Water quality in Chesapeake Bay: Virginia portion, water year 1992: a report to the Virginia Department of Environmental Quality

Kevin Curling  
*Virginia Institute of Marine Science*

Rodney Jackson  
*Virginia Institute of Marine Science*

Bruce Neilson  
*Virginia Institute of Marine Science*

Follow this and additional works at: [https://scholarworks.wm.edu/reports](https://scholarworks.wm.edu/reports)  
Part of the [Environmental Monitoring Commons](https://scholarworks.wm.edu/reports/environmental_monitoring_commons) and the [Oceanography Commons](https://scholarworks.wm.edu/reports/oceanography_commons)

Recommended Citation  
Curling, K., Jackson, R., & Neilson, B. (1993) Water quality in Chesapeake Bay: Virginia portion, water year 1992: a report to the Virginia Department of Environmental Quality. Data report (Virginia Institute of Marine Science); no. 51. Virginia Institute of Marine Science, College of William and Mary. [https://doi.org/10.21220/V5ZC8W](https://doi.org/10.21220/V5ZC8W)
WATER QUALITY IN CHESAPEAKE BAY

Virginia Portion Water Year 1992

Kevin Curing, Rodney Jackson and Bruce Neilson

A report to Virginia Department of Environmental Quality

July 1993
Data Report No. 51

School of Marine Science/Virginia Institute of Marine Science
The College of William & Mary in Virginia
Gloucester Point, Virginia 23062
WATER QUALITY IN CHESAPEAKE BAY

Virginia Portion

Water Year 1992

Kevin Curling, Rodney Jackson and Bruce Neilson

A Report to

Virginia Department of Environmental Quality

June 1993

Data Report No. 51

School of Marine Science/Virginia Institute of Marine Science
The College of William & Mary in Virginia
Gloucester Point, Virginia 23062
TABLE OF CONTENTS

Introduction ................................................................. 1
Description of Monitoring Program ..................................... 1
Results ............................................................................. 7
Other Reports and Other Monitoring Efforts ....................... 8
References ......................................................................... 10

TABLES

1. Location of Chesapeake Bay Water Quality Monitoring Stations . . . 3
2. Date when each station was sampled during each month of the 1992 water year .................................................. 5
3. Water Quality Analyses .................................................. 7

FIGURES

1. Map of Monitoring Stations ............................................. 2

APPENDICES

Secchi Disk ....................................................................... 11
Water Temperature ......................................................... 18
Salinity ............................................................................ 25
Dissolved Oxygen .......................................................... 32
Chlorophyll-Å ................................................................. 39
Total Phosphorus ............................................................ 46
Particulate Phosphorus ................................................... 53
Total Dissolved Phosphorus ............................................. 60
Ortho-Phosphate ............................................................ 67
Total Nitrogen ................................................................... 74
Particulate Nitrogen ......................................................... 81
Total Dissolved Nitrogen ................................................ 88
Ammonia .......................................................................... 95
Nitrate + Nitrite ............................................................... 102
Nitrite .............................................................................. 109
Dissolved Silica ............................................................... 116
Dissolved Organic Carbon ............................................... 123
Particulate Carbon .......................................................... 130
Total Suspended Solids .................................................. 137
pH ..................................................................................... 144
INTRODUCTION

The Chesapeake Bay Water Quality Monitoring Program (WQMP) has three main objectives: (1) characterization of water quality conditions, (2) detection of temporal trends in water quality, and (3) creation of a data base that furthers our understanding of the processes that control water quality in the Chesapeake Bay system. The purpose of this report is to characterize water quality conditions in the Virginia portion of Chesapeake Bay during the 1992 water year, which runs from October 1991 through September 1992. These monitoring efforts have been conducted with funding from the US Environmental Protection Agency and the Commonwealth of Virginia.

DESCRIPTION OF MONITORING PROGRAM

Water quality is monitored at some fifty stations within Chesapeake Bay and at the confluence of a tributary and the main stem of the bay. Twenty-seven of those stations are located in Virginia (see Figure 1). Responsibility for sampling is shared between the Virginia Institute of Marine Science (VIMS) of the College of William & Mary and the Applied Marine Research Laboratory (AMRL) at Old Dominion University (ODU), as indicated in Table 1. Standard protocols are employed throughout the WQMP. VIMS' field procedures are described in the Field Procedures Manual (1989) and the Instrument Calibration Manual (1989). Similar documents are available for the other institutions.

Monitoring occurs once each month during the cooler months (October through March) and twice each month during the warmer months (April through September). The institutions responsible for the monitoring program in both Virginia and Maryland attempt to collect all samples within a three-day window, typically Monday through Wednesday of the chosen week. No attempt is made to schedule the sampling for particular phases of the semi-diurnal tide or for times within the lunar month. Adverse weather is the
Figure 1. Map of Monitoring Stations
Table 1. Location of Chesapeake Bay Water Quality Monitoring Stations

### Sampled by VIMS

<table>
<thead>
<tr>
<th>Station</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Depth (M)</th>
<th>Pycnocline</th>
</tr>
</thead>
<tbody>
<tr>
<td>CB5.4</td>
<td>37 48.0</td>
<td>76 10.5</td>
<td>33</td>
<td>*</td>
</tr>
<tr>
<td>CB5.5</td>
<td>37 41.5</td>
<td>76 11.4</td>
<td>20</td>
<td>*</td>
</tr>
<tr>
<td>CB6.1</td>
<td>37 35.3</td>
<td>76 9.8</td>
<td>13</td>
<td>*</td>
</tr>
<tr>
<td>CB6.2</td>
<td>37 29.2</td>
<td>76 9.4</td>
<td>11</td>
<td>*</td>
</tr>
<tr>
<td>CB6.3</td>
<td>37 24.7</td>
<td>76 9.6</td>
<td>12</td>
<td>*</td>
</tr>
<tr>
<td>EE3.1 **</td>
<td>37 54.5</td>
<td>75 47.5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>EE3.2 **</td>
<td>37 47.6</td>
<td>75 50.6</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>CB7.1N</td>
<td>37 46.5</td>
<td>75 58.5</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>CB7.1</td>
<td>37 41.0</td>
<td>75 59.4</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>CB7.1S</td>
<td>37 34.9</td>
<td>76 3.5</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>CB5.4W</td>
<td>37 48.8</td>
<td>76 17.7</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>CB7.2</td>
<td>37 24.7</td>
<td>76 4.8</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>CB7.2E</td>
<td>37 24.7</td>
<td>76 1.5</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>LE3.6</td>
<td>37 35.8</td>
<td>76 17.1</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>LE3.7</td>
<td>37 31.8</td>
<td>76 18.4</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>WE4.1</td>
<td>37 18.7</td>
<td>76 20.8</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>WE4.2</td>
<td>37 14.5</td>
<td>76 23.2</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>WE4.3</td>
<td>37 10.6</td>
<td>76 22.4</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>WE4.4</td>
<td>37 6.6</td>
<td>76 17.6</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

### Sampled by ODU

<table>
<thead>
<tr>
<th>Station</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Depth (M)</th>
<th>Pycnocline</th>
</tr>
</thead>
<tbody>
<tr>
<td>CB6.4</td>
<td>37 14.2</td>
<td>76 12.5</td>
<td>11</td>
<td>*</td>
</tr>
<tr>
<td>CB7.3</td>
<td>37 7.0</td>
<td>76 7.5</td>
<td>14</td>
<td>*</td>
</tr>
<tr>
<td>CB7.4</td>
<td>36 59.6</td>
<td>76 0.6</td>
<td>14</td>
<td>*</td>
</tr>
<tr>
<td>CB7.4N</td>
<td>37 3.5</td>
<td>75 58.4</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>CB8.1E</td>
<td>36 56.7</td>
<td>76 1.5</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>CB8.1</td>
<td>36 59.3</td>
<td>76 10.1</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>CB7.3E</td>
<td>37 13.7</td>
<td>76 3.3</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>LE5.5</td>
<td>36 59.8</td>
<td>76 18.2</td>
<td>21</td>
<td></td>
</tr>
</tbody>
</table>

* Samples are collected 1 m below the surface and 1 m above the bottom at all stations; samples also are collected 1 m above and 1 m below the pycnocline at the designated stations.

** These stations are referred to as EE3.4 and EE3.5 in Chesapeake Bay Program reports.
primary reason for not meeting the established schedule. The sampling dates for water year 1992 are listed in Table 2.

Observations on sea state, weather conditions, water clarity and other notable features are recorded at each station. The physical setting is characterized using continuous profiling instruments. Water temperature, conductivity, dissolved oxygen (DO), pH and \textit{in vivo} fluorescence measurements are recorded at one-meter intervals vertically through the water column, except at depths greater than 15 meters, when measurements are made at two-meter intervals. Light attenuation measurements were added in early 1992. \textit{In vivo} fluorescence measurements also are recorded as the vessel moves from one station to another; water is taken from about 1 m depth.

Water samples are collected at 1 m below the surface and 1 m above the bottom at all stations. At the stations located along the deep trough of Chesapeake Bay (see Table 1), samples also are collected one meter above and one meter below the pycnocline, except when there is minimal density stratification. For the latter case, samples are collected at 1/3rd and 2/3rds of the water column depth.

Water samples are analyzed for a number of nutrient species (see Table 3) following standard analytical procedures (for details see \textit{Laboratory Procedures Manual}, 1989). Beginning in January of 1992, filters for determination of particulate carbon and nitrogen concentrations were no longer rinsed with deionized water. Methods comparison studies were conducted during 1992 to determine the effects of these changes. Preliminary results indicate that mean concentration differences (between rinsed and unrinised filters) are smaller than the method detection limit (Betty Salley, Personal communication). Researchers concerned about analytical methods and methods changes should consult the Analytical Methods and Quality Assurance Workgroup, which reports to the Chesapeake Bay Program's Monitoring Subcommittee.
<table>
<thead>
<tr>
<th></th>
<th>Oct. 91</th>
<th>Nov. 91</th>
<th>Dec. 91</th>
<th>Jan. 92</th>
<th>Feb. 92</th>
<th>March 92</th>
</tr>
</thead>
<tbody>
<tr>
<td>CB5.4</td>
<td>15</td>
<td>6</td>
<td>2</td>
<td>7</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>CB5.5</td>
<td>18</td>
<td>7</td>
<td>2</td>
<td>6</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>CB6.1</td>
<td>18</td>
<td>6</td>
<td>2</td>
<td>6</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>CB6.2</td>
<td>18</td>
<td>6</td>
<td>2</td>
<td>6</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>CB6.3</td>
<td>18</td>
<td>7</td>
<td>2</td>
<td>7</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>CB6.4</td>
<td>21</td>
<td>6</td>
<td>6</td>
<td>22</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>CB7.3</td>
<td>21</td>
<td>6</td>
<td>6</td>
<td>22</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>CB7.4</td>
<td>21</td>
<td>6</td>
<td>9</td>
<td>22</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>CB7.4N</td>
<td>21</td>
<td>6</td>
<td>9</td>
<td>22</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>CB8.1E</td>
<td>21</td>
<td>6</td>
<td>9</td>
<td>22</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>CB8.1</td>
<td>21</td>
<td>6</td>
<td>9</td>
<td>21</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>EE3.1</td>
<td>15</td>
<td>6</td>
<td>2</td>
<td>7</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>EE3.2</td>
<td>15</td>
<td>6</td>
<td>2</td>
<td>7</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>CB7.1N</td>
<td>15</td>
<td>6</td>
<td>2</td>
<td>6</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>CB7.1</td>
<td>15</td>
<td>6</td>
<td>3</td>
<td>6</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>CB7.1S</td>
<td>15</td>
<td>6</td>
<td>2</td>
<td>6</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>CB5.4W</td>
<td>15</td>
<td>6</td>
<td>2</td>
<td>7</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>CB7.2</td>
<td>18</td>
<td>7</td>
<td>2</td>
<td>6</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>CB7.2E</td>
<td>18</td>
<td>7</td>
<td>2</td>
<td>6</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>CB7.3E</td>
<td>21</td>
<td>6</td>
<td>9</td>
<td>22</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>LE3.6</td>
<td>18</td>
<td>7</td>
<td>3</td>
<td>7</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>LE3.7</td>
<td>18</td>
<td>7</td>
<td>3</td>
<td>7</td>
<td>11</td>
<td>18</td>
</tr>
<tr>
<td>WE4.1</td>
<td>15</td>
<td>5</td>
<td>3</td>
<td>7</td>
<td>11</td>
<td>19</td>
</tr>
<tr>
<td>WE4.2</td>
<td>15</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>10</td>
<td>19</td>
</tr>
<tr>
<td>WE4.3</td>
<td>18</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>WE4.4</td>
<td>18</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>LE5.5</td>
<td>21</td>
<td>7</td>
<td>9</td>
<td>21</td>
<td>13</td>
<td>10</td>
</tr>
</tbody>
</table>
Table 2 (cont.). Date when each station was sampled during each month of the 1992 water year.

<table>
<thead>
<tr>
<th></th>
<th>April 92</th>
<th>May 92</th>
<th>June 92</th>
<th>July 92</th>
<th>Aug. 92</th>
<th>Sep. 92</th>
</tr>
</thead>
<tbody>
<tr>
<td>CB5.4</td>
<td>14, 28</td>
<td>11, 27</td>
<td>8, 23</td>
<td>13, 20</td>
<td>11, 24</td>
<td>8, 21</td>
</tr>
<tr>
<td>CB5.5</td>
<td>14, 28</td>
<td>11, 27</td>
<td>8, 23</td>
<td>13, 20</td>
<td>10, 24</td>
<td>9, 21</td>
</tr>
<tr>
<td>CB6.1</td>
<td>14, 28</td>
<td>11, 27</td>
<td>8, 23</td>
<td>13, 20</td>
<td>10, 24</td>
<td>9, 21</td>
</tr>
<tr>
<td>CB6.2</td>
<td>14, 29</td>
<td>11, 27</td>
<td>9, 23</td>
<td>13, 20</td>
<td>10, 24</td>
<td>9, 21</td>
</tr>
<tr>
<td>CB6.3</td>
<td>14, 27</td>
<td>11, 26</td>
<td>8, 22</td>
<td>13, 20</td>
<td>10, 24</td>
<td>9, 21</td>
</tr>
<tr>
<td>CB6.4</td>
<td>14, 27</td>
<td>11, 27</td>
<td>8, 23</td>
<td>6, 20</td>
<td>10, 24</td>
<td>9, 21</td>
</tr>
<tr>
<td>CB7.3</td>
<td>14, 27</td>
<td>11, 27</td>
<td>10, 23</td>
<td>6, 20</td>
<td>10, 24</td>
<td>8, 21</td>
</tr>
<tr>
<td>CB7.4</td>
<td>14, 27</td>
<td>11, 27</td>
<td>8, 23</td>
<td>6, 20</td>
<td>10, 24</td>
<td>8, 21</td>
</tr>
<tr>
<td>CB7.4N</td>
<td>14, 27</td>
<td>11, 27</td>
<td>8, 23</td>
<td>6, 20</td>
<td>10, 24</td>
<td>8, 21</td>
</tr>
<tr>
<td>CB8.1E</td>
<td>15, 27</td>
<td>11, 27</td>
<td>8, 23</td>
<td>6, 20</td>
<td>10, 24</td>
<td>8, 21</td>
</tr>
<tr>
<td>CB8.1</td>
<td>15, 27</td>
<td>11, 27</td>
<td>8, 23</td>
<td>6, 20</td>
<td>10, 24</td>
<td>8, 21</td>
</tr>
<tr>
<td>EE3.1</td>
<td>15, 27</td>
<td>12, 26</td>
<td>9, 22</td>
<td>14, 21</td>
<td>11, 25</td>
<td>8, 22</td>
</tr>
<tr>
<td>EE3.2</td>
<td>15, 27</td>
<td>11, 26</td>
<td>9, 22</td>
<td>14, 21</td>
<td>11, 25</td>
<td>8, 22</td>
</tr>
<tr>
<td>CB7.1N</td>
<td>14, 27</td>
<td>11, 26</td>
<td>8, 23</td>
<td>14, 21</td>
<td>11, 25</td>
<td>8, 22</td>
</tr>
<tr>
<td>CB7.1</td>
<td>15, 27</td>
<td>12, 26</td>
<td>9, 22</td>
<td>14, 21</td>
<td>11, 25</td>
<td>8, 22</td>
</tr>
<tr>
<td>CB7.1S</td>
<td>15, 27</td>
<td>12, 26</td>
<td>8, 22</td>
<td>14, 21</td>
<td>11, 25</td>
<td>8, 22</td>
</tr>
<tr>
<td>CB5.4W</td>
<td>14, 28</td>
<td>11, 27</td>
<td>8, 23</td>
<td>13, 20</td>
<td>11, 25</td>
<td>9, 21</td>
</tr>
<tr>
<td>CB7.2</td>
<td>15, 27</td>
<td>13, 26</td>
<td>8, 22</td>
<td>14, 21</td>
<td>10, 24</td>
<td>8, 21</td>
</tr>
<tr>
<td>CB7.2E</td>
<td>15, 27</td>
<td>13, 26</td>
<td>8, 22</td>
<td>14, 21</td>
<td>10, 24</td>
<td>8, 21</td>
</tr>
<tr>
<td>CB7.3E</td>
<td>14, 27</td>
<td>11, 27</td>
<td>8, 23</td>
<td>6, 20</td>
<td>10, 24</td>
<td>21</td>
</tr>
<tr>
<td>LE3.6</td>
<td>14, 28</td>
<td>12, 27</td>
<td>9, 23</td>
<td>13, 20</td>
<td>10, 24</td>
<td>9, 21</td>
</tr>
<tr>
<td>LE3.7</td>
<td>14, 28</td>
<td>12, 27</td>
<td>9, 23</td>
<td>13, 20</td>
<td>10, 24</td>
<td>9, 21</td>
</tr>
<tr>
<td>WE4.1</td>
<td>14, 27</td>
<td>11, 26</td>
<td>8, 22</td>
<td>14, 21</td>
<td>11, 25</td>
<td>8, 21</td>
</tr>
<tr>
<td>WE4.2</td>
<td>14, 27</td>
<td>11, 26</td>
<td>8, 22</td>
<td>13, 20</td>
<td>10, 24</td>
<td>8, 21</td>
</tr>
<tr>
<td>WE4.3</td>
<td>16, 29</td>
<td>13, 27</td>
<td>10, 22</td>
<td>13, 20</td>
<td>10, 24</td>
<td>9, 22</td>
</tr>
<tr>
<td>WE4.4</td>
<td>16, 29</td>
<td>13, 27</td>
<td>10, 22</td>
<td>13, 20</td>
<td>10, 24</td>
<td>9, 22</td>
</tr>
<tr>
<td>LE5.5</td>
<td>14, 27</td>
<td>11, 28</td>
<td>10, 23</td>
<td>6, 20</td>
<td>10, 24</td>
<td>8, 22</td>
</tr>
</tbody>
</table>
Table 3. Water Quality Analyses

