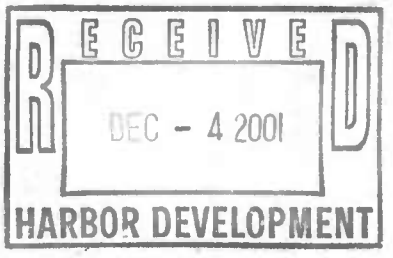
MARYLAND
ENVIRONMENTAL
SERVICE

Parris N. Glendening
Governor

James W. Peck
Director

November 30, 2001



Mr. George Harman
Program Manager
Environmental Planning and Analysis Program
Technical & Regulatory Services Administration
Maryland Department of the Environment
2500 Broening Highway
Baltimore, Maryland 21224

Subject: Interim Quarterly Discharge Monitoring Report
August 1, 2001 through October 31, 2001

Regarding: Poplar Island Environmental Restoration Project (PIERP)
Wetlands License No. 96-WL-0728
Water Quality Certification RAMS No. 199660931

Dear Mr. Harman:

Please find attached the Interim Quarterly Discharge Monitoring Report for the above referenced facility. This report is submitted by the Maryland Environmental Service (MES), on behalf of the project sponsors, the U.S. Army Corps of Engineers, Baltimore District and the Maryland Port Administration, in accordance with the requirements of the Poplar Island Environmental Restoration Project Exterior and Operations Monitoring Plans 2000/2001& 2001/2002. The data submitted covers the monitoring period from August 1, 2001 through October 31, 2001. In addition, the report includes the reformatted charts from the data collected from April 1, 2001 through July 31, 2001.

The report is titled an interim report as the data is not complete for the months of September and October. A lag of at least 6-8 weeks is occurring in obtaining nutrient data from the Chesapeake Biological Laboratories. When the remaining data is received, a final report will be submitted.

Submission of an interim report also gives the Maryland Department of the Environment an opportunity to review the format and content of the report. Please forward comments to myself or to Doug Taylor of my staff for incorporation. A CD-ROM with a series of Excel data files is also enclosed with this report submission, as electronic data transmission was also a requirement of the monitoring plan. If another data format is needed, please let us know.

Should you have any questions concerning this report, please contact me at (410) 974-7261.

Sincerely,

Cecelia Donovan, Chief
Environmental Science & Monitoring
Environmental Dredging

Attachments
cc: Frank Hamons (MPA)
Dave Bibo (MPA)
Nat Brown (MPA)
Scott Johnson (CENAB)
Mark Mendelson (CENAB)
Peggy Derrick, (EA)

INTERIM

POPLAR ISLAND ENVIRONMENTAL RESTORATION PROJECT

Quarterly Monitoring Report
for
August 1, 2001 through October 31, 2001

November 30, 2001

Prepared by:
Maryland Environmental Service

MARYLAND
ENVIRONMENTAL
SERVICE

Interim
Poplar Island Environmental Restoration Project
Quarterly Discharge Monitoring Report
For Phase I Operations
August 1, 2001 through October 31, 2001

Executive Summary

This interim report provides information on the monitoring efforts conducted during the second quarter of operations and discharge monitoring at the Poplar Island Environmental Restoration Project (PIERP). This report is submitted to the Maryland Department of the Environment (MDE) on behalf of the project sponsors, the Baltimore District of the Corps of Engineers (CENAB), and the Maryland Port Administration (MPA) by the Maryland Environment Service (MES). This report is structured to contain information on operations, discharge monitoring, and habitat and exterior monitoring. The report also includes graphs and tables based upon data collected for the first quarterly report

Effluent monitoring to date has shown generally good effluent quality, with discharges primarily able to meet the guidelines established by MDE. There was one instance of Total Suspended Solids (TSS) concentrations exceeding the guidelines, possibly due to a sampling error. Due to concerns about ammonia levels, nutrient analytical frequency will be conducted at more frequent intervals during the warmer months. Elevated pH levels also occurred during the warmer months. The elevated pH was due to large concentrations of algae in the warm, nutrient rich, ponded water. Additional studies are planned in the Spring of 2002 to try and address this issue. Toxic levels of *Microcystis* algae were found in water from Upland Cell 2. Plans have been coordinated with the Maryland Department of Natural Resources (DNR) to monitor *Microcystis* and other algae concentrations in the future.

Dredged material placement has occurred to three cells within PIERP, Wetland Cells 1 and 3 and Upland Cell 2. Dredged material placed at PIERP has originated from the Brewerton Eastern Extension Widening, the Craighill Channel and the Tolchester S-Turn Straightening project.

Habitat and exterior monitoring have found evidence of enhanced fisheries utilization of the rock dikes and created reef structures in particular. This has been supported by findings of abundant epibenthic organisms on the dikes and rock reefs. Sediment quality did not appear to be changed after constructions of Phase I. Enhanced growth of submerged aquatic vegetation (SAV) in Poplar Harbor may have been underway, with three species of SAV found in Poplar Harbor, but the growth was not as significant as expected in the future. Bird utilization of Poplar was enhanced, with nesting of least tern, common tern and osprey in greater numbers than prior to habitat restoration. Continued utilization by double crested cormorants, great blue heron and bald eagle was observed. Some bird mortality occurred in the Fall of 2001, avian botulism is a suspected cause.

Investigation of the event is continuing and management plans will be developed with resource agencies to limit future events, if possible

Data is presented in the report that follows, with five appendices. Graphical representation of data has been prepared for Appendix 5, as requested by MDE.

Overall, PIERP has operated in a manner consistent with plans and specifications, the discharge quality is good, and habitat creation goals are already being realized at the facility.

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1.0 Operations

The table below reflects material inflowed to date at PIERP, and remaining expected volumes for the 2001/2002 inflow season. A total of approximately 1,814,000 cubic yards of dredged material was hydraulically unloaded into Phase I of PIERP during the monitoring period. The placement cells included Wetland Cell 1 and Upland Cell 2. No dredged material was placed in Wetland Cell 3 or 3D during this period. Dredged material placed in the facility during this quarter originated from the Brewerton Extension Widening new work project, the Tolchester Channel new work and Craighill Channel maintenance. There were no crust management operations during the reporting period. The primary discharge locations during the quarter were Spillway 1 (in Cell 2) and Spillways 2 and 4 (in Cell 1). There was periodic discharge from Spillway 6 (in Cell 3) and no discharge from Spillway 5 (in Cell 3) during the monitoring period. A site map, Figure 1, depicts the spillway locations and containment cells at the facility. Figure 2 is an aerial view of Phase 1 and Phase 2 showing the progress on this project as of October 2001.

Table 1.

Material Inflowed to Date

Channel	Season	Volume
Brewerton Widening	2000/2001	3,929,800
Craighill Channel	2001/2002	287,300
Tolchester Straightening	2001/2002	769,580
	Total	4,986,680

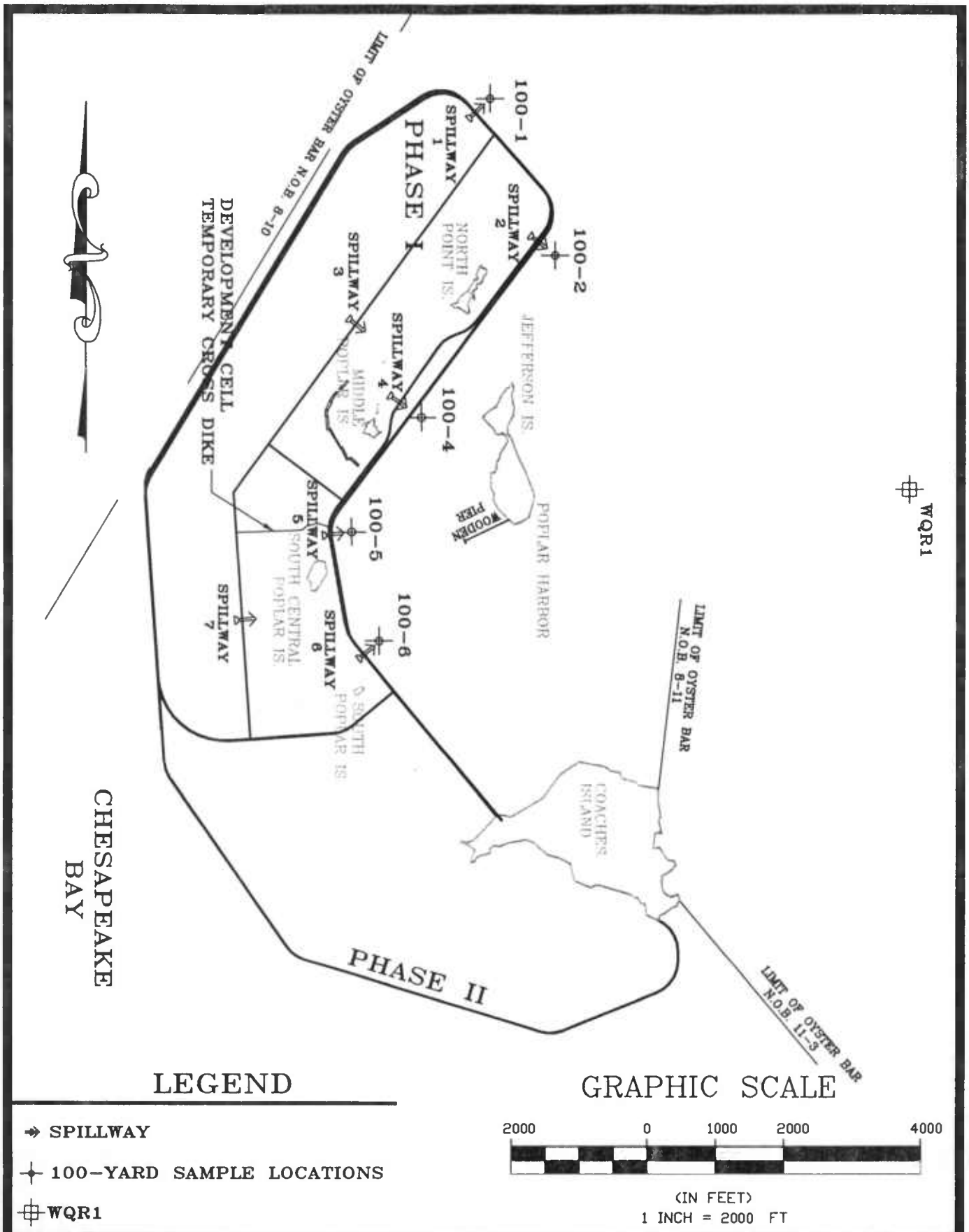
The telescoping weirs are being installed at Spillway 1 and are expected to become operational during the summer of 2002. As requested by Maryland Department of the Environment (MDE), these weirs will be monitored separately, with daily samples and flow measurements collected from each structure.

Phase II construction activities continued at PIERP. Phase II will complete construction of the 1140-acre facility, adding two more wetland cells and one more upland cell to the project. Phase II construction should be completed by Spring of 2002.

2.0 Discharge Monitoring Information

2.1 Monitoring Plans

Monitoring from August 1 to September 22, 2001 was performed according to the guidelines and specifications outlined in the Discharge Monitoring Plan for Phase I Operations of the PIERP Monitoring Plan 2000/2001. Daily, weekly, and monthly effluent sampling was completed at the spillways, 100-yard sampling locations, and at the background water quality reference point in Poplar Island Narrows (WQR1) for the required parameters.



LEGEND

- SPILLWAY
- 100-YARD SAMPLE LOCATIONS
- WQR1

GRAPHIC SCALE

2000 0 1000 2000 4000

(IN FEET)
1 INCH = 2000 FT

MARYLAND ENVIRONMENTAL SERVICE

MARYLAND PORT ADMINISTRATION

POPLAR ISLAND ENVIROMENTAL RESTORATION PROJECT MONITORING STATIONS FIGURE 1

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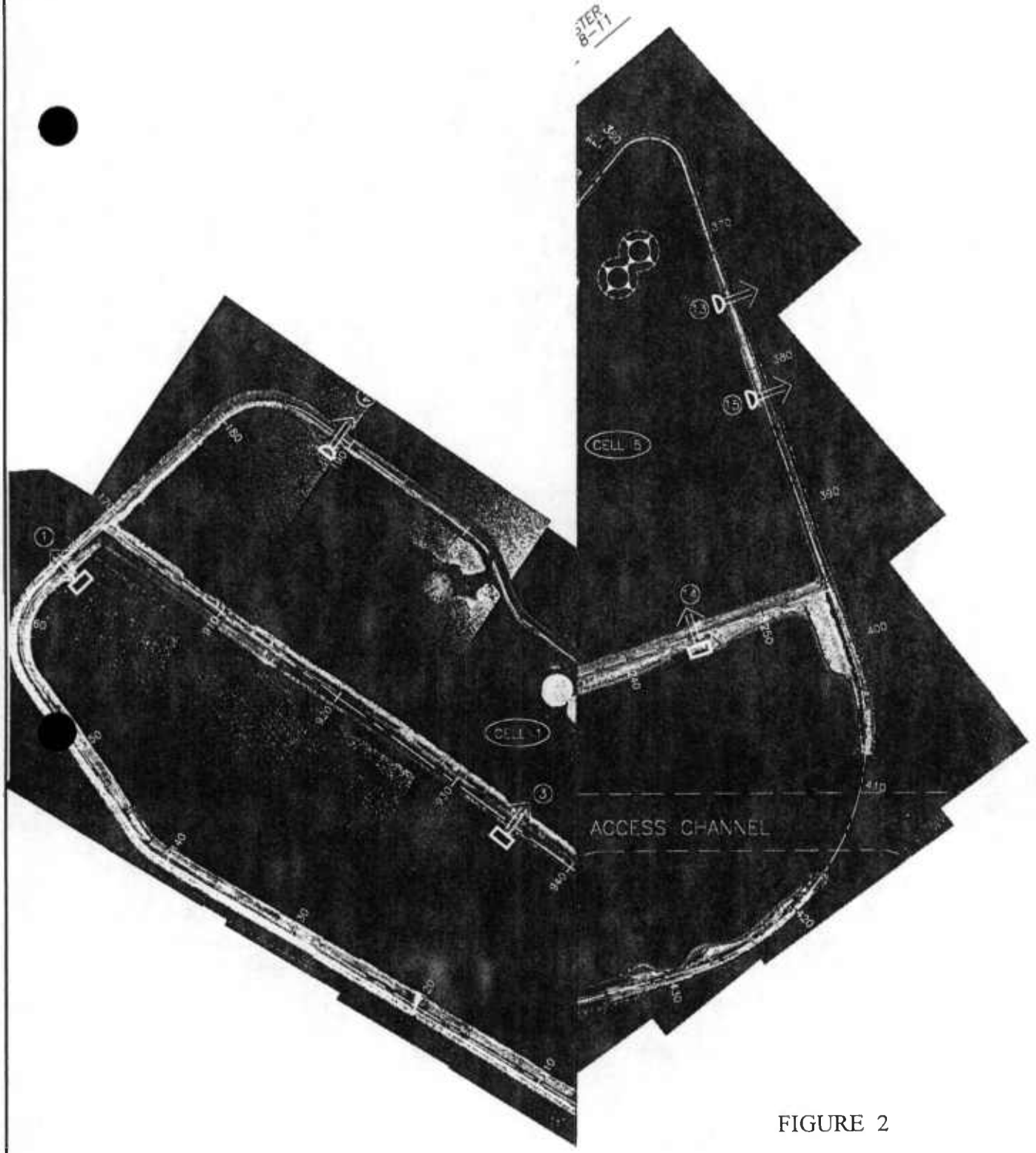


FIGURE 2

PHASE I AERIAL JULY 2001
PHASE II AERIAL OCT 2001

CELL SURFACE AREAS

CELL NUMBER	TYPE OF CELL	APPROXIMATE SURFACE AREA (ACRES)
1	WETLAND	169
2	UPLAND	326
3	WETLAND	104
3D	WETLAND	31
4	WETLAND	97
5	WETLAND	156
6	UPLAND	243
TOTAL ACRES		1142

1000

REV	DATE	DESCRIPTION	BY

MARYLAND PORT ADMINISTRATION
BALTIMORE, MARYLAND

POPLAR ISLAND

AERIAL PROGRESS

DATE: NOV 2001 SCALE: 1"=1000'	CONTRACT No.	SHEET No. 01

GAHAGAN & BRYANT ASSOCIATES, INC.

On September 20, 2001, MES met with the MDE and the project sponsors, MPA and CENAB, prior to the 2001/2002 inflow season. At that meeting, the first quarterly monitoring report was reviewed and the draft monitoring plan for 2001/2002 operations and monitoring was discussed and reviewed. A 2001/2002 monitoring plan was subsequently submitted and approved by MDE. During the second inflow period, which began on September 23, 2001 to the end of the reporting period, October 31, 2001, monitoring was performed according to the guidelines and specifications outlined in the Discharge Monitoring Plan for Phase I Operation of the PIERP Phase I Exterior and Operations Monitoring Plan for 2001/2002. Daily, weekly TSS, bi-weekly and quarterly effluent sampling was completed at the spillways, 100-yard sampling locations, and at WQR1 for the required parameters.

2.2 Analytical Laboratories

Turbidity, pH, salinity, conductivity, and dissolved oxygen samples were analyzed at the spillways, 100-yard sample locations, and reference station WQR1 by the MES staff on-site at Poplar Island. Chesapeake Biological Laboratory (CBL) of the University of Maryland Center for Environmental Science at Solomons, Maryland analyzed weekly, bi-weekly, monthly, and quarterly nutrient samples. Monthly and quarterly metals and priority pollutant organics and daily Total Suspended Solids (TSS) were analyzed by Atlantic Coast Laboratories, Inc. of Newark, Delaware (ACL). In order to expedite sample analysis and meet applicable holding times for some samples, MES personnel at Hart-Miller Island also analyzed some TSS samples, utilizing EPA Method 160.2. Samples collected for Inland Testing Manual (ITM) analysis were analyzed by Severn Trent Laboratories of Sparks, Maryland.

2.3 Data Presentation – Appendices 1-5

Sampling data is attached in Appendices 1-3. Appendix 1 summarizes the field, nutrient and metal data from each sample location. Appendix 2 details each daily, weekly, bi-weekly, monthly and quarterly sample collected for field, nutrient and metal analysis. Appendix 3 includes the priority pollutant organic data for each sample location. The parameter list and detection limits utilized by the contract laboratories to analyze the samples are presented in Appendix 4. Graphs have been prepared for the field parameters, nutrients, and select priority pollutant metals and are presented in Appendix 5.

2.4 Additional Future Monitoring

As was reported in the last quarterly report, phytoplankton and zooplankton growth in the ponded water contributed to turbidity and TSS levels at the facility. At MDE's request, MES will be performing additional monitoring and studies beginning in the spring of 2002 to gather additional information on this influence of biota to effluent TSS, pH, and turbidity. A 30-day study will be conducted on the effluent from the PIERP's spillways to determine the proportion of solids in the discharge that are biological in origin. This

information will be forwarded to MDE with the first quarterly report generated after the data is collected.

Due to concerns about ammonia levels, nutrient analytical frequency will be conducted at weekly intervals during the warmer months, beginning in the Spring of 2002. Frequency will be bi-weekly for the period September 23 to March 31. This will enable more complete trend analysis during the warmer months. Ammonia treatability options are also being reviewed by MES personnel at this time, as was discussed during the October 25, 2001 meeting of MDE, MES, CENAB and MPA.

2.5 Water Quality Standards

An effluent standard of 800 mg/l daily maximum TSS and 400 mg/l monthly average TSS was applied at the point of discharge for the spillways. This discharge limit was given by MDE for PIERP Wetland License #96-0728.

Wetlands License #96-0728 also describes turbidity standards for the project. These standards are based on Part 2 of the Code of Maryland Regulations, Title 26, Subtitle 8, Chapter 2, Section 03-3. This document states "*turbidity in the surface water resulting from any discharge may not exceed 150 units at any time or 50 units as a monthly average. Units shall be measured in Nephelometer Turbidity Units*". Although these limits were designed for post-discharge surface water conditions, they were targeted as operational goals directly at the point of discharge to enable a review of data for use in assessing future monitoring requirements. Turbidity is also measured at the 100-yard points off of each spillway, and at the reference point, and the standards are correlated to these measurements also.

The same section of the Maryland Code of Regulations listed above also includes language stating that "*normal pH values may not be less than 6.5 or greater than 8.5* [Units]". These values have been targeted at the point of discharge as operational goals at PIERP. As directed by MDE, pH plume monitoring was not performed this monitoring period. Additional pH plume monitoring will be performed in the Spring of 2002, as necessary, if high pH conditions develop.

Throughout this report, the effluent limits listed above will be referred to as applicable Water Quality Standards.

2.6 Final Report

The analytical turnaround time for nutrient data from CBL has been approximately 6 to 7 weeks. As a result, some of the discharge monitoring data spreadsheets included in this report for the month of October 2001, reflect an "AD" under the analytical result column. As documented in the spreadsheets, this designation stands for "Awaiting Data". MES is also currently awaiting the priority pollutant sampling results for the month of October from ACL. All outstanding data will be submitted in a final report when it is received. MES has

contacted both ACL and CBL and requested receipt of all analytical results as soon as possible, taking into consideration both operational and quality assurance constraints.

2.7 ITM Sampling

In accordance with the Monitoring Plan for the project, the ITM sampling was completed on August 7, 2001. During this event, samples were collected at Spillway 1, the corresponding 100–yard sample location in the Bay, and at reference site WQR1. Analysis was performed by Severn Trent Laboratories, Inc., of Sparks, Maryland. Some of this data has been included in the monthly analytical data for August 2001. The rest of the ITM data will be included and summarized in the PIERP Annual Report.

2.8 Crust Management Monitoring Plan

At present, crust management activities have been delayed due to the need to extend inflow into Upland Cell 2. The extent of crust management operations following this inflow cycle has not been determined. A Crust Management Operations Monitoring Plan will be drafted by MES, as specified in the PIERP Discharge Monitoring Plan for Phase I Operations, 2001-2002. The draft plan will be submitted to MDE in March of 2002 for review and approval when specific details of the next dredging cycle become known and the extent of crust management needs are assessed.

2.9 Discharge Monitoring By Month – Review of Findings

2.9.1 August

Discharge occurred at Spillway 1 in Upland Cell 2 and Spillway 6 in Wetland Cell 3, as inflow continued from the Brewerton Extension Project. Spillway 1 was the primary discharge location, as dredged material was inflowed into Cell 2. Spillway 6 was used periodically, depending on tidal and pH conditions, to discharge effluent remaining in Cell 3. There was no discharge from Spillways 2, 4, and 5.

While effluent pH from Spillways 1 and 6 exceeded the applicable Water Quality Standards of 8.5 units during the month of August on several occasions, as directed by MPA in accordance with MDE guidance, there were no discharges of effluent with a pH above 9.0 units. As has been stated in the past, it is thought that the development of algae blooms at the facility during the reporting period led to elevated pH readings. While this occurs to some degree in most areas of the Chesapeake Bay in warmer months, the high pH is exacerbated in dredged material projects by shallow pools of warm water combined with nutrients contained in the dredged material. A pH plume monitoring study was completed by MES during the first quarter of monitoring, the results of which were previously submitted to the MDE for review. The monthly average pH levels at Spillways 1 and 6 were 8.54 and 8.81 units, respectively. The turbidity levels at the spillways were within applicable Water Quality Standards during August. The monthly average turbidity discharged at Spillway 1 was 18 NTU and 43 NTU at Spillway 6.

Effluent dissolved oxygen (DO) levels during the month averaged 7.77 mg/l at Spillway 1. As with pH, the developments of algae blooms at the facility during the reporting period led to periodic high DO readings, particularity at Spillway 1, as a byproduct of photosynthesis. On 8/7/01 and 8/8/01 at Spillway 1, the DO readings were greater than 20.00 mg/l and 14.00 mg/l, respectively. DO levels tended to fluctuate, depending on the time of sampling, with lower readings occurring at night or early morning, as DO is used up during respiration. DO levels at Spillway 6 averaged 6.68 mg/l.

DO levels averaged about 6.45 mg/l at WQR1 and 5.91 mg/l at the 100-yard station. Turbidities at the reference and 100 yard stations remained less than 5 NTU. The pH at the 100 yd and reference stations remained within applicable Water Quality Standards, averaging about 8.0 units. TSS levels at both locations averaged about 10 mg/l.

Total suspended solids concentrations at Spillway 1 averaged 32 mg/l in August 2001, with a maximum of 70 mg/l. Total suspended solids concentrations at Spillway 6 averaged 67 mg/l, with a maximum of 91 mg/l.

2.9.2 September

Discharge during September again occurred only from Spillways 1 and 6. Spillway 1 was the primary discharge point, with discharge occurring intermittently from Spillway 6, due to high tides, high pH and other factors. There was no discharge from Spillways 2, 4, and 5 during the month of September.

As in August, the pH levels in the effluent were frequently above applicable Water Quality Standards of 8.5 units at both spillways during September, but there was no discharge of effluent with a pH above 9.0 units. The effluent pH averaged 8.60 units at Spillway 1 and 8.94 at Spillway 6. Monthly average turbidity at Spillway 1 was 20 NTU. Due to the smaller pond volume, the monthly average turbidity discharged at Spillway 6 was 82 NTU, with a maximum of 148 NTU. This was above the targeted operational goal of 50 NTU monthly average. It should also be noted that Spillway 6 was opened four times during September and high turbidities on two of these discharges led to the high monthly average. These turbidities, although elevated, were both below the targeted daily maximum standard of 150 NTU.

Turbidities at WQR1 and the 100-yard stations averaged less than 10 NTU. The pH at the 100-yard station for Spillway 1 averaged 7.84 units, while the pH at reference point WQR1 exceeded Water Quality Standard of 8.5 units on 9/12/01, when the pH was 8.90 units. The average pH at WQR1 was 8.11. As was mentioned before, this is not uncommon in the Chesapeake Bay during the summer. DO levels at the 100-yard and reference station averaged 7.27 and 7.29 mg/l respectively, during the month of September.

Total suspended solids concentrations at Spillway 1 averaged 47 mg/l in September 2001, with a maximum of 69 mg/l. Total suspended solids concentrations at Spillway 6 during September, averaging 191 mg/l, with a maximum of 386 mg/l. Although these levels

were slightly elevated, both the average and the daily maximum limits (400 mg/l and 800 mg/l, respectively) were not exceeded. TSS at WQR1 and the 100-yard stations remained low, averaging 12 NTU.

Effluent DO levels were, for the most part, relatively high during this time period. The average DO concentrations at Spillways 1 and 6 were 10.86 mg/l and 8.64 mg/l, respectively. As previously mentioned, high DO levels are often a byproduct of photosynthesis during algae blooms. Lower DO levels were also experienced during the month of September. As was the case in August, these low DO readings were taken at night or early morning, when DO was being consumed by algae and other organisms in the effluent.

2.9.3 October

With inflow from the 2001/2002 dredging projects beginning in late September, discharge in October 2001 occurred almost continuously from Spillway 1 in Cell 2. In addition, Spillways 2 and 4 in Wetland Cell 1 were opened for the first time on October 15, 2001 and remained opened the rest of the month. Spillway 6 discharged intermittently during October to dewater Wetland Cell 3. The pH at Spillway 1 averaged 8.50 units and the pH at Spillway 6 averaged 8.63 in October. The pH of the effluent from the Wetland Cell 1, Spillways 2 and 4, averaged 7.90 and 7.82 respectively.

Monthly average turbidity levels for October 2001 at Spillways 1, 2, and 4 were about 35 NTU. Monthly average turbidity was 76 NTU at Spillways 6, with a high of 149 NTU on October 27, 2001, reflecting the smaller pond volume. This was above the targeted Water Quality Standard of 50 NTU monthly average, but below the daily maximum of 150 NTU. DO levels at Spillway 1 and 6 remained high, averaging 10.43 mg/l (109% saturation) and 10.82 mg/l (113% saturation), respectively. Average DO of the effluent from Wetland Cell 1 was slightly lower, 8.26 mg/l (88% saturation) at Spillway 2 and 8.35 mg/l (86% saturation) at Spillway 4.

Turbidity, pH and DO values at the 100-yard and reference sites were all within water quality standards for the month of October. Average turbidity levels remained low at the 100-yard points, ranging from 3 NTU off of Spillway 1, to 5 NTU off of Spillways 4. The turbidity at the reference station was also low, averaging 3 NTU for October 2001. The average pH at the reference station and 100 yard points fell below 8.0 in October. The DO averaged 8.56 mg/l (106% saturation) to 7.63 mg/l (94% saturation). The TSS levels at WQR1 and the 100-yard stations remained low, at 20 mg/l or less.

The PIERP Wetland License limit for TSS of 800 mg/l daily maximum was exceeded at Spillway 6 on October 27, 2001, when the TSS concentration averaged 1,577 mg/l. This occurred during dewatering of Cell 3, when sediments in the shallow pond may have been resuspended during the sample collection process, resulting in a higher TSS in the sample than in the effluent being discharged. The turbidity of this sample was 149 NTU, which is not consistent with this high TSS result. The spillway was closed immediately after the sample was taken and remained closed until TSS levels had reached acceptable

levels. This TSS exceedance was reported to MDE on November 14, 2001, when MES received the confirmed results of the TSS analysis. TSS was much lower both before and after this sample was collected and otherwise was within guidelines for the month of October. The monthly average TSS at Spillway 6 was 351 mg/l, below the Wetland License permit limit for TSS of 400 mg/l monthly average. Total suspended solids concentrations at Spillway 1 averaged 63 mg/l in October 2001 with a maximum of 127 mg/l. Total suspended solids concentrations at Spillways 2 and 4 both averaged 57 mg/l, with maximums of 148 mg/l and 100 mg/l, respectively in October 2001.

