ---   |
| S-178        |          | ---      | ---         | ---        | 1:0:0              | ---             | 1:0:0            | ---                | ---                   | ---               | ---      | ---     | ---   |
| S-331/S-173  |          | ---      | ---         | ---        | ---                | ---             | ---              | ---                | 1:0:0                 | 0:1:0             | 0:1:0    | 1:0:0   | ---   |

<sup>1</sup> Four samples were collected for each site and analyzed for all parameters. Table cells only represent concentrations above the detection limit.

\* Number of samples < = PQL (no concern); number of samples > PQL (potential concern); and number of samples exceeding criterion or toxicity limit (concern).

**Table 8.** Pesticide detections and excursions for sediment samples collected in WY2008 with three samples (May 2007, December 2007, and March 2008).<sup>1</sup>

| Structure    | Compound |                  |                 |                    |          |          |
|--------------|----------|------------------|-----------------|--------------------|----------|----------|
|              | 2,4-D    | alpha endosulfan | beta endosulfan | endosulfan sulfate | DDE-p,p' | DDT-p,p' |
| ACME1DS      | --       | --               | --              | --                 | 1:0*     | --       |
| G-94D        | 1:0      | --               | --              | --                 | 1:0      | --       |
| G-123        | --       | --               | --              | --                 | --       | --       |
| S-9          | --       | --               | --              | --                 | 1:0      | --       |
| S-18C        | --       | --               | --              | --                 | --       | --       |
| S-140        | --       | --               | --              | --                 | --       | --       |
| S-190        | --       | --               | --              | --                 | --       | --       |
| S-38B        | --       | --               | --              | --                 | --       | --       |
| S-142        | --       | --               | --              | --                 | --       | --       |
| S-31         | --       | --               | --              | --                 | --       | --       |
| S-176/S332DX | --       | --               | --              | --                 | --       | --       |
| S-177        | --       | --               | --              | --                 | 2:0      | --       |
| S-178        | --       | 2:0              | 1:1             | 1:2                | 2:1      | --       |
| S-331/S-173  | --       | --               | --              | 1:0                | --       | 0:1      |

<sup>1</sup> Three sediment samples were collected for each site (except S-38B and S-142) and analyzed for all parameters. Table cells only represent concentrations above the detection limit.

\* Number of samples < PQL (no concern); and number of samples > PQL (potential concern).

---

## LITERATURE CITED

---

- McGill, R., J.W. Tukey and W.A. Larsen. 1978. Variations of Box Plots. *Am. Statistician*, 32(1): 12-16.
- SFWMD. 1999a. 1999 Everglades Interim Report. South Florida Water Management District, West Palm Beach, FL.
- SFWMD. 1999b. Non-ECP Structures Annual Monitoring Report. Submitted to the Florida Department of Environmental Protection in accordance with the FDEP Permit No. 06,502590709 (Non-ECP Permit). South Florida Water Management District, West Palm Beach, FL.
- SFWMD. 2000. *2000 Everglades Consolidated Report*. South Florida Water Management District, West Palm Beach, FL.
- SFWMD. 2001. *2001 Everglades Consolidated Report*. South Florida Water Management District, West Palm Beach, FL.
- SFWMD. 2002. *2002 Everglades Consolidated Report*. South Florida Water Management District, West Palm Beach, FL.
- SFWMD. 2003. *2003 Everglades Consolidated Report*. South Florida Water Management District, West Palm Beach, FL.
- SFWMD. 2004. *2004 Everglades Consolidated Report*. South Florida Water Management District, West Palm Beach, FL.
- SFWMD. 2005. *2005 South Florida Environmental Report*. South Florida Water Management District, West Palm Beach, FL.
- SFWMD. 2006. *2006 South Florida Environmental Report*. South Florida Water Management District, West Palm Beach, FL.
- SFWMD. 2007. *2007 South Florida Environmental Report*. South Florida Water Management District, West Palm Beach, FL.
- SFWMD. 2008. *2008 South Florida Environmental Report*. South Florida Water Management District, West Palm Beach, FL.

# **Attachment A: Non-Everglades Construction Project Water Quality Sampling Sites, Monitoring Schedule and Flow Volumes**

Shi Kui Xue

**Table 1.** Water quality monitoring schedule for non-Everglades Construction Project (non-ECP) discharge structures and additional upstream monitoring locations.

| AREA        | Non-ECP PERMIT STRUCTURE      | WATER QUALITY SAMPLING SITE | WATER QUALITY MONITORING SCHEDULE |                                         |            |              |                  |                     | WATER QUALITY COMMENTS                                                                      |
|-------------|-------------------------------|-----------------------------|-----------------------------------|-----------------------------------------|------------|--------------|------------------|---------------------|---------------------------------------------------------------------------------------------|
|             |                               |                             | Physical                          | Nutrients                               | Major Ions | Trace Metals | Pesticides Water | Pesticides Sediment |                                                                                             |
| INTO        | ACME1DS                       | ACME1DS                     | BWF/M                             | BWF/M                                   | QTR        | SA           | QTR              | SA                  |                                                                                             |
|             | ACME1 + (Upstream of ACME1DS) | VOW1                        |                                   | Weekly Flowing (autosampler)            |            |              |                  |                     | Sampling conducted by Village of Wellington (ended on 1/2/07). TP collected by autosampler. |
|             | ACME2 + (Upstream of G94D)    | VOW2                        |                                   | Weekly Flowing (autosampler)            |            |              |                  |                     | Sampling conducted by Village of Wellington. TP collected by autosampler.                   |
|             | G-123                         | G123                        | BWF/M                             | BWF/M (autosampler)                     | QTR        | SA           | QTR              | SA                  |                                                                                             |
|             | S-9                           | S9                          | BWF/M                             | Weekly Flowing (autosampler)            | QTR        | SA           | QTR              | SA                  | TP collected by autosampler.                                                                |
|             | S-9A                          | S9A                         | BWF/M                             | BWF/M except TP-WF/M Grab (autosampler) | QTR        |              |                  |                     | Sampling started in WY2003                                                                  |
|             | S-174                         | S176                        | BWF/M                             | BWF/M                                   | QTR        | SA           | QTR              | SA                  |                                                                                             |
|             | S-332D                        | S176 & S332DAS              | BWF                               | BWF                                     |            |              | QTR              |                     |                                                                                             |
|             | S-18C                         | S18C                        | BWF/M                             | BWF/M (autosampler)                     | QTR        | SA           | QTR              | SA                  |                                                                                             |
|             | S-140                         | S140                        | BWF/M                             | BWF/M (autosampler)                     | QTR        | SA           | QTR              | SA                  | TP collected by autosampler, nitrogen species collected by grab                             |
|             | S-190                         | S190                        | BWF/M                             | BWF/M (autosampler)                     | QTR        | SA           | QTR              | SA                  | TP collected by autosampler, nitrogen species collected by grab                             |
| WITHIN      | NSID1                         | NSIDSP01                    | BWF                               | BWF                                     | QTRF       | SAF          | QTRF             | SAF                 | TP collected by autosampler                                                                 |
|             |                               | S38B                        | BWF                               | BWF                                     | QTRF       | SAF          | QTRF             | SAF                 |                                                                                             |
|             | G-64                          | G64                         | BWF                               | BWF                                     | QTRF *     |              |                  |                     | Monitoring Fe, Mg, Ca phased out *                                                          |
|             | S-346, S-347                  | S12D                        | BWF/M                             | BWF/M                                   | QTR *      |              |                  |                     | Monitoring Fe, Mg, Ca phased out *                                                          |
|             | S-141                         | S34                         | BWF/M                             | BWF/M                                   | QTR *      |              |                  |                     | Monitoring Fe, Mg, Ca phased out *                                                          |
|             | S-142                         | S142                        | BWF/M                             | BWF/M                                   | QTR *      |              | QTRF             | SAF                 | Monitoring Fe, Mg, Ca phased out *                                                          |
|             | S-143                         | S11A                        | BWF/M                             | BWF/M                                   | QTR *      |              |                  |                     | Monitoring Fe, Mg, Ca phased out *                                                          |
|             | S-144                         | S145                        |                                   |                                         |            |              |                  |                     | Discontinued sampling in favor of surrogate location at S-145 *                             |
|             | S-145                         | S145                        | BWF/M                             | BWF/M                                   | QTR *      |              |                  |                     | Monitoring Fe, Mg, Ca phased out *                                                          |
|             | S-146                         | S145                        |                                   |                                         |            |              |                  |                     | Discontinued sampling in favor of surrogate location at S-145 *                             |
|             | S-151                         | S151                        | BWF/M                             | BWF/M                                   | QTR *      |              |                  |                     | Monitoring Fe, Mg, Ca phased out *                                                          |
| FROM        | S-333                         | S333                        | BWF/M                             | BWF/M                                   | QTR        | SA           |                  |                     |                                                                                             |
|             | S-339, S-340                  | C123SR84                    | BWF/M                             | BWF/M                                   | QTR *      |              |                  |                     | Monitoring Fe, Mg, Ca phased out *                                                          |
|             | S-175                         | S175                        | BWF/M                             | BWF/M                                   | QTR        | SA           |                  |                     |                                                                                             |
|             | S-332                         | S332                        | BWF/M                             | BWF/M                                   | QTR        | SA           | QTR              | SA                  |                                                                                             |
|             | Berm B3                       | BermB3                      | BWF                               | BWF                                     |            |              | QTR              |                     |                                                                                             |
|             | G-94A, G-94B, G-94C           | G94B                        | BWF/M                             | BWF/M                                   | QTR *      |              |                  |                     | Monitoring Fe, Mg, Ca phased out *                                                          |
|             | G-94D                         | G94D                        | BWF/M                             | BWF/M                                   | QTR        | SA           | QTR              | SA                  |                                                                                             |
|             | S-31                          | S31                         | BWF/M                             | BWF/M                                   | QTR *      |              | QTR              | SA                  | Monitoring Fe, Mg, Ca phased out *                                                          |
|             | S-34                          | S34                         | BWF/M                             | BWF/M                                   | QTR *      |              |                  |                     | Monitoring Fe, Mg, Ca phased out *                                                          |
|             | S-38                          | S38                         | BWF/M                             | BWF/M                                   | QTR *      |              |                  |                     | Monitoring Fe, Mg, Ca phased out *                                                          |
|             | S-39                          | S39                         | BWF/M                             | BWF/M                                   | QTR *      |              |                  |                     | Monitoring Fe, Mg, Ca phased out *                                                          |
| C-111 BASIN | S-197                         | S197                        | BWF                               | BWF                                     | QTRF *     |              |                  |                     | Monitoring Fe, Mg, Ca phased out *                                                          |
|             | S-334                         | S334                        | BWF/M                             | BWF/M                                   | QTR *      |              |                  |                     | Monitoring Fe, Mg, Ca phased out *                                                          |
|             | S-337                         | S31                         | BWF/M                             | BWF/M                                   | QTR *      |              |                  |                     | Monitoring Fe, Mg, Ca phased out *                                                          |
|             | S-343A, S-343B                | US41-25                     | BWF/M                             | BWF/M                                   | QTR *      |              |                  |                     | Monitoring Fe, Mg, Ca phased out *                                                          |
|             | S-344                         | S344                        | QTR                               | QTR                                     | QTR *      |              |                  |                     | Monitoring Fe, Mg, Ca phased out *                                                          |
|             | S-176 +                       | S176                        | BWF/M                             | BWF/M                                   | QTR        | SA           | QTR              | SA                  |                                                                                             |
|             | S-177 +                       | S177                        | BWF/M                             | BWF/M                                   | QTR        | SA           | QTR              | SA                  |                                                                                             |
|             | S-178 +                       | S178                        | BWF/M                             | BWF/M                                   | QTR        | SA           | QTR              | SA                  |                                                                                             |
|             | S-331 +, S-173 +              | S331-173                    | BWF/M                             | BWF/M                                   | QTR        | SA           |                  |                     |                                                                                             |
|             |                               | S331                        |                                   |                                         |            |              | QTR              | SA                  | S173 is not listed in Permit, but is adjacent to and flows in same direction as S331        |
|             | S-332B+                       | S332B                       | BWF                               | BWF                                     |            |              | QTR              |                     | S-332B, and S332C are not listed in Non-ECP permit, but they are in Emergency Order # 9.    |
|             | S-332C+                       | S332C                       | BWF                               | BWF                                     |            |              | QTR              |                     |                                                                                             |

Notes: 1) Water quality sample site is located on upstream side of permitted structure, unless otherwise noted with different representative sampling location.

2) Structure names with a "+" are upstream of Non-ECP INTO structures and are additional monitoring locations.

3) \* indicates monitoring requirement eliminated in the November 1999 Non-ECP Permit Modification.

4) Table Legend:

BWF/M = Biweekly if Flowing/Otherwise Monthly

BWF = Biweekly if Flowing

QTR = Quarterly

QTRF = Quarterly if Flowing

SA = Semiannually

SAF = Semiannually if Flowing

1 WS - 1 DS = 1 Wet Season and 1 Dry Season

**Table 2.** Flow volume and annual flow-weighted mean total phosphorus (TP) concentrations for non-ECP structures during WY2008.

| AREA   | NON-ECP PERMIT STRUCTURE         | WATER QUALITY SAMPLING SITE | FLOW       |       | Monthly Flow Volumes (acre-ft)<br>(May 1, 2007 - April 30, 2008) |        |        |        |        |        |        |       |       |        |        |        | Total Flow Volume (acre-ft) | Annual Flow-Weighted Mean TP (ppb) |
|--------|----------------------------------|-----------------------------|------------|-------|------------------------------------------------------------------|--------|--------|--------|--------|--------|--------|-------|-------|--------|--------|--------|-----------------------------|------------------------------------|
|        |                                  |                             | STATION    | DBKEY | May                                                              | Jun    | Jul    | Aug    | Sep    | Oct    | Nov    | Dec   | Jan   | Feb    | Mar    | Apr    |                             |                                    |
| INTO   | ACME1DS                          | ACME1DS                     | ACME1      | OH647 | 0                                                                | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0                           | N/F                                |
|        | ACME1 +<br>(Upstream of ACME1DS) | VOW1                        | ACME1      | OH647 | 0                                                                | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0                           | N/F                                |
|        | ACME2 +<br>(Upstream of G94D)    | VOW2                        | ACME2      | OH648 | 0                                                                | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0                           | N/F                                |
|        | G-123                            | G123                        | G123_P     | K5481 | 0                                                                | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0                           | N/F                                |
|        | S-9                              | S9                          | S9_P       | K5483 | 0                                                                | 6,225  | 6,461  | 0      | 15,670 | 18,397 | 818    | 0     | 0     | 1,463  | 2,658  | 941    | 52,632                      | 20                                 |
|        | S-9A                             | S9A                         | S-9A_P     | TA415 | 5                                                                | 10,420 | 8,810  | 5,896  | 4,667  | 13,928 | 8,747  | 7,363 | 6,283 | 9,339  | 6,180  | 6,159  | 87,799                      | 14                                 |
|        | S-174                            | S174                        | S174_S     | 15769 | 0                                                                | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0                           | N/F                                |
|        | S-332D                           | S332D                       | S-332D_P   | TA413 | 0                                                                | 3784   | 5434   | 1187   | 3384   | 13661  | 4446   | 0     | 0     | 4      | 5      | 785    | 32,689                      | 6                                  |
|        | S-18C                            | S18C                        | S18C_S     | 15760 | 1,352                                                            | 23,341 | 29,630 | 17,194 | 10,931 | 26,932 | 8,008  | 1,836 | 1,533 | 642    | 314    | 2,668  | 124,381                     | 8                                  |
|        | S-140                            | S140                        | S140_TOT   | 06754 | 0                                                                | 2,638  | 11,457 | 12,011 | 16,036 | 18,266 | 4,295  | 552   | 0     | 5,573  | 8,143  | 11,368 | 90,340                      | 36                                 |
|        | S-190                            | S190                        | S190_S     | K5501 | 1                                                                | 0      | 2120   | 4508   | 10088  | 6487   | 494    | 0     | 0     | 7      | 79     | 1525   | 25,310                      | 101                                |
|        | NSID1                            | NSIDSP01                    | NSID1_WC2A | PS225 | 0                                                                | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0                           | N/F                                |
|        | S38B                             | n/a                         | n/a        | n/a   | See flow data from NSPRNG_C2A                                    |        |        |        |        |        |        |       |       |        |        |        |                             | N/F                                |
| WITHIN | G-64                             | G64                         | G64_C      | n/a   | n/a                                                              | n/a    | n/a    | n/a    | n/a    | n/a    | n/a    | n/a   | n/a   | n/a    | n/a    | n/a    | n/a                         | n/a                                |
|        | S-346, S-347                     | S12D                        | S12D_S     | FE774 | 0                                                                | 708    | 778    | 71     | 186    | 5784   | 7222   | 1315  | 0     | 254    | 3019   | 0      | 19,336                      | 12                                 |
|        | S-141                            | S34                         | S141_W     | K5493 | 0                                                                | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0                           | N/F                                |
|        | S-142                            | S142                        | S142_C     | K5494 | 0                                                                | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0                           | N/F                                |
|        | S-143                            | S11A                        | S143_C     | K5495 | 0                                                                | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0                           | N/F                                |
|        | S-144                            | S145                        | S144_C     | K5497 | 0                                                                | 485    | 3,454  | 4,805  | 924    | 7,660  | 0      | 0     | 0     | 181    | 3,989  | 4,699  | 26,198                      | 11                                 |
|        | S-145                            | S145                        | S145_C     | K5498 | 0                                                                | 1,191  | 5,276  | 5,498  | 1,003  | 8,233  | 0      | 0     | 0     | 842    | 6,152  | 6,628  | 34,823                      | 12                                 |
|        | S-146                            | S145                        | S146_C     | K5499 | 0                                                                | 426    | 2,681  | 154    | 921    | 7,601  | 0      | 0     | 0     | 273    | 2,999  | 4,118  | 19,175                      | 10                                 |
|        | S-151                            | S151                        | S151_C     | K5500 | 0                                                                | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 12,542 | 35,944 | 20,230 | 68,715                      | 13                                 |
|        | S-333                            | S333                        | S333_S     | 15042 | 0                                                                | 1,362  | 1,591  | 1,511  | 516    | 21,758 | 15,847 | 1,776 | 1,584 | 1,171  | 4,091  | 15,378 | 66,584                      | 13                                 |
|        | S-339                            | C123SR84                    | S339_S     | K5506 | 0                                                                | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0                           | N/F                                |
|        | S-340                            | C123SR84                    | S340_S     | K5507 | 0                                                                | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0                           | N/F                                |
|        | S-175                            | S175                        | S175_C     | 15752 | 0                                                                | 0      | 0      | 0      | 1      | 0      | 0      | 0     | 0     | 0      | 0      | 17     | 18                          | 6                                  |
|        | S-332                            | S332                        | S332_P     | 15753 | 0                                                                | 0      | 0      | 0      | 0      | 0      | 0      | 0     | 0     | 0      | 0      | 0      | 0                           | nd                                 |
|        | BERMB3                           | BERMB3                      | n/a        | n/a   | n/a                                                              | n/a    | n/a    | n/a    | n/a    | n/a    | n/a    | n/a   | n/a   | n/a    | n/a    | n/a    | n/a                         | n/a                                |

Notes: 1) Water quality sample site is located on upstream side of permitted structure, unless otherwise noted with different sampling location.

2) n/a indicates that flow and/or stage data are not available, or that structure is not appropriately instrumented to capture information.

3) Structure names with a "+" are upstream of Non-ECP INTO structures and are additional monitoring locations or are listed in Emergency Order Number 9.

4) N/F indicates no positive flow

5) S-331 and S-173 flow records were combined to determine the annual flow-weighted mean TP.

6) nd indicates no data or no positive flow was recorded on sampling date, therefore a flow-weighted mean could not be calculated.

**Table 2.** Continued.

| AREA        | NON-ECP PERMIT STRUCTURE | WATER QUALITY SAMPLING SITE | FLOW    |       | Monthly Flow Volumes (acre-ft)<br>(May 1, 2006 - April 30, 2007) |        |        |       |       |        |       |       |       |        |        |        | Total Flow Volume (acre-ft) | Annual Flow-Weighted Mean TP (ppb) |
|-------------|--------------------------|-----------------------------|---------|-------|------------------------------------------------------------------|--------|--------|-------|-------|--------|-------|-------|-------|--------|--------|--------|-----------------------------|------------------------------------|
|             |                          |                             | STATION | DBKEY | May                                                              | Jun    | Jul    | Aug   | Sep   | Oct    | Nov   | Dec   | Jan   | Feb    | Mar    | Apr    |                             |                                    |
| FROM        | G-94A                    | G94B                        | G94A_C  | TA422 | 0                                                                | 0      | 0      | 0     | 0     | 0      | 0     | 0     | 555   | 3      | 0      | 0      | 557                         | 20                                 |
|             | G-94B                    | G94B                        | G94B_C  | TA423 | 0                                                                | 0      | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 6      | 0      | 0      | 6                           | 42                                 |
|             | G-94C                    | G94B                        | G94C_C  | TA424 | 0                                                                | 0      | 0      | 0     | 0     | 0      | 0     | 0     | 265   | 2      | 0      | 0      | 267                         | 20                                 |
|             | G-94D                    | G94D                        | ACME2   | OH648 | 0                                                                | 0      | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0      | 0      | 0                           | N/F                                |
|             | S-31                     | S31                         | S31_C   | K5486 | 0                                                                | 0      | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 12     | 0      | 12                          | 10                                 |
|             | S-34                     | S34                         | S34_C   | K5487 | 0                                                                | 0      | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0      | 0      | 0                           | N/F                                |
|             | S-38                     | S38                         | S38_C   | K5488 | 0                                                                | 0      | 0      | 0     | 0     | 0      | 0     | 104   | 411   | 191    | 0      | 0      | 706                         | 10                                 |
|             | S-39                     | S39                         | S39_S   | K5489 | 0                                                                | 0      | 0      | 0     | 0     | 0      | 0     | 0     | 353   | 0      | 0      | 0      | 353                         | 15                                 |
|             | S-197                    | S197                        | S197_C  | 15763 | 0                                                                | 1469   | 0      | 0     | 0     | 6993   | 0     | 0     | 0     | 0      | 0      | 0      | 8,462                       | 4                                  |
|             | S-334                    | S334                        | S334_S  | FB752 | 19                                                               | 19     | 23     | 22    | 35    | 20     | 22    | 24    | 1,633 | 1,236  | 0      | 0      | 3,054                       | 11                                 |
|             | S-337                    | S31                         | S337_C  | K5505 | 0                                                                | 0      | 0      | 0     | 0     | 0      | 0     | 0     | 534   | 12,963 | 33,449 | 17,444 | 64,390                      | 13                                 |
|             | S-343A                   | US41-25                     | S343A_C | K5508 | 0                                                                | 0      | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0      | 0      | 0                           | N/F                                |
|             | S-343B                   | US41-25                     | S343B_C | K5509 | 0                                                                | 0      | 13     | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0      | 0      | 13                          | 14                                 |
|             | S-344                    | S344                        | S344_C  | K5511 | 0                                                                | 0      | 0      | 0     | 0     | 0      | 0     | 0     | 0     | 0      | 0      | 0      | 0                           | nd                                 |
| C-111 BASIN | S-176 +                  | S176                        | S176_S  | 15762 | 0                                                                | 1,247  | 336    | 0     | 0     | 2      | 0     | 826   | 4,731 | 2,356  | 1,174  | 711    | 11,382                      | 6                                  |
|             | S-177 +                  | S177                        | S177_S  | 15772 | 0                                                                | 12,588 | 20,113 | 7,654 | 6,247 | 15,459 | 4,659 | 418   | 3,065 | 1,426  | 1,260  | 2,313  | 75,202                      | 6                                  |
|             | S-178 +                  | S178                        | S178_C  | SO632 | 0                                                                | 0      | 1,022  | 646   | 114   | 715    | 0     | 0     | 0     | 0      | 17     | 0      | 2,514                       | 111                                |
|             | S-331 +                  | S331-173                    | S331_P  | P6935 | 0                                                                | 5641   | 9236   | 1604  | 3810  | 15092  | 5544  | 0     | 34    | 41     | 47     | 132    | 41,182                      | 8                                  |
|             | S-173 +                  | S331-173                    | S173_C  | FB759 | 0                                                                | 58     | 0      | 0     | 62    | 0      | 2,049 | 5,913 | 7,670 | 5,165  | 6,297  | 4,628  | 31,841                      | 9                                  |
|             | S-332B+                  | S332B                       | S-332B  | TB064 | 1                                                                | 4,433  | 8,998  | 733   | 2,409 | 8,817  | 578   | 0     | 1     | 0      | 120    | 409    | 26,499                      | 8                                  |
|             | S-332C+                  | S332C                       | S-332B  | UT724 | 0                                                                | 7,616  | 15,058 | 6,036 | 1,626 | 13,440 | 5,239 | 67    | 66    | 0      | 7      | 0      | 49,156                      | 7                                  |

Notes: 1) Water quality sample site is located on upstream side of permitted structure, unless otherwise noted with different sampling location.

2) n/a indicates that flow and/or stage data are not available, or that structure is not appropriately instrumented to capture information.

3) Structure names with a "+" are upstream of Non-ECP INTO structures and are additional monitoring locations or are listed in Emergency Order Number 9.

4) N/F indicates no positive flow

5) S-331 and S-173 flow records were combined to determine the annual flow-weighted mean TP.

6) nd indicates no data or no positive flow was recorded on sampling date, therefore a flow-weighted mean could not be calculated.

# **Attachment B: Summary Statistics of Non-Everglades Construction Project Water Quality Monitoring Data for Water Year 2008**

Shi Kui Xue and Steven Hill

## **NOTES:**

Summary statistics are tabulated in **Table 3** of this attachment for all parameters collected during Water Year 2008 (WY2008) (May 1, 2007 through April 30, 2008) at the non-Everglades Construction Project (non-ECP) water quality monitoring sites. **Table 1** of this attachment presents the water quality parameters associated with the summary statistics and their associated Florida Class III Fresh Surface Water Criteria [Section 62-302.530, Florida Administrative Code (F.A.C.)]. Additionally, the parameter summary statistics shown in Table 3 are sequenced according to the order shown in **Table 1**. The monitoring sites are sequenced based on the order shown in **Table 2**. The non-ECP structure locations are depicted in Appendix 3A-7, Figure 1.

**Table 1.** Class III criteria reference table for water quality parameters presented in summary statistics on **Table 3**.

| Parameter Name                 | Abbreviated Parameter Name | Units                     | SFWMD Test Number | Class III Criteria<br>Predominantly Fresh Surface Waters<br>Section 62-302.530, F.A.C.           |
|--------------------------------|----------------------------|---------------------------|-------------------|--------------------------------------------------------------------------------------------------|
| <b>PHYSICAL</b>                |                            |                           |                   |                                                                                                  |
| % Saturation, Dissolved Oxygen | % SAT. DO                  | percent                   | 76                | None                                                                                             |
| Dissolved Oxygen               | DO                         | mg/L                      | 8                 | Not be less than 5.0 mg/L                                                                        |
| Specific Conductance (Field)   | FLDCOND                    | µmhos/cm                  | 9                 | Not greater than 50% above background or 1,275 µmhos/cm, whichever is greater                    |
| pH (Field)                     | PH                         | units                     | 10                | Not less than 6.0 or greater than 8.5                                                            |
| Turbidity                      | TURBIDITY                  | ntu                       | 12                | Less than or equal to 29 NTU above natural background                                            |
| Total Suspended Solids         | TSS                        | mg/L                      | 16                | None                                                                                             |
| Color                          | COLOR                      | units                     | 13                | None                                                                                             |
| Hardness                       | HARDNESS                   | mg/L as CaCO <sub>3</sub> | 35                | None                                                                                             |
| Temperature                    | TEMP                       | centigrade                | 7                 | None                                                                                             |
| Alkalinity                     | ALKALINITY                 | mg/L                      | 67                | Not less than 20 mg/L                                                                            |
| <b>NUTRIENTS</b>               |                            |                           |                   |                                                                                                  |
| Total Nitrogen                 | TN                         | mg N/L                    | 80                | narrative criteria                                                                               |
| Nitrite + Nitrate              | NOX                        | mg N/L                    | 18;180            | narrative criteria                                                                               |
| Nitrite                        | NO2                        | mg N/L                    | 19                | narrative criteria                                                                               |
| Nitrate                        | NO3                        | mg N/L                    | 78                | narrative criteria                                                                               |
| Ammonium                       | NH4                        | mg N/L                    | 182               | narrative criteria                                                                               |
| Un-ionized Ammonia             | UN-IONIZED AMMONIA         | mg/L as NH <sub>3</sub>   | NONE              | Less than or equal to 0.02 mg/L                                                                  |
| Inorganic Nitrogen             | NNH4                       | mg N/L                    | 92                | narrative criteria                                                                               |
| Organic Nitrogen               | ORGN                       | mg N/L                    | 79                | narrative criteria                                                                               |
| Total Kjeldahl Nitrogen        | TKN                        | mg N/L                    | 21                | narrative criteria                                                                               |
| Ortho-Phosphorus               | OPO4                       | mg P/L                    | 23                | narrative criteria                                                                               |
| Total Phosphorus               | TP                         | mg P/L                    | 25                | narrative criteria                                                                               |
| <b>MAJOR IONS</b>              |                            |                           |                   |                                                                                                  |
| Dissolved Calcium              | DIS. CA                    | mg/L                      | 30                | None                                                                                             |
| Dissolved Potassium            | DIS. K                     | mg/L                      | 29                | None                                                                                             |
| Dissolved Magnesium            | DIS. MG                    | mg/L                      | 31                | None                                                                                             |
| Dissolved Sodium               | DIS. NA                    | mg/L                      | 28                | None                                                                                             |
| Dissolved Silica               | DIS. SILICA                | mg/L                      | 27                | None                                                                                             |
| Total Sulfate                  | TOT. SO4                   | mg/L                      | 33                | None                                                                                             |
| Total Chlorides                | TOT. CL                    | mg/L                      | 32                | None                                                                                             |
| <b>TRACE ELEMENTS</b>          |                            |                           |                   |                                                                                                  |
| Total Arsenic                  | TOT. AS                    | µg/L                      | 106               | Less than or equal to 50 µg/L                                                                    |
| Total Cadmium                  | TOT. CD                    | µg/L                      | 103               | Less than or equal to calculated value using:<br>$e^{(0.7852[\ln(\text{Hardness})-3.49])}$ µg/L  |
| Total Copper                   | TOT. CU                    | µg/L                      | 104               | Less than or equal to calculated value using:<br>$e^{(0.8545[\ln(\text{Hardness})-1.702])}$ µg/L |
| Total Mercury                  | TOT. HG                    | µg/L                      | 102               | Less than or equal to .012 µg/L                                                                  |
| Total Lead                     | TOT. PB                    | µg/L                      | 107               | Less than or equal to calculated value using:<br>$e^{(1.273[\ln(\text{Hardness})-4.705])}$ µg/L  |
| Total Zinc                     | TOT. ZN                    | µg/L                      | 105               | Less than or equal to calculated value using:<br>$e^{(0.8473[\ln(\text{Hardness})+0.884])}$ µg/L |
| Total Iron                     | TOT. FE                    | mg/L                      | 177               | Less than or equal to 1.0 mg/L                                                                   |
| <b>BIOLOGICAL</b>              |                            |                           |                   |                                                                                                  |
| Carotenoid                     | CAROTENOID or CAROT        | mg/m <sup>3</sup>         | 63                | None                                                                                             |
| Chlorophyll-A                  | CHLA                       | mg/m <sup>3</sup>         | 61                | None                                                                                             |
| Chlorophyll-A2                 | CHLA2                      | mg/m <sup>3</sup>         | 112               | None                                                                                             |
| Chlorophyll-B                  | CHLB                       | mg/m <sup>3</sup>         | 62                | None                                                                                             |
| Chlorophyll-C                  | CHLC                       | mg/m <sup>3</sup>         | 113               | None                                                                                             |
| Pheophytin-A                   | PHEOPHYTIN A               | mg/m <sup>3</sup>         | 64                | None                                                                                             |

**Table 2.** Reference table for cross-referencing water quality monitoring sites with non-Everglades Construction Project (non-ECP) discharge structures and the monitoring data summary statistics shown in **Table 3**.

| STRUCTURE CATEGORY | Non-ECP PERMIT STRUCTURE      | WATER QUALITY SAMPLING SITE | Comments                                                                                                                 |
|--------------------|-------------------------------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------|
| INTO               | ACME1DS                       | ACME1DS                     |                                                                                                                          |
|                    | ACME1 + (upstream of ACME1DS) | VOW1                        | Autosampler installed upstream of pump station during WY2001                                                             |
|                    | ACME2 + (upstream of G94D)    | VOW2                        | Autosampler installed upstream of pump station during WY2001                                                             |
|                    | G-123                         | G123                        | Autosampler installed upstream of pump station during WY2001                                                             |
|                    | S-9                           | S9                          | Autosampler installed upstream of pump station during WY2000                                                             |
|                    | S-9A                          | S9A                         | Water quality data available in WY2003                                                                                   |
|                    | S-14                          | S14                         |                                                                                                                          |
|                    | S-174                         | S174                        | The site is a new non-ECP structure, but the structure was plugged in September 2007.                                    |
|                    | S-332D                        | S-332D                      | The site is a new non-ECP structure                                                                                      |
|                    | S-18C                         | S18C                        | Autosampler installed upstream of pump station during WY2003                                                             |
|                    | S-140                         | S140                        | Autosampler installed upstream of pump station during WY2001                                                             |
|                    | S-190                         | S190                        | Autosampler installed upstream of pump station during WY2001                                                             |
| WITHIN             | NSID1                         | NSIDSP01                    | Autosampler installed upstream of pump station during WY2002                                                             |
|                    |                               | S38B                        |                                                                                                                          |
|                    | G-64                          | G64                         |                                                                                                                          |
|                    | S-346, S-347                  | S12D                        |                                                                                                                          |
|                    | S-141                         | S34                         |                                                                                                                          |
|                    | S-142                         | S142                        |                                                                                                                          |
|                    | S-143                         | S11A                        |                                                                                                                          |
|                    | S-144                         | S144                        |                                                                                                                          |
|                    | S-145                         | S145                        |                                                                                                                          |
|                    | S-146                         | S146                        |                                                                                                                          |
|                    | S-151                         | S151                        |                                                                                                                          |
|                    | S-333                         | S333                        |                                                                                                                          |
|                    | S-339, S-340                  | C123SR84                    |                                                                                                                          |
|                    | S-175                         | S175                        |                                                                                                                          |
|                    | S-332                         | S332                        |                                                                                                                          |
| FROM               | Burm-B3                       | BurmB3                      | The site is a new non-ECP structure                                                                                      |
|                    | G-94A, G-94B, G-94C           | G94B                        |                                                                                                                          |
|                    | G-94D                         | G94D                        |                                                                                                                          |
|                    | S-31, S-337                   | S31                         |                                                                                                                          |
|                    | S-34                          | S34                         |                                                                                                                          |
|                    | S-38                          | S38                         |                                                                                                                          |
|                    | S-39                          | S39                         |                                                                                                                          |
|                    | S-197                         | S197                        |                                                                                                                          |
|                    | S-334                         | S334                        |                                                                                                                          |
| C111 BASIN         | S-343A, S-343B                | US41-25                     |                                                                                                                          |
|                    | S-344                         | S344                        |                                                                                                                          |
|                    | S-176 +                       | S176                        | The site is not a non-ECP structure; data are presented for information only                                             |
|                    | S-177 +                       | S177                        |                                                                                                                          |
|                    | S-178 +                       | S178                        |                                                                                                                          |
|                    | S-331 +, S-173 +              | S331-173                    |                                                                                                                          |
|                    | S-332B+                       | S-332B                      | The site is not a non-ECP structure; data are presented for information only                                             |
|                    | S-332C+                       | S-332C                      | The site is not a non-ECP structure; data are presented for information only, the flow data were processed from 3/27/07. |

Notes:

- 1) Water quality sample site is located on upstream side of permitted structure; unless otherwise noted with different representative sampling location.
- 2) Structure names with a "+" are upstream of non-ECP INTO structures and are additional monitoring locations.

**Table 3.** Summary statistics of non-ECP water quality monitoring data (physical parameters, nutrients, major ions, and trace metals) collected during WY2008.

| STATION | TEST NAME           | UNITS      | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN    | STD     | MIN     | Q25     | MEDIAN  | Q75     | MAX     | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|---------|---------------------|------------|-------------|-----------------------|--------------|---------|---------|---------|---------|---------|---------|---------|-------------------------|-----------------|--------------|
| ACME1DS | DO                  | mg/L       | 8           | 08MAY2007 - 10MAR2008 | 11           | 6.116   | 1.494   | 3.020   | 5.560   | 6.230   | 6.990   | 8.360   | 0                       | 2               | 18.18%       |
| ACME1DS | FLDCOND.            | UMHOS/CM   | 9           | 08MAY2007 - 10MAR2008 | 11           | 596.627 | 113.940 | 463.000 | 514.000 | 558.900 | 635.000 | 803.000 | 0                       | 0               | 0.00%        |
| ACME1DS | PH                  | UNITS      | 10          | 08MAY2007 - 10MAR2008 | 11           | 7.445   | 0.288   | 6.900   | 7.300   | 7.400   | 7.600   | 8.100   | 0                       | 0               | 0.00%        |
| ACME1DS | TURBIDITY           | NTU        | 12          | 08MAY2007 - 10MAR2008 | 11           | 3.955   | 4.053   | 1.200   | 1.400   | 2.200   | 5.000   | 12.500  | 0                       | 0               | 0.00%        |
| ACME1DS | TSS                 | mg/L       | 16          | 08MAY2007 - 10MAR2008 | 11           | 5.182   | 3.995   | <3      | <3      | 6.000   | 14.000  | 14.000  | 6                       | 0               | 0.00%        |
| ACME1DS | COLOR               | UNITS      | 13          | 08MAY2007 - 02JUL2007 | 3            | 64.667  | 11.015  | 54.000  | 54.000  | 64.000  | 76.000  | 76.000  | 0                       | 0               | 0.00%        |
| ACME1DS | HARDNESS            | mg/L CaCO3 | 35          | 04JUN2007 - 10MAR2008 | 4            | 161.775 | 36.504  | 125.400 | 134.150 | 156.200 | 189.400 | 209.300 | 0                       | 0               | 0.00%        |
| ACME1DS | TEMP                | CENT       | 7           | 08MAY2007 - 10MAR2008 | 11           | 26.209  | 3.741   | 20.300  | 22.800  | 25.800  | 30.000  | 32.500  | 0                       | 0               | 0.00%        |
| ACME1DS | ALKALINITY          | mg/L       | 67          | 08MAY2007 - 10MAR2008 | 11           | 139.455 | 21.389  | 107.000 | 123.000 | 137.000 | 149.000 | 182.000 | 0                       | 0               | 0.00%        |
| ACME1DS | TN                  | mg N/L     | 80          | 08MAY2007 - 10MAR2008 | 11           | 1.323   | 0.355   | 0.861   | 0.986   | 1.332   | 1.563   | 2.042   | 0                       | 0               | 0.00%        |
| ACME1DS | NOX                 | mg N/L     | 18,180      | 08MAY2007 - 10MAR2008 | 10           | 0.020   | 0.012   | 0.002   | 0.009   | 0.022   | 0.028   | 0.038   | 0                       | 0               | 0.00%        |
| ACME1DS | NO2                 | mg N/L     | 19          | 08MAY2007 - 02JAN2008 | 9            | 0.005   | 0.004   | 0.002   | 0.003   | 0.004   | 0.004   | 0.013   | 0                       | 0               | 0.00%        |
| ACME1DS | NO3                 | mg N/L     | 78          | 08MAY2007 - 02JAN2008 | 8            | 0.013   | 0.009   | <0.004  | 0.002   | 0.011   | 0.020   | 0.030   | 2                       | 0               | 0.00%        |
| ACME1DS | NH4                 | mg N/L     | 20          | 08MAY2007 - 02JAN2008 | 9            | 0.020   | 0.008   | 0.006   | 0.017   | 0.021   | 0.023   | 0.033   | 0                       | 0               | 0.00%        |
| ACME1DS | UN-IONIZED AMMONIA  | mg/L       | NONE        | 08MAY2007 - 10MAR2008 | 9            | 0.001   | 0.000   | 0.000   | 0.000   | 0.000   | 0.001   | 0.001   | 0                       | 0               | 0.00%        |
| ACME1DS | NNH4                | mg N/L     | 92          | 08MAY2007 - 02JAN2008 | 8            | 0.037   | 0.016   | 0.015   | 0.025   | 0.037   | 0.049   | 0.062   | 0                       | 0               | 0.00%        |
| ACME1DS | ORGN                | mg N/L     | 79          | 08MAY2007 - 02JAN2008 | 9            | 1.313   | 0.387   | 0.828   | 0.938   | 1.317   | 1.523   | 2.019   | 0                       | 0               | 0.00%        |
| ACME1DS | TKN                 | mg N/L     | 21          | 08MAY2007 - 10MAR2008 | 11           | 1.305   | 0.357   | 0.840   | 0.960   | 1.300   | 1.540   | 2.040   | 0                       | 0               | 0.00%        |
| ACME1DS | OPO4                | mg P/L     | 23          | 08MAY2007 - 10MAR2008 | 11           | 0.002   | 0.000   | <0.002  | <0.002  | <0.002  | <0.002  | 0.002   | 10                      | 0               | 0.00%        |
| ACME1DS | TP                  | mg P/L     | 25          | 08MAY2007 - 10MAR2008 | 11           | 0.033   | 0.021   | 0.013   | 0.018   | 0.021   | 0.061   | 0.068   | 0                       | 0               | 0.00%        |
| ACME1DS | DIS. CA             | mg/L       | 30          | 04JUN2007 - 10MAR2008 | 4            | 52.100  | 12.610  | 39.600  | 42.600  | 50.100  | 61.600  | 68.600  | 0                       | 0               | 0.00%        |
| ACME1DS | DIS. K              | mg/L       | 29          | 04JUN2007 - 10MAR2008 | 4            | 3.725   | 0.585   | 3.000   | 3.300   | 3.750   | 4.150   | 4.400   | 0                       | 0               | 0.00%        |
| ACME1DS | DIS. MG             | mg/L       | 31          | 04JUN2007 - 10MAR2008 | 4            | 7.675   | 1.237   | 6.400   | 6.700   | 7.550   | 8.650   | 9.200   | 0                       | 0               | 0.00%        |
| ACME1DS | DIS. NA             | mg/L       | 28          | 04JUN2007 - 10MAR2008 | 4            | 46.275  | 6.891   | 41.200  | 42.050  | 43.750  | 50.500  | 56.400  | 0                       | 0               | 0.00%        |
| ACME1DS | TOT. CL             | mg/L       | 32          | 08MAY2007 - 10MAR2008 | 10           | 75.930  | 20.586  | 46.000  | 62.400  | 68.900  | 86.600  | 111.000 | 0                       | 0               | 0.00%        |
| ACME1DS | TOT. SO4            | mg/L       | 33          | 04JUN2007 - 10MAR2008 | 4            | 16.925  | 9.226   | 6.300   | 9.300   | 17.650  | 24.550  | 26.100  | 0                       | 0               | 0.00%        |
| ACME1DS | DIS. SILICA         | mg/L       | 27          | 04JUN2007 - 04JUN2007 | 1            | 2.070   |         | 2.070   | 2.070   | 2.070   | 2.070   | 2.070   | 0                       | 0               | 0.00%        |
| ACME1DS | TOT. FE             | mg/L       | 177         | 04JUN2007 - 04JUN2007 | 1            | 0.197   |         | 0.197   | 0.197   | 0.197   | 0.197   | 0.197   | 0                       | 0               | 0.00%        |
| ACME1DS | TOT. ULTRA TRACE HG | ug/L       | 207         | 09MAY2007 - 09AUG2007 | 2            | 0.002   | 0.000   | 0.002   | 0.002   | 0.002   | 0.002   | 0.002   | 0                       | 0               | 0.00%        |
| ACME1DS | TOT. MTHY HG        | ug/L       | 203         | 09MAY2007 - 28NOV2007 | 3            | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   | 0                       | 0               | 0.00%        |
|         |                     |            |             |                       |              |         |         |         |         |         |         |         |                         |                 |              |
| G94D    | DO                  | mg/L       | 8           | 08MAY2007 - 10MAR2008 | 11           | 3.961   | 2.370   | 1.020   | 2.550   | 3.100   | 5.260   | 9.000   | 0                       | 8               | 72.73%       |
| G94D    | FLDCOND.            | UMHOS/CM   | 9           | 08MAY2007 - 10MAR2008 | 11           | 597.964 | 86.213  | 478.000 | 529.000 | 600.000 | 634.000 | 787.000 | 0                       | 0               | 0.00%        |
| G94D    | PH                  | UNITS      | 10          | 08MAY2007 - 10MAR2008 | 11           | 7.209   | 0.221   | 6.900   | 7.000   | 7.300   | 7.400   | 7.500   | 0                       | 0               | 0.00%        |
| G94D    | TURBIDITY           | NTU        | 12          | 08MAY2007 - 10MAR2008 | 11           | 4.645   | 2.775   | 2.500   | 2.600   | 2.900   | 7.700   | 9.600   | 0                       | 0               | 0.00%        |
| G94D    | TSS                 | mg/L       | 16          | 08MAY2007 - 10MAR2008 | 11           | 9.545   | 6.121   | 4.000   | 5.000   | 6.000   | 14.000  | 22.000  | 0                       | 0               | 0.00%        |
| G94D    | COLOR               | UNITS      | 13          | 08MAY2007 - 02JUL2007 | 3            | 88.000  | 24.249  | 62.000  | 62.000  | 92.000  | 110.000 | 110.000 | 0                       | 0               | 0.00%        |
| G94D    | HARDNESS            | mg/L CaCO3 | 35          | 04JUN2007 - 10MAR2008 | 4            | 188.725 | 27.383  | 159.900 | 167.600 | 186.000 | 209.850 | 223.000 | 0                       | 0               | 0.00%        |
| G94D    | TEMP                | CENT       | 7           | 08MAY2007 - 10MAR2008 | 11           | 25.409  | 3.849   | 19.200  | 22.000  | 25.900  | 28.700  | 30.400  | 0                       | 0               | 0.00%        |
| G94D    | ALKALINITY          | mg/L       | 67          | 08MAY2007 - 10MAR2008 | 11           | 173.455 | 17.154  | 146.000 | 160.000 | 174.000 | 186.000 | 202.000 | 0                       | 0               | 0.00%        |
| G94D    | TN                  | mg N/L     | 80          | 08MAY2007 - 10MAR2008 | 11           | 2.111   | 0.588   | 1.425   | 1.746   | 1.900   | 2.450   | 3.488   | 0                       | 0               | 0.00%        |
| G94D    | NOX                 | mg N/L     | 18,180      | 08MAY2007 - 10MAR2008 | 10           | 0.026   | 0.037   | 0.004   | 0.006   | 0.009   | 0.016   | 0.114   | 0                       | 0               | 0.00%        |
| G94D    | NO2                 | mg N/L     | 19          | 08MAY2007 - 02JAN2008 | 9            | 0.005   | 0.003   | 0.003   | 0.004   | 0.004   | 0.005   | 0.011   | 0                       | 0               | 0.00%        |
| G94D    | NO3                 | mg N/L     | 78          | 08MAY2007 - 02JAN2008 | 8            | 0.012   | 0.020   | <0.004  | <0.004  | <0.004  | 0.004   | 0.061   | 6                       | 0               | 0.00%        |
| G94D    | NH4                 | mg N/L     | 20          | 08MAY2007 - 02JAN2008 | 9            | 0.214   | 0.281   | 0.012   | 0.032   | 0.063   | 0.251   | 0.744   | 0                       | 0               | 0.00%        |

Table 3. Continued.