<table>
<thead>
<tr>
<th>Component</th>
<th>Particulate carbon</th>
<th>Dissolved organic carbon</th>
<th>Particulate nitrogen</th>
<th>Total dissolved nitrogen</th>
<th>Ammonia-nitrogen</th>
<th>Nitrite-nitrogen</th>
<th>Nitrate + nitrite-nitrogen</th>
<th>Particulate phosphorus</th>
<th>Total dissolved phosphorus</th>
<th>Ortho-phosphate</th>
<th>Dissolved silicate</th>
<th>Chlorophyll-a</th>
<th>Total suspended solids</th>
<th>Dissolved oxygen and salinity</th>
</tr>
</thead>
</table>

RESULTS

The data for water year 1992 are presented in the appendices by water quality analysis. For each measure of water quality, maximum, minimum, and mean values for the year are reported for each station. These statistics are given for both the surface and bottom sampling points, and therefore illustrate not only the range of conditions occurring over the year, but also whether surface-to-bottom differences are large. Following the table are the graphs for each station. The data for both the surface and bottom sampling points have been plotted, with the exception of Secchi depth, for which there is only one measurement per station. The maximum and minimum values at the surface are presented as "whiskers", while maximum and minimum values at the bottom are shown as "boxes". When there were two cruises during a given month, the data from the two cruises have been combined into a single monthly data set.
No results have been listed in the tables or plotted in the figures for the samples taken above and below the pycnocline. Individuals interested in values for the surface mixed layer or the bottom mixed layer should access the entire data base and examine the pycnocline results.

Perhaps the single most important measure of water quality is the dissolved oxygen (DO) concentration. For estuarine waters, state water quality standards specify that the daily average DO concentration should be 5.0 mg/l or greater, and that no observation should be below 4.0 mg/l. The portion of the DO measurements below 5 mg/l and below 4 mg/l have been calculated for each station and are included in the DO section.

In addition to those water quality parameters which are measured directly, several other parameters have been calculated. Salinity is determined using water temperature and conductivity observations and the UNESCO Equations of State (UNESCO, 1983). Total phosphorus and total nitrogen have been calculated by summing the values for the particulate and total dissolved fractions. Chlorophyll-a has been calculated using a trichromatic formula (ASTM, 1979; Method D 3731-79).

OTHER REPORTS AND OTHER MONITORING EFFORTS

The water quality monitoring in the Virginia portion of Chesapeake Bay is shared between the Applied Marine Research Lab (AMRL) and the Virginia Institute of Marine Science (VIMS). During the first few years of the program, separate contract reports were prepared. Subsequently, VIMS began producing water quality data reports that covered the entire Virginia portion of Chesapeake Bay. These are listed below:

<table>
<thead>
<tr>
<th>Water Year</th>
<th>VIMS Data Report No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>36</td>
</tr>
<tr>
<td>1988</td>
<td>38</td>
</tr>
<tr>
<td>1989</td>
<td>35</td>
</tr>
<tr>
<td>1990</td>
<td>37</td>
</tr>
<tr>
<td>1991</td>
<td>49</td>
</tr>
</tbody>
</table>
The scientists at ODU redirected their data analysis efforts to synthesizing water quality and living resource data (c. f. Alden et al, 1992) and to an examination of the power of the data set to detect temporal trends (to be published in late 1993). For copies of these reports, contact the principal investigators (Dr. Raymond Alden at AMRL and Dr. Bruce Neilson at VIMS).

A comparable monitoring program is conducted in the major tributaries to Chesapeake Bay by the Virginia State Water Control Board (SWCB), now the water division of the Department of Environmental Quality (DEQ). The SWCB has issued tributary water quality characterization reports for 1984-85, 1986, 1987 and 1988. For copies of these reports, contact the Chesapeake Bay Office at DEQ in Richmond.

The US Environmental Protection Agency, Chesapeake Bay Program Office, has examined the water quality data for the main stem of Chesapeake Bay to determine whether conditions are changing. Reports have been issued as part of the Chesapeake Bay Program’s Technical Report Series (see below). A similar examination of tributary data was made by Bishop et al (1990).

- Dissolved Oxygen (1984-1990)  
- Phosphorus (1984-1990)  

The Chesapeake Bay Program also includes programs to monitor the living resources; phytoplankton, zooplankton and benthos have been monitored in the Virginia tributaries and in the Virginia portion of Chesapeake Bay since 1984 (see Alden et al., 1992). Other elements deal with toxic substances, nonpoint source pollution and modelling of water quality. The Chesapeake Bay Program will provide water quality data to users; it is recommended that interested parties acquire the Guide to Using Chesapeake Bay Program Water Quality Monitoring Data (1993) prior to making a request for data. Contact the Chesapeake Bay Program Office at 1-800-523-2281 to obtain the guide.
REFERENCES


Dissolved Oxygen Trends in the Chesapeake Bay (1984-1990), 1991. US EPA Chesapeake Bay Program, Annapolis, MD 21403. CBP/TRS 66/91


Trends in Nitrogen in the Chesapeake Bay (1984-1990), 1992. US EPA Chesapeake Bay Program, Annapolis, MD 21403. CBP/TRS 68/92

Trends in Phosphorus in the Chesapeake Bay (1984-1990), 1991. US EPA Chesapeake Bay Program, Annapolis, MD 21403. CBP/TRS 67/91

Trends in Phosphorus, Nitrogen, Secchi Depth, and Dissolved Oxygen in the Chesapeake Bay (October 1984 - September 1992), 1993. US EPA Chesapeake Bay Program, Annapolis, MD 21403. CBP/TRS 90/93


SECCHI DISK

Values reported as meters.
### Secchi Disk

**October 1991 - September 1992**

<table>
<thead>
<tr>
<th>Location</th>
<th>Max</th>
<th>Mean</th>
<th>Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>CB5.4</td>
<td>3.40</td>
<td>2.35</td>
<td>1.30</td>
</tr>
<tr>
<td>CB5.5</td>
<td>3.20</td>
<td>2.28</td>
<td>1.30</td>
</tr>
<tr>
<td>CB6.1</td>
<td>3.00</td>
<td>2.09</td>
<td>1.40</td>
</tr>
<tr>
<td>CB6.2</td>
<td>3.10</td>
<td>1.94</td>
<td>1.00</td>
</tr>
<tr>
<td>CB6.3</td>
<td>3.00</td>
<td>1.65</td>
<td>1.00</td>
</tr>
<tr>
<td>CB6.4</td>
<td>3.00</td>
<td>1.82</td>
<td>1.20</td>
</tr>
<tr>
<td>CB7.3</td>
<td>3.80</td>
<td>2.06</td>
<td>1.20</td>
</tr>
<tr>
<td>CB7.4</td>
<td>3.50</td>
<td>2.08</td>
<td>1.10</td>
</tr>
<tr>
<td>CB7.4N</td>
<td>3.60</td>
<td>2.12</td>
<td>1.00</td>
</tr>
<tr>
<td>CB8.1E</td>
<td>3.10</td>
<td>1.79</td>
<td>1.20</td>
</tr>
<tr>
<td>CB8.1S</td>
<td>2.60</td>
<td>1.59</td>
<td>1.00</td>
</tr>
<tr>
<td>EE3.1</td>
<td>1.80</td>
<td>1.12</td>
<td>0.70</td>
</tr>
<tr>
<td>EE3.2</td>
<td>2.30</td>
<td>1.37</td>
<td>1.00</td>
</tr>
<tr>
<td>CB7.1N</td>
<td>2.80</td>
<td>1.62</td>
<td>1.00</td>
</tr>
<tr>
<td>CB7.1S</td>
<td>2.80</td>
<td>1.92</td>
<td>1.20</td>
</tr>
<tr>
<td>CB7.1E</td>
<td>3.20</td>
<td>2.09</td>
<td>1.40</td>
</tr>
<tr>
<td>CB5.4W</td>
<td>2.90</td>
<td>1.76</td>
<td>1.10</td>
</tr>
<tr>
<td>CB7.2</td>
<td>3.50</td>
<td>2.11</td>
<td>1.10</td>
</tr>
<tr>
<td>CB7.2E</td>
<td>3.00</td>
<td>1.92</td>
<td>0.70</td>
</tr>
<tr>
<td>CB7.3E</td>
<td>3.70</td>
<td>2.13</td>
<td>1.30</td>
</tr>
<tr>
<td>LE3.6</td>
<td>3.60</td>
<td>2.00</td>
<td>1.40</td>
</tr>
<tr>
<td>LE3.7</td>
<td>3.00</td>
<td>2.01</td>
<td>1.20</td>
</tr>
<tr>
<td>WE4.1</td>
<td>2.40</td>
<td>1.40</td>
<td>0.70</td>
</tr>
<tr>
<td>WE4.2</td>
<td>3.20</td>
<td>1.74</td>
<td>0.60</td>
</tr>
<tr>
<td>WE4.3</td>
<td>2.30</td>
<td>1.36</td>
<td>0.90</td>
</tr>
<tr>
<td>WE4.4</td>
<td>2.00</td>
<td>1.19</td>
<td>0.70</td>
</tr>
<tr>
<td>LE5.5</td>
<td>2.10</td>
<td>1.38</td>
<td>1.00</td>
</tr>
</tbody>
</table>
Station Id=C85.4

Station Id=C85.5

Station Id=C85.1

Station Id=C85.2

Station Id=C85.3

Month

Layer

Surface

Month

Layer

Surface

Month

Layer

Surface

Month

Layer

Surface
WATER TEMPERATURE

Values reported as degrees Centigrade.
<table>
<thead>
<tr>
<th></th>
<th>Surface</th>
<th>Bottom</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Max</td>
<td>Mean</td>
<td>Min</td>
<td>Max</td>
<td>Mean</td>
<td>Min</td>
</tr>
<tr>
<td>CB5.4</td>
<td>27.79</td>
<td>17.71</td>
<td>3.51</td>
<td>25.63</td>
<td>16.68</td>
<td>4.53</td>
</tr>
<tr>
<td>CB5.5</td>
<td>28.39</td>
<td>17.89</td>
<td>4.11</td>
<td>25.55</td>
<td>16.80</td>
<td>3.72</td>
</tr>
<tr>
<td>CB6.1</td>
<td>28.43</td>
<td>17.91</td>
<td>3.85</td>
<td>25.34</td>
<td>16.71</td>
<td>3.74</td>
</tr>
<tr>
<td>CB6.2</td>
<td>27.96</td>
<td>17.80</td>
<td>3.80</td>
<td>25.38</td>
<td>16.88</td>
<td>3.61</td>
</tr>
<tr>
<td>CB6.3</td>
<td>27.63</td>
<td>17.61</td>
<td>4.03</td>
<td>25.14</td>
<td>16.86</td>
<td>4.45</td>
</tr>
<tr>
<td>CB6.4</td>
<td>27.50</td>
<td>16.71</td>
<td>3.81</td>
<td>25.94</td>
<td>16.24</td>
<td>3.83</td>
</tr>
<tr>
<td>CB7.3</td>
<td>26.03</td>
<td>16.57</td>
<td>3.84</td>
<td>24.03</td>
<td>15.89</td>
<td>4.33</td>
</tr>
<tr>
<td>CB7.4</td>
<td>25.58</td>
<td>15.83</td>
<td>4.35</td>
<td>23.53</td>
<td>15.70</td>
<td>4.21</td>
</tr>
<tr>
<td>CB7.4N</td>
<td>25.41</td>
<td>16.99</td>
<td>3.97</td>
<td>25.12</td>
<td>17.04</td>
<td>3.95</td>
</tr>
<tr>
<td>CB8.1E</td>
<td>26.86</td>
<td>17.16</td>
<td>4.40</td>
<td>23.64</td>
<td>15.03</td>
<td>4.35</td>
</tr>
<tr>
<td>CB8.1</td>
<td>26.56</td>
<td>17.39</td>
<td>4.20</td>
<td>24.70</td>
<td>15.51</td>
<td>4.39</td>
</tr>
<tr>
<td>EE3.1</td>
<td>28.38</td>
<td>18.87</td>
<td>2.89</td>
<td>28.10</td>
<td>17.82</td>
<td>2.98</td>
</tr>
<tr>
<td>EE3.2</td>
<td>27.70</td>
<td>17.69</td>
<td>3.05</td>
<td>27.57</td>
<td>17.45</td>
<td>4.23</td>
</tr>
<tr>
<td>CB7.1N</td>
<td>27.30</td>
<td>17.77</td>
<td>3.34</td>
<td>27.37</td>
<td>17.36</td>
<td>4.35</td>
</tr>
<tr>
<td>CB7.1</td>
<td>28.02</td>
<td>18.28</td>
<td>3.91</td>
<td>26.35</td>
<td>17.15</td>
<td>4.66</td>
</tr>
<tr>
<td>CB7.1S</td>
<td>28.00</td>
<td>18.79</td>
<td>3.75</td>
<td>25.49</td>
<td>17.03</td>
<td>4.61</td>
</tr>
<tr>
<td>CB5.4W</td>
<td>28.58</td>
<td>19.04</td>
<td>3.81</td>
<td>28.16</td>
<td>17.68</td>
<td>3.84</td>
</tr>
<tr>
<td>CB7.2</td>
<td>28.12</td>
<td>18.08</td>
<td>3.85</td>
<td>25.13</td>
<td>16.28</td>
<td>4.85</td>
</tr>
<tr>
<td>CB7.2E</td>
<td>28.57</td>
<td>17.68</td>
<td>4.07</td>
<td>25.47</td>
<td>17.06</td>
<td>4.87</td>
</tr>
<tr>
<td>CB7.3E</td>
<td>25.88</td>
<td>16.69</td>
<td>4.04</td>
<td>24.44</td>
<td>15.56</td>
<td>4.18</td>
</tr>
<tr>
<td>LE3.6</td>
<td>28.97</td>
<td>18.34</td>
<td>4.21</td>
<td>26.55</td>
<td>17.30</td>
<td>3.75</td>
</tr>
<tr>
<td>LE3.7</td>
<td>28.00</td>
<td>18.90</td>
<td>4.07</td>
<td>27.20</td>
<td>17.77</td>
<td>3.92</td>
</tr>
<tr>
<td>WE4.1</td>
<td>29.20</td>
<td>18.45</td>
<td>4.36</td>
<td>26.54</td>
<td>17.87</td>
<td>4.35</td>
</tr>
<tr>
<td>WE4.2</td>
<td>27.05</td>
<td>18.36</td>
<td>4.84</td>
<td>25.90</td>
<td>17.18</td>
<td>4.86</td>
</tr>
<tr>
<td>WE4.3</td>
<td>27.28</td>
<td>18.55</td>
<td>4.01</td>
<td>27.20</td>
<td>17.80</td>
<td>4.01</td>
</tr>
<tr>
<td>WE4.4</td>
<td>27.87</td>
<td>18.05</td>
<td>3.50</td>
<td>27.76</td>
<td>17.77</td>
<td>3.07</td>
</tr>
<tr>
<td>LE5.5</td>
<td>26.06</td>
<td>17.59</td>
<td>4.35</td>
<td>23.83</td>
<td>15.92</td>
<td>4.54</td>
</tr>
</tbody>
</table>
SALINITY