2.10 Nutrient and Metals Data

Weekly (or biweekly), monthly, and quarterly nutrient data was collected at each sampling location, including each spillway in use, the 100-yard location, and the background water quality reference point (WQR1). The nutrient data is summarized in Appendix 1 and detailed in Appendix 2.

Water quality data on total and dissolved metal concentrations was collected either monthly or quarterly. The metal concentration data is also summarized in Appendix 1 and detailed in Appendix 2.

2.11 Priority Pollutant Organics, Total Phenols and Cyanide

Priority pollutant organic compounds and cyanide were monitored on a monthly basis in both August and September. Quarterly monitoring of these constituents began on September 23, 2001, with the beginning of the second dredged material inflow period. Analytical results are detailed in Appendix 3. With the exception of bis(2-ethylhexyl) phthalate, a common laboratory contaminant which is not expected to actually be present in the field samples, most organic compounds have remained below the method detection limit.

Total phenols and cyanide have been detected at levels just above the method detection limit in several samples during the first and second quarters of monitoring combined. At this time, it is not expected that either of these constituents is actually present in the water at levels of concern, but MES is following up with the laboratory to discuss possible sampling and analytical artifacts that might be causing these results.

3.0 Habitat and Exterior Monitoring

3.1 Fisheries Surveys

Three sampling trips were conducted in April (trawl and gill net), July (trawl, gill net, crab pot, and throw trap), and September (trawl, gill net, crab pot, and throw trap), 2001 to examine fisheries use of shallow water habitat within Poplar Harbor and nearby reference sites and for comparison to the pre-PIERP construction baseline. Reference marshes were also sampled for fisheries utilization during these time periods, using fyke nets to help establish a baseline on marsh use variability by nekton for this general area of

Chesapeake Bay. Findings will eventually be used for functional comparisons with the future created marshes. This effort is scheduled to continue for the next two years, maintaining this same annual schedule for the collections. The data from this year's efforts are currently being entered in a database and the draft report is expected to be available in December 2001.

Table 2

Fisheries Sampling Schedule

Sampling Method	Time of Year
Trawl, gill net	April
Trawl, gill net, crab pot, throw trap	July
Trawl, gill net, crab pot, throw trap	September

While the data has not been statistically analyzed, visual field observations that were made during the July 2001 collections at Poplar Harbor have determined that no abnormalities appeared evident in the fish collected. It appears that the fishing reefs yielded substantially higher catch per unit effort, including rockfish, than that of the harbor and reference areas during that time period. Also, during the July trawling, juvenile rockfish appeared to be substantially more prevalent in the harbor area than in the reference areas and more evenly distributed. After the data has been analyzed, the significance of these observations will be determined in regard to the overall picture of fisheries use and beneficial habitat creation at PIERP.

3.2 Facility Use by Wildlife -Report on Bird Activity from February 1, 2001 to October 31, 2001

3.2.1 Background and Baseline Utilization

In 1995, baseline monitoring was conducted by EA during four quarterly seasonal surveys before the PIERP started. Shorebirds, colonial species, osprey, gulls, terns, long-legged wading birds and other water-birds, marsh birds, predatory and scavenging birds, miscellaneous lands birds (primarily on Coaches Island) and waterfowl were found during the initial Popular Island study area. One of the goals for the restoration of the Poplar Island complex is creation of significant wetland and upland habitat for bird utilization.

Ground bird surveys were conducted by a biologist skilled in bird identification on April 29, May 14, and May 22, 1996 during mid or rising tides. All birds seen in the plot or on the islands were counted. During the first surveys, nests were also counted. A one-day boat survey was conducted around the perimeter of the islands and along the marsh sites to identify waterfowl nests. There was also a count of the great blue heron and great egret nests at the southeastern section of Coaches Island to determine if the construction activities associated with the diking of Poplar Island might affect the colonies.

During ground surveys, a total of 25 waterbird species were found at nine sites. Eight of the 25 species were migratory shorebirds that only occur during a brief (April-May) period in the spring.

As reported in the Poplar Island Restoration Project Baseline Monitoring Study prepared by MES dated January 2000, there was very little use of the remaining islands by waterfowl, but it was expected once the project was completed there would be much more nesting by waterfowl, willets, and perhaps colonial species because the area will be larger, with adequate resources and isolated.

3.2.2 Bird Utilization Since Commencement of Dike Construction.

3.2.2.1 Least and Common Tern

Phase 1 of this restoration project was built between 1998 and 2000. Phase 2 should be completed by Spring 2002. Even though the dikes were not finished and there was no wetland vegetation planted in the cells, shorebirds, ducks, herons, swans, and egrets started using the constructed dikes and ponded areas within the cells. Biologists have not done a complete bird survey of the area since 1995, though DNR and USFWS personnel have monitored some species of importance such as colonial species, terns, and raptors since the mid-1980s.

On June 27, 2001, Dave Brinker, a biologist with DNR, discovered that least terns and common terns were nesting on the dikes and the manmade nesting islands. Grading on the dikes was immediately halted upon the discovery of the nests and planned inflow of dredged material and the pumping schedule was rearranged. The least tern is considered a threatened species according to the Maryland Nongame and Endangered Species Act of 1975 and DNR had previously encouraged tern nesting on barges in front of Middle Poplar Island, without success. Three habitat islands were created within Cell 1 as part of the project design. They were covered with shell or sand and placed in proximity to the remnant islands, which are likely to be inundated for a period of time during material inflow. The purpose for these man-made islands is to attract and provide nesting habitat for terns and other species that prefer isolation.

Five scrapes containing a total of 8 least tern eggs were located and monitored until August 8, 2001 by MES staff. The scrapes still contained 8 eggs until a rain event on July 5, 2001, which washed away two of them. On that date another chick was located, but there was no scrape nearby. By July 9, 2001, 4 chicks had survived and 3 nests had washed away. The nests were located on the dike between Spillways 1 and 2 in Phase 1. As of August 8, 2001 despite truck and construction activity, there were 15 least tern scrapes located in Phase 2 of PIERP along the sides of the newly constructed sand dikes. The area was marked off with caution tape to protect the terns and their chicks.

In Spring and Summer 2001, about 350 pairs of common terns used the man-made island in Cell 3 that is covered by shell as nesting habitat. The common terns also used, North

Point Island, a remnant island that was still above water. The nests were discovered in June just before inflow was planned for Cell 1.

3.2.2.2 Bald Eagle

A bald eagle nest was found on Jefferson Island in during the initial survey in 1995. In 1998 the birds relocated to Coaches Island, because of the erosion of Jefferson Island. In each of the years 1999, 2000, and 2001 there was one egg in the nest established on Coaches Island, which successfully hatched. The bald eagle is considered a threatened species under the Federal Endangered Species Act and the US Fish and Wildlife Service requires a quarter-mile radius of no disturbance from the nest between January 15 and June 15. The nest is located in the southeast corner of Coaches Island among the heron rookery. Measures were taken to ensure that these resources would not be impacted by the construction activity and surveying during this reporting period.

3.2.2.3 Osprey

At least five osprey pairs established nests at the site in 2001. Several nests were moved with USFWS supervision due to their low elevations. One osprey pair nested in Cell 1 on a low-lying stump. As the nest was subject to loss due to wind and wave action, this nest was moved to one of the derelict barges placed at the site to protect the remnant islands. Another nest that was near Spillway 2 was moved to a constructed osprey platform near its original location. The other nests are located on barges or on rocks near Spillway 2. Each nest contained between 3 and 4 eggs. The incubation period for ospreys is 28 to 33 days and the birds fledged in June 2001.

3.2.2.4 Double-Crested Cormorants

One of only two nesting sites in Maryland for double-crested cormorants was found on Middle Poplar Island in 1995. The colony contained as many as 500 birds. After the remnants of island disappeared the colony moved to Jefferson Island and nested in the loblolly pine. In 2001 it was estimated the colony contained 300 to 400 birds.

3.2.2.5 Fall 2001 Bird Mortality

The number of birds using the cells and dikes has fluctuated from hour to hour and day to day. Occasionally, sick or dead birds are observed. On October 3, 2001, workers on PIERP found about 30 very decomposed birds in and around Cell 2, mainly near spillway 3. On October 4, a sick great blue heron was removed from PIERP and turned over to DNR. Later the heron was euthanized. On October 5, 7 bird carcasses were collected for necropsy. At the request of DNR and an ad hoc advisory group set up to share information and to determine recommended action, MES inspectors continued to walk the island, bury any dead birds that were not suitable for necropsy and deliver dead or sick birds that might be suitable for necropsy to DNR. An MES inspector walked much of the island on October 6 and 7 to tabulate a preliminary count of sick and dead birds. A sick mute swan was found, collected and also turned over to DNR, along with a sick

black-backed gull. The mute swan subsequently died and was sent for necropsy, along with the black-backed gull. Daily updates were prepared on sick and dead birds found, as were updates on populations of birds in and around Poplar each day. This was continued through the first weeks of November.

The 7 bird carcasses collected on October 5 had inconclusive necropsies. The necropsy of the mute swan revealed that the bird had avian botulism type C. The necropsy of the black-backed gull also found avian botulism type C. Water samples collection on October 4 also found toxic levels of *Microcystis* in water from Cell 2. *Microcystis* is an algae that can produce toxins under certain conditions in aquatic environments. It is more common in freshwater, but has been know to occur in estuarine waters. It was not detected in water samples collected subsequently from Coaches Island and within Poplar Island. MES will be coordinating with the Department of Natural Resources (DNR) to monitor *Microcystis* and other algae concentrations in the future.

MES inspectors began keeping formal records of bird mortality on October 10, 2001. The DNR issued a media advisory on the bird mortality on October 11. The majority of the birds, 77, were found dead between October 3 and 10. The final number of dead birds through the end of the quarter was 87.

Table 3

Bird Mortality at PIERP, October 2001

Type of Bird	Number
Mute Swan	5
Shorebirds	5
Pintail	2
Black Duck/Mallard	28
Green and Blue-Winged Teal	11
Canada Goose	1
Gulls	35
Total	**87**

In addition to the above mortality table, a mute swan, great blue heron, and a gull was found sick and subsequently died off of the island.

Two dead birds, a Canada goose and a great blue heron were also found at Coaches Island on October 24 after the property owner reported dead birds and requested a site inspection.

Several factors may have contributed to bird mortality. Factors known to have contributed include vehicular accidents at Poplar (mostly to gulls), avian botulism type C and, potentially, *Microcystis*. So far the data have been inconclusive. No contaminants related to dredged material inflow have been detected at levels that would be expected to impact birds feeding in the cells or where the water is discharged.

3.2.2.6 Overall Use of PIERP by Birds

The daily (live) bird counts by MES inspectors, found populations between about 800 and 1100. The majority of birds using the site are shorebirds, sea ducks, and gulls. A white pelican, which is very rarely seen in Maryland, was observed at Poplar Island, as were several brown pelicans. Even with the bird mortality, which may be normal for the number of birds using or flying over the cells, the island has already become a significant source of habitat as evidenced by its use by the terns and hundreds of other birds.

3.3 Poplar Island SAV Surveys Summary

Submerged aquatic vegetation (SAV) in the Chesapeake Bay contributed to its high primary and secondary productivity until there was a dramatic decline in the late 1960s and 1970s. The decline is generally attributed to the increase in nutrient loading and sedimentation. Viral and bacterial diseases may also have contributed to the sharp decrease in SAV. Because of the Bay's turbidity SAV in the Bay grows in 3 to 5 feet of water or less. Erosion of Poplar Island has increased sedimentation and turbidity in the adjacent shallow water SAV habitat. One of the goals of the restoration project is to increase SAV, particularly in Poplar Harbor.

USFWS personnel on contract with the USCENAB conducted SAV sampling in July and September 2001. The reference sites are called East Tilghman Island, Ferry Cove, Lowes Point, Front Creek, Harbor Cove and Harbor Cove B. The Poplar sites are Middle Poplar Island, North Poplar Island, Coaches East, Coaches West, Coaches South, Jefferson Island North, Jefferson Island South and Coaches, which was added in September. Thirteen sites were each sampled once in July. Four sites around Poplar Island, Jefferson Island South, and Coaches West, East, and South, were surveyed on July 9 and no SAV was located. One of the reference sites, East Tilghman was also surveyed and widgeon grass was located. Front Creek and Ferry Cove were surveyed on July 10 and widgeon grass and horned pondweed were located. On July 19, widgeon grass and horned pondweed were located at Lowes Point and Harbor Cove. At Harbor Cove B, widgeon grass was also located on the 19th. On July 23 horned pondweed and sago pondweed were discovered at Middle Poplar Island, but no SAV was located at North Poplar Island or Jefferson Island North.

USFWS personnel surveyed 14 sites for SAV in September 2001. On the 10th, widgeon grass was located at East Tilghman Island, Ferry Cove, and Lowes Point, horned pondweed, and sago pondweed were also found among the widgeon grass at Lowes Point. On the 11th, widgeon grass was located at Harbor Cove and Front Creek, which also had horned pondweed. On the 12th, the biologists surveyed Harbor Cove B, Middle Poplar, and North Poplar Island and found widgeon grass at two sites. On the 17th, 4 sites around Coaches Island were sampled and widgeon grass was found at three of them. On the 18th Jefferson Island North and South were surveyed and widgeon grass and sago pondweed were found at Jefferson Island North.

During this reporting period, MES staff also surveyed for SAV around Poplar Island, at the request of Peter Bergstrom of the USFWS. On July 6, 2001, horned pondweed was found off Spillway 6 by MES staff. This was the only observation of SAV by MES staff in the June-August 2001 season. Table 4 summarizes the SAV survey results for July through September 2001.

Table 4

SAV Survey Results, July 2001 and September 2001

Location	Date	Result	Date	Result
Poplar Sites				
Jefferson Island S.	7/9/2001	No SAV	9/18/2001	No SAV
Coaches West	7/9/2001	No SAV	9/17/2001	No SAV
Coaches East	7/9/2001	No SAV	9/17/2001	widgeon grass
Coaches South	7/9/2001	No SAV	9/17/2001	widgeon grass
Harbor Cove B	7/19/2001	widgeon grass	9/12/2001	widgeon grass
Jefferson Island North	7/23/2001	No SAV	9/18/2001	widgeon grass sago pondweed
Coaches	Not Surveyed		9/17/2001	widgeon grass
Spillway 6	7/6/2001	horned pondweed		
Reference Sites				
E. Tilghman Island	7/9/2001	Widgeon grass	9/10/2001	widgeon grass
Front Creek	07/10/2001	widgeon grass horned pondweed	9/11/2001	widgeon grass horned pondweed
Ferry Cove	7/10/2001	widgeon grass horned pondweed	9/10/2001	widgeon grass
Lowes Point	7/19/2001	widgeon grass horned pondweed	9/10/2001	widgeon grass horned pondweed sago pondweed
Harbor Cove	7/19/2001	widgeon grass horned pondweed	9/10/2001	widgeon grass
Middle Poplar Island	7/23/2001	horned pondweed sago pondweed	9/12/2001	widgeon grass
North Poplar Island	7/23/2001	No SAV	9/12/2001	No SAV

The Virginia Institute of Marine Sciences (VIMS) annually surveys the Chesapeake Bay and tributaries for SAV. There has been so significant change in the population of SAV around Poplar, Coaches, and Jefferson islands. Anecdotal evidence from other sections

of the Bay revealed an excellent year for SAV in 2001. VIMS is in the process of switching to a digital orthophoto-based method for the 2001 mapping effort and preliminary maps should be released in January 2002, however the patches of SAV are unlikely to show up on the photographs since the plants were short and the water fairly turbid.

3.4 Poplar Island Sediment Quality Monitoring

Sediment quality monitoring is an element of the long term monitoring framework at PIERP. Sediment quality monitoring is performed by the Maryland Geological Survey (MGS). Baseline monitoring was conducted in 1996. Post Phase I construction monitoring was conducted in the 2000/2001 monitoring year, prior to inflow of dredged material or discharge from the facility. Results showed low concentrations of trace metals and expected correlations between trace elements and grain size. This was believed to be reflective of the predominantly sand environment in and around Poplar. Sand is relatively inert, compared to silts and clays and binds metals to a much lower degree than the other fractions.

As expected, the hydrodynamic regime of the area has changed as a result of the construction of PIERP. The harbor area is currently acting as a sediment trap with more fine grain sediments being deposited in this sheltered area and courser grain sediments being deposited closer to Poplar Narrows, where currents are stronger. Sediment quality sampling will be conducted again in the 2001/2002 season and will be reflective of post-inflow and discharge conditions.

3.5 Benthic Community and Benthic Tissue Sampling

Benthic community and benthic tissue sampling were conducted in the 2000/2001 monitoring year. Results are not yet available for the full study, but epibenthic evaluation of the colonization of the dike is complete. Fourteen separate taxa were collected, with crustaceans, platyhelminths, polycheates, bivalves and bryozoans collected from the rock dikes and reef structures at PIERP. Results indicate that epibenthics are abundant on the exterior dike and likely provide a food source for juvenile fish that take refuge and forage in the rock cover. These results support those of the NMFS fisheries studies, which found higher abundance and diversity around the rock structures.

A preliminary evaluation of the benthic infaunal community data has been completed. Results of the post construction/pre-placement survey indicate that more benthic taxa were identified within Poplar Harbor in the Fall 2000 survey as compared to the Fall 1995 pre-construction baseline survey. In addition, fewer taxa were noted at the monitoring station southeast of Coaches Island and reference stations directly east of Polar Harbor. These results support the MGS pre-placement sediment study that noted an increase in the proportion of fine-grained sediment particles in Poplar Harbor and an increase in the proportion of coarser sediment particles at the outer stations east of Poplar Harbor due to changes in hydrodynamics from dike construction. The increase in the number of taxa in Poplar Harbor could be associated with both the change in the sediment composition and the change in the hydrodynamics within the Poplar Harbor area.

APPENDIX 1

Field, Nutrient and Metal Data Summary

Summary - Spillway #1

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	April- Max Spillway # 1	April- Max 100 yd	April- Max WQR1	April- Avg Spillway # 1	April- Avg 100 yd	April- Avg WQR1
Sample Time	mil		NA	NA	NA	NA	NA	NA
Turbidity	NTU	150 / 50	ND	NA	4	ND	NA	3
pH	units	6.5 - 8.5	ND	NA	8.04	ND	NA	8.01
Dissolved Oxygen	MG/L		ND	NA	11.68	ND	NA	11.44
Dissolved Oxygen	% sat		ND	NA	NR	ND	NA	NR
Salinity	ppt		ND	NA	NR	ND	NA	NR
Conductivity	umhos		ND	NA	NR	ND	NA	NR
Temperature	C		ND	NA	NR	ND	NA	NR
Depth	ft.		ND	NA	6	ND	NA	6
Flow	MGD		ND	NA	NA	ND	NA	NA
Total Suspended Solids	MG/L	800 / 400	ND	NA	10	ND	NA	10
Nitrite	MG/L		ND	NA	0.0102	ND	NA	0.0099
Ammonium	MG/L		ND	NA	0.096	ND	NA	0.077
Total Dissolved P	MG/L		ND	NA	0.0235	ND	NA	0.0183
Total Dissolved N	MG/L		ND	NA	1.07	ND	NA	0.99
Phosphate	MG/L		ND	NA	0.0132	ND	NA	0.0096
Nitrate/Nitrite	MG/L		ND	NA	0.488	ND	NA	0.481
Nitrate	MG/L		ND	NA	0.478	ND	NA	0.472
Dissolved Organic N	MG/L		ND	NA	0.50	ND	NA	0.43
Dissolved Organic P	MG/L		ND	NA	0.0103	ND	NA	0.0088
Total Anitimony	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Antimony	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Arsenic	UG/L		ND	NA	13.0	ND	NA	13.0
Dissolved Arsenic	UG/L		ND	NA	13.0	ND	NA	13.0
Total Beryllium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Beryllium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Cadmium	UG/L	43	ND	NA <	0.5	ND	NA <	0.5
Dissolved Cadmium	UG/L		ND	NA <	0.5	ND	NA <	0.5
Total Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Copper	UG/L	6.1	ND	NA	4.0	ND	NA	4.0
Dissolved Copper	UG/L		ND	NA <	3.0	ND	NA <	3.0
Total Lead	UG/L	210	ND	NA <	2.0	ND	NA <	2.0
Dissolved Lead	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Mercury	UG/L	1.8	ND	NA <	0.2	ND	NA <	0.2
Dissolved Mercury	UG/L		ND	NA <	0.2	ND	NA <	0.2
Total Nickel	UG/L	75	ND	NA	3.0	ND	NA	3.0
Dissolved Nickel	UG/L		ND	NA	3.0	ND	NA	3.0
Total Selenium	UG/L	300	ND	NA	5.0	ND	NA	5.0
Dissolved Selenium	UG/L		ND	NA	6.0	ND	NA	6.0
Total Silver	UG/L	1.9	ND	NA <	1.0	ND	NA <	1.0
Dissolved Silver	UG/L		ND	NA <	1.0	ND	NA <	1.0
Total Thallium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Thallium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Zinc	UG/L	90	ND	NA <	3.0	ND	NA <	3.0
Dissolved Zinc	UG/L		ND	NA <	3.0	ND	NA <	3.0

ND *No discharge*
< *Less than the method detection limit*
AD *Awaiting data*
> *Greater than the value noted*
NA *Not applicable*
NR *Not required*

Summary - Spillway #2

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	April- Max Spillway # 2	April- Max 100 yd	April- Max WQR1	April- Avg Spillway # 2	April- Avg 100 yd	April- Avg WQR1
Sample Time	mil		NA	NA	NA	NA	NA	NA
Turbidity	NTU	150 / 50	ND	NA	4	ND	NA	3
pH	units	6.5 - 8.5	ND	NA	8.04	ND	NA	8.01
Dissolved Oxygen	MG/L		ND	NA	11.68	ND	NA	11.44
Dissolved Oxygen	% sat		ND	NA	NR	ND	NA	NR
Salinity	ppt		ND	NA	NR	ND	NA	NR
Conductivity	umhos		ND	NA	NR	ND	NA	NR
Temperature	C		ND	NA	NR	ND	NA	NR
Depth	ft.		ND	NA	6	ND	NA	6
Flow	MGD		ND	NA	NA	ND	NA	NA
Total Suspended Solids	MG/L	800 / 400	ND	NA	10	ND	NA	10
Nitrite	MG/L		ND	NA	0.0102	ND	NA	0.0099
Ammonium	MG/L		ND	NA	0.096	ND	NA	0.077
Total Dissolved P	MG/L		ND	NA	0.0235	ND	NA	0.0183
Total Dissolved N	MG/L		ND	NA	1.07	ND	NA	0.99
Phosphate	MG/L		ND	NA	0.0132	ND	NA	0.0096
Nitrate/Nitrite	MG/L		ND	NA	0.488	ND	NA	0.481
Nitrate	MG/L		ND	NA	0.478	ND	NA	0.472
Dissolved Organic N	MG/L		ND	NA	0.50	ND	NA	0.43
Dissolved Organic P	MG/L		ND	NA	0.0103	ND	NA	0.0088
Total Anitimony	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Antimony	UG/L		ND	NA <	2.0	ND	NA <	2.0
Arsenic	UG/L		ND	NA	13.0	ND	NA	13.0
Dissolved Arsenic	UG/L		ND	NA	13.0	ND	NA	13.0
Total Beryllium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Beryllium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Cadmium	UG/L	43	ND	NA <	0.5	ND	NA <	0.5
Dissolved Cadmium	UG/L		ND	NA <	0.5	ND	NA <	0.5
Total Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Copper	UG/L	6.1	ND	NA	4.0	ND	NA	4.0
Dissolved Copper	UG/L		ND	NA <	3.0	ND	NA <	3.0
Total Lead	UG/L	210	ND	NA <	2.0	ND	NA <	2.0
Dissolved Lead	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Mercury	UG/L	1.8	ND	NA <	0.2	ND	NA <	0.2
Dissolved Mercury	UG/L		ND	NA <	0.2	ND	NA <	0.2
Total Nickel	UG/L	75	ND	NA	3.0	ND	NA	3.0
Dissolved Nickel	UG/L		ND	NA	3.0	ND	NA	3.0
Total Selenium	UG/L	300	ND	NA	5.0	ND	NA	5.0
Dissolved Selenium	UG/L		ND	NA	6.0	ND	NA	6.0
Total Silver	UG/L	1.9	ND	NA <	1.0	ND	NA <	1.0
Dissolved Silver	UG/L		ND	NA <	1.0	ND	NA <	1.0
Total Thallium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Thallium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Zinc	UG/L	90	ND	NA <	3.0	ND	NA <	3.0
Dissolved Zinc	UG/L		ND	NA <	3.0	ND	NA <	3.0

ND *No discharge*
< *Less than the method detection limit*
AD *Awaiting data*
> *Greater than the value noted*
NA *Not applicable*
NR *Not required*

Summary - Spillway #4

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	April- Max Spillway # 4	April- Max 100 yd	April- Max WQR1	April- Avg Spillway # 4	April- Avg 100 yd	April- Avg WQR1
Sample Time	mil		NA	NA	NA	NA	NA	NA
Turbidity	NTU	150 / 50	ND	NA	4	ND	NA	3
pH	units	6.5 - 8.5	ND	NA	8.04	ND	NA	8.01
Dissolved Oxygen	MG/L		ND	NA	11.68	ND	NA	11.44
Dissolved Oxygen	% sat		ND	NA	NR	ND	NA	NR
Salinity	ppt		ND	NA	NR	ND	NA	NR
Conductivity	umhos		ND	NA	NR	ND	NA	NR
Temperature	C		ND	NA	NR	ND	NA	NR
Depth	ft.		ND	NA	6	ND	NA	6
Flow	MGD		ND	NA	NA	ND	NA	NA
Total Suspended Solids	MG/L	800 / 400	ND	NA	10	ND	NA	10
Nitrite	MG/L		ND	NA	0.0102	ND	NA	0.0099
Ammonium	MG/L		ND	NA	0.096	ND	NA	0.077
Total Dissolved P	MG/L		ND	NA	0.0235	ND	NA	0.0183
Total Dissolved N	MG/L		ND	NA	1.07	ND	NA	0.99
Phosphate	MG/L		ND	NA	0.0132	ND	NA	0.0096
Nitrate/Nitrite	MG/L		ND	NA	0.488	ND	NA	0.481
Nitrate	MG/L		ND	NA	0.478	ND	NA	0.472
Dissolved Organic N	MG/L		ND	NA	0.50	ND	NA	0.43
Dissolved Organic P	MG/L		ND	NA	0.0103	ND	NA	0.0088
Total Anitimony	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Antimony	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Arsenic	UG/L		ND	NA	13.0	ND	NA	[illegible]
Dissolved Arsenic	UG/L		ND	NA	13.0	ND	NA	[illegible]
Total Beryllium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Beryllium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Cadmium	UG/L	43	ND	NA <	0.5	ND	NA <	0.5
Dissolved Cadmium	UG/L		ND	NA <	0.5	ND	NA <	0.5
Total Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Copper	UG/L	6.1	ND	NA	4.0	ND	NA	4.0
Dissolved Copper	UG/L		ND	NA <	3.0	ND	NA <	3.0
Total Lead	UG/L	210	ND	NA <	2.0	ND	NA <	2.0
Dissolved Lead	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Mercury	UG/L	1.8	ND	NA <	0.2	ND	NA <	0.2
Dissolved Mercury	UG/L		ND	NA <	0.2	ND	NA <	0.2
Total Nickel	UG/L	75	ND	NA	3.0	ND	NA	3.0
Dissolved Nickel	UG/L		ND	NA	3.0	ND	NA	3.0
Total Selenium	UG/L	300	ND	NA	5.0	ND	NA	5.0
Dissolved Selenium	UG/L		ND	NA	6.0	ND	NA	6.0
Total Silver	UG/L	1.9	ND	NA <	1.0	ND	NA <	1.0
Dissolved Silver	UG/L		ND	NA <	1.0	ND	NA <	1.0
Total Thallium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Thallium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Zinc	UG/L	90	ND	NA <	3.0	ND	NA <	3.0
Dissolved Zinc	UG/L		ND	NA <	3.0	ND	NA <	3.0

ND *No discharge*
< *Less than the method detection limit*
AD *Awaiting data*
> *Greater than the value noted*
NA *Not applicable*
NR *Not required*