| STATION | TEST NAME           | UNITS      | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN    | STD    | MIN     | Q25     | MEDIAN  | Q75     | MAX     | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|---------|---------------------|------------|-------------|-----------------------|--------------|---------|--------|---------|---------|---------|---------|---------|-------------------------|-----------------|--------------|
| G94D    | UNIONIZED AMMONIA   | mg/L       | NONE        | 08MAY2007 - 10MAR2008 | 9            | 0.002   | 0.002  | 0.000   | 0.000   | 0.001   | 0.003   | 0.004   | 0                       | 0               | 0.00%        |
| G94D    | NNH4                | mg N/L     | 92          | 08MAY2007 - 02JAN2008 | 8            | 0.177   | 0.246  | 0.018   | 0.038   | 0.090   | 0.195   | 0.754   | 0                       | 0               | 0.00%        |
| G94D    | ORGN                | mg N/L     | 79          | 08MAY2007 - 02JAN2008 | 9            | 1.890   | 0.714  | 1.259   | 1.370   | 1.627   | 2.118   | 3.452   | 0                       | 0               | 0.00%        |
| G94D    | TKN                 | mg N/L     | 21          | 08MAY2007 - 10MAR2008 | 11           | 2.087   | 0.588  | 1.420   | 1.690   | 1.900   | 2.440   | 3.480   | 0                       | 0               | 0.00%        |
| G94D    | OPO4                | mg P/L     | 23          | 08MAY2007 - 10MAR2008 | 11           | 0.070   | 0.043  | 0.012   | 0.042   | 0.066   | 0.080   | 0.177   | 0                       | 0               | 0.00%        |
| G94D    | TP                  | mg P/L     | 25          | 08MAY2007 - 10MAR2008 | 11           | 0.178   | 0.100  | 0.077   | 0.113   | 0.155   | 0.191   | 0.413   | 0                       | 0               | 0.00%        |
| G94D    | DIS. CA             | mg/L       | 30          | 04JUN2007 - 10MAR2008 | 4            | 63.225  | 8.901  | 53.800  | 56.400  | 62.350  | 70.050  | 74.400  | 0                       | 0               | 0.00%        |
| G94D    | DIS. K              | mg/L       | 29          | 04JUN2007 - 10MAR2008 | 4            | 3.850   | 0.580  | 3.100   | 3.400   | 3.950   | 4.300   | 4.400   | 0                       | 0               | 0.00%        |
| G94D    | DIS. MG             | mg/L       | 31          | 04JUN2007 - 10MAR2008 | 4            | 7.475   | 1.237  | 6.200   | 6.500   | 7.350   | 8.450   | 9.000   | 0                       | 0               | 0.00%        |
| G94D    | DIS. NA             | mg/L       | 28          | 04JUN2007 - 10MAR2008 | 4            | 39.800  | 4.239  | 35.600  | 36.750  | 39.050  | 42.850  | 45.500  | 0                       | 0               | 0.00%        |
| G94D    | TOT. CL             | mg/L       | 32          | 08MAY2007 - 10MAR2008 | 10           | 64.230  | 7.399  | 55.300  | 57.400  | 63.450  | 68.400  | 78.800  | 0                       | 0               | 0.00%        |
| G94D    | TOT. SO4            | mg/L       | 33          | 04JUN2007 - 10MAR2008 | 4            | 13.200  | 8.526  | 5.000   | 6.200   | 12.250  | 20.200  | 23.300  | 0                       | 0               | 0.00%        |
| G94D    | DIS. SILICA         | mg/L       | 27          | 04JUN2007 - 04JUN2007 | 1            | 3.960   | 3.960  | 3.960   | 3.960   | 3.960   | 3.960   | 3.960   | 0                       | 0               | 0.00%        |
| G94D    | TOT. FE             | mg/L       | 177         | 04JUN2007 - 04JUN2007 | 1            | 0.104   | 0.104  | 0.104   | 0.104   | 0.104   | 0.104   | 0.104   | 0                       | 0               | 0.00%        |
| G94D    | TOT. ULTRA TRACE Hg | ug/L       | 207         | 09MAY2007 - 09AUG2007 | 2            | 0.002   | 0.000  | 0.002   | 0.002   | 0.002   | 0.002   | 0.002   | 0                       | 0               | 0.00%        |
| G94D    | TOT. MTHY HG        | ug/L       | 203         | 09MAY2007 - 28NOV2007 | 3            | 0.001   | 0.001  | 0.000   | 0.000   | 0.000   | 0.002   | 0.002   | 0                       | 0               | 0.00%        |
|         |                     |            |             |                       |              |         |        |         |         |         |         |         |                         |                 |              |
| G123    | DO                  | mg/L       | 8           | 01MAY2007 - 29APR2008 | 53           | 2.968   | 1.380  | 0.580   | 1.610   | 3.230   | 3.820   | 5.700   | 0                       | 49              | 92.45%       |
| G123    | FLDCOND.            | UMHOS/CM   | 9           | 01MAY2007 - 29APR2008 | 53           | 892.830 | 52.729 | 657.000 | 872.000 | 895.000 | 928.000 | 979.000 | 0                       | 0               | 0.00%        |
| G123    | PH                  | UNITS      | 10          | 01MAY2007 - 29APR2008 | 53           | 7.357   | 0.200  | 7.000   | 7.200   | 7.400   | 7.500   | 7.900   | 0                       | 0               | 0.00%        |
| G123    | TURBIDITY           | NTU        | 12          | 08MAY2007 - 08APR2008 | 12           | 1.367   | 0.377  | 0.600   | 1.100   | 1.500   | 1.600   | 2.000   | 0                       | 0               | 0.00%        |
| G123    | TSS                 | mg/L       | 16          | 08MAY2007 - 11SEP2007 | 5            | 3.000   | 0.000  | <3      | <3      | <3      | <3      | <3      | 5                       | 0               | 0.00%        |
| G123    | COLOR               | UNITS      | 13          | 08MAY2007 - 11SEP2007 | 5            | 73.000  | 14.071 | 60.000  | 60.000  | 75.000  | 76.000  | 94.000  | 0                       | 0               | 0.00%        |
| G123    | HARDNESS            | mg/L CaCO3 | 35          | 05JUL2007 - 08APR2008 | 4            | 301.325 | 15.399 | 285.000 | 290.850 | 299.200 | 311.800 | 321.900 | 0                       | 0               | 0.00%        |
| G123    | TEMP                | CENT       | 7           | 01MAY2007 - 29APR2008 | 53           | 25.185  | 2.708  | 19.700  | 23.100  | 24.400  | 28.000  | 29.900  | 0                       | 0               | 0.00%        |
| G123    | ALKALINITY          | mg/L       | 67          | 08MAY2007 - 11SEP2007 | 5            | 311.600 | 2.966  | 307.000 | 311.000 | 312.000 | 313.000 | 315.000 | 0                       | 0               | 0.00%        |
| G123    | TN                  | mg N/L     | 80          | 08MAY2007 - 08APR2008 | 12           | 1.787   | 0.101  | 1.630   | 1.694   | 1.777   | 1.894   | 1.926   | 0                       | 0               | 0.00%        |
| G123    | NOX                 | mg N/L     | 18,180      | 08MAY2007 - 08APR2008 | 11           | 0.052   | 0.098  | <0.005  | 0.006   | 0.011   | 0.051   | 0.336   | 2                       | 0               | 0.00%        |
| G123    | NO2                 | mg N/L     | 19          | 05JUN2007 - 11SEP2007 | 4            | 0.004   | 0.001  | 0.003   | 0.004   | 0.005   | 0.005   | 0.005   | 0                       | 0               | 0.00%        |
| G123    | NO3                 | mg N/L     | 78          | 05JUN2007 - 11SEP2007 | 4            | 0.044   | 0.030  | 0.008   | 0.023   | 0.042   | 0.064   | 0.082   | 0                       | 0               | 0.00%        |
| G123    | NH4                 | mg N/L     | 20          | 08MAY2007 - 11SEP2007 | 5            | 0.395   | 0.133  | 0.260   | 0.263   | 0.420   | 0.463   | 0.569   | 0                       | 0               | 0.00%        |
| G123    | UNIONIZED AMMONIA   | mg/L       | NONE        | 01MAY2007 - 29APR2008 | 5            | 0.011   | 0.002  | 0.007   | 0.011   | 0.011   | 0.012   | 0.012   | 0                       | 0               | 0.00%        |
| G123    | NNH4                | mg N/L     | 92          | 08MAY2007 - 11SEP2007 | 5            | 0.434   | 0.109  | 0.302   | 0.350   | 0.471   | 0.474   | 0.575   | 0                       | 0               | 0.00%        |
| G123    | ORGN                | mg N/L     | 79          | 08MAY2007 - 11SEP2007 | 5            | 1.427   | 0.058  | 1.351   | 1.407   | 1.427   | 1.440   | 1.510   | 0                       | 0               | 0.00%        |
| G123    | TKN                 | mg N/L     | 21          | 08MAY2007 - 08APR2008 | 12           | 1.740   | 0.111  | 1.550   | 1.670   | 1.730   | 1.820   | 1.920   | 0                       | 0               | 0.00%        |
| G123    | OPO4                | mg P/L     | 23          | 08MAY2007 - 08APR2008 | 12           | 0.002   | 0.001  | <0.002  | <0.002  | 0.000   | 0.003   | 0.005   | 6                       | 0               | 0.00%        |
| G123    | TP                  | mg P/L     | 25          | 01MAY2007 - 29APR2008 | 53           | 0.016   | 0.009  | 0.010   | 0.012   | 0.014   | 0.016   | 0.074   | 0                       | 0               | 0.00%        |
| G123    | DIS. CA             | mg/L       | 30          | 05JUL2007 - 08APR2008 | 4            | 86.400  | 3.332  | 83.300  | 84.250  | 85.600  | 88.550  | 91.100  | 0                       | 0               | 0.00%        |
| G123    | DIS. K              | mg/L       | 29          | 05JUL2007 - 08APR2008 | 4            | 5.200   | 0.949  | 4.500   | 4.650   | 4.850   | 5.750   | 6.600   | 0                       | 0               | 0.00%        |
| G123    | DIS. MG             | mg/L       | 31          | 05JUL2007 - 08APR2008 | 4            | 20.775  | 1.739  | 18.700  | 19.550  | 20.750  | 22.000  | 22.900  | 0                       | 0               | 0.00%        |
| G123    | DIS. NA             | mg/L       | 28          | 05JUL2007 - 08APR2008 | 4            | 67.150  | 4.067  | 61.100  | 64.900  | 68.800  | 69.400  | 69.900  | 0                       | 0               | 0.00%        |
| G123    | TOT. CL             | mg/L       | 32          | 08MAY2007 - 08APR2008 | 8            | 102.625 | 8.327  | 85.500  | 98.750  | 105.000 | 108.500 | 111.000 | 0                       | 0               | 0.00%        |
| G123    | TOT. SO4            | mg/L       | 33          | 05JUL2007 - 08APR2008 | 4            | 3.175   | 2.809  | 1.000   | 1.550   | 2.200   | 4.800   | 7.300   | 0                       | 0               | 0.00%        |
| G123    | DIS. SILICA         | mg/L       | 27          | 05JUL2007 - 05JUL2007 | 1            | 14.500  | 14.500 | 14.500  | 14.500  | 14.500  | 14.500  | 14.500  | 0                       | 0               | 0.00%        |

Table 3. Continued.

| STATION | TEST NAME           | UNITS      | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN    | STD    | MIN       | Q25     | MEDIAN  | Q75     | MAX     | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|---------|---------------------|------------|-------------|-----------------------|--------------|---------|--------|-----------|---------|---------|---------|---------|-------------------------|-----------------|--------------|
| G123    | TOT. FE             | mg/L       | 177         | 05JUL2007 - 05JUL2007 | 1            | 0.205   |        | 0.205     | 0.205   | 0.205   | 0.205   | 0.205   | 0                       | 0               | 0.00%        |
| G123    | TOT. ULTRA TRACE HG | ug/L       | 207         | 07MAY2007 - 11FEB2008 | 3            | 0.001   | 0.001  | 0.000     | 0.000   | 0.001   | 0.002   | 0.002   | 0                       | 0               | 0.00%        |
| G123    | TOT. MTHY HG        | ug/L       | 203         | 07MAY2007 - 11FEB2008 | 4            | 0.000   | 0.000  | <0.000022 | 0.000   | 0.000   | 0.000   | 0.000   | 1                       | 0               | 0.00%        |
| S9      | DO                  | mg/L       | 8           | 01MAY2007 - 29APR2008 | 53           | 2.299   | 0.943  | 0.710     | 1.470   | 2.160   | 2.980   | 4.990   | 0                       | 53              | 100.00%      |
| S9      | FLDCOND.            | UMHOS/CM   | 9           | 01MAY2007 - 29APR2008 | 53           | 786.642 | 50.835 | 631.000   | 780.000 | 805.000 | 819.000 | 835.000 | 0                       | 0               | 0.00%        |
| S9      | PH                  | UNITS      | 10          | 01MAY2007 - 29APR2008 | 53           | 7.323   | 0.135  | 7.000     | 7.200   | 7.300   | 7.400   | 7.700   | 0                       | 0               | 0.00%        |
| S9      | TURBIDITY           | NTU        | 12          | 08MAY2007 - 08APR2008 | 13           | 3.269   | 0.902  | 2.000     | 2.700   | 3.100   | 3.700   | 5.400   | 0                       | 0               | 0.00%        |
| S9      | TSS                 | mg/L       | 16          | 08MAY2007 - 25SEP2007 | 6            | 3.167   | 0.408  | <3        | <3      | <3      | 4.000   | 5       | 0                       | 0               | 0.00%        |
| S9      | COLOR               | UNITS      | 13          | 08MAY2007 - 25SEP2007 | 6            | 45.667  | 4.803  | 40.000    | 44.000  | 44.000  | 48.000  | 54.000  | 0                       | 0               | 0.00%        |
| S9      | HARDNESS            | mg/L CaCO3 | 35          | 05JUL2007 - 08APR2008 | 4            | 266.900 | 18.107 | 240.000   | 257.050 | 274.100 | 276.750 | 279.400 | 0                       | 0               | 0.00%        |
| S9      | TEMP                | CENT       | 7           | 01MAY2007 - 29APR2008 | 52           | 25.548  | 2.267  | 20.800    | 23.600  | 25.300  | 27.350  | 30.800  | 0                       | 0               | 0.00%        |
| S9      | ALKALINITY          | mg/L       | 67          | 08MAY2007 - 25SEP2007 | 6            | 260.500 | 21.192 | 224.000   | 247.000 | 268.500 | 277.000 | 278.000 | 0                       | 0               | 0.00%        |
| S9      | TN                  | mg N/L     | 80          | 08MAY2007 - 08APR2008 | 13           | 1.653   | 0.137  | 1.426     | 1.584   | 1.669   | 1.771   | 1.856   | 0                       | 0               | 0.00%        |
| S9      | NOX                 | mg N/L     | 18,180      | 08MAY2007 - 08APR2008 | 12           | 0.057   | 0.053  | 0.008     | 0.013   | 0.033   | 0.109   | 0.143   | 0                       | 0               | 0.00%        |
| S9      | NO2                 | mg N/L     | 19          | 08MAY2007 - 25SEP2007 | 6            | 0.005   | 0.004  | 0.002     | 0.003   | 0.003   | 0.009   | 0.012   | 0                       | 0               | 0.00%        |
| S9      | NO3                 | mg N/L     | 78          | 08MAY2007 - 25SEP2007 | 5            | 0.073   | 0.055  | 0.011     | 0.023   | 0.077   | 0.127   | 0.127   | 0                       | 0               | 0.00%        |
| S9      | NH4                 | mg N/L     | 20          | 08MAY2007 - 25SEP2007 | 6            | 0.378   | 0.117  | 0.264     | 0.297   | 0.358   | 0.403   | 0.590   | 0                       | 0               | 0.00%        |
| S9      | UN-IONIZED AMMONIA  | mg/L       | NONE        | 01MAY2007 - 29APR2008 | 6            | 0.006   | 0.002  | 0.003     | 0.005   | 0.006   | 0.007   | 0.011   | 0                       | 0               | 0.00%        |
| S9      | NNH4                | mg N/L     | 92          | 08MAY2007 - 25SEP2007 | 5            | 0.468   | 0.118  | 0.290     | 0.433   | 0.479   | 0.532   | 0.604   | 0                       | 0               | 0.00%        |
| S9      | ORGN                | mg N/L     | 79          | 08MAY2007 - 25SEP2007 | 6            | 1.127   | 0.052  | 1.030     | 1.114   | 1.137   | 1.170   | 1.173   | 0                       | 0               | 0.00%        |
| S9      | TKN                 | mg N/L     | 21          | 08MAY2007 - 08APR2008 | 13           | 1.600   | 0.158  | 1.400     | 1.470   | 1.540   | 1.760   | 1.830   | 0                       | 0               | 0.00%        |
| S9      | OPO4                | mg P/L     | 23          | 08MAY2007 - 08APR2008 | 12           | 0.002   | 0.000  | <0.002    | <0.002  | <0.002  | 0.000   | 0.002   | 9                       | 0               | 0.00%        |
| S9      | TP                  | mg P/L     | 25          | 01MAY2007 - 29APR2008 | 53           | 0.013   | 0.006  | 0.007     | 0.010   | 0.011   | 0.015   | 0.042   | 0                       | 0               | 0.00%        |
| S9      | DIS. CA             | mg/L       | 30          | 05JUL2007 - 08APR2008 | 4            | 81.525  | 5.837  | 72.800    | 78.300  | 84.150  | 84.750  | 85.000  | 0                       | 0               | 0.00%        |
| S9      | DIS. K              | mg/L       | 29          | 05JUL2007 - 08APR2008 | 4            | 3.700   | 0.216  | 3.500     | 3.550   | 3.650   | 3.850   | 4.000   | 0                       | 0               | 0.00%        |
| S9      | DIS. MG             | mg/L       | 31          | 05JUL2007 - 08APR2008 | 4            | 15.375  | 0.885  | 14.200    | 14.750  | 15.500  | 16.000  | 16.300  | 0                       | 0               | 0.00%        |
| S9      | DIS. NA             | mg/L       | 28          | 05JUL2007 - 08APR2008 | 4            | 54.800  | 3.180  | 51.100    | 52.600  | 54.650  | 57.000  | 58.800  | 0                       | 0               | 0.00%        |
| S9      | TOT. CL             | mg/L       | 32          | 08MAY2007 - 08APR2008 | 9            | 79.633  | 9.280  | 64.200    | 78.100  | 82.900  | 84.500  | 89.400  | 0                       | 0               | 0.00%        |
| S9      | TOT. SO4            | mg/L       | 33          | 05JUL2007 - 08APR2008 | 4            | 2.800   | 0.963  | 1.800     | 2.150   | 2.650   | 3.450   | 4.100   | 0                       | 0               | 0.00%        |
| S9      | DIS. SILICA         | mg/L       | 27          | 05JUL2007 - 05JUL2007 | 1            | 11.180  |        | 11.180    | 11.180  | 11.180  | 11.180  | 11.180  | 0                       | 0               | 0.00%        |
| S9      | TOT. FE             | mg/L       | 177         | 05JUL2007 - 05JUL2007 | 1            | 0.469   |        | 0.469     | 0.469   | 0.469   | 0.469   | 0.469   | 0                       | 0               | 0.00%        |
| S9      | TOT. ULTRA TRACE HG | ug/L       | 207         | 07MAY2007 - 11FEB2008 | 3            | 0.001   | 0.001  | 0.000     | 0.000   | 0.001   | 0.002   | 0.002   | 0                       | 0               | 0.00%        |
| S9      | TOT. MTHY HG        | ug/L       | 203         | 07MAY2007 - 11FEB2008 | 4            | 0.000   | 0.000  | 0.000     | 0.000   | 0.000   | 0.000   | 0.000   | 0                       | 0               | 0.00%        |
| S9Auto  | TN                  | mg N/L     | 80          | 12JUN2007 - 29APR2008 | 15           | 1.564   | 0.148  | 1.315     | 1.481   | 1.530   | 1.661   | 1.900   | 0                       | 0               | 0.00%        |
| S9Auto  | NOX                 | mg N/L     | 18,180      | 12JUN2007 - 15APR2008 | 14           | 0.106   | 0.043  | 0.031     | 0.075   | 0.103   | 0.143   | 0.172   | 0                       | 0               | 0.00%        |
| S9Auto  | TKN                 | mg N/L     | 21          | 12JUN2007 - 29APR2008 | 15           | 1.465   | 0.166  | 1.240     | 1.350   | 1.420   | 1.580   | 1.900   | 0                       | 0               | 0.00%        |
| S9Auto  | TP                  | mg P/L     | 25          | 12JUN2007 - 29APR2008 | 15           | 0.019   | 0.005  | 0.010     | 0.014   | 0.019   | 0.022   | 0.026   | 0                       | 0               | 0.00%        |
| S9A     | DO                  | mg/L       | 8           | 01MAY2007 - 29APR2008 | 52           | 2.278   | 0.995  | 0.580     | 1.650   | 2.180   | 2.770   | 5.160   | 0                       | 51              | 98.08%       |
| S9A     | FLDCOND.            | UMHOS/CM   | 9           | 01MAY2007 - 29APR2008 | 52           | 787.385 | 48.785 | 637.000   | 772.500 | 807.500 | 821.000 | 836.000 | 0                       | 0               | 0.00%        |
| S9A     | PH                  | UNITS      | 10          | 01MAY2007 - 29APR2008 | 52           | 7.310   | 0.116  | 7.000     | 7.200   | 7.300   | 7.400   | 7.600   | 0                       | 0               | 0.00%        |

Table 3. Continued.

| STATION | TEST NAME            | UNITS                  | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN    | STD    | MIN     | Q25     | MEDIAN  | Q75     | MAX     | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|---------|----------------------|------------------------|-------------|-----------------------|--------------|---------|--------|---------|---------|---------|---------|---------|-------------------------|-----------------|--------------|
| S9A     | TURBIDITY            | NTU                    | 12          | 08MAY2007 - 08APR2008 | 21           | 3.010   | 0.554  | 2.300   | 2.600   | 2.900   | 3.300   | 4.100   | 0                       | 0               | 0.00%        |
| S9A     | HARDNESS             | mg/L CaCO <sub>3</sub> | 35          | 23OCT2007 - 08APR2008 | 3            | 273.167 | 8.515  | 263.700 | 263.700 | 275.600 | 280.200 | 280.200 | 0                       | 0               | 0.00%        |
| S9A     | TEMP                 | CENT                   | 7           | 01MAY2007 - 29APR2008 | 52           | 25.512  | 2.252  | 21.000  | 23.700  | 25.450  | 27.250  | 30.600  | 0                       | 0               | 0.00%        |
| S9A     | ALKALINITY           | mg/L                   | 67          | 05JUL2007 - 05JUL2007 | 1            | 244.000 |        | 244.000 | 244.000 | 244.000 | 244.000 | 244.000 | 0                       | 0               | 0.00%        |
| S9A     | TN                   | mg N/L                 | 80          | 08MAY2007 - 08APR2008 | 21           | 1.632   | 0.130  | 1.351   | 1.570   | 1.612   | 1.744   | 1.877   | 0                       | 0               | 0.00%        |
| S9A     | NOX                  | mg N/L                 | 18,180      | 08MAY2007 - 08APR2008 | 17           | 0.052   | 0.052  | 0.009   | 0.022   | 0.032   | 0.060   | 0.200   | 0                       | 0               | 0.00%        |
| S9A     | NO <sub>2</sub>      | mg N/L                 | 19          | 08MAY2007 - 11SEP2007 | 8            | 0.005   | 0.004  | 0.003   | 0.003   | 0.003   | 0.006   | 0.013   | 0                       | 0               | 0.00%        |
| S9A     | NO <sub>3</sub>      | mg N/L                 | 78          | 08MAY2007 - 28AUG2007 | 7            | 0.065   | 0.067  | 0.008   | 0.014   | 0.028   | 0.098   | 0.192   | 0                       | 0               | 0.00%        |
| S9A     | NH <sub>4</sub>      | mg N/L                 | 20          | 08MAY2007 - 11SEP2007 | 8            | 0.389   | 0.117  | 0.258   | 0.337   | 0.373   | 0.390   | 0.656   | 0                       | 0               | 0.00%        |
| S9A     | UNIONIZED AMMONIA    | mg/L                   | NONE        | 01MAY2007 - 29APR2008 | 8            | 0.007   | 0.002  | 0.003   | 0.006   | 0.007   | 0.009   | 0.009   | 0                       | 0               | 0.00%        |
| S9A     | NNH <sub>4</sub>     | mg N/L                 | 92          | 08MAY2007 - 28AUG2007 | 7            | 0.461   | 0.122  | 0.283   | 0.382   | 0.469   | 0.523   | 0.673   | 0                       | 0               | 0.00%        |
| S9A     | ORGN                 | mg N/L                 | 79          | 08MAY2007 - 11SEP2007 | 8            | 1.107   | 0.096  | 0.882   | 1.106   | 1.130   | 1.150   | 1.204   | 0                       | 0               | 0.00%        |
| S9A     | TKN                  | mg N/L                 | 21          | 08MAY2007 - 08APR2008 | 21           | 1.590   | 0.150  | 1.250   | 1.490   | 1.570   | 1.720   | 1.860   | 0                       | 0               | 0.00%        |
| S9A     | OPO <sub>4</sub>     | mg P/L                 | 23          | 08MAY2007 - 08APR2008 | 20           | 0.002   | 0.001  | <0.002  | <0.002  | <0.002  | 0.002   | 0.006   | 14                      | 0               | 0.00%        |
| S9A     | TP                   | mg P/L                 | 25          | 01MAY2007 - 29APR2008 | 52           | 0.012   | 0.005  | 0.007   | 0.010   | 0.010   | 0.013   | 0.035   | 0                       | 0               | 0.00%        |
| S9A     | DIS. CA              | mg/L                   | 30          | 23OCT2007 - 08APR2008 | 3            | 83.467  | 2.836  | 80.200  | 80.200  | 84.900  | 85.300  | 85.300  | 0                       | 0               | 0.00%        |
| S9A     | DIS. K               | mg/L                   | 29          | 23OCT2007 - 08APR2008 | 3            | 3.700   | 0.173  | 3.600   | 3.600   | 3.600   | 3.900   | 3.900   | 0                       | 0               | 0.00%        |
| S9A     | DIS. MG              | mg/L                   | 31          | 23OCT2007 - 08APR2008 | 3            | 15.733  | 0.493  | 15.400  | 15.400  | 15.500  | 16.300  | 16.300  | 0                       | 0               | 0.00%        |
| S9A     | DIS. NA              | mg/L                   | 28          | 23OCT2007 - 08APR2008 | 3            | 55.700  | 3.460  | 52.400  | 52.400  | 55.400  | 59.300  | 59.300  | 0                       | 0               | 0.00%        |
| S9A     | TOT. CL              | mg/L                   | 32          | 05JUL2007 - 08APR2008 | 4            | 77.875  | 14.285 | 57.800  | 68.000  | 81.650  | 87.750  | 90.400  | 0                       | 0               | 0.00%        |
| S9A     | TOT. SO <sub>4</sub> | mg/L                   | 33          | 09OCT2007 - 08APR2008 | 3            | 2.033   | 0.839  | 1.500   | 1.500   | 1.600   | 3.000   | 3.000   | 0                       | 0               | 0.00%        |
| S9AAuto | TP                   | mg P/L                 | 25          | 12JUN2007 - 29APR2008 | 47           | 0.014   | 0.005  | 0.008   | 0.011   | 0.012   | 0.016   | 0.038   | 0                       | 0               | 0.00%        |
| S18C    | DO                   | mg/L                   | 8           | 14MAY2007 - 28APR2008 | 49           | 6.580   | 2.364  | 2.350   | 4.610   | 6.750   | 8.070   | 12.200  | 0                       | 16              | 32.65%       |
| S18C    | FLDCOND.             | UMHOS/CM               | 9           | 07MAY2007 - 28APR2008 | 50           | 549.360 | 63.730 | 500.000 | 521.000 | 527.500 | 548.000 | 814.000 | 0                       | 0               | 0.00%        |
| S18C    | PH                   | UNITS                  | 10          | 07MAY2007 - 28APR2008 | 51           | 7.686   | 0.368  | 7.100   | 7.300   | 7.800   | 8.000   | 8.200   | 0                       | 0               | 0.00%        |
| S18C    | TURBIDITY            | NTU                    | 12          | 14MAY2007 - 07APR2008 | 12           | 1.325   | 0.586  | 0.600   | 1.000   | 1.200   | 1.400   | 2.900   | 0                       | 0               | 0.00%        |
| S18C    | TSS                  | mg/L                   | 16          | 14MAY2007 - 07APR2008 | 25           | 3.000   | 0.000  | <3      | <3      | <3      | <3      | 3.000   | 24                      | 0               | 0.00%        |
| S18C    | COLOR                | UNITS                  | 13          | 14MAY2007 - 17SEP2007 | 9            | 11.111  | 0.928  | 10.000  | 11.000  | 11.000  | 11.000  | 13.000  | 0                       | 0               | 0.00%        |
| S18C    | HARDNESS             | mg/L CaCO <sub>3</sub> | 35          | 14MAY2007 - 07APR2008 | 25           | 207.380 | 44.920 | <1      | 208.900 | 211.500 | 216.200 | 247.800 | 1                       | 0               | 0.00%        |
| S18C    | TEMP                 | CENT                   | 7           | 07MAY2007 - 28APR2008 | 51           | 25.727  | 2.395  | 20.500  | 23.600  | 26.000  | 27.700  | 29.900  | 0                       | 0               | 0.00%        |
| S18C    | ALKALINITY           | mg/L                   | 67          | 14MAY2007 - 17SEP2007 | 9            | 199.333 | 6.442  | 185.000 | 199.000 | 201.000 | 204.000 | 206.000 | 0                       | 0               | 0.00%        |
| S18C    | TN                   | mg N/L                 | 80          | 14MAY2007 - 07APR2008 | 25           | 0.724   | 0.192  | 0.556   | 0.607   | 0.632   | 0.766   | 1.410   | 0                       | 0               | 0.00%        |
| S18C    | NOX                  | mg N/L                 | 18,180      | 14MAY2007 - 07APR2008 | 25           | 0.178   | 0.061  | 0.006   | 0.149   | 0.177   | 0.205   | 0.286   | 0                       | 0               | 0.00%        |
| S18C    | NO <sub>2</sub>      | mg N/L                 | 19          | 14MAY2007 - 17SEP2007 | 9            | 0.009   | 0.005  | <0.002  | 0.006   | 0.009   | 0.010   | 0.016   | 1                       | 0               | 0.00%        |
| S18C    | NO <sub>3</sub>      | mg N/L                 | 78          | 14MAY2007 - 17SEP2007 | 9            | 0.163   | 0.084  | 0.006   | 0.123   | 0.145   | 0.234   | 0.264   | 0                       | 0               | 0.00%        |
| S18C    | NH <sub>4</sub>      | mg N/L                 | 20          | 14MAY2007 - 17SEP2007 | 9            | 0.050   | 0.030  | 0.005   | 0.035   | 0.053   | 0.064   | 0.109   | 0                       | 0               | 0.00%        |
| S18C    | UNIONIZED AMMONIA    | mg/L                   | NONE        | 07MAY2007 - 28APR2008 | 9            | 0.001   | 0.000  | 0.000   | 0.001   | 0.001   | 0.001   | 0.002   | 0                       | 0               | 0.00%        |
| S18C    | NNH <sub>4</sub>     | mg N/L                 | 92          | 14MAY2007 - 17SEP2007 | 9            | 0.221   | 0.110  | 0.011   | 0.174   | 0.199   | 0.329   | 0.349   | 0                       | 0               | 0.00%        |
| S18C    | ORGN                 | mg N/L                 | 79          | 14MAY2007 - 17SEP2007 | 9            | 0.508   | 0.213  | 0.367   | 0.416   | 0.441   | 0.453   | 1.061   | 0                       | 0               | 0.00%        |
| S18C    | TKN                  | mg N/L                 | 21          | 14MAY2007 - 07APR2008 | 25           | 0.546   | 0.176  | 0.410   | 0.450   | 0.470   | 0.550   | 1.170   | 0                       | 0               | 0.00%        |
| S18C    | OPO <sub>4</sub>     | mg P/L                 | 23          | 14MAY2007 - 07APR2008 | 25           | 0.002   | 0.000  | <0.002  | <0.002  | <0.002  | <0.002  | 0.002   | 22                      | 0               | 0.00%        |
| S18C    | ALKALINE PHOS        | nM/minml               | 168         | 14MAY2007 - 20AUG2007 | 4            | 8.000   | 1.414  | 7.000   | 7.000   | 7.500   | 9.000   | 10.000  | 0                       | 0               | 0.00%        |

Table 3. Continued.

| STATION  | TEST NAME           | UNITS      | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN    | STD     | MIN     | Q25     | MEDIAN  | Q75     | MAX      | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|----------|---------------------|------------|-------------|-----------------------|--------------|---------|---------|---------|---------|---------|---------|----------|-------------------------|-----------------|--------------|
| S18C     | TP                  | mg P/L     | 25          | 07MAY2007 - 28APR2008 | 51           | 0.005   | 0.003   | 0.003   | 0.004   | 0.004   | 0.005   | 0.024    | 0                       | 0               | 0.00%        |
| S18C     | DIS. CA             | mg/L       | 30          | 14MAY2007 - 07APR2008 | 25           | 73.120  | 15.658  | <0.2    | 74.100  | 75.500  | 77.400  | 84.600   | 1                       | 0               | 0.00%        |
| S18C     | DIS. K              | mg/L       | 29          | 14MAY2007 - 07APR2008 | 25           | 4.248   | 1.144   | <0.1    | 3.900   | 4.500   | 5.000   | 5.500    | 1                       | 0               | 0.00%        |
| S18C     | DIS. MG             | mg/L       | 31          | 14MAY2007 - 07APR2008 | 25           | 6.012   | 1.824   | <0.1    | 5.500   | 5.600   | 5.800   | 9.700    | 1                       | 0               | 0.00%        |
| S18C     | DIS. NA             | mg/L       | 28          | 14MAY2007 - 07APR2008 | 25           | 24.512  | 6.472   | <0.2    | 22.800  | 23.800  | 25.800  | 38.700   | 1                       | 0               | 0.00%        |
| S18C     | TOT. CL             | mg/L       | 32          | 14MAY2007 - 07APR2008 | 25           | 39.504  | 5.920   | 34.200  | 36.300  | 37.700  | 39.300  | 62.100   | 0                       | 0               | 0.00%        |
| S18C     | TOT. SO4            | mg/L       | 33          | 01OCT2007 - 07APR2008 | 3            | 9.000   | 3.079   | 6.400   | 6.400   | 8.200   | 12.400  | 12.400   | 0                       | 0               | 0.00%        |
| S18C     | TOT. FE             | mg/L       | 177         | 09JUL2007 - 09JUL2007 | 1            | 0.206   |         | 0.206   | 0.206   | 0.206   | 0.206   | 0.206    | 0                       | 0               | 0.00%        |
| S18C     | TOT. ULTRA TRACE HG | ug/L       | 207         | 17JUL2007 - 15APR2008 | 6            | 0.001   | 0.000   | <0.0001 | 0.000   | 0.001   | 0.001   | 0.001    | 1                       | 0               | 0.00%        |
| S18C     | TOT. MTHY HG        | ug/L       | 203         | 17JUL2007 - 15APR2008 | 6            | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   | 0.000    | 0                       | 0               | 0.00%        |
| S18C     | CAROTENOID          | mg/m3      | 63          | 14MAY2007 - 17SEP2007 | 7            | 2.586   | 2.099   | <1      | <1      | 1.900   | 3.400   | 6.900    | 2                       | 0               | 0.00%        |
| S18C     | CHLA                | mg/m3      | 61          | 14MAY2007 - 17SEP2007 | 9            | 2.444   | 1.590   | <1      | 2.000   | 2.000   | 2.000   | 6.000    | 1                       | 0               | 0.00%        |
| S18C     | CHLA2               | mg/m3      | 112         | 14MAY2007 - 17SEP2007 | 9            | 2.333   | 1.581   | <1      | 1.000   | 2.000   | 4.000   | 5.000    | 1                       | 0               | 0.00%        |
| S18C     | CHLB                | mg/m3      | 62          | 14MAY2007 - 17SEP2007 | 9            | 1.333   | 1.000   | <1      | <1      | 1.000   | 4.000   | 4.000    | 5                       | 0               | 0.00%        |
| S18C     | CHLC                | mg/m3      | 113         | 14MAY2007 - 17SEP2007 | 7            | 2.429   | 1.813   | <1      | <1      | 2.000   | 5.000   | 5.000    | 2                       | 0               | 0.00%        |
| S18C     | PHEOPHYTIN A        | mg/m3      | 64          | 14MAY2007 - 17SEP2007 | 9            | 1.556   | 1.130   | <1      | <1      | <1      | <1      | 4.000    | 7                       | 0               | 0.00%        |
|          |                     |            |             |                       |              |         |         |         |         |         |         |          |                         |                 |              |
| S18CAuto | TN                  | mg N/L     | 80          | 01OCT2007 - 14APR2008 | 13           | 0.742   | 0.142   | 0.523   | 0.649   | 0.717   | 0.839   | 1.028    | 0                       | 0               | 0.00%        |
| S18CAuto | NOX                 | mg N/L     | 18,180      | 01OCT2007 - 14APR2008 | 13           | 0.188   | 0.075   | 0.113   | 0.139   | 0.171   | 0.204   | 0.378    | 0                       | 0               | 0.00%        |
| S18CAuto | TKN                 | mg N/L     | 21          | 01OCT2007 - 14APR2008 | 13           | 0.553   | 0.116   | 0.390   | 0.510   | 0.540   | 0.600   | 0.780    | 0                       | 0               | 0.00%        |
| S18CAuto | TP                  | mg P/L     | 25          | 21MAY2007 - 14APR2008 | 23           | 0.009   | 0.003   | 0.005   | 0.006   | 0.008   | 0.010   | 0.020    | 0                       | 0               | 0.00%        |
|          |                     |            |             |                       |              |         |         |         |         |         |         |          |                         |                 |              |
| S140     | DO                  | mg/L       | 8           | 01MAY2007 - 29APR2008 | 53           | 5.397   | 2.018   | 2.160   | 3.510   | 5.520   | 6.770   | 9.370    | 0                       | 22              | 41.51%       |
| S140     | FLDCOND.            | UMHOS/CM   | 9           | 01MAY2007 - 29APR2008 | 53           | 690.566 | 188.465 | 415.000 | 585.000 | 666.000 | 753.000 | 1172.000 | 0                       | 0               | 0.00%        |
| S140     | PH                  | UNITS      | 10          | 01MAY2007 - 29APR2008 | 53           | 7.640   | 0.328   | 7.000   | 7.400   | 7.600   | 7.900   | 8.300    | 0                       | 0               | 0.00%        |
| S140     | TURBIDITY           | NTU        | 12          | 08MAY2007 - 08APR2008 | 18           | 3.789   | 1.587   | 1.200   | 2.800   | 3.650   | 4.400   | 7.200    | 0                       | 0               | 0.00%        |
| S140     | TSS                 | mg/L       | 16          | 08MAY2007 - 25SEP2007 | 10           | 4.300   | 1.418   | <3      | <3      | 4.000   | 5.000   | 7.000    | 4                       | 0               | 0.00%        |
| S140     | COLOR               | UNITS      | 13          | 08MAY2007 - 25SEP2007 | 10           | 78.600  | 21.035  | 38.000  | 81.000  | 87.500  | 91.000  | 94.000   | 0                       | 0               | 0.00%        |
| S140     | HARDNESS            | mg/L CaCO3 | 35          | 05JUL2007 - 08APR2008 | 4            | 219.100 | 36.596  | 167.900 | 193.300 | 228.950 | 244.900 | 250.600  | 0                       | 0               | 0.00%        |
| S140     | TEMP                | CENT       | 7           | 01MAY2007 - 29APR2008 | 53           | 25.174  | 3.356   | 18.500  | 22.500  | 25.500  | 28.200  | 30.200   | 0                       | 0               | 0.00%        |
| S140     | ALKALINITY          | mg/L       | 67          | 08MAY2007 - 25SEP2007 | 10           | 195.400 | 27.093  | 145.000 | 170.000 | 198.500 | 220.000 | 230.000  | 0                       | 0               | 0.00%        |
| S140     | TN                  | mg N/L     | 80          | 08MAY2007 - 08APR2008 | 18           | 1.367   | 0.121   | 1.131   | 1.289   | 1.379   | 1.476   | 1.536    | 0                       | 0               | 0.00%        |
| S140     | NOX                 | mg N/L     | 18,180      | 08MAY2007 - 08APR2008 | 18           | 0.059   | 0.052   | <0.005  | 0.016   | 0.049   | 0.084   | 0.201    | 2                       | 0               | 0.00%        |
| S140     | NO2                 | mg N/L     | 19          | 05JUN2007 - 25SEP2007 | 9            | 0.004   | 0.001   | <0.002  | 0.003   | 0.004   | 0.005   | 0.006    | 2                       | 0               | 0.00%        |
| S140     | NO3                 | mg N/L     | 78          | 05JUN2007 - 25SEP2007 | 9            | 0.052   | 0.063   | <0.002  | 0.012   | 0.032   | 0.056   | 0.196    | 1                       | 0               | 0.00%        |
| S140     | NH4                 | mg N/L     | 20          | 08MAY2007 - 25SEP2007 | 10           | 0.034   | 0.024   | <0.005  | 0.016   | 0.030   | 0.058   | 0.076    | 2                       | 0               | 0.00%        |
| S140     | UNIONIZED AMMONIA   | mg/L       | NONE        | 01MAY2007 - 29APR2008 | 10           | 0.001   | 0.001   | 0.000   | 0.001   | 0.001   | 0.001   | 0.002    | 0                       | 0               | 0.00%        |
| S140     | NNH4                | mg N/L     | 92          | 08MAY2007 - 25SEP2007 | 10           | 0.084   | 0.076   | <0.005  | 0.026   | 0.058   | 0.124   | 0.232    | 1                       | 0               | 0.00%        |
| S140     | ORGN                | mg N/L     | 79          | 08MAY2007 - 25SEP2007 | 10           | 1.296   | 0.125   | 1.007   | 1.250   | 1.296   | 1.410   | 1.428    | 0                       | 0               | 0.00%        |
| S140     | TKN                 | mg N/L     | 21          | 08MAY2007 - 08APR2008 | 18           | 1.309   | 0.111   | 1.070   | 1.250   | 1.320   | 1.410   | 1.460    | 0                       | 0               | 0.00%        |
| S140     | OPO4                | mg P/L     | 23          | 08MAY2007 - 08APR2008 | 18           | 0.006   | 0.005   | <0.002  | 0.002   | 0.005   | 0.008   | 0.020    | 2                       | 0               | 0.00%        |
| S140     | TP                  | mg P/L     | 25          | 01MAY2007 - 29APR2008 | 52           | 0.032   | 0.009   | 0.019   | 0.024   | 0.033   | 0.038   | 0.052    | 0                       | 0               | 0.00%        |
| S140     | DIS. CA             | mg/L       | 30          | 05JUL2007 - 08APR2008 | 4            | 76.975  | 12.411  | 59.800  | 68.100  | 80.050  | 85.850  | 88.000   | 0                       | 0               | 0.00%        |
| S140     | DIS. K              | mg/L       | 29          | 05JUL2007 - 08APR2008 | 4            | 5.200   | 1.476   | 3.300   | 4.050   | 5.450   | 6.350   | 6.600    | 0                       | 0               | 0.00%        |

Table 3. Continued.

| STATION  | TEST NAME           | UNITS      | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN    | STD    | MIN     | Q25     | MEDIAN  | Q75     | MAX     | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|----------|---------------------|------------|-------------|-----------------------|--------------|---------|--------|---------|---------|---------|---------|---------|-------------------------|-----------------|--------------|
| S140     | DIS. MG             | mg/L       | 31          | 05JUL2007 - 08APR2008 | 4            | 6.550   | 1.401  | 4.500   | 5.650   | 7.100   | 7.450   | 7.500   | 0                       | 0               | 0.00%        |
| S140     | DIS. NA             | mg/L       | 28          | 05JUL2007 - 08APR2008 | 4            | 47.075  | 15.255 | 27.600  | 34.950  | 50.250  | 59.200  | 60.200  | 0                       | 0               | 0.00%        |
| S140     | TOT. CL             | mg/L       | 32          | 08MAY2007 - 08APR2008 | 13           | 80.485  | 47.959 | 32.200  | 53.500  | 65.700  | 86.400  | 197.000 | 0                       | 0               | 0.00%        |
| S140     | TOT. SO4            | mg/L       | 33          | 05JUL2007 - 08APR2008 | 4            | 15.625  | 7.152  | 6.600   | 11.200  | 15.900  | 20.050  | 24.100  | 0                       | 0               | 0.00%        |
| S140     | DIS. SILICA         | mg/L       | 27          | 05JUL2007 - 05JUL2007 | 1            | 8.560   |        | 8.560   | 8.560   | 8.560   | 8.560   | 8.560   | 0                       | 0               | 0.00%        |
| S140     | TOT. FE             | mg/L       | 177         | 05JUL2007 - 05JUL2007 | 1            | 0.085   |        | 0.085   | 0.085   | 0.085   | 0.085   | 0.085   | 0                       | 0               | 0.00%        |
| S140     | TOT. ULTRA TRACE HG | ug/L       | 207         | 08MAY2007 - 12FEB2008 | 3            | 0.002   | 0.002  | 0.001   | 0.001   | 0.001   | 0.004   | 0.004   | 0                       | 0               | 0.00%        |
| S140     | TOT. MTHY HG        | ug/L       | 203         | 08MAY2007 - 12FEB2008 | 4            | 0.000   | 0.000  | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   | 0                       | 0               | 0.00%        |
|          |                     |            |             |                       |              |         |        |         |         |         |         |         |                         |                 |              |
| S140Auto | TP                  | mg P/L     | 25          | 12JUN2007 - 29APR2008 | 36           | 0.039   | 0.014  | 0.023   | 0.032   | 0.035   | 0.044   | 0.088   | 0                       | 0               | 0.00%        |
|          |                     |            |             |                       |              |         |        |         |         |         |         |         |                         |                 |              |
| S190     | DO                  | mg/L       | 8           | 03MAY2007 - 30APR2008 | 53           | 6.835   | 1.983  | 2.390   | 5.190   | 7.360   | 8.340   | 10.100  | 0                       | 13              | 24.53%       |
| S190     | FLDCOND.            | UMHOS/CM   | 9           | 03MAY2007 - 30APR2008 | 53           | 517.055 | 49.629 | 410.000 | 497.000 | 529.000 | 545.000 | 652.000 | 0                       | 0               | 0.00%        |
| S190     | PH                  | UNITS      | 10          | 03MAY2007 - 30APR2008 | 52           | 7.604   | 0.384  | 7.000   | 7.300   | 7.600   | 7.800   | 8.700   | 0                       | 1               | 1.92%        |
| S190     | TURBIDITY           | NTU        | 12          | 10MAY2007 - 08APR2008 | 14           | 1.429   | 0.687  | 0.600   | 1.000   | 1.200   | 1.800   | 3.300   | 0                       | 0               | 0.00%        |
| S190     | TSS                 | mg/L       | 16          | 10MAY2007 - 20JUN2007 | 2            | 3.500   | 0.707  | <3      | <3      | 0.500   | 4.000   | 4.000   | 1                       | 0               | 0.00%        |
| S190     | COLOR               | UNITS      | 13          | 10MAY2007 - 20JUN2007 | 2            | 38.500  | 2.121  | 37.000  | 37.000  | 38.500  | 40.000  | 40.000  | 0                       | 0               | 0.00%        |
| S190     | HARDNESS            | mg/L CaCO3 | 35          | 20JUN2007 - 13MAR2008 | 4            | 201.775 | 38.773 | 147.000 | 174.300 | 215.350 | 229.250 | 229.400 | 0                       | 0               | 0.00%        |
| S190     | TEMP                | CENT       | 7           | 03MAY2007 - 30APR2008 | 53           | 26.306  | 3.962  | 17.600  | 23.200  | 27.000  | 29.700  | 34.600  | 0                       | 0               | 0.00%        |
| S190     | ALKALINITY          | mg/L       | 67          | 10MAY2007 - 20JUN2007 | 2            | 131.000 | 12.728 | 122.000 | 122.000 | 131.000 | 140.000 | 140.000 | 0                       | 0               | 0.00%        |
| S190     | TN                  | mg N/L     | 80          | 10MAY2007 - 08APR2008 | 15           | 1.081   | 0.108  | 0.911   | 1.012   | 1.030   | 1.185   | 1.312   | 0                       | 0               | 0.00%        |
| S190     | NOX                 | mg N/L     | 18,180      | 10MAY2007 - 08APR2008 | 13           | 0.021   | 0.018  | 0.002   | 0.006   | 0.018   | 0.030   | 0.061   | 0                       | 0               | 0.00%        |
| S190     | NO2                 | mg N/L     | 19          | 10MAY2007 - 03JAN2008 | 11           | 0.003   | 0.001  | <0.002  | 0.002   | 0.003   | 0.004   | 0.005   | 1                       | 0               | 0.00%        |
| S190     | NO3                 | mg N/L     | 78          | 10MAY2007 - 03JAN2008 | 11           | 0.019   | 0.018  | <0.004  | <0.004  | 0.013   | 0.031   | 0.058   | 3                       | 0               | 0.00%        |
| S190     | NH4                 | mg N/L     | 20          | 10MAY2007 - 03JAN2008 | 11           | 0.017   | 0.014  | <0.005  | 0.008   | 0.010   | 0.020   | 0.048   | 1                       | 0               | 0.00%        |
| S190     | UNIONIZED AMMONIA   | mg/L       | NONE        | 03MAY2007 - 30APR2008 | 11           | 0.000   | 0.000  | 0.000   | 0.000   | 0.000   | 0.001   | 0.001   | 0                       | 0               | 0.00%        |
| S190     | NNH4                | mg N/L     | 92          | 10MAY2007 - 03JAN2008 | 11           | 0.038   | 0.031  | 0.003   | 0.012   | 0.026   | 0.074   | 0.090   | 0                       | 0               | 0.00%        |
| S190     | ORGN                | mg N/L     | 79          | 10MAY2007 - 03JAN2008 | 11           | 1.034   | 0.127  | 0.880   | 0.942   | 1.004   | 1.162   | 1.300   | 0                       | 0               | 0.00%        |
| S190     | TKN                 | mg N/L     | 21          | 10MAY2007 - 08APR2008 | 15           | 1.063   | 0.113  | 0.900   | 0.990   | 1.020   | 1.170   | 1.310   | 0                       | 0               | 0.00%        |
| S190     | OPO4                | mg P/L     | 23          | 10MAY2007 - 13MAR2008 | 11           | 0.005   | 0.005  | <0.002  | <0.002  | 0.003   | 0.006   | 0.016   | 5                       | 0               | 0.00%        |
| S190     | TP                  | mg P/L     | 25          | 03MAY2007 - 30APR2008 | 53           | 0.030   | 0.009  | 0.019   | 0.023   | 0.028   | 0.032   | 0.059   | 0                       | 0               | 0.00%        |
| S190     | DIS. CA             | mg/L       | 30          | 20JUN2007 - 13MAR2008 | 4            | 68.375  | 16.699 | 45.300  | 56.100  | 73.500  | 80.650  | 81.200  | 0                       | 0               | 0.00%        |
| S190     | DIS. K              | mg/L       | 29          | 20JUN2007 - 13MAR2008 | 4            | 3.300   | 0.739  | 2.600   | 2.700   | 3.200   | 3.900   | 4.200   | 0                       | 0               | 0.00%        |
| S190     | DIS. MG             | mg/L       | 31          | 20JUN2007 - 13MAR2008 | 4            | 7.525   | 0.922  | 6.500   | 6.750   | 7.600   | 8.300   | 8.400   | 0                       | 0               | 0.00%        |
| S190     | DIS. NA             | mg/L       | 28          | 20JUN2007 - 13MAR2008 | 4            | 30.275  | 7.266  | 22.500  | 24.150  | 30.500  | 36.400  | 37.600  | 0                       | 0               | 0.00%        |
| S190     | TOT. CL             | mg/L       | 32          | 10MAY2007 - 08APR2008 | 14           | 41.871  | 10.489 | 27.800  | 32.000  | 42.750  | 53.300  | 56.500  | 0                       | 0               | 0.00%        |
| S190     | TOT. SO4            | mg/L       | 33          | 20JUN2007 - 13MAR2008 | 4            | 7.300   | 5.070  | <0.1    | 4.150   | 8.550   | 10.350  | 12.000  | 1                       | 0               | 0.00%        |
| S190     | DIS. SILICA         | mg/L       | 27          | 20JUN2007 - 20JUN2007 | 1            | 7.440   |        | 7.440   | 7.440   | 7.440   | 7.440   | 7.440   | 0                       | 0               | 0.00%        |
| S190     | TOT. FE             | mg/L       | 177         | 20JUN2007 - 20JUN2007 | 1            | 0.049   |        | 0.049   | 0.049   | 0.049   | 0.049   | 0.049   | 0                       | 0               | 0.00%        |
|          |                     |            |             |                       |              |         |        |         |         |         |         |         |                         |                 |              |
| S190Auto | TP                  | mg P/L     | 25          | 26JUL2007 - 16APR2008 | 17           | 0.081   | 0.076  | 0.035   | 0.049   | 0.061   | 0.086   | 0.368   | 0                       | 0               | 0.00%        |
|          |                     |            |             |                       |              |         |        |         |         |         |         |         |                         |                 |              |
| S38B     | TOT. ULTRA TRACE HG | ug/L       | 207         | 08MAY2007 - 12FEB2008 | 3            | 0.002   | 0.002  | 0.000   | 0.000   | 0.001   | 0.005   | 0.005   | 0                       | 0               | 0.00%        |
| S38B     | TOT. MTHY HG        | ug/L       | 203         | 08MAY2007 - 12FEB2008 | 4            | 0.000   | 0.000  | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   | 0                       | 0               | 0.00%        |

Table 3. Continued.