Salinity is calculated using UNESCO 83 EOS and is reported as practical salinity (PS).
<table>
<thead>
<tr>
<th>Location</th>
<th>Surface Max</th>
<th>Surface Mean</th>
<th>Surface Min</th>
<th>Bottom Max</th>
<th>Bottom Mean</th>
<th>Bottom Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>CB5.4</td>
<td>20.32</td>
<td>17.46</td>
<td>14.44</td>
<td>25.30</td>
<td>23.00</td>
<td>20.17</td>
</tr>
<tr>
<td>CB5.5</td>
<td>21.68</td>
<td>18.48</td>
<td>15.81</td>
<td>25.57</td>
<td>22.72</td>
<td>19.97</td>
</tr>
<tr>
<td>CB6.1</td>
<td>21.54</td>
<td>18.86</td>
<td>14.39</td>
<td>25.26</td>
<td>22.78</td>
<td>20.22</td>
</tr>
<tr>
<td>CB6.2</td>
<td>22.30</td>
<td>19.31</td>
<td>14.67</td>
<td>25.21</td>
<td>22.90</td>
<td>15.54</td>
</tr>
<tr>
<td>CB6.3</td>
<td>22.84</td>
<td>19.99</td>
<td>16.09</td>
<td>28.20</td>
<td>23.52</td>
<td>19.75</td>
</tr>
<tr>
<td>CB6.4</td>
<td>25.10</td>
<td>21.79</td>
<td>17.80</td>
<td>28.10</td>
<td>24.54</td>
<td>20.30</td>
</tr>
<tr>
<td>CB7.3</td>
<td>27.40</td>
<td>23.65</td>
<td>18.90</td>
<td>30.80</td>
<td>28.63</td>
<td>25.80</td>
</tr>
<tr>
<td>CB7.4</td>
<td>30.90</td>
<td>27.46</td>
<td>23.60</td>
<td>33.50</td>
<td>30.54</td>
<td>28.40</td>
</tr>
<tr>
<td>CB7.4N</td>
<td>33.50</td>
<td>28.64</td>
<td>24.60</td>
<td>33.30</td>
<td>29.51</td>
<td>27.00</td>
</tr>
<tr>
<td>CB8.1E</td>
<td>30.80</td>
<td>25.24</td>
<td>20.60</td>
<td>33.20</td>
<td>30.46</td>
<td>27.50</td>
</tr>
<tr>
<td>CB8.1E</td>
<td>26.10</td>
<td>22.78</td>
<td>19.60</td>
<td>31.60</td>
<td>26.77</td>
<td>23.30</td>
</tr>
<tr>
<td>EE3.2</td>
<td>22.65</td>
<td>20.24</td>
<td>19.08</td>
<td>23.68</td>
<td>21.09</td>
<td>19.26</td>
</tr>
<tr>
<td>CB7.1N</td>
<td>21.60</td>
<td>19.45</td>
<td>17.94</td>
<td>24.81</td>
<td>21.30</td>
<td>19.01</td>
</tr>
<tr>
<td>CB7.1</td>
<td>23.21</td>
<td>20.62</td>
<td>18.60</td>
<td>25.96</td>
<td>23.02</td>
<td>20.33</td>
</tr>
<tr>
<td>CB7.1S</td>
<td>22.81</td>
<td>19.80</td>
<td>14.69</td>
<td>28.23</td>
<td>24.41</td>
<td>21.26</td>
</tr>
<tr>
<td>CB5.4W</td>
<td>20.00</td>
<td>17.16</td>
<td>13.64</td>
<td>20.00</td>
<td>17.65</td>
<td>13.88</td>
</tr>
<tr>
<td>CB7.2</td>
<td>25.29</td>
<td>20.80</td>
<td>17.35</td>
<td>31.16</td>
<td>26.63</td>
<td>22.95</td>
</tr>
<tr>
<td>CB7.2E</td>
<td>26.21</td>
<td>22.36</td>
<td>18.41</td>
<td>29.34</td>
<td>24.94</td>
<td>22.49</td>
</tr>
<tr>
<td>CB7.3E</td>
<td>26.30</td>
<td>24.77</td>
<td>19.90</td>
<td>29.90</td>
<td>27.77</td>
<td>25.00</td>
</tr>
<tr>
<td>LE3.7</td>
<td>21.25</td>
<td>18.10</td>
<td>14.87</td>
<td>21.58</td>
<td>18.60</td>
<td>15.32</td>
</tr>
<tr>
<td>WE4.1</td>
<td>23.46</td>
<td>21.12</td>
<td>17.63</td>
<td>24.14</td>
<td>21.67</td>
<td>17.66</td>
</tr>
<tr>
<td>WE4.2</td>
<td>25.89</td>
<td>21.32</td>
<td>15.43</td>
<td>27.08</td>
<td>23.47</td>
<td>20.06</td>
</tr>
<tr>
<td>WE4.3</td>
<td>24.01</td>
<td>21.33</td>
<td>18.23</td>
<td>24.07</td>
<td>21.56</td>
<td>18.28</td>
</tr>
<tr>
<td>WE4.4</td>
<td>23.84</td>
<td>21.05</td>
<td>18.45</td>
<td>23.85</td>
<td>21.55</td>
<td>18.58</td>
</tr>
<tr>
<td>LE5.5</td>
<td>24.00</td>
<td>20.54</td>
<td>12.40</td>
<td>29.80</td>
<td>26.37</td>
<td>22.50</td>
</tr>
</tbody>
</table>
DISSOLVED OXYGEN

Values reported as mg/l.

* When no observations were made at a station (Total Obs. = 0) no percentages can be calculated.
<table>
<thead>
<tr>
<th>Station</th>
<th>Surface Max</th>
<th>Surface Mean</th>
<th>Surface Min</th>
<th>Bottom Max</th>
<th>Bottom Mean</th>
<th>Bottom Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>CB5.4</td>
<td>11.93</td>
<td>9.48</td>
<td>7.16</td>
<td>10.44</td>
<td>5.36</td>
<td>0.26</td>
</tr>
<tr>
<td>CB5.5</td>
<td>11.81</td>
<td>9.53</td>
<td>7.05</td>
<td>11.21</td>
<td>5.87</td>
<td>0.17</td>
</tr>
<tr>
<td>CB6.1</td>
<td>12.41</td>
<td>9.48</td>
<td>7.22</td>
<td>10.80</td>
<td>5.91</td>
<td>0.35</td>
</tr>
<tr>
<td>CB6.2</td>
<td>12.04</td>
<td>9.41</td>
<td>7.34</td>
<td>10.95</td>
<td>6.57</td>
<td>1.13</td>
</tr>
<tr>
<td>CB6.3</td>
<td>11.35</td>
<td>8.95</td>
<td>5.30</td>
<td>10.29</td>
<td>6.69</td>
<td>2.52</td>
</tr>
<tr>
<td>CB6.4</td>
<td>11.84</td>
<td>9.40</td>
<td>6.36</td>
<td>11.03</td>
<td>7.03</td>
<td>1.49</td>
</tr>
<tr>
<td>CB7.3</td>
<td>11.90</td>
<td>9.10</td>
<td>6.68</td>
<td>10.40</td>
<td>7.50</td>
<td>5.41</td>
</tr>
<tr>
<td>CB7.4</td>
<td>10.90</td>
<td>8.57</td>
<td>6.89</td>
<td>10.16</td>
<td>7.51</td>
<td>5.50</td>
</tr>
<tr>
<td>CB7.4N</td>
<td>10.73</td>
<td>8.42</td>
<td>6.78</td>
<td>10.29</td>
<td>8.02</td>
<td>6.75</td>
</tr>
<tr>
<td>CB8.1E</td>
<td>10.65</td>
<td>8.57</td>
<td>6.53</td>
<td>10.00</td>
<td>7.41</td>
<td>4.50</td>
</tr>
<tr>
<td>CB8.1</td>
<td>11.00</td>
<td>8.78</td>
<td>6.01</td>
<td>10.46</td>
<td>7.51</td>
<td>4.78</td>
</tr>
<tr>
<td>EE3.1</td>
<td>11.76</td>
<td>8.51</td>
<td>6.51</td>
<td>11.56</td>
<td>8.21</td>
<td>5.78</td>
</tr>
<tr>
<td>EE3.2</td>
<td>11.42</td>
<td>8.32</td>
<td>5.39</td>
<td>10.64</td>
<td>7.51</td>
<td>3.77</td>
</tr>
<tr>
<td>CB7.1N</td>
<td>11.30</td>
<td>8.61</td>
<td>5.75</td>
<td>10.64</td>
<td>7.25</td>
<td>2.88</td>
</tr>
<tr>
<td>CB7.1</td>
<td>11.06</td>
<td>9.09</td>
<td>7.36</td>
<td>10.06</td>
<td>5.99</td>
<td>1.37</td>
</tr>
<tr>
<td>CB7.1S</td>
<td>11.15</td>
<td>9.22</td>
<td>6.80</td>
<td>10.31</td>
<td>6.28</td>
<td>1.13</td>
</tr>
<tr>
<td>CB5.4W</td>
<td>11.66</td>
<td>9.04</td>
<td>6.04</td>
<td>11.68</td>
<td>8.77</td>
<td>1.97</td>
</tr>
<tr>
<td>CB7.2</td>
<td>11.12</td>
<td>9.16</td>
<td>6.06</td>
<td>10.09</td>
<td>6.31</td>
<td>3.08</td>
</tr>
<tr>
<td>CB7.2E</td>
<td>11.14</td>
<td>8.88</td>
<td>5.97</td>
<td>10.04</td>
<td>7.13</td>
<td>3.43</td>
</tr>
<tr>
<td>CB7.3E</td>
<td>11.17</td>
<td>8.66</td>
<td>5.61</td>
<td>10.65</td>
<td>7.76</td>
<td>4.31</td>
</tr>
<tr>
<td>LE3.6</td>
<td>11.38</td>
<td>9.16</td>
<td>6.94</td>
<td>11.36</td>
<td>7.62</td>
<td>1.68</td>
</tr>
<tr>
<td>LE3.7</td>
<td>11.43</td>
<td>9.09</td>
<td>7.05</td>
<td>11.38</td>
<td>8.02</td>
<td>1.78</td>
</tr>
<tr>
<td>WE4.1</td>
<td>10.90</td>
<td>8.50</td>
<td>6.56</td>
<td>10.86</td>
<td>7.68</td>
<td>3.06</td>
</tr>
<tr>
<td>WE4.2</td>
<td>10.85</td>
<td>8.03</td>
<td>5.42</td>
<td>10.32</td>
<td>6.10</td>
<td>1.58</td>
</tr>
<tr>
<td>WE4.3</td>
<td>10.67</td>
<td>8.27</td>
<td>5.76</td>
<td>10.66</td>
<td>7.97</td>
<td>3.25</td>
</tr>
<tr>
<td>WE4.4</td>
<td>10.59</td>
<td>7.99</td>
<td>5.59</td>
<td>10.73</td>
<td>7.94</td>
<td>5.13</td>
</tr>
<tr>
<td>LE5.5</td>
<td>11.98</td>
<td>8.71</td>
<td>5.45</td>
<td>10.65</td>
<td>7.11</td>
<td>3.96</td>
</tr>
</tbody>
</table>
## Dissolved Oxygen

**October 1991 - September 1992**

<table>
<thead>
<tr>
<th></th>
<th>CB7.4N</th>
<th>CB7.4</th>
<th>CB8.1E</th>
<th>CB8.1</th>
<th>CB7.3</th>
<th>CB7.3E</th>
<th>CB6.4</th>
<th>CB6.3</th>
<th>CB7.2</th>
<th>CB7.2E</th>
<th>CB6.2</th>
<th>CB6.1</th>
<th>CB5.5</th>
<th>CB5.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct, 1991</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total Obs</td>
<td>10</td>
<td>13</td>
<td>15</td>
<td>9</td>
<td>13</td>
<td>16</td>
<td>10</td>
<td>11</td>
<td>18</td>
<td>12</td>
<td>10</td>
<td>12</td>
<td>10</td>
<td>23</td>
</tr>
<tr>
<td>Nov, 1991</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total Obs</td>
<td>11</td>
<td>13</td>
<td>14</td>
<td>10</td>
<td>13</td>
<td>14</td>
<td>9</td>
<td>11</td>
<td>18</td>
<td>12</td>
<td>10</td>
<td>12</td>
<td>17</td>
<td>24</td>
</tr>
<tr>
<td>Dec, 1991</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total Obs</td>
<td>14</td>
<td>12</td>
<td>15</td>
<td>9</td>
<td>14</td>
<td>19</td>
<td>12</td>
<td>11</td>
<td>18</td>
<td>12</td>
<td>10</td>
<td>12</td>
<td>15</td>
<td>23</td>
</tr>
<tr>
<td>Jan, 1992</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total Obs</td>
<td>12</td>
<td>16</td>
<td>14</td>
<td>10</td>
<td>13</td>
<td>18</td>
<td>10</td>
<td>12</td>
<td>18</td>
<td>13</td>
<td>10</td>
<td>12</td>
<td>17</td>
<td>25</td>
</tr>
<tr>
<td>Feb, 1992</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total Obs</td>
<td>14</td>
<td>15</td>
<td>14</td>
<td>8</td>
<td>13</td>
<td>15</td>
<td>9</td>
<td>11</td>
<td>18</td>
<td>12</td>
<td>10</td>
<td>12</td>
<td>15</td>
<td>24</td>
</tr>
<tr>
<td>Mar, 1992</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total Obs</td>
<td>15</td>
<td>13</td>
<td>17</td>
<td>8</td>
<td>11</td>
<td>17</td>
<td>9</td>
<td>10</td>
<td>18</td>
<td>12</td>
<td>10</td>
<td>12</td>
<td>17</td>
<td>25</td>
</tr>
<tr>
<td>Apr, 1992</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total Obs</td>
<td>26</td>
<td>30</td>
<td>33</td>
<td>19</td>
<td>30</td>
<td>35</td>
<td>22</td>
<td>22</td>
<td>36</td>
<td>24</td>
<td>20</td>
<td>23</td>
<td>32</td>
<td>47</td>
</tr>
<tr>
<td>May, 1992</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>3.12</td>
</tr>
<tr>
<td>Total Obs</td>
<td>24</td>
<td>27</td>
<td>31</td>
<td>18</td>
<td>30</td>
<td>36</td>
<td>18</td>
<td>22</td>
<td>37</td>
<td>25</td>
<td>19</td>
<td>24</td>
<td>32</td>
<td>48</td>
</tr>
<tr>
<td>Jun, 1992</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total Obs</td>
<td>29</td>
<td>26</td>
<td>30</td>
<td>17</td>
<td>25</td>
<td>32</td>
<td>19</td>
<td>22</td>
<td>38</td>
<td>25</td>
<td>20</td>
<td>28</td>
<td>17.65</td>
<td>30.61</td>
</tr>
<tr>
<td>Jul, 1992</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>38.24</td>
<td>5.88</td>
<td>63.64</td>
<td>69.44</td>
<td>50.00</td>
<td>42.11</td>
<td>37.50</td>
<td>54.29</td>
</tr>
<tr>
<td>Total Obs</td>
<td>24</td>
<td>28</td>
<td>33</td>
<td>16</td>
<td>30</td>
<td>34</td>
<td>17</td>
<td>22</td>
<td>36</td>
<td>24</td>
<td>19</td>
<td>24</td>
<td>35</td>
<td>47</td>
</tr>
<tr>
<td>Aug, 1992</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>38.89</td>
<td>34.78</td>
<td>62.16</td>
<td>12.50</td>
<td>38.10</td>
<td>41.67</td>
<td>44.12</td>
<td>68.09</td>
</tr>
<tr>
<td>Total Obs</td>
<td>26</td>
<td>24</td>
<td>31</td>
<td>18</td>
<td>28</td>
<td>33</td>
<td>18</td>
<td>23</td>
<td>37</td>
<td>24</td>
<td>21</td>
<td>24</td>
<td>34</td>
<td>47</td>
</tr>
<tr>
<td>Sep, 1992</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>33.33</td>
<td>27.27</td>
<td>47.22</td>
<td>12.50</td>
<td>35.00</td>
<td>12.50</td>
<td>44.12</td>
<td>50.00</td>
</tr>
<tr>
<td>Total Obs</td>
<td>21</td>
<td>24</td>
<td>33</td>
<td>16</td>
<td>28</td>
<td>16</td>
<td>9</td>
<td>22</td>
<td>36</td>
<td>24</td>
<td>20</td>
<td>24</td>
<td>34</td>
<td>48</td>
</tr>
</tbody>
</table>
### Dissolved Oxygen