Summary - Spillway #5

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	April- Max Spillway # 5	April- Max 100 yd	April- Max WQR1	April- Avg Spillway # 5	April- Avg 100 yd	April- Avg WQR1
Sample Time	mil		NA	NA	NA	NA	NA	NA
Turbidity	NTU	150 / 50	52	8	4	36	8	3
pH	units	6.5 - 8.5	8.31	8.17	8.04	8.07	8.12	8.01
Dissolved Oxygen	MG/L		14.20	10.72	11.68	8.24	10.71	11.44
Dissolved Oxygen	% sat		NR	NR	NR	NR	NR	NR
Salinity	ppt		NR	NR	NR	NR	NR	NR
Conductivity	umhos		NR	NR	NR	NR	NR	NR
Temperature	C		NR	NR	NR	NR	NR	NR
Depth	ft.		1	2	6	1	2	6
Flow	MGD		7.19	NA	NA	4.68	NA	NA
Total Suspended Solids	MG/L	800 / 400	59	17	10	41	15	10
Nitrite	MG/L		0.0207	0.0149	0.0102	0.0165	0.0122	0.0099
Ammonium	MG/L		22.620	6.605	0.096	18.005	3.692	0.077
Total Dissolved P	MG/L		0.8011	0.1724	0.0235	0.5231	0.0934	0.0183
Total Dissolved N	MG/L		24.16	7.93	1.07	19.97	4.77	0.99
Phosphate	MG/L		0.7320	0.1490	0.0132	0.4810	0.0782	0.0096
Nitrate/Nitrite	MG/L		0.186	0.405	0.488	0.173	0.400	0.481
Nitrate	MG/L		0.165	0.396	0.478	0.157	0.388	0.472
Dissolved Organic N	MG/L		2.23	0.93	0.50	1.79	0.68	0.43
Dissolved Organic P	MG/L		0.0691	0.0234	0.0103	0.0421	0.0152	0.0088
Total Anitimony	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
[redacted] Arsenic	UG/L		24.0	17.0	13.0	24.0	17.0	13.0
[redacted]olved Arsenic	UG/L		25.0	17.0	13.0	25.0	17.0	13.0
Total Beryllium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Total Chromium	UG/L		3.0	< 2.0	< 2.0	3.0	< 2.0	< 2.0
Dissolved Chromium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1	18.0	7.0	4.0	18.0	7.0	4.0
Dissolved Copper	UG/L		3.0	11.0 <	3.0	3.0	11.0 <	3.0
Total Lead	UG/L	210	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75	10.0	4.0	3.0	10.0	4.0	3.0
Dissolved Nickel	UG/L		3.0	5.0	3.0	3.0	5.0	3.0
Total Selenium	UG/L	300	4.0	4.0	5.0	4.0	4.0	5.0
Dissolved Selenium	UG/L		6.0	6.0	6.0	6.0	6.0	6.0
Total Silver	UG/L	1.9	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Thallium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L		< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

[redacted]

ND *No discharge*

< *Less than the method detection limit*

AD *Awaiting data*

> *Greater than the value noted*

NA *Not applicable*

NR *Not required*

Summary - Spillway #6

Month / *Day* / *Location* / *Frequency* / *Sample #* / Parameter	Units	*State Water* Quality Standards *at any time / monthly avg.*	April- Max			April- Avg		
			Spillway # 6	100 yd	WQR1	Spillway # 6	100 yd	WQR1
Sample Time	*mil*		NA	NA	NA	NA	NA	NA
Turbidity	*NTU*	*150 / 50*	87	5	4	40	5	3
pH	*units*	*6.5 - 8.5*	8.21	8.20	8.04	8.02	8.08	8.01
Dissolved Oxygen	*MG/L*		13.40	11.03	11.68	7.78	11.01	11.44
Dissolved Oxygen	*% sat*		NR	NR	NR	NR	NR	NR
Salinity	*ppt*		NR	NR	NR	NR	NR	NR
Conductivity	*umhos*		NR	NR	NR	NR	NR	NR
Temperature	*C*		NR	NR	NR	NR	NR	NR
Depth	*ft.*		1	2	6	1	2	6
Flow	*MGD*		7.19	NA	NA	4.37	NA	NA
Total Suspended Solids	*MG/L*	*800 / 400*	89	17	10	46	13	10
Nitrite	*MG/L*		0.0137	0.0150	0.0102	0.0131	0.0125	0.0099
Ammonium	*MG/L*		16.300	7.710	0.096	15.245	3.896	0.077
Total Dissolved P	*MG/L*		0.6095	0.1677	0.0235	0.4344	0.0909	0.0183
Total Dissolved N	*MG/L*		19.72	8.76	1.07	17.93	4.83	0.99
Phosphate	*MG/L*		0.5680	0.1450	0.0132	0.4040	0.0755	0.0096
Nitrate/Nitrite	*MG/L*		0.167	0.481	0.488	0.160	0.438	0.481
Nitrate	*MG/L*		0.155	0.471	0.478	0.147	0.425	0.472
Dissolved Organic N	*MG/L*		3.27	0.66	0.50	2.53	0.50	0.43
Dissolved Organic P	*MG/L*		0.0415	0.0227	0.0103	0.0304	0.0154	0.0088
Total Anitimony	*UG/L*		2.0 <	2.0 <	2.0	2.0 <	2.0 <	2.0
Dissolved Antimony	*UG/L*		< 2.0 <	2.0 <	2.0	< 2.0 <	2.0 <	2.0
Total Arsenic	*UG/L*		25.0	17.0	13.0	25.0	17.0	13.0
Dissolved Arsenic	*UG/L*		25.0	18.0	13.0	25.0	18.0	13.0
Total Beryllium	*UG/L*		< 2.0 <	2.0 <	2.0	< 2.0 <	2.0 <	2.0
Dissolved Beryllium	*UG/L*		< 2.0 <	2.0 <	2.0	< 2.0 <	2.0 <	2.0
Total Cadmium	*UG/L*	*43*	< 0.5 <	0.5 <	0.5	< 0.5 <	0.5 <	0.5
Dissolved Cadmium	*UG/L*		< 0.5 <	0.5 <	0.5	< 0.5 <	0.5 <	0.5
Total Chromium	*UG/L*		2.0	2.0 <	2.0	2.0	2.0 <	2.0
Dissolved Chromium	*UG/L*		< 2.0 <	2.0 <	2.0	< 2.0 <	2.0 <	2.0
Total Copper	*UG/L*	*6.1*	< 3.0	5.0	4.0	< 3.0	5.0	4.0
Dissolved Copper	*UG/L*		< 3.0	6.0 <	3.0	< 3.0	6.0 <	3.0
Total Lead	*UG/L*	*210*	< 2.0 <	2.0 <	2.0	< 2.0 <	2.0 <	2.0
Dissolved Lead	*UG/L*		< 2.0 <	2.0 <	2.0	< 2.0 <	2.0 <	2.0
Total Mercury	*UG/L*	*1.8*	< 0.2 <	0.2 <	0.2	< 0.2 <	0.2 <	0.2
Dissolved Mercury	*UG/L*		< 0.2 <	0.2 <	0.2	< 0.2 <	0.2 <	0.2
Total Nickel	*UG/L*	*75*	4.0	5.0	3.0	4.0	5.0	3.0
Dissolved Nickel	*UG/L*		3.0	3.0	3.0	3.0	3.0	3.0
Total Selenium	*UG/L*	*300*	4.0	4.0	5.0	4.0	4.0	5.0
Dissolved Selenium	*UG/L*		6.0	6.0	6.0	6.0	6.0	6.0
Total Silver	*UG/L*	*1.9*	< 1.0 <	1.0 <	1.0	< 1.0 <	1.0 <	1.0
Dissolved Silver	*UG/L*		< 1.0 <	1.0 <	1.0	< 1.0 <	1.0 <	1.0
Total Thallium	*UG/L*		< 2.0 <	2.0 <	2.0	< 2.0 <	2.0 <	2.0
Dissolved Thallium	*UG/L*		< 2.0 <	2.0 <	2.0	< 2.0 <	2.0 <	2.0
Total Zinc	*UG/L*	*90*	< 3.0 <	7.0 <	3.0	< 3.0 <	7.0 <	3.0
Dissolved Zinc	*UG/L*		< 3.0 <	3.0 <	3.0	< 3.0 <	3.0 <	3.0

ND *No discharge*

< *Less than the method detection limit*

AD *Awaiting data*

> *Greater than the value noted*

NA *Not applicable*

NR *Not required*

Summary - Spillway #1

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	May- Max Spillway # 1	May- Max 100 yd	May- Max WQR1	May- Avg Spillway # 1	May- Avg 100 yd	May- Avg WQR1
			May					
Sample Time	mil		NA	NA	NA	NA	NA	NA
Turbidity	NTU	150 / 50	ND	NA	3	ND	NA	3
pH	units	6.5 - 8.5	ND	NA	8.68	ND	NA	8.25
Dissolved Oxygen	MG/L		ND	NA	10.14	ND	NA	8.75
Dissolved Oxygen	% sat		NR	NR	NR	NR	NR	NR
Salinity	ppt		NR	NR	NR	NR	NR	NR
Conductivity	umhos		NR	NR	NR	NR	NR	NR
Temperature	C		NR	NR	NR	NR	NR	NR
Depth	ft.		ND	NA	6	ND	NA	6
Flow	MGD		ND	NA	NA	ND	NA	NA
Total Suspended Solids	MG/L	800 / 400	ND	NA	15	ND	NA	12
Nitrite	MG/L		ND	NA	0.0105	ND	NA	0.0078
Ammonium	MG/L		ND	NA	0.121	ND	NA	0.070
Total Dissolved P	MG/L		ND	NA	0.0366	ND	NA	0.0189
Total Dissolved N	MG/L		ND	NA	0.90	ND	NA	0.69
Phosphate	MG/L		ND	NA	0.0256	ND	NA	0.0099
Nitrate/Nitrite	MG/L		ND	NA	0.526	ND	NA	0.323
Nitrate	MG/L		ND	NA	0.516	ND	NA	0.316
Dissolved Organic N	MG/L		ND	NA	0.33	ND	NA	0.30
Dissolved Organic P	MG/L		ND	NA	0.0110	ND	NA	0.0090
Total Anitimony	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Antimony	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Arsenic	UG/L		ND	NA	12.0	ND	NA	12.0
Dissolved Arsenic	UG/L		ND	NA	14.0	ND	NA	14.0
Total Beryllium	UG/L		ND	NA	5.0	ND	NA	5.0
Dissolved Beryllium	UG/L		ND	NA	6.0	ND	NA	6.0
Total Cadmium	UG/L	43	ND	NA <	0.5	ND	NA <	0.5
Dissolved Cadmium	UG/L		ND	NA <	0.5	ND	NA <	0.5
Total Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Copper	UG/L	6.1	ND	NA <	3.0	ND	NA <	3.0
Dissolved Copper	UG/L		ND	NA <	3.0	ND	NA <	3.0
Total Lead	UG/L	210	ND	NA <	2.0	ND	NA <	2.0
Dissolved Lead	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Mercury	UG/L	1.8	ND	NA <	0.2	ND	NA <	0.2
Dissolved Mercury	UG/L		ND	NA <	0.2	ND	NA <	0.2
Total Nickel	UG/L	75	ND	NA	2.0	ND	NA	2.0
Dissolved Nickel	UG/L		ND	NA	2.0	ND	NA	2.0
Total Selenium	UG/L	300	ND	NA	6.0	ND	NA	6.0
Dissolved Selenium	UG/L		ND	NA	8.0	ND	NA	8.0
Total Silver	UG/L	1.9	ND	NA <	1.0	ND	NA <	1.0
Dissolved Silver	UG/L		ND	NA <	1.0	ND	NA <	1.0
Total Thallium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Thallium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Zinc	UG/L	90	ND	NA <	3.0	ND	NA <	3.0
Dissolved Zinc	UG/L		ND	NA <	3.0	ND	NA <	3.0

ND *No discharge*

< *Less than the method detection limit*

AD *Awaiting data*

> *Greater than the value noted*

NA *Not applicable*

NR *Not required*

Summary - Spillway #2

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards [2] at any time / monthly avg.	May- Max Spillway # 2	May- Max 100 yd	May- Max WQR1	May- Avg Spillway # 2	May- Avg 100 yd	May- Avg WQR1
Sample Time	mil		NA	NA	NA	NA	NA	NA
Turbidity	NTU	150 / 50	ND	NA	3	ND	NA	3
pH	units	6.5 - 8.5	ND	NA	8.68	ND	NA	8.25
Dissolved Oxygen	MG/L		ND	NA	10.14	ND	NA	8.75
Dissolved Oxygen	% sat		NR	NR	NR	NR	NR	NR
Salinity	ppt		NR	NR	NR	NR	NR	NR
Conductivity	umhos		NR	NR	NR	NR	NR	NR
Temperature	C		NR	NR	NR	NR	NR	NR
Depth	ft.		ND	NA	6	ND	NA	6
Flow	MGD		ND	NA	NA	ND	NA	NA
Total Suspended Solids	MG/L	800 / 400	ND	NA	15	ND	NA	12
Nitrite	MG/L		ND	NA	0.0105	ND	NA	0.0078
Ammonium	MG/L		ND	NA	0.121	ND	NA	0.070
Total Dissolved P	MG/L		ND	NA	0.0366	ND	NA	0.0189
Total Dissolved N	MG/L		ND	NA	0.90	ND	NA	0.69
Phosphate	MG/L		ND	NA	0.0256	ND	NA	0.0099
Nitrate/Nitrite	MG/L		ND	NA	0.526	ND	NA	0.323
Nitrate	MG/L		ND	NA	0.516	ND	NA	0.316
Dissolved Organic N	MG/L		ND	NA	0.33	ND	NA	0.30
Dissolved Organic P	MG/L		ND	NA	0.0110	ND	NA	0.0090
Total Anitimony	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Antimony	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Arsenic	UG/L		ND	NA	12.0	ND	NA	12.0
Dissolved Arsenic	UG/L		ND	NA	14.0	ND	NA	[illegible]
Total Beryllium	UG/L		ND	NA	5.0	ND	NA	5.0
Dissolved Beryllium	UG/L		ND	NA	6.0	ND	NA	6.0
Total Cadmium	UG/L	43	ND	NA <	0.5	ND	NA <	0.5
Dissolved Cadmium	UG/L		ND	NA <	0.5	ND	NA <	0.5
Total Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Copper	UG/L	6.1	ND	NA <	3.0	ND	NA <	3.0
Dissolved Copper	UG/L		ND	NA <	3.0	ND	NA <	3.0
Total Lead	UG/L	210	ND	NA <	2.0	ND	NA <	2.0
Dissolved Lead	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Mercury	UG/L	1.8	ND	NA <	0.2	ND	NA <	0.2
Dissolved Mercury	UG/L		ND	NA <	0.2	ND	NA <	0.2
Total Nickel	UG/L	75	ND	NA	2.0	ND	NA	2.0
Dissolved Nickel	UG/L		ND	NA	2.0	ND	NA	2.0
Total Selenium	UG/L	300	ND	NA	6.0	ND	NA	6.0
Dissolved Selenium	UG/L		ND	NA	8.0	ND	NA	8.0
Total Silver	UG/L	1.9	ND	NA <	1.0	ND	NA <	1.0
Dissolved Silver	UG/L		ND	NA <	1.0	ND	NA <	1.0
Total Thallium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Thallium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Zinc	UG/L	90	ND	NA <	3.0	ND	NA <	3.0
Dissolved Zinc	UG/L		ND	NA <	3.0	ND	NA <	3.0

ND *No discharge*
< *Less than the method detection limit*
AD *Awaiting data*
> *Greater than the value noted*
NA *Not applicable*
NR *Not required*

Summary - Spillway #4

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	May- Max Spillway # 4	May- Max 100 yd	May- Max WQR1	May- Avg Spillway # 4	May- Avg 100 yd	May- Avg WQR1
Sample Time	mil		NA	NA	NA	NA	NA	NA
Turbidity	NTU	150 / 50	ND	NA	3	ND	NA	3
pH	units	6.5 - 8.5	ND	NA	8.68	ND	NA	8.25
Dissolved Oxygen	MG/L		ND	NA	10.14	ND	NA	8.75
Dissolved Oxygen	% sat		NR	NR	NR	NR	NR	NR
Salinity	ppt		NR	NR	NR	NR	NR	NR
Conductivity	umhos		NR	NR	NR	NR	NR	NR
Temperature	C		NR	NR	NR	NR	NR	NR
Depth	ft.		ND	NA	6	ND	NA	6
Flow	MGD		ND	NA	NA	ND	NA	NA
Total Suspended Solids	MG/L	800 / 400	ND	NA	15	ND	NA	12
Nitrite	MG/L		ND	NA	0.0105	ND	NA	0.0078
Ammonium	MG/L		ND	NA	0.121	ND	NA	0.070
Total Dissolved P	MG/L		ND	NA	0.0366	ND	NA	0.0189
Total Dissolved N	MG/L		ND	NA	0.90	ND	NA	0.69
Phosphate	MG/L		ND	NA	0.0256	ND	NA	0.0099
Nitrate/Nitrite	MG/L		ND	NA	0.526	ND	NA	0.323
Nitrate	MG/L		ND	NA	0.516	ND	NA	0.316
Dissolved Organic N	MG/L		ND	NA	0.33	ND	NA	0.30
Dissolved Organic P	MG/L		ND	NA	0.0110	ND	NA	0.0090
Total Anitimony	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Antimony	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Arsenic	UG/L		ND	NA	12.0	ND	NA	12.0
Dissolved Arsenic	UG/L		ND	NA	14.0	ND	NA	14.0
Total Beryllium	UG/L		ND	NA	5.0	ND	NA	5.0
Dissolved Beryllium	UG/L		ND	NA	6.0	ND	NA	6.0
Total Cadmium	UG/L	43	ND	NA <	0.5	ND	NA <	0.5
Dissolved Cadmium	UG/L		ND	NA <	0.5	ND	NA <	0.5
Total Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Copper	UG/L	6.1	ND	NA <	3.0	ND	NA <	3.0
Dissolved Copper	UG/L		ND	NA <	3.0	ND	NA <	3.0
Total Lead	UG/L	210	ND	NA <	2.0	ND	NA <	2.0
Dissolved Lead	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Mercury	UG/L	1.8	ND	NA <	0.2	ND	NA <	0.2
Dissolved Mercury	UG/L		ND	NA <	0.2	ND	NA <	0.2
Total Nickel	UG/L	75	ND	NA	2.0	ND	NA	2.0
Dissolved Nickel	UG/L		ND	NA	2.0	ND	NA	2.0
Total Selenium	UG/L	300	ND	NA	6.0	ND	NA	6.0
Dissolved Selenium	UG/L		ND	NA	8.0	ND	NA	8.0
Total Silver	UG/L	1.9	ND	NA <	1.0	ND	NA <	1.0
Dissolved Silver	UG/L		ND	NA <	1.0	ND	NA <	1.0
Total Thallium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Thallium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Zinc	UG/L	90	ND	NA <	3.0	ND	NA <	3.0
Dissolved Zinc	UG/L		ND	NA <	3.0	ND	NA <	3.0

ND *No discharge*
< *Less than the method detection limit*
AD *Awaiting data*
> *Greater than the value noted*
NA *Not applicable*
NR *Not required*

Summary - Spillway #5

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	May- Max Spillway # 5	May- Max 100 yd	May- Max WQR1	May- Avg Spillway # 5	May- Avg 100 yd	May- Avg WQR1
Sample Time	mil		NA	NA	NA	NA	NA	NA
Turbidity	NTU	150 / 50	138	7	3	49	6	3
pH	units	6.5 - 8.5	9.90	8.62	8.68	9.04	8.31	8.25
Dissolved Oxygen	MG/L		> 20.00	11.00	10.14	13.06	9.29	8.75
Dissolved Oxygen	% sat		NR	NR	NR	NR	NR	NR
Salinity	ppt		NR	NR	NR	NR	NR	NR
Conductivity	umhos		NR	NR	NR	NR	NR	NR
Temperature	C		NR	NR	NR	NR	NR	NR
Depth	ft.		1	2	6	1	2	6
Flow	MGD		4.60	NA	NA	1.49	NA	NA
Total Suspended Solids	MG/L	800 / 400	221	19	15	102	16	12
Nitrite	MG/L		0.0508	0.0136	0.0105	0.0387	0.0097	0.0078
Ammonium	MG/L		26.900	1.000	0.121	10.330	0.375	0.070
Total Dissolved P	MG/L		1.0444	0.0438	0.0366	0.7664	0.0292	0.0189
Total Dissolved N	MG/L		22.93	2.44	0.90	12.26	1.17	0.69
Phosphate	MG/L		0.9810	0.0281	0.0256	0.6335	0.0170	0.0099
Nitrate/Nitrite	MG/L		0.207	0.489	0.526	0.190	0.305	0.323
Nitrate	MG/L		0.167	0.475	0.516	0.152	0.295	0.316
Dissolved Organic N	MG/L		3.80	0.95	0.33	2.79	0.50	0.30
Dissolved Organic P	MG/L		0.1696	0.0157	0.0110	0.1329	0.0122	0.0090
Total Anitimony	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L		30.0	14.0	12.0	30.0	14.0	12.0
Dissolved Arsenic	UG/L		27.0	12.0	14.0	27.0	12.0	14.0
Total Beryllium	UG/L		5.0	5.0	5.0	5.0	5.0	5.0
Dissolved Beryllium	UG/L		6.0	6.0	6.0	6.0	6.0	6.0
Total Cadmium	UG/L	43	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Total Chromium	UG/L		4.0	< 2.0	< 2.0	4.0	< 2.0	< 2.0
Dissolved Chromium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1	15.0	< 3.0	< 3.0	15.0	< 3.0	< 3.0
Dissolved Copper	UG/L		5.0	5.0	< 3.0	5.0	5.0	< 3.0
Total Lead	UG/L	210	3.0	< 2.0	< 2.0	3.0	< 2.0	< 2.0
Dissolved Lead	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75	8.0	3.0	2.0	8.0	3.0	2.0
Dissolved Nickel	UG/L		5.0	< 2.0	2.0	5.0	< 2.0	2.0
Total Selenium	UG/L	300	9.0	7.0	6.0	9.0	7.0	6.0
Dissolved Selenium	UG/L		8.0	8.0	8.0	8.0	8.0	8.0
Total Silver	UG/L	1.9	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Thallium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90	5.0	< 3.0	< 3.0	5.0	< 3.0	< 3.0
Dissolved Zinc	UG/L		< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

ND *No discharge*
< *Less than the method detection limit*
AD *Awaiting data*
> *Greater than the value noted*
NA *Not applicable*
NR *Not required*

Summary - Spillway #6

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	May- Max Spillway # 6	May- Max 100 yd	May- Max WQR1	May- Avg Spillway # 6	May- Avg 100 yd	May- Avg WQR1
Sample Time	mil		NA	NA	NA	NA	NA	NA
Turbidity	NTU	150 / 50	61	4	3	41	4	3
pH	units	6.5 - 8.5	9.94	8.56	8.68	9.08	8.14	8.25
Dissolved Oxygen	MG/L		> 20.00	10.16	10.14	13.60	8.61	8.75
Dissolved Oxygen	% sat		NR	NR	NR	NR	NR	NR
Salinity	ppt		NR	NR	NR	NR	NR	NR
Conductivity	umhos		NR	NR	NR	NR	NR	NR
Temperature	C		NR	NR	NR	NR	NR	NR
Depth	ft.		1	2	6	1	2	6
Flow	MGD		4.60	NA	NA	1.40	NA	NA
Total Suspended Solids	MG/L	800 / 400	212	36	15	90	18	12
Nitrite	MG/L		0.0482	0.0108	0.0105	0.0405	0.0082	0.0078
Ammonium	MG/L		26.400	0.189	0.121	9.620	0.106	0.070
Total Dissolved P	MG/L		1.1954	0.0284	0.0366	0.7781	0.0157	0.0189
Total Dissolved N	MG/L		23.20	0.86	0.90	11.20	0.67	0.69
Phosphate	MG/L		1.0000	0.0183	0.0256	0.6492	0.0080	0.0099
Nitrate/Nitrite	MG/L		0.249	0.493	0.526	0.195	0.299	0.323
Nitrate	MG/L		0.203	0.482	0.516	0.155	0.290	0.316
Dissolved Organic N	MG/L		3.90	0.30	0.33	2.24	0.27	0.30
Dissolved Organic P	MG/L		0.1954	0.0101	0.0110	0.1289	0.0077	0.0090
Total Anitimony	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L		30.0	13.0	12.0	30.0	13.0	12.0
Dissolved Arsenic	UG/L		27.0	13.0	14.0	27.0	13.0	14.0
Total Beryllium	UG/L		5.0	5.0	5.0	5.0	5.0	5.0
Dissolved Beryllium	UG/L		6.0	6.0	6.0	6.0	6.0	6.0
Total Cadmium	UG/L	43	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Total Chromium	UG/L		3.0	< 2.0	< 2.0	3.0	< 2.0	< 2.0
Dissolved Chromium	UG/L		2.0	< 2.0	< 2.0	2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1	7.0	7.0	< 3.0	7.0	7.0	< 3.0
Dissolved Copper	UG/L		< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Total Lead	UG/L	210	3.0	3.0	< 2.0	3.0	3.0	< 2.0
Dissolved Lead	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75	8.0	6.0	2.0	8.0	6.0	2.0
Dissolved Nickel	UG/L		5.0	< 2.0	2.0	5.0	< 2.0	2.0
Total Selenium	UG/L	300	9.0	6.0	6.0	9.0	6.0	6.0
Dissolved Selenium	UG/L		8.0	8.0	8.0	8.0	8.0	8.0
Total Silver	UG/L	1.9	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Thallium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L		5.0	< 3.0	< 3.0	5.0	< 3.0	< 3.0

ND *No discharge*

< *Less than the method detection limit*

AD *Awaiting data*

> *Greater than the value noted*

NA *Not applicable*

NR *Not required*

Summary - Spillway #1

Month / *Day* / *Location* / *Frequency* / *Sample #* / Parameter	Units	*State Water Quality Standards at any time / monthly avg.*	June- Max Spillway # 1	June- Max 100 yd	June- Max WQR1	June- Avg Spillway # 1	June- Avg 100 yd	June- Avg WQR1
Sample Time	*mil*		NA	NA	NA	NA	NA	NA
Turbidity	*NTU*	*150 / 50*	119	5	42	19	4	14
pH	*units*	*6.5 - 8.5*	8.88	8.08	8.22	8.55	7.96	7.94
Dissolved Oxygen	*MG/L*		15.88	9.91	8.96	8.18	8.11	7.61
Dissolved Oxygen	*% sat*		NR	NR	NR	NR	NR	NR
Salinity	*ppt*		NR	NR	NR	NR	NR	NR
Conductivity	*umhos*		NR	NR	NR	NR	NR	NR
Temperature	*C*		NR	NR	NR	NR	NR	NR
Depth	*ft.*		1	5	6	1	5	6
Flow	*MGD*		20.18	NA	NA	7.58	NA	NA
Total Suspended Solids	*MG/L*	*800 / 400*	94	17	15	24	12	11
Nitrite	*MG/L*		0.0489	0.0042	0.0055	0.0298	0.0032	0.0031
Ammonium	*MG/L*		10.400	0.081	0.188	6.196	0.039	0.062
Total Dissolved P	*MG/L*		0.4505	0.0249	0.0273	0.3149	0.0190	0.0209
Total Dissolved N	*MG/L*		15.09	0.73	0.87	14.04	0.55	0.70
Phosphate	*MG/L*		0.2340	0.0033	0.0050	0.1142	0.0023	0.0023
Nitrate/Nitrite	*MG/L*		0.101	0.150	0.120	0.089	0.057	0.048
Nitrate	*MG/L*		0.076	0.146	0.115	0.060	0.054	0.045
Dissolved Organic N	*MG/L*		11.00	0.71	0.83	7.75	0.46	0.59
Dissolved Organic P	*MG/L*		0.3563	0.0234	0.0255	0.2008	0.0168	0.0186
Total Anitimony	*UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Antimony	*UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Arsenic	*UG/L*		24.0	17.0	15.0	24.0	17.0	15.0
Dissolved Arsenic	*UG/L*		24.0	14.0	15.0	24.0	14.0	.0
Total Beryllium	*UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Beryllium	*UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Cadmium	*UG/L*	*43*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dissolved Cadmium	*UG/L*		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Total Chromium	*UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Chromium	*UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Copper	*UG/L*	*6.1*	29.0	8.0	13.0	29.0	8.0	13.0
Dissolved Copper	*UG/L*		9.0	6.0	3.0	9.0	6.0	3.0
Total Lead	*UG/L*	*210*	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Lead	*UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Mercury	*UG/L*	*1.8*	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Dissolved Mercury	*UG/L*		< 0.2	0.2 <	0.2	< 0.2	0.2 <	0.2
Total Nickel	*UG/L*	*75*	8.0	2.0	5.0	8.0	2.0	5.0
Dissolved Nickel	*UG/L*		5.0	2.0 <	2.0	5.0	2.0 <	2.0
Total Selenium	*UG/L*	*300*	13.0	14.0	11.0	13.0	14.0	11.0
Dissolved Selenium	*UG/L*		11.0	10.0	10.0	11.0	10.0	10.0
Total Silver	*UG/L*	*1.9*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Silver	*UG/L*		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Thallium	*UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Thallium	*UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Zinc	*UG/L*	*90*	6.0 <	3.0 <	3.0	6.0 <	3.0 <	3.0
Dissolved Zinc	*UG/L*		< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