| STATION      | TEST NAME           | UNITS      | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN    | STD     | MIN     | Q25     | MEDIAN  | Q75     | MAX     | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|--------------|---------------------|------------|-------------|-----------------------|--------------|---------|---------|---------|---------|---------|---------|---------|-------------------------|-----------------|--------------|
| NSIDSP01     | DO                  | mg/L       | 8           | 04JUN2007 - 21APR2008 | 30           | 7.081   | 1.519   | 3.690   | 6.440   | 7.205   | 8.310   | 8.980   | 0                       | 4               | 13.33%       |
| NSIDSP01     | FLDCOND.            | UMHOS/CM   | 9           | 04JUN2007 - 21APR2008 | 30           | 497.400 | 71.661  | 353.000 | 452.000 | 493.000 | 556.000 | 608.000 | 0                       | 0               | 0.00%        |
| NSIDSP01     | PH                  | UNITS      | 10          | 04JUN2007 - 21APR2008 | 30           | 8.122   | 0.241   | 7.520   | 8.000   | 8.100   | 8.300   | 8.800   | 0                       | 1               | 3.33%        |
| NSIDSP01     | TURBIDITY           | NTU        | 12          | 05JUN2007 - 25SEP2007 | 3            | 2.817   | 1.905   | 0.890   | 0.890   | 2.860   | 4.700   | 4.700   | 0                       | 0               | 0.00%        |
| NSIDSP01     | TEMP                | CENT       | 7           | 04JUN2007 - 21APR2008 | 30           | 26.903  | 3.631   | 20.400  | 23.400  | 27.300  | 29.800  | 33.200  | 0                       | 0               | 0.00%        |
| NSIDSP01     | TP                  | mg P/L     | 25          | 04JUN2007 - 21APR2008 | 31           | 0.018   | 0.016   | <0.0053 | 0.014   | 0.015   | 0.017   | 0.104   | 1                       | 0               | 0.00%        |
| NSIDSP01Auto | TP                  | mg P/L     | 25          | 16JUL2007 - 21APR2008 | 5            | 0.020   | 0.007   | 0.015   | 0.017   | 0.017   | 0.018   | 0.032   | 0                       | 0               | 0.00%        |
| S12D         | DO                  | mg/L       | 8           | 15MAY2007 - 29APR2008 | 26           | 5.142   | 2.021   | 3.260   | 4.160   | 4.735   | 5.520   | 14.000  | 0                       | 15              | 57.69%       |
| S12D         | FLDCOND.            | UMHOS/CM   | 9           | 15MAY2007 - 29APR2008 | 26           | 606.115 | 189.705 | 258.000 | 408.000 | 679.000 | 765.000 | 835.000 | 0                       | 0               | 0.00%        |
| S12D         | PH                  | UNITS      | 10          | 15MAY2007 - 29APR2008 | 25           | 7.440   | 0.153   | 7.100   | 7.300   | 7.500   | 7.500   | 7.800   | 0                       | 0               | 0.00%        |
| S12D         | TURBIDITY           | NTU        | 12          | 15MAY2007 - 05SEP2007 | 6            | 2.017   | 0.930   | 1.100   | 1.300   | 1.850   | 2.300   | 3.700   | 0                       | 0               | 0.00%        |
| S12D         | TSS                 | mg/L       | 16          | 15MAY2007 - 05SEP2007 | 5            | 3.000   | 0.000   | <3      | <3      | <3      | 3.000   | 4       | 0                       | 0               | 0.00%        |
| S12D         | COLOR               | UNITS      | 13          | 15MAY2007 - 05SEP2007 | 6            | 32.667  | 3.670   | 27.000  | 30.000  | 33.500  | 36.000  | 36.000  | 0                       | 0               | 0.00%        |
| S12D         | HARDNESS            | mg/L CaCO3 | 35          | 15MAY2007 - 05SEP2007 | 6            | 135.267 | 20.549  | 104.200 | 125.700 | 134.150 | 150.900 | 162.500 | 0                       | 0               | 0.00%        |
| S12D         | TEMP                | CENT       | 7           | 15MAY2007 - 29APR2008 | 26           | 25.665  | 3.079   | 21.900  | 23.300  | 24.450  | 27.900  | 31.600  | 0                       | 0               | 0.00%        |
| S12D         | ALKALINITY          | mg/L       | 67          | 15MAY2007 - 05SEP2007 | 6            | 127.333 | 19.886  | 97.000  | 116.000 | 127.500 | 143.000 | 153.000 | 0                       | 0               | 0.00%        |
| S12D         | TN                  | mg N/L     | 80          | 15MAY2007 - 05SEP2007 | 6            | 1.104   | 0.172   | 0.899   | 0.919   | 1.130   | 1.210   | 1.335   | 0                       | 0               | 0.00%        |
| S12D         | NOX                 | mg N/L     | 18,180      | 15MAY2007 - 05SEP2007 | 5            | 0.039   | 0.028   | 0.009   | 0.019   | 0.029   | 0.065   | 0.071   | 0                       | 0               | 0.00%        |
| S12D         | NO2                 | mg N/L     | 19          | 15MAY2007 - 05SEP2007 | 6            | 0.004   | 0.001   | 0.002   | 0.003   | 0.005   | 0.005   | 0.005   | 0                       | 0               | 0.00%        |
| S12D         | NO3                 | mg N/L     | 78          | 15MAY2007 - 05SEP2007 | 5            | 0.034   | 0.027   | 0.007   | 0.014   | 0.025   | 0.060   | 0.066   | 0                       | 0               | 0.00%        |
| S12D         | NH4                 | mg N/L     | 20          | 15MAY2007 - 05SEP2007 | 6            | 0.049   | 0.046   | 0.012   | 0.020   | 0.035   | 0.060   | 0.135   | 0                       | 0               | 0.00%        |
| S12D         | UNIONIZED AMMONIA   | mg/L       | NONE        | 15MAY2007 - 29APR2008 | 6            | 0.001   | 0.001   | 0.000   | 0.000   | 0.001   | 0.001   | 0.002   | 0                       | 0               | 0.00%        |
| S12D         | NNH4                | mg N/L     | 92          | 15MAY2007 - 05SEP2007 | 5            | 0.093   | 0.071   | 0.021   | 0.039   | 0.089   | 0.116   | 0.200   | 0                       | 0               | 0.00%        |
| S12D         | ORGN                | mg N/L     | 79          | 15MAY2007 - 05SEP2007 | 6            | 1.022   | 0.129   | 0.878   | 0.880   | 1.028   | 1.135   | 1.186   | 0                       | 0               | 0.00%        |
| S12D         | TKN                 | mg N/L     | 21          | 15MAY2007 - 05SEP2007 | 6            | 1.072   | 0.157   | 0.890   | 0.900   | 1.080   | 1.210   | 1.270   | 0                       | 0               | 0.00%        |
| S12D         | OPO4                | mg P/L     | 23          | 15MAY2007 - 05SEP2007 | 6            | 0.002   | 0.000   | <0.002  | <0.002  | <0.002  | <0.002  | 0.002   | 5                       | 0               | 0.00%        |
| S12D         | ALKALINE PHOS       | nM/minml   | 168         | 15MAY2007 - 07AUG2007 | 4            | 11.500  | 4.509   | 5.000   | 8.500   | 13.000  | 14.500  | 15.000  | 0                       | 0               | 0.00%        |
| S12D         | TP                  | mg P/L     | 25          | 15MAY2007 - 29APR2008 | 25           | 0.012   | 0.003   | 0.009   | 0.010   | 0.012   | 0.013   | 0.020   | 0                       | 0               | 0.00%        |
| S12D         | DIS. CA             | mg/L       | 30          | 15MAY2007 - 05SEP2007 | 6            | 47.367  | 6.685   | 37.300  | 44.600  | 47.050  | 50.900  | 57.300  | 0                       | 0               | 0.00%        |
| S12D         | DIS. K              | mg/L       | 29          | 15MAY2007 - 05SEP2007 | 6            | 1.817   | 0.462   | 1.200   | 1.300   | 1.950   | 2.200   | 2.300   | 0                       | 0               | 0.00%        |
| S12D         | DIS. MG             | mg/L       | 31          | 15MAY2007 - 05SEP2007 | 6            | 4.133   | 1.133   | 2.700   | 3.400   | 4.100   | 4.700   | 5.800   | 0                       | 0               | 0.00%        |
| S12D         | DIS. NA             | mg/L       | 28          | 15MAY2007 - 05SEP2007 | 6            | 17.333  | 4.459   | 11.500  | 13.400  | 17.850  | 20.700  | 22.700  | 0                       | 0               | 0.00%        |
| S12D         | TOT. CL             | mg/L       | 32          | 15MAY2007 - 05SEP2007 | 6            | 25.717  | 6.092   | 17.700  | 20.000  | 26.700  | 30.400  | 32.800  | 0                       | 0               | 0.00%        |
| S12D         | TOT. SO4            | mg/L       | 33          | 10JUL2007 - 10JUL2007 | 1            | 3.000   |         | 3.000   | 3.000   | 3.000   | 3.000   | 3.000   | 0                       | 0               | 0.00%        |
| S12D         | DIS. SILICA         | mg/L       | 27          | 10JUL2007 - 10JUL2007 | 1            | 9.670   |         | 9.670   | 9.670   | 9.670   | 9.670   | 9.670   | 0                       | 0               | 0.00%        |
| S12D         | TOT. FE             | mg/L       | 177         | 10JUL2007 - 10JUL2007 | 1            | 0.113   |         | 0.113   | 0.113   | 0.113   | 0.113   | 0.113   | 0                       | 0               | 0.00%        |
| S12D         | TOT. ULTRA TRACE HG | ug/L       | 207         | 17JUL2007 - 17JUL2007 | 1            | 0.003   |         | 0.003   | 0.003   | 0.003   | 0.003   | 0.003   | 0                       | 0               | 0.00%        |
| S12D         | TOT. MTHY HG        | ug/L       | 203         | 17JUL2007 - 17JUL2007 | 1            | 0.000   |         | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   | 0                       | 0               | 0.00%        |
| S12D         | CAROTENOID          | mg/m3      | 63          | 15MAY2007 - 05SEP2007 | 5            | 8.340   | 7.557   | 2.800   | 3.400   | 3.900   | 11.200  | 20.400  | 0                       | 0               | 0.00%        |
| S12D         | CHLA                | mg/m3      | 61          | 15MAY2007 - 05SEP2007 | 5            | 9.000   | 5.000   | 4.000   | 5.000   | 8.000   | 12.000  | 16.000  | 0                       | 0               | 0.00%        |
| S12D         | CHLA2               | mg/m3      | 112         | 15MAY2007 - 05SEP2007 | 4            | 6.250   | 2.630   | 4.000   | 4.000   | 6.000   | 8.500   | 9.000   | 0                       | 0               | 0.00%        |
| S12D         | CHLB                | mg/m3      | 62          | 15MAY2007 - 05SEP2007 | 5            | 6.800   | 10.872  | 1.000   | 1.000   | 1.000   | 5.000   | 26.000  | 0                       | 0               | 0.00%        |

Table 3. Continued.

| STATION | TEST NAME         | UNITS      | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN    | STD     | MIN     | Q25     | MEDIAN  | Q75     | MAX      | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|---------|-------------------|------------|-------------|-----------------------|--------------|---------|---------|---------|---------|---------|---------|----------|-------------------------|-----------------|--------------|
| S12D    | CHLC              | mg/m3      | 113         | 15MAY2007 - 05SEP2007 | 5            | 7.000   | 7.746   | 1.000   | 2.000   | 4.000   | 8.000   | 20.000   | 0                       | 0               | 0.00%        |
| S12D    | PHEOPHYTIN A      | mg/m3      | 64          | 15MAY2007 - 05SEP2007 | 5            | 4.400   | 5.505   | <1      | <1      | 2.000   | 4.000   | 14.000   | 2                       | 0               | 0.00%        |
|         |                   |            |             |                       |              |         |         |         |         |         |         |          |                         |                 |              |
| S34     | DO                | mg/L       | 8           | 07MAY2007 - 21APR2008 | 15           | 5.774   | 1.293   | 3.510   | 4.860   | 6.220   | 6.750   | 7.540    | 0                       | 4               | 26.67%       |
| S34     | FLDCOND.          | UMHOS/CM   | 9           | 07MAY2007 - 21APR2008 | 15           | 805.667 | 187.881 | 555.000 | 669.000 | 767.000 | #####   | 1096.000 | 0                       | 0               | 0.00%        |
| S34     | PH                | UNITS      | 10          | 07MAY2007 - 21APR2008 | 15           | 7.767   | 0.333   | 7.200   | 7.500   | 7.800   | 8.000   | 8.200    | 0                       | 0               | 0.00%        |
| S34     | TURBIDITY         | NTU        | 12          | 07MAY2007 - 21APR2008 | 15           | 2.127   | 1.017   | 0.800   | 1.300   | 2.000   | 2.700   | 4.700    | 0                       | 0               | 0.00%        |
| S34     | TSS               | mg/L       | 16          | 07MAY2007 - 10SEP2007 | 5            | 3.400   | 0.548   | <3      | <3      | <3      | 4.000   | 4.000    | 3                       | 0               | 0.00%        |
| S34     | COLOR             | UNITS      | 13          | 07MAY2007 - 10SEP2007 | 5            | 64.800  | 5.404   | 59.000  | 62.000  | 63.000  | 67.000  | 73.000   | 0                       | 0               | 0.00%        |
| S34     | HARDNESS          | mg/L CaCO3 | 35          | 02JUL2007 - 07APR2008 | 4            | 237.825 | 39.497  | 196.300 | 209.700 | 232.500 | 265.950 | 290.000  | 0                       | 0               | 0.00%        |
| S34     | TEMP              | CENT       | 7           | 07MAY2007 - 21APR2008 | 15           | 24.793  | 3.338   | 19.900  | 21.800  | 24.300  | 27.900  | 30.200   | 0                       | 0               | 0.00%        |
| S34     | ALKALINITY        | mg/L       | 67          | 07MAY2007 - 10SEP2007 | 5            | 256.600 | 13.012  | 243.000 | 249.000 | 250.000 | 269.000 | 272.000  | 0                       | 0               | 0.00%        |
| S34     | TN                | mg N/L     | 80          | 07MAY2007 - 21APR2008 | 15           | 1.756   | 0.493   | 1.140   | 1.420   | 1.585   | 2.292   | 2.549    | 0                       | 0               | 0.00%        |
| S34     | NOX               | mg N/L     | 18,180      | 07MAY2007 - 21APR2008 | 15           | 0.045   | 0.034   | 0.002   | 0.013   | 0.043   | 0.070   | 0.109    | 0                       | 0               | 0.00%        |
| S34     | NO2               | mg N/L     | 19          | 07MAY2007 - 10SEP2007 | 5            | 0.004   | 0.002   | 0.002   | 0.002   | 0.003   | 0.005   | 0.006    | 0                       | 0               | 0.00%        |
| S34     | NO3               | mg N/L     | 78          | 07MAY2007 - 10SEP2007 | 5            | 0.028   | 0.028   | <0.004  | <0.004  | 0.015   | 0.053   | 0.063    | 2                       | 0               | 0.00%        |
| S34     | NH4               | mg N/L     | 20          | 07MAY2007 - 10SEP2007 | 5            | 0.067   | 0.095   | 0.006   | 0.022   | 0.030   | 0.043   | 0.235    | 0                       | 0               | 0.00%        |
| S34     | UNIONIZED AMMONIA | mg/L       | NONE        | 07MAY2007 - 21APR2008 | 5            | 0.003   | 0.002   | 0.001   | 0.002   | 0.003   | 0.005   | 0.006    | 0                       | 0               | 0.00%        |
| S34     | NNH4              | mg N/L     | 92          | 07MAY2007 - 10SEP2007 | 5            | 0.098   | 0.097   | 0.008   | 0.027   | 0.089   | 0.111   | 0.253    | 0                       | 0               | 0.00%        |
| S34     | ORGN              | mg N/L     | 79          | 07MAY2007 - 10SEP2007 | 5            | 2.293   | 0.148   | 2.078   | 2.245   | 2.284   | 2.397   | 2.460    | 0                       | 0               | 0.00%        |
| S34     | TKN               | mg N/L     | 21          | 07MAY2007 - 21APR2008 | 15           | 1.711   | 0.500   | 1.130   | 1.350   | 1.530   | 2.290   | 2.490    | 0                       | 0               | 0.00%        |
| S34     | OPO4              | mg P/L     | 23          | 07MAY2007 - 21APR2008 | 15           | 0.002   | 0.001   | <0.002  | <0.002  | <0.002  | 0.002   | 0.004    | 10                      | 0               | 0.00%        |
| S34     | TP                | mg P/L     | 25          | 07MAY2007 - 21APR2008 | 15           | 0.018   | 0.006   | 0.012   | 0.014   | 0.016   | 0.021   | 0.036    | 0                       | 0               | 0.00%        |
| S34     | DIS. CA           | mg/L       | 30          | 02JUL2007 - 07APR2008 | 4            | 60.575  | 6.561   | 51.500  | 56.200  | 61.900  | 64.950  | 67.000   | 0                       | 0               | 0.00%        |
| S34     | DIS. K            | mg/L       | 29          | 02JUL2007 - 07APR2008 | 4            | 6.825   | 1.830   | 5.400   | 5.700   | 6.200   | 7.950   | 9.500    | 0                       | 0               | 0.00%        |
| S34     | DIS. MG           | mg/L       | 31          | 02JUL2007 - 07APR2008 | 4            | 21.050  | 6.097   | 16.500  | 16.900  | 18.950  | 25.200  | 29.800   | 0                       | 0               | 0.00%        |
| S34     | DIS. NA           | mg/L       | 28          | 02JUL2007 - 07APR2008 | 4            | 74.450  | 24.225  | 57.200  | 57.750  | 65.750  | 91.150  | 109.100  | 0                       | 0               | 0.00%        |
| S34     | TOT. CL           | mg/L       | 32          | 07MAY2007 - 07APR2008 | 8            | 131.975 | 33.416  | 85.800  | 99.000  | 143.500 | 157.500 | 170.000  | 0                       | 0               | 0.00%        |
| S34     | TOT. SO4          | mg/L       | 33          | 02JUL2007 - 07APR2008 | 4            | 15.375  | 11.430  | 4.500   | 6.150   | 13.800  | 24.600  | 29.400   | 0                       | 0               | 0.00%        |
| S34     | DIS. SILICA       | mg/L       | 27          | 02JUL2007 - 02JUL2007 | 1            | 9.880   |         | 9.880   | 9.880   | 9.880   | 9.880   | 9.880    | 0                       | 0               | 0.00%        |
|         |                   |            |             |                       |              |         |         |         |         |         |         |          |                         |                 |              |
| S142    | DO                | mg/L       | 8           | 07MAY2007 - 07APR2008 | 12           | 4.698   | 1.697   | 2.190   | 3.550   | 4.475   | 5.730   | 7.500    | 0                       | 8               | 66.67%       |
| S142    | FLDCOND.          | UMHOS/CM   | 9           | 07MAY2007 - 07APR2008 | 12           | 874.417 | 146.814 | 683.000 | 766.000 | 848.500 | 997.500 | 1112.000 | 0                       | 0               | 0.00%        |
| S142    | PH                | UNITS      | 10          | 07MAY2007 - 07APR2008 | 12           | 7.683   | 0.195   | 7.400   | 7.550   | 7.650   | 7.800   | 8.100    | 0                       | 0               | 0.00%        |
| S142    | TURBIDITY         | NTU        | 12          | 07MAY2007 - 07APR2008 | 12           | 3.525   | 1.230   | 1.100   | 2.750   | 3.600   | 4.300   | 5.800    | 0                       | 0               | 0.00%        |
| S142    | HARDNESS          | mg/L CaCO3 | 35          | 02JUL2007 - 07APR2008 | 4            | 278.625 | 46.077  | 231.700 | 248.750 | 270.500 | 308.500 | 341.800  | 0                       | 0               | 0.00%        |
| S142    | TEMP              | CENT       | 7           | 07MAY2007 - 07APR2008 | 12           | 25.783  | 3.359   | 20.200  | 23.450  | 25.850  | 28.800  | 30.300   | 0                       | 0               | 0.00%        |
| S142    | TN                | mg N/L     | 80          | 07MAY2007 - 07APR2008 | 12           | 1.992   | 0.321   | 1.574   | 1.793   | 1.885   | 2.376   | 2.424    | 0                       | 0               | 0.00%        |
| S142    | NOX               | mg N/L     | 18,180      | 07MAY2007 - 07APR2008 | 12           | 0.079   | 0.051   | 0.026   | 0.039   | 0.059   | 0.114   | 0.168    | 0                       | 0               | 0.00%        |
| S142    | TKN               | mg N/L     | 21          | 07MAY2007 - 07APR2008 | 12           | 1.913   | 0.280   | 1.540   | 1.740   | 1.820   | 2.245   | 2.290    | 0                       | 0               | 0.00%        |
| S142    | TP                | mg P/L     | 25          | 07MAY2007 - 07APR2008 | 12           | 0.022   | 0.007   | 0.015   | 0.017   | 0.019   | 0.027   | 0.036    | 0                       | 0               | 0.00%        |
| S142    | DIS. CA           | mg/L       | 30          | 02JUL2007 - 07APR2008 | 4            | 72.550  | 12.720  | 58.300  | 64.000  | 71.400  | 81.100  | 89.100   | 0                       | 0               | 0.00%        |
| S142    | DIS. K            | mg/L       | 29          | 02JUL2007 - 07APR2008 | 4            | 6.850   | 1.358   | 5.400   | 5.850   | 6.700   | 7.850   | 8.600    | 0                       | 0               | 0.00%        |

Table 3. Continued.

| STATION | TEST NAME         | UNITS      | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN    | STD     | MIN     | Q25     | MEDIAN  | Q75     | MAX      | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|---------|-------------------|------------|-------------|-----------------------|--------------|---------|---------|---------|---------|---------|---------|----------|-------------------------|-----------------|--------------|
| S142    | DIS. MG           | mg/L       | 31          | 02JUL2007 - 07APR2008 | 4            | 23.700  | 3.595   | 21.000  | 21.650  | 22.400  | 25.750  | 29.000   | 0                       | 0               | 0.00%        |
| S142    | DIS. NA           | mg/L       | 28          | 02JUL2007 - 07APR2008 | 4            | 71.900  | 6.212   | 63.900  | 67.250  | 72.650  | 76.550  | 78.400   | 0                       | 0               | 0.00%        |
| S142    | TOT. SO4          | mg/L       | 33          | 02JUL2007 - 07APR2008 | 4            | 29.700  | 13.575  | 14.200  | 18.800  | 29.900  | 40.600  | 44.800   | 0                       | 0               | 0.00%        |
| S11A    | DO                | mg/L       | 8           | 07MAY2007 - 21APR2008 | 14           | 5.955   | 1.819   | 1.500   | 5.100   | 5.945   | 7.640   | 8.690    | 0                       | 2               | 14.29%       |
| S11A    | FLDCOND.          | UMHOS/CM   | 9           | 07MAY2007 - 21APR2008 | 14           | 795.643 | 162.056 | 547.000 | 680.000 | 777.500 | 936.000 | 1070.000 | 0                       | 0               | 0.00%        |
| S11A    | PH                | UNITS      | 10          | 07MAY2007 - 21APR2008 | 14           | 7.886   | 0.277   | 7.500   | 7.700   | 7.800   | 8.100   | 8.400    | 0                       | 0               | 0.00%        |
| S11A    | TURBIDITY         | NTU        | 12          | 07MAY2007 - 21APR2008 | 14           | 2.614   | 1.253   | 0.900   | 1.600   | 2.300   | 3.600   | 5.200    | 0                       | 0               | 0.00%        |
| S11A    | TSS               | mg/L       | 16          | 07MAY2007 - 10SEP2007 | 5            | 4.000   | 1.732   | <3      | <3      | <3      | 4.000   | 7.000    | 3                       | 0               | 0.00%        |
| S11A    | COLOR             | UNITS      | 13          | 07MAY2007 - 10SEP2007 | 5            | 99.600  | 28.518  | 68.000  | 69.000  | 116.000 | 122.000 | 123.000  | 0                       | 0               | 0.00%        |
| S11A    | HARDNESS          | mg/L CaCO3 | 35          | 02JUL2007 - 07APR2008 | 4            | 241.300 | 55.826  | 185.000 | 195.200 | 237.450 | 287.400 | 305.300  | 0                       | 0               | 0.00%        |
| S11A    | TEMP              | CENT       | 7           | 07MAY2007 - 21APR2008 | 14           | 25.429  | 2.910   | 20.900  | 23.100  | 25.500  | 28.600  | 29.300   | 0                       | 0               | 0.00%        |
| S11A    | ALKALINITY        | mg/L       | 67          | 07MAY2007 - 10SEP2007 | 5            | 231.600 | 36.828  | 187.000 | 208.000 | 231.000 | 250.000 | 282.000  | 0                       | 0               | 0.00%        |
| S11A    | TN                | mg N/L     | 80          | 07MAY2007 - 21APR2008 | 14           | 1.873   | 0.440   | 1.366   | 1.554   | 1.851   | 2.133   | 2.774    | 0                       | 0               | 0.00%        |
| S11A    | NOX               | mg N/L     | 18,180      | 07MAY2007 - 21APR2008 | 14           | 0.039   | 0.041   | <0.005  | 0.006   | 0.021   | 0.068   | 0.113    | 2                       | 0               | 0.00%        |
| S11A    | NO2               | mg N/L     | 19          | 07MAY2007 - 10SEP2007 | 5            | 0.005   | 0.001   | 0.004   | 0.004   | 0.004   | 0.005   | 0.007    | 0                       | 0               | 0.00%        |
| S11A    | NO3               | mg N/L     | 78          | 07MAY2007 - 10SEP2007 | 5            | 0.037   | 0.040   | <0.004  | 0.020   | 0.061   | 0.095   | 2        | 0                       | 0               | 0.00%        |
| S11A    | NH4               | mg N/L     | 20          | 07MAY2007 - 10SEP2007 | 5            | 0.035   | 0.031   | <0.005  | 0.010   | 0.030   | 0.050   | 0.080    | 1                       | 0               | 0.00%        |
| S11A    | UNIONIZED AMMONIA | mg/L       | NONE        | 07MAY2007 - 21APR2008 | 5            | 0.003   | 0.003   | 0.000   | 0.000   | 0.001   | 0.005   | 0.006    | 0                       | 0               | 0.00%        |
| S11A    | NNH4              | mg N/L     | 92          | 07MAY2007 - 10SEP2007 | 5            | 0.074   | 0.051   | 0.014   | 0.054   | 0.057   | 0.099   | 0.148    | 0                       | 0               | 0.00%        |
| S11A    | ORGN              | mg N/L     | 79          | 07MAY2007 - 10SEP2007 | 5            | 2.230   | 0.360   | 1.820   | 1.960   | 2.230   | 2.420   | 2.720    | 0                       | 0               | 0.00%        |
| S11A    | TKN               | mg N/L     | 21          | 07MAY2007 - 21APR2008 | 14           | 1.834   | 0.426   | 1.350   | 1.540   | 1.770   | 2.020   | 2.750    | 0                       | 0               | 0.00%        |
| S11A    | OPO4              | mg P/L     | 23          | 07MAY2007 - 21APR2008 | 14           | 0.003   | 0.003   | <0.002  | <0.002  | <0.002  | 0.002   | 0.012    | 8                       | 0               | 0.00%        |
| S11A    | TP                | mg P/L     | 25          | 07MAY2007 - 21APR2008 | 14           | 0.018   | 0.010   | 0.006   | 0.009   | 0.018   | 0.024   | 0.038    | 0                       | 0               | 0.00%        |
| S11A    | DIS. CA           | mg/L       | 30          | 02JUL2007 - 07APR2008 | 4            | 61.250  | 16.066  | 46.800  | 47.550  | 59.950  | 74.950  | 78.300   | 0                       | 0               | 0.00%        |
| S11A    | DIS. K            | mg/L       | 29          | 02JUL2007 - 07APR2008 | 4            | 6.500   | 1.747   | 5.200   | 5.300   | 5.900   | 7.700   | 9.000    | 0                       | 0               | 0.00%        |
| S11A    | DIS. MG           | mg/L       | 31          | 02JUL2007 - 07APR2008 | 4            | 21.450  | 4.207   | 16.500  | 18.550  | 21.300  | 24.350  | 26.700   | 0                       | 0               | 0.00%        |
| S11A    | DIS. NA           | mg/L       | 28          | 02JUL2007 - 07APR2008 | 4            | 69.550  | 6.754   | 59.600  | 65.500  | 72.050  | 73.600  | 74.500   | 0                       | 0               | 0.00%        |
| S11A    | TOT. CL           | mg/L       | 32          | 07MAY2007 - 07APR2008 | 8            | 125.588 | 32.620  | 94.700  | 106.000 | 113.000 | 143.000 | 186.000  | 0                       | 0               | 0.00%        |
| S11A    | TOT. SO4          | mg/L       | 33          | 02JUL2007 - 07APR2008 | 4            | 24.775  | 13.785  | 11.700  | 12.900  | 24.750  | 36.650  | 37.900   | 0                       | 0               | 0.00%        |
| S11A    | DIS. SILICA       | mg/L       | 27          | 02JUL2007 - 02JUL2007 | 1            | 14.040  |         | 14.040  | 14.040  | 14.040  | 14.040  | 14.040   | 0                       | 0               | 0.00%        |
| S145    | DO                | mg/L       | 8           | 07MAY2007 - 21APR2008 | 18           | 4.037   | 1.170   | 2.390   | 3.040   | 3.945   | 4.650   | 6.700    | 0                       | 15              | 83.33%       |
| S145    | FLDCOND.          | UMHOS/CM   | 9           | 07MAY2007 - 21APR2008 | 18           | 731.111 | 192.593 | 439.000 | 549.000 | 754.000 | 856.000 | 1098.000 | 0                       | 0               | 0.00%        |
| S145    | PH                | UNITS      | 10          | 07MAY2007 - 21APR2008 | 18           | 7.594   | 0.170   | 7.300   | 7.500   | 7.600   | 7.700   | 7.900    | 0                       | 0               | 0.00%        |
| S145    | TURBIDITY         | NTU        | 12          | 07MAY2007 - 21APR2008 | 18           | 1.611   | 1.310   | 0.700   | 0.800   | 1.100   | 1.700   | 5.100    | 0                       | 0               | 0.00%        |
| S145    | TSS               | mg/L       | 16          | 07MAY2007 - 10SEP2007 | 8            | 3.250   | 0.463   | <3      | <3      | <3      | 3.500   | 4.000    | 5                       | 0               | 0.00%        |
| S145    | COLOR             | UNITS      | 13          | 07MAY2007 - 10SEP2007 | 8            | 97.750  | 13.242  | 78.000  | 86.500  | 101.500 | 108.000 | 112.000  | 0                       | 0               | 0.00%        |
| S145    | HARDNESS          | mg/L CaCO3 | 35          | 02JUL2007 - 07APR2008 | 4            | 202.050 | 71.767  | 137.300 | 156.750 | 183.300 | 247.350 | 304.300  | 0                       | 0               | 0.00%        |
| S145    | TEMP              | CENT       | 7           | 07MAY2007 - 21APR2008 | 18           | 26.272  | 3.244   | 20.900  | 23.500  | 27.400  | 28.800  | 30.700   | 0                       | 0               | 0.00%        |
| S145    | ALKALINITY        | mg/L       | 67          | 07MAY2007 - 10SEP2007 | 8            | 204.125 | 23.859  | 173.000 | 183.000 | 208.000 | 217.000 | 244.000  | 0                       | 0               | 0.00%        |
| S145    | TN                | mg N/L     | 80          | 07MAY2007 - 21APR2008 | 18           | 1.800   | 0.521   | 1.218   | 1.350   | 1.677   | 2.217   | 3.052    | 0                       | 0               | 0.00%        |
| S145    | NOX               | mg N/L     | 18,180      | 07MAY2007 - 21APR2008 | 18           | 0.021   | 0.019   | <0.005  | 0.008   | 0.015   | 0.024   | 0.080    | 2                       | 0               | 0.00%        |

Table 3. Continued.

| STATION | TEST NAME           | UNITS      | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN     | STD     | MIN     | Q25     | MEDIAN  | Q75     | MAX     | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|---------|---------------------|------------|-------------|-----------------------|--------------|----------|---------|---------|---------|---------|---------|---------|-------------------------|-----------------|--------------|
| S145    | NO2                 | mg N/L     | 19          | 07MAY2007 - 10SEP2007 | 8            | 0.006    | 0.003   | 0.003   | 0.004   | 0.005   | 0.007   | 0.012   | 0                       | 0               | 0.00%        |
| S145    | NO3                 | mg N/L     | 78          | 07MAY2007 - 10SEP2007 | 8            | 0.026625 | 0.02109 | 0.009   | 0.0105  | 0.0185  | 0.039   | 0.068   | 0                       | 0               | 0.00%        |
| S145    | NH4                 | mg N/L     | 20          | 07MAY2007 - 10SEP2007 | 8            | 0.048    | 0.047   | <0.005  | 0.020   | 0.032   | 0.063   | 0.152   | 1                       | 0               | 0.00%        |
| S145    | UN-IONIZED AMMONIA  | mg/L       | NONE        | 07MAY2007 - 21APR2008 | 8            | 0.002    | 0.002   | 0.000   | 0.001   | 0.001   | 0.003   | 0.007   | 0                       | 0               | 0.00%        |
| S145    | NNH4                | mg N/L     | 92          | 07MAY2007 - 10SEP2007 | 8            | 0.080    | 0.058   | 0.025   | 0.044   | 0.050   | 0.122   | 0.184   | 0                       | 0               | 0.00%        |
| S145    | ORGN                | mg N/L     | 79          | 07MAY2007 - 10SEP2007 | 8            | 2.206    | 0.321   | 1.845   | 2.000   | 2.150   | 2.319   | 2.868   | 0                       | 0               | 0.00%        |
| S145    | TKN                 | mg N/L     | 21          | 07MAY2007 - 21APR2008 | 18           | 1.780    | 0.509   | 1.210   | 1.350   | 1.670   | 2.180   | 3.020   | 0                       | 0               | 0.00%        |
| S145    | OPO4                | mg P/L     | 23          | 04JUN2007 - 21APR2008 | 17           | 0.002    | 0.000   | <0.002  | <0.002  | <0.002  | <0.002  | 0.003   | 13                      | 0               | 0.00%        |
| S145    | TP                  | mg P/L     | 25          | 07MAY2007 - 21APR2008 | 18           | 0.014    | 0.009   | 0.006   | 0.008   | 0.009   | 0.018   | 0.035   | 0                       | 0               | 0.00%        |
| S145    | DIS. CA             | mg/L       | 30          | 02JUL2007 - 07APR2008 | 4            | 51.900   | 17.286  | 38.200  | 41.200  | 46.150  | 62.600  | 77.100  | 0                       | 0               | 0.00%        |
| S145    | DIS. K              | mg/L       | 29          | 02JUL2007 - 07APR2008 | 4            | 5.725    | 2.567   | 3.400   | 3.750   | 5.200   | 7.700   | 9.100   | 0                       | 0               | 0.00%        |
| S145    | DIS. MG             | mg/L       | 31          | 02JUL2007 - 07APR2008 | 4            | 17.625   | 7.450   | 10.200  | 11.900  | 16.550  | 23.350  | 27.200  | 0                       | 0               | 0.00%        |
| S145    | DIS. NA             | mg/L       | 28          | 02JUL2007 - 07APR2008 | 4            | 60.525   | 15.704  | 45.000  | 47.100  | 60.450  | 73.950  | 76.200  | 0                       | 0               | 0.00%        |
| S145    | TOT. CL             | mg/L       | 32          | 07MAY2007 - 07APR2008 | 11           | 114.945  | 34.843  | 64.800  | 93.000  | 114.000 | 138.000 | 193.000 | 0                       | 0               | 0.00%        |
| S145    | TOT. SO4            | mg/L       | 33          | 02JUL2007 - 07APR2008 | 4            | 25.175   | 19.745  | 7.500   | 8.100   | 24.900  | 42.250  | 43.400  | 0                       | 0               | 0.00%        |
| S145    | DIS. SILICA         | mg/L       | 27          | 02JUL2007 - 02JUL2007 | 1            | 14.230   |         | 14.230  | 14.230  | 14.230  | 14.230  | 14.230  | 0                       | 0               | 0.00%        |
|         |                     |            |             |                       |              |          |         |         |         |         |         |         |                         |                 |              |
| S151    | DO                  | mg/L       | 8           | 07MAY2007 - 21APR2008 | 13           | 5.068    | 1.581   | 2.610   | 4.620   | 4.960   | 5.580   | 8.770   | 0                       | 7               | 53.85%       |
| S151    | FLDCOND.            | UMHOS/CM   | 9           | 07MAY2007 - 21APR2008 | 14           | 771.357  | 79.954  | 598.000 | 704.000 | 792.500 | 807.000 | 876.000 | 0                       | 0               | 0.00%        |
| S151    | PH                  | UNITS      | 10          | 07MAY2007 - 21APR2008 | 14           | 7.621    | 0.294   | 7.000   | 7.500   | 7.650   | 7.700   | 8.300   | 0                       | 0               | 0.00%        |
| S151    | TURBIDITY           | NTU        | 12          | 07MAY2007 - 21APR2008 | 14           | 2.721    | 1.763   | 1.100   | 1.400   | 2.200   | 3.200   | 7.500   | 0                       | 0               | 0.00%        |
| S151    | TSS                 | mg/L       | 16          | 07MAY2007 - 10SEP2007 | 5            | 4.800    | 2.168   | <3      | <3      | 4.000   | 6.000   | 8.000   | 2                       | 0               | 0.00%        |
| S151    | COLOR               | UNITS      | 13          | 07MAY2007 - 10SEP2007 | 5            | 61.000   | 20.591  | 34.000  | 44.000  | 72.000  | 75.000  | 80.000  | 0                       | 0               | 0.00%        |
| S151    | HARDNESS            | mg/L CaCO3 | 35          | 02JUL2007 - 07APR2008 | 4            | 262.725  | 31.917  | 215.700 | 243.950 | 274.350 | 281.500 | 286.500 | 0                       | 0               | 0.00%        |
| S151    | TEMP                | CENT       | 7           | 07MAY2007 - 21APR2008 | 14           | 25.736   | 3.003   | 21.100  | 23.600  | 25.550  | 28.000  | 30.500  | 0                       | 0               | 0.00%        |
| S151    | ALKALINITY          | mg/L       | 67          | 07MAY2007 - 10SEP2007 | 5            | 255.000  | 20.469  | 238.000 | 246.000 | 246.000 | 255.000 | 290.000 | 0                       | 0               | 0.00%        |
| S151    | TN                  | mg N/L     | 80          | 07MAY2007 - 21APR2008 | 14           | 1.729    | 0.197   | 1.503   | 1.550   | 1.710   | 1.821   | 2.220   | 0                       | 0               | 0.00%        |
| S151    | NOX                 | mg N/L     | 18,180      | 07MAY2007 - 21APR2008 | 14           | 0.106    | 0.104   | 0.016   | 0.040   | 0.084   | 0.112   | 0.390   | 0                       | 0               | 0.00%        |
| S151    | NO2                 | mg N/L     | 19          | 07MAY2007 - 10SEP2007 | 5            | 0.005    | 0.002   | 0.002   | 0.003   | 0.006   | 0.007   | 0.007   | 0                       | 0               | 0.00%        |
| S151    | NO3                 | mg N/L     | 78          | 07MAY2007 - 10SEP2007 | 5            | 0.071    | 0.034   | 0.016   | 0.061   | 0.084   | 0.086   | 0.106   | 0                       | 0               | 0.00%        |
| S151    | NH4                 | mg N/L     | 20          | 07MAY2007 - 10SEP2007 | 5            | 0.081    | 0.063   | <0.005  | 0.049   | 0.063   | 0.130   | 0.160   | 1                       | 0               | 0.00%        |
| S151    | UN-IONIZED AMMONIA  | mg/L       | NONE        | 07MAY2007 - 21APR2008 | 5            | 0.003    | 0.001   | 0.001   | 0.003   | 0.004   | 0.004   | 0.004   | 0                       | 0               | 0.00%        |
| S151    | NNH4                | mg N/L     | 92          | 07MAY2007 - 10SEP2007 | 5            | 0.156    | 0.091   | 0.063   | 0.068   | 0.154   | 0.242   | 0.253   | 0                       | 0               | 0.00%        |
| S151    | ORGN                | mg N/L     | 79          | 07MAY2007 - 10SEP2007 | 5            | 1.580    | 0.135   | 1.440   | 1.490   | 1.561   | 1.620   | 1.787   | 0                       | 0               | 0.00%        |
| S151    | TKN                 | mg N/L     | 21          | 07MAY2007 - 21APR2008 | 14           | 1.623    | 0.129   | 1.440   | 1.510   | 1.595   | 1.750   | 1.850   | 0                       | 0               | 0.00%        |
| S151    | OPO4                | mg P/L     | 23          | 07MAY2007 - 21APR2008 | 14           | 0.002    | 0.000   | <0.002  | <0.002  | <0.002  | <0.002  | 0.002   | 13                      | 0               | 0.00%        |
| S151    | TP                  | mg P/L     | 25          | 07MAY2007 - 21APR2008 | 14           | 0.018    | 0.009   | 0.010   | 0.011   | 0.013   | 0.019   | 0.039   | 0                       | 0               | 0.00%        |
| S151    | DIS. CA             | mg/L       | 30          | 02JUL2007 - 07APR2008 | 4            | 74.125   | 12.176  | 56.200  | 66.500  | 79.250  | 81.750  | 81.800  | 0                       | 0               | 0.00%        |
| S151    | DIS. K              | mg/L       | 29          | 02JUL2007 - 07APR2008 | 4            | 5.525    | 0.640   | 5.000   | 5.050   | 5.350   | 6.000   | 6.400   | 0                       | 0               | 0.00%        |
| S151    | DIS. MG             | mg/L       | 31          | 02JUL2007 - 07APR2008 | 4            | 18.875   | 1.803   | 16.600  | 17.450  | 19.150  | 20.300  | 20.600  | 0                       | 0               | 0.00%        |
| S151    | DIS. NA             | mg/L       | 28          | 02JUL2007 - 07APR2008 | 4            | 63.325   | 10.6841 | 49.3    | 56.3    | 64.4    | 70.35   | 75.2    | 0                       | 0               | 0.00%        |
| S151    | TOT. CL             | mg/L       | 32          | 07MAY2007 - 07APR2008 | 8            | 87.588   | 16.721  | 62.600  | 75.650  | 86.100  | 100.800 | 113.000 | 0                       | 0               | 0.00%        |
| S151    | TOT. SO4            | mg/L       | 33          | 02JUL2007 - 07APR2008 | 4            | 16.850   | 6.295   | 9.000   | 11.850  | 17.700  | 21.850  | 23.000  | 0                       | 0               | 0.00%        |
| S151    | DIS. SILICA         | mg/L       | 27          | 02JUL2007 - 02JUL2007 | 1            | 10.390   |         | 10.390  | 10.390  | 10.390  | 10.390  | 10.390  | 0                       | 0               | 0.00%        |
| S151    | TOT. ULTRA TRACE HG | ug/L       | 207         | 07MAY2007 - 11FEB2008 | 3            | 0.002    | 0.002   | 0.001   | 0.001   | 0.002   | 0.004   | 0.004   | 0                       | 0               | 0.00%        |
| S151    | TOT. MTHY HG        | ug/L       | 203         | 07MAY2007 - 11FEB2008 | 4            | 0.000    | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   | 0                       | 0               | 0.00%        |

Table 3. Continued.

| STATION  | TEST NAME           | UNITS      | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN    | STD     | MIN     | Q25     | MEDIAN  | Q75     | MAX     | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|----------|---------------------|------------|-------------|-----------------------|--------------|---------|---------|---------|---------|---------|---------|---------|-------------------------|-----------------|--------------|
| S333     | DO                  | mg/L       | 8           | 01MAY2007 - 29APR2008 | 52           | 4.747   | 1.902   | 2.580   | 3.740   | 4.245   | 5.275   | 15.300  | 0                       | 32              | 61.54%       |
| S333     | FLDCOND.            | UMHOS/CM   | 9           | 01MAY2007 - 29APR2008 | 53           | 507.698 | 195.057 | 243.000 | 349.000 | 433.000 | 707.000 | 839.000 | 0                       | 0               | 0.00%        |
| S333     | PH                  | UNITS      | 10          | 01MAY2007 - 29APR2008 | 52           | 7.371   | 0.176   | 7.100   | 7.200   | 7.350   | 7.500   | 7.800   | 0                       | 0               | 0.00%        |
| S333     | TURBIDITY           | NTU        | 12          | 15MAY2007 - 09APR2008 | 10           | 1.690   | 0.714   | 0.600   | 1.300   | 1.600   | 2.200   | 2.700   | 0                       | 0               | 0.00%        |
| S333     | TSS                 | mg/L       | 16          | 15MAY2007 - 29APR2008 | 30           | 3.133   | 0.571   | <3      | <3      | <3      | <3      | 6.000   | 27                      | 0               | 0.00%        |
| S333     | COLOR               | UNITS      | 13          | 15MAY2007 - 05SEP2007 | 7            | 33.714  | 3.861   | 29.000  | 31.000  | 33.000  | 37.000  | 40.000  | 0                       | 0               | 0.00%        |
| S333     | HARDNESS            | mg/L CaCO3 | 35          | 15MAY2007 - 29APR2008 | 31           | 191.116 | 61.267  | <1      | 145.100 | 214.600 | 242.300 | 268.100 | 1                       | 0               | 0.00%        |
| S333     | TEMP                | CENT       | 7           | 01MAY2007 - 29APR2008 | 53           | 25.655  | 3.793   | 16.600  | 22.700  | 26.100  | 28.900  | 31.400  | 0                       | 0               | 0.00%        |
| S333     | ALKALINITY          | mg/L       | 67          | 15MAY2007 - 05SEP2007 | 7            | 127.143 | 22.252  | 98.000  | 111.000 | 118.000 | 154.000 | 157.000 | 0                       | 0               | 0.00%        |
| S333     | TN                  | mg N/L     | 80          | 01MAY2007 - 29APR2008 | 47           | 1.273   | 0.312   | <0.5    | 1.000   | 1.227   | 1.556   | 1.790   | 1                       | 0               | 0.00%        |
| S333     | NOX                 | mg N/L     | 18;180      | 01MAY2007 - 29APR2008 | 37           | 0.064   | 0.041   | <0.005  | 0.031   | 0.063   | 0.088   | 0.181   | 1                       | 0               | 0.00%        |
| S333     | NO2                 | mg N/L     | 19          | 15MAY2007 - 05SEP2007 | 7            | 0.003   | 0.001   | <0.002  | <0.002  | 0.003   | 0.004   | 0.005   | 2                       | 0               | 0.00%        |
| S333     | NO3                 | mg N/L     | 78          | 15MAY2007 - 05SEP2007 | 5            | 0.040   | 0.021   | 0.016   | 0.020   | 0.041   | 0.058   | 0.063   | 0                       | 0               | 0.00%        |
| S333     | NH4                 | mg N/L     | 20          | 01MAY2007 - 25SEP2007 | 20           | 0.055   | 0.037   | 0.006   | 0.031   | 0.046   | 0.072   | 0.148   | 0                       | 0               | 0.00%        |
| S333     | UNIONIZED AMMONIA   | mg/L       | NONE        | 01MAY2007 - 29APR2008 | 20           | 0.001   | 0.000   | 0.000   | 0.001   | 0.001   | 0.002   | 0.003   | 0                       | 0               | 0.00%        |
| S333     | NNH4                | mg N/L     | 92          | 01MAY2007 - 25SEP2007 | 13           | 0.119   | 0.058   | 0.026   | 0.085   | 0.117   | 0.165   | 0.211   | 0                       | 0               | 0.00%        |
| S333     | ORGN                | mg N/L     | 79          | 01MAY2007 - 01APR2008 | 21           | 0.969   | 0.235   | <0.05   | 0.920   | 1.009   | 1.105   | 1.166   | 1                       | 0               | 0.00%        |
| S333     | TKN                 | mg N/L     | 21          | 01MAY2007 - 29APR2008 | 47           | 1.213   | 0.312   | <0.05   | 0.980   | 1.190   | 1.480   | 1.720   | 1                       | 0               | 0.00%        |
| S333     | OPO4                | mg P/L     | 23          | 15MAY2007 - 29APR2008 | 27           | 0.002   | 0.001   | <0.002  | <0.002  | <0.002  | 0.002   | 0.006   | 16                      | 0               | 0.00%        |
| S333     | ALKALINE PHOS       | nM/minml   | 168         | 15MAY2007 - 26JUN2007 | 2            | 11.500  | 9.192   | 5.000   | 5.000   | 11.500  | 18.000  | 18.000  | 0                       | 0               | 0.00%        |
| S333     | TP                  | mg P/L     | 25          | 01MAY2007 - 29APR2008 | 52           | 0.013   | 0.004   | <0.002  | 0.011   | 0.012   | 0.016   | 0.024   | 1                       | 0               | 0.00%        |
| S333     | DIS. CA             | mg/L       | 30          | 15MAY2007 - 29APR2008 | 31           | 56.926  | 14.669  | <0.2    | 51.100  | 58.500  | 67.700  | 75.500  | 1                       | 0               | 0.00%        |
| S333     | DIS. K              | mg/L       | 29          | 15MAY2007 - 29APR2008 | 31           | 3.719   | 1.981   | <0.1    | 1.500   | 4.700   | 5.100   | 6.700   | 1                       | 0               | 0.00%        |
| S333     | DIS. MG             | mg/L       | 31          | 15MAY2007 - 29APR2008 | 31           | 11.894  | 6.829   | <0.1    | 4.300   | 14.700  | 17.800  | 20.900  | 1                       | 0               | 0.00%        |
| S333     | DIS. NA             | mg/L       | 28          | 15MAY2007 - 29APR2008 | 30           | 43.640  | 22.073  | 11.700  | 20.100  | 48.700  | 60.800  | 79.500  | 0                       | 0               | 0.00%        |
| S333     | TOT. CL             | mg/L       | 32          | 15MAY2007 - 29APR2008 | 31           | 67.632  | 33.902  | 17.800  | 29.700  | 74.500  | 92.700  | 121.000 | 0                       | 0               | 0.00%        |
| S333     | TOT. SO4            | mg/L       | 33          | 10JUL2007 - 09APR2008 | 4            | 8.375   | 7.330   | 0.400   | 2.150   | 9.150   | 14.600  | 14.800  | 0                       | 0               | 0.00%        |
| S333     | DIS. SILICA         | mg/L       | 27          | 10JUL2007 - 10JUL2007 | 1            | 8.900   |         | 8.900   | 8.900   | 8.900   | 8.900   | 8.900   | 0                       | 0               | 0.00%        |
| S333     | TOT. FE             | mg/L       | 177         | 10JUL2007 - 10JUL2007 | 1            | 0.109   |         | 0.109   | 0.109   | 0.109   | 0.109   | 0.109   | 0                       | 0               | 0.00%        |
| S333     | TOT. ULTRA TRACE HG | ug/L       | 207         | 23OCT2007 - 15APR2008 | 3            | 0.001   | 0.000   | 0.000   | 0.000   | 0.001   | 0.001   | 0.001   | 0                       | 0               | 0.00%        |
| S333     | TOT. MTHY HG        | ug/L       | 203         | 23OCT2007 - 15APR2008 | 3            | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   | 0                       | 0               | 0.00%        |
| S333     | CAROTENOID          | mg/m3      | 63          | 15MAY2007 - 05SEP2007 | 6            | 3.767   | 2.975   | <1      | 1.900   | 2.850   | 4.800   | 9.200   | 1                       | 0               | 0.00%        |
| S333     | CHLA                | mg/m3      | 61          | 15MAY2007 - 05SEP2007 | 7            | 5.571   | 4.237   | <1      | 3.000   | 5.000   | 7.000   | 14.000  | 1                       | 0               | 0.00%        |
| S333     | CHLA2               | mg/m3      | 112         | 15MAY2007 - 05SEP2007 | 6            | 3.500   | 1.761   | 2.000   | 2.000   | 3.000   | 5.000   | 6.000   | 0                       | 0               | 0.00%        |
| S333     | CHLB                | mg/m3      | 62          | 15MAY2007 - 05SEP2007 | 7            | 1.429   | 1.134   | <1      | <1      | <1      | 1.000   | 4.000   | 5                       | 0               | 0.00%        |
| S333     | CHLC                | mg/m3      | 113         | 15MAY2007 - 05SEP2007 | 7            | 2.286   | 2.360   | <1      | <1      | 1.000   | 4.000   | 7.000   | 2                       | 0               | 0.00%        |
| S333     | PHEOPHYTIN A        | mg/m3      | 64          | 15MAY2007 - 05SEP2007 | 7            | 2.286   | 2.563   | <1      | 1.000   | 1.000   | 2.000   | 8.000   | 1                       | 0               | 0.00%        |
| S333Auto | TN                  | mg N/L     | 80          | 01MAY2007 - 29APR2008 | 351          | 1.276   | 0.315   | <0.5    | 0.965   | 1.261   | 1.574   | 2.007   | 1                       | 0               | 0.00%        |
| S333Auto | NOX                 | mg N/L     | 18;180      | 01MAY2007 - 29APR2008 | 329          | 0.053   | 0.044   | <0.005  | 0.016   | 0.046   | 0.073   | 0.214   | 2                       | 0               | 0.00%        |
| S333Auto | ORGN                | mg N/L     | 79          | 18SEP2007 - 18SEP2007 | 1            | 0.050   |         | <0.05   | <0.05   | <0.05   | <0.05   | <0.05   | 1                       | 0               | 0.00%        |
| S333Auto | TKN                 | mg N/L     | 21          | 01MAY2007 - 29APR2008 | 351          | 1.225   | 0.290   | <0.05   | 0.950   | 1.170   | 1.500   | 1.960   | 1                       | 0               | 0.00%        |
| S333Auto | TP                  | mg P/L     | 25          | 01MAY2007 - 29APR2008 | 345          | 0.013   | 0.004   | <0.002  | 0.011   | 0.013   | 0.016   | 0.033   | 1                       | 0               | 0.00%        |

Table 3. Continued.