**October 1991 - September 1992**

<table>
<thead>
<tr>
<th></th>
<th>CB7.1S</th>
<th>CB7.1</th>
<th>CB7.1N</th>
<th>EE3.2</th>
<th>EE3.1</th>
<th>CB5.4W</th>
<th>LE3.6</th>
<th>LE3.7</th>
<th>WE4.1</th>
<th>WE4.2</th>
<th>WE4.3</th>
<th>WE4.4</th>
<th>LE5.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct, 1991</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% &lt; 5</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total Obs</td>
<td>13</td>
<td>19</td>
<td>24</td>
<td>21</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>6</td>
<td>5</td>
<td>13</td>
<td>5</td>
<td>6</td>
<td>17</td>
</tr>
<tr>
<td>Nov, 1991</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% &lt; 5</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total Obs</td>
<td>16</td>
<td>20</td>
<td>24</td>
<td>21</td>
<td>3</td>
<td>4</td>
<td>9</td>
<td>7</td>
<td>5</td>
<td>13</td>
<td>5</td>
<td>4</td>
<td>17</td>
</tr>
<tr>
<td>Dec, 1991</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% &lt; 5</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total Obs</td>
<td>13</td>
<td>20</td>
<td>23</td>
<td>21</td>
<td>5</td>
<td>4</td>
<td>9</td>
<td>7</td>
<td>5</td>
<td>13</td>
<td>5</td>
<td>7</td>
<td>17</td>
</tr>
<tr>
<td>Jan, 1992</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% &lt; 5</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total Obs</td>
<td>14</td>
<td>19</td>
<td>24</td>
<td>20</td>
<td>3</td>
<td>4</td>
<td>9</td>
<td>6</td>
<td>5</td>
<td>13</td>
<td>5</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Feb, 1992</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% &lt; 5</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total Obs</td>
<td>12</td>
<td>20</td>
<td>21</td>
<td>21</td>
<td>3</td>
<td>4</td>
<td>9</td>
<td>6</td>
<td>5</td>
<td>13</td>
<td>4</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>Mar, 1992</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% &lt; 5</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total Obs</td>
<td>16</td>
<td>20</td>
<td>24</td>
<td>22</td>
<td>3</td>
<td>3</td>
<td>9</td>
<td>7</td>
<td>5</td>
<td>15</td>
<td>5</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>Apr, 1992</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% &lt; 5</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total Obs</td>
<td>31</td>
<td>41</td>
<td>49</td>
<td>44</td>
<td>8</td>
<td>8</td>
<td>16</td>
<td>12</td>
<td>10</td>
<td>27</td>
<td>10</td>
<td>15</td>
<td>36</td>
</tr>
<tr>
<td>May, 1992</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% &lt; 5</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total Obs</td>
<td>29</td>
<td>40</td>
<td>47</td>
<td>40</td>
<td>8</td>
<td>8</td>
<td>17</td>
<td>13</td>
<td>10</td>
<td>27</td>
<td>10</td>
<td>14</td>
<td>33</td>
</tr>
<tr>
<td>Jun, 1992</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% &lt; 5</td>
<td>6.45</td>
<td>15.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total Obs</td>
<td>31</td>
<td>40</td>
<td>47</td>
<td>44</td>
<td>7</td>
<td>8</td>
<td>17</td>
<td>13</td>
<td>10</td>
<td>25</td>
<td>10</td>
<td>11</td>
<td>34</td>
</tr>
<tr>
<td>Jul, 1992</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% &lt; 5</td>
<td>65.62</td>
<td>55.00</td>
<td>29.79</td>
<td>14.29</td>
<td>0.00</td>
<td>25.00</td>
<td>42.11</td>
<td>14.29</td>
<td>40.00</td>
<td>65.52</td>
<td>10.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total Obs</td>
<td>32</td>
<td>40</td>
<td>47</td>
<td>42</td>
<td>7</td>
<td>8</td>
<td>19</td>
<td>14</td>
<td>10</td>
<td>29</td>
<td>10</td>
<td>13</td>
<td>34</td>
</tr>
<tr>
<td>Aug, 1992</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% &lt; 5</td>
<td>51.72</td>
<td>50.00</td>
<td>13.33</td>
<td>11.63</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>7.69</td>
<td>0.00</td>
<td>0.00</td>
<td>18.42</td>
</tr>
<tr>
<td>Total Obs</td>
<td>31</td>
<td>39</td>
<td>47</td>
<td>6.8</td>
<td>9</td>
<td>8</td>
<td>18</td>
<td>12</td>
<td>10</td>
<td>26</td>
<td>11</td>
<td>14</td>
<td>38</td>
</tr>
<tr>
<td>Sep, 1992</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% &lt; 5</td>
<td>50.00</td>
<td>63.41</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>16.67</td>
<td>0.00</td>
<td>0.00</td>
<td>40.00</td>
</tr>
<tr>
<td>Total Obs</td>
<td>28</td>
<td>41</td>
<td>45</td>
<td>43</td>
<td>8</td>
<td>8</td>
<td>17</td>
<td>12</td>
<td>10</td>
<td>24</td>
<td>10</td>
<td>14</td>
<td>35</td>
</tr>
</tbody>
</table>
CHLOROPHYLL-A

Values reported as ug/l.
| Chlorophyll-A |
| October 1991 - September 1992 |

<table>
<thead>
<tr>
<th></th>
<th>Surface</th>
<th>Bottom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Max</td>
<td>Mean</td>
</tr>
<tr>
<td>CB5.4</td>
<td>10.67</td>
<td>5.40</td>
</tr>
<tr>
<td>CB5.5</td>
<td>13.12</td>
<td>6.65</td>
</tr>
<tr>
<td>CB6.1</td>
<td>12.58</td>
<td>6.23</td>
</tr>
<tr>
<td>CB6.2</td>
<td>13.26</td>
<td>6.21</td>
</tr>
<tr>
<td>CB6.3</td>
<td>14.42</td>
<td>8.05</td>
</tr>
<tr>
<td>CB6.4</td>
<td>30.97</td>
<td>7.81</td>
</tr>
<tr>
<td>CB7.3</td>
<td>23.00</td>
<td>5.77</td>
</tr>
<tr>
<td>CB7.4</td>
<td>13.31</td>
<td>3.52</td>
</tr>
<tr>
<td>CB7.4N</td>
<td>7.12</td>
<td>3.14</td>
</tr>
<tr>
<td>CB8.1E</td>
<td>9.97</td>
<td>4.43</td>
</tr>
<tr>
<td>CB8.1</td>
<td>16.59</td>
<td>6.93</td>
</tr>
<tr>
<td>EE3.1</td>
<td>18.29</td>
<td>9.14</td>
</tr>
<tr>
<td>EE3.2</td>
<td>19.99</td>
<td>7.87</td>
</tr>
<tr>
<td>CB7.1N</td>
<td>15.22</td>
<td>6.51</td>
</tr>
<tr>
<td>CB7.1</td>
<td>11.67</td>
<td>6.08</td>
</tr>
<tr>
<td>CB7.1S</td>
<td>15.38</td>
<td>5.92</td>
</tr>
<tr>
<td>CB5.4W</td>
<td>16.24</td>
<td>6.82</td>
</tr>
<tr>
<td>CB7.2</td>
<td>11.11</td>
<td>5.53</td>
</tr>
<tr>
<td>CB7.2E</td>
<td>28.32</td>
<td>8.13</td>
</tr>
<tr>
<td>CB7.3E</td>
<td>20.69</td>
<td>4.92</td>
</tr>
<tr>
<td>LE3.6</td>
<td>12.80</td>
<td>6.45</td>
</tr>
<tr>
<td>LE3.7</td>
<td>14.10</td>
<td>6.11</td>
</tr>
<tr>
<td>WE4.1</td>
<td>20.91</td>
<td>7.31</td>
</tr>
<tr>
<td>WE4.2</td>
<td>17.01</td>
<td>7.23</td>
</tr>
<tr>
<td>WE4.3</td>
<td>13.16</td>
<td>6.15</td>
</tr>
<tr>
<td>WE4.4</td>
<td>11.53</td>
<td>5.83</td>
</tr>
<tr>
<td>LE5.5</td>
<td>23.49</td>
<td>8.56</td>
</tr>
</tbody>
</table>
TOTAL PHOSPHORUS

Total Phosphorus is the sum of Particulate Phosphorus and Total Dissolved Phosphorus.

Values reported as mg/l.
## Total Phosphorus
**October 1991 - September 1992**

<table>
<thead>
<tr>
<th>Location</th>
<th>Surface</th>
<th>Bottom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Max</td>
<td>Mean</td>
</tr>
<tr>
<td><strong>CB5.4</strong></td>
<td>0.0460</td>
<td>0.0265</td>
</tr>
<tr>
<td><strong>CB5.5</strong></td>
<td>0.0662</td>
<td>0.0269</td>
</tr>
<tr>
<td><strong>CB6.1</strong></td>
<td>0.0530</td>
<td>0.0236</td>
</tr>
<tr>
<td><strong>CB6.2</strong></td>
<td>0.0420</td>
<td>0.0263</td>
</tr>
<tr>
<td><strong>CB6.3</strong></td>
<td>0.0470</td>
<td>0.0291</td>
</tr>
<tr>
<td><strong>CB6.4</strong></td>
<td>0.0450</td>
<td>0.0266</td>
</tr>
<tr>
<td><strong>CB7.3</strong></td>
<td>0.0380</td>
<td>0.0248</td>
</tr>
<tr>
<td><strong>CB7.4</strong></td>
<td>0.0370</td>
<td>0.0228</td>
</tr>
<tr>
<td><strong>CB7.4N</strong></td>
<td>0.0370</td>
<td>0.0238</td>
</tr>
<tr>
<td><strong>CB8.1E</strong></td>
<td>0.0450</td>
<td>0.0280</td>
</tr>
<tr>
<td><strong>CB8.1</strong></td>
<td>0.0480</td>
<td>0.0304</td>
</tr>
<tr>
<td><strong>EE3.1</strong></td>
<td>0.0523</td>
<td>0.0348</td>
</tr>
<tr>
<td><strong>EE3.2</strong></td>
<td>0.0460</td>
<td>0.0281</td>
</tr>
<tr>
<td><strong>CB7.1N</strong></td>
<td>0.0350</td>
<td>0.0244</td>
</tr>
<tr>
<td><strong>CB7.1</strong></td>
<td>0.0472</td>
<td>0.0258</td>
</tr>
<tr>
<td><strong>CB7.1S</strong></td>
<td>0.0420</td>
<td>0.0253</td>
</tr>
<tr>
<td><strong>CB5.4W</strong></td>
<td>0.0490</td>
<td>0.0284</td>
</tr>
<tr>
<td><strong>CB7.2</strong></td>
<td>0.0600</td>
<td>0.0282</td>
</tr>
<tr>
<td><strong>CB7.2E</strong></td>
<td>0.0610</td>
<td>0.0290</td>
</tr>
<tr>
<td><strong>CB7.3E</strong></td>
<td>0.0350</td>
<td>0.0239</td>
</tr>
<tr>
<td><strong>LE3.6</strong></td>
<td>0.0443</td>
<td>0.0241</td>
</tr>
<tr>
<td><strong>LE3.7</strong></td>
<td>0.0427</td>
<td>0.0256</td>
</tr>
<tr>
<td><strong>WE4.1</strong></td>
<td>0.0680</td>
<td>0.0341</td>
</tr>
<tr>
<td><strong>WE4.2</strong></td>
<td>0.0659</td>
<td>0.0379</td>
</tr>
<tr>
<td><strong>WE4.3</strong></td>
<td>0.0570</td>
<td>0.0346</td>
</tr>
<tr>
<td><strong>WE4.4</strong></td>
<td>0.0470</td>
<td>0.0336</td>
</tr>
<tr>
<td><strong>LE5.5</strong></td>
<td>0.0900</td>
<td>0.0454</td>
</tr>
</tbody>
</table>
Station Id=EE3.1