ND *No discharge*

< *Less than the method detection limit*

AD *Awaiting data*

> *Greater than the value noted*

NA *Not applicable*

NR *Not required*

Summary - Spillway #2

Month	June	State Water Quality Standards at any time / monthly avg.	June- Max			June- Avg		
Day								
Location			Spillway # 2	100 yd	WQR1	Spillway # 2	100 yd	WQR1
Frequency								
Sample #								
Parameter	Units							
Sample Time	mil		NA	NA	NA	NA	NA	NA
Turbidity	NTU	150 / 50	ND	NA	42	ND	NA	14
pH	units	6.5 - 8.5	ND	NA	8.22	ND	NA	7.94
Dissolved Oxygen	MG/L		ND	NA	8.96	ND	NA	7.61
Dissolved Oxygen	% sat		NR	NR	NR	NR	NR	NR
Salinity	ppt		NR	NR	NR	NR	NR	NR
Conductivity	umhos		NR	NR	NR	NR	NR	NR
Temperature	C		NR	NR	NR	NR	NR	NR
Depth	ft.		ND	NA	6	ND	NA	6
Flow	MGD		ND	NA	NA	ND	NA	NA
Total Suspended Solids	MG/L	800 / 400	ND	NA	15	ND	NA	11
Nitrite	MG/L		ND	NA	0.0055	ND	NA	0.0031
Ammonium	MG/L		ND	NA	0.188	ND	NA	0.062
Total Dissolved P	MG/L		ND	NA	0.0273	ND	NA	0.0209
Total Dissolved N	MG/L		ND	NA	0.87	ND	NA	0.70
Phosphate	MG/L		ND	NA	0.0050	ND	NA	0.0023
Nitrate/Nitrite	MG/L		ND	NA	0.120	ND	NA	0.048
Nitrate	MG/L		ND	NA	0.115	ND	NA	0.045
Dissolved Organic N	MG/L		ND	NA	0.83	ND	NA	0.59
Dissolved Organic P	MG/L		ND	NA	0.0255	ND	NA	0.0186
Total Anitimony	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Antimony	UG/L		ND	NA <	2.0	ND	NA <	2.0
Arsenic	UG/L		ND	NA	15.0	ND	NA	15.0
Dissolved Arsenic	UG/L		ND	NA	15.0	ND	NA	15.0
Total Beryllium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Beryllium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Cadmium	UG/L	43	ND	NA <	0.5	ND	NA <	0.5
Dissolved Cadmium	UG/L		ND	NA <	0.5	ND	NA <	0.5
Total Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Copper	UG/L	6.1	ND	NA	13.0	ND	NA	13.0
Dissolved Copper	UG/L		ND	NA	3.0	ND	NA	3.0
Total Lead	UG/L	210	ND	NA <	2.0	ND	NA <	2.0
Dissolved Lead	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Mercury	UG/L	1.8	ND	NA <	0.2	ND	NA <	0.2
Dissolved Mercury	UG/L		ND	NA <	0.2	ND	NA <	0.2
Total Nickel	UG/L	75	ND	NA	5.0	ND	NA	5.0
Dissolved Nickel	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Selenium	UG/L	300	ND	NA	11.0	ND	NA	11.0
Dissolved Selenium	UG/L		ND	NA	10.0	ND	NA	10.0
Total Silver	UG/L	1.9	ND	NA <	1.0	ND	NA <	1.0
Dissolved Silver	UG/L		ND	NA <	1.0	ND	NA <	1.0
Total Thallium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Thallium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Zinc	UG/L	90	ND	NA <	3.0	ND	NA <	3.0
Dissolved Zinc	UG/L		ND	NA <	3.0	ND	NA <	3.0

ND *No discharge*

< *Less than the method detection limit*

AD *Awaiting data*

> *Greater than the value noted*

NA *Not applicable*

NR *Not required*

Summary - Spillway #4

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	June- Max Spillway # 4	June- Max 100 yd	June- Max WQR1	June- Avg Spillway # 4	June- Avg 100 yd	June- Avg WQR1
Sample Time	mil		NA	NA	NA	NA	NA	NA
Turbidity	NTU	150 / 50	ND	NA	42	ND	NA	14
pH	units	6.5 - 8.5	ND	NA	8.22	ND	NA	7.94
Dissolved Oxygen	MG/L		ND	NA	8.96	ND	NA	7.61
Dissolved Oxygen	% sat		NR	NR	NR	NR	NR	NR
Salinity	ppt		NR	NR	NR	NR	NR	NR
Conductivity	umhos		NR	NR	NR	NR	NR	NR
Temperature	C		NR	NR	NR	NR	NR	NR
Depth	ft.		ND	NA	6	ND	NA	6
Flow	MGD		ND	NA	NA	ND	NA	NA
Total Suspended Solids	MG/L	800 / 400	ND	NA	15	ND	NA	11
Nitrite	MG/L		ND	NA	0.0055	ND	NA	0.0031
Ammonium	MG/L		ND	NA	0.188	ND	NA	0.062
Total Dissolved P	MG/L		ND	NA	0.0273	ND	NA	0.0209
Total Dissolved N	MG/L		ND	NA	0.87	ND	NA	0.70
Phosphate	MG/L		ND	NA	0.0050	ND	NA	0.0023
Nitrate/Nitrite	MG/L		ND	NA	0.120	ND	NA	0.048
Nitrate	MG/L		ND	NA	0.115	ND	NA	0.045
Dissolved Organic N	MG/L		ND	NA	0.83	ND	NA	0.59
Dissolved Organic P	MG/L		ND	NA	0.0255	ND	NA	0.0186
Total Anitimony	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Antimony	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Arsenic	UG/L		ND	NA	15.0	ND	NA	15.0
Dissolved Arsenic	UG/L		ND	NA	15.0	ND	NA	[illegible]
Total Beryllium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Beryllium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Cadmium	UG/L	43	ND	NA <	0.5	ND	NA <	0.5
Dissolved Cadmium	UG/L		ND	NA <	0.5	ND	NA <	0.5
Total Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Copper	UG/L	6.1	ND	NA	13.0	ND	NA	13.0
Dissolved Copper	UG/L		ND	NA	3.0	ND	NA	3.0
Total Lead	UG/L	210	ND	NA <	2.0	ND	NA <	2.0
Dissolved Lead	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Mercury	UG/L	1.8	ND	NA <	0.2	ND	NA <	0.2
Dissolved Mercury	UG/L		ND	NA <	0.2	ND	NA <	0.2
Total Nickel	UG/L	75	ND	NA	5.0	ND	NA	5.0
Dissolved Nickel	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Selenium	UG/L	300	ND	NA	11.0	ND	NA	11.0
Dissolved Selenium	UG/L		ND	NA	10.0	ND	NA	10.0
Total Silver	UG/L	1.9	ND	NA <	1.0	ND	NA <	1.0
Dissolved Silver	UG/L		ND	NA <	1.0	ND	NA <	1.0
Total Thallium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Thallium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Zinc	UG/L	90	ND	NA <	3.0	ND	NA <	3.0
Dissolved Zinc	UG/L		ND	NA <	3.0	ND	NA <	3.0

ND *No discharge*
< *Less than the method detection limit*
AD *Awaiting data*
> *Greater than the value noted*
NA *Not applicable*
NR *Not required*

Summary - Spillway #5

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	June- Max Spillway # 5	June- Max 100 yd	June- Max WQR1	June- Avg Spillway # 5	June- Avg 100 yd	June- Avg WQR1
Sample Time	mil		NA	NA	NA	NA	NA	NA
Turbidity	NTU	150 / 50	101	15	42	63	11	14
pH	units	6.5 - 8.5	8.98	7.97	8.22	8.70	7.84	7.94
Dissolved Oxygen	MG/L		12.70	7.64	8.96	6.86	6.77	7.61
Dissolved Oxygen	% sat		NR	NR	NR	NR	NR	NR
Salinity	ppt		NR	NR	NR	NR	NR	NR
Conductivity	umhos		NR	NR	NR	NR	NR	NR
Temperature	C		NR	NR	NR	NR	NR	NR
Depth	ft.		1	2	6	1	2	6
Flow	MGD		2.02	NA	NA	1.01	NA	NA
Total Suspended Solids	MG/L	800 / 400	164	13	15	73	13	11
Nitrite	MG/L		0.0152	0.0105	0.0055	0.0150	0.0061	0.0031
Ammonium	MG/L		1.564	0.243	0.188	0.831	0.109	0.062
Total Dissolved P	MG/L		2.1172	0.0331	0.0273	1.8396	0.0258	0.0209
Total Dissolved N	MG/L		9.43	0.78	0.87	6.75	0.74	0.70
Phosphate	MG/L		0.6520	0.0094	0.0050	0.5320	0.0044	0.0023
Nitrate/Nitrite	MG/L		0.075	0.164	0.120	0.064	0.075	0.048
Nitrate	MG/L		0.060	0.154	0.115	0.049	0.069	0.045
Dissolved Organic N	MG/L		7.79	0.71	0.83	5.85	0.56	0.59
Dissolved Organic P	MG/L		1.7052	0.0318	0.0255	1.3076	0.0214	0.0186
Total Anitimony	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L		48.0	25.0	15.0	48.0	25.0	15.0
Dissolved Arsenic	UG/L		44.0	24.0	15.0	44.0	24.0	15.0
Total Beryllium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Total Chromium	UG/L		3.0	< 2.0	< 2.0	3.0	< 2.0	< 2.0
Dissolved Chromium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1	17.0	< 3.0	13.0	17.0	< 3.0	13.0
Dissolved Copper	UG/L		7.0	4.0	3.0	7.0	4.0	3.0
Total Lead	UG/L	210	2.0	< 2.0	< 2.0	2.0	< 2.0	< 2.0
Dissolved Lead	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75	17.0	2.0	5.0	17.0	2.0	5.0
Dissolved Nickel	UG/L		5.0	3.0	< 2.0	5.0	3.0	< 2.0
Total Selenium	UG/L	300	32.0	29.0	11.0	32.0	29.0	11.0
Dissolved Selenium	UG/L		30.0	27.0	10.0	30.0	27.0	10.0
Total Silver	UG/L	1.9	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Thallium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90	9.0	< 3.0	3.0	9.0	< 3.0	3.0
Dissolved Zinc	UG/L		< 3.0	< 3.0	3.0	< 3.0	< 3.0	3.0

ND *No discharge*

< *Less than the method detection limit*

AD *Awaiting data*

> *Greater than the value noted*

NA *Not applicable*

NR *Not required*

Summary - Spillway #6

Month *June* *Day* *Location* *Frequency* *Sample #* Parameter Units	*State Water Quality Standards at any time / monthly avg.*	June- Max Spillway # 6	 100 yd	 WQR1	June- Avg Spillway # 6	 100 yd	 WQR1
Sample Time *mil*		NA	NA	NA	NA	NA	NA
Turbidity *NTU*	*150 / 50*	170	16	42	82	11	14
pH *units*	*6.5 - 8.5*	8.95	7.91	8.22	8.68	7.86	7.94
Dissolved Oxygen *MG/L*		18.68	7.40	8.96	8.09	6.81	7.61
Dissolved Oxygen *% sat*		NR	NR	NR	NR	NR	NR
Salinity *ppt*		NR	NR	NR	NR	NR	NR
Conductivity *umhos*		NR	NR	NR	NR	NR	NR
Temperature *C*		NR	NR	NR	NR	NR	NR
Depth *ft.*		1	2	6	1	2	6
Flow *MGD*		2.02	NA	NA	1.03	NA	NA
Total Suspended Solids *MG/L*	*800 / 400*	128	26	15	80	17	11
Nitrite *MG/L*		0.0321	0.0103	0.0055	0.0205	0.0072	0.0031
Ammonium *MG/L*		0.917	0.181	0.188	0.481	0.115	0.062
Total Dissolved P *MG/L*		2.3731	0.0543	0.0273	1.8726	0.0356	0.0209
Total Dissolved N *MG/L*		9.04	0.89	0.87	6.28	0.76	0.70
Phosphate *MG/L*		0.4700	0.0127	0.0050	0.4590	0.0088	0.0023
Nitrate/Nitrite *MG/L*		0.092	0.114	0.120	0.067	0.065	0.048
Nitrate *MG/L*		0.060	0.104	0.115	0.047	0.058	0.045
Dissolved Organic N *MG/L*		8.08	0.70	0.83	5.73	0.59	0.59
Dissolved Organic P *MG/L*		1.9031	0.0434	0.0255	1.4136	0.0269	0.0186
Total Anitimony *UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Antimony *UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Arsenic *UG/L*		46.0	24.0	15.0	46.0	24.0	15.0
Dissolved Arsenic *UG/L*		44.0	24.0	15.0	44.0	24.0	[illegible].0
Total Beryllium *UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Beryllium *UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Cadmium *UG/L*	*43*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dissolved Cadmium *UG/L*		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Total Chromium *UG/L*		4.0	< 2.0	< 2.0	4.0	< 2.0	< 2.0
Dissolved Chromium *UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Copper *UG/L*	*6.1*	12.0	< 3.0	13.0	12.0	< 3.0	13.0
Dissolved Copper *UG/L*		8.0	5.0	3.0	8.0	5.0	3.0
Total Lead *UG/L*	*210*	< 2.0	4.0	< 2.0	< 2.0	4.0	< 2.0
Dissolved Lead *UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Mercury *UG/L*	*1.8*	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Dissolved Mercury *UG/L*		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Total Nickel *UG/L*	*75*	13.0	2.0	5.0	13.0	2.0	5.0
Dissolved Nickel *UG/L*		5.0	< 2.0	2.0	5.0	< 2.0	2.0
Total Selenium *UG/L*	*300*	27.0	21.0	11.0	27.0	21.0	11.0
Dissolved Selenium *UG/L*		27.0	30.0	10.0	27.0	30.0	10.0
Total Silver *UG/L*	*1.9*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Silver *UG/L*		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Thallium *UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Thallium *UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Zinc *UG/L*	*90*	7.0	< 3.0	3.0	7.0	< 3.0	3.0
Dissolved Zinc *UG/L*		< 3.0	< 3.0	3.0	< 3.0	< 3.0	3.0

ND *No discharge*

< *Less than the method detection limit*

AD *Awaiting data*

> *Greater than the value noted*

NA *Not applicable*

NR *Not required*

Summary - Spillway #1

Month / *Day* / *Location* / *Frequency* / *Sample #* / Parameter	Units	*State Water* Quality Standards *at any time / monthly avg.*	July- Max Spillway # 1	July- Max 100 yd	July- Max WQR1	July- Avg Spillway # 1	July- Avg 100 yd	July- Avg WQR1
	July							
Sample Time	*mil*		NA	NA	NA	NA	NA	NA
Turbidity	*NTU*	*150 / 50*	65	8	7	37	5	5
pH	*units*	*6.5 - 8.5*	8.85	7.91	7.91	8.58	7.83	7.78
Dissolved Oxygen	*MG/L*		10.68	7.31	7.32	6.08	6.80	7.05
Dissolved Oxygen	*% sat*		NR	NR	NR	NR	NR	NR
Salinity	*ppt*		NR	NR	NR	NR	NR	NR
Conductivity	*umhos*		NR	NR	NR	NR	NR	NR
Temperature	*C*		NR	NR	NR	NR	NR	NR
Depth	*ft.*		1	2	6	1	2	6
Flow	*MGD*		35.38	NA	NA	19.79	NA	NA
Total Suspended Solids	*MG/L*	*800 / 400*	71	26	19	39	17	14
Nitrite	*MG/L*		1.4601	0.0278	0.0401	0.3789	0.0094	0.0112
Ammonium	*MG/L*		6.170	0.811	0.033	4.895	0.249	0.021
Total Dissolved P	*MG/L*		0.3898	0.0539	0.0213	0.3392	0.0326	0.0164
Total Dissolved N	*MG/L*		8.37	1.30	0.51	7.94	0.65	0.38
Phosphate	*MG/L*		0.3270	0.0369	0.0058	0.2060	0.0167	0.0044
Nitrate/Nitrite	*MG/L*		2.050	0.110	0.175	0.720	0.045	0.068
Nitrate	*MG/L*		0.590	0.082	0.135	0.341	0.035	0.057
Dissolved Organic N	*MG/L*		3.04	0.39	0.32	2.32	0.35	0.29
Dissolved Organic P	*MG/L*		0.1818	0.0187	0.0155	0.1332	0.0160	0.0121
Total Anitimony	*UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Antimony	*UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Arsenic	*UG/L*		29.0	14.0	15.0	29.0	14.0	15.0
Dissolved Arsenic	*UG/L*		29.0	16.0	14.0	29.0	16.0	14.0
Total Beryllium	*UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Beryllium	*UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Cadmium	*UG/L*	*43*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dissolved Cadmium	*UG/L*		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Total Chromium	*UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Chromium	*UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Copper	*UG/L*	*6.1*	7.0	5.0	10.0	7.0	5.0	10.0
Dissolved Copper	*UG/L*		8.0	< 3.0	< 3.0	8.0	< 3.0	< 3.0
Total Lead	*UG/L*	*210*	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Lead	*UG/L*		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Mercury	*UG/L*	*1.8*	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Dissolved Mercury	*UG/L*		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Total Nickel	*UG/L*	*75*	6.0	3.0	3.0	6.0	3.0	3.0
Dissolved Nickel	*UG/L*		5.0	< 2.0	< 2.0	5.0	< 2.0	< 2.0
Total Selenium	*UG/L*	*300*	9.0	9.0	14.0	9.0	9.0	14.0
Dissolved Selenium	*UG/L*		9.0	13.0	9.0	9.0	13.0	9.0
Total Silver	*UG/L*	*1.9*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Silver	*UG/L*		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Thallium	*UG/L*		< 2.0	2.0	< 2.0	< 2.0	2.0	< 2.0
Dissolved Thallium	*UG/L*		< 2.0	3.0	< 2.0	< 2.0	3.0	< 2.0
Total Zinc	*UG/L*	*90*	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dissolved Zinc	*UG/L*		< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

ND *No discharge*

< *Less than method detection limit*

AD *Awaiting data*

> *Greater than value noted*

NA *Not applicable*

NR *Not required*

Summary - Spillway #2

Month / *Day* / *Location* / *Frequency* / *Sample #* / **Parameter**	**Units**	*State Water* **Quality Standards** *at any time / monthly avg.*	July- Max **Spillway # 2**	July- Max **100 yd**	July- Max **WQR1**	July- Avg **Spillway # 2**	July- Avg **100 yd**	July- Avg **WQR1**
July								
Sample Time	*mil*		NA	NA	NA	NA	NA	NA
Turbidity	*NTU*	*150 / 50*	ND	NA	7	ND	NA	5
pH	*units*	*6.5 - 8.5*	ND	NA	7.91	ND	NA	7.78
Dissolved Oxygen	*MG/L*		ND	NA	7.32	ND	NA	7.05
Dissolved Oxygen	*% sat*		ND	NR	NR	ND	NR	NR
Salinity	*ppt*		ND	NR	NR	ND	NR	NR
Conductivity	*umhos*		ND	NR	NR	ND	NR	NR
Temperature	*C*		ND	NR	NR	ND	NR	NR
Depth	*ft.*		ND	NA	6	ND	NA	6
Flow	*MGD*		ND	NA	NA	ND	NA	NA
Total Suspended Solids	*MG/L*	*800 / 400*	ND	NA	19	ND	NA	14
Nitrite	*MG/L*		ND	NA	0.0401	ND	NA	0.0112
Ammonium	*MG/L*		ND	NA	0.033	ND	NA	0.021
Total Dissolved P	*MG/L*		ND	NA	0.0213	ND	NA	0.0164
Total Dissolved N	*MG/L*		ND	NA	0.51	ND	NA	0.38
Phosphate	*MG/L*		ND	NA	0.0058	ND	NA	0.0044
Nitrate/Nitrite	*MG/L*		ND	NA	0.175	ND	NA	0.068
Nitrate	*MG/L*		ND	NA	0.135	ND	NA	0.057
Dissolved Organic N	*MG/L*		ND	NA	0.32	ND	NA	0.29
Dissolved Organic P	*MG/L*		ND	NA	0.0155	ND	NA	0.0121
Total Anitimony	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Dissolved Antimony	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Total Arsenic	*UG/L*		ND	NA	15.0	ND	NA	.0
Dissolved Arsenic	*UG/L*		ND	NA	14.0	ND	NA	14.0
Total Beryllium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Dissolved Beryllium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Total Cadmium	*UG/L*	*43*	ND	NA <	0.5	ND	NA <	0.5
Dissolved Cadmium	*UG/L*		ND	NA <	0.5	ND	NA <	0.5
Total Chromium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Dissolved Chromium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Total Copper	*UG/L*	*6.1*	ND	NA	10.0	ND	NA	10.0
Dissolved Copper	*UG/L*		ND	NA <	3.0	ND	NA <	3.0
Total Lead	*UG/L*	*210*	ND	NA <	2.0	ND	NA <	2.0
Dissolved Lead	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Total Mercury	*UG/L*	*1.8*	ND	NA <	0.2	ND	NA <	0.2
Dissolved Mercury	*UG/L*		ND	NA <	0.2	ND	NA <	0.2
Total Nickel	*UG/L*	*75*	ND	NA	3.0	ND	NA	3.0
Dissolved Nickel	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Total Selenium	*UG/L*	*300*	ND	NA	14.0	ND	NA	14.0
Dissolved Selenium	*UG/L*		ND	NA	9.0	ND	NA	9.0
Total Silver	*UG/L*	*1.9*	ND	NA <	1.0	ND	NA <	1.0
Dissolved Silver	*UG/L*		ND	NA <	1.0	ND	NA <	1.0
Total Thallium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Dissolved Thallium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Total Zinc	*UG/L*	*90*	ND	NA <	3.0	ND	NA <	3.0
Dissolved Zinc	*UG/L*		ND	NA <	3.0	ND	NA <	3.0

ND *No discharge*

< *Less than method detection limit*

AD *Awaiting data*

> *Greater than value noted*

NA *Not applicable*

NR *Not required*

Summary - Spillway #4

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	July- Max Spillway # 4	July- Max 100 yd	July- Max WQR1	July- Avg Spillway # 4	July- Avg 100 yd	July- Avg WQR1
Sample Time	mil		NA	NA	NA	NA	NA	NA
Turbidity	NTU	150 / 50	ND	NA	7	ND	NA	5
pH	units	6.5 - 8.5	ND	NA	7.91	ND	NA	7.78
Dissolved Oxygen	MG/L		ND	NA	7.32	ND	NA	7.05
Dissolved Oxygen	% sat		ND	NR	NR	ND	NR	NR
Salinity	ppt		ND	NR	NR	ND	NR	NR
Conductivity	umhos		ND	NR	NR	ND	NR	NR
Temperature	C		ND	NR	NR	ND	NR	NR
Depth	ft.		ND	NA	6	ND	NA	6
Flow	MGD		ND	NA	NA	ND	NA	NA
Total Suspended Solids	MG/L	800 / 400	ND	NA	19	ND	NA	14
Nitrite	MG/L		ND	NA	0.0401	ND	NA	0.0112
Ammonium	MG/L		ND	NA	0.033	ND	NA	0.021
Total Dissolved P	MG/L		ND	NA	0.0213	ND	NA	0.0164
Total Dissolved N	MG/L		ND	NA	0.51	ND	NA	0.38
Phosphate	MG/L		ND	NA	0.0058	ND	NA	0.0044
Nitrate/Nitrite	MG/L		ND	NA	0.175	ND	NA	0.068
Nitrate	MG/L		ND	NA	0.135	ND	NA	0.057
Dissolved Organic N	MG/L		ND	NA	0.32	ND	NA	0.29
Dissolved Organic P	MG/L		ND	NA	0.0155	ND	NA	0.0121
Total Anitimony	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Antimony	UG/L		ND	NA <	2.0	ND	NA <	2.0
Arsenic	UG/L		ND	NA	15.0	ND	NA	15.0
Dissolved Arsenic	UG/L		ND	NA	14.0	ND	NA	14.0
Total Beryllium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Beryllium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Cadmium	UG/L	43	ND	NA <	0.5	ND	NA <	0.5
Dissolved Cadmium	UG/L		ND	NA <	0.5	ND	NA <	0.5
Total Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Copper	UG/L	6.1	ND	NA	10.0	ND	NA	10.0
Dissolved Copper	UG/L		ND	NA <	3.0	ND	NA <	3.0
Total Lead	UG/L	210	ND	NA <	2.0	ND	NA <	2.0
Dissolved Lead	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Mercury	UG/L	1.8	ND	NA <	0.2	ND	NA <	0.2
Dissolved Mercury	UG/L		ND	NA <	0.2	ND	NA <	0.2
Total Nickel	UG/L	75	ND	NA	3.0	ND	NA	3.0
Dissolved Nickel	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Selenium	UG/L	300	ND	NA	14.0	ND	NA	14.0
Dissolved Selenium	UG/L		ND	NA	9.0	ND	NA	9.0
Total Silver	UG/L	1.9	ND	NA <	1.0	ND	NA <	1.0
Dissolved Silver	UG/L		ND	NA <	1.0	ND	NA <	1.0
Total Thallium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Thallium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Zinc	UG/L	90	ND	NA <	3.0	ND	NA <	3.0
Dissolved Zinc	UG/L		ND	NA <	3.0	ND	NA <	3.0

ND *No discharge*
< *Less than method detection limit*
AD *Awaiting data*
> *Greater than value noted*
NA *Not applicable*
NR *Not required*

Summary - Spillway #5

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	July- Max Spillway # 5	July- Max 100 yd	July- Max WQR1	July- Avg Spillway # 5	July- Avg 100 yd	July- Avg WQR1
Sample Time	mil		NA	NA	NA	NA	NA	NA
Turbidity	NTU	150 / 50	170	16	7	126	14	5
pH	units	6.5 - 8.5	8.85	7.88	7.91	8.64	7.80	7.78
Dissolved Oxygen	MG/L		12.92	7.67	7.32	6.40	7.46	7.05
Dissolved Oxygen	% sat		NR	NR	NR	NR	NR	NR
Salinity	ppt		NR	NR	NR	NR	NR	NR
Conductivity	umhos		NR	NR	NR	NR	NR	NR
Temperature	C		NR	NR	NR	NR	NR	NR
Depth	ft.		1	2	6	1	2	6
Flow	MGD		4.53	NA	NA	3.04	NA	NA
Total Suspended Solids	MG/L	800 / 400	159	20	19	128	20	14
Nitrite	MG/L		0.0497	0.0066	0.0401	0.0347	0.0058	0.0112
Ammonium	MG/L		5.220	0.054	0.033	2.655	0.039	0.021
Total Dissolved P	MG/L		0.9754	0.0397	0.0213	0.8529	0.0286	0.0164
Total Dissolved N	MG/L		10.13	0.40	0.51	6.57	0.37	0.38
Phosphate	MG/L		0.7730	0.0303	0.0058	0.6155	0.0188	0.0044
Nitrate/Nitrite	MG/L		0.202	0.031	0.175	0.174	0.030	0.068
Nitrate	MG/L		0.152	0.025	0.135	0.139	0.025	0.057
Dissolved Organic N	MG/L		4.76	0.32	0.32	3.74	0.30	0.29
Dissolved Organic P	MG/L		0.2724	0.0103	0.0155	0.2374	0.0099	0.0121
Total Anitimony	UG/L		**	** <	2.0	**	** <	2.0
Dissolved Antimony	UG/L		**	** <	2.0	**	** <	2.0
Total Arsenic	UG/L		**	**	15.0	**	**	[redacted]
Dissolved Arsenic	UG/L		**	**	14.0	**	**	14.0
Total Beryllium	UG/L		**	** <	2.0	**	** <	2.0
Dissolved Beryllium	UG/L		**	** <	2.0	**	** <	2.0
Total Cadmium	UG/L	43	**	** <	0.5	**	** <	0.5
Dissolved Cadmium	UG/L		**	** <	0.5	**	** <	0.5
Total Chromium	UG/L		**	** <	2.0	**	** <	2.0
Dissolved Chromium	UG/L		**	** <	2.0	**	** <	2.0
Total Copper	UG/L	6.1	**	**	10.0	**	**	10.0
Dissolved Copper	UG/L		**	** <	3.0	**	** <	3.0
Total Lead	UG/L	210	**	** <	2.0	**	** <	2.0
Dissolved Lead	UG/L		**	** <	2.0	**	** <	2.0
Total Mercury	UG/L	1.8	**	** <	0.2	**	** <	0.2
Dissolved Mercury	UG/L		**	** <	0.2	**	** <	0.2
Total Nickel	UG/L	75	**	**	3.0	**	**	3.0
Dissolved Nickel	UG/L		**	** <	2.0	**	** <	2.0
Total Selenium	UG/L	300	**	**	14.0	**	**	14.0
Dissolved Selenium	UG/L		**	**	9.0	**	**	9.0
Total Silver	UG/L	1.9	**	** <	1.0	**	** <	1.0
Dissolved Silver	UG/L		**	** <	1.0	**	** <	1.0
Total Thallium	UG/L		**	** <	2.0	**	** <	2.0
Dissolved Thallium	UG/L		**	** <	2.0	**	** <	2.0
Total Zinc	UG/L	90	**	** <	3.0	**	** <	3.0
Dissolved Zinc	UG/L		**	** <	3.0	**	** <	3.0