| STATION  | TEST NAME         | UNITS      | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN    | STD     | MIN     | Q25     | MEDIAN  | Q75     | MAX     | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|----------|-------------------|------------|-------------|-----------------------|--------------|---------|---------|---------|---------|---------|---------|---------|-------------------------|-----------------|--------------|
| C123SR84 | DO                | mg/L       | 8           | 08MAY2007 - 08APR2008 | 13           | 5.228   | 1.586   | 3.160   | 3.530   | 5.490   | 6.790   | 7.820   | 0                       | 6               | 46.15%       |
| C123SR84 | FLDCOND.          | UMHOS/CM   | 9           | 08MAY2007 - 08APR2008 | 13           | 583.692 | 156.924 | 384.000 | 444.000 | 529.000 | 735.000 | 858.000 | 0                       | 0               | 0.00%        |
| C123SR84 | PH                | UNITS      | 10          | 08MAY2007 - 08APR2008 | 13           | 7.669   | 0.295   | 7.300   | 7.400   | 7.600   | 8.000   | 8.100   | 0                       | 0               | 0.00%        |
| C123SR84 | TURBIDITY         | NTU        | 12          | 08MAY2007 - 08APR2008 | 13           | 3.769   | 4.208   | 0.900   | 1.100   | 2.400   | 3.600   | 14.600  | 0                       | 0               | 0.00%        |
| C123SR84 | TSS               | mg/L       | 16          | 08MAY2007 - 25SEP2007 | 6            | 7.000   | 6.325   | <3      | <3      | 0.000   | 13.000  | 17.000  | 3                       | 0               | 0.00%        |
| C123SR84 | COLOR             | UNITS      | 13          | 08MAY2007 - 25SEP2007 | 6            | 59.333  | 20.461  | 31.000  | 39.000  | 63.500  | 78.000  | 81.000  | 0                       | 0               | 0.00%        |
| C123SR84 | HARDNESS          | mg/L CaCO3 | 35          | 05JUL2007 - 08APR2008 | 4            | 234.350 | 71.333  | 151.700 | 182.350 | 231.750 | 286.350 | 322.200 | 0                       | 0               | 0.00%        |
| C123SR84 | TEMP              | CENT       | 7           | 08MAY2007 - 08APR2008 | 13           | 25.646  | 3.633   | 18.200  | 23.300  | 26.000  | 28.900  | 30.600  | 0                       | 0               | 0.00%        |
| C123SR84 | ALKALINITY        | mg/L       | 67          | 08MAY2007 - 25SEP2007 | 6            | 212.667 | 60.427  | 141.000 | 169.000 | 200.500 | 264.000 | 301.000 | 0                       | 0               | 0.00%        |
| C123SR84 | TN                | mg N/L     | 80          | 08MAY2007 - 08APR2008 | 13           | 1.308   | 0.249   | 0.960   | 1.122   | 1.310   | 1.444   | 1.789   | 0                       | 0               | 0.00%        |
| C123SR84 | NOX               | mg N/L     | 18,180      | 08MAY2007 - 08APR2008 | 12           | 0.039   | 0.043   | <0.005  | 0.008   | 0.027   | 0.054   | 0.144   | 2                       | 0               | 0.00%        |
| C123SR84 | NO2               | mg N/L     | 19          | 05JUN2007 - 25SEP2007 | 5            | 0.003   | 0.001   | <0.002  | 0.003   | 0.003   | 0.003   | 0.005   | 1                       | 0               | 0.00%        |
| C123SR84 | NO3               | mg N/L     | 78          | 05JUN2007 - 11SEP2007 | 4            | 0.018   | 0.019   | <0.002  | 0.001   | 0.013   | 0.032   | 0.042   | 1                       | 0               | 0.00%        |
| C123SR84 | NH4               | mg N/L     | 20          | 08MAY2007 - 25SEP2007 | 6            | 0.022   | 0.028   | <0.005  | <0.005  | 0.012   | 0.018   | 0.079   | 2                       | 0               | 0.00%        |
| C123SR84 | UNIONIZED AMMONIA | mg/L       | NONE        | 08MAY2007 - 08APR2008 | 6            | 0.001   | 0.000   | 0.000   | 0.000   | 0.000   | 0.001   | 0.002   | 0                       | 0               | 0.00%        |
| C123SR84 | NNH4              | mg N/L     | 92          | 08MAY2007 - 11SEP2007 | 5            | 0.039   | 0.040   | <0.005  | 0.020   | 0.020   | 0.045   | 0.106   | 1                       | 0               | 0.00%        |
| C123SR84 | ORGN              | mg N/L     | 79          | 08MAY2007 - 25SEP2007 | 6            | 1.367   | 0.286   | 0.942   | 1.267   | 1.315   | 1.591   | 1.769   | 0                       | 0               | 0.00%        |
| C123SR84 | TKN               | mg N/L     | 21          | 08MAY2007 - 08APR2008 | 13           | 1.273   | 0.249   | 0.960   | 1.050   | 1.300   | 1.330   | 1.780   | 0                       | 0               | 0.00%        |
| C123SR84 | OPO4              | mg P/L     | 23          | 08MAY2007 - 08APR2008 | 13           | 0.003   | 0.002   | <0.002  | <0.002  | 0.002   | 0.002   | 0.011   | 6                       | 0               | 0.00%        |
| C123SR84 | TP                | mg P/L     | 25          | 08MAY2007 - 08APR2008 | 13           | 0.024   | 0.012   | 0.012   | 0.015   | 0.023   | 0.030   | 0.053   | 0                       | 0               | 0.00%        |
| C123SR84 | DIS. CA           | mg/L       | 30          | 05JUL2007 - 08APR2008 | 4            | 75.225  | 19.930  | 48.600  | 60.250  | 79.350  | 90.200  | 93.600  | 0                       | 0               | 0.00%        |
| C123SR84 | DIS. K            | mg/L       | 29          | 05JUL2007 - 08APR2008 | 4            | 5.475   | 1.300   | 4.000   | 4.400   | 5.550   | 6.550   | 6.800   | 0                       | 0               | 0.00%        |
| C123SR84 | DIS. MG           | mg/L       | 31          | 05JUL2007 - 08APR2008 | 4            | 11.300  | 6.809   | 7.400   | 7.750   | 8.150   | 14.850  | 21.500  | 0                       | 0               | 0.00%        |
| C123SR84 | DIS. NA           | mg/L       | 28          | 05JUL2007 - 08APR2008 | 4            | 45.050  | 13.913  | 30.100  | 33.300  | 45.650  | 56.800  | 58.800  | 0                       | 0               | 0.00%        |
| C123SR84 | TOT. CL           | mg/L       | 32          | 08MAY2007 - 08APR2008 | 9            | 56.156  | 19.583  | 29.300  | 44.300  | 50.800  | 71.600  | 83.700  | 0                       | 0               | 0.00%        |
| C123SR84 | TOT. SO4          | mg/L       | 33          | 05JUL2007 - 08APR2008 | 4            | 12.825  | 15.797  | 4.000   | 4.650   | 5.400   | 21.000  | 36.500  | 0                       | 0               | 0.00%        |
| C123SR84 | DIS. SILICA       | mg/L       | 27          | 05JUL2007 - 05JUL2007 | 1            | 6.910   |         | 6.910   | 6.910   | 6.910   | 6.910   | 6.910   | 0                       | 0               | 0.00%        |
|          |                   |            |             |                       |              |         |         |         |         |         |         |         |                         |                 |              |
| G94B     | DO                | mg/L       | 8           | 08MAY2007 - 07APR2008 | 12           | 4.978   | 1.490   | 2.870   | 3.885   | 4.720   | 6.340   | 7.530   | 0                       | 7               | 58.33%       |
| G94B     | FLDCOND.          | UMHOS/CM   | 9           | 08MAY2007 - 07APR2008 | 12           | 484.900 | 115.338 | 195.900 | 431.500 | 525.000 | 571.000 | 599.900 | 0                       | 0               | 0.00%        |
| G94B     | PH                | UNITS      | 10          | 08MAY2007 - 07APR2008 | 12           | 7.200   | 0.469   | 6.400   | 6.900   | 7.150   | 7.500   | 8.000   | 0                       | 0               | 0.00%        |
| G94B     | TURBIDITY         | NTU        | 12          | 08MAY2007 - 07APR2008 | 12           | 2.200   | 1.799   | 1.000   | 1.150   | 1.650   | 2.300   | 7.300   | 0                       | 0               | 0.00%        |
| G94B     | TSS               | mg/L       | 16          | 08MAY2007 - 07APR2008 | 12           | 3.917   | 2.314   | <3      | <3      | <3      | 0.500   | 11.000  | 9                       | 0               | 0.00%        |
| G94B     | COLOR             | UNITS      | 13          | 08MAY2007 - 07APR2008 | 12           | 70.417  | 22.845  | 45.000  | 56.500  | 68.500  | 77.000  | 133.000 | 0                       | 0               | 0.00%        |
| G94B     | HARDNESS          | mg/L CaCO3 | 35          | 04JUN2007 - 10MAR2008 | 4            | 142.975 | 12.172  | 126.100 | 135.300 | 145.350 | 150.650 | 155.100 | 0                       | 0               | 0.00%        |
| G94B     | TEMP              | CENT       | 7           | 08MAY2007 - 07APR2008 | 12           | 25.858  | 3.401   | 20.100  | 23.100  | 25.500  | 28.700  | 30.600  | 0                       | 0               | 0.00%        |
| G94B     | ALKALINITY        | mg/L       | 67          | 08MAY2007 - 07APR2008 | 12           | 122.500 | 36.152  | 51.000  | 104.500 | 125.500 | 137.500 | 200.000 | 0                       | 0               | 0.00%        |
| G94B     | TN                | mg N/L     | 80          | 08MAY2007 - 07APR2008 | 12           | 1.201   | 0.350   | 0.812   | 0.986   | 1.109   | 1.240   | 2.029   | 0                       | 0               | 0.00%        |
| G94B     | NOX               | mg N/L     | 18,180      | 08MAY2007 - 10MAR2008 | 10           | 0.013   | 0.011   | 0.002   | 0.008   | 0.009   | 0.019   | 0.037   | 0                       | 0               | 0.00%        |
| G94B     | NO2               | mg N/L     | 19          | 08MAY2007 - 07APR2008 | 12           | 0.003   | 0.001   | 0.002   | 0.003   | 0.003   | 0.004   | 0.005   | 0                       | 0               | 0.00%        |
| G94B     | NO3               | mg N/L     | 78          | 08MAY2007 - 10MAR2008 | 10           | 0.010   | 0.009   | <0.004  | 0.004   | 0.005   | 0.016   | 0.032   | 2                       | 0               | 0.00%        |
| G94B     | NH4               | mg N/L     | 20          | 08MAY2007 - 07APR2008 | 12           | 0.018   | 0.013   | 0.008   | 0.009   | 0.014   | 0.021   | 0.047   | 0                       | 0               | 0.00%        |
| G94B     | UNIONIZED AMMONIA | mg/L       | NONE        | 08MAY2007 - 07APR2008 | 12           | 0.000   | 0.001   | 0.000   | 0.000   | 0.000   | 0.001   | 0.001   | 0                       | 0               | 0.00%        |

Table 3. Continued.

| STATION | TEST NAME          | UNITS      | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN    | STD     | MIN     | Q25     | MEDIAN  | Q75     | MAX      | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|---------|--------------------|------------|-------------|-----------------------|--------------|---------|---------|---------|---------|---------|---------|----------|-------------------------|-----------------|--------------|
| G94B    | NNH4               | mg N/L     | 92          | 08MAY2007 - 10MAR2008 | 10           | 0.033   | 0.020   | 0.010   | 0.020   | 0.028   | 0.031   | 0.077    | 0                       | 0               | 0.00%        |
| G94B    | ORGN               | mg N/L     | 79          | 08MAY2007 - 07APR2008 | 12           | 1.172   | 0.341   | 0.802   | 0.966   | 1.080   | 1.217   | 1.973    | 0                       | 0               | 0.00%        |
| G94B    | TKN                | mg N/L     | 21          | 08MAY2007 - 07APR2008 | 12           | 1.190   | 0.350   | 0.810   | 0.975   | 1.095   | 1.230   | 2.020    | 0                       | 0               | 0.00%        |
| G94B    | OPO4               | mg P/L     | 23          | 08MAY2007 - 07APR2008 | 12           | 0.004   | 0.006   | <0.002  | <0.002  | 0.002   | 0.003   | 0.023    | 4                       | 0               | 0.00%        |
| G94B    | TP                 | mg P/L     | 25          | 08MAY2007 - 07APR2008 | 12           | 0.035   | 0.022   | 0.018   | 0.020   | 0.025   | 0.039   | 0.089    | 0                       | 0               | 0.00%        |
| G94B    | DIS. CA            | mg/L       | 30          | 04JUN2007 - 10MAR2008 | 4            | 45.700  | 4.734   | 39.600  | 42.400  | 46.100  | 49.000  | 51.000   | 0                       | 0               | 0.00%        |
| G94B    | DIS. K             | mg/L       | 29          | 04JUN2007 - 10MAR2008 | 4            | 3.650   | 0.954   | 2.600   | 3.000   | 3.550   | 4.300   | 4.900    | 0                       | 0               | 0.00%        |
| G94B    | DIS. MG            | mg/L       | 31          | 04JUN2007 - 10MAR2008 | 4            | 7.025   | 0.479   | 6.600   | 6.700   | 6.900   | 7.350   | 7.700    | 0                       | 0               | 0.00%        |
| G94B    | DIS. NA            | mg/L       | 28          | 04JUN2007 - 10MAR2008 | 4            | 42.950  | 10.808  | 28.200  | 35.000  | 45.550  | 50.900  | 52.500   | 0                       | 0               | 0.00%        |
| G94B    | TOT. CL            | mg/L       | 32          | 08MAY2007 - 07APR2008 | 12           | 62.033  | 18.767  | 26.900  | 51.100  | 63.100  | 77.750  | 86.200   | 0                       | 0               | 0.00%        |
| G94B    | TOT. SO4           | mg/L       | 33          | 04JUN2007 - 10MAR2008 | 4            | 14.675  | 5.610   | 6.700   | 11.150  | 16.100  | 18.200  | 19.800   | 0                       | 0               | 0.00%        |
| G94B    | DIS. SILICA        | mg/L       | 27          | 04JUN2007 - 10MAR2008 | 4            | 5.828   | 4.478   | 1.900   | 1.950   | 5.825   | 9.705   | 9.760    | 0                       | 0               | 0.00%        |
| S31     | DO                 | mg/L       | 8           | 07MAY2007 - 07APR2008 | 12           | 3.938   | 1.531   | 1.370   | 2.560   | 4.485   | 5.095   | 5.650    | 0                       | 9               | 75.00%       |
| S31     | FLDCOND.           | UMHOS/CM   | 9           | 07MAY2007 - 07APR2008 | 13           | 745.538 | 64.072  | 679.000 | 712.000 | 726.000 | 761.000 | 893.000  | 0                       | 0               | 0.00%        |
| S31     | PH                 | UNITS      | 10          | 07MAY2007 - 07APR2008 | 13           | 7.515   | 0.208   | 7.200   | 7.400   | 7.600   | 7.700   | 7.800    | 0                       | 0               | 0.00%        |
| S31     | TURBIDITY          | NTU        | 12          | 07MAY2007 - 07APR2008 | 13           | 2.254   | 1.065   | 0.800   | 1.300   | 2.400   | 2.900   | 4.100    | 0                       | 0               | 0.00%        |
| S31     | TSS                | mg/L       | 16          | 07MAY2007 - 10SEP2007 | 5            | 3.200   | 0.447   | <3      | <3      | 3.000   | 4.000   | 4.000    | 3                       | 0               | 0.00%        |
| S31     | COLOR              | UNITS      | 13          | 07MAY2007 - 10SEP2007 | 5            | 47.200  | 3.271   | 43.000  | 46.000  | 46.000  | 50.000  | 51.000   | 0                       | 0               | 0.00%        |
| S31     | HARDNESS           | mg/L CaCO3 | 35          | 02JUL2007 - 07APR2008 | 4            | 252.100 | 25.634  | 216.500 | 234.950 | 257.550 | 269.250 | 276.800  | 0                       | 0               | 0.00%        |
| S31     | TEMP               | CENT       | 7           | 07MAY2007 - 07APR2008 | 13           | 25.162  | 2.404   | 21.900  | 23.400  | 24.900  | 26.700  | 29.600   | 0                       | 0               | 0.00%        |
| S31     | ALKALINITY         | mg/L       | 67          | 07MAY2007 - 10SEP2007 | 5            | 251.400 | 6.348   | 245.000 | 247.000 | 250.000 | 254.000 | 261.000  | 0                       | 0               | 0.00%        |
| S31     | TN                 | mg N/L     | 80          | 07MAY2007 - 07APR2008 | 13           | 1.450   | 0.261   | 1.200   | 1.278   | 1.330   | 1.541   | 2.042    | 0                       | 0               | 0.00%        |
| S31     | NOX                | mg N/L     | 18;180      | 07MAY2007 - 07APR2008 | 12           | 0.063   | 0.092   | 0.002   | 0.011   | 0.034   | 0.072   | 0.342    | 0                       | 0               | 0.00%        |
| S31     | NO2                | mg N/L     | 19          | 07MAY2007 - 10SEP2007 | 5            | 0.003   | 0.001   | 0.002   | 0.002   | 0.002   | 0.003   | 0.004    | 0                       | 0               | 0.00%        |
| S31     | NO3                | mg N/L     | 78          | 07MAY2007 - 10SEP2007 | 4            | 0.035   | 0.036   | <0.004  | 0.000   | 0.031   | 0.068   | 0.074    | 1                       | 0               | 0.00%        |
| S31     | NH4                | mg N/L     | 20          | 07MAY2007 - 10SEP2007 | 5            | 0.184   | 0.095   | 0.105   | 0.141   | 0.160   | 0.167   | 0.349    | 0                       | 0               | 0.00%        |
| S31     | UN-IONIZED AMMONIA | mg/L       | NONE        | 07MAY2007 - 07APR2008 | 5            | 0.004   | 0.001   | 0.002   | 0.004   | 0.005   | 0.005   | 0.005    | 0                       | 0               | 0.00%        |
| S31     | NNH4               | mg N/L     | 92          | 07MAY2007 - 10SEP2007 | 4            | 0.232   | 0.082   | 0.173   | 0.178   | 0.202   | 0.286   | 0.351    | 0                       | 0               | 0.00%        |
| S31     | ORGN               | mg N/L     | 79          | 07MAY2007 - 10SEP2007 | 5            | 1.074   | 0.028   | 1.041   | 1.059   | 1.063   | 1.095   | 1.110    | 0                       | 0               | 0.00%        |
| S31     | TKN                | mg N/L     | 21          | 07MAY2007 - 07APR2008 | 13           | 1.392   | 0.204   | 1.200   | 1.270   | 1.290   | 1.460   | 1.850    | 0                       | 0               | 0.00%        |
| S31     | OPO4               | mg P/L     | 23          | 07MAY2007 - 07APR2008 | 13           | 0.002   | 0.000   | <0.002  | <0.002  | <0.002  | <0.002  | 0.002    | 11                      | 0               | 0.00%        |
| S31     | TP                 | mg P/L     | 25          | 07MAY2007 - 07APR2008 | 13           | 0.011   | 0.002   | 0.009   | 0.010   | 0.010   | 0.013   | 0.015    | 0                       | 0               | 0.00%        |
| S31     | DIS. CA            | mg/L       | 30          | 02JUL2007 - 07APR2008 | 4            | 76.300  | 12.653  | 57.900  | 68.300  | 80.500  | 84.300  | 86.300   | 0                       | 0               | 0.00%        |
| S31     | DIS. K             | mg/L       | 29          | 02JUL2007 - 07APR2008 | 4            | 4.300   | 0.673   | 3.900   | 3.900   | 4.000   | 4.700   | 5.300    | 0                       | 0               | 0.00%        |
| S31     | DIS. MG            | mg/L       | 31          | 02JUL2007 - 07APR2008 | 4            | 14.950  | 1.794   | 13.600  | 13.700  | 14.350  | 16.200  | 17.500   | 0                       | 0               | 0.00%        |
| S31     | DIS. NA            | mg/L       | 28          | 02JUL2007 - 07APR2008 | 4            | 52.900  | 13.113  | 44.200  | 45.400  | 47.500  | 60.400  | 72.400   | 0                       | 0               | 0.00%        |
| S31     | TOT. CL            | mg/L       | 32          | 07MAY2007 - 07APR2008 | 8            | 74.288  | 14.274  | 63.300  | 65.850  | 71.300  | 74.350  | 108.000  | 0                       | 0               | 0.00%        |
| S31     | TOT. SO4           | mg/L       | 33          | 02JUL2007 - 07APR2008 | 4            | 5.700   | 4.690   | 2.700   | 3.200   | 3.700   | 8.200   | 12.700   | 0                       | 0               | 0.00%        |
| S31     | DIS. SILICA        | mg/L       | 27          | 02JUL2007 - 02JUL2007 | 1            | 9.830   |         | 9.830   | 9.830   | 9.830   | 9.830   | 9.830    | 0                       | 0               | 0.00%        |
| S38     | DO                 | mg/L       | 8           | 07MAY2007 - 07APR2008 | 13           | 3.054   | 1.806   | 1.540   | 2.040   | 2.490   | 3.100   | 8.380    | 0                       | 12              | 92.31%       |
| S38     | FLDCOND.           | UMHOS/CM   | 9           | 07MAY2007 - 07APR2008 | 13           | 650.154 | 190.280 | 411.000 | 501.000 | 696.000 | 786.000 | 1031.000 | 0                       | 0               | 0.00%        |
| S38     | PH                 | UNITS      | 10          | 07MAY2007 - 07APR2008 | 13           | 7.446   | 0.240   | 7.200   | 7.300   | 7.400   | 7.500   | 8.100    | 0                       | 0               | 0.00%        |

Table 3. Continued.

| STATION | TEST NAME         | UNITS      | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN    | STD     | MIN     | Q25     | MEDIAN  | Q75     | MAX     | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|---------|-------------------|------------|-------------|-----------------------|--------------|---------|---------|---------|---------|---------|---------|---------|-------------------------|-----------------|--------------|
| S38     | TURBIDITY         | NTU        | 12          | 07MAY2007 - 07APR2008 | 13           | 1.338   | 1.072   | 0.600   | 0.900   | 1.100   | 1.300   | 4.700   | 0                       | 0               | 0.00%        |
| S38     | TSS               | mg/L       | 16          | 07MAY2007 - 10SEP2007 | 5            | 3.400   | 0.894   | <3      | <3      | <3      | <3      | 5.000   | 4                       | 0               | 0.00%        |
| S38     | COLOR             | UNITS      | 13          | 07MAY2007 - 10SEP2007 | 5            | 88.600  | 11.459  | 76.000  | 78.000  | 91.000  | 95.000  | 103.000 | 0                       | 0               | 0.00%        |
| S38     | HARDNESS          | mg/L CaCO3 | 35          | 02JUL2007 - 07APR2008 | 4            | 183.225 | 58.910  | 118.200 | 136.250 | 181.450 | 230.200 | 251.800 | 0                       | 0               | 0.00%        |
| S38     | TEMP              | CENT       | 7           | 07MAY2007 - 07APR2008 | 13           | 25.346  | 3.938   | 19.100  | 21.900  | 26.000  | 28.600  | 30.800  | 0                       | 0               | 0.00%        |
| S38     | ALKALINITY        | mg/L       | 67          | 07MAY2007 - 10SEP2007 | 5            | 194.200 | 24.263  | 167.000 | 170.000 | 202.000 | 213.000 | 219.000 | 0                       | 0               | 0.00%        |
| S38     | TN                | mg N/L     | 80          | 07MAY2007 - 07APR2008 | 13           | 1.665   | 0.535   | 1.061   | 1.270   | 1.510   | 1.861   | 2.952   | 0                       | 0               | 0.00%        |
| S38     | NOX               | mg N/L     | 18,180      | 07MAY2007 - 07APR2008 | 13           | 0.023   | 0.021   | <0.005  | 0.006   | 0.013   | 0.028   | 0.072   | 2                       | 0               | 0.00%        |
| S38     | NO2               | mg N/L     | 19          | 07MAY2007 - 10SEP2007 | 5            | 0.006   | 0.004   | 0.003   | 0.004   | 0.004   | 0.008   | 0.013   | 0                       | 0               | 0.00%        |
| S38     | NO3               | mg N/L     | 78          | 07MAY2007 - 10SEP2007 | 5            | 0.034   | 0.023   | <0.004  | 0.017   | 0.044   | 0.045   | 0.059   | 1                       | 0               | 0.00%        |
| S38     | NH4               | mg N/L     | 20          | 07MAY2007 - 10SEP2007 | 5            | 0.051   | 0.075   | 0.006   | 0.009   | 0.016   | 0.042   | 0.183   | 0                       | 0               | 0.00%        |
| S38     | UNIONIZED AMMONIA | mg/L       | NONE        | 07MAY2007 - 07APR2008 | 5            | 0.002   | 0.002   | 0.000   | 0.000   | 0.001   | 0.002   | 0.005   | 0                       | 0               | 0.00%        |
| S38     | NNH4              | mg N/L     | 92          | 07MAY2007 - 10SEP2007 | 5            | 0.091   | 0.094   | 0.015   | 0.053   | 0.063   | 0.069   | 0.255   | 0                       | 0               | 0.00%        |
| S38     | ORGN              | mg N/L     | 79          | 07MAY2007 - 10SEP2007 | 5            | 2.117   | 0.381   | 1.764   | 1.798   | 2.081   | 2.244   | 2.697   | 0                       | 0               | 0.00%        |
| S38     | TKN               | mg N/L     | 21          | 07MAY2007 - 07APR2008 | 13           | 1.642   | 0.519   | 1.050   | 1.270   | 1.510   | 1.840   | 2.880   | 0                       | 0               | 0.00%        |
| S38     | OPO4              | mg P/L     | 23          | 07MAY2007 - 07APR2008 | 13           | 0.003   | 0.003   | <0.002  | <0.002  | <0.002  | 0.002   | 0.013   | 9                       | 0               | 0.00%        |
| S38     | TP                | mg P/L     | 25          | 07MAY2007 - 07APR2008 | 13           | 0.018   | 0.012   | 0.008   | 0.010   | 0.014   | 0.017   | 0.047   | 0                       | 0               | 0.00%        |
| S38     | DIS. CA           | mg/L       | 30          | 02JUL2007 - 07APR2008 | 4            | 47.700  | 12.537  | 33.900  | 38.300  | 46.750  | 57.100  | 63.400  | 0                       | 0               | 0.00%        |
| S38     | DIS. K            | mg/L       | 29          | 02JUL2007 - 07APR2008 | 4            | 5.500   | 2.315   | 3.500   | 3.600   | 5.100   | 7.400   | 8.300   | 0                       | 0               | 0.00%        |
| S38     | DIS. MG           | mg/L       | 31          | 02JUL2007 - 07APR2008 | 4            | 15.550  | 6.838   | 8.100   | 9.850   | 15.700  | 21.250  | 22.700  | 0                       | 0               | 0.00%        |
| S38     | DIS. NA           | mg/L       | 28          | 02JUL2007 - 07APR2008 | 4            | 54.450  | 16.163  | 37.600  | 41.150  | 53.700  | 67.750  | 72.800  | 0                       | 0               | 0.00%        |
| S38     | TOT. CL           | mg/L       | 32          | 07MAY2007 - 07APR2008 | 8            | 103.088 | 36.994  | 55.100  | 79.350  | 100.450 | 117.500 | 175.000 | 0                       | 0               | 0.00%        |
| S38     | TOT. SO4          | mg/L       | 33          | 02JUL2007 - 07APR2008 | 4            | 17.750  | 10.959  | 6.500   | 8.400   | 18.050  | 27.100  | 28.400  | 0                       | 0               | 0.00%        |
| S38     | DIS. SILICA       | mg/L       | 27          | 02JUL2007 - 02JUL2007 | 1            | 11.730  |         | 11.730  | 11.730  | 11.730  | 11.730  | 11.730  | 0                       | 0               | 0.00%        |
| S39     | DO                | mg/L       | 8           | 08MAY2007 - 07APR2008 | 13           | 6.519   | 1.374   | 4.030   | 5.460   | 6.960   | 7.360   | 8.640   | 0                       | 2               | 15.38%       |
| S39     | FLDCOND.          | UMHOS/CM   | 9           | 08MAY2007 - 07APR2008 | 13           | 418.831 | 142.241 | 208.500 | 318.300 | 421.000 | 480.000 | 723.000 | 0                       | 0               | 0.00%        |
| S39     | PH                | UNITS      | 10          | 08MAY2007 - 07APR2008 | 13           | 7.462   | 0.318   | 6.800   | 7.200   | 7.600   | 7.600   | 8.000   | 0                       | 0               | 0.00%        |
| S39     | TURBIDITY         | NTU        | 12          | 08MAY2007 - 07APR2008 | 13           | 2.192   | 2.465   | 0.800   | 0.800   | 1.100   | 2.100   | 9.400   | 0                       | 0               | 0.00%        |
| S39     | TSS               | mg/L       | 16          | 08MAY2007 - 02JUL2007 | 3            | 3.667   | 1.155   | <3      | <3      | <3      | 5.000   | 5.000   | 2                       | 0               | 0.00%        |
| S39     | COLOR             | UNITS      | 13          | 08MAY2007 - 02JUL2007 | 3            | 83.000  | 45.044  | 56.000  | 56.000  | 58.000  | 135.000 | 135.000 | 0                       | 0               | 0.00%        |
| S39     | HARDNESS          | mg/L CaCO3 | 35          | 04JUN2007 - 10MAR2008 | 4            | 117.000 | 33.496  | 68.700  | 97.150  | 126.600 | 136.850 | 146.100 | 0                       | 0               | 0.00%        |
| S39     | TEMP              | CENT       | 7           | 08MAY2007 - 07APR2008 | 13           | 25.169  | 3.925   | 19.400  | 21.700  | 25.300  | 27.500  | 31.200  | 0                       | 0               | 0.00%        |
| S39     | ALKALINITY        | mg/L       | 67          | 08MAY2007 - 02JUL2007 | 3            | 86.667  | 38.004  | 49.000  | 49.000  | 86.000  | 125.000 | 125.000 | 0                       | 0               | 0.00%        |
| S39     | TN                | mg N/L     | 80          | 08MAY2007 - 07APR2008 | 13           | 1.145   | 0.270   | 0.830   | 0.940   | 1.103   | 1.268   | 1.723   | 0                       | 0               | 0.00%        |
| S39     | NOX               | mg N/L     | 18,180      | 08MAY2007 - 10MAR2008 | 11           | 0.008   | 0.006   | <0.005  | 0.002   | 0.005   | 0.012   | 0.023   | 2                       | 0               | 0.00%        |
| S39     | NO2               | mg N/L     | 19          | 08MAY2007 - 02JAN2008 | 9            | 0.003   | 0.001   | 0.002   | 0.003   | 0.003   | 0.003   | 0.005   | 0                       | 0               | 0.00%        |
| S39     | NO3               | mg N/L     | 78          | 08MAY2007 - 02JAN2008 | 8            | 0.008   | 0.006   | <0.004  | <0.004  | 0.001   | 0.011   | 0.020   | 4                       | 0               | 0.00%        |
| S39     | NH4               | mg N/L     | 20          | 08MAY2007 - 02JAN2008 | 9            | 0.019   | 0.005   | 0.011   | 0.015   | 0.019   | 0.022   | 0.026   | 0                       | 0               | 0.00%        |
| S39     | UNIONIZED AMMONIA | mg/L       | NONE        | 08MAY2007 - 07APR2008 | 9            | 0.001   | 0.000   | 0.000   | 0.000   | 0.000   | 0.001   | 0.001   | 0                       | 0               | 0.00%        |
| S39     | NNH4              | mg N/L     | 92          | 08MAY2007 - 02JAN2008 | 8            | 0.028   | 0.010   | 0.013   | 0.020   | 0.028   | 0.036   | 0.042   | 0                       | 0               | 0.00%        |
| S39     | ORGN              | mg N/L     | 79          | 08MAY2007 - 02JAN2008 | 9            | 1.226   | 0.251   | 0.925   | 1.085   | 1.148   | 1.388   | 1.694   | 0                       | 0               | 0.00%        |
| S39     | TKN               | mg N/L     | 21          | 08MAY2007 - 07APR2008 | 13           | 1.138   | 0.267   | 0.830   | 0.940   | 1.100   | 1.260   | 1.720   | 0                       | 0               | 0.00%        |
| S39     | OPO4              | mg P/L     | 23          | 08MAY2007 - 07APR2008 | 13           | 0.002   | 0.001   | <0.002  | <0.002  | 0.002   | 0.003   | 0.004   | 6                       | 0               | 0.00%        |

Table 3. Continued.

| STATION | TEST NAME   | UNITS      | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN    | STD     | MIN     | Q25     | MEDIAN  | Q75     | MAX     | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|---------|-------------|------------|-------------|-----------------------|--------------|---------|---------|---------|---------|---------|---------|---------|-------------------------|-----------------|--------------|
| S39     | TP          | mg P/L     | 25          | 08MAY2007 - 07APR2008 | 13           | 0.023   | 0.010   | 0.013   | 0.014   | 0.021   | 0.033   | 0.041   | 0                       | 0               | 0.00%        |
| S39     | DIS. CA     | mg/L       | 30          | 04JUN2007 - 10MAR2008 | 4            | 36.225  | 11.082  | 20.700  | 29.650  | 38.600  | 42.800  | 47.000  | 0                       | 0               | 0.00%        |
| S39     | DIS. K      | mg/L       | 29          | 04JUN2007 - 10MAR2008 | 4            | 2.950   | 0.790   | 2.000   | 2.300   | 3.100   | 3.600   | 3.600   | 0                       | 0               | 0.00%        |
| S39     | DIS. MG     | mg/L       | 31          | 04JUN2007 - 10MAR2008 | 4            | 6.450   | 1.589   | 4.100   | 5.550   | 7.050   | 7.350   | 7.600   | 0                       | 0               | 0.00%        |
| S39     | DIS. NA     | mg/L       | 28          | 04JUN2007 - 10MAR2008 | 4            | 34.125  | 9.316   | 24.200  | 26.250  | 34.450  | 42.000  | 43.400  | 0                       | 0               | 0.00%        |
| S39     | TOT. CL     | mg/L       | 32          | 08MAY2007 - 10MAR2008 | 10           | 58.190  | 24.334  | 24.700  | 40.600  | 58.800  | 67.900  | 112.000 | 0                       | 0               | 0.00%        |
| S39     | TOT. SO4    | mg/L       | 33          | 04JUN2007 - 10MAR2008 | 4            | 12.525  | 6.848   | 2.300   | 8.700   | 15.550  | 16.350  | 16.700  | 0                       | 0               | 0.00%        |
| S39     | DIS. SILICA | mg/L       | 27          | 04JUN2007 - 04JUN2007 | 1            | 1.950   |         | 1.950   | 1.950   | 1.950   | 1.950   | 1.950   | 0                       | 0               | 0.00%        |
| S39     | TOT. FE     | mg/L       | 177         | 04JUN2007 - 04JUN2007 | 1            | 0.039   |         | 0.039   | 0.039   | 0.039   | 0.039   | 0.039   | 0                       | 0               | 0.00%        |
|         |             |            |             |                       |              |         |         |         |         |         |         |         |                         |                 |              |
| S197    | DO          | mg/L       | 8           | 02JUL2007 - 07APR2008 | 4            | 8.528   | 2.176   | 5.770   | 6.910   | 8.720   | 10.145  | 10.900  | 0                       | 0               | 0.00%        |
| S197    | FLDCOND.    | UMHOS/CM   | 9           | 02JUL2007 - 07APR2008 | 4            | 564.500 | 128.513 | 452.000 | 477.000 | 530.000 | 652.000 | 746.000 | 0                       | 0               | 0.00%        |
| S197    | PH          | UNITS      | 10          | 02JUL2007 - 07APR2008 | 4            | 7.775   | 0.443   | 7.300   | 7.400   | 7.800   | 8.150   | 8.200   | 0                       | 0               | 0.00%        |
| S197    | TURBIDITY   | NTU        | 12          | 02JUL2007 - 07APR2008 | 4            | 1.800   | 0.716   | 0.800   | 1.350   | 1.950   | 2.250   | 2.500   | 0                       | 0               | 0.00%        |
| S197    | TSS         | mg/L       | 16          | 01OCT2007 - 07APR2008 | 3            | 3.000   | 0.000   | <3      | <3      | <3      | <3      | <3      | 3                       | 0               | 0.00%        |
| S197    | HARDNESS    | mg/L CaCO3 | 35          | 02JUL2007 - 07APR2008 | 4            | 196.425 | 17.774  | 170.900 | 184.600 | 202.000 | 208.250 | 210.800 | 0                       | 0               | 0.00%        |
| S197    | TEMP        | CENT       | 7           | 02JUL2007 - 07APR2008 | 4            | 26.075  | 2.899   | 22.500  | 24.300  | 26.100  | 27.850  | 29.600  | 0                       | 0               | 0.00%        |
| S197    | TN          | mg N/L     | 80          | 02JUL2007 - 07APR2008 | 4            | 0.631   | 0.054   | 0.590   | 0.599   | 0.612   | 0.663   | 0.710   | 0                       | 0               | 0.00%        |
| S197    | NOX         | mg N/L     | 18;180      | 02JUL2007 - 07APR2008 | 4            | 0.102   | 0.066   | <0.005  | 0.058   | 0.128   | 0.142   | 0.148   | 1                       | 0               | 0.00%        |
| S197    | TKN         | mg N/L     | 21          | 02JUL2007 - 07APR2008 | 4            | 0.530   | 0.070   | 0.460   | 0.470   | 0.535   | 0.590   | 0.590   | 0                       | 0               | 0.00%        |
| S197    | OPO4        | mg P/L     | 23          | 02JUL2007 - 07APR2008 | 4            | 0.002   | 0.000   | <0.002  | <0.002  | <0.002  | <0.002  | <0.002  | 4                       | 0               | 0.00%        |
| S197    | TP          | mg P/L     | 25          | 02JUL2007 - 07APR2008 | 3            | 0.005   | 0.001   | 0.004   | 0.004   | 0.004   | 0.006   | 0.006   | 0                       | 0               | 0.00%        |
| S197    | DIS. CA     | mg/L       | 30          | 02JUL2007 - 07APR2008 | 4            | 66.625  | 5.504   | 60.300  | 62.150  | 66.850  | 71.100  | 72.500  | 0                       | 0               | 0.00%        |
| S197    | DIS. K      | mg/L       | 29          | 02JUL2007 - 07APR2008 | 4            | 4.600   | 0.497   | 3.900   | 4.250   | 4.750   | 4.950   | 5.000   | 0                       | 0               | 0.00%        |
| S197    | DIS. MG     | mg/L       | 31          | 02JUL2007 - 07APR2008 | 4            | 7.300   | 3.436   | 4.900   | 5.400   | 5.950   | 9.200   | 12.400  | 0                       | 0               | 0.00%        |
| S197    | DIS. NA     | mg/L       | 28          | 02JUL2007 - 07APR2008 | 4            | 37.450  | 21.676  | 23.000  | 25.250  | 28.550  | 49.650  | 69.700  | 0                       | 0               | 0.00%        |
| S197    | TOT. CL     | mg/L       | 32          | 01OCT2007 - 07APR2008 | 3            | 68.700  | 41.030  | 42.700  | 42.700  | 47.400  | 116.000 | 116.000 | 0                       | 0               | 0.00%        |
| S197    | TOT. SO4    | mg/L       | 33          | 02JUL2007 - 07APR2008 | 4            | 9.925   | 2.780   | 6.400   | 8.200   | 10.050  | 11.650  | 13.200  | 0                       | 0               | 0.00%        |
|         |             |            |             |                       |              |         |         |         |         |         |         |         |                         |                 |              |
| S334    | DO          | mg/L       | 8           | 08MAY2007 - 11SEP2007 | 8            | 5.181   | 2.344   | 2.100   | 2.635   | 6.150   | 6.840   | 8.100   | 0                       | 3               | 37.50%       |
| S334    | FLDCOND.    | UMHOS/CM   | 9           | 08MAY2007 - 11SEP2007 | 9            | 546.444 | 71.582  | 442.000 | 479.000 | 572.000 | 584.000 | 644.000 | 0                       | 0               | 0.00%        |
| S334    | PH          | UNITS      | 10          | 08MAY2007 - 11SEP2007 | 9            | 7.511   | 0.366   | 7.000   | 7.200   | 7.600   | 7.800   | 8.000   | 0                       | 0               | 0.00%        |
| S334    | TURBIDITY   | NTU        | 12          | 08MAY2007 - 11SEP2007 | 7            | 3.114   | 1.298   | 1.400   | 1.800   | 3.100   | 4.700   | 4.700   | 0                       | 0               | 0.00%        |
| S334    | HARDNESS    | mg/L CaCO3 | 35          | 14AUG2007 - 14AUG2007 | 1            | 172.900 |         | 172.900 | 172.900 | 172.900 | 172.900 | 172.900 | 0                       | 0               | 0.00%        |
| S334    | TEMP        | CENT       | 7           | 08MAY2007 - 11SEP2007 | 9            | 28.956  | 1.776   | 25.300  | 28.400  | 29.300  | 30.200  | 31.000  | 0                       | 0               | 0.00%        |
| S334    | TN          | mg N/L     | 80          | 08MAY2007 - 11SEP2007 | 7            | 1.172   | 0.096   | 1.070   | 1.110   | 1.129   | 1.236   | 1.350   | 0                       | 0               | 0.00%        |
| S334    | NOX         | mg N/L     | 18;180      | 08MAY2007 - 02JUL2007 | 4            | 0.050   | 0.034   | <0.006  | 0.022   | 0.053   | 0.072   | 0.088   | 1                       | 0               | 0.00%        |
| S334    | TKN         | mg N/L     | 21          | 08MAY2007 - 11SEP2007 | 7            | 1.144   | 0.097   | 1.070   | 1.080   | 1.110   | 1.180   | 1.350   | 0                       | 0               | 0.00%        |
| S334    | TP          | mg P/L     | 25          | 08MAY2007 - 11SEP2007 | 9            | 0.014   | 0.002   | 0.012   | 0.013   | 0.015   | 0.016   | 0.016   | 0                       | 0               | 0.00%        |
| S334    | DIS. CA     | mg/L       | 30          | 14AUG2007 - 14AUG2007 | 1            | 60.000  |         | 60.000  | 60.000  | 60.000  | 60.000  | 60.000  | 0                       | 0               | 0.00%        |
| S334    | DIS. K      | mg/L       | 29          | 14AUG2007 - 14AUG2007 | 1            | 1.700   |         | 1.700   | 1.700   | 1.700   | 1.700   | 1.700   | 0                       | 0               | 0.00%        |
| S334    | DIS. MG     | mg/L       | 31          | 14AUG2007 - 14AUG2007 | 1            | 5.600   |         | 5.600   | 5.600   | 5.600   | 5.600   | 5.600   | 0                       | 0               | 0.00%        |
| S334    | DIS. NA     | mg/L       | 28          | 14AUG2007 - 14AUG2007 | 1            | 22.900  |         | 22.900  | 22.900  | 22.900  | 22.900  | 22.900  | 0                       | 0               | 0.00%        |
| S334    | TOT. SO4    | mg/L       | 33          | 02JUL2007 - 14AUG2007 | 2            | 2.250   | 2.051   | 0.800   | 0.800   | 2.250   | 3.700   | 3.700   | 0                       | 0               | 0.00%        |

Table 3. Continued.

| STATION | TEST NAME         | UNITS      | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN    | STD    | MIN     | Q25     | MEDIAN  | Q75     | MAX     | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|---------|-------------------|------------|-------------|-----------------------|--------------|---------|--------|---------|---------|---------|---------|---------|-------------------------|-----------------|--------------|
| US41-25 | DO                | mg/L       | 8           | 10MAY2007 - 10APR2008 | 18           | 3.661   | 1.186  | 2.050   | 2.600   | 3.485   | 4.030   | 6.600   | 0                       | 16              | 88.89%       |
| US41-25 | FLDCOND.          | UMHOS/CM   | 9           | 10MAY2007 - 10APR2008 | 18           | 433.167 | 39.320 | 357.000 | 399.000 | 451.000 | 457.000 | 505.000 | 0                       | 0               | 0.00%        |
| US41-25 | PH                | UNITS      | 10          | 10MAY2007 - 10APR2008 | 18           | 7.289   | 0.181  | 7.000   | 7.200   | 7.250   | 7.400   | 7.800   | 0                       | 0               | 0.00%        |
| US41-25 | TURBIDITY         | NTU        | 12          | 10MAY2007 - 10APR2008 | 9            | 2.689   | 1.545  | 0.800   | 1.300   | 2.900   | 3.800   | 5.300   | 0                       | 0               | 0.00%        |
| US41-25 | TSS               | mg/L       | 16          | 10MAY2007 - 10APR2008 | 13           | 3.846   | 1.405  | <3      | <3      | <3      | 5.000   | 7.000   | 8                       | 0               | 0.00%        |
| US41-25 | COLOR             | UNITS      | 13          | 10MAY2007 - 13SEP2007 | 6            | 30.000  | 15.710 | 18.000  | 18.000  | 22.500  | 44.000  | 55.000  | 0                       | 0               | 0.00%        |
| US41-25 | HARDNESS          | mg/L CaCO3 | 35          | 10MAY2007 - 10APR2008 | 13           | 196.446 | 26.756 | 150.300 | 178.300 | 206.800 | 209.900 | 245.300 | 0                       | 0               | 0.00%        |
| US41-25 | TEMP              | CENT       | 7           | 10MAY2007 - 10APR2008 | 18           | 26.300  | 3.313  | 18.500  | 23.000  | 27.150  | 29.100  | 30.000  | 0                       | 0               | 0.00%        |
| US41-25 | ALKALINITY        | mg/L       | 67          | 10MAY2007 - 13SEP2007 | 6            | 185.667 | 26.561 | 149.000 | 154.000 | 201.500 | 203.000 | 205.000 | 0                       | 0               | 0.00%        |
| US41-25 | TN                | mg N/L     | 80          | 10MAY2007 - 10APR2008 | 12           | 1.044   | 0.112  | 0.900   | 0.973   | 1.012   | 1.099   | 1.300   | 0                       | 0               | 0.00%        |
| US41-25 | NOX               | mg N/L     | 18;180      | 07JUN2007 - 10APR2008 | 7            | 0.036   | 0.014  | 0.015   | 0.030   | 0.034   | 0.043   | 0.061   | 0                       | 0               | 0.00%        |
| US41-25 | NO2               | mg N/L     | 19          | 10MAY2007 - 13SEP2007 | 6            | 0.003   | 0.001  | <0.002  | <0.002  | 0.003   | 0.003   | 0.003   | 2                       | 0               | 0.00%        |
| US41-25 | NO3               | mg N/L     | 78          | 07JUN2007 - 02AUG2007 | 2            | 0.024   | 0.015  | 0.013   | 0.013   | 0.024   | 0.034   | 0.034   | 0                       | 0               | 0.00%        |
| US41-25 | NH4               | mg N/L     | 20          | 10MAY2007 - 13SEP2007 | 6            | 0.050   | 0.030  | 0.005   | 0.022   | 0.060   | 0.071   | 0.081   | 0                       | 0               | 0.00%        |
| US41-25 | UNIONIZED AMMONIA | mg/L       | NONE        | 10MAY2007 - 10APR2008 | 6            | 0.001   | 0.000  | 0.000   | 0.000   | 0.001   | 0.001   | 0.001   | 0                       | 0               | 0.00%        |
| US41-25 | NNH4              | mg N/L     | 92          | 07JUN2007 - 02AUG2007 | 2            | 0.071   | 0.021  | 0.056   | 0.056   | 0.071   | 0.086   | 0.086   | 0                       | 0               | 0.00%        |
| US41-25 | ORGN              | mg N/L     | 79          | 10MAY2007 - 13SEP2007 | 6            | 1.047   | 0.104  | 0.911   | 0.995   | 1.034   | 1.089   | 1.219   | 0                       | 0               | 0.00%        |
| US41-25 | TKN               | mg N/L     | 21          | 10MAY2007 - 10APR2008 | 12           | 1.023   | 0.118  | 0.900   | 0.925   | 0.990   | 1.070   | 1.300   | 0                       | 0               | 0.00%        |
| US41-25 | OPO4              | mg P/L     | 23          | 07JUN2007 - 10APR2008 | 10           | 0.002   | 0.000  | <0.002  | <0.002  | <0.002  | 0.002   | 0.003   | 6                       | 0               | 0.00%        |
| US41-25 | ALKALINE PHOS     | nM/minml   | 168         | 07JUN2007 - 13SEP2007 | 3            | 7.333   | 4.509  | 3.000   | 3.000   | 7.000   | 12.000  | 12.000  | 0                       | 0               | 0.00%        |
| US41-25 | TP                | mg P/L     | 25          | 10MAY2007 - 10APR2008 | 17           | 0.029   | 0.017  | 0.012   | 0.017   | 0.020   | 0.037   | 0.067   | 0                       | 0               | 0.00%        |
| US41-25 | DIS. CA           | mg/L       | 30          | 10MAY2007 - 10APR2008 | 13           | 72.823  | 10.324 | 55.400  | 66.100  | 77.100  | 78.000  | 91.800  | 0                       | 0               | 0.00%        |
| US41-25 | DIS. K            | mg/L       | 29          | 10MAY2007 - 10APR2008 | 12           | 0.892   | 0.193  | 0.700   | 0.700   | 0.850   | 1.000   | 1.300   | 0                       | 0               | 0.00%        |
| US41-25 | DIS. MG           | mg/L       | 31          | 10MAY2007 - 10APR2008 | 12           | 3.567   | 0.516  | 2.900   | 3.250   | 3.550   | 3.700   | 4.900   | 0                       | 0               | 0.00%        |
| US41-25 | DIS. NA           | mg/L       | 28          | 10MAY2007 - 10APR2008 | 12           | 16.000  | 3.088  | 12.600  | 13.950  | 15.050  | 17.650  | 23.200  | 0                       | 0               | 0.00%        |
| US41-25 | TOT. CL           | mg/L       | 32          | 10MAY2007 - 10APR2008 | 12           | 23.325  | 4.721  | 18.700  | 20.350  | 21.600  | 25.700  | 35.300  | 0                       | 0               | 0.00%        |
| US41-25 | TOT. SO4          | mg/L       | 33          | 11OCT2007 - 10APR2008 | 3            | 0.733   | 1.012  | <0.1    | <0.1    | 0.200   | 1.900   | 1.900   | 1                       | 0               | 0.00%        |
| US41-25 | TOT. FE           | mg/L       | 177         | 05JUL2007 - 05JUL2007 | 1            | 0.202   |        | 0.202   | 0.202   | 0.202   | 0.202   | 0.202   | 0                       | 0               | 0.00%        |
| US41-25 | CAROTENOID        | mg/m3      | 63          | 10MAY2007 - 13SEP2007 | 6            | 5.617   | 3.061  | 2.200   | 3.000   | 5.350   | 7.200   | 10.600  | 0                       | 0               | 0.00%        |
| US41-25 | CHLA              | mg/m3      | 61          | 10MAY2007 - 13SEP2007 | 6            | 16.167  | 11.548 | 5.000   | 7.000   | 14.000  | 20.000  | 37.000  | 0                       | 0               | 0.00%        |
| US41-25 | CHLA2             | mg/m3      | 112         | 10MAY2007 - 13SEP2007 | 6            | 14.167  | 11.409 | 5.000   | 6.000   | 11.000  | 16.000  | 36.000  | 0                       | 0               | 0.00%        |
| US41-25 | CHLB              | mg/m3      | 62          | 10MAY2007 - 13SEP2007 | 6            | 1.500   | 0.837  | <1      | <1      | 1.000   | 2.000   | 3.000   | 2                       | 0               | 0.00%        |
| US41-25 | CHLC              | mg/m3      | 113         | 10MAY2007 - 13SEP2007 | 6            | 1.500   | 0.837  | <1      | <1      | 0.000   | 2.000   | 3.000   | 3                       | 0               | 0.00%        |
| US41-25 | PHEOPHYTIN A      | mg/m3      | 64          | 10MAY2007 - 13SEP2007 | 6            | 2.833   | 1.472  | <1      | 1.000   | 3.500   | 4.000   | 4.000   | 1                       | 0               | 0.00%        |
| S344    | DO                | mg/L       | 8           | 16MAY2007 - 04MAR2008 | 4            | 3.665   | 1.879  | 1.840   | 2.065   | 3.600   | 5.265   | 5.620   | 0                       | 3               | 75.00%       |
| S344    | FLDCOND.          | UMHOS/CM   | 9           | 16MAY2007 - 04MAR2008 | 4            | 325.750 | 59.343 | 267.000 | 287.500 | 314.000 | 364.000 | 408.000 | 0                       | 0               | 0.00%        |
| S344    | PH                | UNITS      | 10          | 16MAY2007 - 04MAR2008 | 4            | 7.350   | 0.208  | 7.100   | 7.200   | 7.350   | 7.500   | 7.600   | 0                       | 0               | 0.00%        |
| S344    | TURBIDITY         | NTU        | 12          | 16MAY2007 - 04MAR2008 | 4            | 2.800   | 2.448  | 0.300   | 0.700   | 2.950   | 4.900   | 5.000   | 0                       | 0               | 0.00%        |
| S344    | HARDNESS          | mg/L CaCO3 | 35          | 16MAY2007 - 04MAR2008 | 4            | 146.925 | 25.817 | 121.500 | 130.400 | 141.700 | 163.450 | 182.800 | 0                       | 0               | 0.00%        |
| S344    | TEMP              | CENT       | 7           | 16MAY2007 - 04MAR2008 | 4            | 25.200  | 3.927  | 21.300  | 22.050  | 24.750  | 28.350  | 30.000  | 0                       | 0               | 0.00%        |
| S344    | TN                | mg N/L     | 80          | 16MAY2007 - 04MAR2008 | 4            | 1.386   | 0.227  | 1.140   | 1.206   | 1.374   | 1.566   | 1.657   | 0                       | 0               | 0.00%        |