Station Id=EE3.2

Station Id=CB7.1N

Station Id=CB7.1

Station Id=CB7.1S

Station Id=CB5.4W

Month

Layer Surface Bottom

Month

Layer Surface Bottom

Month

Layer Surface Bottom

Month

Layer Surface Bottom

Month

Layer Surface Bottom
PARTICULATE PHOSPHORUS

Values reported as mg/l.
## Particulate Phosphorus

### October 1991 - September 1992

<table>
<thead>
<tr>
<th>Location</th>
<th>Surface Max</th>
<th>Surface Mean</th>
<th>Surface Min</th>
<th>Bottom Max</th>
<th>Bottom Mean</th>
<th>Bottom Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>CB5.4</td>
<td>0.0265</td>
<td>0.0119</td>
<td>0.0050</td>
<td>0.1120</td>
<td>0.0213</td>
<td>0.0047</td>
</tr>
<tr>
<td>CB5.5</td>
<td>0.0281</td>
<td>0.0136</td>
<td>0.0060</td>
<td>0.0350</td>
<td>0.0159</td>
<td>0.0032</td>
</tr>
<tr>
<td>CB6.1</td>
<td>0.0194</td>
<td>0.0111</td>
<td>0.0050</td>
<td>0.0445</td>
<td>0.0165</td>
<td>0.0080</td>
</tr>
<tr>
<td>CB6.2</td>
<td>0.0254</td>
<td>0.0135</td>
<td>0.0050</td>
<td>0.0520</td>
<td>0.0210</td>
<td>0.0080</td>
</tr>
<tr>
<td>CB6.3</td>
<td>0.0276</td>
<td>0.0150</td>
<td>0.0050</td>
<td>0.0440</td>
<td>0.0221</td>
<td>0.0015</td>
</tr>
<tr>
<td>CB6.4</td>
<td>0.0270</td>
<td>0.0139</td>
<td>0.0035</td>
<td>0.0260</td>
<td>0.0162</td>
<td>0.0090</td>
</tr>
<tr>
<td>CB7.3</td>
<td>0.0230</td>
<td>0.0127</td>
<td>0.0035</td>
<td>0.0420</td>
<td>0.0208</td>
<td>0.0035</td>
</tr>
<tr>
<td>CB7.4</td>
<td>0.0140</td>
<td>0.0093</td>
<td>0.0035</td>
<td>0.0870</td>
<td>0.0196</td>
<td>0.0035</td>
</tr>
<tr>
<td>CB7.4N</td>
<td>0.0180</td>
<td>0.0101</td>
<td>0.0035</td>
<td>0.0910</td>
<td>0.0229</td>
<td>0.0035</td>
</tr>
<tr>
<td>CB8.1E</td>
<td>0.0210</td>
<td>0.0124</td>
<td>0.0035</td>
<td>0.0950</td>
<td>0.0291</td>
<td>0.0110</td>
</tr>
<tr>
<td>CB8.1</td>
<td>0.0260</td>
<td>0.0157</td>
<td>0.0080</td>
<td>0.0570</td>
<td>0.0224</td>
<td>0.0090</td>
</tr>
<tr>
<td>EE3.1</td>
<td>0.0383</td>
<td>0.0192</td>
<td>0.0070</td>
<td>0.0387</td>
<td>0.0216</td>
<td>0.0080</td>
</tr>
<tr>
<td>EE3.2</td>
<td>0.0268</td>
<td>0.0156</td>
<td>0.0090</td>
<td>0.0692</td>
<td>0.0247</td>
<td>0.0110</td>
</tr>
<tr>
<td>CB7.1N</td>
<td>0.0241</td>
<td>0.0128</td>
<td>0.0050</td>
<td>0.0800</td>
<td>0.0262</td>
<td>0.0040</td>
</tr>
<tr>
<td>CB7.1</td>
<td>0.0242</td>
<td>0.0128</td>
<td>0.0050</td>
<td>0.0470</td>
<td>0.0188</td>
<td>0.0060</td>
</tr>
<tr>
<td>CB7.1W</td>
<td>0.0217</td>
<td>0.0123</td>
<td>0.0030</td>
<td>0.0680</td>
<td>0.0192</td>
<td>0.0053</td>
</tr>
<tr>
<td>CB5.4W</td>
<td>0.0259</td>
<td>0.0149</td>
<td>0.0050</td>
<td>0.0315</td>
<td>0.0150</td>
<td>0.0060</td>
</tr>
<tr>
<td>CB7.2</td>
<td>0.0220</td>
<td>0.0124</td>
<td>0.0015</td>
<td>0.0368</td>
<td>0.0225</td>
<td>0.0100</td>
</tr>
<tr>
<td>CB7.2E</td>
<td>0.0260</td>
<td>0.0140</td>
<td>0.0040</td>
<td>0.0347</td>
<td>0.0180</td>
<td>0.0040</td>
</tr>
<tr>
<td>CB7.3E</td>
<td>0.0180</td>
<td>0.0112</td>
<td>0.0035</td>
<td>0.0330</td>
<td>0.0221</td>
<td>0.0110</td>
</tr>
<tr>
<td>LE3.6</td>
<td>0.0213</td>
<td>0.0121</td>
<td>0.0050</td>
<td>0.0427</td>
<td>0.0203</td>
<td>0.0060</td>
</tr>
<tr>
<td>LE3.7</td>
<td>0.0237</td>
<td>0.0124</td>
<td>0.0040</td>
<td>0.0234</td>
<td>0.0149</td>
<td>0.0080</td>
</tr>
<tr>
<td>WE4.1</td>
<td>0.0280</td>
<td>0.0153</td>
<td>0.0060</td>
<td>0.0325</td>
<td>0.0218</td>
<td>0.0110</td>
</tr>
<tr>
<td>WE4.2</td>
<td>0.0279</td>
<td>0.0158</td>
<td>0.0060</td>
<td>0.0332</td>
<td>0.0183</td>
<td>0.0080</td>
</tr>
<tr>
<td>WE4.3</td>
<td>0.0280</td>
<td>0.0170</td>
<td>0.0090</td>
<td>0.0291</td>
<td>0.0193</td>
<td>0.0090</td>
</tr>
<tr>
<td>WE4.4</td>
<td>0.0276</td>
<td>0.0179</td>
<td>0.0060</td>
<td>0.0326</td>
<td>0.0191</td>
<td>0.0111</td>
</tr>
<tr>
<td>LE5.5</td>
<td>0.0330</td>
<td>0.0193</td>
<td>0.0100</td>
<td>0.0500</td>
<td>0.0284</td>
<td>0.0120</td>
</tr>
</tbody>
</table>
TOTAL DISSOLVED PHOSPHORUS

Values reported as mg/l.
Total Dissolved Phosphorus
October 1991 - September 1992

<table>
<thead>
<tr>
<th>Total Dissolved Phosphorus (mg/l)</th>
<th>Surface</th>
<th>Bottom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Max</td>
<td>Mean</td>
</tr>
<tr>
<td>CB5.4</td>
<td>0.0380</td>
<td>0.0146</td>
</tr>
<tr>
<td>CB5.5</td>
<td>0.0480</td>
<td>0.0133</td>
</tr>
<tr>
<td>CB6.1</td>
<td>0.0430</td>
<td>0.0125</td>
</tr>
<tr>
<td>CB6.2</td>
<td>0.0240</td>
<td>0.0123</td>
</tr>
<tr>
<td>CB6.3</td>
<td>0.0300</td>
<td>0.0142</td>
</tr>
<tr>
<td>CB6.4</td>
<td>0.0290</td>
<td>0.0129</td>
</tr>
<tr>
<td>CB7.3</td>
<td>0.0250</td>
<td>0.0126</td>
</tr>
<tr>
<td>CB7.4</td>
<td>0.0280</td>
<td>0.0137</td>
</tr>
<tr>
<td>CB7.4N</td>
<td>0.0250</td>
<td>0.0142</td>
</tr>
<tr>
<td>CB8.1E</td>
<td>0.0290</td>
<td>0.0157</td>
</tr>
<tr>
<td>CB8.1N</td>
<td>0.0370</td>
<td>0.0148</td>
</tr>
<tr>
<td>EE3.1</td>
<td>0.0320</td>
<td>0.0156</td>
</tr>
<tr>
<td>EE3.2</td>
<td>0.0270</td>
<td>0.0125</td>
</tr>
<tr>
<td>CB7.1N</td>
<td>0.0300</td>
<td>0.0116</td>
</tr>
<tr>
<td>CB7.1</td>
<td>0.0230</td>
<td>0.0131</td>
</tr>
<tr>
<td>CB7.1S</td>
<td>0.0330</td>
<td>0.0130</td>
</tr>
<tr>
<td>CB5.4W</td>
<td>0.0390</td>
<td>0.0136</td>
</tr>
<tr>
<td>CB7.2</td>
<td>0.0450</td>
<td>0.0158</td>
</tr>
<tr>
<td>CB7.2E</td>
<td>0.0410</td>
<td>0.0149</td>
</tr>
<tr>
<td>CB7.3E</td>
<td>0.0250</td>
<td>0.0126</td>
</tr>
<tr>
<td>LE3.5</td>
<td>0.0230</td>
<td>0.0120</td>
</tr>
<tr>
<td>LE3.7</td>
<td>0.0280</td>
<td>0.0131</td>
</tr>
<tr>
<td>WE4.1</td>
<td>0.0490</td>
<td>0.0188</td>
</tr>
<tr>
<td>WE4.2</td>
<td>0.0430</td>
<td>0.0221</td>
</tr>
<tr>
<td>WE4.3</td>
<td>0.0480</td>
<td>0.0176</td>
</tr>
<tr>
<td>WE4.4</td>
<td>0.0260</td>
<td>0.0157</td>
</tr>
<tr>
<td>LE5.5</td>
<td>0.0730</td>
<td>0.0261</td>
</tr>
</tbody>
</table>
ORTHO-PHOSPHATE

Values reported as mg/l.
<table>
<thead>
<tr>
<th></th>
<th>Surface</th>
<th></th>
<th>Bottom</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Max</td>
<td>Mean</td>
<td>Min</td>
<td>Max</td>
<td>Mean</td>
</tr>
<tr>
<td>CB5.4</td>
<td>0.0093</td>
<td>0.0042</td>
<td>0.0003</td>
<td>0.0422</td>
<td>0.0126</td>
</tr>
<tr>
<td>CB5.5</td>
<td>0.0093</td>
<td>0.0035</td>
<td>0.0003</td>
<td>0.0350</td>
<td>0.0109</td>
</tr>
<tr>
<td>CB6.1</td>
<td>0.0164</td>
<td>0.0040</td>
<td>0.0003</td>
<td>0.0249</td>
<td>0.0090</td>
</tr>
<tr>
<td>CB6.2</td>
<td>0.0095</td>
<td>0.0034</td>
<td>0.0003</td>
<td>0.0244</td>
<td>0.0098</td>
</tr>
<tr>
<td>CB6.3</td>
<td>0.0141</td>
<td>0.0047</td>
<td>0.0007</td>
<td>0.0175</td>
<td>0.0088</td>
</tr>
<tr>
<td>CB6.4</td>
<td>0.0180</td>
<td>0.0042</td>
<td>0.0025</td>
<td>0.0260</td>
<td>0.0097</td>
</tr>
<tr>
<td>CB7.3</td>
<td>0.0150</td>
<td>0.0061</td>
<td>0.0025</td>
<td>0.0220</td>
<td>0.0100</td>
</tr>
<tr>
<td>CB7.4</td>
<td>0.0180</td>
<td>0.0058</td>
<td>0.0025</td>
<td>0.0270</td>
<td>0.0108</td>
</tr>
<tr>
<td>CB7.4N</td>
<td>0.0240</td>
<td>0.0079</td>
<td>0.0025</td>
<td>0.0250</td>
<td>0.0082</td>
</tr>
<tr>
<td>CB8.1E</td>
<td>0.0150</td>
<td>0.0069</td>
<td>0.0025</td>
<td>0.0380</td>
<td>0.0141</td>
</tr>
<tr>
<td>CB8.1</td>
<td>0.0240</td>
<td>0.0062</td>
<td>0.0025</td>
<td>0.0350</td>
<td>0.0110</td>
</tr>
<tr>
<td>EE3.1</td>
<td>0.0108</td>
<td>0.0040</td>
<td>0.0003</td>
<td>0.0101</td>
<td>0.0039</td>
</tr>
<tr>
<td>EE3.2</td>
<td>0.0109</td>
<td>0.0034</td>
<td>0.0003</td>
<td>0.0116</td>
<td>0.0044</td>
</tr>
<tr>
<td>CB7.1N</td>
<td>0.0098</td>
<td>0.0030</td>
<td>0.0003</td>
<td>0.0104</td>
<td>0.0048</td>
</tr>
<tr>
<td>CB7.1</td>
<td>0.0187</td>
<td>0.0041</td>
<td>0.0003</td>
<td>0.0310</td>
<td>0.0108</td>
</tr>
<tr>
<td>CB7.1S</td>
<td>0.0081</td>
<td>0.0039</td>
<td>0.0003</td>
<td>0.0307</td>
<td>0.0111</td>
</tr>
<tr>
<td>CB5.4W</td>
<td>0.0095</td>
<td>0.0034</td>
<td>0.0003</td>
<td>0.0098</td>
<td>0.0046</td>
</tr>
<tr>
<td>CB7.2</td>
<td>0.0110</td>
<td>0.0040</td>
<td>0.0003</td>
<td>0.0236</td>
<td>0.0135</td>
</tr>
<tr>
<td>CB7.2E</td>
<td>0.0089</td>
<td>0.0040</td>
<td>0.0003</td>
<td>0.0196</td>
<td>0.0094</td>
</tr>
<tr>
<td>CB7.3E</td>
<td>0.0170</td>
<td>0.0054</td>
<td>0.0025</td>
<td>0.0180</td>
<td>0.0091</td>
</tr>
<tr>
<td>LE3.6</td>
<td>0.0162</td>
<td>0.0035</td>
<td>0.0003</td>
<td>0.0160</td>
<td>0.0048</td>
</tr>
<tr>
<td>LE3.7</td>
<td>0.0120</td>
<td>0.0036</td>
<td>0.0003</td>
<td>0.0089</td>
<td>0.0035</td>
</tr>
<tr>
<td>WE4.1</td>
<td>0.0098</td>
<td>0.0033</td>
<td>0.0003</td>
<td>0.0120</td>
<td>0.0051</td>
</tr>
<tr>
<td>WE4.2</td>
<td>0.0224</td>
<td>0.0098</td>
<td>0.0003</td>
<td>0.0334</td>
<td>0.0130</td>
</tr>
<tr>
<td>WE4.3</td>
<td>0.0099</td>
<td>0.0049</td>
<td>0.0021</td>
<td>0.0166</td>
<td>0.0062</td>
</tr>
<tr>
<td>WE4.4</td>
<td>0.0116</td>
<td>0.0045</td>
<td>0.0012</td>
<td>0.0116</td>
<td>0.0050</td>
</tr>
<tr>
<td>LE5.5</td>
<td>0.0610</td>
<td>0.0164</td>
<td>0.0025</td>
<td>0.0360</td>
<td>0.0151</td>
</tr>
</tbody>
</table>

Ortho-phosphate
October 1991 - September 1992

Ortho-phosphate (mg/l)
TOTAL NITROGEN

Total Nitrogen is the sum of Particulate Nitrogen and Total Dissolved Nitrogen. Values reported as mg/l.
<table>
<thead>
<tr>
<th>Surface</th>
<th>Bottom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max</td>
<td>Mean</td>
</tr>
<tr>
<td>CB5.4</td>
<td>0.8720</td>
</tr>
<tr>
<td>CB5.5</td>
<td>0.7510</td>
</tr>
<tr>
<td>CB6.1</td>
<td>0.7430</td>
</tr>
<tr>
<td>CB6.2</td>
<td>0.7420</td>
</tr>
<tr>
<td>CB6.3</td>
<td>0.7010</td>
</tr>
<tr>
<td>CB6.4</td>
<td>0.7590</td>
</tr>
<tr>
<td>CB7.3</td>
<td>0.4810</td>
</tr>
<tr>
<td>CB7.4</td>
<td>0.3650</td>
</tr>
<tr>
<td>CB7.4N</td>
<td>0.3760</td>
</tr>
<tr>
<td>CB8.1E</td>
<td>0.4340</td>
</tr>
<tr>
<td>CB8.1</td>
<td>0.4910</td>
</tr>
<tr>
<td>EE3.1</td>
<td>1.1270</td>
</tr>
<tr>
<td>EE3.2</td>
<td>0.8860</td>
</tr>
<tr>
<td>CB7.1N</td>
<td>0.7760</td>
</tr>
<tr>
<td>CB7.1</td>
<td>0.6290</td>
</tr>
<tr>
<td>CB7.1S</td>
<td>0.7150</td>
</tr>
<tr>
<td>CB5.4W</td>
<td>0.3390</td>
</tr>
<tr>
<td>CB7.2</td>
<td>0.6760</td>
</tr>
<tr>
<td>CB7.2E</td>
<td>0.6480</td>
</tr>
<tr>
<td>CB7.3E</td>
<td>0.3960</td>
</tr>
<tr>
<td>LE3.6</td>
<td>0.7480</td>
</tr>
<tr>
<td>LE3.7</td>
<td>0.8350</td>
</tr>
<tr>
<td>LE4.1</td>
<td>0.8350</td>
</tr>
<tr>
<td>LE4.2</td>
<td>0.8660</td>
</tr>
<tr>
<td>LE4.3</td>
<td>0.6270</td>
</tr>
<tr>
<td>LE4.4</td>
<td>0.7110</td>
</tr>
<tr>
<td>LE5.5</td>
<td>1.7090</td>
</tr>
</tbody>
</table>
PARTICULATE NITROGEN