** No monthly sample collected, no discharge from Spillway 5 on 7/27/01.

ND *No discharge*

< *Less than method detection limit*

AD *Awaiting data*

> *Greater than value noted*

NA *Not applicable*

NR *Not required*

Summary - Spillway #6

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	July- Max Spillway #6	July- Max 100 yd	July- Max WQR1	July- Avg Spillway #6	July- Avg 100 yd	July- Avg WQR1
Month			July					
Sample Time	mil		NA	NA	NA	NA	NA	NA
Turbidity	NTU	150 / 50	182	44	7	93	26	5
pH	units	6.5 - 8.5	8.98	8.55	7.91	8.72	8.05	7.78
Dissolved Oxygen	MG/L		15.50	9.32	7.32	9.03	7.89	7.05
Dissolved Oxygen	% sat		NR	NR	NR	NR	NR	NR
Salinity	ppt		NR	NR	NR	NR	NR	NR
Conductivity	umhos		NR	NR	NR	NR	NR	NR
Temperature	C		NR	NR	NR	NR	NR	NR
Depth	ft.		1	2	6	1	2	6
Flow	MGD		24.37	NA	NA	10.06	NA	NA
Total Suspended Solids	MG/L	800 / 400	350	97	19	150	52	14
Nitrite	MG/L		0.0544	0.0221	0.0401	0.0417	0.0090	0.0112
Ammonium	MG/L		6.390	2.200	0.033	4.014	0.761	0.021
Total Dissolved P	MG/L		0.9644	0.1931	0.0213	0.7864	0.0747	0.0164
Total Dissolved N	MG/L		10.79	2.61	0.51	8.08	1.10	0.38
Phosphate	MG/L		0.7520	0.1600	0.0058	0.5710	0.0565	0.0044
Nitrate/Nitrite	MG/L		0.204	0.083	0.175	0.192	0.046	0.068
Nitrate	MG/L		0.154	0.061	0.135	0.150	0.038	0.057
Dissolved Organic N	MG/L		5.07	0.33	0.32	3.87	0.29	0.29
Dissolved Organic P	MG/L		0.3005	0.0331	0.0155	0.2154	0.0181	0.0121
Total Anitimony	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L		33.0	19.0	15.0	33.0	19.0	15.0
Dissolved Arsenic	UG/L		32.0	19.0	14.0	32.0	19.0	14.0
Total Beryllium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Total Chromium	UG/L		4.0	< 2.0	< 2.0	4.0	< 2.0	< 2.0
Dissolved Chromium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1	10.0	8.0	10.0	10.0	8.0	10.0
Dissolved Copper	UG/L		5.0	5.0	< 3.0	5.0	5.0	< 3.0
Total Lead	UG/L	210	3.0	< 2.0	< 2.0	3.0	< 2.0	< 2.0
Dissolved Lead	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75	9.0	5.0	3.0	9.0	5.0	3.0
Dissolved Nickel	UG/L		5.0	3.0	< 2.0	5.0	3.0	< 2.0
Total Selenium	UG/L	300	10.0	9.0	14.0	10.0	9.0	14.0
Dissolved Selenium	UG/L		9.0	11.0	9.0	9.0	11.0	9.0
Total Silver	UG/L	1.9	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Thallium	UG/L		< 2.0	3.0	< 2.0	< 2.0	3.0	< 2.0
Dissolved Thallium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90	9.0	< 3.0	< 3.0	9.0	< 3.0	< 3.0
Dissolved Zinc	UG/L		< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

ND *No discharge*

< *Less than method detection limit*

AD *Awaiting data*

> *Greater than value noted*

NA *Not applicable*

NR *Not required*

Summary - Spillway #1

Month / *Day* / *Location* / *Frequency* / *Sample #* / **Parameter**	**Units**	*State Water* **Quality Standards** *at any time / monthly avg.*	**August - Max** Spillway # 1	100 yd	WQR1	**August - Avg** Spillway # 1	100 yd	WQR1
August								
Sample Time	*mil*		NA	NA	NA	NA	NA	NA
Turbidity	*NTU*	*150 / 50*	52	7	5	18	4	4
pH	*units*	*6.5 - 8.5*	8.95	8.33	8.09	8.54	7.95	7.92
Dissolved Oxygen	*MG/L*		20.00	6.68	7.74	7.77	5.91	6.45
Dissolved Oxygen	*% sat*		NR	NR	NR	NR	NR	NR
Salinity	*ppt*		NR	NR	NR	NR	NR	NR
Conductivity	*umhos*		NR	NR	NR	NR	NR	NR
Temperature	*C*		NR	NR	NR	NR	NR	NR
Depth	*ft.*		1	2	6	1	2	6
Flow	*MGD*		39.80	NA	NA	17.45	NA	NA
Total Suspended Solids	*MG/L*	*800 / 400*	70	16	14	32	11	10
Nitrite	*MG/L*		2.2130	0.1015	0.0038	1.2920	0.0224	0.0023
Ammonium	*MG/L*		9.620	1.825	0.053	4.336	0.395	0.027
Total Dissolved P	*MG/L*		0.4553	0.0925	0.0175	0.4147	0.0318	0.0164
Total Dissolved N	*MG/L*		17.98	2.44	0.52	10.61	0.84	0.42
Phosphate	*MG/L*		0.3800	0.0645	0.0042	0.3182	0.0161	0.0032
Nitrate/Nitrite	*MG/L*		2.530	0.138	0.037	1.672	0.051	0.028
Nitrate	*MG/L*		1.006	0.037	0.035	0.380	0.029	0.026
Dissolved Organic N	*MG/L*		7.68	0.48	0.47	4.60	0.39	0.36
Dissolved Organic P	*MG/L*		0.1478	0.0280	0.0142	0.0965	0.0157	0.0132
Total Antimony	*UG/L*		10.0	5.0	5.0	10.0	5.0	5.0
Dissolved Antimony	*UG/L*		6.0	4.0	5.0	6.0	4.0	5.0
Total Arsenic	*UG/L*		29.0 <	2.0 <	2.0	29.0 <	2.0 <	2.0
Dissolved Arsenic	*UG/L*		22.0 <	2.0 <	2.0	22.0 <	2.0 <	2.0
Total Beryllium	*UG/L*		< 2.0 <	2.0 <	2.0	< 2.0 <	2.0 <	2.0
Dissolved Beryllium	*UG/L*		< 2.0 <	2.0 <	2.0	< 2.0 <	2.0 <	2.0
Total Cadmium	*UG/L*	*43*	< 0.5 <	0.5 <	0.5	< 0.5 <	0.5 <	0.5
Dissolved Cadmium	*UG/L*		< 0.5 <	0.5 <	0.5	< 0.5 <	0.5 <	0.5
Total Chromium	*UG/L*		< 2.0 <	2.0 <	2.0	< 2.0 <	2.0 <	2.0
Dissolved Chromium	*UG/L*		< 2.0 <	2.0 <	2.0	< 2.0 <	2.0 <	2.0
Total Copper	*UG/L*	*6.1*	5.0 <	3.0	5.0	5.0 <	3.0	5.0
Dissolved Copper	*UG/L*		4.0 <	3.0	2.0	4.0 <	3.0	2.0
Total Lead	*UG/L*	*210*	< 2.0 <	2.0	2.0	< 2.0 <	2.0	2.0
Dissolved Lead	*UG/L*		< 2.0 <	2.0 <	2.0	< 2.0 <	2.0 <	2.0
Total Mercury	*UG/L*	*1.8*	< 0.2 <	0.2 <	0.2	< 0.2 <	0.2 <	0.2
Dissolved Mercury	*UG/L*		< 0.2 <	0.2 <	0.2	< 0.2 <	0.2 <	0.2
Total Nickel	*UG/L*	*75*	9.0	3.0	6.0	9.0	3.0	6.0
Dissolved Nickel	*UG/L*		9.0	3.0	5.0	9.0	3.0	5.0
Total Selenium	*UG/L*	*300*	< 2.0 <	2.0 <	2.0	< 2.0 <	2.0 <	2.0
Dissolved Selenium	*UG/L*		< 2.0 <	2.0 <	2.0	< 2.0 <	2.0 <	2.0
Total Silver	*UG/L*	*1.9*	< 1.0 <	1.0 <	1.0	< 1.0 <	1.0 <	1.0
Dissolved Silver	*UG/L*		< 1.0 <	1.0 <	1.0	< 1.0 <	1.0 <	1.0
Total Thallium	*UG/L*		< 2.0 <	2.0 <	2.0	< 2.0 <	2.0 <	2.0
Dissolved Thallium	*UG/L*		< 2.0 <	2.0 <	2.0	< 2.0 <	2.0 <	2.0
Total Zinc	*UG/L*	*90*	15.0 <	3.0	18.0	15.0 <	3.0	18.0
Dissolved Zinc	*UG/L*		20.0 <	3.0	14.0	20.0 <	3.0	14.0

ND *No discharge*
< *Less than method detection limit*
AD *Awaiting data*
> *Greater than value noted*
NA *Not applicable*
NR *Not required*

Summary - Spillway #2

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	August - Max			August - Avg		
			Spillway # 2	100 yd	WQR1	Spillway # 2	100 yd	WQR1
Sample Time	mil		NA	NA	NA	NA	NA	NA
Turbidity	NTU	150 / 50	ND	NA	5	ND	NA	4
pH	units	6.5 - 8.5	ND	NA	8.09	ND	NA	7.92
Dissolved Oxygen	MG/L		ND	NA	7.74	ND	NA	6.45
Dissolved Oxygen	% sat		NR	NR	NR	NR	NR	NR
Salinity	ppt		NR	NR	NR	NR	NR	NR
Conductivity	umhos		NR	NR	NR	NR	NR	NR
Temperature	C		NR	NR	NR	NR	NR	NR
Depth	ft.		ND	NA	6	ND	NA	6
Flow	MGD		ND	NA	NA	ND	NA	NA
Total Suspended Solids	MG/L	800 / 400	ND	NA	14	ND	NA	10
Nitrite	MG/L		ND	NA	0.0038	ND	NA	0.0023
Ammonium	MG/L		ND	NA	0.053	ND	NA	0.027
Total Dissolved P	MG/L		ND	NA	0.0175	ND	NA	0.0164
Total Dissolved N	MG/L		ND	NA	0.52	ND	NA	0.42
Phosphate	MG/L		ND	NA	0.0042	ND	NA	0.0032
Nitrate/Nitrite	MG/L		ND	NA	0.037	ND	NA	0.028
Nitrate	MG/L		ND	NA	0.035	ND	NA	0.026
Dissolved Organic N	MG/L		ND	NA	0.47	ND	NA	0.36
Dissolved Organic P	MG/L		ND	NA	0.0142	ND	NA	0.0132
Total Anitimony	UG/L		ND	NA	5.0	ND	NA	5.0
Dissolved Antimony	UG/L		ND	NA	5.0	ND	NA	5.0
Total Arsenic	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Arsenic	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Beryllium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Beryllium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Cadmium	UG/L	43	ND	NA <	0.5	ND	NA <	0.5
Dissolved Cadmium	UG/L		ND	NA <	0.5	ND	NA <	0.5
Total Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Copper	UG/L	6.1	ND	NA	5.0	ND	NA	5.0
Dissolved Copper	UG/L		ND	NA	2.0	ND	NA	2.0
Total Lead	UG/L	210	ND	NA	2.0	ND	NA	2.0
Dissolved Lead	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Mercury	UG/L	1.8	ND	NA <	0.2	ND	NA <	0.2
Dissolved Mercury	UG/L		ND	NA <	0.2	ND	NA <	0.2
Total Nickel	UG/L	75	ND	NA	6.0	ND	NA	6.0
Dissolved Nickel	UG/L		ND	NA	5.0	ND	NA	5.0
Total Selenium	UG/L	300	ND	NA <	2.0	ND	NA <	2.0
Dissolved Selenium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Silver	UG/L	1.9	ND	NA <	1.0	ND	NA <	1.0
Dissolved Silver	UG/L		ND	NA <	1.0	ND	NA <	1.0
Total Thallium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Thallium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Zinc	UG/L	90	ND	NA	18.0	ND	NA	18.0
Dissolved Zinc	UG/L		ND	NA	14.0	ND	NA	14.0

ND *No discharge*
< *Less than method detection limit*
AD *Awaiting data*
> *Greater than value noted*
NA *Not applicable*
NR *Not required*

Summary - Spillway #4

Month / *Day* / *Location* / *Frequency* / *Sample #* / Parameter	Units	*State Water Quality Standards at any time / monthly avg.*	August - Max Spillway # 4	100 yd	WQR1	August - Avg Spillway # 4	100 yd	WQR1
	August							
Sample Time	*mil*		NA	NA	NA	NA	NA	NA
Turbidity	*NTU*	*150 / 50*	ND	NA	5	ND	NA	4
pH	*units*	*6.5 - 8.5*	ND	NA	8.09	ND	NA	7.92
Dissolved Oxygen	*MG/L*		ND	NA	7.74	ND	NA	6.45
Dissolved Oxygen	*% sat*		NR	NR	NR	NR	NR	NR
Salinity	*ppt*		NR	NR	NR	NR	NR	NR
Conductivity	*umhos*		NR	NR	NR	NR	NR	NR
Temperature	*C*		NR	NR	NR	NR	NR	NR
Depth	*ft.*		ND	NA	6	ND	NA	6
Flow	*MGD*		ND	NA	NA	ND	NA	NA
Total Suspended Solids	*MG/L*	*800 / 400*	ND	NA	14	ND	NA	10
Nitrite	*MG/L*		ND	NA	0.0038	ND	NA	0.0023
Ammonium	*MG/L*		ND	NA	0.053	ND	NA	0.027
Total Dissolved P	*MG/L*		ND	NA	0.0175	ND	NA	0.0164
Total Dissolved N	*MG/L*		ND	NA	0.52	ND	NA	0.42
Phosphate	*MG/L*		ND	NA	0.0042	ND	NA	0.0032
Nitrate/Nitrite	*MG/L*		ND	NA	0.037	ND	NA	0.028
Nitrate	*MG/L*		ND	NA	0.035	ND	NA	0.026
Dissolved Organic N	*MG/L*		ND	NA	0.47	ND	NA	0.36
Dissolved Organic P	*MG/L*		ND	NA	0.0142	ND	NA	0.0132
Total Anitimony	*UG/L*		ND	NA	5.0	ND	NA	5.0
Dissolved Antimony	*UG/L*		ND	NA	5.0	ND	NA	5.0
Total Arsenic	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Dissolved Arsenic	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Total Beryllium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Dissolved Beryllium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Total Cadmium	*UG/L*	*43*	ND	NA <	0.5	ND	NA <	0.5
Dissolved Cadmium	*UG/L*		ND	NA <	0.5	ND	NA <	0.5
Total Chromium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Dissolved Chromium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Total Copper	*UG/L*	*6.1*	ND	NA	5.0	ND	NA	5.0
Dissolved Copper	*UG/L*		ND	NA	2.0	ND	NA	2.0
Total Lead	*UG/L*	*210*	ND	NA	2.0	ND	NA	2.0
Dissolved Lead	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Total Mercury	*UG/L*	*1.8*	ND	NA <	0.2	ND	NA <	0.2
Dissolved Mercury	*UG/L*		ND	NA <	0.2	ND	NA <	0.2
Total Nickel	*UG/L*	*75*	ND	NA	6.0	ND	NA	6.0
Dissolved Nickel	*UG/L*		ND	NA	5.0	ND	NA	5.0
Total Selenium	*UG/L*	*300*	ND	NA <	2.0	ND	NA <	2.0
Dissolved Selenium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Total Silver	*UG/L*	*1.9*	ND	NA <	1.0	ND	NA <	1.0
Dissolved Silver	*UG/L*		ND	NA <	1.0	ND	NA <	1.0
Total Thallium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Dissolved Thallium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Total Zinc	*UG/L*	*90*	ND	NA	18.0	ND	NA	18.0
Dissolved Zinc	*UG/L*		ND	NA	14.0	ND	NA	14.0

ND *No discharge*

< *Less than method detection limit*

AD *Awaiting data*

> *Greater than value noted*

NA *Not applicable*

NR *Not required*

Summary - Spillway #5

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	August - Max Spillway # 5	August - Max 100 yd	August - Max WQR1	August - Avg Spillway # 5	August - Avg 100 yd	August - Avg WQR1
Sample Time	mil		NA	NA	NA	NA	NA	NA
Turbidity	NTU	150 / 50	ND	NA	5	ND	NA	4
pH	units	6.5 - 8.5	ND	NA	8.09	ND	NA	7.92
Dissolved Oxygen	MG/L		ND	NA	7.74	ND	NA	6.45
Dissolved Oxygen	% sat		NR	NR	NR	NR	NR	NR
Salinity	ppt		NR	NR	NR	NR	NR	NR
Conductivity	umhos		NR	NR	NR	NR	NR	NR
Temperature	C		NR	NR	NR	NR	NR	NR
Depth	ft.		ND	NA	6	ND	NA	6
Flow	MGD		ND	NA	NA	ND	NA	NA
Total Suspended Solids	MG/L	800 / 400	ND	NA	14	ND	NA	10
Nitrite	MG/L		ND	NA	0.0038	ND	NA	0.0023
Ammonium	MG/L		ND	NA	0.053	ND	NA	0.027
Total Dissolved P	MG/L		ND	NA	0.0175	ND	NA	0.0164
Total Dissolved N	MG/L		ND	NA	0.52	ND	NA	0.42
Phosphate	MG/L		ND	NA	0.0042	ND	NA	0.0032
Nitrate/Nitrite	MG/L		ND	NA	0.037	ND	NA	0.028
Nitrate	MG/L		ND	NA	0.035	ND	NA	0.026
Dissolved Organic N	MG/L		ND	NA	0.47	ND	NA	0.36
Dissolved Organic P	MG/L		ND	NA	0.0142	ND	NA	0.0132
Total Anitimony	UG/L		ND	NA	5.0	ND	NA	5.0
Dissolved Antimony	UG/L		ND	NA	5.0	ND	NA	5.0
[redacted]l Arsenic	UG/L		ND	NA <	2.0	ND	NA <	2.0
[redacted]solved Arsenic	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Beryllium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Beryllium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Cadmium	UG/L	43	ND	NA <	0.5	ND	NA <	0.5
Dissolved Cadmium	UG/L		ND	NA <	0.5	ND	NA <	0.5
Total Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Copper	UG/L	6.1	ND	NA	5.0	ND	NA	5.0
Dissolved Copper	UG/L		ND	NA	2.0	ND	NA	2.0
Total Lead	UG/L	210	ND	NA	2.0	ND	NA	2.0
Dissolved Lead	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Mercury	UG/L	1.8	ND	NA <	0.2	ND	NA <	0.2
Dissolved Mercury	UG/L		ND	NA <	0.2	ND	NA <	0.2
Total Nickel	UG/L	75	ND	NA	6.0	ND	NA	6.0
Dissolved Nickel	UG/L		ND	NA	5.0	ND	NA	5.0
Total Selenium	UG/L	300	ND	NA <	2.0	ND	NA <	2.0
Dissolved Selenium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Silver	UG/L	1.9	ND	NA <	1.0	ND	NA <	1.0
Dissolved Silver	UG/L		ND	NA <	1.0	ND	NA <	1.0
Total Thallium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Thallium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Zinc	UG/L	90	ND	NA	18.0	ND	NA	18.0
Dissolved Zinc	UG/L		ND	NA	14.0	ND	NA	14.0

ND *No discharge*
< *Less than method detection limit*
AD *Awaiting data*
> *Greater than value noted*
NA *Not applicable*
NR *Not required*

Summary - Spillway #6

Month *August* *Day* *Location* *Frequency* *Sample #* **Parameter** **Units**	*State Water Quality Standards at any time / monthly avg.*	**August - Max** Spillway # 6	100 yd	WQR1	**August - Avg** Spillway # 6	100 yd	WQR1
Sample Time *mil*		NA	NA	NA	NA	NA	NA
Turbidity *NTU*	*150 / 50*	59	25	5	43	20	4
pH *units*	*6.5 - 8.5*	8.97	8.43	8.09	8.81	8.08	7.92
Dissolved Oxygen *MG/L*		16.68	6.17	7.74	6.68	5.07	6.45
Dissolved Oxygen *% sat*		NR	NR	NR	NR	NR	NR
Salinity *ppt*		NR	NR	NR	NR	NR	NR
Conductivity *umhos*		NR	NR	NR	NR	NR	NR
Temperature *C*		NR	NR	NR	NR	NR	NR
Depth *ft.*		1	2	6	1	2	6
Flow *MGD*		8.16	NA	NA	3.86	NA	NA
Total Suspended Solids *MG/L*	*800 / 400*	91	39	14	67	30	10
Nitrite *MG/L*		0.0195	0.0060	0.0038	0.0109	0.0045	0.0023
Ammonium *MG/L*		0.935	0.156	0.053	0.487	0.107	0.027
Total Dissolved P *MG/L*		0.7313	0.0904	0.0175	0.5925	0.0419	0.0164
Total Dissolved N *MG/L*		6.31	1.03	0.52	4.75	0.76	0.42
Phosphate *MG/L*		0.6130	0.0519	0.0042	0.4267	0.0202	0.0032
Nitrate/Nitrite *MG/L*		0.143	0.061	0.037	0.113	0.054	0.028
Nitrate *MG/L*		0.124	0.055	0.035	0.102	0.049	0.026
Dissolved Organic N *MG/L*		5.23	0.83	0.47	4.15	0.60	0.36
Dissolved Organic P *MG/L*		0.2119	0.0385	0.0142	0.1658	0.0217	0.0132
Total Anitimony *UG/L*		< 2.0	< 2.0	5.0	< 2.0	< 2.0	5.0
Dissolved Antimony *UG/L*		< 2.0	< 2.0	5.0	< 2.0	< 2.0	5.0
Total Arsenic *UG/L*		36.0	18.0 <	2.0	36.0	18.0 <	2.0
Dissolved Arsenic *UG/L*		36.0	17.0 <	2.0	36.0	17.0 <	2.0
Total Beryllium *UG/L*		2.0	2.0 <	2.0	2.0	2.0 <	2.0
Dissolved Beryllium *UG/L*		3.0	2.0 <	2.0	3.0	2.0 <	2.0
Total Cadmium *UG/L*	*43*	< 0.5	< 0.5	0.5	< 0.5	< 0.5	0.5
Dissolved Cadmium *UG/L*		< 0.5	< 0.5	0.5	< 0.5	< 0.5	0.5
Total Chromium *UG/L*		< 2.0	< 2.0	2.0	< 2.0	< 2.0	2.0
Dissolved Chromium *UG/L*		< 2.0	< 2.0	2.0	< 2.0	< 2.0	2.0
Total Copper *UG/L*	*6.1*	5.0	3.0	5.0	5.0	3.0	5.0
Dissolved Copper *UG/L*		4.0	3.0	2.0	4.0	3.0	2.0
Total Lead *UG/L*	*210*	< 2.0	< 2.0	2.0	< 2.0	< 2.0	2.0
Dissolved Lead *UG/L*		< 2.0	< 2.0	2.0	< 2.0	< 2.0	2.0
Total Mercury *UG/L*	*1.8*	< 0.2	< 0.2	0.2	< 0.2	< 0.2	0.2
Dissolved Mercury *UG/L*		< 0.2	< 0.2	0.2	< 0.2	< 0.2	0.2
Total Nickel *UG/L*	*75*	11.0	3.0	6.0	11.0	3.0	6.0
Dissolved Nickel *UG/L*		5.0	2.0	5.0	5.0	2.0	5.0
Total Selenium *UG/L*	*300*	11.0	10.0 <	2.0	11.0	10.0 <	2.0
Dissolved Selenium *UG/L*		12.0	13.0 <	2.0	12.0	13.0 <	2.0
Total Silver *UG/L*	*1.9*	< 1.0	< 1.0	1.0	< 1.0	< 1.0	1.0
Dissolved Silver *UG/L*		< 1.0	< 1.0	1.0	< 1.0	< 1.0	1.0
Total Thallium *UG/L*		< 2.0	< 2.0	2.0	< 2.0	< 2.0	2.0
Dissolved Thallium *UG/L*		< 2.0	< 2.0	2.0	< 2.0	< 2.0	2.0
Total Zinc *UG/L*	*90*	< 3.0	3.0	18.0	< 3.0	3.0	18.0
Dissolved Zinc *UG/L*		< 3.0	3.0	14.0	< 3.0	3.0	14.0

ND *No discharge*
< *Less than method detection limit*
AD *Awaiting data*
> *Greater than value noted*
NA *Not applicable*
NR *Not required*

Summary - Spillway #1

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	September - Max Spillway # 1	September - Max 100 yd	September - Max WQR1	September - Avg Spillway # 1	September - Avg 100 yd	September - Avg WQR1
Month			September					
Sample Time	mil		NA	NA	NA	NA	NA	NA
Turbidity	NTU	150 / 50	34	5	3	20	4	3
pH	units	6.5 - 8.5	8.82	8.05	8.90	8.60	7.84	8.11
Dissolved Oxygen	MG/L		20.00	8.20	8.30	10.86	7.27	7.29
Dissolved Oxygen	% sat		131.00	84.00	98.60	109.84	84.00	98.60
Salinity	ppt		14	15	16	14	15	16
Conductivity	umhos		24	22	23	22	22	23
Temperature	C		26.90	19.90	20.00	19.64	19.90	20.00
Depth	ft.		1	5	6	1	5	6
Flow	MGD		15.60	NA	NA	4.12	NA	NA
Total Suspended Solids	MG/L	800 / 400	69	18	19	47	12	11
Nitrite	MG/L		AD	AD	AD	AD	AD	AD
Ammonium	MG/L		AD	AD	AD	AD	AD	AD
Total Dissolved P	MG/L		AD	AD	AD	AD	AD	AD
Total Dissolved N	MG/L		AD	AD	AD	AD	AD	AD
Phosphate	MG/L		AD	AD	AD	AD	AD	AD
Nitrate/Nitrite	MG/L		AD	AD	AD	AD	AD	AD
Nitrate	MG/L		AD	AD	AD	AD	AD	AD
Dissolved Organic N	MG/L		AD	AD	AD	AD	AD	AD
Dissolved Organic P	MG/L		AD	AD	AD	AD	AD	AD
Total Anitimony	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Arsenic	UG/L		40.0	21.0	20.0	40.0	21.0	20.0
Dissolved Arsenic	UG/L		42.0	14.0	17.0	42.0	14.0	17.0
Total Beryllium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Total Chromium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Chromium	UG/L		< 5.0	< 2.0	< 2.0	< 5.0	< 2.0	< 2.0
Total Copper	UG/L	6.1	16.0	< 3.0	< 3.0	16.0	< 3.0	< 3.0
Dissolved Copper	UG/L		13.0	< 3.0	< 3.0	13.0	< 3.0	< 3.0
Total Lead	UG/L	210	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75	10.0	2.0	2.0	10.0	2.0	2.0
Dissolved Nickel	UG/L		8.0	< 2.0	2.0	8.0	< 2.0	2.0
Total Selenium	UG/L	300	14.0	13.0	12.0	14.0	13.0	12.0
Dissolved Selenium	UG/L		14.0	12.0	12.0	14.0	12.0	12.0
Total Silver	UG/L	1.9	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Thallium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L		< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0

ND *No discharge*

< *Less than method detection limit*

AD *Awaiting data*

> *Greater than value noted*

NA *Not applicable*

NR *Not required*

Summary - Spillway #2

Month / *Day* / *Location* / *Frequency* / *Sample #* / Parameter	Units	*State Water* Quality Standards *at any time / monthly avg.*	September - Max			September - Avg		
	September		Spillway # 2	100 yd	WQR1	Spillway # 2	100 yd	WQR1
Sample Time	*mil*		NA	NA	NA	NA	NA	NA
Turbidity	*NTU*	*150 / 50*	ND	NA	3	ND	NA	3
pH	*units*	*6.5 - 8.5*	ND	NA	8.90	ND	NA	8.11
Dissolved Oxygen	*MG/L*		ND	NA	8.30	ND	NA	7.29
Dissolved Oxygen	*% sat*		ND	NA	98.60	ND	NA	98.60
Salinity	*ppt*		ND	NA	16	ND	NA	16
Conductivity	*umhos*		ND	NA	23	ND	NA	23
Temperature	*C*		ND	NA	20.00	ND	NA	20.00
Depth	*ft.*		ND	NA	6	ND	NA	6
Flow	*MGD*		ND	NA	NA	ND	NA	NA
Total Suspended Solids	*MG/L*	*800 / 400*	ND	NA	19	ND	NA	11
Nitrite	*MG/L*		ND	NA	AD	ND	NA	AD
Ammonium	*MG/L*		ND	NA	AD	ND	NA	AD
Total Dissolved P	*MG/L*		ND	NA	AD	ND	NA	AD
Total Dissolved N	*MG/L*		ND	NA	AD	ND	NA	AD
Phosphate	*MG/L*		ND	NA	AD	ND	NA	AD
Nitrate/Nitrite	*MG/L*		ND	NA	AD	ND	NA	AD
Nitrate	*MG/L*		ND	NA	AD	ND	NA	AD
Dissolved Organic N	*MG/L*		ND	NA	AD	ND	NA	AD
Dissolved Organic P	*MG/L*		ND	NA	AD	ND	NA	AD
Total Anitimony	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Dissolved Antimony	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Total Arsenic	*UG/L*		ND	NA	20.0	ND	NA	20.0
Dissolved Arsenic	*UG/L*		ND	NA	17.0	ND	NA	17.0
Total Beryllium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Dissolved Beryllium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Total Cadmium	*UG/L*	*43*	ND	NA <	0.5	ND	NA <	0.5
Dissolved Cadmium	*UG/L*		ND	NA <	0.5	ND	NA <	0.5
Total Chromium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Dissolved Chromium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Total Copper	*UG/L*	*6.1*	ND	NA <	3.0	ND	NA <	3.0
Dissolved Copper	*UG/L*		ND	NA <	3.0	ND	NA <	3.0
Total Lead	*UG/L*	*210*	ND	NA <	2.0	ND	NA <	2.0
Dissolved Lead	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Total Mercury	*UG/L*	*1.8*	ND	NA <	0.2	ND	NA <	0.2
Dissolved Mercury	*UG/L*		ND	NA <	0.2	ND	NA <	0.2
Total Nickel	*UG/L*	*75*	ND	NA	2.0	ND	NA	2.0
Dissolved Nickel	*UG/L*		ND	NA	2.0	ND	NA	2.0
Total Selenium	*UG/L*	*300*	ND	NA	12.0	ND	NA	12.0
Dissolved Selenium	*UG/L*		ND	NA	12.0	ND	NA	12.0
Total Silver	*UG/L*	*1.9*	ND	NA <	1.0	ND	NA <	1.0
Dissolved Silver	*UG/L*		ND	NA <	1.0	ND	NA <	1.0
Total Thallium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Dissolved Thallium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Total Zinc	*UG/L*	*90*	ND	NA <	3.0	ND	NA <	3.0
Dissolved Zinc	*UG/L*		ND	NA <	3.0	ND	NA <	3.0