Table 3. Continued.

| STATION | TEST NAME         | UNITS      | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN    | STD   | MIN     | Q25     | MEDIAN  | Q75     | MAX     | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|---------|-------------------|------------|-------------|-----------------------|--------------|---------|-------|---------|---------|---------|---------|---------|-------------------------|-----------------|--------------|
| S344    | NOX               | mg N/L     | 18,180      | 16MAY2007 - 04MAR2008 | 4            | 0.011   | 0.003 | 0.007   | 0.009   | 0.011   | 0.014   | 0.015   | 0                       | 0               | 0.00%        |
| S344    | TKN               | mg N/L     | 21          | 16MAY2007 - 04MAR2008 | 4            | 1.375   | 0.228 | 1.130   | 1.195   | 1.360   | 1.555   | 1.650   | 0                       | 0               | 0.00%        |
| S344    | TP                | mg P/L     | 25          | 16MAY2007 - 04MAR2008 | 4            | 0.036   | 0.020 | 0.017   | 0.020   | 0.033   | 0.053   | 0.061   | 0                       | 0               | 0.00%        |
| S344    | DIS. CA           | mg/L       | 30          | 16MAY2007 - 04MAR2008 | 4            | 54.200  | 9.407 | 44.800  | 48.150  | 52.400  | 60.250  | 67.200  | 0                       | 0               | 0.00%        |
| S344    | DIS. K            | mg/L       | 29          | 16MAY2007 - 04MAR2008 | 4            | 0.750   | 0.387 | 0.400   | 0.500   | 0.650   | 1.000   | 1.300   | 0                       | 0               | 0.00%        |
| S344    | DIS. MG           | mg/L       | 31          | 16MAY2007 - 04MAR2008 | 4            | 2.775   | 0.568 | 2.300   | 2.450   | 2.600   | 3.100   | 3.600   | 0                       | 0               | 0.00%        |
| S344    | DIS. NA           | mg/L       | 28          | 16MAY2007 - 04MAR2008 | 4            | 11.075  | 3.250 | 8.100   | 8.700   | 10.350  | 13.450  | 15.500  | 0                       | 0               | 0.00%        |
| S344    | TOT. SO4          | mg/L       | 33          | 16MAY2007 - 04MAR2008 | 4            | 0.250   | 0.173 | <0.1    | 0.050   | 0.200   | 0.350   | 0.500   | 1                       | 0               | 0.00%        |
| S174    | DO                | mg/L       | 8           | 02MAY2007 - 26SEP2007 | 18           | 4.888   | 2.096 | 0.750   | 4.090   | 5.120   | 6.680   | 7.760   | 0                       | 9               | 50.00%       |
| S174    | FLDCOND.          | UMHOS/CM   | 9           | 02MAY2007 - 26SEP2007 | 21           | 529.190 | 9.147 | 509.000 | 521.000 | 531.000 | 536.000 | 543.000 | 0                       | 0               | 0.00%        |
| S174    | PH                | UNITS      | 10          | 02MAY2007 - 26SEP2007 | 22           | 7.423   | 0.272 | 7.000   | 7.200   | 7.350   | 7.700   | 8.000   | 0                       | 0               | 0.00%        |
| S174    | TEMP              | CENT       | 7           | 02MAY2007 - 26SEP2007 | 22           | 27.668  | 1.477 | 25.400  | 26.200  | 27.750  | 28.600  | 30.500  | 0                       | 0               | 0.00%        |
| S174    | TP                | mg P/L     | 25          | 02MAY2007 - 26SEP2007 | 22           | 0.008   | 0.003 | 0.004   | 0.006   | 0.007   | 0.008   | 0.018   | 0                       | 0               | 0.00%        |
|         |                   |            |             |                       |              |         |       |         |         |         |         |         |                         |                 |              |
| S176    | DO                | mg/L       | 8           | 02MAY2007 - 12SEP2007 | 17           | 4.689   | 2.154 | 1.220   | 3.330   | 4.540   | 6.650   | 7.640   | 0                       | 9               | 52.94%       |
| S176    | FLDCOND.          | UMHOS/CM   | 9           | 02MAY2007 - 12SEP2007 | 19           | 530.053 | 9.284 | 507.000 | 526.000 | 532.000 | 537.000 | 544.000 | 0                       | 0               | 0.00%        |
| S176    | PH                | UNITS      | 10          | 02MAY2007 - 12SEP2007 | 20           | 7.430   | 0.290 | 7.000   | 7.200   | 7.350   | 7.600   | 8.100   | 0                       | 0               | 0.00%        |
| S176    | TURBIDITY         | NTU        | 12          | 02MAY2007 - 06SEP2007 | 5            | 1.740   | 0.391 | 1.200   | 1.500   | 1.800   | 2.100   | 2.100   | 0                       | 0               | 0.00%        |
| S176    | TSS               | mg/L       | 16          | 02MAY2007 - 06SEP2007 | 5            | 3.200   | 0.447 | <3      | <3      | <3      | <3      | 4.000   | 4                       | 0               | 0.00%        |
| S176    | COLOR             | UNITS      | 13          | 02MAY2007 - 06SEP2007 | 5            | 13.800  | 1.095 | 13.000  | 13.000  | 13.000  | 15.000  | 15.000  | 0                       | 0               | 0.00%        |
| S176    | HARDNESS          | mg/L CaCO3 | 35          | 02MAY2007 - 06SEP2007 | 5            | 220.780 | 2.044 | 218.000 | 219.300 | 221.800 | 221.900 | 222.900 | 0                       | 0               | 0.00%        |
| S176    | TEMP              | CENT       | 7           | 02MAY2007 - 12SEP2007 | 20           | 27.315  | 1.232 | 25.400  | 26.500  | 27.350  | 27.900  | 30.100  | 0                       | 0               | 0.00%        |
| S176    | ALKALINITY        | mg/L       | 67          | 02MAY2007 - 06SEP2007 | 5            | 217.200 | 2.280 | 214.000 | 216.000 | 218.000 | 218.000 | 220.000 | 0                       | 0               | 0.00%        |
| S176    | TN                | mg N/L     | 80          | 02MAY2007 - 12SEP2007 | 20           | 0.586   | 0.052 | 0.500   | 0.552   | 0.569   | 0.629   | 0.678   | 0                       | 0               | 0.00%        |
| S176    | NOX               | mg N/L     | 18,180      | 02MAY2007 - 12SEP2007 | 14           | 0.019   | 0.011 | <0.005  | 0.007   | 0.023   | 0.028   | 0.037   | 1                       | 0               | 0.00%        |
| S176    | NO2               | mg N/L     | 19          | 02MAY2007 - 06SEP2007 | 5            | 0.002   | 0.000 | <0.002  | <0.002  | <0.002  | 0.002   | 0.002   | 3                       | 0               | 0.00%        |
| S176    | NO3               | mg N/L     | 78          | 02MAY2007 - 06SEP2007 | 4            | 0.016   | 0.010 | 0.007   | 0.008   | 0.016   | 0.025   | 0.026   | 0                       | 0               | 0.00%        |
| S176    | NH4               | mg N/L     | 20          | 02MAY2007 - 12SEP2007 | 18           | 0.051   | 0.042 | <0.005  | 0.012   | 0.042   | 0.087   | 0.137   | 1                       | 0               | 0.00%        |
| S176    | UNIONIZED AMMONIA | mg/L       | NONE        | 02MAY2007 - 12SEP2007 | 18           | 0.001   | 0.000 | 0.000   | 0.001   | 0.001   | 0.001   | 0.002   | 0                       | 0               | 0.00%        |
| S176    | NNH4              | mg N/L     | 92          | 02MAY2007 - 12SEP2007 | 13           | 0.063   | 0.049 | 0.007   | 0.034   | 0.052   | 0.087   | 0.157   | 0                       | 0               | 0.00%        |
| S176    | ORGN              | mg N/L     | 79          | 02MAY2007 - 12SEP2007 | 18           | 0.525   | 0.052 | 0.451   | 0.492   | 0.508   | 0.565   | 0.641   | 0                       | 0               | 0.00%        |
| S176    | TKN               | mg N/L     | 21          | 02MAY2007 - 12SEP2007 | 20           | 0.573   | 0.049 | 0.500   | 0.530   | 0.565   | 0.610   | 0.650   | 0                       | 0               | 0.00%        |
| S176    | OPO4              | mg P/L     | 23          | 02MAY2007 - 06SEP2007 | 5            | 0.002   | 0.000 | <0.002  | <0.002  | <0.002  | <0.002  | <0.002  | 5                       | 0               | 0.00%        |
| S176    | TP                | mg P/L     | 25          | 02MAY2007 - 12SEP2007 | 20           | 0.007   | 0.002 | 0.004   | 0.005   | 0.006   | 0.008   | 0.011   | 0                       | 0               | 0.00%        |
| S176    | DIS. CA           | mg/L       | 30          | 02MAY2007 - 06SEP2007 | 5            | 77.340  | 0.796 | 76.500  | 76.500  | 77.600  | 77.900  | 78.200  | 0                       | 0               | 0.00%        |
| S176    | DIS. K            | mg/L       | 29          | 02MAY2007 - 06SEP2007 | 5            | 2.640   | 0.114 | 2.500   | 2.600   | 2.600   | 2.700   | 2.800   | 0                       | 0               | 0.00%        |
| S176    | DIS. MG           | mg/L       | 31          | 02MAY2007 - 06SEP2007 | 5            | 6.700   | 0.158 | 6.500   | 6.600   | 6.700   | 6.800   | 6.900   | 0                       | 0               | 0.00%        |
| S176    | DIS. NA           | mg/L       | 28          | 02MAY2007 - 06SEP2007 | 5            | 26.000  | 1.102 | 25.200  | 25.400  | 25.500  | 26.000  | 27.900  | 0                       | 0               | 0.00%        |
| S176    | TOT. CL           | mg/L       | 32          | 02MAY2007 - 06SEP2007 | 5            | 38.900  | 0.866 | 37.600  | 38.800  | 38.900  | 39.200  | 40.000  | 0                       | 0               | 0.00%        |
| S176    | TOT. FE           | mg/L       | 177         | 11JUL2007 - 11JUL2007 | 1            | 0.388   |       | 0.388   | 0.388   | 0.388   | 0.388   | 0.388   | 0                       | 0               | 0.00%        |
| S176    | CAROTENOID        | mg/m3      | 63          | 02MAY2007 - 06SEP2007 | 4            | 3.400   | 2.601 | <1      | 0.850   | 2.750   | 4.950   | 7.100   | 1                       | 0               | 0.00%        |
| S176    | CHLA              | mg/m3      | 61          | 02MAY2007 - 06SEP2007 | 4            | 3.500   | 2.380 | <1      | 0.500   | 3.500   | 5.500   | 6.000   | 1                       | 0               | 0.00%        |

Table 3. Continued.

| STATION  | TEST NAME         | UNITS      | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN    | STD     | MIN     | Q25     | MEDIAN  | Q75     | MAX     | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|----------|-------------------|------------|-------------|-----------------------|--------------|---------|---------|---------|---------|---------|---------|---------|-------------------------|-----------------|--------------|
| S176     | CHLA2             | mg/m3      | 112         | 02MAY2007 - 06SEP2007 | 4            | 3.500   | 2.380   | 1.000   | 1.500   | 3.500   | 5.500   | 6.000   | 0                       | 0               | 0.00%        |
| S176     | CHLB              | mg/m3      | 62          | 02MAY2007 - 06SEP2007 | 4            | 1.500   | 1.000   | <1      | <1      | 0.000   | 2.000   | 3.000   | 2                       | 0               | 0.00%        |
| S176     | CHLC              | mg/m3      | 113         | 02MAY2007 - 06SEP2007 | 4            | 2.250   | 1.893   | <1      | <1      | 0.500   | 3.500   | 5.000   | 2                       | 0               | 0.00%        |
| S176     | PHEOPHYTIN A      | mg/m3      | 64          | 02MAY2007 - 06SEP2007 | 5            | 1.400   | 0.548   | <1      | <1      | <1      | 2.000   | 2.000   | 3                       | 0               | 0.00%        |
| S176     | TOT. DIS. P       | mg P/L     | 26          | 11JUL2007 - 11JUL2007 | 1            | 0.002   |         | 0.002   | 0.002   | 0.002   | 0.002   | 0.002   | 0                       | 0               | 0.00%        |
| S176Auto | TN                | mg N/L     | 80          | 02MAY2007 - 29AUG2007 | 106          | 0.590   | 0.059   | 0.466   | 0.548   | 0.579   | 0.620   | 0.783   | 0                       | 0               | 0.00%        |
| S176Auto | NOX               | mg N/L     | 18:180      | 02MAY2007 - 29AUG2007 | 106          | 0.015   | 0.010   | <0.005  | 0.007   | 0.013   | 0.022   | 0.049   | 13                      | 0               | 0.00%        |
| S176Auto | TKN               | mg N/L     | 21          | 02MAY2007 - 29AUG2007 | 106          | 0.575   | 0.058   | 0.450   | 0.540   | 0.570   | 0.610   | 0.760   | 0                       | 0               | 0.00%        |
| S176Auto | TP                | mg P/L     | 25          | 02MAY2007 - 29AUG2007 | 106          | 0.007   | 0.002   | 0.003   | 0.006   | 0.007   | 0.008   | 0.012   | 0                       | 0               | 0.00%        |
| S177     | DO                | mg/L       | 8           | 14MAY2007 - 28APR2008 | 40           | 5.082   | 2.404   | 1.230   | 2.960   | 5.465   | 6.925   | 9.630   | 0                       | 17              | 42.50%       |
| S177     | FLDCOND.          | UMHOS/CM   | 9           | 07MAY2007 - 28APR2008 | 41           | 552.268 | 67.667  | 482.000 | 512.000 | 524.000 | 568.000 | 756.000 | 0                       | 0               | 0.00%        |
| S177     | PH                | UNITS      | 10          | 07MAY2007 - 28APR2008 | 42           | 7.481   | 0.292   | 7.000   | 7.200   | 7.550   | 7.700   | 8.000   | 0                       | 0               | 0.00%        |
| S177     | TURBIDITY         | NTU        | 12          | 14MAY2007 - 07APR2008 | 12           | 3.900   | 5.805   | 0.900   | 1.100   | 1.900   | 2.350   | 20.500  | 0                       | 0               | 0.00%        |
| S177     | TSS               | mg/L       | 16          | 14MAY2007 - 28APR2008 | 30           | 7.933   | 25.170  | <3      | <3      | <3      | <3      | 141.000 | 27                      | 0               | 0.00%        |
| S177     | COLOR             | UNITS      | 13          | 14MAY2007 - 17SEP2007 | 9            | 14.556  | 5.876   | 11.000  | 12.000  | 13.000  | 14.000  | 30.000  | 0                       | 0               | 0.00%        |
| S177     | HARDNESS          | mg/L CaCO3 | 35          | 14MAY2007 - 28APR2008 | 30           | 223.583 | 21.181  | 203.000 | 206.200 | 212.100 | 242.300 | 269.500 | 0                       | 0               | 0.00%        |
| S177     | TEMP              | CENT       | 7           | 07MAY2007 - 28APR2008 | 42           | 25.602  | 1.840   | 21.100  | 24.300  | 26.000  | 26.800  | 28.600  | 0                       | 0               | 0.00%        |
| S177     | ALKALINITY        | mg/L       | 67          | 14MAY2007 - 17SEP2007 | 9            | 205.333 | 7.089   | 197.000 | 201.000 | 204.000 | 208.000 | 221.000 | 0                       | 0               | 0.00%        |
| S177     | TN                | mg N/L     | 80          | 07MAY2007 - 28APR2008 | 41           | 0.880   | 0.810   | 0.490   | 0.582   | 0.650   | 0.910   | 5.657   | 0                       | 0               | 0.00%        |
| S177     | NOX               | mg N/L     | 18:180      | 07MAY2007 - 28APR2008 | 32           | 0.115   | 0.086   | 0.012   | 0.046   | 0.082   | 0.184   | 0.297   | 0                       | 0               | 0.00%        |
| S177     | NO2               | mg N/L     | 19          | 14MAY2007 - 17SEP2007 | 9            | 0.010   | 0.008   | 0.002   | 0.003   | 0.007   | 0.017   | 0.021   | 0                       | 0               | 0.00%        |
| S177     | NO3               | mg N/L     | 78          | 14MAY2007 - 17SEP2007 | 8            | 0.135   | 0.097   | 0.020   | 0.055   | 0.115   | 0.221   | 0.276   | 0                       | 0               | 0.00%        |
| S177     | NH4               | mg N/L     | 20          | 14MAY2007 - 17SEP2007 | 19           | 0.151   | 0.308   | 0.011   | 0.030   | 0.060   | 0.081   | 1.186   | 0                       | 0               | 0.00%        |
| S177     | UNIONIZED AMMONIA | mg/L       | NONE        | 07MAY2007 - 28APR2008 | 19           | 0.002   | 0.004   | 0.000   | 0.001   | 0.001   | 0.001   | 0.014   | 0                       | 0               | 0.00%        |
| S177     | NNH4              | mg N/L     | 92          | 14MAY2007 - 17SEP2007 | 15           | 0.329   | 0.387   | 0.043   | 0.071   | 0.230   | 0.349   | 1.403   | 0                       | 0               | 0.00%        |
| S177     | ORGN              | mg N/L     | 79          | 14MAY2007 - 17SEP2007 | 19           | 0.676   | 0.869   | 0.325   | 0.422   | 0.473   | 0.549   | 4.254   | 0                       | 0               | 0.00%        |
| S177     | TKN               | mg N/L     | 21          | 07MAY2007 - 28APR2008 | 41           | 0.791   | 0.783   | 0.390   | 0.510   | 0.570   | 0.900   | 5.440   | 0                       | 0               | 0.00%        |
| S177     | OPO4              | mg P/L     | 23          | 14MAY2007 - 28APR2008 | 27           | 0.002   | 0.001   | <0.002  | <0.002  | <0.002  | <0.002  | 0.005   | 24                      | 0               | 0.00%        |
| S177     | TP                | mg P/L     | 25          | 07MAY2007 - 28APR2008 | 40           | 0.009   | 0.019   | 0.004   | 0.004   | 0.005   | 0.007   | 0.126   | 0                       | 0               | 0.00%        |
| S177     | DIS. CA           | mg/L       | 30          | 14MAY2007 - 28APR2008 | 30           | 77.190  | 5.622   | 71.400  | 72.900  | 74.850  | 80.600  | 90.600  | 0                       | 0               | 0.00%        |
| S177     | DIS. K            | mg/L       | 29          | 14MAY2007 - 28APR2008 | 30           | 2.990   | 0.758   | 2.200   | 2.400   | 2.700   | 3.300   | 4.700   | 0                       | 0               | 0.00%        |
| S177     | DIS. MG           | mg/L       | 31          | 14MAY2007 - 28APR2008 | 30           | 7.493   | 2.347   | 5.500   | 5.800   | 6.400   | 8.400   | 14.300  | 0                       | 0               | 0.00%        |
| S177     | DIS. NA           | mg/L       | 28          | 14MAY2007 - 28APR2008 | 30           | 29.237  | 8.538   | 22.700  | 24.100  | 25.550  | 30.800  | 56.700  | 0                       | 0               | 0.00%        |
| S177     | TOT. CL           | mg/L       | 32          | 14MAY2007 - 28APR2008 | 30           | 44.150  | 13.862  | 20.400  | 37.000  | 39.600  | 44.900  | 88.200  | 0                       | 0               | 0.00%        |
| S177     | TOT. SO4          | mg/L       | 33          | 01OCT2007 - 07APR2008 | 3            | 3.967   | 3.722   | 0.500   | 0.500   | 3.500   | 7.900   | 7.900   | 0                       | 0               | 0.00%        |
| S177     | TOT. FE           | mg/L       | 177         | 09JUL2007 - 09JUL2007 | 1            | 0.234   |         | 0.234   | 0.234   | 0.234   | 0.234   | 0.234   | 0                       | 0               | 0.00%        |
| S177     | CAROTENOID        | mg/m3      | 63          | 14MAY2007 - 17SEP2007 | 8            | 27.725  | 65.301  | <1      | <1      | 1.400   | 13.650  | 188.700 | 3                       | 0               | 0.00%        |
| S177     | CHLA              | mg/m3      | 61          | 14MAY2007 - 17SEP2007 | 9            | 71.333  | 196.226 | <1      | 1.000   | 2.000   | 9.000   | 594.000 | 2                       | 0               | 0.00%        |
| S177     | CHLA2             | mg/m3      | 112         | 14MAY2007 - 17SEP2007 | 9            | 58.222  | 159.137 | <1      | 1.000   | 2.000   | 6.000   | 482.000 | 2                       | 0               | 0.00%        |
| S177     | CHLB              | mg/m3      | 62          | 14MAY2007 - 17SEP2007 | 9            | 4.111   | 4.755   | <1      | <1      | <1      | 6.000   | 12.000  | 5                       | 0               | 0.00%        |
| S177     | CHLC              | mg/m3      | 113         | 14MAY2007 - 17SEP2007 | 8            | 7.375   | 11.401  | <1      | <1      | 1.500   | 9.500   | 34.000  | 3                       | 0               | 0.00%        |
| S177     | PHEOPHYTIN A      | mg/m3      | 64          | 14MAY2007 - 17SEP2007 | 9            | 19.000  | 51.398  | <1      | <1      | <1      | 4.000   | 156.000 | 5                       | 0               | 0.00%        |

Table 3. Continued.

| STATION  | TEST NAME         | UNITS      | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN    | STD     | MIN     | Q25     | MEDIAN  | Q75     | MAX     | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|----------|-------------------|------------|-------------|-----------------------|--------------|---------|---------|---------|---------|---------|---------|---------|-------------------------|-----------------|--------------|
| S177Auto | TN                | mg N/L     | 80          | 07MAY2007 - 27AUG2007 | 110          | 0.609   | 0.088   | 0.480   | 0.550   | 0.590   | 0.635   | 1.136   | 0                       | 0               | 0.00%        |
| S177Auto | NOX               | mg N/L     | 18,180      | 14MAY2007 - 27AUG2007 | 88           | 0.095   | 0.080   | <0.006  | 0.026   | 0.073   | 0.129   | 0.287   | 1                       | 0               | 0.00%        |
| S177Auto | TKN               | mg N/L     | 21          | 07MAY2007 - 27AUG2007 | 110          | 0.533   | 0.067   | 0.400   | 0.490   | 0.525   | 0.570   | 0.880   | 0                       | 0               | 0.00%        |
| S177Auto | TP                | mg P/L     | 25          | 07MAY2007 - 27AUG2007 | 110          | 0.006   | 0.003   | 0.003   | 0.005   | 0.005   | 0.007   | 0.026   | 0                       | 0               | 0.00%        |
|          |                   |            |             |                       |              |         |         |         |         |         |         |         |                         |                 |              |
| S178     | DO                | mg/L       | 8           | 14MAY2007 - 07APR2008 | 24           | 4.735   | 1.897   | 1.160   | 3.540   | 4.795   | 6.205   | 8.750   | 0                       | 14              | 58.33%       |
| S178     | FLDCOND.          | UMHOS/CM   | 9           | 07MAY2007 - 07APR2008 | 26           | 444.577 | 88.612  | 279.000 | 360.000 | 452.000 | 522.000 | 573.000 | 0                       | 0               | 0.00%        |
| S178     | PH                | UNITS      | 10          | 07MAY2007 - 07APR2008 | 26           | 7.531   | 0.374   | 7.000   | 7.200   | 7.500   | 7.800   | 8.400   | 0                       | 0               | 0.00%        |
| S178     | TURBIDITY         | NTU        | 12          | 14MAY2007 - 07APR2008 | 8            | 25.088  | 36.703  | 1.100   | 2.900   | 9.750   | 32.150  | 110.000 | 0                       | 3               | 37.50%       |
| S178     | TSS               | mg/L       | 16          | 14MAY2007 - 07APR2008 | 13           | 18.692  | 17.689  | <3      | 5.000   | 13.000  | 22.000  | 61.000  | 1                       | 0               | 0.00%        |
| S178     | COLOR             | UNITS      | 13          | 14MAY2007 - 04SEP2007 | 5            | 14.800  | 3.033   | 13.000  | 13.000  | 13.000  | 15.000  | 20.000  | 0                       | 0               | 0.00%        |
| S178     | HARDNESS          | mg/L CaCO3 | 35          | 14MAY2007 - 07APR2008 | 13           | 152.923 | 38.515  | 88.400  | 132.500 | 157.300 | 173.300 | 226.000 | 0                       | 0               | 0.00%        |
| S178     | TEMP              | CENT       | 7           | 07MAY2007 - 07APR2008 | 26           | 26.123  | 2.749   | 20.400  | 24.000  | 26.350  | 28.000  | 30.900  | 0                       | 0               | 0.00%        |
| S178     | ALKALINITY        | mg/L       | 67          | 14MAY2007 - 04SEP2007 | 5            | 140.400 | 56.981  | 81.000  | 81.000  | 152.000 | 189.000 | 199.000 | 0                       | 0               | 0.00%        |
| S178     | TN                | mg N/L     | 80          | 14MAY2007 - 07APR2008 | 13           | 1.383   | 0.696   | 0.439   | 0.992   | 1.265   | 1.741   | 3.141   | 0                       | 0               | 0.00%        |
| S178     | NOX               | mg N/L     | 18,180      | 14MAY2007 - 07APR2008 | 13           | 0.219   | 0.333   | 0.012   | 0.059   | 0.101   | 0.148   | 1.182   | 0                       | 0               | 0.00%        |
| S178     | NO2               | mg N/L     | 19          | 14MAY2007 - 04SEP2007 | 5            | 0.016   | 0.015   | 0.003   | 0.006   | 0.006   | 0.025   | 0.038   | 0                       | 0               | 0.00%        |
| S178     | NO3               | mg N/L     | 78          | 14MAY2007 - 04SEP2007 | 5            | 0.042   | 0.031   | 0.006   | 0.032   | 0.034   | 0.046   | 0.091   | 0                       | 0               | 0.00%        |
| S178     | NH4               | mg N/L     | 20          | 14MAY2007 - 04SEP2007 | 5            | 0.085   | 0.100   | 0.030   | 0.034   | 0.045   | 0.053   | 0.263   | 0                       | 0               | 0.00%        |
| S178     | UNIONIZED AMMONIA | mg/L       | NONE        | 07MAY2007 - 07APR2008 | 5            | 0.002   | 0.002   | 0.000   | 0.001   | 0.003   | 0.003   | 0.004   | 0                       | 0               | 0.00%        |
| S178     | NNH4              | mg N/L     | 92          | 14MAY2007 - 04SEP2007 | 5            | 0.142   | 0.108   | 0.042   | 0.088   | 0.093   | 0.174   | 0.315   | 0                       | 0               | 0.00%        |
| S178     | ORGN              | mg N/L     | 79          | 14MAY2007 - 04SEP2007 | 5            | 0.721   | 0.296   | 0.346   | 0.677   | 0.700   | 0.705   | 1.177   | 0                       | 0               | 0.00%        |
| S178     | TKN               | mg N/L     | 21          | 14MAY2007 - 07APR2008 | 13           | 1.164   | 0.666   | 0.380   | 0.750   | 0.940   | 1.280   | 3.040   | 0                       | 0               | 0.00%        |
| S178     | OPO4              | mg P/L     | 23          | 14MAY2007 - 07APR2008 | 13           | 0.013   | 0.025   | <0.002  | 0.002   | 0.004   | 0.009   | 0.094   | 3                       | 0               | 0.00%        |
| S178     | TP                | mg P/L     | 25          | 07MAY2007 - 07APR2008 | 26           | 0.053   | 0.055   | 0.015   | 0.026   | 0.038   | 0.058   | 0.286   | 0                       | 0               | 0.00%        |
| S178     | DIS. CA           | mg/L       | 30          | 14MAY2007 - 07APR2008 | 13           | 52.408  | 14.998  | 26.700  | 44.200  | 52.600  | 59.900  | 81.000  | 0                       | 0               | 0.00%        |
| S178     | DIS. K            | mg/L       | 29          | 14MAY2007 - 07APR2008 | 13           | 17.677  | 3.624   | 10.300  | 15.300  | 18.000  | 19.300  | 23.300  | 0                       | 0               | 0.00%        |
| S178     | DIS. MG           | mg/L       | 31          | 14MAY2007 - 07APR2008 | 13           | 5.354   | 0.851   | 3.800   | 4.900   | 5.400   | 5.900   | 6.600   | 0                       | 0               | 0.00%        |
| S178     | DIS. NA           | mg/L       | 28          | 14MAY2007 - 07APR2008 | 13           | 22.369  | 4.797   | 13.200  | 19.500  | 23.100  | 25.600  | 30.500  | 0                       | 0               | 0.00%        |
| S178     | TOT. CL           | mg/L       | 32          | 14MAY2007 - 07APR2008 | 13           | 39.523  | 8.722   | 22.100  | 34.400  | 39.500  | 46.300  | 53.900  | 0                       | 0               | 0.00%        |
| S178     | TOT. SO4          | mg/L       | 33          | 01OCT2007 - 07APR2008 | 3            | 25.867  | 4.606   | 20.800  | 20.800  | 27.000  | 29.800  | 29.800  | 0                       | 0               | 0.00%        |
| S178     | TOT. FE           | mg/L       | 177         | 09JUL2007 - 09JUL2007 | 1            | 0.038   |         | 0.038   | 0.038   | 0.038   | 0.038   | 0.038   | 0                       | 0               | 0.00%        |
| S178     | CAROTENOID        | mg/m3      | 63          | 14MAY2007 - 04SEP2007 | 5            | 5.040   | 2.281   | 2.000   | 3.400   | 5.600   | 6.900   | 7.300   | 0                       | 0               | 0.00%        |
| S178     | CHLA              | mg/m3      | 61          | 14MAY2007 - 04SEP2007 | 5            | 9.600   | 5.030   | 4.000   | 6.000   | 10.000  | 11.000  | 17.000  | 0                       | 0               | 0.00%        |
| S178     | CHLA2             | mg/m3      | 112         | 14MAY2007 - 04SEP2007 | 5            | 7.200   | 4.970   | <1      | 4.000   | 8.000   | 9.000   | 14.000  | 1                       | 0               | 0.00%        |
| S178     | CHLB              | mg/m3      | 62          | 14MAY2007 - 04SEP2007 | 5            | 3.400   | 3.782   | <1      | 1.000   | 2.000   | 3.000   | 10.000  | 1                       | 0               | 0.00%        |
| S178     | CHLC              | mg/m3      | 113         | 14MAY2007 - 04SEP2007 | 5            | 5.200   | 7.225   | <1      | <1      | 3.000   | 3.000   | 18.000  | 2                       | 0               | 0.00%        |
| S178     | PHEOPHYTIN A      | mg/m3      | 64          | 14MAY2007 - 04SEP2007 | 5            | 5.000   | 4.183   | <1      | 3.000   | 4.000   | 5.000   | 12.000  | 1                       | 0               | 0.00%        |
|          |                   |            |             |                       |              |         |         |         |         |         |         |         |                         |                 |              |
| S331-173 | DO                | mg/L       | 8           | 02MAY2007 - 28APR2008 | 47           | 4.576   | 2.330   | 0.880   | 2.290   | 4.130   | 6.970   | 8.940   | 0                       | 27              | 57.45%       |
| S331-173 | FLDCOND.          | UMHOS/CM   | 9           | 02MAY2007 - 28APR2008 | 51           | 618.176 | 107.456 | 413.000 | 545.000 | 568.000 | 706.000 | 891.000 | 0                       | 0               | 0.00%        |
| S331-173 | PH                | UNITS      | 10          | 02MAY2007 - 28APR2008 | 51           | 7.439   | 0.311   | 6.900   | 7.200   | 7.400   | 7.600   | 8.200   | 0                       | 0               | 0.00%        |
| S331-173 | TURBIDITY         | NTU        | 12          | 02MAY2007 - 08APR2008 | 9            | 1.811   | 0.637   | 0.400   | 1.800   | 2.000   | 2.100   | 2.400   | 0                       | 0               | 0.00%        |

Table 3. Continued.

| STATION      | TEST NAME           | UNITS      | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN    | STD     | MIN     | Q25     | MEDIAN  | Q75     | MAX     | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|--------------|---------------------|------------|-------------|-----------------------|--------------|---------|---------|---------|---------|---------|---------|---------|-------------------------|-----------------|--------------|
| S331-173     | TSS                 | mg/L       | 16          | 02MAY2007 - 28APR2008 | 35           | 3.000   | 0.000   | <3      | <3      | <3      | <3      | <3      | 35                      | 0               | 0.00%        |
| S331-173     | COLOR               | UNITS      | 13          | 11JUL2007 - 08AUG2007 | 2            | 24.500  | 2.121   | 23.000  | 23.000  | 24.500  | 26.000  | 26.000  | 0                       | 0               | 0.00%        |
| S331-173     | HARDNESS            | mg/L CaCO3 | 35          | 11JUL2007 - 28APR2008 | 30           | 251.377 | 22.418  | 213.800 | 227.400 | 253.150 | 270.100 | 293.600 | 0                       | 0               | 0.00%        |
| S331-173     | TEMP                | CENT       | 7           | 02MAY2007 - 28APR2008 | 52           | 25.952  | 2.872   | 19.700  | 23.850  | 25.550  | 27.650  | 32.100  | 0                       | 0               | 0.00%        |
| S331-173     | ALKALINITY          | mg/L       | 67          | 02MAY2007 - 06SEP2007 | 5            | 227.800 | 8.843   | 214.000 | 224.000 | 232.000 | 234.000 | 235.000 | 0                       | 0               | 0.00%        |
| S331-173     | TN                  | mg N/L     | 80          | 02MAY2007 - 28APR2008 | 51           | 1.094   | 0.326   | <0.5    | 0.839   | 0.994   | 1.340   | 1.781   | 3                       | 0               | 0.00%        |
| S331-173     | NOX                 | mg N/L     | 18:180      | 02MAY2007 - 28APR2008 | 40           | 0.074   | 0.044   | 0.008   | 0.040   | 0.064   | 0.095   | 0.177   | 0                       | 0               | 0.00%        |
| S331-173     | NO2                 | mg N/L     | 19          | 11JUL2007 - 08AUG2007 | 2            | 0.003   | 0.001   | 0.002   | 0.002   | 0.003   | 0.004   | 0.004   | 0                       | 0               | 0.00%        |
| S331-173     | NO3                 | mg N/L     | 78          | 11JUL2007 - 08AUG2007 | 2            | 0.063   | 0.049   | 0.028   | 0.028   | 0.063   | 0.098   | 0.098   | 0                       | 0               | 0.00%        |
| S331-173     | NH4                 | mg N/L     | 20          | 02MAY2007 - 26SEP2007 | 20           | 0.124   | 0.077   | 0.011   | 0.067   | 0.110   | 0.189   | 0.309   | 0                       | 0               | 0.00%        |
| S331-173     | UNIONIZED AMMONIA   | mg/L       | NONE        | 02MAY2007 - 28APR2008 | 20           | 0.004   | 0.002   | 0.001   | 0.002   | 0.004   | 0.005   | 0.006   | 0                       | 0               | 0.00%        |
| S331-173     | NNH4                | mg N/L     | 92          | 02MAY2007 - 26SEP2007 | 18           | 0.201   | 0.062   | 0.112   | 0.152   | 0.202   | 0.249   | 0.336   | 0                       | 0               | 0.00%        |
| S331-173     | ORGN                | mg N/L     | 79          | 02MAY2007 - 26SEP2007 | 20           | 0.755   | 0.089   | 0.552   | 0.715   | 0.764   | 0.827   | 0.872   | 0                       | 0               | 0.00%        |
| S331-173     | TKN                 | mg N/L     | 21          | 02MAY2007 - 21APR2008 | 48           | 1.073   | 0.296   | 0.730   | 0.820   | 0.925   | 1.325   | 1.680   | 0                       | 0               | 0.00%        |
| S331-173     | OPO4                | mg P/L     | 23          | 02MAY2007 - 28APR2008 | 33           | 0.002   | 0.001   | <0.002  | <0.002  | <0.002  | <0.002  | 0.007   | 29                      | 0               | 0.00%        |
| S331-173     | TP                  | mg P/L     | 25          | 02MAY2007 - 28APR2008 | 51           | 0.008   | 0.002   | 0.005   | 0.006   | 0.007   | 0.008   | 0.013   | 0                       | 0               | 0.00%        |
| S331-173     | DIS. CA             | mg/L       | 30          | 11JUL2007 - 28APR2008 | 30           | 81.870  | 6.459   | 69.300  | 78.800  | 80.950  | 85.800  | 94.000  | 0                       | 0               | 0.00%        |
| S331-173     | DIS. K              | mg/L       | 29          | 11JUL2007 - 28APR2008 | 30           | 3.283   | 1.323   | 2.100   | 2.400   | 2.650   | 3.800   | 6.300   | 0                       | 0               | 0.00%        |
| S331-173     | DIS. MG             | mg/L       | 31          | 11JUL2007 - 28APR2008 | 30           | 11.400  | 5.085   | 5.500   | 6.200   | 10.550  | 14.300  | 22.200  | 0                       | 0               | 0.00%        |
| S331-173     | DIS. NA             | mg/L       | 28          | 11JUL2007 - 28APR2008 | 30           | 40.170  | 17.894  | 22.600  | 24.000  | 33.350  | 51.000  | 75.300  | 0                       | 0               | 0.00%        |
| S331-173     | TOT. CL             | mg/L       | 32          | 02MAY2007 - 28APR2008 | 35           | 57.229  | 27.343  | 16.100  | 36.600  | 44.600  | 72.700  | 116.000 | 0                       | 0               | 0.00%        |
| S331-173     | TOT. SO4            | mg/L       | 33          | 11JUL2007 - 08APR2008 | 5            | 3.840   | 6.536   | 0.300   | 0.700   | 1.100   | 1.600   | 15.500  | 0                       | 0               | 0.00%        |
| S331-173     | DIS. SILICA         | mg/L       | 27          | 11JUL2007 - 08AUG2007 | 2            | 7.040   | 0.410   | 6.750   | 6.750   | 7.040   | 7.330   | 7.330   | 0                       | 0               | 0.00%        |
| S331-173     | TOT. ULTRA TRACE HG | ug/L       | 207         | 17JUL2007 - 15APR2008 | 4            | 0.001   | 0.001   | <0.0001 | 0.000   | 0.001   | 0.001   | 0.001   | 1                       | 0               | 0.00%        |
| S331-173     | TOT. MTHY HG        | ug/L       | 203         | 17JUL2007 - 15APR2008 | 4            | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   | 0                       | 0               | 0.00%        |
| S331-173     | DIS. ORGAN. C       | mg/L       | 89:181      | 02OCT2007 - 08APR2008 | 3            | 15.933  | 8.339   | 8.100   | 8.100   | 15.000  | 24.700  | 24.700  | 0                       | 0               | 0.00%        |
| S331-173Auto | TN                  | mg N/L     | 80          | 02MAY2007 - 21APR2008 | 303          | 1.151   | 0.294   | 0.757   | 0.891   | 1.069   | 1.360   | 2.056   | 0                       | 0               | 0.00%        |
| S331-173Auto | NOX                 | mg N/L     | 18:180      | 02MAY2007 - 21APR2008 | 290          | 0.060   | 0.048   | <0.005  | 0.025   | 0.049   | 0.079   | 0.306   | 11                      | 0               | 0.00%        |
| S331-173Auto | TKN                 | mg N/L     | 21          | 02MAY2007 - 21APR2008 | 303          | 1.094   | 0.287   | 0.720   | 0.840   | 0.960   | 1.330   | 1.750   | 0                       | 0               | 0.00%        |
| S331-173Auto | TP                  | mg P/L     | 25          | 02MAY2007 - 21APR2008 | 303          | 0.008   | 0.002   | 0.005   | 0.007   | 0.008   | 0.010   | 0.022   | 0                       | 0               | 0.00%        |
| S332B        | DO                  | mg/L       | 8           | 02MAY2007 - 28APR2008 | 47           | 3.966   | 1.780   | 0.750   | 2.740   | 3.820   | 5.240   | 7.240   | 0                       | 34              | 72.34%       |
| S332B        | FLDCOND.            | UMHOS/CM   | 9           | 02MAY2007 - 28APR2008 | 51           | 609.941 | 100.353 | 510.000 | 543.000 | 549.000 | 706.000 | 857.000 | 0                       | 0               | 0.00%        |
| S332B        | PH                  | UNITS      | 10          | 02MAY2007 - 28APR2008 | 51           | 7.320   | 0.176   | 6.900   | 7.200   | 7.300   | 7.400   | 7.800   | 0                       | 0               | 0.00%        |
| S332B        | TURBIDITY           | NTU        | 12          | 13JUN2007 - 26SEP2007 | 9            | 2.822   | 0.800   | 1.100   | 2.700   | 2.800   | 3.000   | 4.000   | 0                       | 0               | 0.00%        |
| S332B        | TSS                 | mg/L       | 16          | 02OCT2007 - 08APR2008 | 6            | 3.000   | 0.000   | <3      | <3      | <3      | <3      | <3      | 6                       | 0               | 0.00%        |
| S332B        | HARDNESS            | mg/L CaCO3 | 35          | 13JUN2007 - 08APR2008 | 15           | 232.880 | 10.855  | 221.600 | 224.200 | 231.100 | 237.000 | 256.900 | 0                       | 0               | 0.00%        |
| S332B        | TEMP                | CENT       | 7           | 02MAY2007 - 28APR2008 | 52           | 25.450  | 2.055   | 20.300  | 24.100  | 25.400  | 26.600  | 29.400  | 0                       | 0               | 0.00%        |
| S332B        | TN                  | mg N/L     | 80          | 02MAY2007 - 08APR2008 | 23           | 0.738   | 0.222   | 0.510   | 0.640   | 0.672   | 0.744   | 1.406   | 0                       | 0               | 0.00%        |
| S332B        | NOX                 | mg N/L     | 18:180      | 02MAY2007 - 08APR2008 | 16           | 0.054   | 0.029   | 0.020   | 0.035   | 0.051   | 0.065   | 0.139   | 0                       | 0               | 0.00%        |
| S332B        | NO2                 | mg N/L     | 19          | 20JUN2007 - 26SEP2007 | 5            | 0.003   | 0.001   | <0.002  | 0.002   | 0.003   | 0.004   | 0.005   | 1                       | 0               | 0.00%        |
| S332B        | NO3                 | mg N/L     | 78          | 20JUN2007 - 26SEP2007 | 4            | 0.064   | 0.050   | 0.023   | 0.029   | 0.049   | 0.098   | 0.134   | 0                       | 0               | 0.00%        |

Table 3. Continued.

| STATION   | TEST NAME     | UNITS      | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN    | STD     | MIN     | Q25     | MEDIAN  | Q75     | MAX     | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|-----------|---------------|------------|-------------|-----------------------|--------------|---------|---------|---------|---------|---------|---------|---------|-------------------------|-----------------|--------------|
| S332B     | TKN           | mg N/L     | 21          | 02MAY2007 - 08APR2008 | 23           | 0.701   | 0.217   | 0.510   | 0.570   | 0.640   | 0.690   | 1.340   | 0                       | 0               | 0.00%        |
| S332B     | OPO4          | mg P/L     | 23          | 20JUN2007 - 08APR2008 | 14           | 0.002   | 0.000   | <0.002  | <0.002  | <0.002  | <0.002  | 0.002   | 12                      | 0               | 0.00%        |
| S332B     | TP            | mg P/L     | 25          | 02MAY2007 - 28APR2008 | 53           | 0.007   | 0.002   | 0.005   | 0.006   | 0.006   | 0.008   | 0.013   | 0                       | 0               | 0.00%        |
| S332B     | DIS. CA       | mg/L       | 30          | 13JUN2007 - 08APR2008 | 15           | 81.360  | 3.816   | 71.700  | 79.400  | 81.900  | 83.700  | 87.100  | 0                       | 0               | 0.00%        |
| S332B     | DIS. K        | mg/L       | 29          | 13JUN2007 - 08APR2008 | 15           | 3.113   | 0.650   | 2.300   | 2.800   | 3.000   | 3.300   | 5.100   | 0                       | 0               | 0.00%        |
| S332B     | DIS. MG       | mg/L       | 31          | 13JUN2007 - 08APR2008 | 15           | 7.233   | 3.187   | 5.200   | 6.000   | 6.300   | 6.600   | 18.200  | 0                       | 0               | 0.00%        |
| S332B     | DIS. NA       | mg/L       | 28          | 13JUN2007 - 08APR2008 | 15           | 27.107  | 11.253  | 21.600  | 23.000  | 23.900  | 24.600  | 66.700  | 0                       | 0               | 0.00%        |
| S332B     | TOT. CL       | mg/L       | 32          | 13JUN2007 - 08APR2008 | 15           | 41.267  | 17.143  | 33.200  | 35.100  | 36.700  | 37.100  | 102.000 | 0                       | 0               | 0.00%        |
| S332B     | TOT. SO4      | mg/L       | 33          | 11JUL2007 - 08AUG2007 | 2            | 1.750   | 0.778   | 1.200   | 1.200   | 1.750   | 2.300   | 2.300   | 0                       | 0               | 0.00%        |
| S332B     | DIS. ORGAN. C | mg/L       | 89:181      | 11JUL2007 - 11JUL2007 | 1            | 8.600   |         | 8.600   | 8.600   | 8.600   | 8.600   | 8.600   | 0                       | 0               | 0.00%        |
| S332BAuto | TN            | mg N/L     | 80          | 13JUN2007 - 14APR2008 | 21           | 0.947   | 0.535   | 0.543   | 0.660   | 0.711   | 1.047   | 2.737   | 0                       | 0               | 0.00%        |
| S332BAuto | NOX           | mg N/L     | 18:180      | 13JUN2007 - 14APR2008 | 19           | 0.046   | 0.027   | 0.019   | 0.027   | 0.038   | 0.066   | 0.120   | 0                       | 0               | 0.00%        |
| S332BAuto | TKN           | mg N/L     | 21          | 13JUN2007 - 14APR2008 | 21           | 0.906   | 0.518   | 0.520   | 0.640   | 0.660   | 1.020   | 2.670   | 0                       | 0               | 0.00%        |
| S332BAuto | TP            | mg P/L     | 25          | 13JUN2007 - 14APR2008 | 21           | 0.010   | 0.008   | 0.005   | 0.006   | 0.007   | 0.008   | 0.037   | 0                       | 0               | 0.00%        |
| S332C     | DO            | mg/L       | 8           | 02MAY2007 - 28APR2008 | 48           | 4.217   | 2.014   | 0.700   | 2.790   | 4.295   | 5.605   | 9.710   | 0                       | 29              | 60.42%       |
| S332C     | FLDCOND.      | UMHOS/CM   | 9           | 02MAY2007 - 28APR2008 | 52           | 606.212 | 103.821 | 526.000 | 536.000 | 544.000 | 684.000 | 859.000 | 0                       | 0               | 0.00%        |
| S332C     | PH            | UNITS      | 10          | 02MAY2007 - 28APR2008 | 52           | 7.350   | 0.218   | 7.000   | 7.200   | 7.400   | 7.500   | 7.800   | 0                       | 0               | 0.00%        |
| S332C     | TURBIDITY     | NTU        | 12          | 13JUN2007 - 26SEP2007 | 11           | 2.164   | 1.095   | <0.1    | 1.300   | 2.200   | 3.000   | 4.100   | 1                       | 0               | 0.00%        |
| S332C     | TSS           | mg/L       | 16          | 02OCT2007 - 08APR2008 | 11           | 3.000   | 0.000   | <3      | <3      | <3      | <3      | <3      | 11                      | 0               | 0.00%        |
| S332C     | HARDNESS      | mg/L CaCO3 | 35          | 13JUN2007 - 08APR2008 | 22           | 215.105 | 49.786  | <1      | 216.000 | 219.500 | 226.800 | 258.000 | 1                       | 0               | 0.00%        |
| S332C     | TEMP          | CENT       | 7           | 02MAY2007 - 28APR2008 | 53           | 25.538  | 1.996   | 20.400  | 24.400  | 25.800  | 26.700  | 30.300  | 0                       | 0               | 0.00%        |
| S332C     | TN            | mg N/L     | 80          | 02MAY2007 - 08APR2008 | 29           | 0.727   | 0.243   | <0.5    | 0.597   | 0.640   | 0.685   | 1.434   | 1                       | 0               | 0.00%        |
| S332C     | NOX           | mg N/L     | 18:180      | 02MAY2007 - 08APR2008 | 17           | 0.042   | 0.033   | 0.010   | 0.025   | 0.031   | 0.060   | 0.143   | 0                       | 0               | 0.00%        |
| S332C     | NO2           | mg N/L     | 19          | 13JUN2007 - 26SEP2007 | 9            | 0.002   | 0.001   | <0.002  | <0.002  | <0.002  | 0.002   | 0.006   | 6                       | 0               | 0.00%        |
| S332C     | NO3           | mg N/L     | 78          | 13JUN2007 - 26SEP2007 | 6            | 0.026   | 0.016   | 0.010   | 0.016   | 0.020   | 0.033   | 0.054   | 0                       | 0               | 0.00%        |
| S332C     | NH4           | mg N/L     | 20          | 26SEP2007 - 26SEP2007 | 1            | 0.005   |         | 0.005   | 0.005   | 0.005   | 0.005   | 0.005   | 0                       | 0               | 0.00%        |
| S332C     | NNH4          | mg N/L     | 92          | 26SEP2007 - 26SEP2007 | 1            | 0.015   |         | 0.015   | 0.015   | 0.015   | 0.015   | 0.015   | 0                       | 0               | 0.00%        |
| S332C     | ORGN          | mg N/L     | 79          | 26SEP2007 - 26SEP2007 | 1            | 0.050   |         | <0.05   | <0.05   | <0.05   | <0.05   | <0.05   | 1                       | 0               | 0.00%        |
| S332C     | TKN           | mg N/L     | 21          | 02MAY2007 - 08APR2008 | 29           | 0.687   | 0.259   | <0.05   | 0.580   | 0.620   | 0.660   | 1.370   | 1                       | 0               | 0.00%        |
| S332C     | OPO4          | mg P/L     | 23          | 13JUN2007 - 08APR2008 | 22           | 0.002   | 0.000   | <0.002  | <0.002  | <0.002  | 0.002   | 0.002   | 15                      | 0               | 0.00%        |
| S332C     | TP            | mg P/L     | 25          | 02MAY2007 - 28APR2008 | 53           | 0.006   | 0.002   | 0.002   | 0.005   | 0.006   | 0.007   | 0.011   | 0                       | 0               | 0.00%        |
| S332C     | DIS. CA       | mg/L       | 30          | 13JUN2007 - 08APR2008 | 22           | 74.668  | 17.029  | <0.2    | 76.000  | 77.150  | 80.200  | 87.400  | 1                       | 0               | 0.00%        |
| S332C     | DIS. K        | mg/L       | 29          | 13JUN2007 - 08APR2008 | 22           | 2.600   | 0.819   | <0.1    | 2.400   | 2.600   | 2.700   | 5.200   | 1                       | 0               | 0.00%        |
| S332C     | DIS. MG       | mg/L       | 31          | 13JUN2007 - 08APR2008 | 22           | 6.945   | 3.107   | <0.1    | 6.100   | 6.400   | 6.700   | 18.500  | 1                       | 0               | 0.00%        |
| S332C     | DIS. NA       | mg/L       | 28          | 13JUN2007 - 08APR2008 | 22           | 26.255  | 11.015  | <0.2    | 24.000  | 25.050  | 25.700  | 68.100  | 1                       | 0               | 0.00%        |
| S332C     | TOT. CL       | mg/L       | 32          | 13JUN2007 - 08APR2008 | 22           | 39.573  | 16.788  | <0.1    | 36.500  | 37.850  | 38.800  | 104.000 | 1                       | 0               | 0.00%        |
| S332C     | TOT. SO4      | mg/L       | 33          | 11JUL2007 - 08AUG2007 | 2            | 1.150   | 0.071   | 1.100   | 1.100   | 1.150   | 1.200   | 1.200   | 0                       | 0               | 0.00%        |
| S332C     | DIS. ORGAN. C | mg/L       | 89:181      | 11JUL2007 - 11JUL2007 | 1            | 7.700   |         | 7.700   | 7.700   | 7.700   | 7.700   | 7.700   | 0                       | 0               | 0.00%        |
| S332CAuto | TN            | mg N/L     | 80          | 20JUN2007 - 28APR2008 | 23           | 0.812   | 0.308   | 0.554   | 0.624   | 0.665   | 0.815   | 1.545   | 0                       | 0               | 0.00%        |
| S332CAuto | NOX           | mg N/L     | 18:180      | 20JUN2007 - 28APR2008 | 22           | 0.037   | 0.026   | 0.008   | 0.023   | 0.035   | 0.042   | 0.125   | 0                       | 0               | 0.00%        |
| S332CAuto | TKN           | mg N/L     | 21          | 20JUN2007 - 28APR2008 | 23           | 0.777   | 0.288   | 0.530   | 0.600   | 0.640   | 0.770   | 1.420   | 0                       | 0               | 0.00%        |
| S332CAuto | TP            | mg P/L     | 25          | 20JUN2007 - 28APR2008 | 22           | 0.009   | 0.009   | 0.004   | 0.006   | 0.007   | 0.008   | 0.043   | 0                       | 0               | 0.00%        |