Values reported as mg/l.
<table>
<thead>
<tr>
<th>Station</th>
<th>Surface Max</th>
<th>Surface Mean</th>
<th>Surface Min</th>
<th>Bottom Max</th>
<th>Bottom Mean</th>
<th>Bottom Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBS 5.1</td>
<td>0.2550</td>
<td>0.1259</td>
<td>0.0600</td>
<td>0.5620</td>
<td>0.1282</td>
<td>0.0420</td>
</tr>
<tr>
<td>CBS 5.5</td>
<td>0.3330</td>
<td>0.1401</td>
<td>0.0560</td>
<td>0.2560</td>
<td>0.1049</td>
<td>0.0500</td>
</tr>
<tr>
<td>CBS 6.1</td>
<td>0.2240</td>
<td>0.1241</td>
<td>0.0570</td>
<td>0.1550</td>
<td>0.0978</td>
<td>0.0590</td>
</tr>
<tr>
<td>CBS 6.2</td>
<td>0.2010</td>
<td>0.1330</td>
<td>0.0680</td>
<td>0.2900</td>
<td>0.1295</td>
<td>0.0720</td>
</tr>
<tr>
<td>CBS 6.3</td>
<td>0.2690</td>
<td>0.1417</td>
<td>0.0700</td>
<td>0.2510</td>
<td>0.1349</td>
<td>0.0790</td>
</tr>
<tr>
<td>CBS 6.4</td>
<td>0.5430</td>
<td>0.1482</td>
<td>0.0580</td>
<td>1.0800</td>
<td>0.1552</td>
<td>0.0180</td>
</tr>
<tr>
<td>CBS 7.3</td>
<td>0.2690</td>
<td>0.1152</td>
<td>0.0380</td>
<td>0.2140</td>
<td>0.1032</td>
<td>0.0180</td>
</tr>
<tr>
<td>CBS 7.4</td>
<td>0.1570</td>
<td>0.0849</td>
<td>0.0180</td>
<td>0.1380</td>
<td>0.0956</td>
<td>0.0180</td>
</tr>
<tr>
<td>CBS 7.4H</td>
<td>0.1340</td>
<td>0.0841</td>
<td>0.0360</td>
<td>0.3410</td>
<td>0.1354</td>
<td>0.0180</td>
</tr>
<tr>
<td>CB8.1E</td>
<td>0.2390</td>
<td>0.1099</td>
<td>0.0180</td>
<td>0.2540</td>
<td>0.1222</td>
<td>0.0180</td>
</tr>
<tr>
<td>EE3.1</td>
<td>0.2030</td>
<td>0.1213</td>
<td>0.0180</td>
<td>0.1990</td>
<td>0.1211</td>
<td>0.0690</td>
</tr>
<tr>
<td>EE3.2</td>
<td>0.5100</td>
<td>0.1967</td>
<td>0.0870</td>
<td>0.3830</td>
<td>0.1926</td>
<td>0.0930</td>
</tr>
<tr>
<td>CB7.1N</td>
<td>0.2240</td>
<td>0.1296</td>
<td>0.0680</td>
<td>0.6480</td>
<td>0.1988</td>
<td>0.0930</td>
</tr>
<tr>
<td>CB7.1H</td>
<td>0.2680</td>
<td>0.1293</td>
<td>0.0780</td>
<td>0.2660</td>
<td>0.1353</td>
<td>0.0390</td>
</tr>
<tr>
<td>CB7.1S</td>
<td>0.2760</td>
<td>0.1226</td>
<td>0.0390</td>
<td>0.1740</td>
<td>0.1042</td>
<td>0.0490</td>
</tr>
<tr>
<td>CB5.4W</td>
<td>0.2780</td>
<td>0.1642</td>
<td>0.0650</td>
<td>0.3580</td>
<td>0.1709</td>
<td>0.0620</td>
</tr>
<tr>
<td>CB7.2</td>
<td>0.2340</td>
<td>0.1169</td>
<td>0.0560</td>
<td>0.1940</td>
<td>0.1245</td>
<td>0.0630</td>
</tr>
<tr>
<td>CB7.2E</td>
<td>0.2070</td>
<td>0.1342</td>
<td>0.0680</td>
<td>0.1970</td>
<td>0.1163</td>
<td>0.0570</td>
</tr>
<tr>
<td>CB7.3E</td>
<td>0.1790</td>
<td>0.0922</td>
<td>0.0180</td>
<td>0.1700</td>
<td>0.1119</td>
<td>0.0640</td>
</tr>
<tr>
<td>LE3.6</td>
<td>0.2070</td>
<td>0.1253</td>
<td>0.0490</td>
<td>0.1990</td>
<td>0.1395</td>
<td>0.0860</td>
</tr>
<tr>
<td>LE3.7</td>
<td>0.2390</td>
<td>0.1313</td>
<td>0.0540</td>
<td>0.2010</td>
<td>0.1364</td>
<td>0.0560</td>
</tr>
<tr>
<td>WE4.1</td>
<td>0.2070</td>
<td>0.1353</td>
<td>0.0510</td>
<td>0.2550</td>
<td>0.1658</td>
<td>0.0820</td>
</tr>
<tr>
<td>WE4.2</td>
<td>0.2060</td>
<td>0.1312</td>
<td>0.0740</td>
<td>0.2430</td>
<td>0.1401</td>
<td>0.0430</td>
</tr>
<tr>
<td>WE4.3</td>
<td>0.1900</td>
<td>0.1330</td>
<td>0.0720</td>
<td>0.2400</td>
<td>0.1517</td>
<td>0.0740</td>
</tr>
<tr>
<td>WE4.4</td>
<td>0.2080</td>
<td>0.1357</td>
<td>0.0530</td>
<td>0.2390</td>
<td>0.1443</td>
<td>0.0660</td>
</tr>
<tr>
<td>LE5.5</td>
<td>0.4400</td>
<td>0.2387</td>
<td>0.0590</td>
<td>0.2270</td>
<td>0.1478</td>
<td>0.0900</td>
</tr>
</tbody>
</table>
TOTAL DISSOLVED NITROGEN

Values reported as mg/l.
<table>
<thead>
<tr>
<th></th>
<th>Surface</th>
<th></th>
<th>Bottom</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Max</td>
<td>Mean</td>
<td>Min</td>
<td>Max</td>
</tr>
<tr>
<td>CB5.4</td>
<td>0.7790</td>
<td>0.4787</td>
<td>0.2690</td>
<td>0.8090</td>
</tr>
<tr>
<td>CB5.5</td>
<td>0.6950</td>
<td>0.4321</td>
<td>0.2670</td>
<td>0.6210</td>
</tr>
<tr>
<td>CB6.1</td>
<td>0.6230</td>
<td>0.4138</td>
<td>0.2520</td>
<td>0.5610</td>
</tr>
<tr>
<td>CB6.2</td>
<td>0.6110</td>
<td>0.4088</td>
<td>0.2280</td>
<td>0.5650</td>
</tr>
<tr>
<td>CB6.3</td>
<td>0.5610</td>
<td>0.3901</td>
<td>0.1980</td>
<td>0.5370</td>
</tr>
<tr>
<td>CB6.4</td>
<td>0.3620</td>
<td>0.2367</td>
<td>0.1320</td>
<td>0.4670</td>
</tr>
<tr>
<td>CB7.3</td>
<td>0.3260</td>
<td>0.2150</td>
<td>0.1460</td>
<td>0.2860</td>
</tr>
<tr>
<td>CB7.1</td>
<td>0.2420</td>
<td>0.1909</td>
<td>0.1270</td>
<td>0.2490</td>
</tr>
<tr>
<td>CB7.1N</td>
<td>0.2710</td>
<td>0.1787</td>
<td>0.0930</td>
<td>0.2490</td>
</tr>
<tr>
<td>CB8.1E</td>
<td>0.2820</td>
<td>0.2182</td>
<td>0.1240</td>
<td>0.2440</td>
</tr>
<tr>
<td>CB8.1</td>
<td>0.3350</td>
<td>0.2506</td>
<td>0.2010</td>
<td>0.3070</td>
</tr>
<tr>
<td>EE3.1</td>
<td>0.6350</td>
<td>0.4586</td>
<td>0.3260</td>
<td>0.6840</td>
</tr>
<tr>
<td>EE3.2</td>
<td>0.6540</td>
<td>0.4312</td>
<td>0.2820</td>
<td>0.7570</td>
</tr>
<tr>
<td>CB7.1N</td>
<td>0.5860</td>
<td>0.4090</td>
<td>0.2390</td>
<td>0.5380</td>
</tr>
<tr>
<td>CB7.1</td>
<td>0.5270</td>
<td>0.3864</td>
<td>0.2210</td>
<td>0.5610</td>
</tr>
<tr>
<td>CB7.1S</td>
<td>0.6740</td>
<td>0.3927</td>
<td>0.1940</td>
<td>0.6340</td>
</tr>
<tr>
<td>CB5.1W</td>
<td>0.6920</td>
<td>0.4523</td>
<td>0.2410</td>
<td>0.6730</td>
</tr>
<tr>
<td>CB7.2</td>
<td>0.5830</td>
<td>0.3765</td>
<td>0.2010</td>
<td>0.5650</td>
</tr>
<tr>
<td>CB7.2E</td>
<td>0.4730</td>
<td>0.3584</td>
<td>0.1880</td>
<td>0.5060</td>
</tr>
<tr>
<td>CB7.3E</td>
<td>0.2580</td>
<td>0.2202</td>
<td>0.1840</td>
<td>0.2500</td>
</tr>
<tr>
<td>LE3.5</td>
<td>0.6290</td>
<td>0.4136</td>
<td>0.2280</td>
<td>0.9690</td>
</tr>
<tr>
<td>LE3.7</td>
<td>0.6000</td>
<td>0.4293</td>
<td>0.2620</td>
<td>0.6970</td>
</tr>
<tr>
<td>WE4.1</td>
<td>0.6980</td>
<td>0.4066</td>
<td>0.2280</td>
<td>0.6550</td>
</tr>
<tr>
<td>WE4.2</td>
<td>0.7470</td>
<td>0.4287</td>
<td>0.1620</td>
<td>0.6480</td>
</tr>
<tr>
<td>WE4.3</td>
<td>0.4600</td>
<td>0.3868</td>
<td>0.2020</td>
<td>0.5190</td>
</tr>
<tr>
<td>WE4.4</td>
<td>0.5790</td>
<td>0.3928</td>
<td>0.2890</td>
<td>0.5060</td>
</tr>
<tr>
<td>LE5.3</td>
<td>0.5340</td>
<td>0.2962</td>
<td>0.1840</td>
<td>0.3440</td>
</tr>
</tbody>
</table>
AMMONIA

Values reported as mg/l.
<table>
<thead>
<tr>
<th>Location</th>
<th>Max</th>
<th>Mean</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>CB5.4</td>
<td>0.0110</td>
<td>0.0056</td>
<td>0.0020</td>
<td>0.1910</td>
<td>0.0729</td>
<td>0.0020</td>
</tr>
<tr>
<td>CB5.5</td>
<td>0.1470</td>
<td>0.0129</td>
<td>0.0020</td>
<td>0.2060</td>
<td>0.0523</td>
<td>0.0020</td>
</tr>
<tr>
<td>CB6.1</td>
<td>0.0110</td>
<td>0.0033</td>
<td>0.0010</td>
<td>0.2080</td>
<td>0.0482</td>
<td>0.0020</td>
</tr>
<tr>
<td>CB6.2</td>
<td>0.0130</td>
<td>0.0035</td>
<td>0.0010</td>
<td>0.1390</td>
<td>0.0361</td>
<td>0.0020</td>
</tr>
<tr>
<td>CB6.3</td>
<td>0.0200</td>
<td>0.0042</td>
<td>0.0010</td>
<td>0.1270</td>
<td>0.0343</td>
<td>0.0010</td>
</tr>
<tr>
<td>CB6.4</td>
<td>0.0360</td>
<td>0.0063</td>
<td>0.0030</td>
<td>0.2350</td>
<td>0.0436</td>
<td>0.0030</td>
</tr>
<tr>
<td>CB7.3</td>
<td>0.0580</td>
<td>0.0076</td>
<td>0.0030</td>
<td>0.0690</td>
<td>0.0211</td>
<td>0.0030</td>
</tr>
<tr>
<td>CB7.4</td>
<td>0.0570</td>
<td>0.0092</td>
<td>0.0030</td>
<td>0.0750</td>
<td>0.0160</td>
<td>0.0030</td>
</tr>
<tr>
<td>CB7.4N</td>
<td>0.0700</td>
<td>0.0092</td>
<td>0.0030</td>
<td>0.0690</td>
<td>0.0090</td>
<td>0.0030</td>
</tr>
<tr>
<td>CB8.1E</td>
<td>0.0510</td>
<td>0.0081</td>
<td>0.0030</td>
<td>0.0770</td>
<td>0.0216</td>
<td>0.0030</td>
</tr>
<tr>
<td>CB8.1</td>
<td>0.0610</td>
<td>0.0106</td>
<td>0.0030</td>
<td>0.0860</td>
<td>0.0265</td>
<td>0.0030</td>
</tr>
<tr>
<td>EE3.1</td>
<td>0.0540</td>
<td>0.0114</td>
<td>0.0010</td>
<td>0.0800</td>
<td>0.0165</td>
<td>0.0010</td>
</tr>
<tr>
<td>EE3.2</td>
<td>0.0500</td>
<td>0.0151</td>
<td>0.0020</td>
<td>0.1490</td>
<td>0.0389</td>
<td>0.0010</td>
</tr>
<tr>
<td>CB7.1N</td>
<td>0.0310</td>
<td>0.0086</td>
<td>0.0010</td>
<td>0.1370</td>
<td>0.0401</td>
<td>0.0010</td>
</tr>
<tr>
<td>CB7.1</td>
<td>0.0080</td>
<td>0.0024</td>
<td>0.0010</td>
<td>0.2220</td>
<td>0.0591</td>
<td>0.0030</td>
</tr>
<tr>
<td>CB7.1S</td>
<td>0.0050</td>
<td>0.0026</td>
<td>0.0010</td>
<td>0.1750</td>
<td>0.0443</td>
<td>0.0020</td>
</tr>
<tr>
<td>CB5.4W</td>
<td>0.0430</td>
<td>0.0093</td>
<td>0.0010</td>
<td>0.0620</td>
<td>0.0161</td>
<td>0.0010</td>
</tr>
<tr>
<td>CB7.2</td>
<td>0.0430</td>
<td>0.0048</td>
<td>0.0010</td>
<td>0.0950</td>
<td>0.0342</td>
<td>0.0020</td>
</tr>
<tr>
<td>CB7.2E</td>
<td>0.0120</td>
<td>0.0030</td>
<td>0.0010</td>
<td>0.0680</td>
<td>0.0222</td>
<td>0.0010</td>
</tr>
<tr>
<td>CB7.3E</td>
<td>0.0480</td>
<td>0.0073</td>
<td>0.0030</td>
<td>0.0460</td>
<td>0.0138</td>
<td>0.0030</td>
</tr>
<tr>
<td>LE3.6</td>
<td>0.0250</td>
<td>0.0065</td>
<td>0.0020</td>
<td>0.1120</td>
<td>0.0221</td>
<td>0.0010</td>
</tr>
<tr>
<td>LE3.7</td>
<td>0.0090</td>
<td>0.0048</td>
<td>0.0020</td>
<td>0.0400</td>
<td>0.0117</td>
<td>0.0020</td>
</tr>
<tr>
<td>WE4.1</td>
<td>0.0260</td>
<td>0.0061</td>
<td>0.0020</td>
<td>0.0420</td>
<td>0.0103</td>
<td>0.0020</td>
</tr>
<tr>
<td>WE4.2</td>
<td>0.0470</td>
<td>0.0152</td>
<td>0.0070</td>
<td>0.1060</td>
<td>0.0452</td>
<td>0.0010</td>
</tr>
<tr>
<td>WE4.3</td>
<td>0.0270</td>
<td>0.0064</td>
<td>0.0010</td>
<td>0.0380</td>
<td>0.0093</td>
<td>0.0010</td>
</tr>
<tr>
<td>WE4.4</td>
<td>0.0520</td>
<td>0.0093</td>
<td>0.0010</td>
<td>0.0480</td>
<td>0.0097</td>
<td>0.0010</td>
</tr>
<tr>
<td>LE5.5</td>
<td>0.1020</td>
<td>0.0279</td>
<td>0.0030</td>
<td>0.1240</td>
<td>0.0312</td>
<td>0.0030</td>
</tr>
</tbody>
</table>
NITRATE + NITRITE