ND *No discharge*
< *Less than method detection limi*
AD *Awaiting data*
> *Greater than value notec*
NA *Not applicable*
NR *Not required*

Summary - Spillway #4

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	September - Max			September - Avg		
			Spillway # 4	100 yd	WQR1	Spillway # 4	100 yd	WQR1
Sample Time	mil		NA	NA	NA	NA	NA	NA
Turbidity	NTU	150 / 50	ND	NA	3	ND	NA	3
pH	units	6.5 - 8.5	ND	NA	8.90	ND	NA	8.11
Dissolved Oxygen	MG/L		ND	NA	8.30	ND	NA	7.29
Dissolved Oxygen	% sat		ND	NA	98.60	ND	NA	98.60
Solinity	ppt		ND	NA	16	ND	NA	16
Conductivity	umhos		ND	NA	23	ND	NA	23
Temperoture	C		ND	NA	20.00	ND	NA	20.00
Depth	ft.		ND	NA	6	ND	NA	6
Flow	MGD		ND	NA	NA	ND	NA	NA
Total Suspended Solids	MG/L	800 / 400	ND	NA	19	ND	NA	11
Nitrite	MG/L		ND	NA	AD	ND	NA	AD
Ammonium	MG/L		ND	NA	AD	ND	NA	AD
Total Dissolved P	MG/L		ND	NA	AD	ND	NA	AD
Total Dissolved N	MG/L		ND	NA	AD	ND	NA	AD
Phosphate	MG/L		ND	NA	AD	ND	NA	AD
Nitrote/Nitrite	MG/L		ND	NA	AD	ND	NA	AD
Nitrote	MG/L		ND	NA	AD	ND	NA	AD
Dissolved Organic N	MG/L		ND	NA	AD	ND	NA	AD
Dissolved Organic P	MG/L		ND	NA	AD	ND	NA	AD
Total Anitimony	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Antimony	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Arsenic	UG/L		ND	NA	20.0	ND	NA	20.0
Dissolved Arsenic	UG/L		ND	NA	17.0	ND	NA	17.0
Total Beryllium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Beryllium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Codmium	UG/L	43	ND	NA <	0.5	ND	NA <	0.5
Dissolved Codmium	UG/L		ND	NA <	0.5	ND	NA <	0.5
Total Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Chromium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Copper	UG/L	6.1	ND	NA <	3.0	ND	NA <	3.0
Dissolved Copper	UG/L		ND	NA <	3.0	ND	NA <	3.0
Total Lead	UG/L	210	ND	NA <	2.0	ND	NA <	2.0
Dissolved Lead	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Mercury	UG/L	1.8	ND	NA <	0.2	ND	NA <	0.2
Dissolved Mercury	UG/L		ND	NA <	0.2	ND	NA <	0.2
Total Nickel	UG/L	75	ND	NA	2.0	ND	NA	2.0
Dissolved Nickel	UG/L		ND	NA	2.0	ND	NA	2.0
Total Selenium	UG/L	300	ND	NA	12.0	ND	NA	12.0
Dissolved Selenium	UG/L		ND	NA	12.0	ND	NA	12.0
Total Silver	UG/L	1.9	ND	NA <	1.0	ND	NA <	1.0
Dissolved Silver	UG/L		ND	NA <	1.0	ND	NA <	1.0
Total Thollium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Dissolved Thollium	UG/L		ND	NA <	2.0	ND	NA <	2.0
Total Zinc	UG/L	90	ND	NA <	3.0	ND	NA <	3.0
Dissolved Zinc	UG/L		ND	NA <	3.0	ND	NA <	3.0

ND *No discharge*

< *Less than method detection limit*

AD *Awaiting data*

> *Greater than value noted*

NA *Not applicable*

NR *Not required*

Summary - Spillway #5

Month *September* / *Day* / *Location* / *Frequency* / *Sample #* / **Parameter**	**Units**	*State Water* **Quality Standards** *at any time / monthly avg.*	**September - Max** Spillway # 5	100 yd	WQR1	**September - Avg** Spillway # 5	100 yd	WQR1
Sample Time	*mil*		NA	NA	NA	NA	NA	NA
Turbidity	*NTU*	*150 / 50*	ND	NA	3	ND	NA	3
pH	*units*	*6.5 - 8.5*	ND	NA	8.90	ND	NA	8.11
Dissolved Oxygen	*MG/L*		ND	NA	8.30	ND	NA	7.29
Dissolved Oxygen	*% sat*		ND	NA	98.60	ND	NA	98.60
Salinity	*ppt*		ND	NA	16	ND	NA	16
Conductivity	*umhos*		ND	NA	23	ND	NA	23
Temperature	*C*		ND	NA	20.00	ND	NA	20.00
Depth	*ft.*		ND	NA	6	ND	NA	6
Flow	*MGD*		ND	NA	NA	ND	NA	NA
Total Suspended Solids	*MG/L*	*800 / 400*	ND	NA	19	ND	NA	11
Nitrite	*MG/L*		ND	NA	AD	ND	NA	AD
Ammonium	*MG/L*		ND	NA	AD	ND	NA	AD
Total Dissolved P	*MG/L*		ND	NA	AD	ND	NA	AD
Total Dissolved N	*MG/L*		ND	NA	AD	ND	NA	AD
Phosphate	*MG/L*		ND	NA	AD	ND	NA	AD
Nitrate/Nitrite	*MG/L*		ND	NA	AD	ND	NA	AD
Nitrate	*MG/L*		ND	NA	AD	ND	NA	AD
Dissolved Organic N	*MG/L*		ND	NA	AD	ND	NA	AD
Dissolved Organic P	*MG/L*		ND	NA	AD	ND	NA	AD
Total Anitimony	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Dissolved Antimony	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Total Arsenic	*UG/L*		ND	NA	20.0	ND	NA	.0
Dissolved Arsenic	*UG/L*		ND	NA	17.0	ND	NA	17.0
Total Beryllium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Dissolved Beryllium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Total Cadmium	*UG/L*	*43*	ND	NA <	0.5	ND	NA <	0.5
Dissolved Cadmium	*UG/L*		ND	NA <	0.5	ND	NA <	0.5
Total Chromium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Dissolved Chromium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Total Copper	*UG/L*	*6.1*	ND	NA <	3.0	ND	NA <	3.0
Dissolved Copper	*UG/L*		ND	NA <	3.0	ND	NA <	3.0
Total Lead	*UG/L*	*210*	ND	NA <	2.0	ND	NA <	2.0
Dissolved Lead	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Total Mercury	*UG/L*	*1.8*	ND	NA <	0.2	ND	NA <	0.2
Dissolved Mercury	*UG/L*		ND	NA <	0.2	ND	NA <	0.2
Total Nickel	*UG/L*	*75*	ND	NA	2.0	ND	NA	2.0
Dissolved Nickel	*UG/L*		ND	NA	2.0	ND	NA	2.0
Total Selenium	*UG/L*	*300*	ND	NA	12.0	ND	NA	12.0
Dissolved Selenium	*UG/L*		ND	NA	12.0	ND	NA	12.0
Total Silver	*UG/L*	*1.9*	ND	NA <	1.0	ND	NA <	1.0
Dissolved Silver	*UG/L*		ND	NA <	1.0	ND	NA <	1.0
Total Thallium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Dissolved Thallium	*UG/L*		ND	NA <	2.0	ND	NA <	2.0
Total Zinc	*UG/L*	*90*	ND	NA <	3.0	ND	NA <	3.0
Dissolved Zinc	*UG/L*		ND	NA <	3.0	ND	NA <	3.0

ND *No discharge*

< *Less than method detection limit*

AD *Awaiting data*

> *Greater than value noted*

NA *Not applicable*

NR *Not required*

Summary - Spillway #6

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	September - Max Spillway # 6	September - Max 100 yd	September - Max WQR1	September - Avg Spillway # 6	September - Avg 100 yd	September - Avg WQR1
Month			September					
Sample Time	mil		NA	NA	NA	NA	NA	NA
Turbidity	NTU	150 / 50	148	4	3	82	4	3
pH	units	6.5 - 8.5	8.99	8.01	8.90	8.94	7.94	8.11
Dissolved Oxygen	MG/L		11.30	9.27	8.30	8.64	8.87	7.29
Dissolved Oxygen	% sat		NR	NR	98.60	NR	NR	98.60
Salinity	ppt		NR	NR	16	NR	NR	16
Conductivity	umhos		NR	NR	23	NR	NR	23
Temperature	C		NR	NR	20.00	NR	NR	20.00
Depth	ft.		1	2	6	1	2	6
Flow	MGD		1.84	NA	NA	1.10	NA	NA
Total Suspended Solids	MG/L	800 / 400	386	17	19	191	12	11
Nitrite	MG/L		AD	AD	AD	AD	AD	AD
Ammonium	MG/L		AD	AD	AD	AD	AD	AD
Total Dissolved P	MG/L		AD	AD	AD	AD	AD	AD
Total Dissolved N	MG/L		AD	AD	AD	AD	AD	AD
Phosphate	MG/L		AD	AD	AD	AD	AD	AD
Nitrate/Nitrite	MG/L		AD	AD	AD	AD	AD	AD
Nitrate	MG/L		AD	AD	AD	AD	AD	AD
Dissolved Organic N	MG/L		AD	AD	AD	AD	AD	AD
Dissolved Organic P	MG/L		AD	AD	AD	AD	AD	AD
Total Anitimony	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L		37.0	21.0	20.0	37.0	21.0	20.0
Dissolved Arsenic	UG/L		39.0	21.0	17.0	39.0	21.0	17.0
Total Beryllium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Total Chromium	UG/L		7.0	< 2.0	< 2.0	7.0	< 2.0	< 2.0
Dissolved Chromium	UG/L		4.0	< 2.0	< 2.0	4.0	< 2.0	< 2.0
Total Copper	UG/L	6.1	9.0	< 3.0	< 3.0	9.0	< 3.0	< 3.0
Dissolved Copper	UG/L		7.0	< 3.0	< 3.0	7.0	< 3.0	< 3.0
Total Lead	UG/L	210	6.0	< 2.0	< 2.0	6.0	< 2.0	< 2.0
Dissolved Lead	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75	12.0	3.0	2.0	12.0	3.0	2.0
Dissolved Nickel	UG/L		6.0	2.0	2.0	6.0	2.0	2.0
Total Selenium	UG/L	300	14.0	12.0	12.0	14.0	12.0	12.0
Dissolved Selenium	UG/L		15.0	14.0	12.0	15.0	14.0	12.0
Total Silver	UG/L	1.9	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L		< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Thallium	UG/L		< 2.0	3.0	< 2.0	< 2.0	3.0	< 2.0
Dissolved Thallium	UG/L		< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90	16.0	< 3.0	< 3.0	16.0	< 3.0	< 3.0
Dissolved Zinc	UG/L		4.000	< 3.000	< 3.000	4.000	< 3.000	< 3.000

ND *No discharge*

< *Less than method detection limit*

AD *Awaiting data*

> *Greater than value noted*

NA *Not applicable*

NR *Not required*

Summary - Spillway #1

Month / *Day* / *Location* / *Frequency* / *Sample #* / Parameter	Units	*State Water Quality Standards at anytime / monthly avg.*	October - Max			October - Avg		
			Spillway # 1	100 yd	WQR1	Spillway # 1	100 yd	WQR1
Sample Time	*mil*		NA	NA	NA	NA	NA	NA
Turbidity	*NTU*	*150 / 50*	74	5	4	35	3	3
pH	*units*	*6.5 - 8.5*	8.92	7.82	7.92	8.50	7.79	7.77
Dissolved Oxygen	*MG/L*		17.01	9.57	9.75	10.43	8.09	8.39
Dissolved Oxygen	*% sat*		184.40	104.20	106.00	109.45	69.47	95.00
Salinity	*ppt*		16	17	17	15	16	16
Conductivity	*umhos*		24	24	24	21	23	23
Temperature	*C*		24.80	19.90	20.10	16.70	18.88	17.66
Depth	*ft.*		1	2	6	1	2	6
Flow	*MGD*		8.14	NA	NA	2.53	NA	NA
Total Suspended Solids	*MG/L*	*800 / 400*	127	20	28	63	17	17
Nitrite	*MG/L*		AD	AD	AD	AD	AD	AD
Ammonium	*MG/L*		AD	AD	AD	AD	AD	AD
Total Dissolved P	*MG/L*		AD	AD	AD	AD	AD	AD
Total Dissolved N	*MG/L*		AD	AD	AD	AD	AD	AD
Phosphate	*MG/L*		AD	AD	AD	AD	AD	AD
Nitrate/Nitrite	*MG/L*		AD	AD	AD	AD	AD	AD
Nitrate	*MG/L*		AD	AD	AD	AD	AD	AD
Dissolved Organic N	*MG/L*		AD	AD	AD	AD	AD	AD
Dissolved Organic P	*MG/L*		AD	AD	AD	AD	AD	AD
Total Anitimony	*UG/L*		NA	NA	AD	NA	NA	AD
Dissolved Antimony	*UG/L*		NA	NA	AD	NA	NA	AD
Total Arsenic	*UG/L*		NA	NA	AD	NA	NA	AD
Dissolved Arsenic	*UG/L*		NA	NA	AD	NA	NA	AD
Total Beryllium	*UG/L*		NA	NA	AD	NA	NA	AD
Dissolved Beryllium	*UG/L*		NA	NA	AD	NA	NA	AD
Total Cadmium	*UG/L*	*43*	NA	NA	AD	NA	NA	AD
Dissolved Cadmium	*UG/L*		NA	NA	AD	NA	NA	AD
Total Chromium	*UG/L*		NA	NA	AD	NA	NA	AD
Dissolved Chromium	*UG/L*		NA	NA	AD	NA	NA	AD
Total Copper	*UG/L*	*6.1*	NA	NA	AD	NA	NA	AD
Dissolved Copper	*UG/L*		NA	NA	AD	NA	NA	AD
Total Lead	*UG/L*	*210*	NA	NA	AD	NA	NA	AD
Dissolved Lead	*UG/L*		NA	NA	AD	NA	NA	AD
Total Mercury	*UG/L*	*1.8*	NA	NA	AD	NA	NA	AD
Dissolved Mercury	*UG/L*		NA	NA	AD	NA	NA	AD
Total Nickel	*UG/L*	*75*	NA	NA	AD	NA	NA	AD
Dissolved Nickel	*UG/L*		NA	NA	AD	NA	NA	AD
Total Selenium	*UG/L*	*300*	NA	NA	AD	NA	NA	AD
Dissolved Selenium	*UG/L*		NA	NA	AD	NA	NA	AD
Total Silver	*UG/L*	*1.9*	NA	NA	AD	NA	NA	AD
Dissolved Silver	*UG/L*		NA	NA	AD	NA	NA	AD
Total Thallium	*UG/L*		NA	NA	AD	NA	NA	AD
Dissolved Thallium	*UG/L*		NA	NA	AD	NA	NA	AD
Total Zinc	*UG/L*	*90*	NA	NA	AD	NA	NA	AD
Dissolved Zinc	*UG/L*		NA	NA	AD	NA	NA	AD

ND *No discharge*

< *Less than the method detection limit*

AD *Awaiting data*

> *Greater than the value noted*

NA *Not applicable*

NR *Not required*

Summary - Spillway #2

Month / *Day* / *Location* / *Frequency* / *Sample #* / Parameter	Units	*State Water Quality Standards at anytime / monthly avg.*	October - Max			October - Avg		
			Spillway # 2	100 yd	WQR1	Spillway # 2	100 yd	WQR1
Sample Time	*mil*		NA	NA	NA	NA	NA	NA
Turbidity	*NTU*	*150 / 50*	68	7	4	33	4	3
pH	*units*	*6.5 - 8.5*	8.24	7.97	7.92	7.90	7.84	7.77
Dissolved Oxygen	*MG/L*		12.60	8.30	9.75	8.26	7.63	8.39
Dissolved Oxygen	*% sat*		124.30	115.60	106.00	88.51	93.73	95.00
Salinity	*ppt*		14	17	17	13	17	16
Conductivity	*umhos*		21	24	24	18	23	23
Temperature	*C*		18.90	19.00	20.10	15.12	17.60	17.66
Depth	*ft.*		1	2	6	1	2	6
Flow	*MGD*		6.96	NA	NA	1.92	NA	NA
Total Suspended Solids	*MG/L*	*800 / 400*	148	19	28	57	19	17
Nitrite	*MG/L*		AD	AD	AD	AD	AD	AD
Ammonium	*MG/L*		AD	AD	AD	AD	AD	AD
Total Dissolved P	*MG/L*		AD	AD	AD	AD	AD	AD
Total Dissolved N	*MG/L*		AD	AD	AD	AD	AD	AD
Phosphate	*MG/L*		AD	AD	AD	AD	AD	AD
Nitrate/Nitrite	*MG/L*		AD	AD	AD	AD	AD	AD
Nitrate	*MG/L*		AD	AD	AD	AD	AD	AD
Dissolved Organic N	*MG/L*		AD	AD	AD	AD	AD	AD
Dissolved Organic P	*MG/L*		AD	AD	AD	AD	AD	AD
Total Anitimony	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Antimony	*UG/L*		AD	AD	AD	AD	AD	AD
Total Arsenic	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Arsenic	*UG/L*		AD	AD	AD	AD	AD	AD
Total Beryllium	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Beryllium	*UG/L*		AD	AD	AD	AD	AD	AD
Total Cadmium	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Cadmium	*UG/L*		AD	AD	AD	AD	AD	AD
Total Chromium	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Chromium	*UG/L*		AD	AD	AD	AD	AD	AD
Total Copper	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Copper	*UG/L*		AD	AD	AD	AD	AD	AD
Total Lead	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Lead	*UG/L*		AD	AD	AD	AD	AD	AD
Total Mercury	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Mercury	*UG/L*		AD	AD	AD	AD	AD	AD
Total Nickel	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Nickel	*UG/L*		AD	AD	AD	AD	AD	AD
Total Selenium	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Selenium	*UG/L*		AD	AD	AD	AD	AD	AD
Total Silver	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Silver	*UG/L*		AD	AD	AD	AD	AD	AD
Total Thallium	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Thallium	*UG/L*		AD	AD	AD	AD	AD	AD
Total Zinc	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Zinc	*UG/L*		AD	AD	AD	AD	AD	AD

ND *No discharge*

< *Less than the method detection limit*

AD *Awaiting data*

> *Greater than the value noted*

NA *Not applicable*

NR *Not required*

Summary - Spillway #4

Month / *Day* / *Location* / *Frequency* / *Sample #* / Parameter	Units	*State Water Quality Standards at any time / monthly avg.*	October - Max			October - Avg		
			Spillway # 4	100 yd	WQR1	Spillway # 4	100 yd	WQR1
Sample Time	*mil*		NA	NA	NA	NA	NA	NA
Turbidity	*NTU*	*150 / 50*	68	6	4	32	5	3
pH	*units*	*6.5 - 8.5*	8.27	7.96	7.92	7.82	7.83	7.77
Dissolved Oxygen	*MG/L*		13.70	9.90	9.75	8.35	8.54	8.39
Dissolved Oxygen	*% sat*		140.20	106.80	106.00	85.59	93.40	95.00
Salinity	*ppt*		14	17	17	13	17	16
Conductivity	*umhos*		21	24	24	18	23	23
Temperature	*C*		19.90	19.40	20.10	14.54	17.00	17.66
Depth	*ft.*		1	2	6	1	2	6
Flow	*MGD*		6.96	NA	NA	1.92	NA	NA
Total Suspended Solids	*MG/L*	*800 / 400*	100	24	28	57	20	17
Nitrite	*MG/L*		AD	AD	AD	AD	AD	AD
Ammonium	*MG/L*		AD	AD	AD	AD	AD	AD
Total Dissolved P	*MG/L*		AD	AD	AD	AD	AD	AD
Total Dissolved N	*MG/L*		AD	AD	AD	AD	AD	AD
Phosphate	*MG/L*		AD	AD	AD	AD	AD	AD
Nitrate/Nitrite	*MG/L*		AD	AD	AD	AD	AD	AD
Nitrate	*MG/L*		AD	AD	AD	AD	AD	AD
Dissolved Organic N	*MG/L*		AD	AD	AD	AD	AD	AD
Dissolved Organic P	*MG/L*		AD	AD	AD	AD	AD	AD
Total Anitimony	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Antimony	*UG/L*		AD	AD	AD	AD	AD	AD
Total Arsenic	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Arsenic	*UG/L*		AD	AD	AD	AD	AD	AD
Total Beryllium	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Beryllium	*UG/L*		AD	AD	AD	AD	AD	AD
Total Cadmium	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Cadmium	*UG/L*		AD	AD	AD	AD	AD	AD
Total Chromium	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Chromium	*UG/L*		AD	AD	AD	AD	AD	AD
Total Copper	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Copper	*UG/L*		AD	AD	AD	AD	AD	AD
Total Lead	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Lead	*UG/L*		AD	AD	AD	AD	AD	AD
Total Mercury	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Mercury	*UG/L*		AD	AD	AD	AD	AD	AD
Total Nickel	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Nickel	*UG/L*		AD	AD	AD	AD	AD	AD
Total Selenium	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Selenium	*UG/L*		AD	AD	AD	AD	AD	AD
Total Silver	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Silver	*UG/L*		AD	AD	AD	AD	AD	AD
Total Thallium	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Thallium	*UG/L*		AD	AD	AD	AD	AD	AD
Total Zinc	*UG/L*		AD	AD	AD	AD	AD	AD
Dissolved Zinc	*UG/L*		AD	AD	AD	AD	AD	AD

ND *No discharge*
< *Less than the method detection limit*
AD *Awaiting data*
> *Greater than the value noted*
NA *Not applicable*
NR *Not required*

Summary - Spillway #5

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	October - Max			October - Avg		
			Spillway # 5	100 yd	WQR1	Spillway # 5	100 yd	WQR1
Month	October							
Sample Time	mil		NA	NA	NA	NA	NA	NA
Turbidity	NTU	150 / 50	ND	ND	4	ND	ND	3
pH	units	6.5 - 8.5	ND	ND	7.92	ND	ND	7.77
Dissolved Oxygen	MG/L		ND	ND	9.75	ND	ND	8.39
Dissolved Oxygen	% sat		ND	ND	106.00	ND	ND	95.00
Salinity	ppt		ND	ND	17	ND	ND	16
Conductivity	umhos		ND	ND	24	ND	ND	23
Temperature	C		ND	ND	20.10	ND	ND	17.66
Depth	ft.		ND	ND	6	ND	ND	6
Flow	MGD		ND	NA	NA	ND	NA	NA
Total Suspended Solids	MG/L	800 / 400	ND	ND	28	ND	ND	17
Nitrite	MG/L		ND	ND	AD	ND	ND	AD
Ammonium	MG/L		ND	ND	AD	ND	ND	AD
Total Dissolved P	MG/L		ND	ND	AD	ND	ND	AD
Total Dissolved N	MG/L		ND	ND	AD	ND	ND	AD
Phosphate	MG/L		ND	ND	AD	ND	ND	AD
Nitrate/Nitrite	MG/L		ND	ND	AD	ND	ND	AD
Nitrate	MG/L		ND	ND	AD	ND	ND	AD
Dissolved Organic N	MG/L		ND	ND	AD	ND	ND	AD
Dissolved Organic P	MG/L		ND	ND	AD	ND	ND	AD
Total Anitimony	UG/L		ND	ND	AD	ND	ND	AD
Dissolved Antimony	UG/L		ND	ND	AD	ND	ND	AD
Total Arsenic	UG/L		ND	ND	AD	ND	ND	AD
Dissolved Arsenic	UG/L		ND	ND	AD	ND	ND	AD
Total Beryllium	UG/L		ND	ND	AD	ND	ND	AD
Dissolved Beryllium	UG/L		ND	ND	AD	ND	ND	AD
Total Cadmium	UG/L		ND	ND	AD	ND	ND	AD
Dissolved Cadmium	UG/L		ND	ND	AD	ND	ND	AD
Total Chromium	UG/L		ND	ND	AD	ND	ND	AD
Dissolved Chromium	UG/L		ND	ND	AD	ND	ND	AD
Total Copper	UG/L		ND	ND	AD	ND	ND	AD
Dissolved Copper	UG/L		ND	ND	AD	ND	ND	AD
Total Lead	UG/L		ND	ND	AD	ND	ND	AD
Dissolved Lead	UG/L		ND	ND	AD	ND	ND	AD
Total Mercury	UG/L		ND	ND	AD	ND	ND	AD
Dissolved Mercury	UG/L		ND	ND	AD	ND	ND	AD
Total Nickel	UG/L		ND	ND	AD	ND	ND	AD
Dissolved Nickel	UG/L		ND	ND	AD	ND	ND	AD
Total Selenium	UG/L		ND	ND	AD	ND	ND	AD
Dissolved Selenium	UG/L		ND	ND	AD	ND	ND	AD
Total Silver	UG/L		ND	ND	AD	ND	ND	AD
Dissolved Silver	UG/L		ND	ND	AD	ND	ND	AD
Total Thallium	UG/L		ND	ND	AD	ND	ND	AD
Dissolved Thallium	UG/L		ND	ND	AD	ND	ND	AD
Total Zinc	UG/L		ND	ND	AD	ND	ND	AD
Dissolved Zinc	UG/L		ND	ND	AD	ND	ND	AD

ND *No discharge*

< *Less than the method detection limit*

AD *Awaiting data*

> *Greater than the value noted*

NA *Not applicable*

NR *Not required*

Summary - Spillway #6

Month / *Day* / *Location* / *Frequency* / *Sample #* / Parameter	Units	*State Water Quality Standards at any time / monthly avg.*	October - Max: Spillway # 6	October - Max: 100 yd	October - Max: WQR1	October - Avg: Spillway # 6	October - Avg: 100 yd	October - Avg: WQR1
Sample Time	*mil*		NA	NA	NA	NA	NA	NA
Turbidity	*NTU*	*150 / 50*	149	2	4	76	2	3
pH	*units*	*6.5 - 8.5*	8.74	7.74	7.92	8.63	7.74	7.77
Dissolved Oxygen	*MG/L*		14.55	8.56	9.75	10.82	8.56	8.39
Dissolved Oxygen	*% sat*		147.70	106.10	106.00	112.68	106.10	95.00
Salinity	*ppt*		19	17	17	18	17	16
Conductivity	*umhos*		25	24	24	22	24	23
Temperature	*C*		19.20	18.90	20.10	11.14	18.90	17.66
Depth	*ft.*		1	2	6	1	2	6
Flow	*MGD*		1.79	NA	NA	0.60	NA	NA
Total Suspended Solids	*MG/L*	*800 / 400*	1577	10	28	351	10	17
Nitrite	*MG/L*		AD	AD	AD	AD	AD	AD
Ammonium	*MG/L*		AD	AD	AD	AD	AD	AD
Total Dissolved P	*MG/L*		AD	AD	AD	AD	AD	AD
Total Dissolved N	*MG/L*		AD	AD	AD	AD	AD	AD
Phosphate	*MG/L*		AD	AD	AD	AD	AD	AD
Nitrate/Nitrite	*MG/L*		AD	AD	AD	AD	AD	AD
Nitrate	*MG/L*		AD	AD	AD	AD	AD	AD
Dissolved Organic N	*MG/L*		AD	AD	AD	AD	AD	AD
Dissolved Organic P	*MG/L*		AD	AD	AD	AD	AD	AD
Total Anitimony	*UG/L*		NA	NA	AD	NA	NA	AD
Dissolved Antimony	*UG/L*		NA	NA	AD	NA	NA	AD
Total Arsenic	*UG/L*		NA	NA	AD	NA	NA	AD
Dissolved Arsenic	*UG/L*		NA	NA	AD	NA	NA	AD
Total Beryllium	*UG/L*		NA	NA	AD	NA	NA	AD
Dissolved Beryllium	*UG/L*		NA	NA	AD	NA	NA	AD
Total Cadmium	*UG/L*	*43*	NA	NA	AD	NA	NA	AD
Dissolved Cadmium	*UG/L*		NA	NA	AD	NA	NA	AD
Total Chromium	*UG/L*		NA	NA	AD	NA	NA	AD
Dissolved Chromium	*UG/L*		NA	NA	AD	NA	NA	AD
Total Copper	*UG/L*	*6.1*	NA	NA	AD	NA	NA	AD
Dissolved Copper	*UG/L*		NA	NA	AD	NA	NA	AD
Total Lead	*UG/L*	*210*	NA	NA	AD	NA	NA	AD
Dissolved Lead	*UG/L*		NA	NA	AD	NA	NA	AD
Total Mercury	*UG/L*	*1.8*	NA	NA	AD	NA	NA	AD
Dissolved Mercury	*UG/L*		NA	NA	AD	NA	NA	AD
Total Nickel	*UG/L*	*75*	NA	NA	AD	NA	NA	AD
Dissolved Nickel	*UG/L*		NA	NA	AD	NA	NA	AD
Total Selenium	*UG/L*	*300*	NA	NA	AD	NA	NA	AD
Dissolved Selenium	*UG/L*		NA	NA	AD	NA	NA	AD
Total Silver	*UG/L*	*1.9*	NA	NA	AD	NA	NA	AD
Dissolved Silver	*UG/L*		NA	NA	AD	NA	NA	AD
Total Thallium	*UG/L*		NA	NA	AD	NA	NA	AD
Dissolved Thallium	*UG/L*		NA	NA	AD	NA	NA	AD
Total Zinc	*UG/L*	*90*	NA	NA	AD	NA	NA	AD
Dissolved Zinc	*UG/L*		NA	NA	AD	NA	NA	AD