Table 3. Continued.

| STATION     | TEST NAME           | UNITS      | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN    | STD    | MIN     | Q25     | MEDIAN  | Q75     | MAX     | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|-------------|---------------------|------------|-------------|-----------------------|--------------|---------|--------|---------|---------|---------|---------|---------|-------------------------|-----------------|--------------|
| S332D       | DO                  | mg/L       | 8           | 02MAY2007 - 26SEP2007 | 18           | 4.476   | 1.901  | 0.910   | 3.050   | 4.235   | 6.370   | 7.410   | 0                       | 11              | 61.11%       |
| S332D       | FLDCOND.            | UMHOS/CM   | 9           | 02MAY2007 - 26SEP2007 | 21           | 531.571 | 8.784  | 506.000 | 529.000 | 535.000 | 538.000 | 542.000 | 0                       | 0               | 0.00%        |
| S332D       | PH                  | UNITS      | 10          | 02MAY2007 - 26SEP2007 | 22           | 7.409   | 0.302  | 7.000   | 7.200   | 7.300   | 7.600   | 8.100   | 0                       | 0               | 0.00%        |
| S332D       | TURBIDITY           | NTU        | 12          | 16MAY2007 - 06SEP2007 | 7            | 1.929   | 0.419  | 1.300   | 1.400   | 2.000   | 2.200   | 2.400   | 0                       | 0               | 0.00%        |
| S332D       | TSS                 | mg/L       | 16          | 16MAY2007 - 06SEP2007 | 7            | 3.000   | 0.000  | <3      | <3      | <3      | <3      | <3      | 7                       | 0               | 0.00%        |
| S332D       | HARDNESS            | mg/L CaCO3 | 35          | 11JUL2007 - 08AUG2007 | 2            | 221.750 | 3.323  | 219.400 | 219.400 | 221.750 | 224.100 | 224.100 | 0                       | 0               | 0.00%        |
| S332D       | TEMP                | CENT       | 7           | 02MAY2007 - 26SEP2007 | 22           | 27.191  | 1.167  | 25.400  | 26.200  | 27.200  | 27.900  | 30.100  | 0                       | 0               | 0.00%        |
| S332D       | ALKALINITY          | mg/L       | 67          | 11JUL2007 - 08AUG2007 | 2            | 216.500 | 2.121  | 215.000 | 215.000 | 216.500 | 218.000 | 218.000 | 0                       | 0               | 0.00%        |
| S332D       | TN                  | mg N/L     | 80          | 16MAY2007 - 06SEP2007 | 8            | 0.613   | 0.088  | 0.540   | 0.561   | 0.578   | 0.643   | 0.799   | 0                       | 0               | 0.00%        |
| S332D       | NOX                 | mg N/L     | 18,180      | 16MAY2007 - 06SEP2007 | 6            | 0.023   | 0.016  | 0.003   | 0.008   | 0.026   | 0.029   | 0.049   | 0                       | 0               | 0.00%        |
| S332D       | NO2                 | mg N/L     | 19          | 16MAY2007 - 06SEP2007 | 7            | 0.002   | 0.000  | <0.002  | <0.002  | 0.002   | 0.003   | 0.003   | 2                       | 0               | 0.00%        |
| S332D       | NO3                 | mg N/L     | 78          | 16MAY2007 - 06SEP2007 | 5            | 0.017   | 0.012  | <0.004  | 0.006   | 0.023   | 0.025   | 0.029   | 1                       | 0               | 0.00%        |
| S332D       | NH4                 | mg N/L     | 20          | 16MAY2007 - 06SEP2007 | 8            | 0.061   | 0.042  | <0.005  | 0.027   | 0.056   | 0.102   | 0.115   | 1                       | 0               | 0.00%        |
| S332D       | UNIONIZED AMMONIA   | mg/L       | NONE        | 02MAY2007 - 26SEP2007 | 8            | 0.001   | 0.000  | 0.000   | 0.001   | 0.001   | 0.001   | 0.002   | 0                       | 0               | 0.00%        |
| S332D       | NNH4                | mg N/L     | 92          | 16MAY2007 - 06SEP2007 | 6            | 0.078   | 0.060  | 0.003   | 0.052   | 0.055   | 0.136   | 0.164   | 0                       | 0               | 0.00%        |
| S332D       | ORGN                | mg N/L     | 79          | 16MAY2007 - 06SEP2007 | 8            | 0.535   | 0.089  | 0.460   | 0.481   | 0.519   | 0.538   | 0.743   | 0                       | 0               | 0.00%        |
| S332D       | TKN                 | mg N/L     | 21          | 16MAY2007 - 06SEP2007 | 8            | 0.595   | 0.077  | 0.540   | 0.550   | 0.565   | 0.610   | 0.770   | 0                       | 0               | 0.00%        |
| S332D       | OPO4                | mg P/L     | 23          | 16MAY2007 - 06SEP2007 | 7            | 0.002   | 0.000  | <0.002  | <0.002  | <0.002  | <0.002  | 0.003   | 6                       | 0               | 0.00%        |
| S332D       | TP                  | mg P/L     | 25          | 02MAY2007 - 26SEP2007 | 21           | 0.006   | 0.001  | 0.004   | 0.005   | 0.006   | 0.006   | 0.009   | 0                       | 0               | 0.00%        |
| S332D       | DIS. CA             | mg/L       | 30          | 11JUL2007 - 08AUG2007 | 2            | 77.900  | 1.131  | 77.100  | 77.100  | 77.900  | 78.700  | 78.700  | 0                       | 0               | 0.00%        |
| S332D       | DIS. K              | mg/L       | 29          | 11JUL2007 - 08AUG2007 | 2            | 2.650   | 0.071  | 2.600   | 2.600   | 2.650   | 2.700   | 2.700   | 0                       | 0               | 0.00%        |
| S332D       | DIS. MG             | mg/L       | 31          | 11JUL2007 - 08AUG2007 | 2            | 6.600   | 0.141  | 6.500   | 6.500   | 6.600   | 6.700   | 6.700   | 0                       | 0               | 0.00%        |
| S332D       | DIS. NA             | mg/L       | 28          | 11JUL2007 - 08AUG2007 | 2            | 25.500  | 0.424  | 25.200  | 25.200  | 25.500  | 25.800  | 25.800  | 0                       | 0               | 0.00%        |
| S332D       | TOT. CL             | mg/L       | 32          | 16MAY2007 - 06SEP2007 | 7            | 38.500  | 0.821  | 37.500  | 37.800  | 38.600  | 38.800  | 40.000  | 0                       | 0               | 0.00%        |
| S332D       | TOT. SO4            | mg/L       | 33          | 11JUL2007 - 08AUG2007 | 2            | 1.000   | 0.141  | 0.900   | 0.900   | 1.000   | 1.100   | 1.100   | 0                       | 0               | 0.00%        |
| S332D       | DIS. SILICA         | mg/L       | 27          | 11JUL2007 - 08AUG2007 | 2            | 6.445   | 0.078  | 6.390   | 6.390   | 6.445   | 6.500   | 6.500   | 0                       | 0               | 0.00%        |
| S332D       | TOT. FE             | mg/L       | 177         | 11JUL2007 - 08AUG2007 | 2            | 0.359   | 0.062  | 0.315   | 0.315   | 0.359   | 0.403   | 0.403   | 0                       | 0               | 0.00%        |
| S332D       | TOT. ULTRA TRACE HG | ug/L       | 207         | 17JUL2007 - 17JUL2007 | 1            | 0.002   |        | 0.002   | 0.002   | 0.002   | 0.002   | 0.002   | 0                       | 0               | 0.00%        |
| S332D       | TOT. MTHY HG        | ug/L       | 203         | 17JUL2007 - 17JUL2007 | 1            | 0.000   |        | 0.000   | 0.000   | 0.000   | 0.000   | 0.000   | 0                       | 0               | 0.00%        |
| S332D       | DIS. ORGAN. C       | mg/L       | 89,181      | 11JUL2007 - 08AUG2007 | 2            | 7.700   | 0.141  | 7.600   | 7.600   | 7.700   | 7.800   | 7.800   | 0                       | 0               | 0.00%        |
| S332D       | TOT. FIL RES.       | mg/L       | 97          | 11JUL2007 - 08AUG2007 | 2            | 308.500 | 10.607 | 301.000 | 301.000 | 308.500 | 316.000 | 316.000 | 0                       | 0               | 0.00%        |
|             |                     |            |             |                       |              |         |        |         |         |         |         |         |                         |                 |              |
| S332DASAuto | TN                  | mg N/L     | 80          | 13JUN2007 - 12SEP2007 | 12           | 0.702   | 0.176  | 0.535   | 0.597   | 0.635   | 0.769   | 1.128   | 0                       | 0               | 0.00%        |
| S332DASAuto | NOX                 | mg N/L     | 18,180      | 13JUN2007 - 12SEP2007 | 11           | 0.018   | 0.009  | 0.005   | 0.010   | 0.020   | 0.028   | 0.031   | 0                       | 0               | 0.00%        |
| S332DASAuto | TKN                 | mg N/L     | 21          | 13JUN2007 - 12SEP2007 | 12           | 0.685   | 0.171  | 0.530   | 0.575   | 0.615   | 0.750   | 1.100   | 0                       | 0               | 0.00%        |
| S332DASAuto | TP                  | mg P/L     | 25          | 13JUN2007 - 12SEP2007 | 12           | 0.008   | 0.002  | 0.005   | 0.007   | 0.008   | 0.010   | 0.010   | 0                       | 0               | 0.00%        |
|             |                     |            |             |                       |              |         |        |         |         |         |         |         |                         |                 |              |
| BERMB3      | DO                  | mg/L       | 8           | 02OCT2007 - 02OCT2007 | 1            | 4.430   |        | 4.430   | 4.430   | 4.430   | 4.430   | 4.430   | 0                       | 1               | 100.00%      |
| BERMB3      | FLDCOND.            | UMHOS/CM   | 9           | 02OCT2007 - 02OCT2007 | 1            | 167.000 |        | 167.000 | 167.000 | 167.000 | 167.000 | 167.000 | 0                       | 0               | 0.00%        |
| BERMB3      | PH                  | UNITS      | 10          | 02OCT2007 - 02OCT2007 | 1            | 7.200   |        | 7.200   | 7.200   | 7.200   | 7.200   | 7.200   | 0                       | 0               | 0.00%        |
| BERMB3      | TURBIDITY           | NTU        | 12          | 02OCT2007 - 02OCT2007 | 1            | 2.100   |        | 2.100   | 2.100   | 2.100   | 2.100   | 2.100   | 0                       | 0               | 0.00%        |
| BERMB3      | TSS                 | mg/L       | 16          | 02OCT2007 - 02OCT2007 | 1            | 3.000   |        | <3      | <3      | <3      | <3      | <3      | 1                       | 0               | 0.00%        |

**Table 3.** Continued.

| STATION | TEST NAME            | UNITS                  | TEST NUMBER | PERIOD OF RECORD      | # OF SAMPLES | MEAN   | STD | MIN    | Q25    | MEDIAN | Q75    | MAX    | # BELOW DETECTION LIMIT | # OF EXCURSIONS | % EXCURSIONS |
|---------|----------------------|------------------------|-------------|-----------------------|--------------|--------|-----|--------|--------|--------|--------|--------|-------------------------|-----------------|--------------|
| BERMB3  | HARDNESS             | mg/L CaCO <sub>3</sub> | 35          | 02OCT2007 - 02OCT2007 | 1            | 83.000 |     | 83.000 | 83.000 | 83.000 | 83.000 | 83.000 | 0                       | 0               | 0.00%        |
| BERMB3  | TEMP                 | CENT                   | 7           | 02OCT2007 - 02OCT2007 | 1            | 25.000 |     | 25.000 | 25.000 | 25.000 | 25.000 | 25.000 | 0                       | 0               | 0.00%        |
| BERMB3  | TN                   | mg N/L                 | 80          | 02OCT2007 - 02OCT2007 | 1            | 0.610  |     | 0.610  | 0.610  | 0.610  | 0.610  | 0.610  | 0                       | 0               | 0.00%        |
| BERMB3  | TKN                  | mg N/L                 | 21          | 02OCT2007 - 02OCT2007 | 1            | 0.610  |     | 0.610  | 0.610  | 0.610  | 0.610  | 0.610  | 0                       | 0               | 0.00%        |
| BERMB3  | OPO <sub>4</sub>     | mg P/L                 | 23          | 02OCT2007 - 02OCT2007 | 1            | 0.003  |     | 0.003  | 0.003  | 0.003  | 0.003  | 0.003  | 0                       | 0               | 0.00%        |
| BERMB3  | TP                   | mg P/L                 | 25          | 02OCT2007 - 02OCT2007 | 1            | 0.032  |     | 0.032  | 0.032  | 0.032  | 0.032  | 0.032  | 0                       | 0               | 0.00%        |
| BERMB3  | DIS. CA              | mg/L                   | 30          | 02OCT2007 - 02OCT2007 | 1            | 31.200 |     | 31.200 | 31.200 | 31.200 | 31.200 | 31.200 | 0                       | 0               | 0.00%        |
| BERMB3  | DIS. K               | mg/L                   | 29          | 02OCT2007 - 02OCT2007 | 1            | 2.000  |     | 2.000  | 2.000  | 2.000  | 2.000  | 2.000  | 0                       | 0               | 0.00%        |
| BERMB3  | DIS. MG              | mg/L                   | 31          | 02OCT2007 - 02OCT2007 | 1            | 1.200  |     | 1.200  | 1.200  | 1.200  | 1.200  | 1.200  | 0                       | 0               | 0.00%        |
| BERMB3  | DIS. NA              | mg/L                   | 28          | 02OCT2007 - 02OCT2007 | 1            | 1.500  |     | 1.500  | 1.500  | 1.500  | 1.500  | 1.500  | 0                       | 0               | 0.00%        |
| BERMB3  | TOT. CL              | mg/L                   | 32          | 02OCT2007 - 02OCT2007 | 1            | 2.300  |     | 2.300  | 2.300  | 2.300  | 2.300  | 2.300  | 0                       | 0               | 0.00%        |
| BERMB3  | TOT. SO <sub>4</sub> | mg/L                   | 33          | 02OCT2007 - 02OCT2007 | 1            | 0.200  |     | 0.200  | 0.200  | 0.200  | 0.200  | 0.200  | 0                       | 0               | 0.00%        |

# **Attachment C: Time-Series and Box Plots for Non-Everglades Construction Project Water Quality Monitoring Data Exhibiting Excursions from Class III Numeric Standards for Water Year 2008**

Shi Kui Xue and Steven Hill

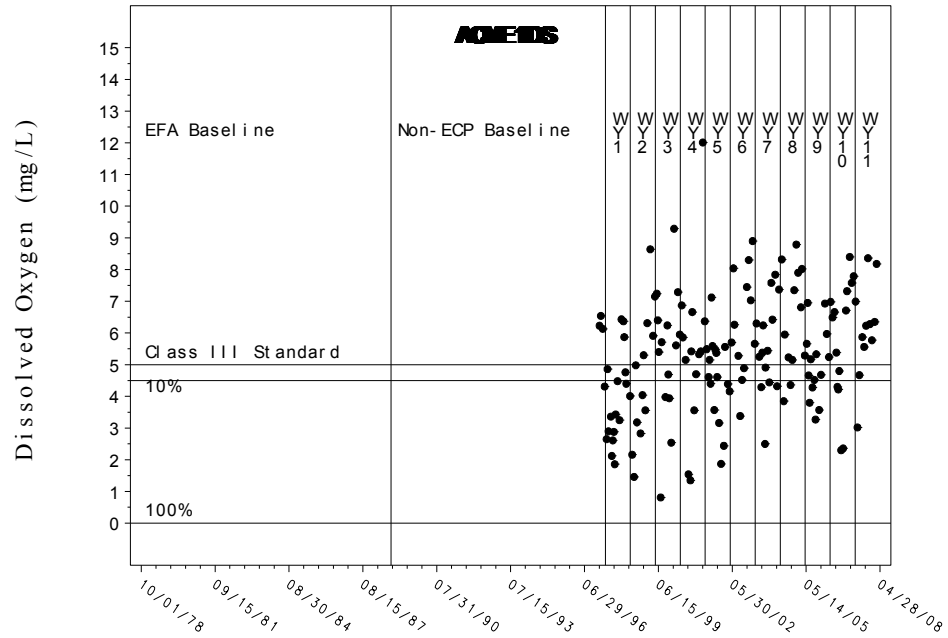
## **Key to Abbreviations**

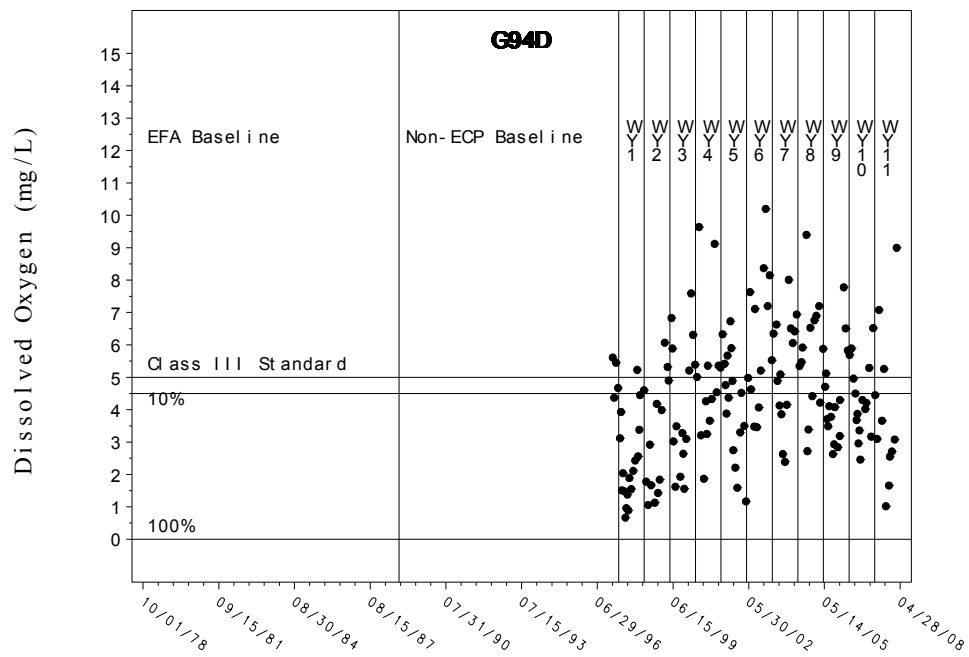
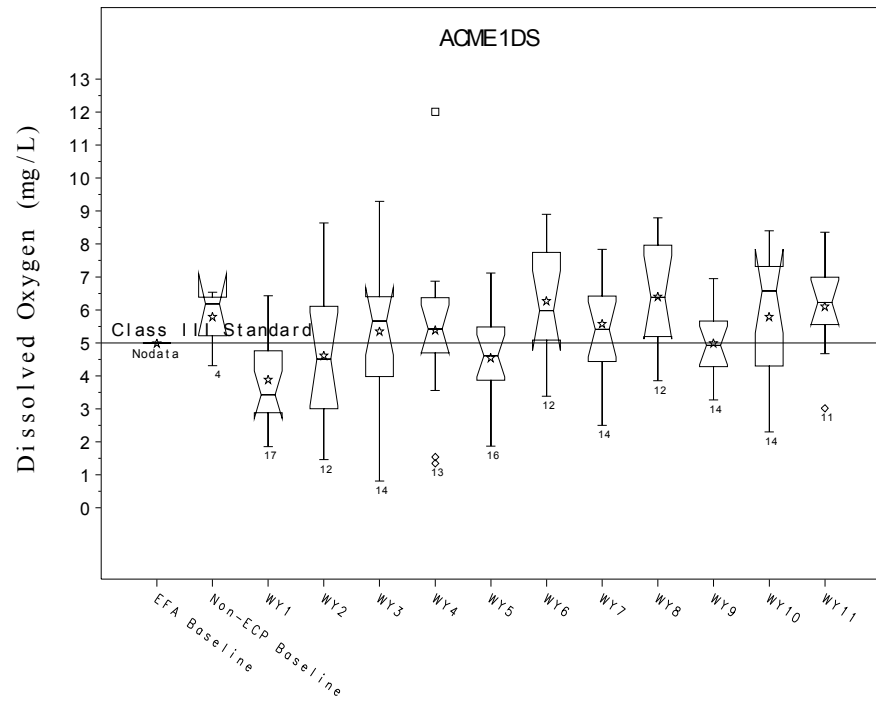
**WY1:** Water Year 1 (May 1, 1997 through April 30, 1998)  
**WY2:** Water Year 2 (May 1, 1998 through April 30, 1999)  
**WY3:** Water Year 3 (May 1, 1999 through April 30, 2000)  
**WY4:** Water Year 4 (May 1, 2000 through April 30, 2001)  
**WY5:** Water Year 5 (May 1, 2001 through April 30, 2002)  
**WY6:** Water Year 6 (May 1, 2002 through April 30, 2003)  
**WY7:** Water Year 7 (May 1, 2003 through April 30, 2004)  
**WY8:** Water Year 8 (May 1, 2004 through April 30, 2005)  
**WY9:** Water Year 9 (May 1, 2005 through April 30, 2006)  
**WY10:** Water Year 10 (May 1, 2006 through April 30, 2007)  
**WY11:** Water Year 11 (May 1, 2007 through April 30, 2008)

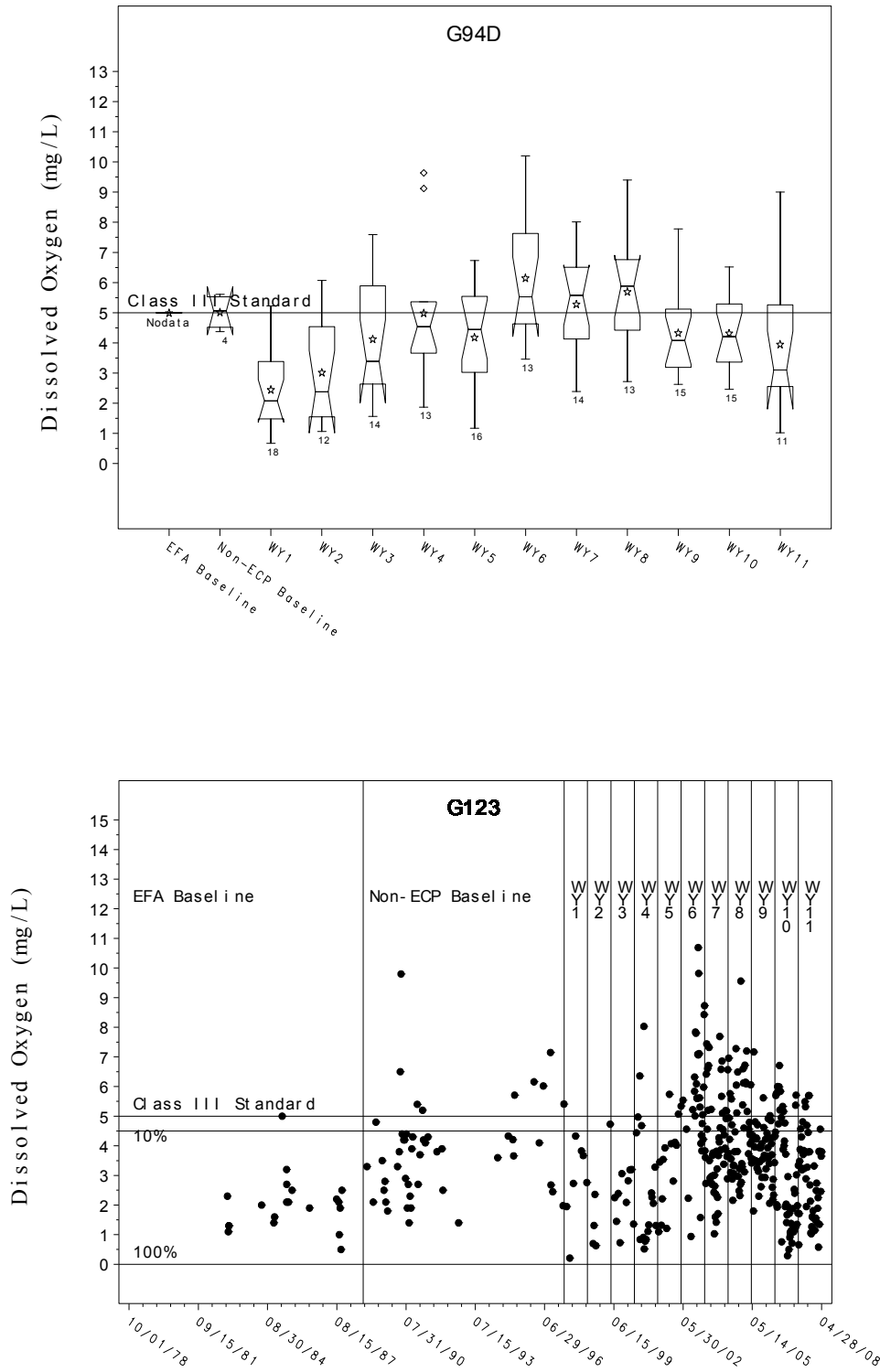
## **NOTES:**

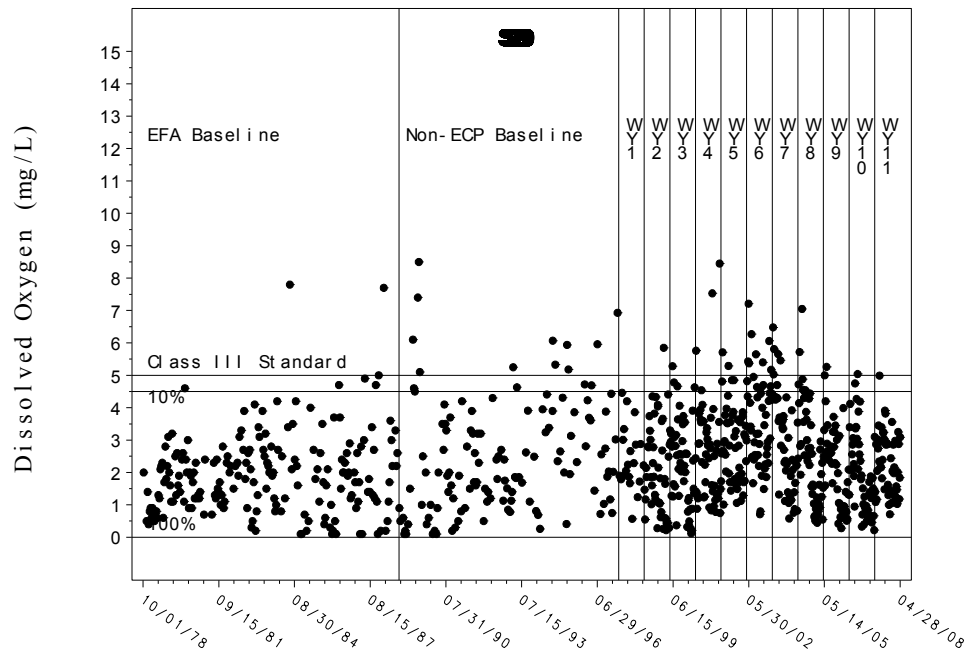
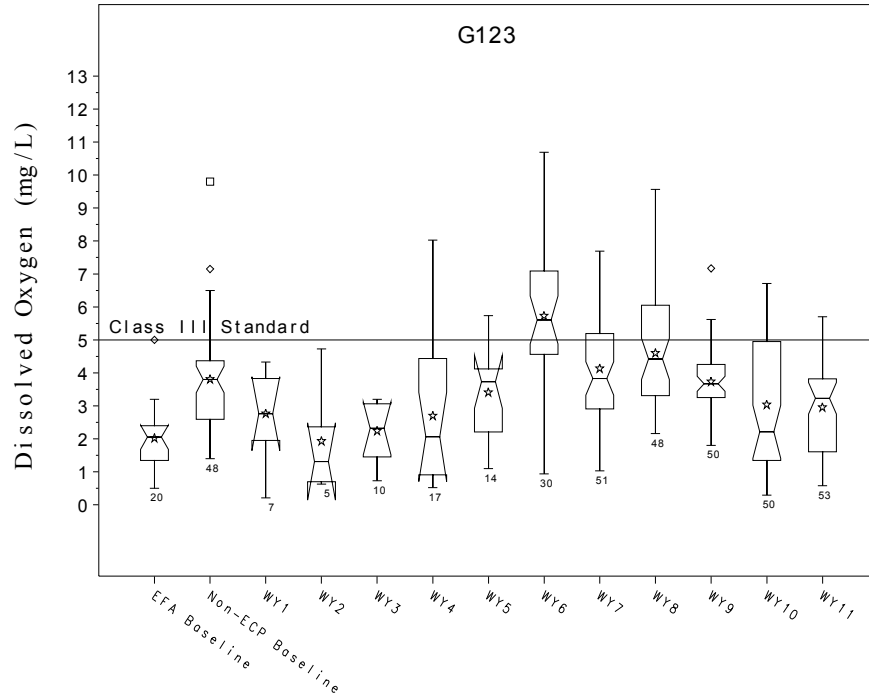
The graphs in this attachment correspond to the non-Everglades Construction Project (non-ECP) water quality monitoring sites exhibiting excursions during Water Year 11 (WY11), as shown in **Table 3**. The graph sequencing follows the station and parameter order shown in that table. The non-ECP structure locations are depicted in Appendix 3A-7, Figure 1. Additionally,

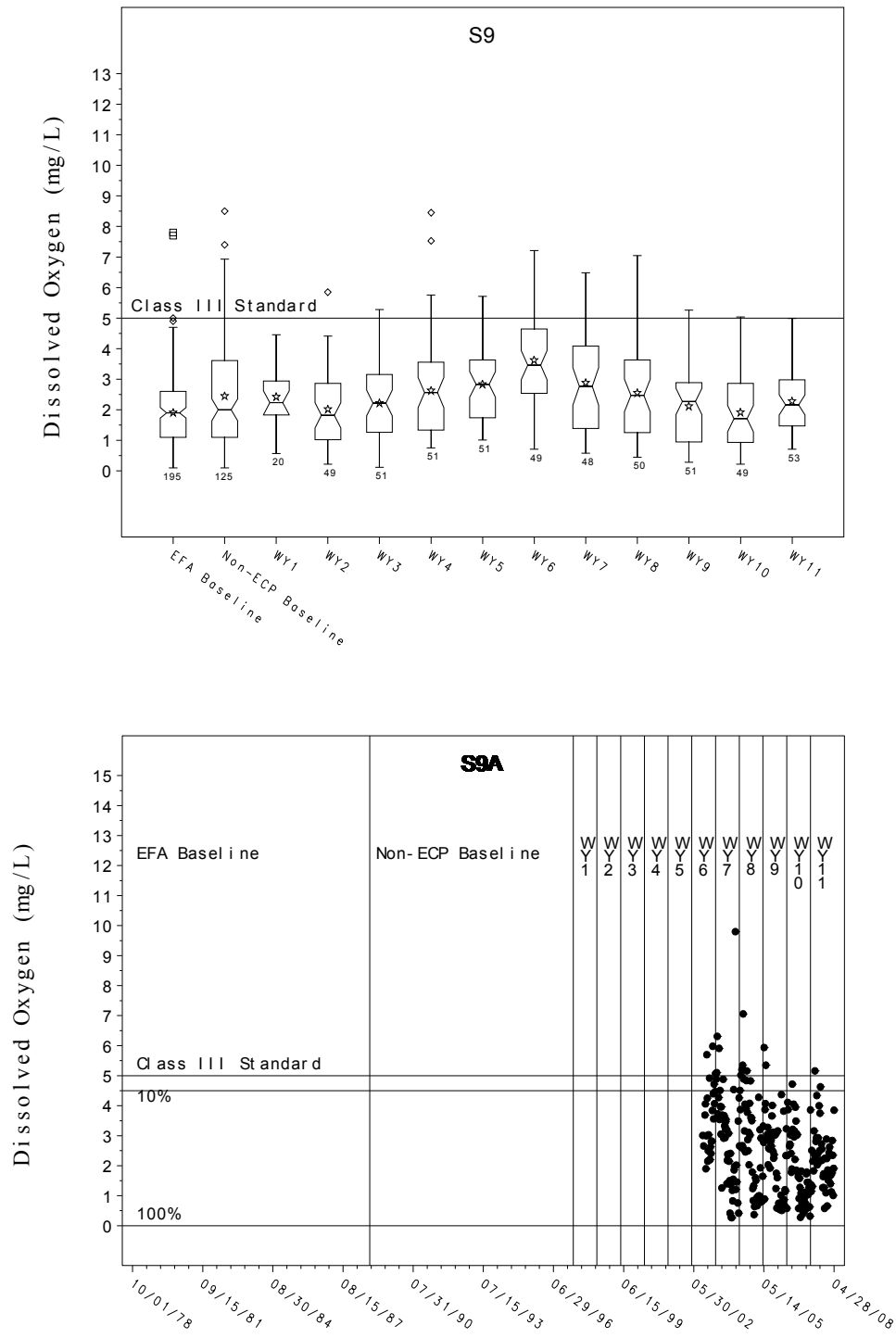
the graphs are identified by the monitoring site name. In most cases, the monitoring site name corresponds to the structure. If the monitoring site is a surrogate location for a structure, then the structure name(s) is/are shown in parentheses below the monitoring site name.

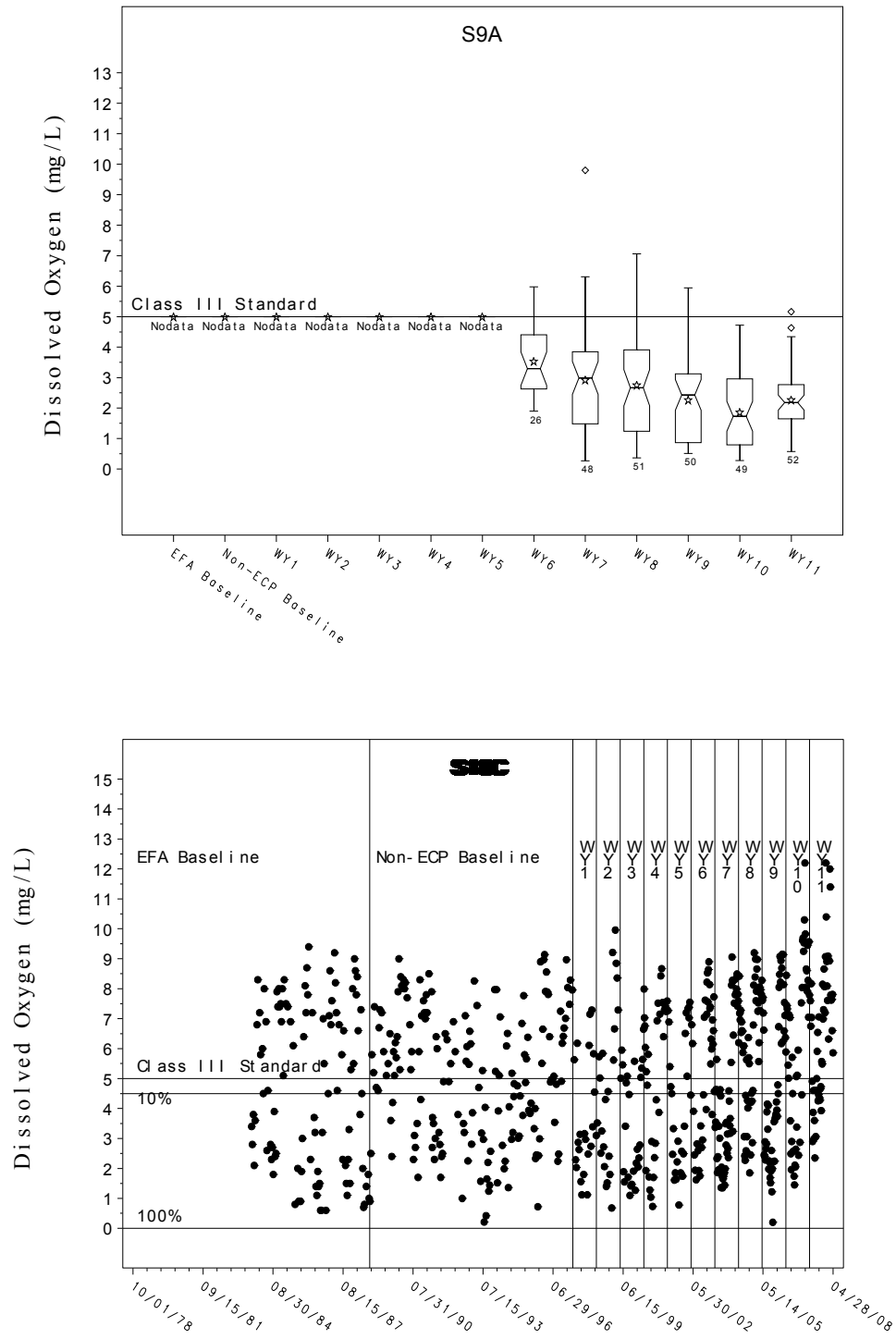


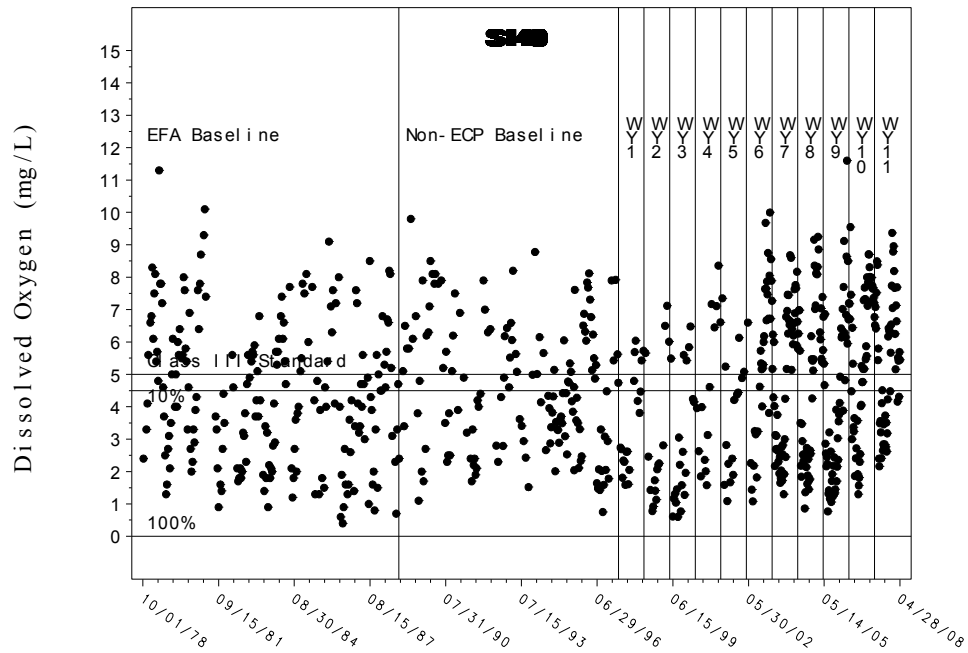
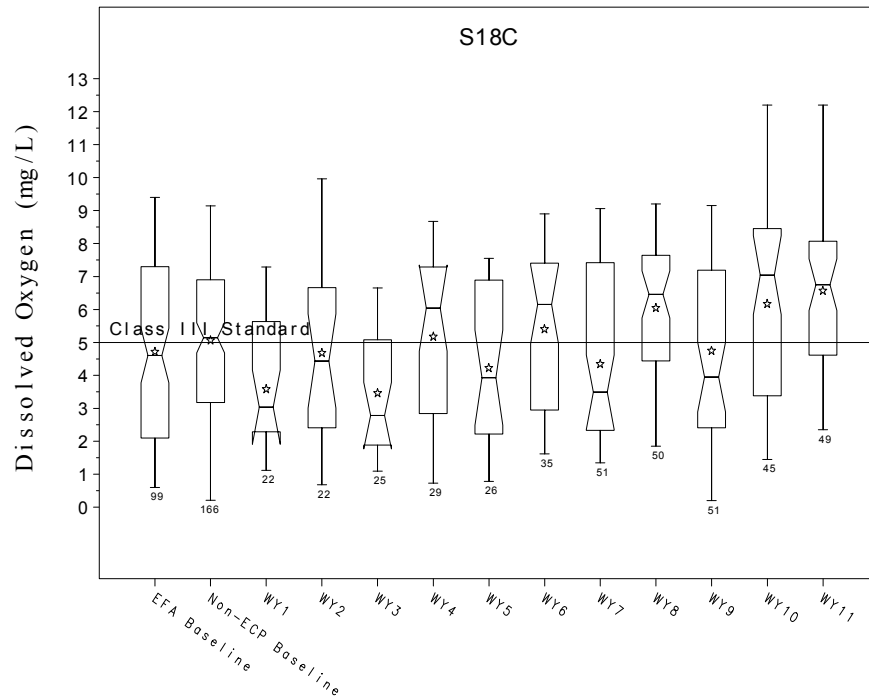


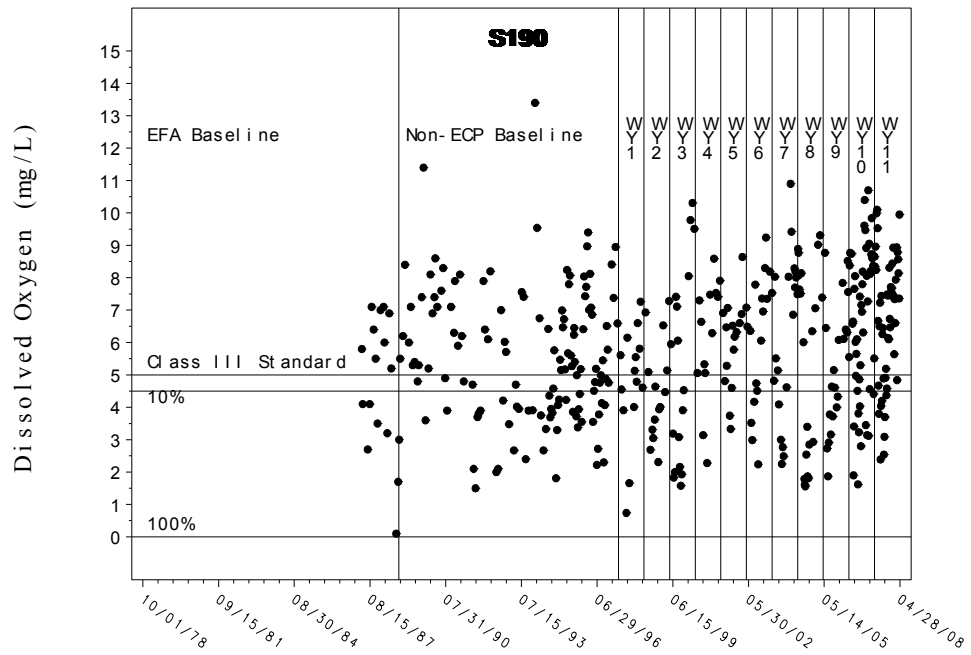
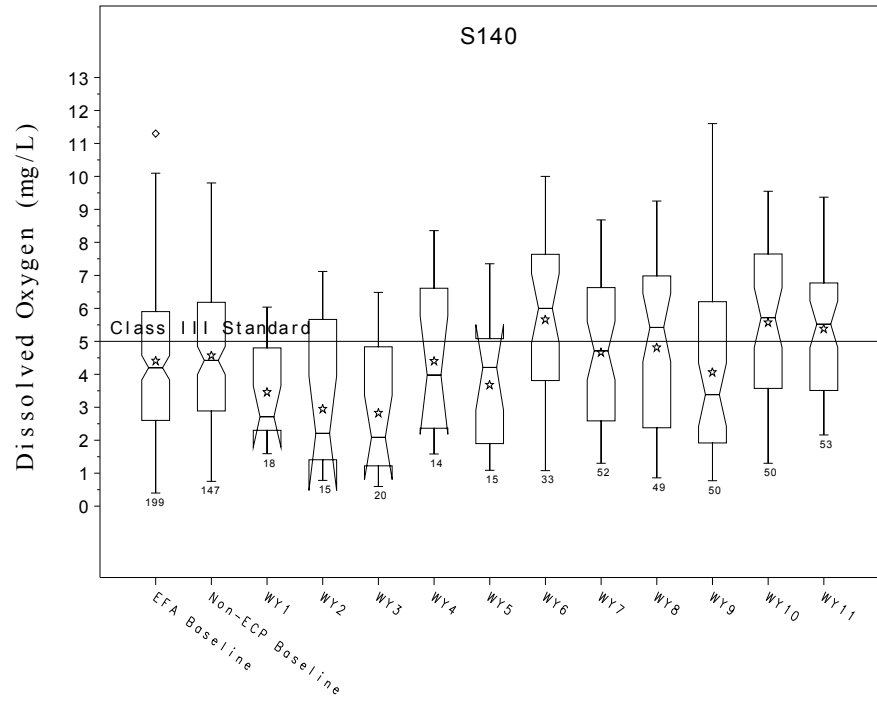


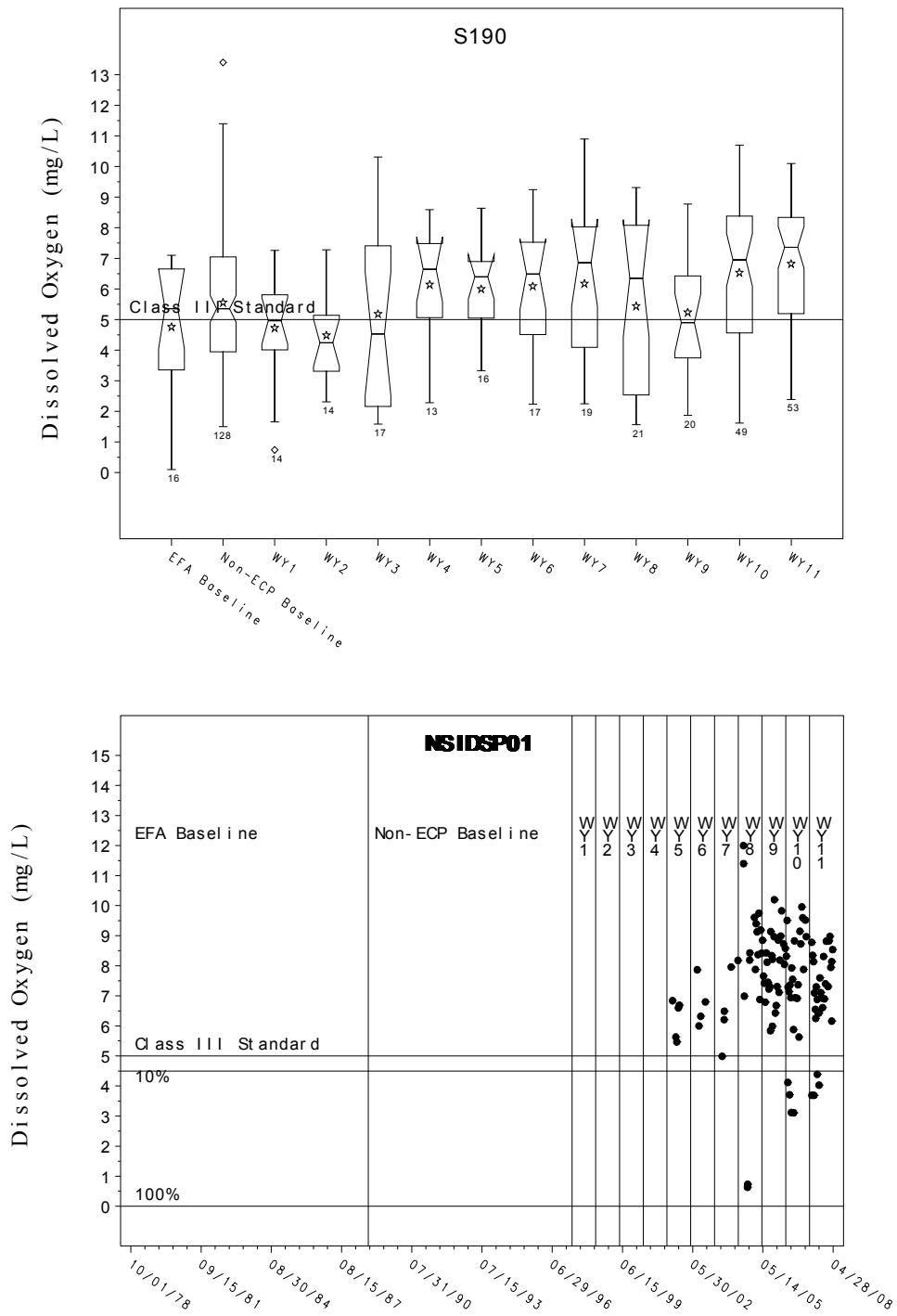


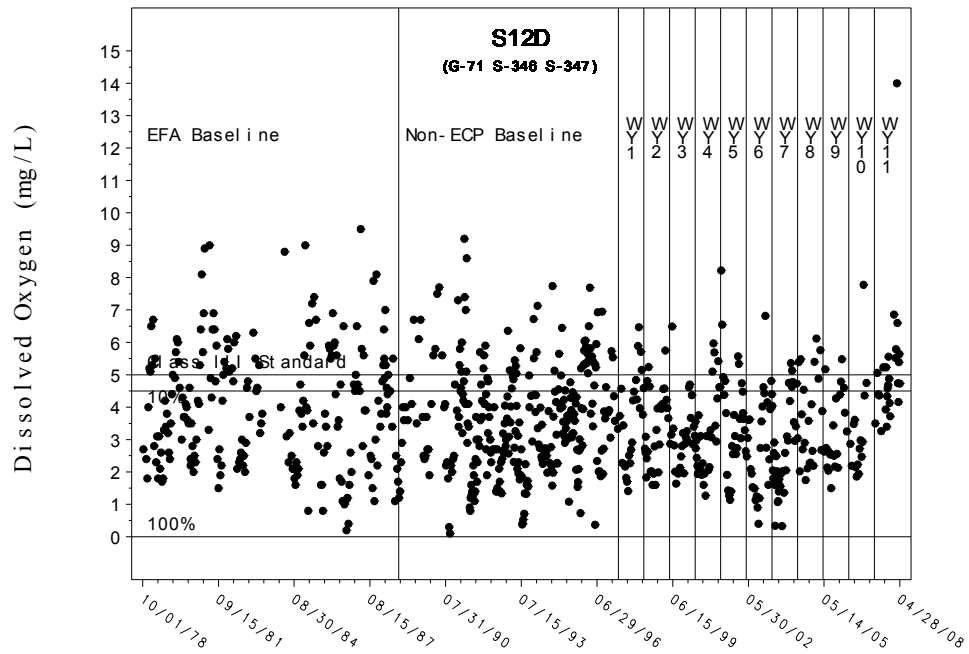
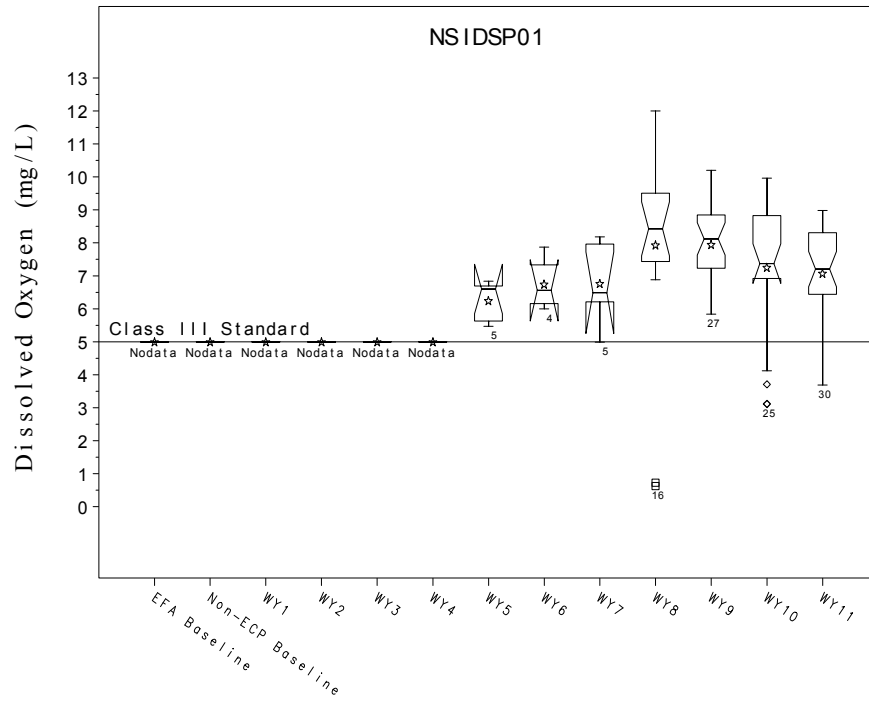