Values reported as mg/l.
### Nitrate+Nitrite

**October 1991 - September 1992**

<table>
<thead>
<tr>
<th>Surface</th>
<th>Bottom</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Max</strong></td>
<td><strong>Mean</strong></td>
</tr>
<tr>
<td>CB5.4</td>
<td>0.3093</td>
</tr>
<tr>
<td>CB5.5</td>
<td>0.2413</td>
</tr>
<tr>
<td>CB6.1</td>
<td>0.1737</td>
</tr>
<tr>
<td>CB6.2</td>
<td>0.2924</td>
</tr>
<tr>
<td>CB6.3</td>
<td>0.1300</td>
</tr>
<tr>
<td>CB6.4</td>
<td>0.1115</td>
</tr>
<tr>
<td>CB7.3</td>
<td>0.0925</td>
</tr>
<tr>
<td>CB7.4</td>
<td>0.0440</td>
</tr>
<tr>
<td>CB7.4W</td>
<td>0.0327</td>
</tr>
<tr>
<td>CB8.1E</td>
<td>0.0585</td>
</tr>
<tr>
<td>CB8.1</td>
<td>0.0778</td>
</tr>
<tr>
<td>EE3.1</td>
<td>0.0252</td>
</tr>
<tr>
<td>EE3.2</td>
<td>0.0368</td>
</tr>
<tr>
<td>CB7.1N</td>
<td>0.1333</td>
</tr>
<tr>
<td>CB7.1</td>
<td>0.0568</td>
</tr>
<tr>
<td>CB7.1S</td>
<td>0.2008</td>
</tr>
<tr>
<td>CB5.4W</td>
<td>0.1817</td>
</tr>
<tr>
<td>CB7.2</td>
<td>0.1217</td>
</tr>
<tr>
<td>CB7.2E</td>
<td>0.0395</td>
</tr>
<tr>
<td>CB7.3E</td>
<td>0.0304</td>
</tr>
<tr>
<td>LE3.6</td>
<td>0.1854</td>
</tr>
<tr>
<td>LE3.7</td>
<td>0.0587</td>
</tr>
<tr>
<td>WE4.1</td>
<td>0.0587</td>
</tr>
<tr>
<td>WE4.2</td>
<td>0.0558</td>
</tr>
<tr>
<td>WE4.3</td>
<td>0.0085</td>
</tr>
<tr>
<td>WE4.4</td>
<td>0.0152</td>
</tr>
<tr>
<td>LE5.5</td>
<td>0.1194</td>
</tr>
</tbody>
</table>
NITRITE

Values reported as mg/l.
<table>
<thead>
<tr>
<th>Location</th>
<th>Max</th>
<th>Mean</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>CB5.4</td>
<td>0.0147</td>
<td>0.0041</td>
<td>0.0001</td>
<td>0.2621</td>
<td>0.0210</td>
<td>0.0007</td>
</tr>
<tr>
<td>CB5.5</td>
<td>0.0076</td>
<td>0.0027</td>
<td>0.0001</td>
<td>0.2026</td>
<td>0.0166</td>
<td>0.0005</td>
</tr>
<tr>
<td>CB6.1</td>
<td>0.0076</td>
<td>0.0021</td>
<td>0.0001</td>
<td>0.0273</td>
<td>0.0050</td>
<td>0.0005</td>
</tr>
<tr>
<td>CB6.2</td>
<td>0.0107</td>
<td>0.0023</td>
<td>0.0001</td>
<td>0.0186</td>
<td>0.0041</td>
<td>0.0001</td>
</tr>
<tr>
<td>CB6.3</td>
<td>0.0102</td>
<td>0.0026</td>
<td>0.0003</td>
<td>0.0135</td>
<td>0.0036</td>
<td>0.0001</td>
</tr>
<tr>
<td>CB6.4</td>
<td>0.0037</td>
<td>0.0011</td>
<td>0.0005</td>
<td>0.0094</td>
<td>0.0023</td>
<td>0.0005</td>
</tr>
<tr>
<td>CB7.3</td>
<td>0.0037</td>
<td>0.0009</td>
<td>0.0005</td>
<td>0.0043</td>
<td>0.0011</td>
<td>0.0005</td>
</tr>
<tr>
<td>CB7.4</td>
<td>0.0048</td>
<td>0.0011</td>
<td>0.0005</td>
<td>0.0068</td>
<td>0.0012</td>
<td>0.0005</td>
</tr>
<tr>
<td>CB7.4N</td>
<td>0.0068</td>
<td>0.0011</td>
<td>0.0005</td>
<td>0.0071</td>
<td>0.0011</td>
<td>0.0005</td>
</tr>
<tr>
<td>CB8.1E</td>
<td>0.0040</td>
<td>0.0011</td>
<td>0.0005</td>
<td>0.0054</td>
<td>0.0012</td>
<td>0.0005</td>
</tr>
<tr>
<td>CB8.1I</td>
<td>0.0037</td>
<td>0.0018</td>
<td>0.0005</td>
<td>0.0065</td>
<td>0.0015</td>
<td>0.0005</td>
</tr>
<tr>
<td>EE3.1</td>
<td>0.0052</td>
<td>0.0015</td>
<td>0.0003</td>
<td>0.0071</td>
<td>0.0021</td>
<td>0.0001</td>
</tr>
<tr>
<td>EE3.2</td>
<td>0.0052</td>
<td>0.0022</td>
<td>0.0003</td>
<td>0.0310</td>
<td>0.0046</td>
<td>0.0001</td>
</tr>
<tr>
<td>CB7.1I</td>
<td>0.0162</td>
<td>0.0034</td>
<td>0.0003</td>
<td>0.0151</td>
<td>0.0041</td>
<td>0.0001</td>
</tr>
<tr>
<td>CB7.1I</td>
<td>0.0048</td>
<td>0.0013</td>
<td>0.0001</td>
<td>0.0296</td>
<td>0.0058</td>
<td>0.0001</td>
</tr>
<tr>
<td>CB7.1S</td>
<td>0.0149</td>
<td>0.0025</td>
<td>0.0001</td>
<td>0.0112</td>
<td>0.0036</td>
<td>0.0001</td>
</tr>
<tr>
<td>CB5.4W</td>
<td>0.0088</td>
<td>0.0028</td>
<td>0.0003</td>
<td>0.0076</td>
<td>0.0032</td>
<td>0.0001</td>
</tr>
<tr>
<td>CB7.2</td>
<td>0.0071</td>
<td>0.0020</td>
<td>0.0001</td>
<td>0.0058</td>
<td>0.0024</td>
<td>0.0001</td>
</tr>
<tr>
<td>CB7.2E</td>
<td>0.0035</td>
<td>0.0012</td>
<td>0.0001</td>
<td>0.0043</td>
<td>0.0023</td>
<td>0.0001</td>
</tr>
<tr>
<td>CB7.3E</td>
<td>0.0029</td>
<td>0.0009</td>
<td>0.0005</td>
<td>0.0046</td>
<td>0.0012</td>
<td>0.0005</td>
</tr>
<tr>
<td>LE3.6</td>
<td>0.0074</td>
<td>0.0024</td>
<td>0.0003</td>
<td>0.0066</td>
<td>0.0031</td>
<td>0.0006</td>
</tr>
<tr>
<td>LE3.7</td>
<td>0.0045</td>
<td>0.0013</td>
<td>0.0001</td>
<td>0.0045</td>
<td>0.0017</td>
<td>0.0001</td>
</tr>
<tr>
<td>WE4.1</td>
<td>0.0074</td>
<td>0.0015</td>
<td>0.0003</td>
<td>0.0048</td>
<td>0.0017</td>
<td>0.0001</td>
</tr>
<tr>
<td>WE4.2</td>
<td>0.0143</td>
<td>0.0033</td>
<td>0.0001</td>
<td>0.0143</td>
<td>0.0028</td>
<td>0.0003</td>
</tr>
<tr>
<td>WE4.3</td>
<td>0.0057</td>
<td>0.0014</td>
<td>0.0001</td>
<td>0.0106</td>
<td>0.0013</td>
<td>0.0001</td>
</tr>
<tr>
<td>WE4.4</td>
<td>0.0084</td>
<td>0.0017</td>
<td>0.0003</td>
<td>0.0087</td>
<td>0.0014</td>
<td>0.0001</td>
</tr>
<tr>
<td>LE5.5</td>
<td>0.0553</td>
<td>0.0065</td>
<td>0.0005</td>
<td>0.0091</td>
<td>0.0022</td>
<td>0.0005</td>
</tr>
</tbody>
</table>
DISSOLVED SILICA

Values reported as mg/l.
<table>
<thead>
<tr>
<th></th>
<th>Surface</th>
<th></th>
<th>Bottom</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Max</td>
<td>Mean</td>
<td>Min</td>
<td>Max</td>
<td>Mean</td>
</tr>
<tr>
<td>CB5.4</td>
<td>0.9970</td>
<td>0.3259</td>
<td>0.0065</td>
<td>1.2320</td>
<td>0.5048</td>
</tr>
<tr>
<td>CB5.5</td>
<td>0.9400</td>
<td>0.3312</td>
<td>0.0160</td>
<td>1.4330</td>
<td>0.5021</td>
</tr>
<tr>
<td>CB6.1</td>
<td>0.9410</td>
<td>0.3346</td>
<td>0.0065</td>
<td>1.3700</td>
<td>0.4508</td>
</tr>
<tr>
<td>CB6.2</td>
<td>0.9410</td>
<td>0.2807</td>
<td>0.0230</td>
<td>1.1850</td>
<td>0.3557</td>
</tr>
<tr>
<td>CB6.3</td>
<td>0.0800</td>
<td>0.2982</td>
<td>0.0170</td>
<td>1.0720</td>
<td>0.3379</td>
</tr>
<tr>
<td>CB6.4</td>
<td>0.8750</td>
<td>0.2522</td>
<td>0.0115</td>
<td>1.3170</td>
<td>0.4018</td>
</tr>
<tr>
<td>CB7.3</td>
<td>0.6150</td>
<td>0.2165</td>
<td>0.0115</td>
<td>0.4190</td>
<td>0.1746</td>
</tr>
<tr>
<td>CB7.4</td>
<td>0.5070</td>
<td>0.1776</td>
<td>0.0115</td>
<td>0.4480</td>
<td>0.1357</td>
</tr>
<tr>
<td>CB7.4N</td>
<td>0.4020</td>
<td>0.1221</td>
<td>0.0115</td>
<td>0.4400</td>
<td>0.1085</td>
</tr>
<tr>
<td>CB8.1E</td>
<td>0.7340</td>
<td>0.2129</td>
<td>0.0115</td>
<td>0.4830</td>
<td>0.1933</td>
</tr>
<tr>
<td>CBS. 1</td>
<td>0.8410</td>
<td>0.3143</td>
<td>0.0115</td>
<td>0.8420</td>
<td>0.2469</td>
</tr>
<tr>
<td>EE3.1</td>
<td>1.5880</td>
<td>0.5065</td>
<td>0.0210</td>
<td>1.5500</td>
<td>0.4839</td>
</tr>
<tr>
<td>EE3.2</td>
<td>0.8910</td>
<td>0.2705</td>
<td>0.0240</td>
<td>0.9400</td>
<td>0.3116</td>
</tr>
<tr>
<td>CB7.1N</td>
<td>0.9050</td>
<td>0.2943</td>
<td>0.0170</td>
<td>1.0500</td>
<td>0.3493</td>
</tr>
<tr>
<td>CB7.1</td>
<td>0.8320</td>
<td>0.2536</td>
<td>0.0190</td>
<td>1.7080</td>
<td>0.4634</td>
</tr>
<tr>
<td>CB7.1S</td>
<td>0.9110</td>
<td>0.2808</td>
<td>0.0140</td>
<td>1.2600</td>
<td>0.3586</td>
</tr>
<tr>
<td>CB5.4W</td>
<td>1.2250</td>
<td>0.4057</td>
<td>0.0230</td>
<td>1.2360</td>
<td>0.3873</td>
</tr>
<tr>
<td>CB7.2</td>
<td>0.8920</td>
<td>0.2416</td>
<td>0.0190</td>
<td>0.8400</td>
<td>0.3135</td>
</tr>
<tr>
<td>CB7.2E</td>
<td>0.8560</td>
<td>0.2355</td>
<td>0.0065</td>
<td>0.8960</td>
<td>0.2643</td>
</tr>
<tr>
<td>LE3.3E</td>
<td>0.7160</td>
<td>0.1693</td>
<td>0.0115</td>
<td>0.6940</td>
<td>0.1891</td>
</tr>
<tr>
<td>LE3.6</td>
<td>1.2160</td>
<td>0.3852</td>
<td>0.0065</td>
<td>1.3540</td>
<td>0.3792</td>
</tr>
<tr>
<td>LE3.7</td>
<td>1.2780</td>
<td>0.3778</td>
<td>0.0160</td>
<td>1.3910</td>
<td>0.3960</td>
</tr>
<tr>
<td>WE4.1</td>
<td>1.1140</td>
<td>0.3326</td>
<td>0.0200</td>
<td>1.5280</td>
<td>0.4004</td>
</tr>
<tr>
<td>WE4.2</td>
<td>1.3080</td>
<td>0.4652</td>
<td>0.0190</td>
<td>1.2860</td>
<td>0.4688</td>
</tr>
<tr>
<td>WE4.3</td>
<td>1.3120</td>
<td>0.3806</td>
<td>0.0290</td>
<td>1.5310</td>
<td>0.4257</td>
</tr>
<tr>
<td>WE4.4</td>
<td>0.9450</td>
<td>0.3519</td>
<td>0.0350</td>
<td>0.9730</td>
<td>0.3238</td>
</tr>
<tr>
<td>LE5.4</td>
<td>1.2790</td>
<td>0.6006</td>
<td>0.0330</td>
<td>0.7190</td>
<td>0.3122</td>
</tr>
</tbody>
</table>

Silica
October 1991 - September 1992

Dissolved Silica (mg/l)
DISSOLVED ORGANIC CARBON

Values reported as mg/l.
<table>
<thead>
<tr>
<th></th>
<th>Surface</th>
<th></th>
<th>Bottom</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Max</td>
<td>Mean</td>
<td>Min</td>
<td>Max</td>
</tr>
<tr>
<td>CB5.4</td>
<td>5.080</td>
<td>3.747</td>
<td>2.990</td>
<td>4.000</td>
</tr>
<tr>
<td>CB5.5</td>
<td>3.850</td>
<td>3.376</td>
<td>2.870</td>
<td>3.800</td>
</tr>
<tr>
<td>CB6.2</td>
<td>4.210</td>
<td>3.563</td>
<td>3.070</td>
<td>4.455</td>
</tr>
<tr>
<td>CB6.3</td>
<td>4.110</td>
<td>3.468</td>
<td>2.970</td>
<td>3.940</td>
</tr>
<tr>
<td>CB6.4</td>
<td>2.700</td>
<td>2.356</td>
<td>1.970</td>
<td>2.630</td>
</tr>
<tr>
<td>CB7.3</td>
<td>3.420</td>
<td>2.371</td>
<td>1.600</td>
<td>2.630</td>
</tr>
<tr>
<td>CB7.4</td>
<td>2.750</td>
<td>1.987</td>
<td>1.170</td>
<td>2.800</td>
</tr>
<tr>
<td>CB7.4N</td>
<td>3.150</td>
<td>1.971</td>
<td>1.210</td>
<td>2.240</td>
</tr>
<tr>
<td>CB8.1R</td>
<td>3.000</td>
<td>2.223</td>
<td>1.390</td>
<td>4.250</td>
</tr>
<tr>
<td>CB8.1</td>
<td>3.670</td>
<td>2.667</td>
<td>1.750</td>
<td>3.290</td>
</tr>
<tr>
<td>EE3.1</td>
<td>6.360</td>
<td>4.575</td>
<td>3.430</td>
<td>7.305</td>
</tr>
<tr>
<td>CB7.1N</td>
<td>4.830</td>
<td>3.745</td>
<td>2.840</td>
<td>4.430</td>
</tr>
<tr>
<td>CB7.1S</td>
<td>4.710</td>
<td>3.562</td>
<td>3.030</td>
<td>4.160</td>
</tr>
<tr>
<td>CB5.4W</td>
<td>4.140</td>
<td>3.513</td>
<td>2.730</td>
<td>3.960</td>
</tr>
<tr>
<td>CB5.2</td>
<td>4.760</td>
<td>3.912</td>
<td>2.940</td>
<td>4.890</td>
</tr>
<tr>
<td>CB7.2</td>
<td>4.320</td>
<td>3.366</td>
<td>2.790</td>
<td>3.630</td>
</tr>
<tr>
<td>CB7.2E</td>
<td>4.300</td>
<td>3.283</td>
<td>2.670</td>
<td>4.100</td>
</tr>
<tr>
<td>CB7.3E</td>
<td>2.630</td>
<td>2.149</td>
<td>1.800</td>
<td>3.160</td>
</tr>
<tr>
<td>LE3.7</td>
<td>4.980</td>
<td>3.791</td>
<td>2.890</td>
<td>4.185</td>
</tr>
<tr>
<td>WE4.1</td>
<td>4.770</td>
<td>3.906</td>
<td>3.015</td>
<td>4.830</td>
</tr>
<tr>
<td>WE4.2</td>
<td>9.610</td>
<td>4.012</td>
<td>2.780</td>
<td>4.730</td>
</tr>
<tr>
<td>WE4.3</td>
<td>4.420</td>
<td>3.798</td>
<td>3.100</td>
<td>4.990</td>
</tr>
<tr>
<td>WE4.4</td>
<td>5.140</td>
<td>3.909</td>
<td>3.260</td>
<td>5.170</td>
</tr>
<tr>
<td>LE5.5</td>
<td>5.170</td>
<td>3.160</td>
<td>2.260</td>
<td>6.140</td>
</tr>
</tbody>
</table>
PARTICULATE CARBON