ND *No discharge*
< *Less than the method detection limit*
AD *Awaiting data*
> *Greater than the value noted*
NA *Not applicable*
NR *Not required*

APPENDIX 2

Daily, Weekly and Monthly Field, Nutrient and Metal Data

Reference Point WQR1

PIERP WQR1, APRIL 2001

Month	April	State Water Quality Standards at any time / monthly avg.	April 1	April 2	April 3	April 4	April 5	April 6	April 7	April 8	April 9	April 10	April 11	April 12	April 13	April 14	April 15	April 16	April 17
Day			WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1
Location			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Frequency			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sample #																			
Parameter	Units																		
Sample Time	Mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than method detection limit AD: Awaiting Data >: Greater than value noted NA: Not applicable NR: Not required

eference Point WQR1

PIERP WQR1, APRIL 2001

Month	April	State Water Quality Standards at any time / monthly avg.	April	April	April	April	April	April	April	April	April	April	April	April	April	Reference Point WQR1	Reference Point WQR1	Reference Point WQR1
Day			18	19	20	21	22	23	24	25	26	27	28	29	30			
Location			WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1			
Frequency			d	d	d	w	d	d	d	d	d	m	d	d	d			
Sample #			NA	NA	NA	P1005	NA	NA	NA	NA	NA	P1020	NA	NA	NA			
Parameter	Units															Minimum	Maximum	Average
Sample Time	Mil					1315						1635				NA	NA	NA
Turbidity	NTU	150 / 50				4						2				2	4	3
pH	units	6.5 - 8.5				7.98						8.04				7.98	8.04	8.01
Dissolved Oxygen	MG/L					11.19						11.68				11.19	11.68	11.44
Dissolved Oxygen	% sat					NR						NR				NR	NR	NR
Salinity	ppt					NR						NR				NR	NR	NR
Conductivity	umhos					NR						NR				NR	NR	NR
Temperature	C					NR						NR				NR	NR	NR
Depth	ft					6						6				6	6	6
Flow	MGD					NA						NA				NA	NA	NA
Total Suspended Solids	MG/L	800 / 400				9						10				9	10	10
Nitrite	MG/L					0.0095						0.0102				0.0095	0.0102	0.0099
Ammonium	MG/L					0.096						0.058				0.058	0.096	0.077
Total Dissolved P	MG/L					0.0235						0.0131				0.0131	0.0235	0.0183
Total Dissolved N	MG/L					1.07						0.90				0.90	1.07	0.99
Phosphate	MG/L					0.0132						0.0059				0.0059	0.0132	0.0096
Nitrate/Nitrite	MG/L					0.474						0.488				0.474	0.488	0.481
Nitrate	MG/L					0.465						0.478				0.465	0.478	0.472
Dissolved Organic N	MG/L					0.50						0.35				0.35	0.50	0.43
Dissolved Organic P	MG/L					0.0103						0.0072				0.0072	0.0103	0.0088
Total Antimony	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L											13.0				13.0	13.0	13.0
Dissolved Arsenic	UG/L											13.0				13.0	13.0	13.0
Total Beryllium	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43										< 0.5				< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L											< 0.5				< 0.5	< 0.5	< 0.5
Total Chromium	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Dissolved Chromium	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1										4.0				4.0	4.0	4.0
Dissolved Copper	UG/L											< 3.0				< 3.0	< 3.0	< 3.0
Total Lead	UG/L	210										< 2.0				< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8										< 0.2				< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L											< 0.2				< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75										3.0				3.0	3.0	3.0
Dissolved Nickel	UG/L											3.0				3.0	3.0	3.0
Total Selenium	UG/L	300										5.0				5.0	5.0	5.0
Dissolved Selenium	UG/L											6.0				6.0	6.0	6.0
Total Silver	UG/L	1.9										< 1.0				< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L											< 1.0				< 1.0	< 1.0	< 1.0
Total Thallium	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90										< 3.0				< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L											< 3.0				< 3.0	< 3.0	< 3.0

ND: No discharge <: Less than method detection limit AD: Awaiting Data >: Greater than value noted NA: Not applicable NR: Not required

Spillway #1

PIERP SPILLWAY 1, APRIL 2001

Month	April		April	April	April	April	April	April	April	April	April	April	April	April	April	April	April	April
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	Sp. 1	Sp.1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	Mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge < Less than the method detection limit AD: Awaiting Data >: Greater than value noted NA: Not applicable NR: Not required

Spillway #1

PIERP SPILLWAY 1, APRIL 2001

Month	April	State Water Quality Standards at any time / monthly avg.	April	April	April	April	April	April	April	April	April	April	April	April	Spillway #1 Minimum	Spillway #1 Maximum	Spillway #1 Average
Day			18	19	20	21	22	23	24	25	26	27	28	29	30			
Location			Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1			
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																	
Sample Time	Mil															NA	NA	NA
Turbidity	NTU	150 / 50														ND	ND	ND
pH	units	6.5 - 8.5														ND	ND	ND
Dissolved Oxygen	MG/L															ND	ND	ND
Dissolved Oxygen	% sat															ND	ND	ND
Salinity	ppt															ND	ND	ND
Conductivity	umhos															ND	ND	ND
Temperature	C															ND	ND	ND
Depth	ft															ND	ND	ND
Flow	MGD															ND	ND	ND
Total Suspended Solids	MG/L	800 / 400														ND	ND	ND
Nitrite	MG/L															ND	ND	ND
Ammonium	MG/L															ND	ND	ND
Total Dissolved P	MG/L															ND	ND	ND
Total Dissolved N	MG/L															ND	ND	ND
Phosphate	MG/L															ND	ND	ND
Nitrate/Nitrite	MG/L															ND	ND	ND
Nitrate	MG/L															ND	ND	ND
Dissolved Drganic N	MG/L															ND	ND	ND
Dissolved Organic P	MG/L															ND	ND	ND
Total Antimony	UG/L															ND	ND	ND
Dissolved Antimony	UG/L															ND	ND	ND
Total Arsenic	UG/L															ND	ND	ND
Dissolved Arsenic	UG/L															ND	ND	ND
Total Beryllium	UG/L															ND	ND	ND
Dissolved Beryllium	UG/L															ND	ND	ND
Total Cadmium	UG/L	43														ND	ND	ND
Dissolved Cadmium	UG/L															ND	ND	ND
Total Chromium	UG/L															ND	ND	ND
Dissolved Chromium	UG/L															ND	ND	ND
Total Copper	UG/L	6.1														ND	ND	ND
Dissolved Copper	UG/L															ND	ND	ND
Total Lead	UG/L	210														ND	ND	ND
Dissolved Lead	UG/L															ND	ND	ND
Total Mercury	UG/L	1.8														ND	ND	ND
Dissolved Mercury	UG/L															ND	ND	ND
Total Nickel	UG/L	75														ND	ND	ND
Dissolved Nickel	UG/L															ND	ND	ND
Total Selenium	UG/L	300														ND	ND	ND
Dissolved Selenium	UG/L															ND	ND	ND
Total Silver	UG/L	1.9														ND	ND	ND
Dissolved Silver	UG/L															ND	ND	ND
Total Thallium	UG/L															ND	ND	ND
Dissolved Thallium	UG/L															ND	ND	ND
Total Zinc	UG/L	90														ND	ND	ND
Dissolved Zinc	UG/L															ND	ND	ND

ND: No discharge <: Less than the method detection limit AD: Awaiting Data >: Greater than value noted NA: Not applicable NR: Not required

Spillway #2

PIERP SPILLWAY 2, APRIL 2001

Month			April	April	April	April	April	April	April	April	April	April	April	April	April	April	April	April
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	Sp. 2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	Mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge < Less than method detection limit AD: Awaiting Data >: Greater than value noted NA: Not applicable NR: Not required

Spillway #2

PIERP SPILLWAY 2, APRIL 2001

Month	April	State Water Quality Standards at any time / monthly avg.	April	April	April	April	April	April	April	April	April	April	April	April	April	Spillway #2 Minimum	Spillway #2 Maximum	Spillway #2 Average
Day			18	19	20	21	22	23	24	25	26	27	28	29	30			
Location			Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2			
Frequency			w	d	d	d	d	d	d	d	d	m	d	d	d			
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																	
Sample Time	Mil															NA	NA	NA
Turbidity	NTU	150 / 50														ND	ND	ND
pH	units	6.5 - 8.5														ND	ND	ND
Dissolved Oxygen	MG/L															ND	ND	ND
Dissolved Oxygen	% sat															ND	ND	ND
Salinity	ppt															ND	ND	ND
Conductivity	umhos															ND	ND	ND
Temperature	C															ND	ND	ND
Depth	ft															ND	ND	ND
Flow	MGD															ND	ND	ND
Total Suspended Solids	MG/L	800 / 400														ND	ND	ND
Nitrite	MG/L															ND	ND	ND
Ammonium	MG/L															ND	ND	ND
Total Dissolved P	MG/L															ND	ND	ND
Total Dissolved N	MG/L															ND	ND	ND
Phosphate	MG/L															ND	ND	ND
Nitrate/Nitrite	MG/L															ND	ND	ND
Nitrate	MG/L															ND	ND	ND
Dissolved Organic N	MG/L															ND	ND	ND
Dissolved Organic P	MG/L															ND	ND	ND
Total Antimony	UG/L															ND	ND	ND
Dissolved Antimony	UG/L															ND	ND	ND
Total Arsenic	UG/L															ND	ND	ND
Dissolved Arsenic	UG/L															ND	ND	ND
Total Beryllium	UG/L															ND	ND	ND
Dissolved Beryllium	UG/L															ND	ND	ND
Total Cadmium	UG/L	43														ND	ND	ND
Dissolved Cadmium	UG/L															ND	ND	ND
Total Chromium	UG/L															ND	ND	ND
Dissolved Chromium	UG/L															ND	ND	ND
Total Copper	UG/L	6.1														ND	ND	ND
Dissolved Copper	UG/L															ND	ND	ND
Total Lead	UG/L	210														ND	ND	ND
Dissolved Lead	UG/L															ND	ND	ND
Total Mercury	UG/L	1.8														ND	ND	ND
Dissolved Mercury	UG/L															ND	ND	ND
Total Nickel	UG/L	75														ND	ND	ND
Dissolved Nickel	UG/L															ND	ND	ND
Total Selenium	UG/L	300														ND	ND	ND
Dissolved Selenium	UG/L															ND	ND	ND
Total Silver	UG/L	1.9														ND	ND	ND
Dissolved Silver	UG/L															ND	ND	ND
Total Thallium	UG/L															ND	ND	ND
Dissolved Thallium	UG/L															ND	ND	ND
Total Zinc	UG/L	90														ND	ND	ND
Dissolved Zinc	UG/L															ND	ND	ND

ND: No discharge <: Less than method detection limit AD: Awaiting Data >: Greater than value noted NA: Not applicable NR: Not required

Spillway #3

PIERP SPILLWAY 3, APRIL 2001

Month		April	April	April	April	April	April	April	April	April	April	April	April	April	April	April	April	April
Day			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		State Water	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3
Frequency		Quality Standards	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #		at any time / monthly avg.	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	Mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than method detection limit AD: Awaiting Data >: Greater than value noted NA: Not applicable NR: Not required

Spillway #3

PIERP SPILLWAY 3, APRIL 2001

Month	April		April	April	April	April	April	April	April	April	April	April	April	April	Spillway #3	Spillway #3	Spillway #3
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	Minimum	Maximum	Average
Location		Quality Standards	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3			
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																	
Sample Time	Mil															NA	NA	NA
Turbidity	NTU	150 / 50														ND	ND	ND
pH	units	6.5 - 8.5														ND	ND	ND
Dissolved Oxygen	MG/L															ND	ND	ND
Dissolved Oxygen	% sat															ND	ND	ND
Salinity	ppt															ND	ND	ND
Conductivity	umhos															ND	ND	ND
Temperature	C															ND	ND	ND
Depth	ft															ND	ND	ND
Flow	MGD															ND	ND	ND
Total Suspended Solids	MG/L	800 / 400														ND	ND	ND
Nitrite	MG/L															ND	ND	ND
Ammonium	MG/L															ND	ND	ND
Total Dissolved P	MG/L															ND	ND	ND
Total Dissolved N	MG/L															ND	ND	ND
Phosphate	MG/L															ND	ND	ND
Nitrate/Nitrite	MG/L															ND	ND	ND
Nitrate	MG/L															ND	ND	ND
Dissolved Organic N	MG/L															ND	ND	ND
Dissolved Organic P	MG/L															ND	ND	ND
Total Antimony	UG/L															ND	ND	ND
Dissolved Antimony	UG/L															ND	ND	ND
Total Arsenic	UG/L															ND	ND	ND
Dissolved Arsenic	UG/L															ND	ND	ND
Total Beryllium	UG/L															ND	ND	ND
Dissolved Beryllium	UG/L															ND	ND	ND
Total Cadmium	UG/L	43														ND	ND	ND
Dissolved Cadmium	UG/L															ND	ND	ND
Total Chromium	UG/L															ND	ND	ND
Dissolved Chromium	UG/L															ND	ND	ND
Total Copper	UG/L	6.1														ND	ND	ND
Dissolved Copper	UG/L															ND	ND	ND
Total Lead	UG/L	210														ND	ND	ND
Dissolved Lead	UG/L															ND	ND	ND
Total Mercury	UG/L	1.8														ND	ND	ND
Dissolved Mercury	UG/L															ND	ND	ND
Total Nickel	UG/L	75														ND	ND	ND
Dissolved Nickel	UG/L															ND	ND	ND
Total Selenium	UG/L	300														ND	ND	ND
Dissolved Selenium	UG/L															ND	ND	ND
Total Silver	UG/L	1.9														ND	ND	ND
Dissolved Silver	UG/L															ND	ND	ND
Total Thallium	UG/L															ND	ND	ND
Dissolved Thallium	UG/L															ND	ND	ND
Total Zinc	UG/L	90														ND	ND	ND
Dissolved Zinc	UG/L															ND	ND	ND

ND: No discharge <: Less than method detection limit AD: Awaiting Data >: Greater than value noted NA: Not applicable NR: Not required

Spillway #4

PIERP SPILLWAY 4, APRIL 2001

Month	April		April	April	April	April	April	April	April	April	April	April	April	April	April	April	April	April
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	Mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge < Less than method detection limit AD: Awaiting Data > Greater than value noted NA: Not applicable NR: Not required

Spillway #4

PIERP SPILLWAY 4, APRIL 2001

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	April 18 Sp. 4 d	April 19 Sp. 4 d	April 20 Sp. 4 d	April 21 Sp. 4 d	April 22 Sp. 4 d	April 23 Sp. 4 d	April 24 Sp. 4 d	April 25 Sp. 4 d	April 26 Sp. 4 d	April 27 Sp. 4 d	April 28 Sp. 4 d	April 29 Sp. 4 d	April 30 Sp. 4 d	Spillway #4 Minimum	Spillway #4 Maximum	Spillway #4 Average
	April		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Sample Time	Mil															NA	NA	NA
Turbidity	NTU	150 / 50														ND	ND	ND
pH	units	6.5 - 8.5														ND	ND	ND
Dissolved Oxygen	MG/L															ND	ND	ND
Dissolved Oxygen	% sat															ND	ND	ND
Salinity	ppt															ND	ND	ND
Conductivity	umhos															ND	ND	ND
Temperature	C															ND	ND	ND
Depth	ft															ND	ND	ND
Flow	MGD															ND	ND	ND
Total Suspended Solids	MG/L	800 / 400														ND	ND	ND
Nitrite	MG/L															ND	ND	ND
Ammonium	MG/L															ND	ND	ND
Total Dissolved P	MG/L															ND	ND	ND
Total Dissolved N	MG/L															ND	ND	ND
Phosphate	MG/L															ND	ND	ND
Nitrate/Nitrite	MG/L															ND	ND	ND
Nitrate	MG/L															ND	ND	ND
Dissolved Organic N	MG/L															ND	ND	ND
Dissolved Organic P	MG/L															ND	ND	ND
Total Antimony	UG/L															ND	ND	ND
Dissolved Antimony	UG/L															ND	ND	ND
Total Arsenic	UG/L															ND	ND	ND
Dissolved Arsenic	UG/L															ND	ND	ND
Total Beryllium	UG/L															ND	ND	ND
Dissolved Beryllium	UG/L															ND	ND	ND
Total Cadmium	UG/L	43														ND	ND	ND
Dissolved Cadmium	UG/L															ND	ND	ND
Total Chromium	UG/L															ND	ND	ND
Dissolved Chromium	UG/L															ND	ND	ND
Total Copper	UG/L	6.1														ND	ND	ND
Dissolved Copper	UG/L															ND	ND	ND
Total Lead	UG/L	210														ND	ND	ND
Dissolved Lead	UG/L															ND	ND	ND
Total Mercury	UG/L	1.8														ND	ND	ND
Dissolved Mercury	UG/L															ND	ND	ND
Total Nickel	UG/L	75														ND	ND	ND
Dissolved Nickel	UG/L															ND	ND	ND
Total Selenium	UG/L	300														ND	ND	ND
Dissolved Selenium	UG/L															ND	ND	ND
Total Silver	UG/L	1.9														ND	ND	ND
Dissolved Silver	UG/L															ND	ND	ND
Total Thallium	UG/L															ND	ND	ND
Dissolved Thallium	UG/L															ND	ND	ND
Total Zinc	UG/L	90														ND	ND	ND
Dissolved Zinc	UG/L															ND	ND	ND

ND: No discharge < Less than method detection limit AD: Awaiting Data >: Greater than value noted NA: Not applicable NR: Not required

Spillway #5

PIERP SPILLWAY 5, APRIL 2001

Month			April	April	April	April	April	April	April	April	April	April	April	April	April	April	April	April	April
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	Sp. 5	Sp. 5	Sp. 5	5p. 5	Sp. 5	5p. 5	5p. 5	5p. 5	5p. 5	5p. 5	5p. 5	5p. 5	5p. 5	5p. 5	5p. 5	5p. 5	5p. 5
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	Mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than method detection limit AD: Awaiting Data >: Greater than value noted NA: Not applicable NR: Not required

Spillway #5

PIERP SPILLWAY 5, APRIL 2001

Month	April	State Water	April	April	April	April	April	April	April	April	April	April	April	April	April	Spillway #5	Spillway #5	Spillway #5
Day		Quality Standards	18	19	20	21	22	23	24	25	26	27	28	29	30	Minimum	Maximum	Average
Location		at any time / monthly avg.	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5			
Frequency			w	d	d	w	d	d	d	d	d	m	d	d	d			
Sample #			ND	ND	ND	P1001	P1006	P1008	P1010	P1012	P1014	P1016	P1021	P1023	P1025			
Parameter	Units																	
Sample Time	Mil					1230	0940	0840	1410	1315	0915	1345	1010	1045	1400	NA	NA	NA
Turbidity	NTU	150 / 50				31	27	25	28	52	47	22	39	48	40	22.00	52.00	35.90
pH	units	6.5 - 8.5				7.95	7.90	7.88	7.89	8.05	8.13	8.09	8.31	8.22	8.29	7.88	8.31	8.07
Dissolved Oxygen	MG/L					6.01	4.60	5.20	8.11	7.36	7.15	10.13	9.31	10.36	14.20	4.60	14.20	8.24
Dissolved Oxygen	% sat					NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Salinity	ppt					NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Conductivity	umhos					NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Temperature	C					NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Depth	ft.					1	1	1	1	1	1	1	1	1	1	1	1	1
Flow	MGD					3.92	4.00	4.00	4.00	4.00	6.42	4.50	3.87	4.90	7.19	3.87	7.19	4.68
Total Suspended Solids	MG/L	800 / 400				32	33	30	33	59	45	25	51	48	53	25	59	41
Nitrite	MG/L					0.0122						0.0207				0.0122	0.0207	0.0165
Ammonium	MG/L					13.390						22.620				13.390	22.620	18.005
Total Dissolved P	MG/L					0.2451						0.8011				0.2451	0.8011	0.5231
Total Dissolved N	MG/L					15.78						24.16				15.78	24.16	19.97
Phosphate	MG/L					0.2300						0.7320				0.2300	0.7320	0.4810
Nitrate/Nitrite	MG/L					0.160						0.186				0.160	0.186	0.173
Nitrate	MG/L					0.148						0.165				0.148	0.165	0.157
Dissolved Organic N	MG/L					2.23						1.35				1.35	2.23	1.79
Dissolved Organic P	MG/L					0.0151						0.0691				0.0151	0.0691	0.0421
Total Antimony	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L											24.0				24.0	24.0	24.0
Dissolved Arsenic	UG/L											25.0				25.0	25.0	25.0
Total Beryllium	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43										< 0.5				< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L											< 0.5				< 0.5	< 0.5	< 0.5
Total Chromium	UG/L											3.0				3.0	3.0	3.0
Dissolved Chromium	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1										18.0				18.0	18.0	18.0
Dissolved Copper	UG/L											3.0				3.0	3.0	3.0
Total Lead	UG/L	210										< 2.0				< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8										< 0.2				< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L											< 0.2				< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75										10.0				10.0	10.0	10.0
Dissolved Nickel	UG/L											3.0				3.0	3.0	3.0
Total Selenium	UG/L	300										4.0				4.0	4.0	4.0
Dissolved Selenium	UG/L											6.0				6.0	6.0	6.0
Total Silver	UG/L	1.9										< 1.0				< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L											< 1.0				< 1.0	< 1.0	< 1.0
Total Thallium	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90										< 3.0				< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L											< 3.0				< 3.0	< 3.0	< 3.0

ND: No discharge <: Less than method detection limit AD: Awaiting Data >: Greater than value noted NA: Not applicable NR: Not required

Spillway # 6

PIERP SPILLWAY 6, APRIL 2001

Month			April	April	April	April	April	April	April	April	April	April	April	April	April	April	April	April
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	Mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less then method detection limit AD: Awaiting Data >: Greater than value noted NA: Not applicable NR: Not required

Spillway # 6

PIERP SPILLWAY 6, APRIL 2001

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	April 18 Sp. 6 w ND	April 19 Sp. 6 d ND	April 20 Sp. 6 d ND	April 21 Sp. 6 w P1002	April 22 Sp. 6 d P1007	April 23 Sp. 6 d P1009	April 24 Sp. 6 d P1011	April 25 Sp. 6 d P1013	April 26 Sp. 6 d P1015	April 27 Sp. 6 m P1017	April 28 Sp. 6 d P1022	April 29 Sp. 6 d P1024	April 30 Sp. 6 d P1026	Spillway # 6 Minimum	Spillway # 6 Maximum	Spillway # 6 Average
Sample Time	Mil					1245	0930	0830	1445	1300	0900	1410	1600	1345	1340	NA	NA	NA
Turbidity	NTU	150 / 50				23	31	35	27	60	36	21	87	33	49	21	87	40
pH	units	6.5 - 8.5				7.96	7.82	7.78	7.87	8.10	8.06	8.06	8.14	8.18	8.21	7.78	8.21	8.02
Dissolved Oxygen	MG/L					6.11	2.71	3.52	8.09	8.20	6.91	9.63	8.43	10.79	13.40	2.71	13.40	7.78
Dissolved Oxygen	% sat					NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Salinity	ppt					NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Conductivity	umhos					NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Temperature	C					NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Depth	ft.					1	1	1	1	1	1	1	1	1	1	1	1	1
Flow	MGD					3.92	4.00	4.00	3.08	1.81	6.42	4.50	3.87	4.90	7.19	1.81	7.19	4.37
Total Suspended Solids	MG/L	800 / 400				27	41	48	34	67	34	19	89	35	70	19	89	46
Nitrite	MG/L					0.0124						0.0137				0.0124	0.0137	0.0131
Ammonium	MG/L					14.190						16.300				14.190	16.300	15.245
Total Dissolved P	MG/L					0.2592						0.6095				0.2592	0.6095	0.4344
Total Dissolved N	MG/L					16.14						19.72				16.14	19.72	17.93
Phosphate	MG/L					0.2400						0.5680				0.2400	0.5680	0.4040
Nitrate/Nitrite	MG/L					0.167						0.153				0.153	0.167	0.160
Nitrate	MG/L					0.155						0.139				0.139	0.155	0.147
Dissolved Organic N	MG/L					1.78						3.27				1.78	3.27	2.53
Dissolved Organic P	MG/L					0.0192						0.0415				0.0192	0.0415	0.0304
Total Antimony	UG/L											2.0				2.0	2.0	2.0
Dissolved Antimony	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L											25.0				25.0	25.0	25.0
Dissolved Arsenic	UG/L											25.0				25.0	25.0	25.0
Total Beryllium	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43										< 0.5				< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L											< 0.5				< 0.5	< 0.5	< 0.5
Total Chromium	UG/L											2.0				2.0	2.0	2.0
Dissolved Chromium	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1										< 3.0				< 3.0	< 3.0	< 3.0
Dissolved Copper	UG/L											< 3.0				< 3.0	< 3.0	< 3.0
Total Lead	UG/L	210										< 2.0				< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8										< 0.2				< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L											< 0.2				< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75										4.0				4.0	4.0	4.0
Dissolved Nickel	UG/L											3.0				3.0	3.0	3.0
Total Selenium	UG/L	300										4.0				4.0	4.0	4.0
Dissolved Selenium	UG/L											6.0				6.0	6.0	6.0
Total Silver	UG/L	1.9										< 1.0				< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L											< 1.0				< 1.0	< 1.0	< 1.0
Total Thallium	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90										< 3.0				< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L											< 3.0				< 3.0	< 3.0	< 3.0

ND: No discharge <: Less then method detection limit AD: Awaiting Data >: Greater than value noted NA: Not applicable NR: Not required

00 Yard #1

PIERP 100 YD-1, APRIL 2001

Month	April	State Water Quality Standards at any time / monthly avg.	April	April	April	April	April	April	April	April	April	April	April	April	April	April	April	April
Day			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location			100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																		
Sample Time	Mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge < Less than method detection limit AD: Awaiting Data >: Greater than value noted NA: Not applicable NR: Not required

100 Yard #1

PIERP 100 YD-1, APRIL 2001

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	April 18 100yd-1 d NA	April 19 100yd-1 d NA	April 20 100yd-1 d NA	April 21 100yd-1 d NA	April 22 100yd-1 d NA	April 23 100yd-1 d NA	April 24 100yd-1 d NA	April 25 100yd-1 d NA	April 26 100yd-1 d NA	April 27 100yd-1 d NA	April 28 100yd-1 d NA	April 29 100yd-1 d NA	April 30 100yd-1 d NA	100 Yard #1 Minimum	100 Yard #1 Maximum	100 Yard #1 Average
Sample Time	Mil															NA	NA	NA
Turbidity	NTU	150 / 50														NA	NA	NA
pH	units	6.5 - 8.5														NA	NA	NA
Dissolved Oxygen	MG/L															NA	NA	NA
Dissolved Oxygen	% sat															NA	NA	NA
Salinity	ppt															NA	NA	NA
Conductivity	umhos															NA	NA	NA
Temperature	C															NA	NA	NA
Depth	ft															NA	NA	NA
Flow	MGD															NA	NA	NA
Total Suspended Solids	MG/L	800 / 400														NA	NA	NA
Nitrite	MG/L															NA	NA	NA
Ammonium	MG/L															NA	NA	NA
Total Dissolved P	MG/L															NA	NA	NA
Total Dissolved N	MG/L															NA	NA	NA
Phosphate	MG/L															NA	NA	NA
Nitrate/Nitrite	MG/L															NA	NA	NA
Nitrate	MG/L															NA	NA	NA
Dissolved Organic N	MG/L															NA	NA	NA
Dissolved Organic P	MG/L															NA	NA	NA
Total Antimony	UG/L															NA	NA	NA
Dissolved Antimony	UG/L															NA	NA	NA
Total Arsenic	UG/L															NA	NA	NA
Dissolved Arsenic	UG/L															NA	NA	NA
Total Beryllium	UG/L															NA	NA	NA
Dissolved Beryllium	UG/L															NA	NA	NA
Total Cadmium	UG/L	43														NA	NA	NA
Dissolved Cadmium	UG/L															NA	NA	NA
Total Chromium	UG/L															NA	NA	NA
Dissolved Chromium	UG/L															NA	NA	NA
Total Copper	UG/L	6.1														NA	NA	NA
Dissolved Copper	UG/L															NA	NA	NA
Total Lead	UG/L	210														NA	NA	NA
Dissolved Lead	UG/L															NA	NA	NA
Total Mercury	UG/L	1.8														NA	NA	NA
Dissolved Mercury	UG/L															NA	NA	NA
Total Nickel	UG/L	75														NA	NA	NA
Dissolved Nickel	UG/L															NA	NA	NA
Total Selenium	UG/L	300														NA	NA	NA
Dissolved Selenium	UG/L															NA	NA	NA
Total Silver	UG/L	1.9														NA	NA	NA
Dissolved Silver	UG/L															NA	NA	NA
Total Thallium	UG/L															NA	NA	NA
Dissolved Thallium	UG/L															NA	NA	NA
Total Zinc	UG/L	90														NA	NA	NA
Dissolved Zinc	UG/L															NA	NA	NA