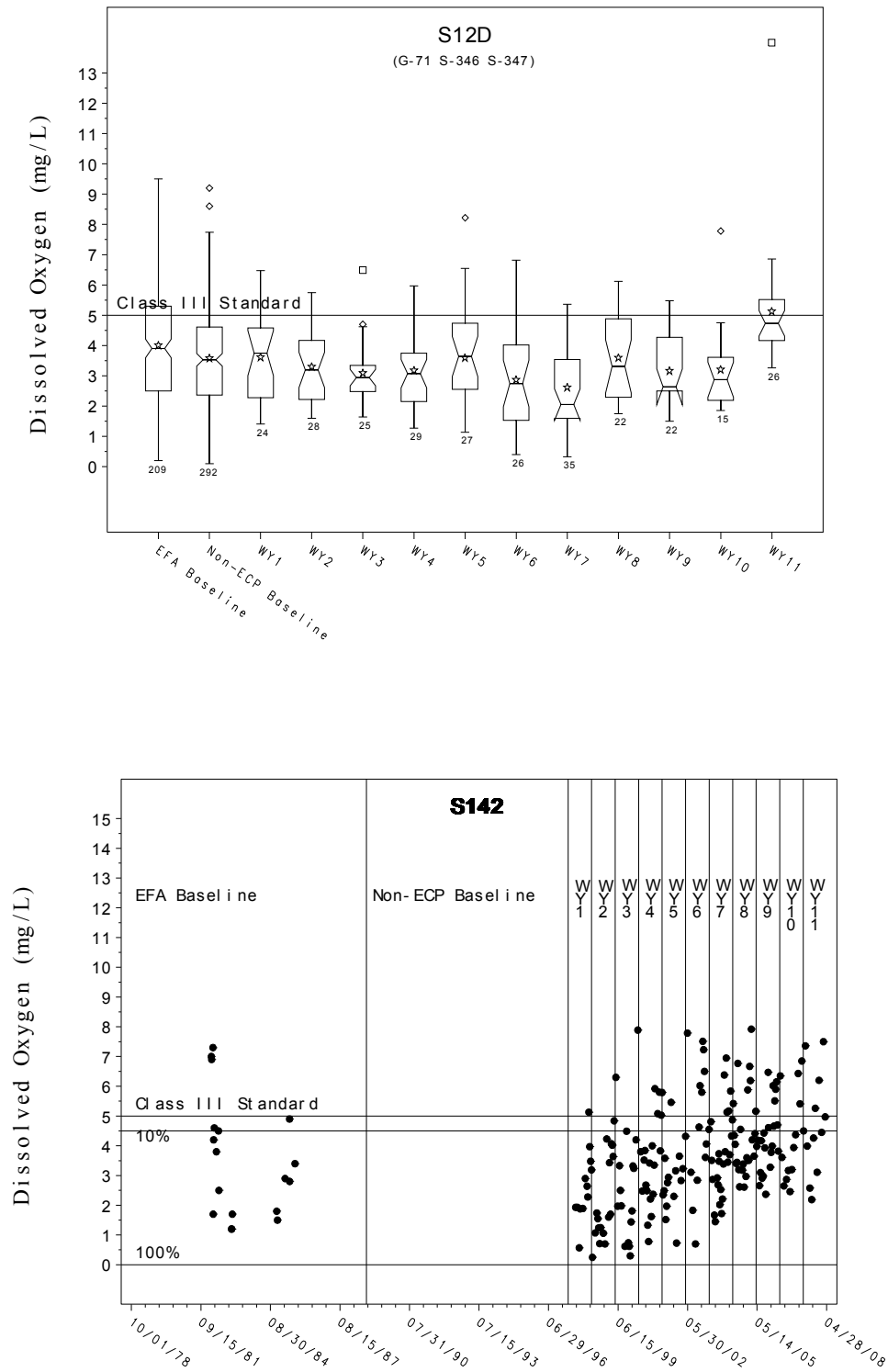


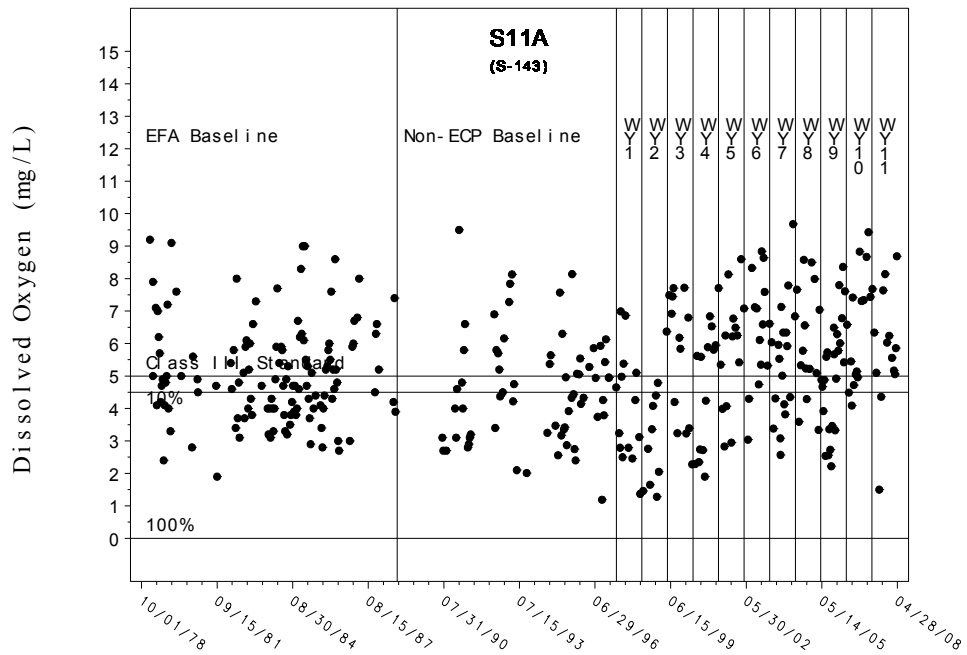
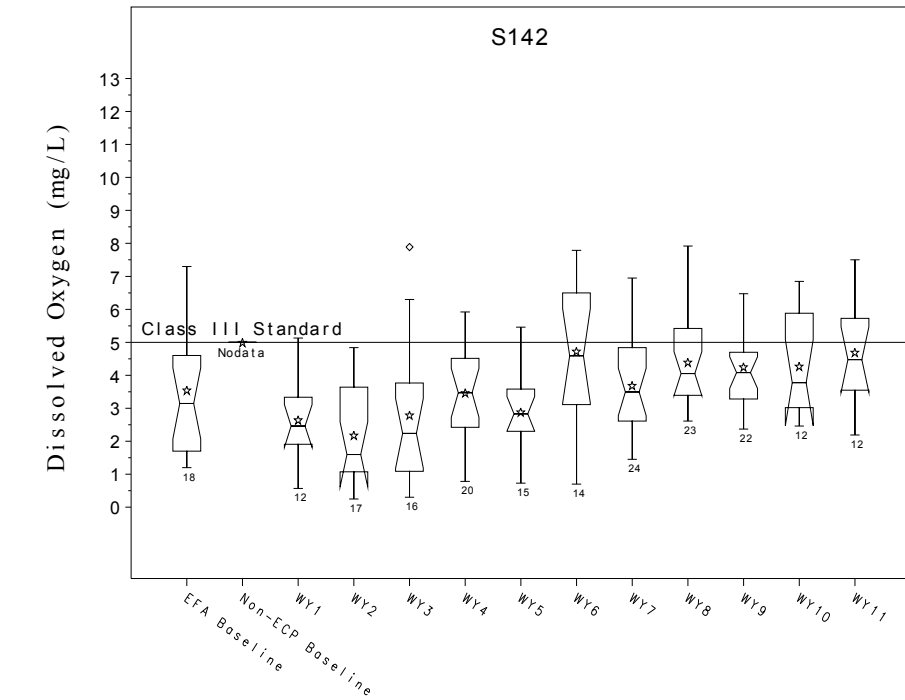


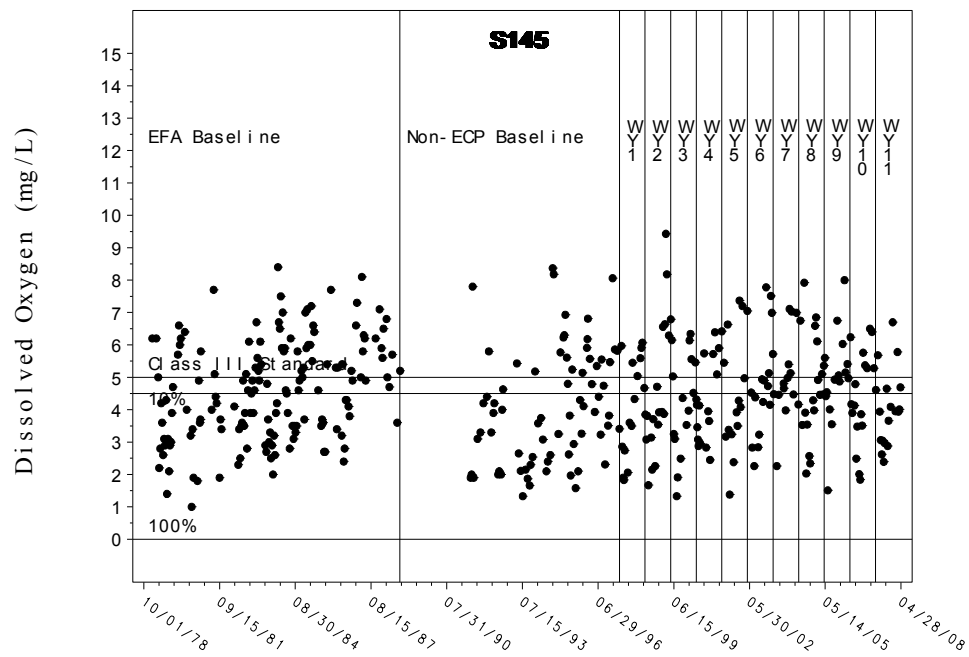
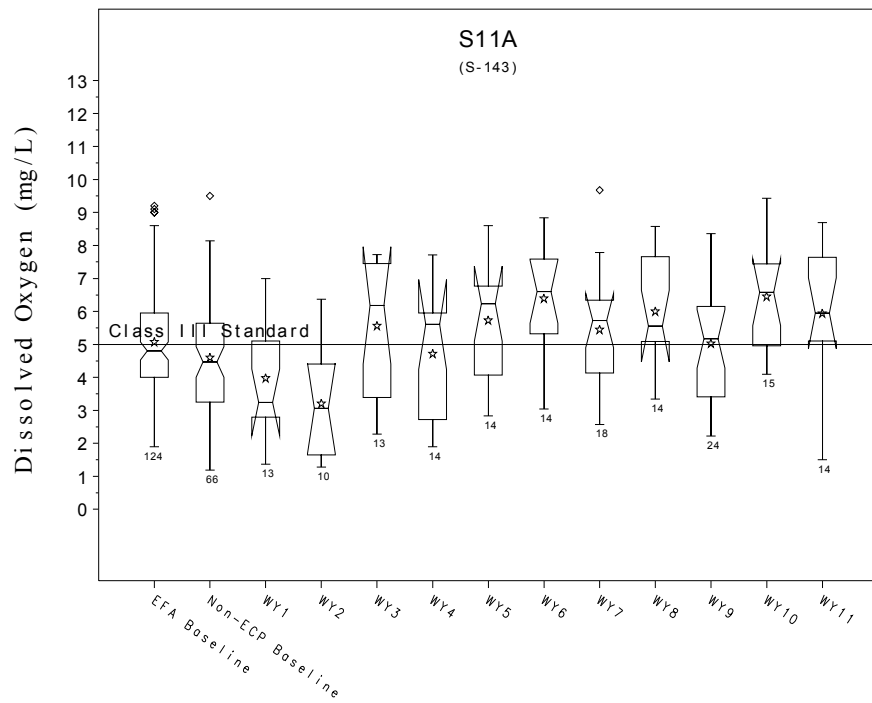


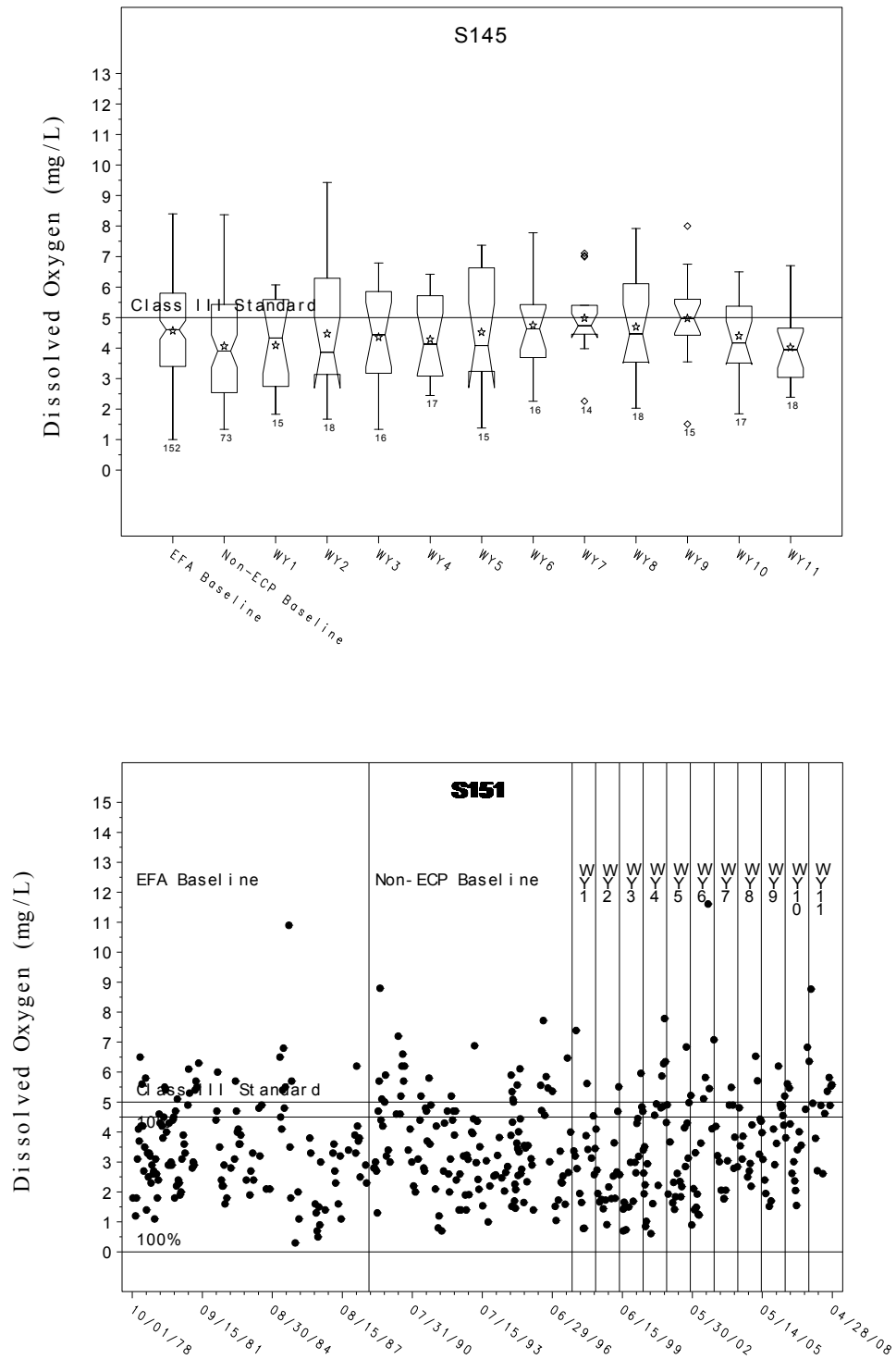


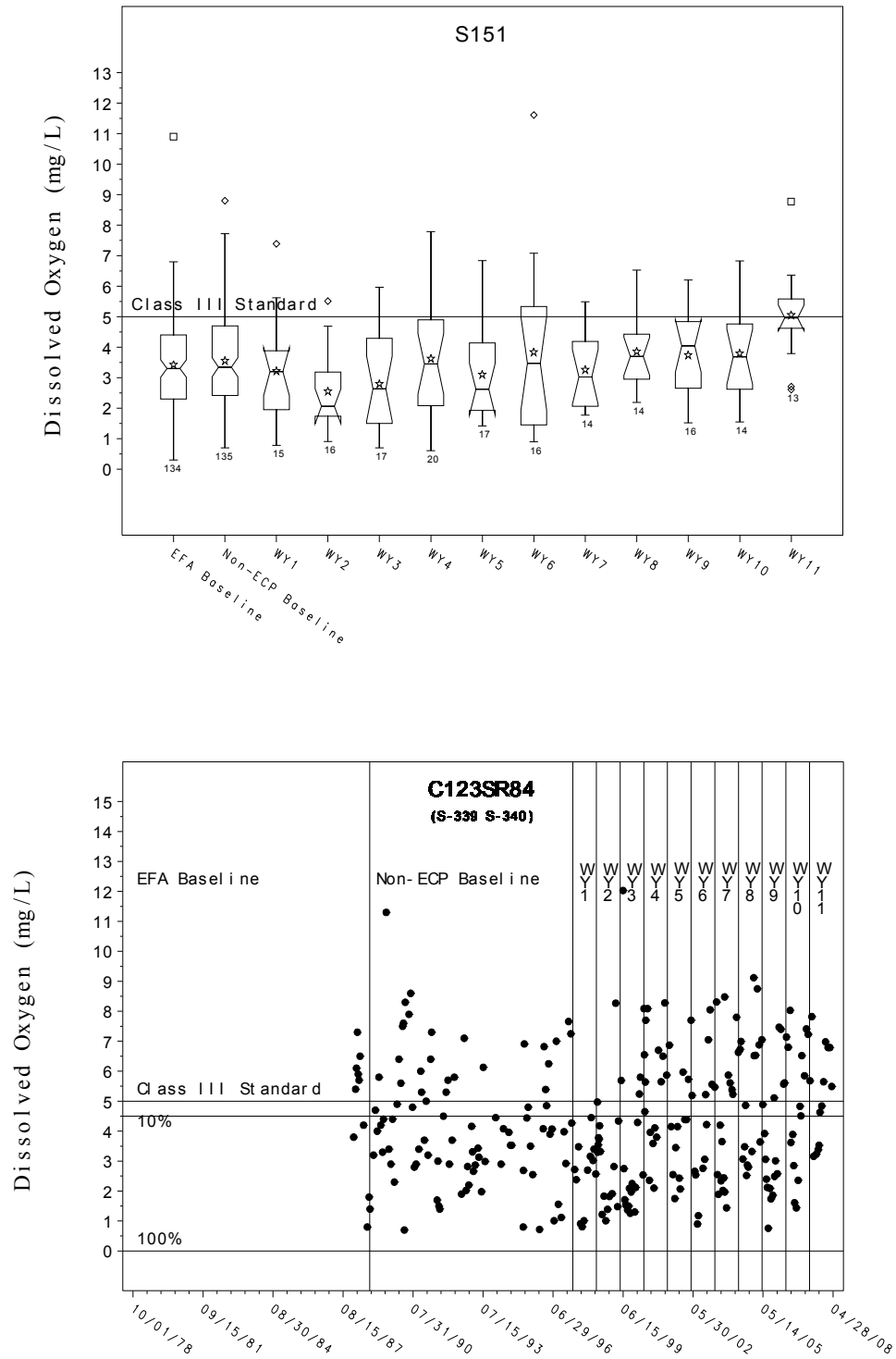


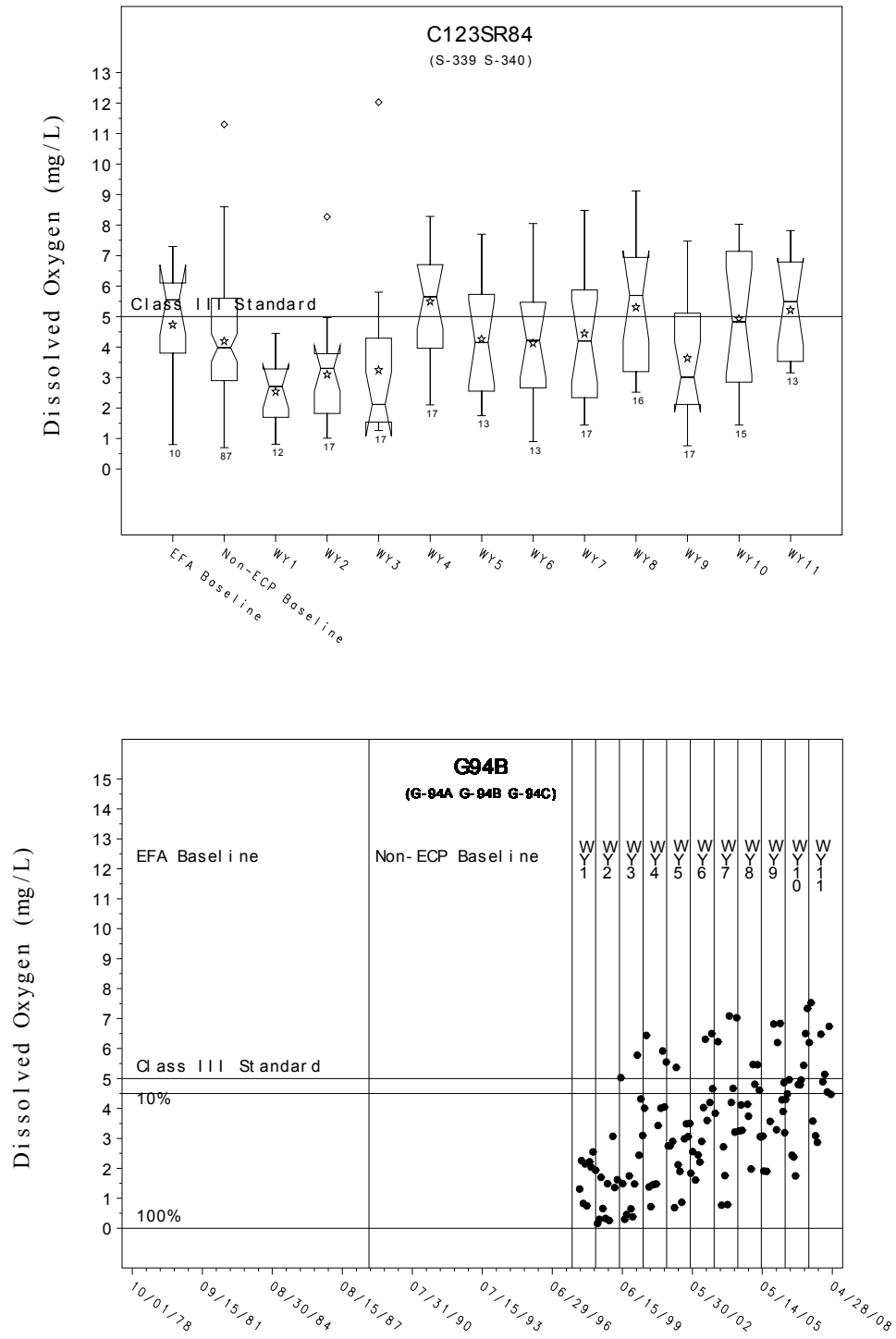


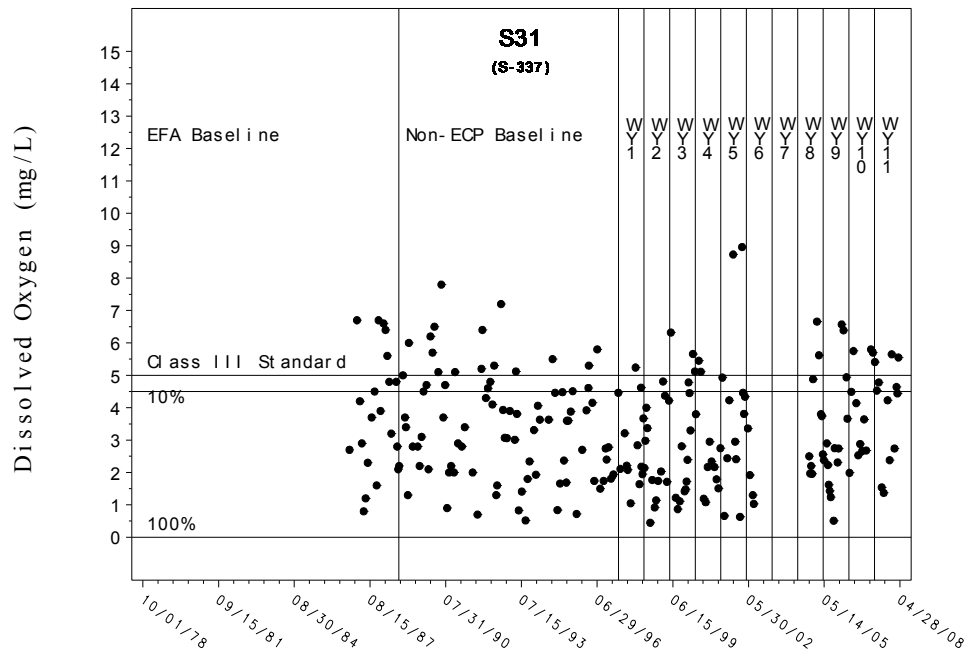
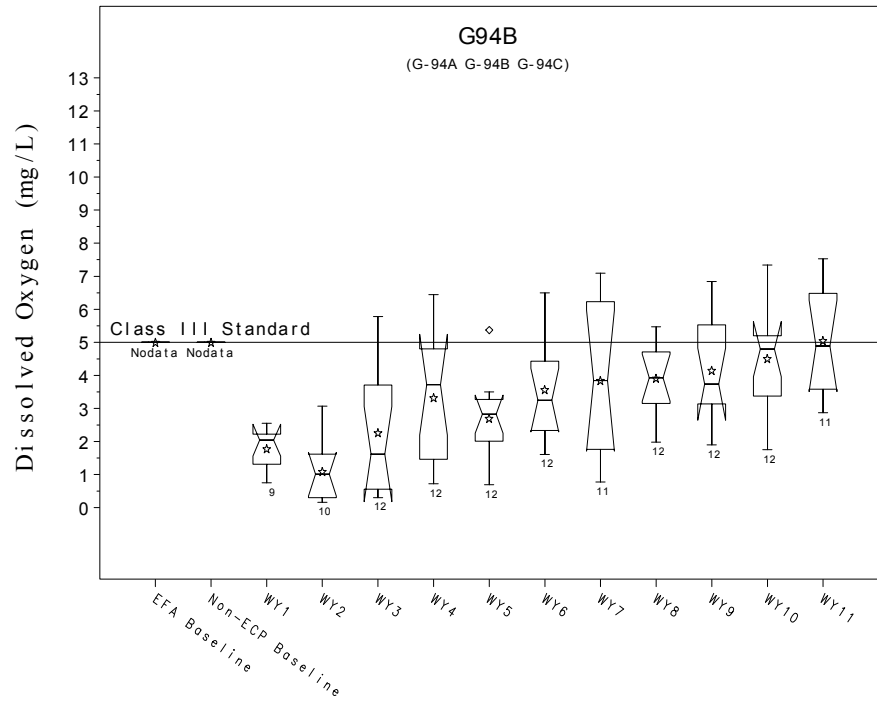


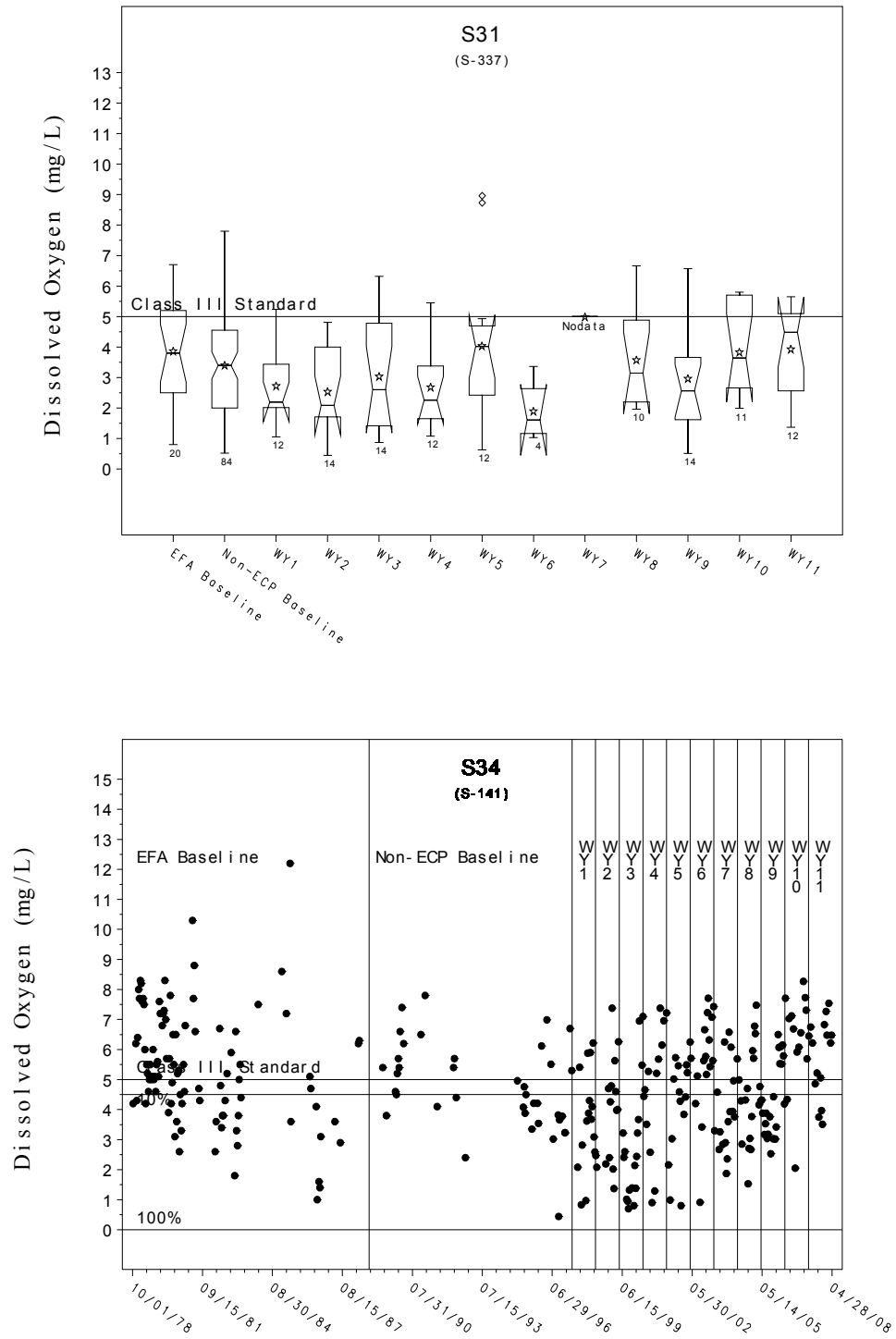


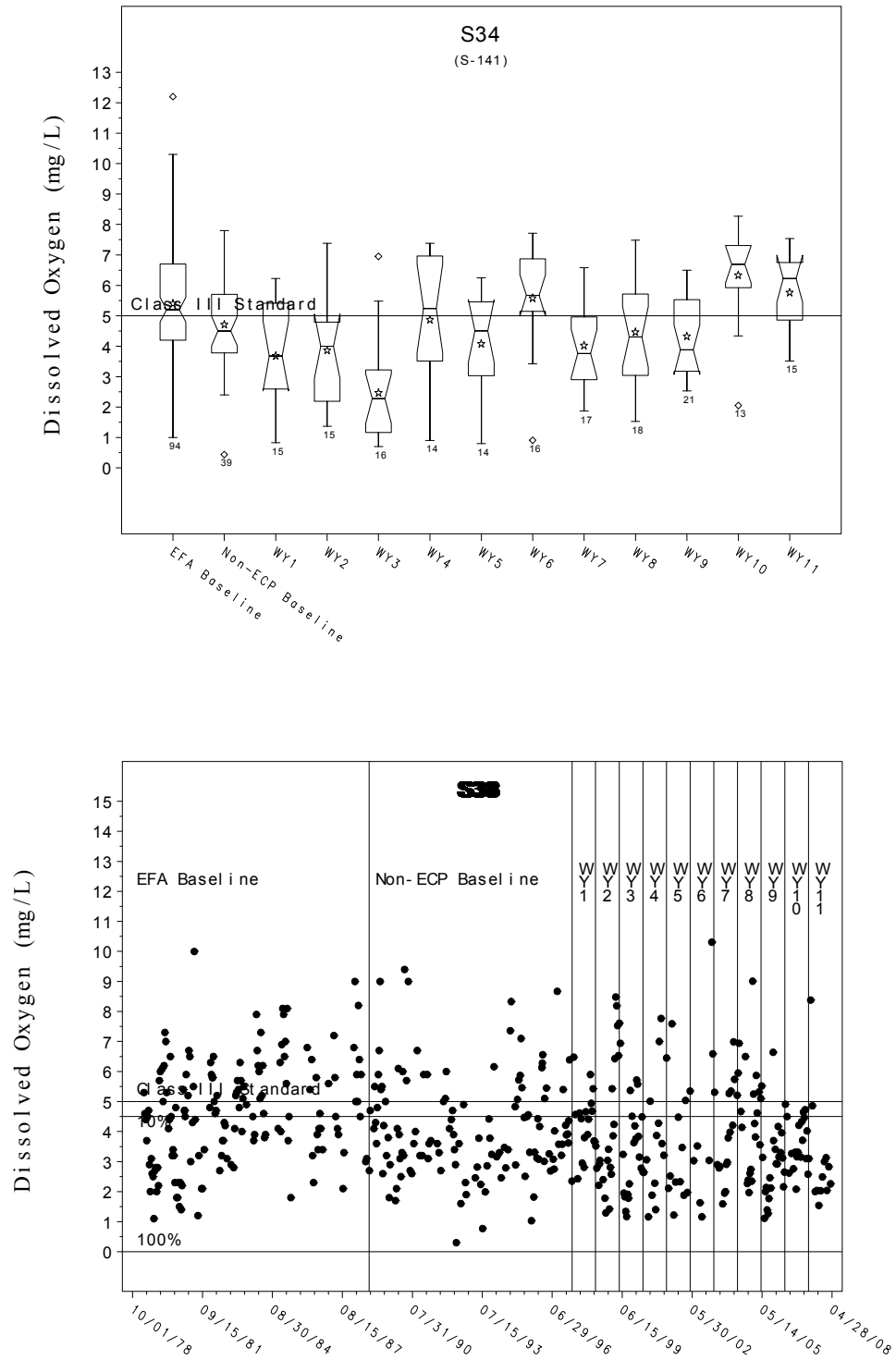


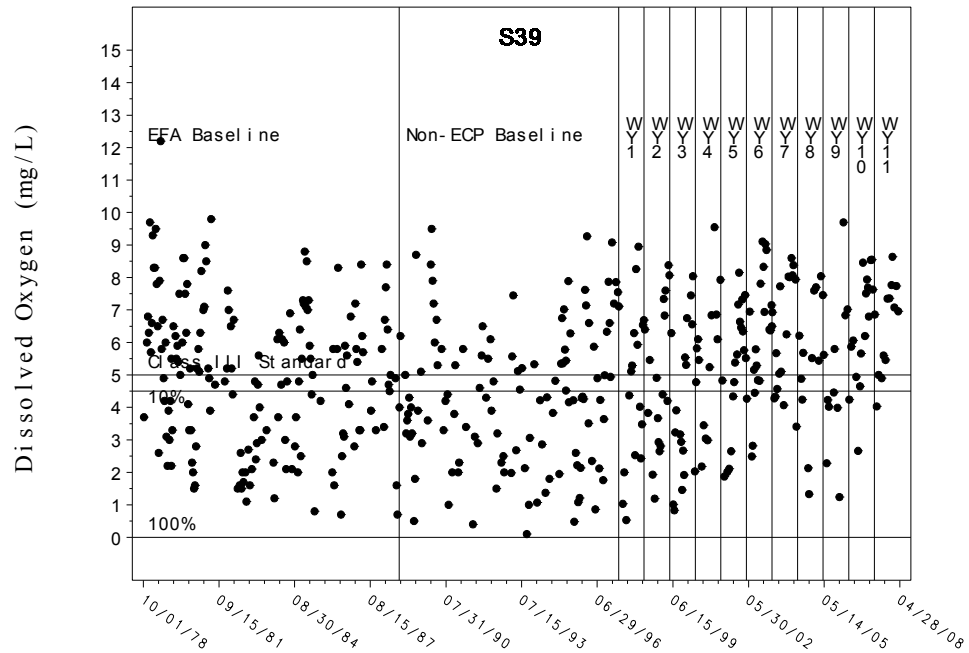
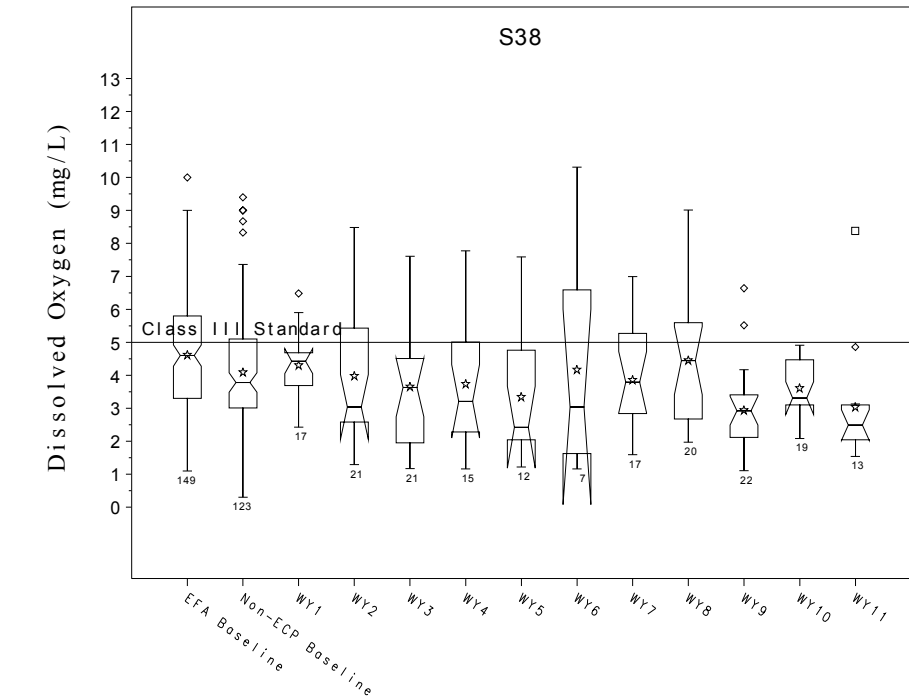


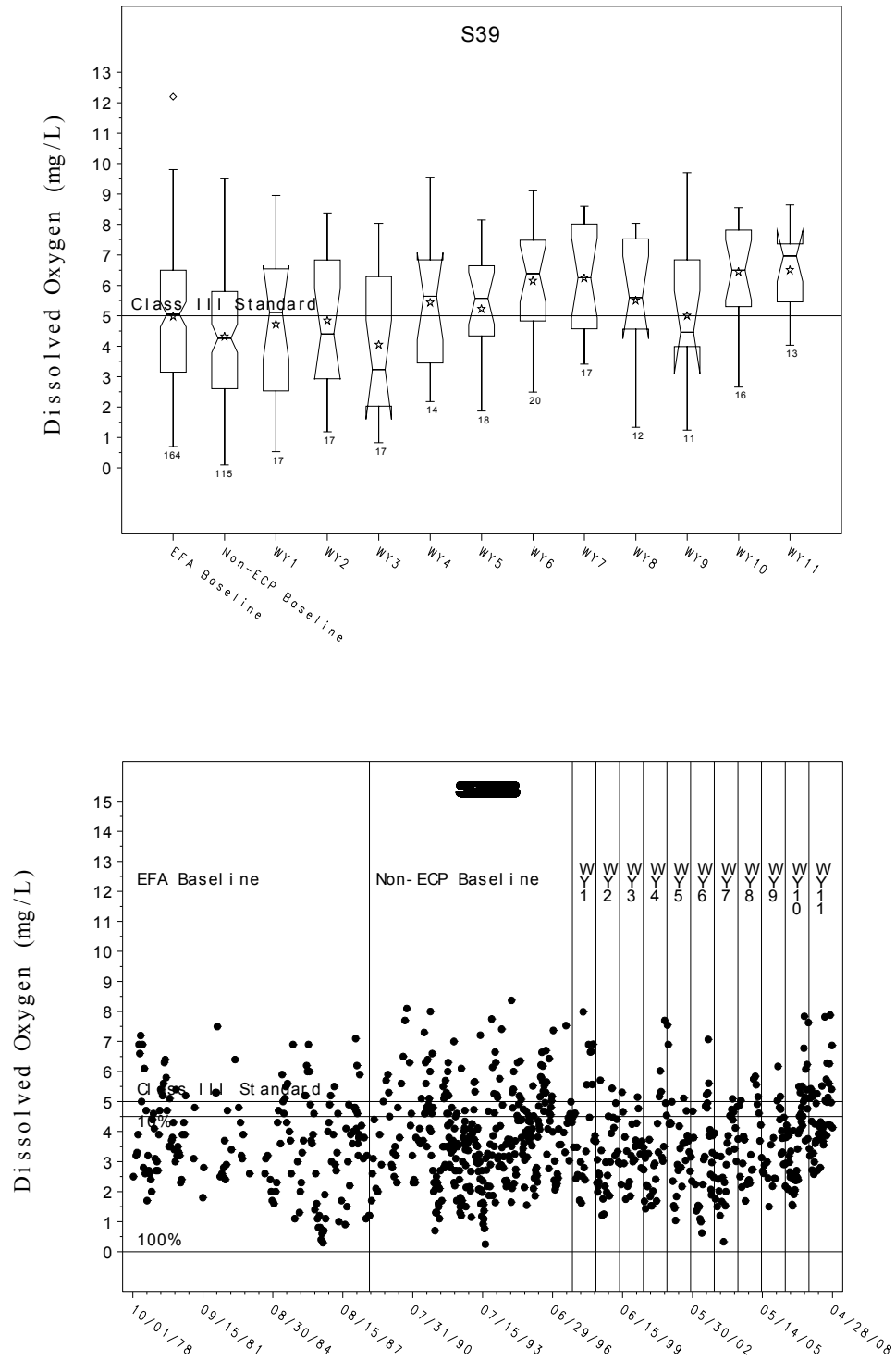


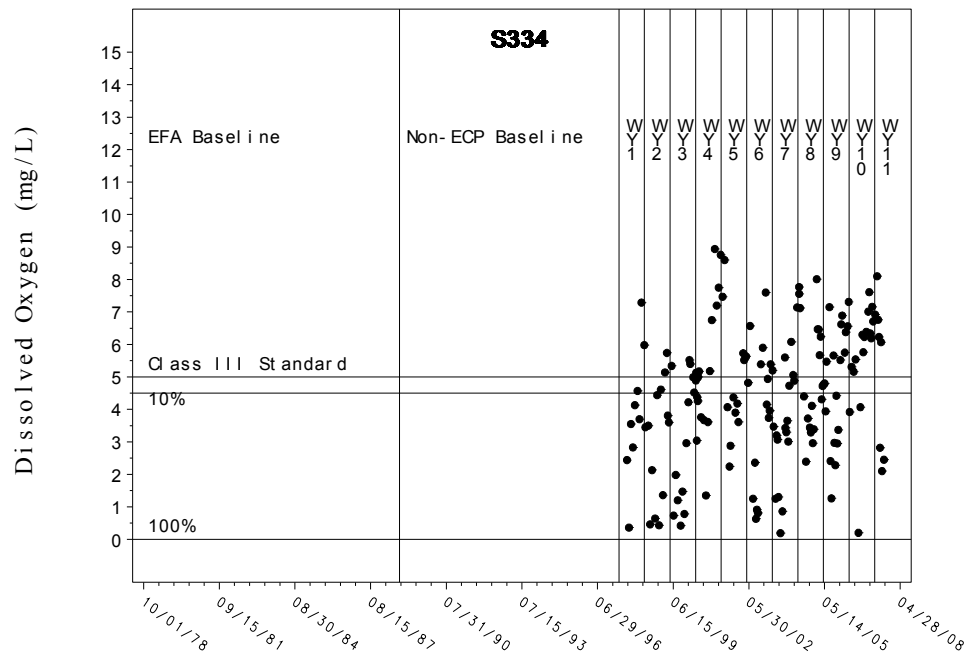
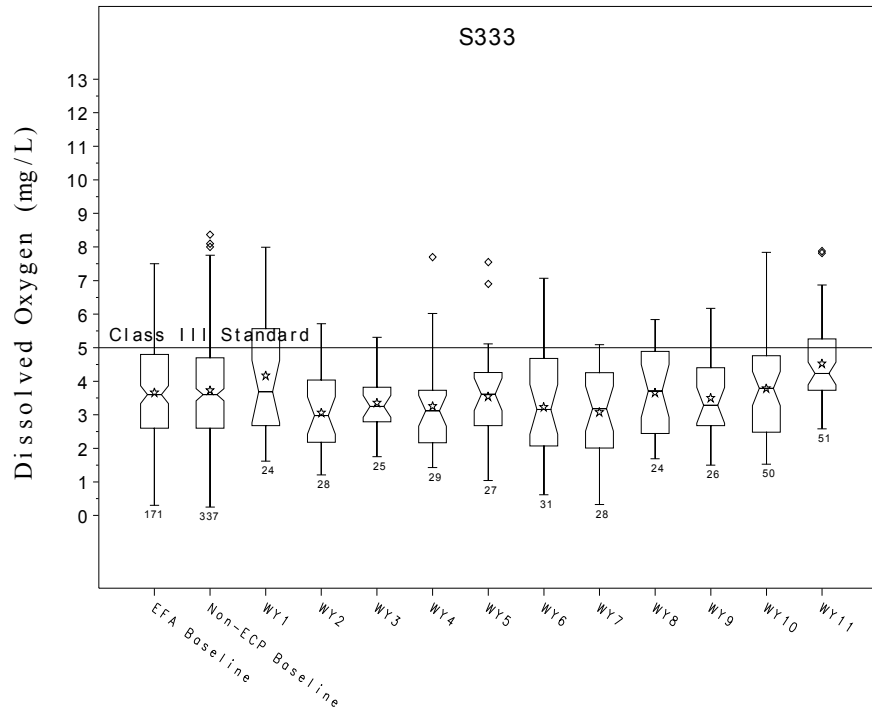


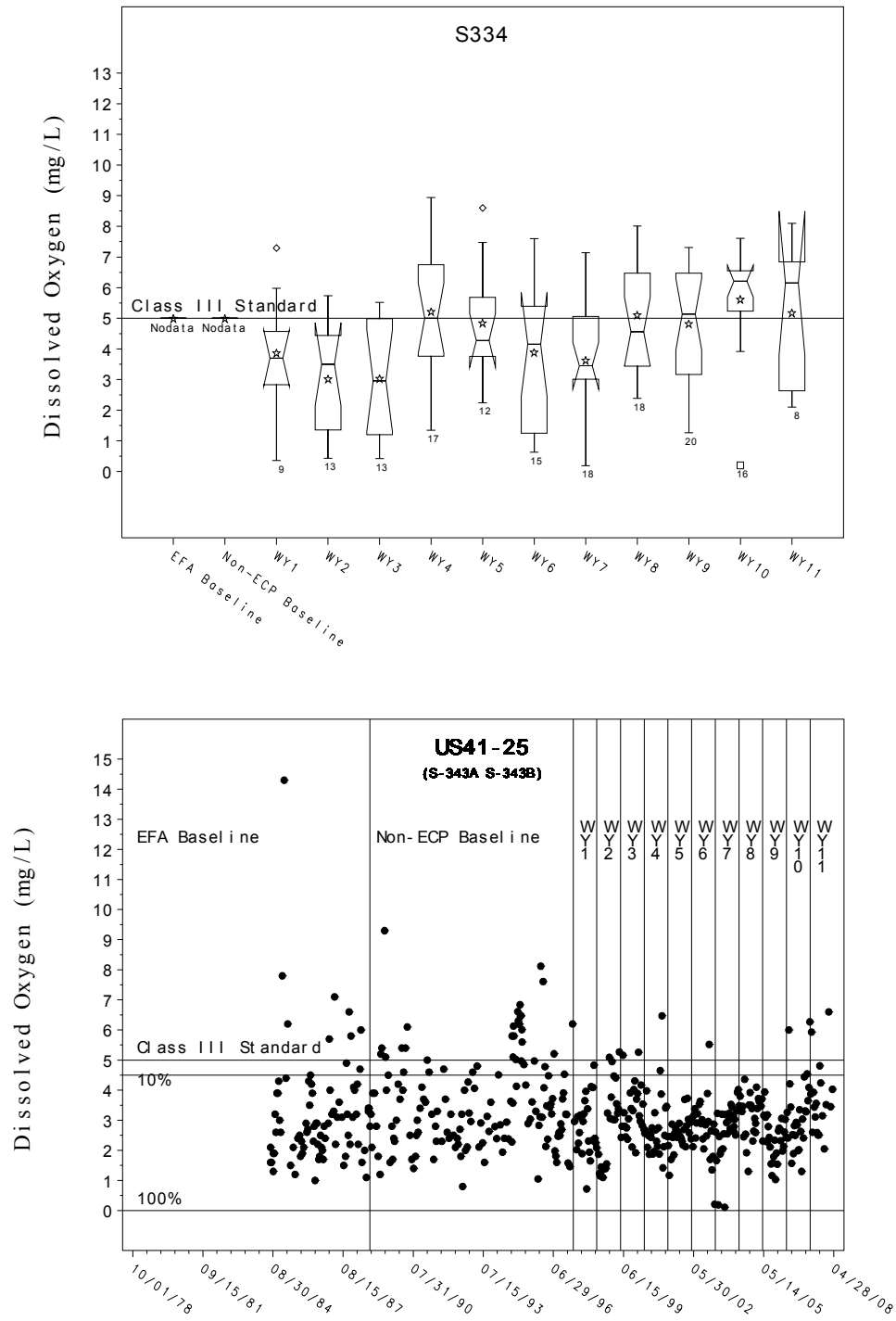


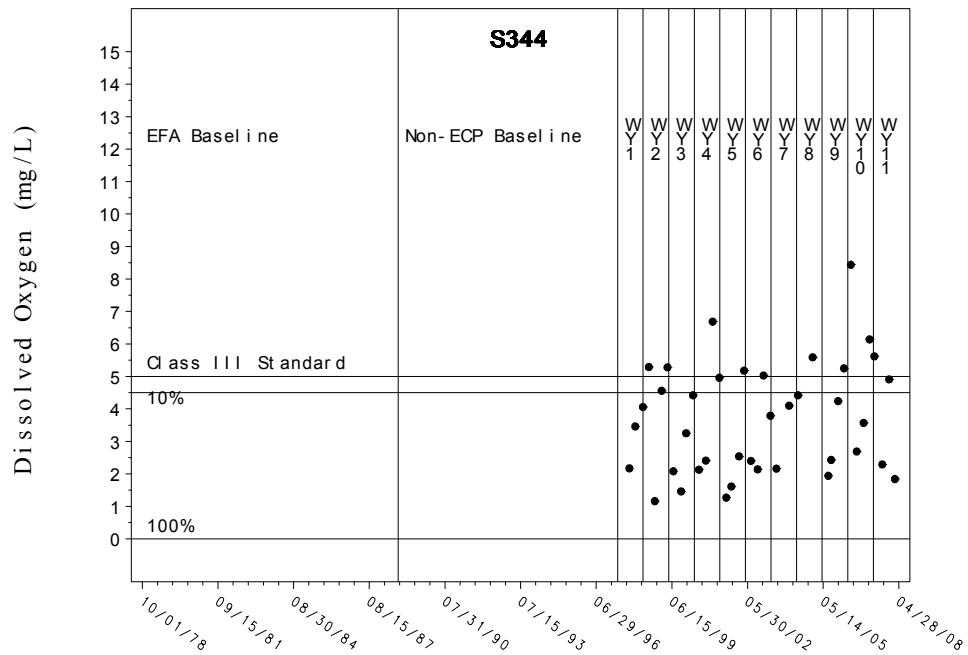
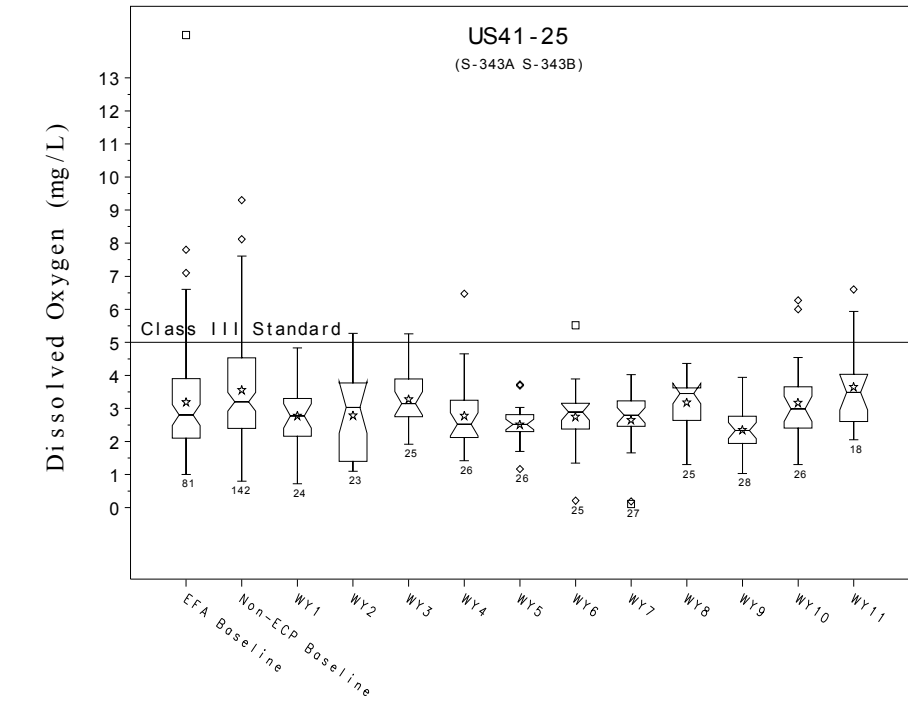