Values reported as mg/l.
<table>
<thead>
<tr>
<th>Station</th>
<th>Surface Max</th>
<th>Surface Mean</th>
<th>Surface Min</th>
<th>Bottom Max</th>
<th>Bottom Mean</th>
<th>Bottom Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>CB5.4</td>
<td>2.2030</td>
<td>0.9604</td>
<td>0.3800</td>
<td>4.1710</td>
<td>0.9291</td>
<td>0.3140</td>
</tr>
<tr>
<td>CB5.5</td>
<td>2.3240</td>
<td>1.1291</td>
<td>0.4740</td>
<td>1.8320</td>
<td>0.7521</td>
<td>0.3220</td>
</tr>
<tr>
<td>CB6.1</td>
<td>2.1040</td>
<td>1.0253</td>
<td>0.4620</td>
<td>2.9480</td>
<td>0.8102</td>
<td>0.4210</td>
</tr>
<tr>
<td>CB6.2</td>
<td>1.8840</td>
<td>1.0676</td>
<td>0.5310</td>
<td>2.1870</td>
<td>0.9653</td>
<td>0.5340</td>
</tr>
<tr>
<td>CB6.3</td>
<td>1.9700</td>
<td>1.0507</td>
<td>0.4950</td>
<td>1.5650</td>
<td>0.9578</td>
<td>0.5750</td>
</tr>
<tr>
<td>CB6.4</td>
<td>5.4900</td>
<td>1.3129</td>
<td>0.5800</td>
<td>1.1900</td>
<td>0.8317</td>
<td>0.5400</td>
</tr>
<tr>
<td>CB7.3</td>
<td>2.6400</td>
<td>1.0355</td>
<td>0.5200</td>
<td>1.6100</td>
<td>0.8637</td>
<td>0.5200</td>
</tr>
<tr>
<td>CB7.4</td>
<td>1.8100</td>
<td>0.7411</td>
<td>0.4200</td>
<td>3.2300</td>
<td>0.9275</td>
<td>0.5700</td>
</tr>
<tr>
<td>CB7.4N</td>
<td>1.5300</td>
<td>0.7082</td>
<td>0.4900</td>
<td>4.7500</td>
<td>1.2094</td>
<td>0.5800</td>
</tr>
<tr>
<td>CB8.1E</td>
<td>1.8800</td>
<td>0.9206</td>
<td>0.5300</td>
<td>1.8700</td>
<td>0.9860</td>
<td>0.4600</td>
</tr>
<tr>
<td>CB8.1</td>
<td>1.8800</td>
<td>1.0765</td>
<td>0.6400</td>
<td>1.9400</td>
<td>1.0673</td>
<td>0.5000</td>
</tr>
<tr>
<td>EE3.1</td>
<td>3.3360</td>
<td>1.4148</td>
<td>0.5630</td>
<td>2.6420</td>
<td>1.3470</td>
<td>0.6000</td>
</tr>
<tr>
<td>EE3.2</td>
<td>2.2490</td>
<td>1.1118</td>
<td>0.6420</td>
<td>2.9610</td>
<td>1.4252</td>
<td>0.7690</td>
</tr>
<tr>
<td>CB7.1N</td>
<td>1.9310</td>
<td>0.9260</td>
<td>0.5690</td>
<td>5.5600</td>
<td>1.4947</td>
<td>0.7780</td>
</tr>
<tr>
<td>CB7.1</td>
<td>1.9510</td>
<td>0.9991</td>
<td>0.5860</td>
<td>1.8720</td>
<td>0.9570</td>
<td>0.2850</td>
</tr>
<tr>
<td>CB7.1E</td>
<td>2.2680</td>
<td>0.9988</td>
<td>0.4720</td>
<td>1.2070</td>
<td>0.7817</td>
<td>0.4090</td>
</tr>
<tr>
<td>CB5.4W</td>
<td>2.3210</td>
<td>1.1363</td>
<td>0.5100</td>
<td>2.2460</td>
<td>1.1603</td>
<td>0.4520</td>
</tr>
<tr>
<td>CB7.2</td>
<td>2.0610</td>
<td>0.9546</td>
<td>0.4890</td>
<td>2.4690</td>
<td>1.0112</td>
<td>0.4410</td>
</tr>
<tr>
<td>CB7.2E</td>
<td>2.0580</td>
<td>1.0406</td>
<td>0.5580</td>
<td>1.3360</td>
<td>0.8337</td>
<td>0.3780</td>
</tr>
<tr>
<td>CB7.3E</td>
<td>1.7500</td>
<td>0.8512</td>
<td>0.5000</td>
<td>1.4100</td>
<td>0.9450</td>
<td>0.6200</td>
</tr>
<tr>
<td>LE3.6</td>
<td>1.6520</td>
<td>0.9784</td>
<td>0.4240</td>
<td>1.7880</td>
<td>1.0333</td>
<td>0.5750</td>
</tr>
<tr>
<td>LE3.7</td>
<td>1.9420</td>
<td>1.0303</td>
<td>0.4440</td>
<td>1.4220</td>
<td>0.9758</td>
<td>0.4600</td>
</tr>
<tr>
<td>WE4.1</td>
<td>1.8770</td>
<td>1.0404</td>
<td>0.4770</td>
<td>1.9900</td>
<td>1.2111</td>
<td>0.7900</td>
</tr>
<tr>
<td>WE4.2</td>
<td>1.4510</td>
<td>0.8563</td>
<td>0.5490</td>
<td>1.3940</td>
<td>0.9263</td>
<td>0.4000</td>
</tr>
<tr>
<td>WE4.3</td>
<td>1.9130</td>
<td>0.9865</td>
<td>0.5930</td>
<td>1.8960</td>
<td>1.0873</td>
<td>0.4950</td>
</tr>
<tr>
<td>WE4.4</td>
<td>1.7270</td>
<td>1.0113</td>
<td>0.4250</td>
<td>1.6340</td>
<td>1.0744</td>
<td>0.5170</td>
</tr>
<tr>
<td>LE5.5</td>
<td>1.9700</td>
<td>1.1471</td>
<td>0.5600</td>
<td>2.0000</td>
<td>1.2353</td>
<td>0.6200</td>
</tr>
</tbody>
</table>
TOTAL SUSPENDED SOLIDS

Values reported as mg/l.
## Total Suspended Solids
October 1991 - September 1992

<table>
<thead>
<tr>
<th></th>
<th>Surface</th>
<th>Bottom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Max</td>
<td>Mean</td>
</tr>
<tr>
<td>CB5.1</td>
<td>29.20</td>
<td>10.88</td>
</tr>
<tr>
<td>CB5.3</td>
<td>36.00</td>
<td>10.92</td>
</tr>
<tr>
<td>CB6.1</td>
<td>31.80</td>
<td>13.46</td>
</tr>
<tr>
<td>CB6.2</td>
<td>32.20</td>
<td>12.65</td>
</tr>
<tr>
<td>CB6.3</td>
<td>33.00</td>
<td>14.88</td>
</tr>
<tr>
<td>CB6.4</td>
<td>15.40</td>
<td>8.70</td>
</tr>
<tr>
<td>CB7.3</td>
<td>21.20</td>
<td>9.29</td>
</tr>
<tr>
<td>CB7.4</td>
<td>67.00</td>
<td>10.76</td>
</tr>
<tr>
<td>CB7.1N</td>
<td>23.40</td>
<td>9.98</td>
</tr>
<tr>
<td>CB8.1E</td>
<td>17.80</td>
<td>8.72</td>
</tr>
<tr>
<td>CB8.1I</td>
<td>21.50</td>
<td>9.77</td>
</tr>
<tr>
<td>EE3.1</td>
<td>40.20</td>
<td>21.57</td>
</tr>
<tr>
<td>EE3.2</td>
<td>44.60</td>
<td>17.58</td>
</tr>
<tr>
<td>CB7.1N</td>
<td>32.60</td>
<td>14.92</td>
</tr>
<tr>
<td>CB7.1I</td>
<td>33.20</td>
<td>13.62</td>
</tr>
<tr>
<td>CB7.1S</td>
<td>35.80</td>
<td>15.70</td>
</tr>
<tr>
<td>CB5.1W</td>
<td>29.40</td>
<td>14.27</td>
</tr>
<tr>
<td>CB7.2</td>
<td>37.00</td>
<td>15.10</td>
</tr>
<tr>
<td>CB7.2E</td>
<td>44.40</td>
<td>17.61</td>
</tr>
<tr>
<td>CB7.3E</td>
<td>12.30</td>
<td>7.69</td>
</tr>
<tr>
<td>LE3.5</td>
<td>29.80</td>
<td>13.83</td>
</tr>
<tr>
<td>LE3.7</td>
<td>28.60</td>
<td>12.98</td>
</tr>
<tr>
<td>WE4.1</td>
<td>39.40</td>
<td>13.47</td>
</tr>
<tr>
<td>WE4.2</td>
<td>48.40</td>
<td>16.16</td>
</tr>
<tr>
<td>WE4.3</td>
<td>41.00</td>
<td>16.51</td>
</tr>
<tr>
<td>WE4.1</td>
<td>49.60</td>
<td>22.56</td>
</tr>
<tr>
<td>LE5.1</td>
<td>20.00</td>
<td>11.86</td>
</tr>
</tbody>
</table>

138
<table>
<thead>
<tr>
<th>Location</th>
<th>Max</th>
<th>Mean</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Min</th>
</tr>
</thead>
<tbody>
<tr>
<td>CB5.4</td>
<td>8.69</td>
<td>8.28</td>
<td>7.50</td>
<td>8.21</td>
<td>7.95</td>
<td>7.51</td>
</tr>
<tr>
<td>CB5.5</td>
<td>8.62</td>
<td>8.21</td>
<td>7.53</td>
<td>8.38</td>
<td>8.02</td>
<td>7.60</td>
</tr>
<tr>
<td>CB6.1</td>
<td>8.77</td>
<td>8.28</td>
<td>8.10</td>
<td>8.45</td>
<td>8.07</td>
<td>7.66</td>
</tr>
<tr>
<td>CB6.2</td>
<td>8.90</td>
<td>8.30</td>
<td>7.97</td>
<td>8.86</td>
<td>8.12</td>
<td>7.94</td>
</tr>
<tr>
<td>CB6.3</td>
<td>8.57</td>
<td>8.19</td>
<td>7.91</td>
<td>8.57</td>
<td>8.11</td>
<td>7.90</td>
</tr>
<tr>
<td>CB6.4</td>
<td>8.65</td>
<td>8.19</td>
<td>7.94</td>
<td>8.52</td>
<td>8.01</td>
<td>7.69</td>
</tr>
<tr>
<td>CB7.3</td>
<td>8.77</td>
<td>8.14</td>
<td>7.61</td>
<td>8.14</td>
<td>7.96</td>
<td>7.75</td>
</tr>
<tr>
<td>CB7.4</td>
<td>8.22</td>
<td>8.01</td>
<td>7.55</td>
<td>8.10</td>
<td>7.94</td>
<td>7.77</td>
</tr>
<tr>
<td>CB7.4N</td>
<td>8.33</td>
<td>8.03</td>
<td>7.46</td>
<td>8.21</td>
<td>8.01</td>
<td>7.78</td>
</tr>
<tr>
<td>CB8.1E</td>
<td>8.43</td>
<td>8.05</td>
<td>7.82</td>
<td>8.04</td>
<td>7.90</td>
<td>7.77</td>
</tr>
<tr>
<td>CB8.1I</td>
<td>8.35</td>
<td>8.04</td>
<td>7.70</td>
<td>8.27</td>
<td>7.93</td>
<td>7.73</td>
</tr>
<tr>
<td>EE3.1</td>
<td>8.99</td>
<td>8.15</td>
<td>7.61</td>
<td>8.34</td>
<td>8.09</td>
<td>7.92</td>
</tr>
<tr>
<td>EE3.2</td>
<td>8.31</td>
<td>8.02</td>
<td>7.43</td>
<td>8.28</td>
<td>8.01</td>
<td>7.33</td>
</tr>
<tr>
<td>CB7.1N</td>
<td>8.53</td>
<td>8.12</td>
<td>7.28</td>
<td>8.65</td>
<td>8.10</td>
<td>7.83</td>
</tr>
<tr>
<td>CB7.1I</td>
<td>8.44</td>
<td>8.22</td>
<td>7.99</td>
<td>8.29</td>
<td>8.06</td>
<td>7.68</td>
</tr>
<tr>
<td>CB7.1S</td>
<td>8.62</td>
<td>8.27</td>
<td>8.02</td>
<td>8.27</td>
<td>8.08</td>
<td>7.82</td>
</tr>
<tr>
<td>CB5.4W</td>
<td>8.49</td>
<td>8.24</td>
<td>7.44</td>
<td>8.62</td>
<td>8.25</td>
<td>7.62</td>
</tr>
<tr>
<td>CB7.2</td>
<td>8.70</td>
<td>8.27</td>
<td>8.07</td>
<td>8.31</td>
<td>8.09</td>
<td>7.79</td>
</tr>
<tr>
<td>CB7.2E</td>
<td>8.75</td>
<td>8.29</td>
<td>8.05</td>
<td>8.33</td>
<td>8.17</td>
<td>8.01</td>
</tr>
<tr>
<td>CB7.3E</td>
<td>8.42</td>
<td>8.11</td>
<td>7.90</td>
<td>8.12</td>
<td>7.98</td>
<td>7.71</td>
</tr>
<tr>
<td>LE3.6</td>
<td>8.69</td>
<td>8.26</td>
<td>8.09</td>
<td>8.61</td>
<td>8.20</td>
<td>7.83</td>
</tr>
<tr>
<td>LE3.7</td>
<td>8.74</td>
<td>8.23</td>
<td>7.36</td>
<td>8.70</td>
<td>8.20</td>
<td>7.84</td>
</tr>
<tr>
<td>WE4.1</td>
<td>8.44</td>
<td>8.14</td>
<td>7.81</td>
<td>8.63</td>
<td>8.18</td>
<td>7.96</td>
</tr>
<tr>
<td>WE4.2</td>
<td>8.33</td>
<td>7.80</td>
<td>6.91</td>
<td>8.16</td>
<td>7.92</td>
<td>7.49</td>
</tr>
<tr>
<td>WE4.3</td>
<td>8.84</td>
<td>8.17</td>
<td>7.80</td>
<td>8.83</td>
<td>8.18</td>
<td>7.73</td>
</tr>
<tr>
<td>WE4.4</td>
<td>8.65</td>
<td>8.12</td>
<td>7.81</td>
<td>8.70</td>
<td>8.13</td>
<td>7.73</td>
</tr>
<tr>
<td>LE5.5</td>
<td>8.44</td>
<td>8.04</td>
<td>7.67</td>
<td>8.12</td>
<td>7.91</td>
<td>7.74</td>
</tr>
</tbody>
</table>