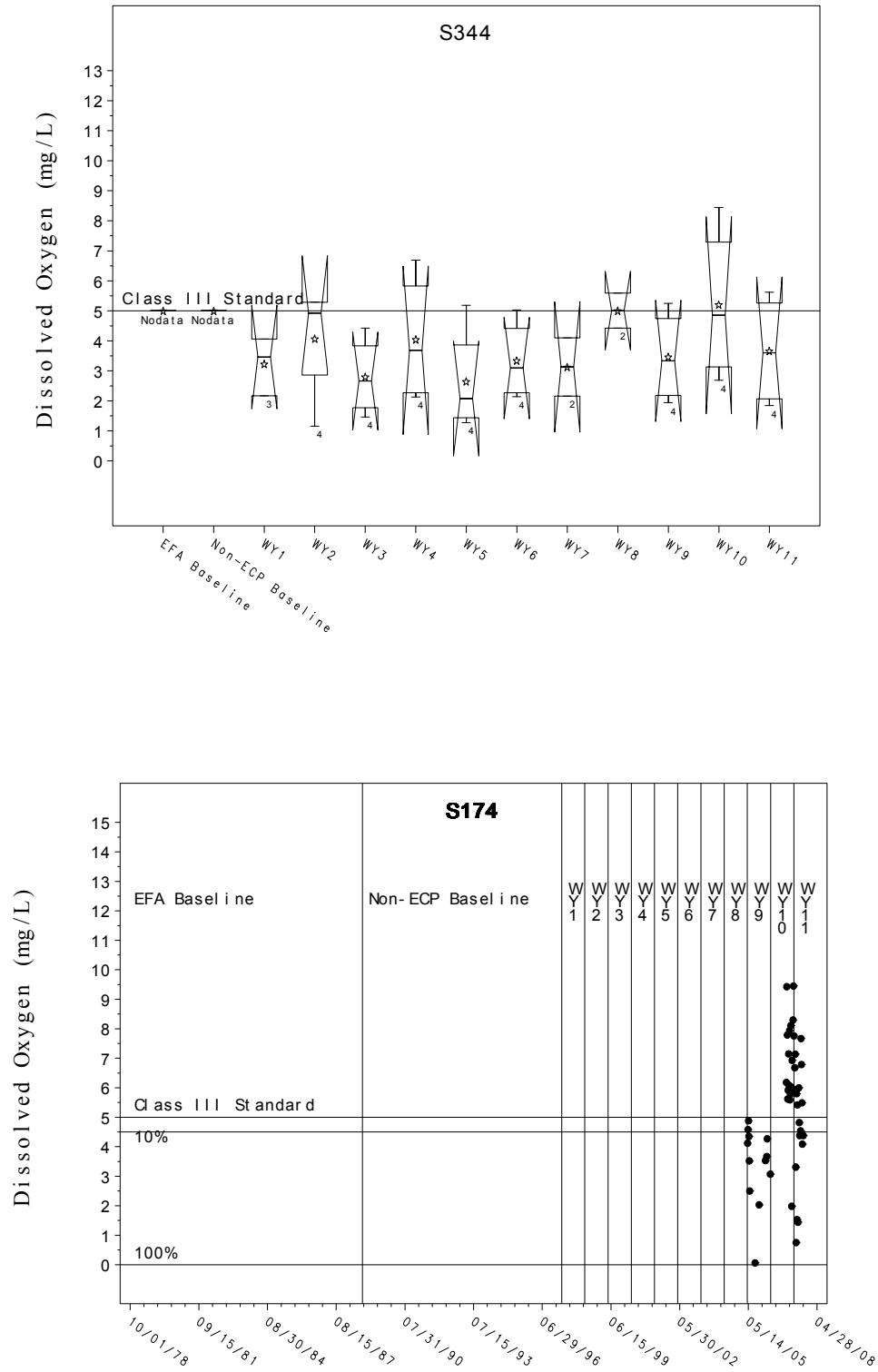


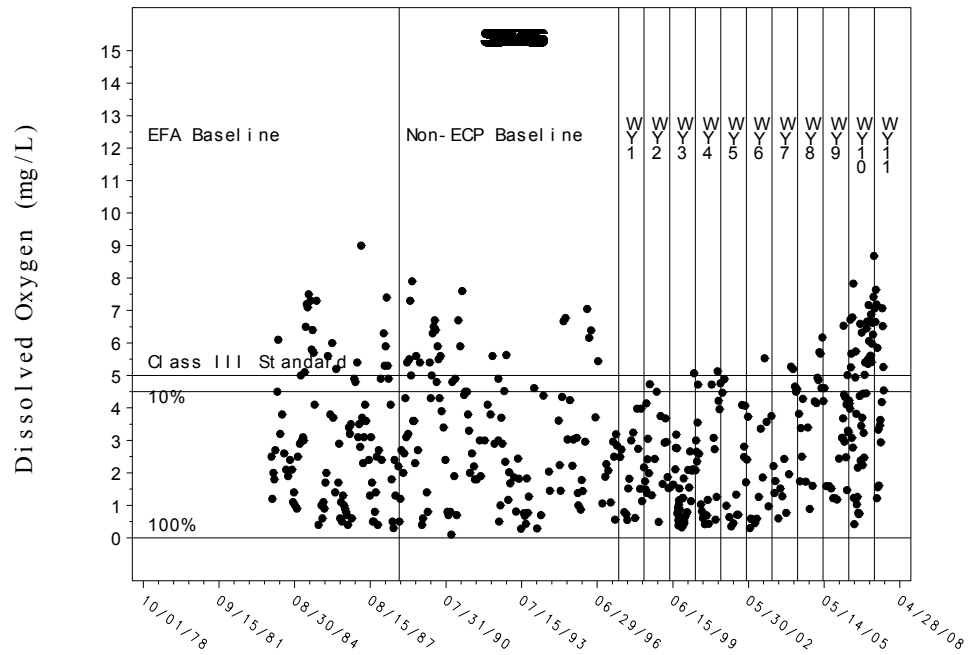
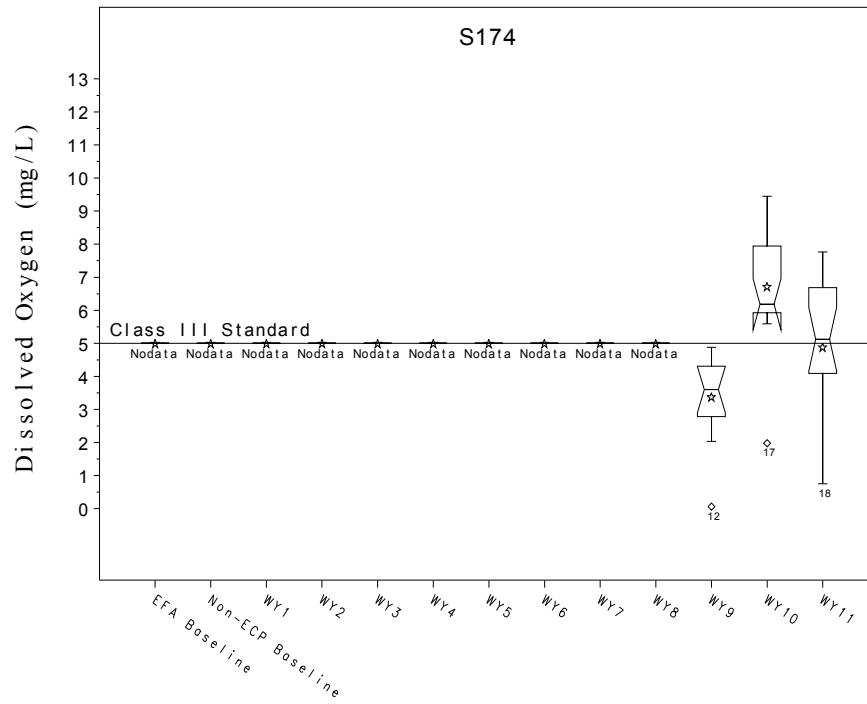


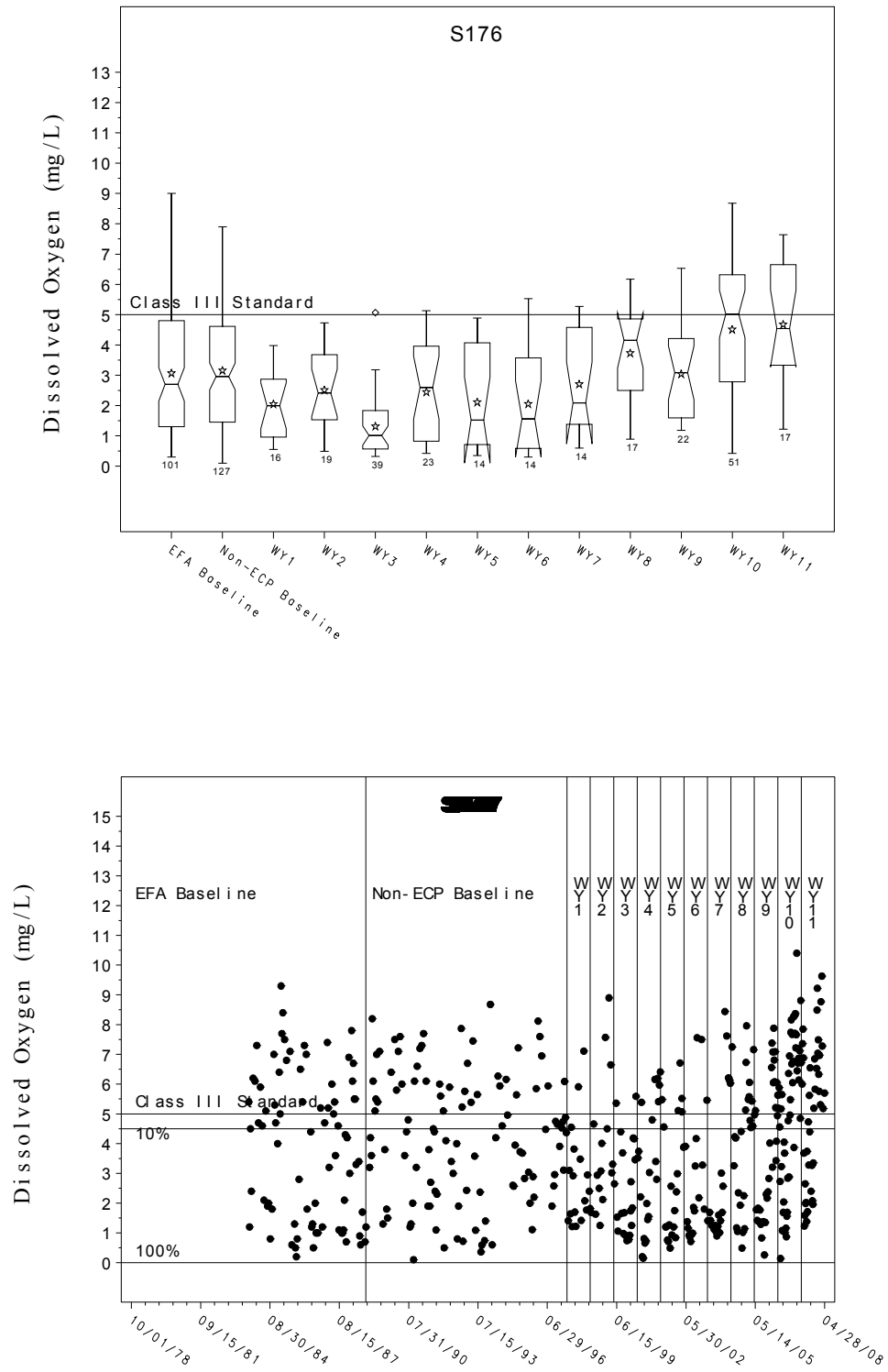


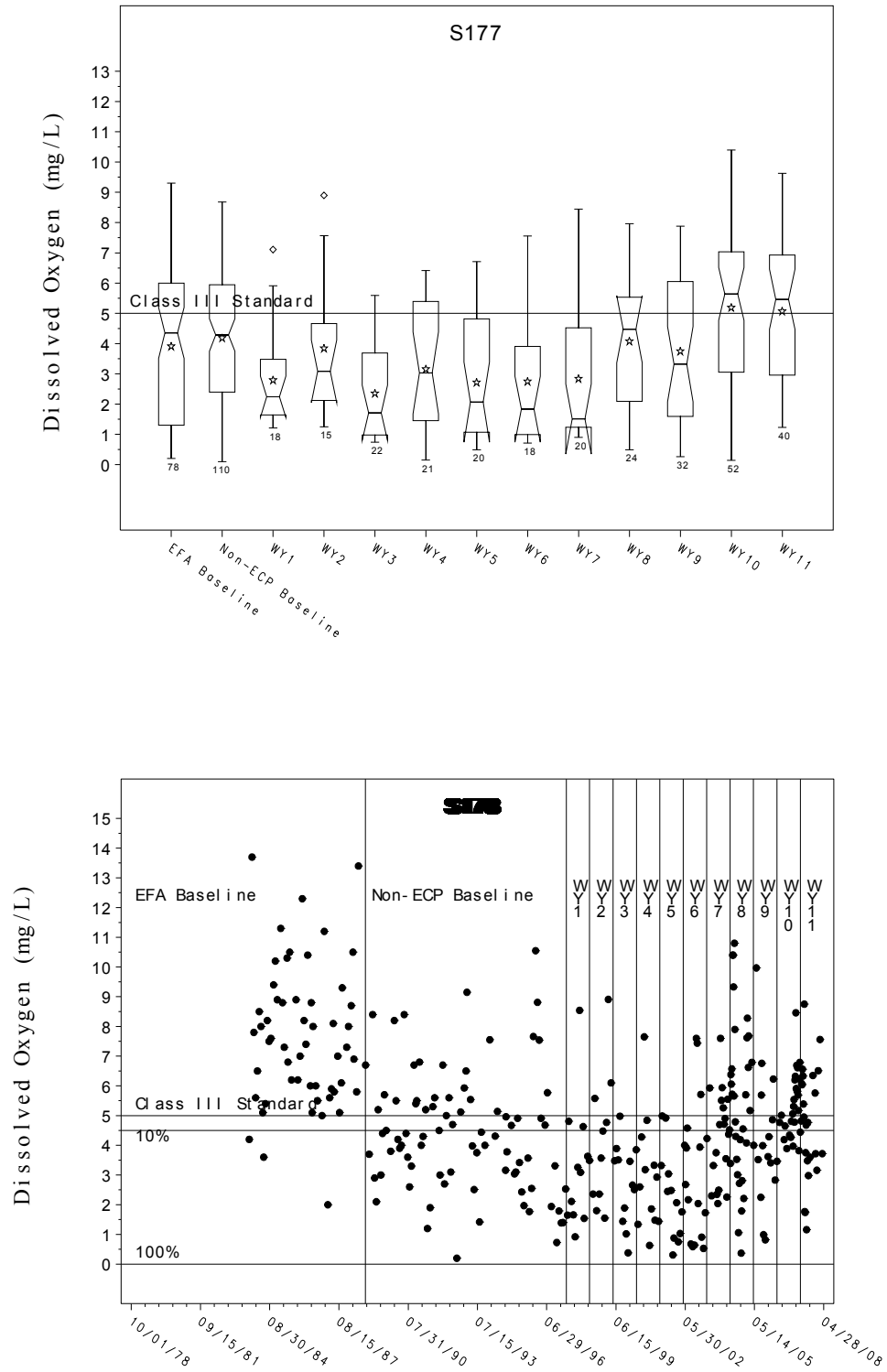


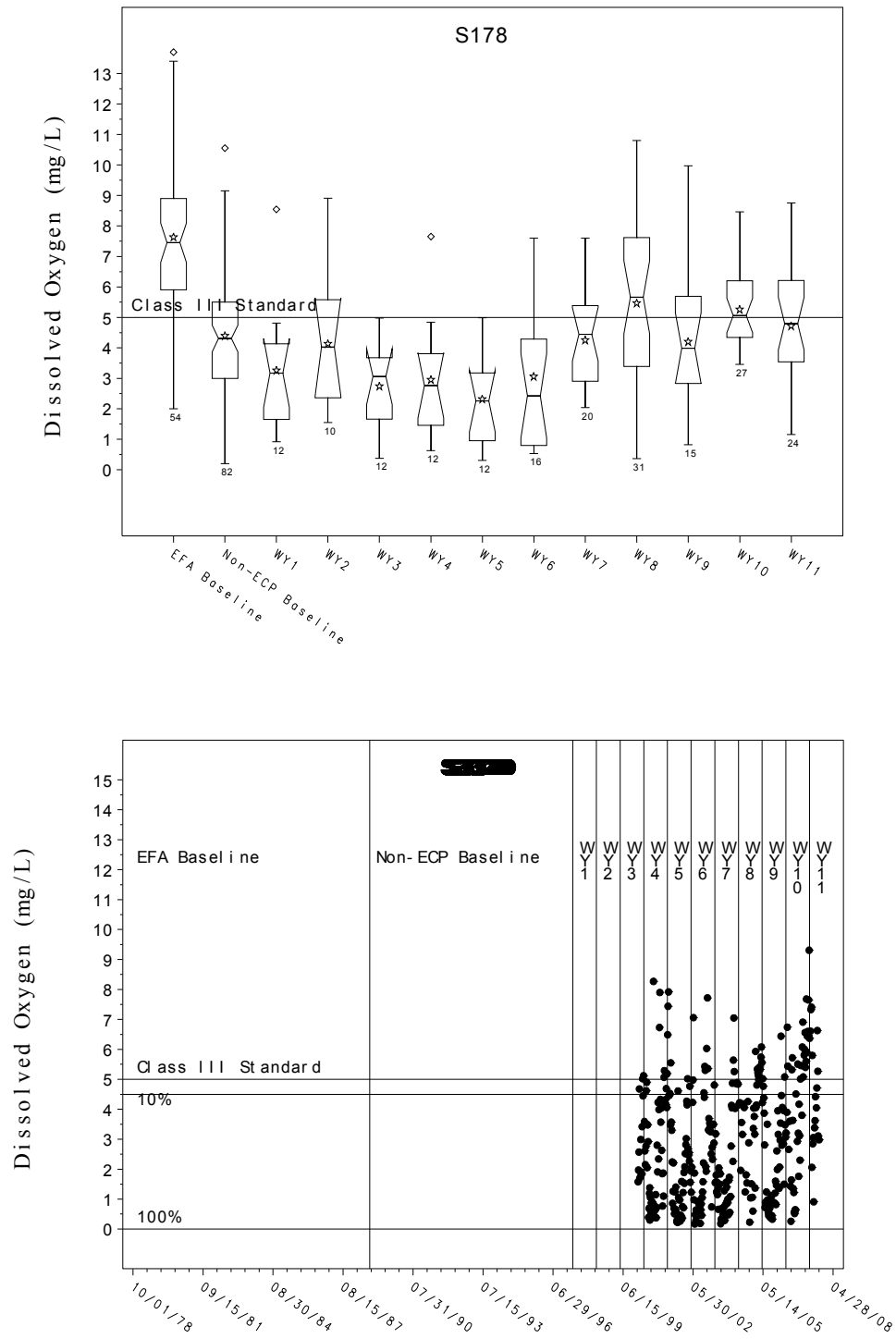


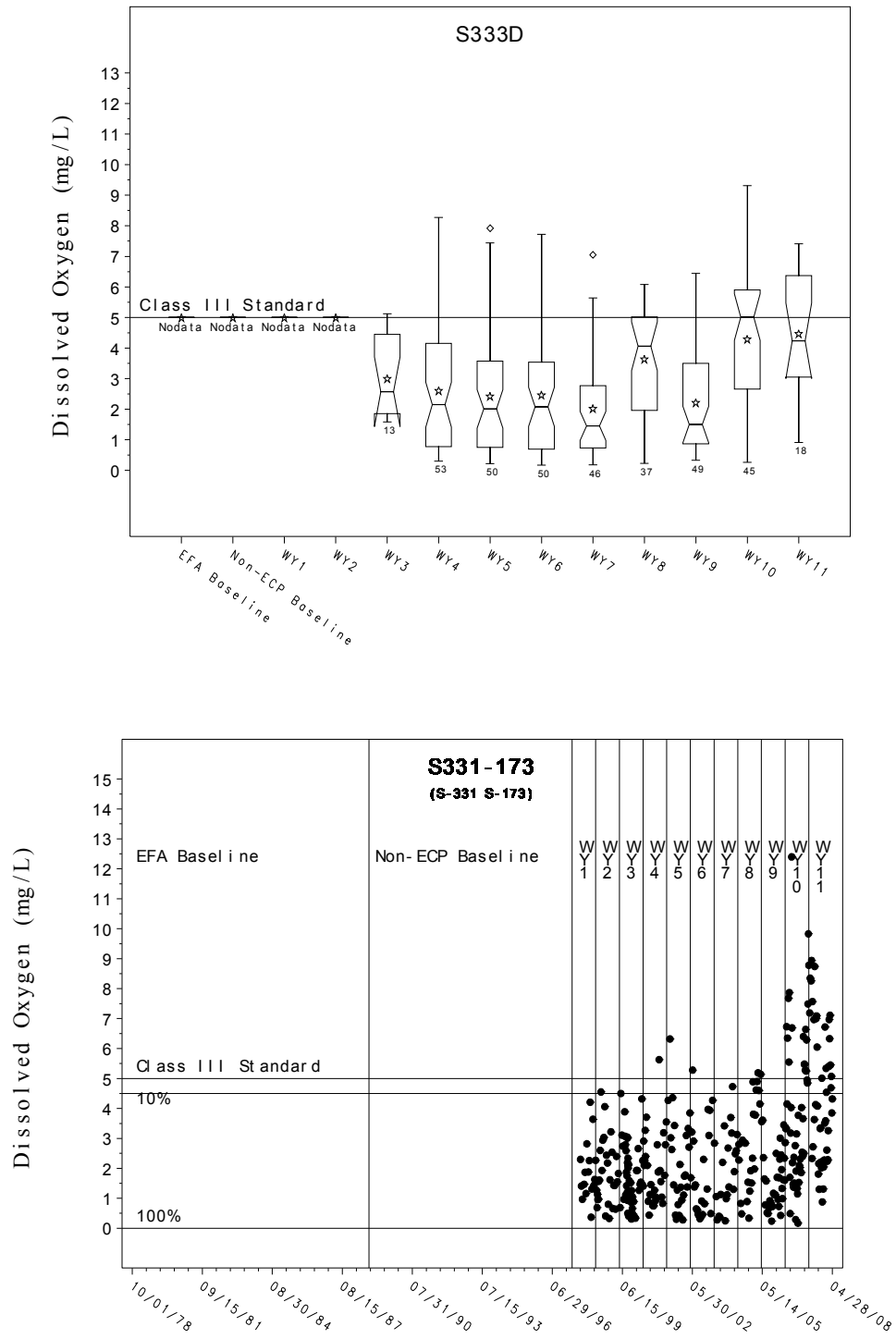


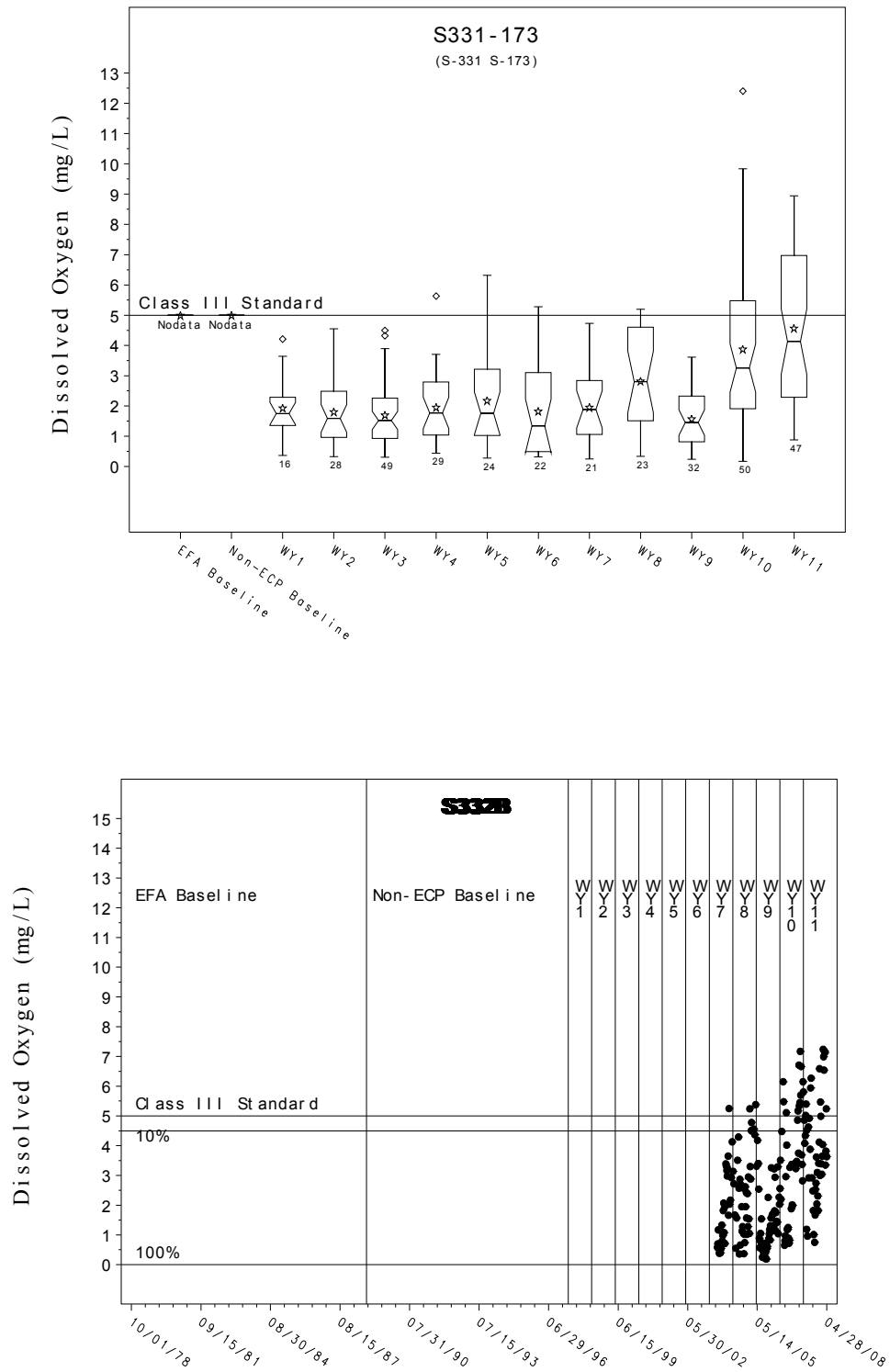


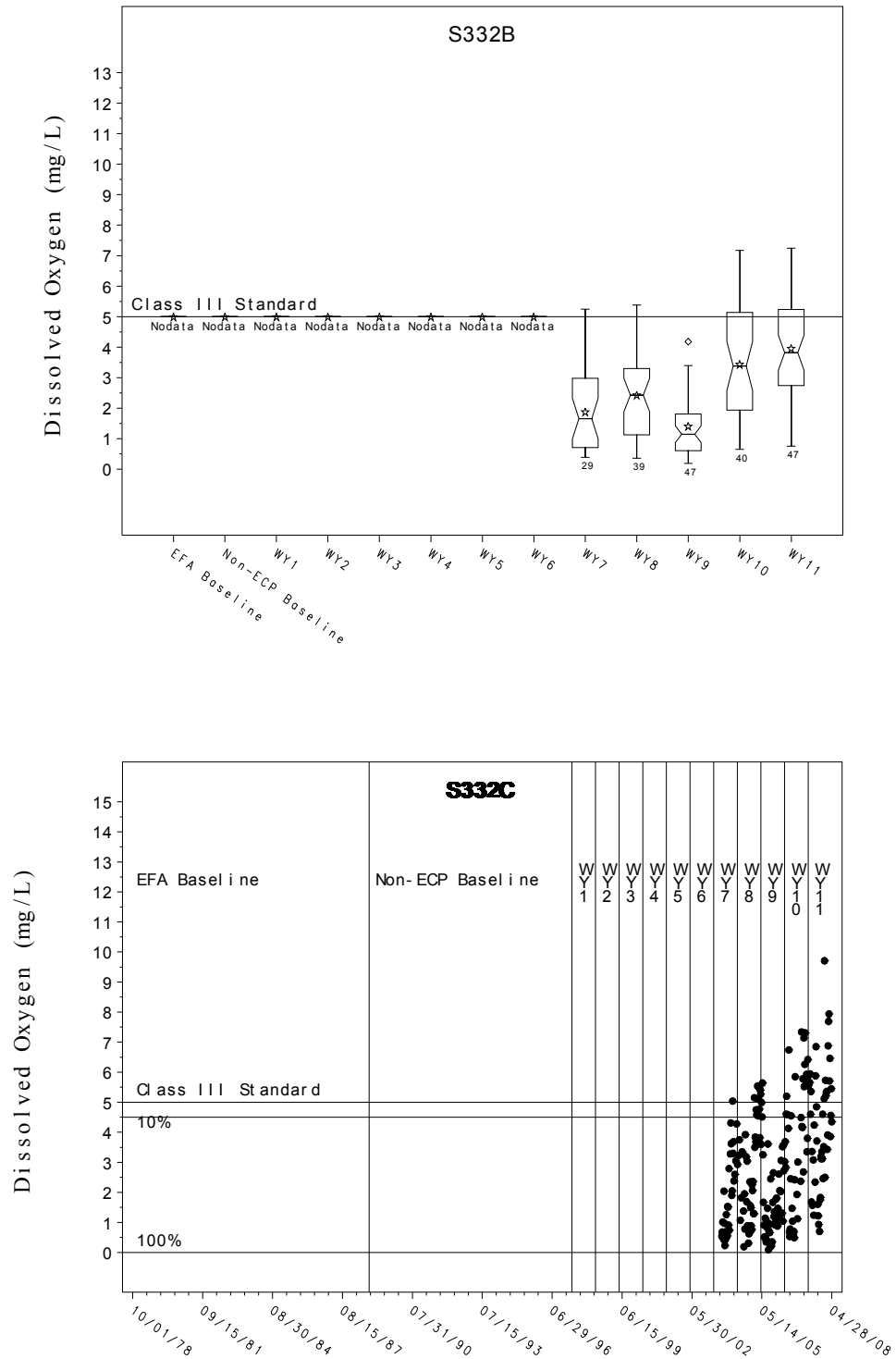


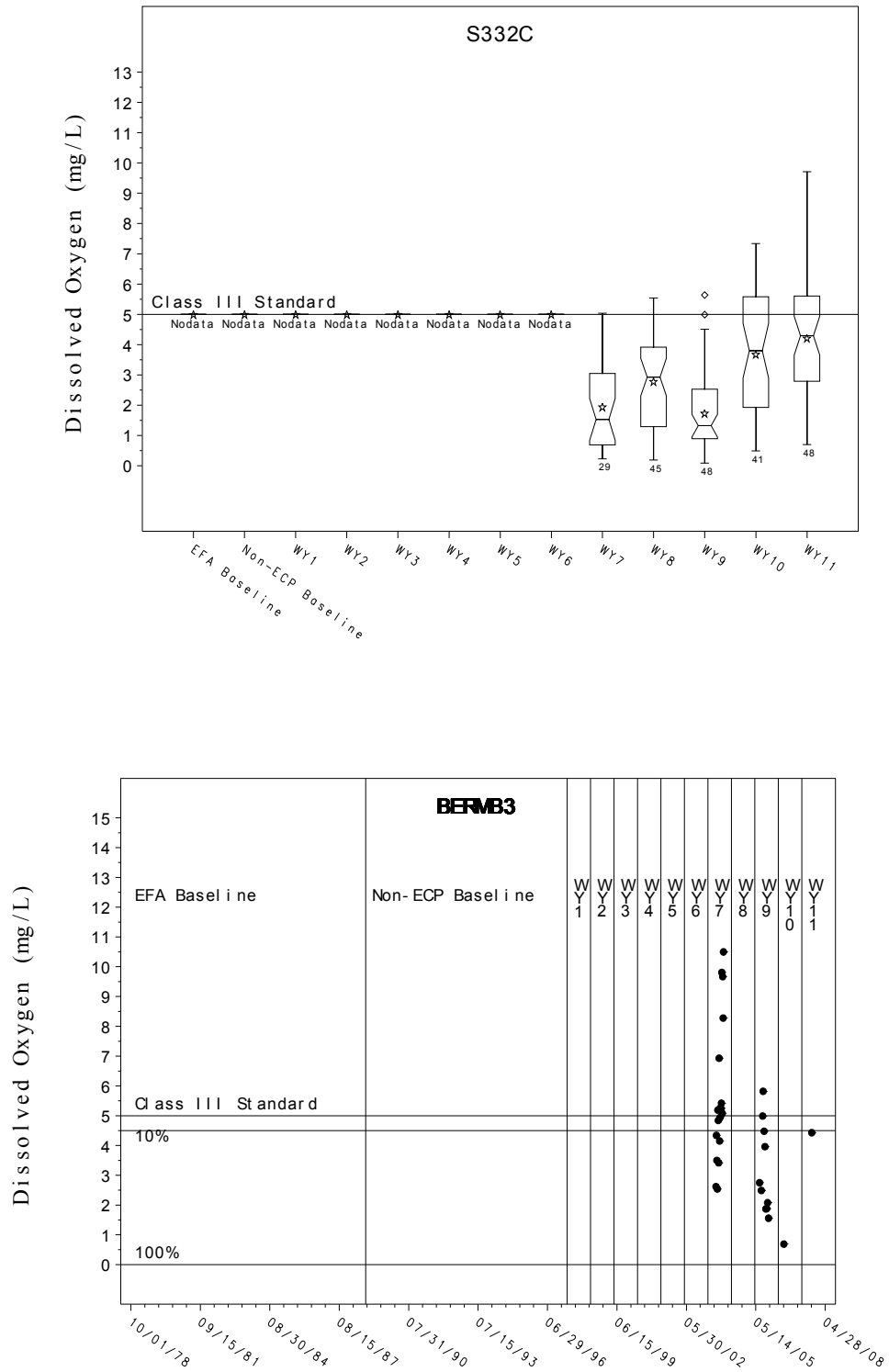


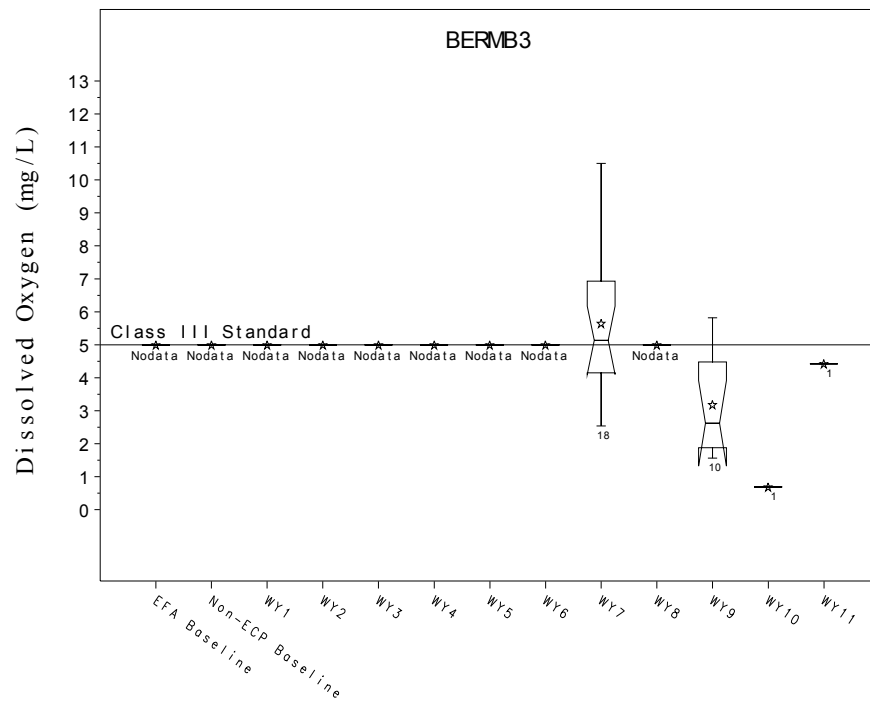


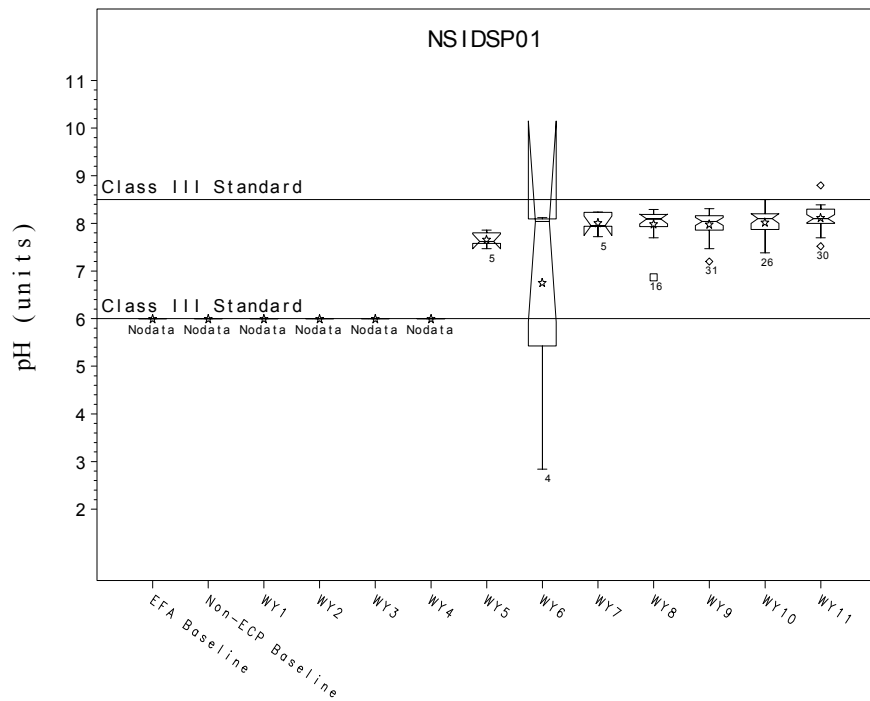
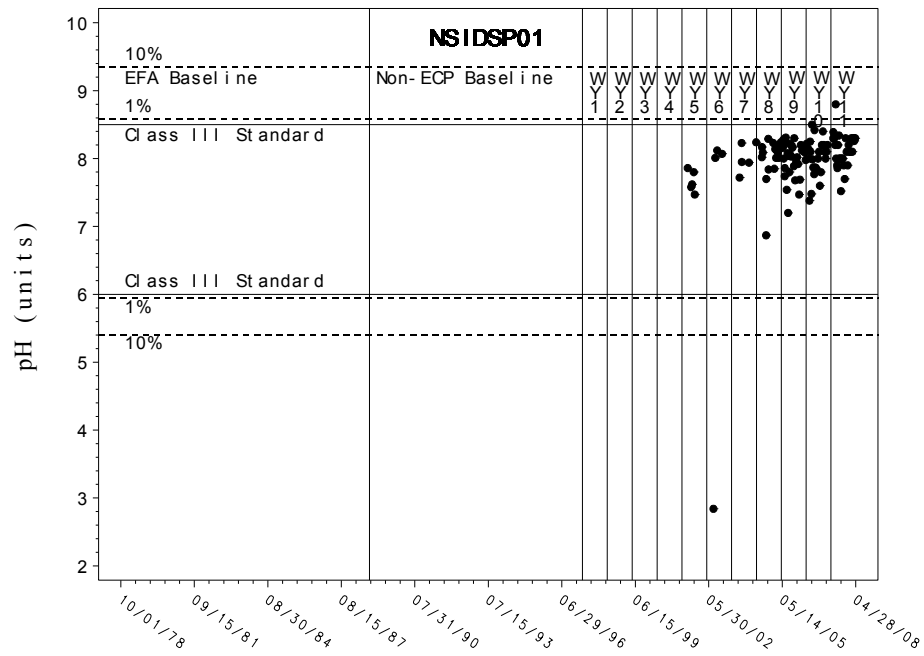


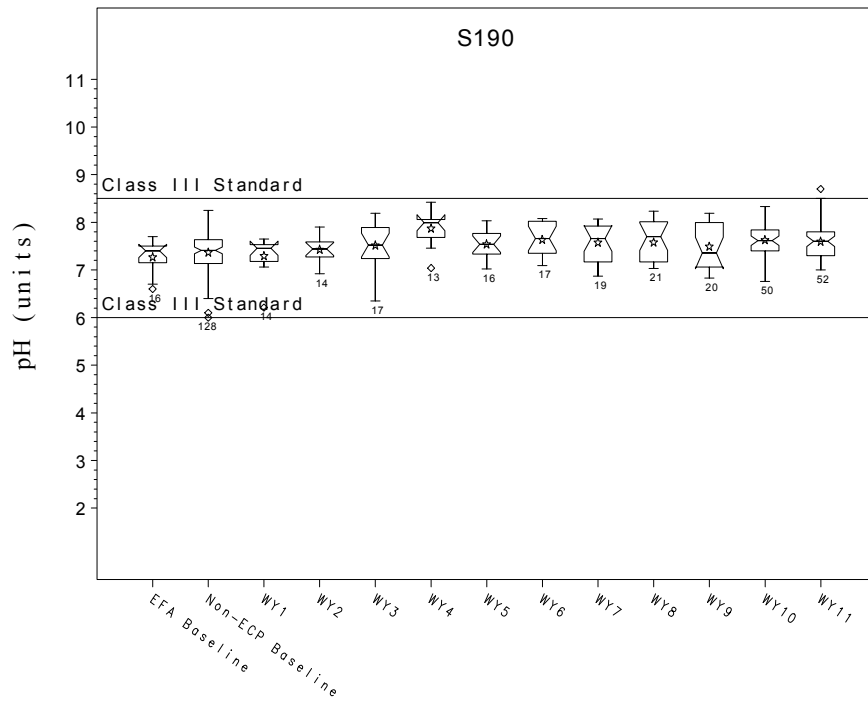
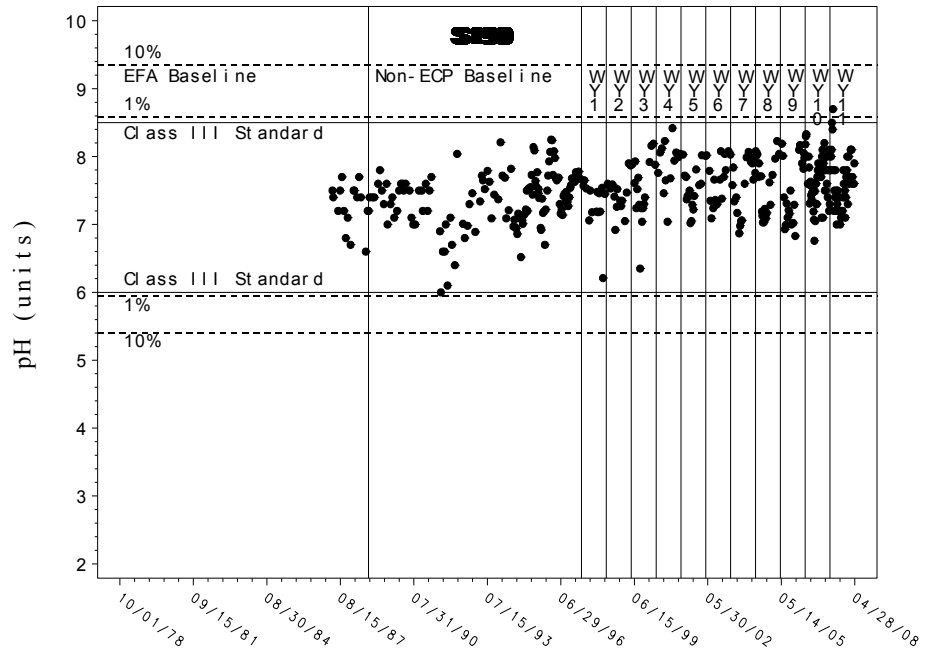


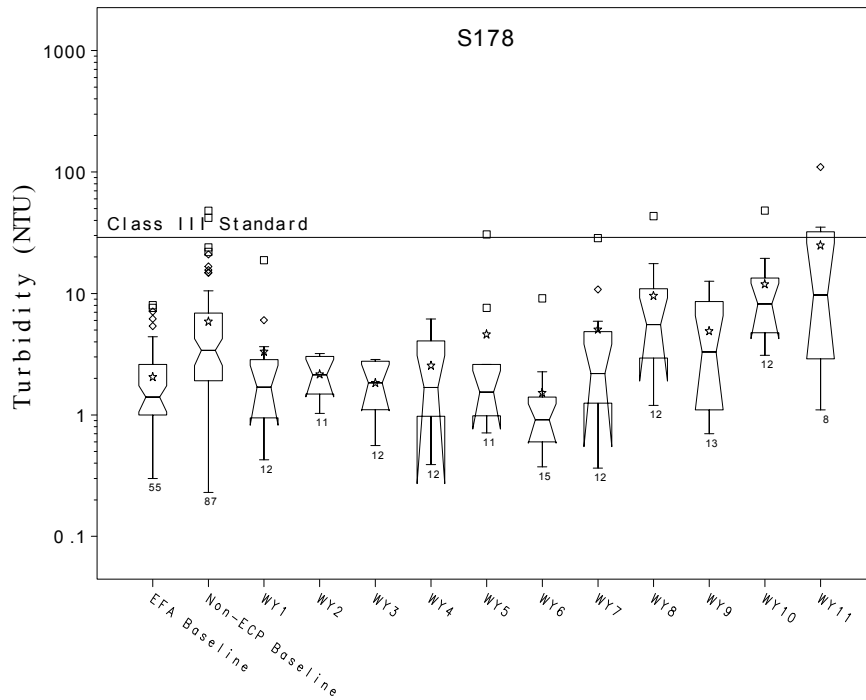
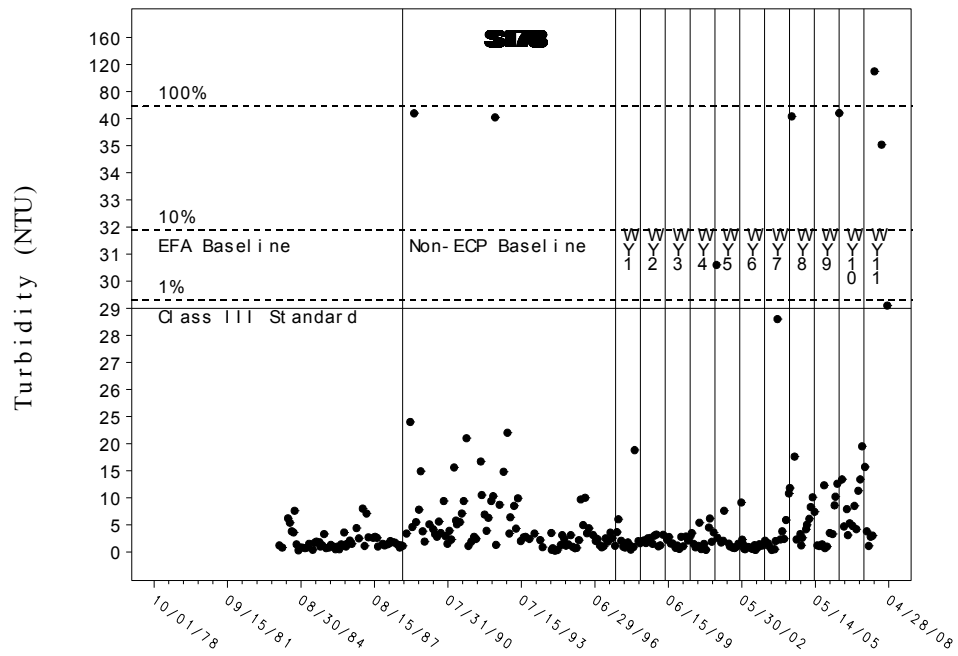












# **Attachment D: Time-Series and Box Plots of Total Phosphorus at Non-Everglades Construction Project Monitoring Sites for Water Year 2008 and Earlier Periods**

Shi Kui Xue and Steven Hill

## **Key to Abbreviations**

**WY1:** Water Year 1 (May 1, 1997 through April 30, 1998)  
**WY2:** Water Year 2 (May 1, 1998 through April 30, 1999)  
**WY3:** Water Year 3 (May 1, 1999 through April 30, 2000)  
**WY4:** Water Year 4 (May 1, 2000 through April 30, 2001)  
**WY5:** Water Year 5 (May 1, 2001 through April 30, 2002)  
**WY6:** Water Year 6 (May 1, 2002 through April 30, 2003)  
**WY7:** Water Year 7 (May 1, 2003 through April 30, 2004)  
**WY8:** Water Year 8 (May 1, 2004 through April 30, 2005)  
**WY9:** Water Year 9 (May 1, 2005 through April 30, 2006)  
**WY10:** Water Year 10 (May 1, 2006 through April 30, 2007)  
**WY11:** Water Year 11 (May 1, 2007 through April 30, 2008)

## **NOTES:**

The graphs in this attachment depict total phosphorus (TP) concentration data collected from Water Year 1 through Water Year 11 (WY1–WY11) for the non-Everglades Construction Project (non-ECP) water quality monitoring sites. The graph sequencing follows the station order shown in Attachment A, Table 1. The non-ECP structure locations are depicted in **Figure 1**. Additionally, the graphs are identified by monitoring site name. In most cases, the monitoring site name corresponds to the structure. If the monitoring site is a surrogate location for a structure, the structure name(s) is/are shown in parentheses below the monitoring site name.

Most graphs depict TP data collected by grab sampling methods. The graphs for sites with autosampler data are annotated with Auto (e.g., VOW1Auto). The TP data collected by both methods are not shown as combined data in the graphs.