ND: No discharge <: Less than method detection limit AD: Awaiting Data >: Greater than value noted NA: Not applicable NR: Not required

100 Yard #2

PIERP 100 YD-2, APRIL 2001

Month	Apnl	State Water	April	April	April	April	April	April	April	April	April	April	April	April	April	April	April	April
Day		Quality Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		at any time / monthly avg.	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																		
Sample Time	Mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge < Less than method detection limit AD: Awaiting Data >: Greater than value noted NA: Not applicable NR: Not required

00 Yard #2

PIERP 100 YD-2, APRIL 2001

Month	April	State Water	April	April	April	April	April	April	April	April	April	April	April	April	100 Yard #2	100 Yard #2	100 Yard #2
Day		Quality Standards	18	19	20	21	22	23	24	25	26	27	28	29	30	Minimum	Maximum	Average
Location		at any time / monthly avg.	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2			
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Parameter	Units																	
Sample Time	Mil															NA	NA	NA
Turbidity	NTU	150 / 50														NA	NA	NA
pH	units	6.5 - 8.5														NA	NA	NA
Dissolved Oxygen	MG/L															NA	NA	NA
Dissolved Oxygen	% sat															NA	NA	NA
Salinity	ppt															NA	NA	NA
Conductivity	umhos															NA	NA	NA
Temperature	C															NA	NA	NA
Depth	ft															NA	NA	NA
Flow	MGD															NA	NA	NA
Total Suspended Solids	MG/L	800 / 400														NA	NA	NA
Nitrite	MG/L															NA	NA	NA
Ammonium	MG/L															NA	NA	NA
Total Dissolved P	MG/L															NA	NA	NA
Total Dissolved N	MG/L															NA	NA	NA
Phosphate	MG/L															NA	NA	NA
Nitrate/Nitrite	MG/L															NA	NA	NA
Nitrate	MG/L															NA	NA	NA
Dissolved Organic N	MG/L															NA	NA	NA
Dissolved Organic P	MG/L															NA	NA	NA
Total Antimony	UG/L															NA	NA	NA
Dissolved Antimony	UG/L															NA	NA	NA
Total Arsenic	UG/L															NA	NA	NA
Dissolved Arsenic	UG/L															NA	NA	NA
Total Beryllium	UG/L															NA	NA	NA
Dissolved Beryllium	UG/L															NA	NA	NA
Total Cadmium	UG/L	43														NA	NA	NA
Dissolved Cadmium	UG/L															NA	NA	NA
Total Chromium	UG/L															NA	NA	NA
Dissolved Chromium	UG/L															NA	NA	NA
Total Copper	UG/L	6.1														NA	NA	NA
Dissolved Copper	UG/L															NA	NA	NA
Total Lead	UG/L	210														NA	NA	NA
Dissolved Lead	UG/L															NA	NA	NA
Total Mercury	UG/L	1.8														NA	NA	NA
Dissolved Mercury	UG/L															NA	NA	NA
Total Nickel	UG/L	75														NA	NA	NA
Dissolved Nickel	UG/L															NA	NA	NA
Total Selenium	UG/L	300														NA	NA	NA
Dissolved Selenium	UG/L															NA	NA	NA
Total Silver	UG/L	1.9														NA	NA	NA
Dissolved Silver	UG/L															NA	NA	NA
Total Thallium	UG/L															NA	NA	NA
Dissolved Thallium	UG/L															NA	NA	NA
Total Zinc	UG/L	90														NA	NA	NA
Dissolved Zinc	UG/L															NA	NA	NA

ND: No discharge <: Less than method detection limit AD: Awaiting Data >: Greater than value noted NA: Not applicable NR: Not required

00 Yard #4

PIERP 100 YD-4, APRIL 2001

Month	Day	Location	Frequency	Sample #	Parameter	Units	State Water Quality Standards at any time / monthly avg.	April 1 100yd-4 d NA	April 2 100yd-4 d NA	April 3 100yd-4 d NA	April 4 100yd-4 d NA	April 5 100yd-4 d NA	April 6 100yd-4 d NA	April 7 100yd-4 d NA	April 8 100yd-4 d NA	April 9 100yd-4 d NA	April 10 100yd-4 d NA	April 11 100yd-4 d NA	April 12 100yd-4 d NA	April 13 100yd-4 d NA	April 14 100yd-4 d NA	April 15 100yd-4 d NA	April 16 100yd-4 d NA	April 17 100yd-4 d NA
April					Sample Time	Mil																		
					Turbidity	NTU	150 / 50																	
					pH	units	6.5 - 8.5																	
					Dissolved Oxygen	MG/L																		
					Dissolved Oxygen	% sat																		
					Salinity	ppt																		
					Conductivity	umhos																		
					Temperature	C																		
					Depth	ft																		
					Flow	MGD																		
					Total Suspended Solids	MG/L	800 / 400																	
					Nitrite	MG/L																		
					Ammonium	MG/L																		
					Total Dissolved P	MG/L																		
					Total Dissolved N	MG/L																		
					Phosphate	MG/L																		
					Nitrate/Nitrite	MG/L																		
					Nitrate	MG/L																		
					Dissolved Organic N	MG/L																		
					Dissolved Organic P	MG/L																		
					Total Antimony	UG/L																		
					Dissolved Antimony	UG/L																		
					Total Arsenic	UG/L																		
					Dissolved Arsenic	UG/L																		
					Total Beryllium	UG/L																		
					Dissolved Beryllium	UG/L																		
					Total Cadmium	UG/L	43																	
					Dissolved Cadmium	UG/L																		
					Total Chromium	UG/L																		
					Dissolved Chromium	UG/L																		
					Total Copper	UG/L	6.1																	
					Dissolved Copper	UG/L																		
					Total Lead	UG/L	210																	
					Dissolved Lead	UG/L																		
					Total Mercury	UG/L	1.8																	
					Dissolved Mercury	UG/L																		
					Total Nickel	UG/L	75																	
					Dissolved Nickel	UG/L																		
					Total Selenium	UG/L	300																	
					Dissolved Selenium	UG/L																		
					Total Silver	UG/L	1.9																	
					Dissolved Silver	UG/L																		
					Total Thallium	UG/L																		
					Dissolved Thallium	UG/L																		
					Total Zinc	UG/L	90																	
					Dissolved Zinc	UG/L																		

ND: No discharge <: Less than method detection limit AD: Awaiting Data >: Greater than value noted NA: Not applicable NR: Not required

00 Yard #4

PIERP 100 YD-4, APRIL 2001

Month	April	State Water Quality Standards at any time / monthly avg.	April	April	April	April	April	April	April	April	April	April	April	April	100 Yard #4	100 Yard #4	100 Yard #4
Day			18	19	20	21	22	23	24	25	26	27	28	29	30	Minimum	Maximum	Average
Location			100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4			
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Parameter	Units																	
Sample Time	Mil															NA	NA	NA
Turbidity	NTU	150 / 50														NA	NA	NA
pH	units	6.5 - 8.5														NA	NA	NA
Dissolved Oxygen	MG/L															NA	NA	NA
Dissolved Oxygen	% sat															NA	NA	NA
Salinity	ppt															NA	NA	NA
Conductivity	umhos															NA	NA	NA
Temperature	C															NA	NA	NA
Depth	ft															NA	NA	NA
Flow	MGD															NA	NA	NA
Total Suspended Solids	MG/L	800 / 400														NA	NA	NA
Nitrite	MG/L															NA	NA	NA
Ammonium	MG/L															NA	NA	NA
Total Dissolved P	MG/L															NA	NA	NA
Total Dissolved N	MG/L															NA	NA	NA
Phosphate	MG/L															NA	NA	NA
Nitrate/Nitrite	MG/L															NA	NA	NA
Nitrate	MG/L															NA	NA	NA
Dissolved Organic N	MG/L															NA	NA	NA
Dissolved Organic P	MG/L															NA	NA	NA
Total Anitimony	UG/L															NA	NA	NA
Dissolved Antimony	UG/L															NA	NA	NA
Total Arsenic	UG/L															NA	NA	NA
Dissolved Arsenic	UG/L															NA	NA	NA
Total Beryllium	UG/L															NA	NA	NA
Dissolved Beryllium	UG/L															NA	NA	NA
Total Cadmium	UG/L	43														NA	NA	NA
Dissolved Cadmium	UG/L															NA	NA	NA
Total Chromium	UG/L															NA	NA	NA
Dissolved Chromium	UG/L															NA	NA	NA
Total Copper	UG/L	6.1														NA	NA	NA
Dissolved Copper	UG/L															NA	NA	NA
Total Lead	UG/L	210														NA	NA	NA
Dissolved Lead	UG/L															NA	NA	NA
Total Mercury	UG/L	1.8														NA	NA	NA
Dissolved Mercury	UG/L															NA	NA	NA
Total Nickel	UG/L	75														NA	NA	NA
Dissolved Nickel	UG/L															NA	NA	NA
Total Selenium	UG/L	300														NA	NA	NA
Dissolved Selenium	UG/L															NA	NA	NA
Total Silver	UG/L	1.9														NA	NA	NA
Dissolved Silver	UG/L															NA	NA	NA
Total Thallium	UG/L															NA	NA	NA
Dissolved Thallium	UG/L															NA	NA	NA
Total Zinc	UG/L	90														NA	NA	NA
Dissolved Zinc	UG/L															NA	NA	NA

ND: No discharge <: Less than method detection limit AD: Awaiting Data >: Greater than value noted NA: Not applicable NR: Not required

100 Yard #5

PIERP 100 YD-5, APRIL 2001

Month	April		April	April	April	April	April	April	April	April	April	April	April	April	April	April	April	April
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																		
Sample Time	Mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge < Less than method detection limit AD: Awaiting Data > Greater than value noted NA: Not applicable NR: Not required

100 Yard #5

PIERP 100 YD-5, APRIL 2001

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	April 18 100yd-5 w NA	April 19 100yd-5 d NA	April 20 100yd-5 d NA	April 21 100yd-5 w P1003	April 22 100yd-5 d NA	April 23 100yd-5 d NA	April 24 100yd-5 d NA	April 25 100yd-5 d NA	April 26 100yd-5 d NA	April 27 100yd-5 m P1018	April 28 100yd-5 d NA	April 29 100yd-5 d NA	April 30 100yd-5 d NA	100 Yard #5 Minimum	100 Yard #5 Maximum	100 Yard #5 Average
Sample Time	Mil					1455						1545				NA	NA	NA
Turbidity	NTU	150 / 50				7						8				7	8	8
pH	units	6.5 - 8.5				8.06						8.17				8.06	8.17	8.12
Dissolved Oxygen	MG/L					10.69						10.72				10.69	10.72	10.71
Dissolved Oxygen	% sat					NR						NR				NR	NR	NR
Salinity	ppt					NR						NR				NR	NR	NR
Conductivity	umhos					NR						NR				NR	NR	NR
Temperature	C					NR						NR				NR	NR	NR
Depth	ft					2						2				2	2	2
Flow	MGD					NA						NA				NA	NA	NA
Total Suspended Solids	MG/L	800 / 400				13						17				13	17	15
Nitrite	MG/L					0.0095						0.0149				0.0095	0.0149	0.0122
Ammonium	MG/L					0.779						6.605				0.779	6.605	3.692
Total Dissolved P	MG/L					0.0143						0.1724				0.0143	0.1724	0.0934
Total Dissolved N	MG/L					1.61						7.93				1.61	7.93	4.77
Phosphate	MG/L					0.0074						0.1490				0.0074	0.1490	0.0782
Nitrate/Nitrite	MG/L					0.405						0.394				0.394	0.405	0.400
Nitrate	MG/L					0.396						0.379				0.379	0.396	0.388
Dissolved Organic N	MG/L					0.43						0.93				0.43	0.93	0.68
Dissolved Organic P	MG/L					0.0069						0.0234				0.0069	0.0234	0.0152
Total Antimony	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L											17.0				17.0	17.0	17.0
Dissolved Arsenic	UG/L											17.0				17.0	17.0	17.0
Total Beryllium	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43										< 0.5				< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L											< 0.5				< 0.5	< 0.5	< 0.5
Total Chromium	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Dissolved Chromium	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1										7.0				7.0	7.0	7.0
Dissolved Copper	UG/L											11.0				11.0	11.0	11.0
Total Lead	UG/L	210										< 2.0				< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8										< 0.2				< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L											< 0.2				< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75										4.0				4.0	4.0	4.0
Dissolved Nickel	UG/L											5.0				5.0	5.0	5.0
Total Selenium	UG/L	300										4.0				4.0	4.0	4.0
Dissolved Selenium	UG/L											6.0				6.0	6.0	6.0
Total Silver	UG/L	1.9										< 1.0				< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L											< 1.0				< 1.0	< 1.0	< 1.0
Total Thallium	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L											< 2.0				< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90										< 3.0				< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L											< 3.0				< 3.0	< 3.0	< 3.0

ND: No discharge <: Less than method detection limit AD: Awaiting Data >: Greater than value noted NA: Not applicable NR: Not required

100 Yard #6

PIERP 100 YD-6, APRIL 2001

Month	April	State Water	April	April	April	April	April	April	April	April	April	April	April	April	April	April	April	April
Day		Quality Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		at any time / monthly avg.	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																		
Sample Time	Mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than method detection limit AD: Awaiting Data >: Greater than value noted NA: Not applicable NR: Not required

100 Yard #6

PIERP 100 YD-6, APRIL 2001

Month	April		April	April	April	April	April	April	April	April	April	April	April	April	April	100 Yard #6	100 Yard #6	100 Yard #6
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	Minimum	Maximum	Average
Location		Quality Standards	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6			
Frequency		at any time / monthly avg.	w	d	d	w	d	d	d	d	d	m	d	d	d			
Sample #			NA	NA	NA	P1004	NA	NA	NA	NA	NA	P1019	NA	NA	NA			
Parameter	Units																	
Sample Time	Mil															NA	NA	NA
Turbidity	NTU	150 / 50				5						4				4	5	5
pH	units	6.5 - 8.5				7.96						8.20				7.96	8.20	8.08
Dissolved Oxygen	MG/L					11.03						10.98				10.98	11.03	11.01
Dissolved Oxygen	% sat					NR						NR				NR	NR	NR
Salinity	ppt					NR						NR				NR	NR	NR
Conductivity	umhos					NR						NR				NR	NR	NR
Temperature	C					NR						NR				NR	NR	NR
Depth	ft.					2						2				2	2	2
Flow	MGD					NA						NA				NA	NA	NA
Total Suspended Solids	MG/L	800 / 400				9						17				9	17	13
Nitrite	MG/L					0.0100						0.0150				0.0100	0.0150	0.0125
Ammonium	MG/L					0.082						7.710				0.082	7.710	3.896
Total Dissolved P	MG/L					0.0141						0.1677				0.0141	0.1677	0.0909
Total Dissolved N	MG/L					0.89						8.76				0.89	8.76	4.83
Phosphate	MG/L					0.0060						0.145				0.0060	0.1450	0.0755
Nitrate/Nitrite	MG/L					0.481						0.394				0.394	0.481	0.438
Nitrate	MG/L					0.471						0.379				0.379	0.471	0.425
Dissolved Organic N	MG/L					0.33						0.66				0.33	0.66	0.50
Dissolved Organic P	MG/L					0.0081						0.0227				0.0081	0.0227	0.0154
Total Antimony	UG/L										<	2.0				< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L										<	2.0				< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L											17.0				17.0	17.0	17.0
Dissolved Arsenic	UG/L											18.0				18.0	18.0	18.0
Total Beryllium	UG/L										<	2.0				< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L										<	2.0				< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43									<	0.5				< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L										<	0.5				< 0.5	< 0.5	< 0.5
Total Chromium	UG/L											2.0				2.0	2.0	2.0
Dissolved Chromium	UG/L										<	2.0				< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1										5.0				5.0	5.0	5.0
Dissolved Copper	UG/L											6.0				6.0	6.0	6.0
Total Lead	UG/L	210									<	2.0				< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L										<	2.0				< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8									<	0.2				< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L										<	0.2				< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75										5.0				5.0	5.0	5.0
Dissolved Nickel	UG/L											3.0				3.0	3.0	3.0
Total Selenium	UG/L	300										4.0				4.0	4.0	4.0
Dissolved Selenium	UG/L											6.0				6.0	6.0	6.0
Total Silver	UG/L	1.9									<	1.0				< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L										<	1.0				< 1.0	< 1.0	< 1.0
Total Thallium	UG/L										<	2.0				< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L										<	2.0				< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90										7.0				7.0	7.0	7.0
Dissolved Zinc	UG/L										<	3.0				< 3.0	< 3.0	< 3.0

ND: No discharge < Less than method detection limit AD: Awaiting Data > Greater than value noted NA: Not applicable NR: Not required

eference Point WQR1

PIERP WQR1, MAY 2001

Month	May	State Water Quality Standards at any time / monthly avg.	May	May	May	May	May	May	May	May	May	May	May	May	May	May	May	May	May
Day			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Location			WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1
Frequency			w	d	d	d	d	d	d	w	d	d	d	d	d	d	d	d	d	d
Sample #			P1031	NA	NA	NA	NA	NA	NA	P1044	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																			
Sample Time	mil		1145							1450										
Turbidity	NTU	150 / 50	3							3										
pH	units	6.5 - 8.5	8.08							8.68										
Dissolved Oxygen	MG/L		10.14							9.45										
Dissolved Oxygen	% sat		NR							NR										
Salinity	ppt		NR							NR										
Conductivity	umhos		NR							NR										
Temperature	C		NR							NR										
Depth	ft		6							6										
Flow	MGD		NA							NA										
Total Suspended Solids	MG/L	800 / 400	9							15										
Nitrite	MG/L		0.0105							0.0092										
Ammonium	MG/L		0.048							0.028										
Total Dissolved P	MG/L		0.0136							0.0128										
Total Dissolved N	MG/L		0.90							0.64										
Phosphate	MG/L		0.0061							0.0047										
Nitrate/Nitrite	MG/L		0.526							0.341										
Nitrate	MG/L		0.516							0.332										
Dissolved Organic N	MG/L		0.33							0.27										
Dissolved Organic P	MG/L		0.0075							0.0081										
Total Antimony	UG/L																			
Dissolved Antimony	UG/L																			
Total Arsenic	UG/L																			
Dissolved Arsenic	UG/L																			
Total Beryllium	UG/L																			
Dissolved Beryllium	UG/L																			
Total Cadmium	UG/L	43																		
Dissolved Cadmium	UG/L																			
Total Chromium	UG/L																			
Dissolved Chromium	UG/L																			
Total Copper	UG/L	6.1																		
Dissolved Copper	UG/L																			
Total Lead	UG/L	210																		
Dissolved Lead	UG/L																			
Total Mercury	UG/L	1.8																		
Dissolved Mercury	UG/L																			
Total Nickel	UG/L	75																		
Dissolved Nickel	UG/L																			
Total Selenium	UG/L	300																		
Dissolved Selenium	UG/L																			
Total Silver	UG/L	1.9																		
Dissolved Silver	UG/L																			
Total Thallium	UG/L																			
Dissolved Thallium	UG/L																			
Total Zinc	UG/L	90																		
Dissolved Zinc	UG/L																			

ND: No Discharge <: Less than method detection limit AD: Data not available >: Greater than value noted NA: Not applicable NR: Not required

Reference Point WQR1

PIERP WQR1, MAY 2001

Month	May	State Water	May	May	May	May	May	May	May	May	May	May	May	May	Reference Point	Reference Point	Reference Point
Day			19	20	21	22	23	24	25	26	27	28	29	30	31	WQR1	WQR1	WQR1
Location		Quality Standards	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	Minimum	Maximum	Average
Frequency		at any time / monthly avg.	d	d	d	w	d	d	d	d	d	d	d	d	m			
Sample #			NA	NA	NA	P1059	NA	NA	NA	NA	NA	NA	NA	NA	P1079			
Parameter	Units																	
Sample Time	mil					1415									1225	NA	NA	NA
Turbidity	NTU	150 / 50				2									2	2	3	3
pH	units	6.5 - 8.5				8.15									8.07	8.07	8.68	8.25
Dissolved Oxygen	MG/L					7.29									8.11	7.29	10.14	8.75
Dissolved Oxygen	% sat					NR									NR	NR	NR	NR
Salinity	ppt					NR									NR	NR	NR	NR
Conductivity	umhos					NR									NR	NR	NR	NR
Temperature	C					NR									NR	NR	NR	NR
Depth	ft					6									6	6	6	6
Flow	MGD					NA									NA	NA	NA	NA
Total Suspended Solids	MG/L	800 / 400				13									10	9	15	11.75
Nitrite	MG/L					0.0052									0.0061	0.0052	0.0105	0.0078
Ammonium	MG/L					0.081									0.121	0.028	0.121	0.070
Total Dissolved P	MG/L					0.0366									0.0126	0.0126	0.0366	0.0189
Total Dissolved N	MG/L					0.58									0.63	0.58	0.90	0.69
Phosphate	MG/L					0.0256									0.0031	0.0031	0.0256	0.0099
Nitrate/Nitrite	MG/L					0.209									0.217	0.209	0.526	0.323
Nitrate	MG/L					0.204									0.211	0.204	0.516	0.316
Dissolved Organic N	MG/L					0.29									0.29	0.27	0.33	0.30
Dissolved Organic P	MG/L					0.0110									0.0095	0.0075	0.0110	0.0090
Total Antimony	UG/L														< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L														< 2.0	< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L														12.0	12.0	12.0	12.0
Dissolved Arsenic	UG/L														14.0	14.0	14.0	14.0
Total Beryllium	UG/L														5.0	5.0	5.0	5.0
Dissolved Beryllium	UG/L														6.0	6.0	6.0	6.0
Total Cadmium	UG/L	43													< 0.5	< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L														< 0.5	< 0.5	< 0.5	< 0.5
Total Chromium	UG/L														< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Chromium	UG/L														< 2.0	< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1													< 3.0	< 3.0	< 3.0	< 3.0
Dissolved Copper	UG/L														< 3.0	< 3.0	< 3.0	< 3.0
Total Lead	UG/L	210													< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L														< 2.0	< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8													< 0.2	< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L														< 0.2	< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75													2.0	2.0	2.0	2.0
Dissolved Nickel	UG/L														2.0	2.0	2.0	2.0
Total Selenium	UG/L	300													6.0	6.0	6.0	6.0
Dissolved Selenium	UG/L														8.0	8.0	8.0	8.0
Total Silver	UG/L	1.9													< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L														< 1.0	< 1.0	< 1.0	< 1.0
Total Thallium	UG/L														< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L														< 2.0	< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90													< 3.0	< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L														< 3.0	< 3.0	< 3.0	< 3.0

ND: No Discharge <: Less than method detection limit AD: Data not available >: Greater than value noted NA: Not applicable NR: Not required

Spillway #1

PIERP SPILLWAY 1, MAY 2001

Month	May	State Water	May	May	May	May	May	May	May	May	May	May	May	May	May	May	May	May
Day		Quality Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		at any time / monthly avg.	Sp. 1	Sp.1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
oH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge < Less than the method detection limit AD: Awaiting data > Greater than value noted NA: Not applicable NR: Not required

Spillway #1

PIERP SPILLWAY 1, MAY 2001

Month	May	State Water	May	May	May	May	May	May	May	May	May	May	May	May	May	Spillway #1	Spillway #1	Spillway #1
Day		Quality Standards	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		at any time / monthly avg.	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1			
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																		
Sample Time	mil																NA	NA	NA
Turbidity	NTU	150 / 50															ND	ND	ND
pH	units	6.5 - 8.5															ND	ND	ND
Dissolved Oxygen	MG/L																NR	NR	NR
Dissolved Oxygen	% sat																NR	NR	NR
Salinity	ppt																NR	NR	NR
Conductivity	umhos																NR	NR	NR
Temperature	C																ND	ND	ND
Depth	ft.																ND	ND	ND
Flow	MGD																ND	ND	ND
Total Suspended Solids	MG/L	800 / 400															ND	ND	ND
Nitrite	MG/L																ND	ND	ND
Ammonium	MG/L																ND	ND	ND
Total Dissolved P	MG/L																ND	ND	ND
Total Dissolved N	MG/L																ND	ND	ND
Phosphate	MG/L																ND	ND	ND
Nitrate/Nitrite	MG/L																ND	ND	ND
Nitrate	MG/L																ND	ND	ND
Dissolved Organic N	MG/L																ND	ND	ND
Dissolved Organic P	MG/L																ND	ND	ND
Total Antimony	UG/L																ND	ND	ND
Dissolved Antimony	UG/L																ND	ND	ND
Total Arsenic	UG/L																ND	ND	ND
Dissolved Arsenic	UG/L																ND	ND	ND
Total Beryllium	UG/L																ND	ND	ND
Dissolved Beryllium	UG/L																ND	ND	ND
Total Cadmium	UG/L	43															ND	ND	ND
Dissolved Cadmium	UG/L																ND	ND	ND
Total Chromium	UG/L																ND	ND	ND
Dissolved Chromium	UG/L																ND	ND	ND
Total Copper	UG/L	6.1															ND	ND	ND
Dissolved Copper	UG/L																ND	ND	ND
Total Lead	UG/L	210															ND	ND	ND
Dissolved Lead	UG/L																ND	ND	ND
Total Mercury	UG/L	1.8															ND	ND	ND
Dissolved Mercury	UG/L																ND	ND	ND
Total Nickel	UG/L	75															ND	ND	ND
Dissolved Nickel	UG/L																ND	ND	ND
Total Selenium	UG/L	300															ND	ND	ND
Dissolved Selenium	UG/L																ND	ND	ND
Total Silver	UG/L	1.9															ND	ND	ND
Dissolved Silver	UG/L																ND	ND	ND
Total Thallium	UG/L																ND	ND	ND
Dissolved Thallium	UG/L																ND	ND	ND
Total Zinc	UG/L	90															ND	ND	ND
Dissolved Zinc	UG/L																ND	ND	ND

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

pillway #2

PIERP SPILLWAY 2, MAY 2001

Month	May	State Water	May	May	May	May	May	May	May	May	May	May	May	May	May	May	May	May
Day		Quality Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		at any time / monthly avg.	Sp. 2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

Spillway #2

PIERP SPILLWAY 2, MAY 2001

Month	May		May	May	May	May	May	May	May	May	May	May	May	May	May	Spillway #2	Spillway #2	Spillway #2
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2			
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																		
Sample Time	mil																NA	NA	NA
Turbidity	NTU	150 / 50															ND	ND	ND
pH	units	6.5 - 8.5															ND	ND	ND
Dissolved Oxygen	MG/L																ND	ND	ND
Dissolved Oxygen	% sat																NR	NR	NR
Salinity	ppt																NR	NR	NR
Conductivity	umhos																NR	NR	NR
Temperature	C																NR	NR	NR
Depth	ft.																ND	ND	ND
Flow	MGD																ND	ND	ND
Total Suspended Solids	MG/L	800 / 400															ND	ND	ND
Nitrite	MG/L																ND	ND	ND
Ammonium	MG/L																ND	ND	ND
Total Dissolved P	MG/L																ND	ND	ND
Total Dissolved N	MG/L																ND	ND	ND
Phosphate	MG/L																ND	ND	ND
Nitrate/Nitrite	MG/L																ND	ND	ND
Nitrate	MG/L																ND	ND	ND
Dissolved Organic N	MG/L																ND	ND	ND
Dissolved Organic P	MG/L																ND	ND	ND
Total Antimony	UG/L																ND	ND	ND
Dissolved Antimony	UG/L																ND	ND	ND
Total Arsenic	UG/L																ND	ND	ND
Dissolved Arsenic	UG/L																ND	ND	ND
Total Beryllium	UG/L																ND	ND	ND
Dissolved Beryllium	UG/L																ND	ND	ND
Total Cadmium	UG/L	43															ND	ND	ND
Dissolved Cadmium	UG/L																ND	ND	ND
Total Chromium	UG/L																ND	ND	ND
Dissolved Chromium	UG/L																ND	ND	ND
Total Copper	UG/L	6.1															ND	ND	ND
Dissolved Copper	UG/L																ND	ND	ND
Total Lead	UG/L	210															ND	ND	ND
Dissolved Lead	UG/L																ND	ND	ND
Total Mercury	UG/L	1.8															ND	ND	ND
Dissolved Mercury	UG/L																ND	ND	ND
Total Nickel	UG/L	75															ND	ND	ND
Dissolved Nickel	UG/L																ND	ND	ND
Total Selenium	UG/L	300															ND	ND	ND
Dissolved Selenium	UG/L																ND	ND	ND
Total Silver	UG/L	1.9															ND	ND	ND
Dissolved Silver	UG/L																ND	ND	ND
Total Thallium	UG/L																ND	ND	ND
Dissolved Thallium	UG/L																ND	ND	ND
Total Zinc	UG/L	90															ND	ND	ND
Dissolved Zinc	UG/L																ND	ND	ND

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

pillway #3

PIERP SPILLWAY 3, MAY 2001

Month	May	State Water	May	May	May	May	May	May	May	May	May	May	May	May	May	May	May	May
Day		Duality Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		at any time / monthly avg.	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

Spillway #3

PIERP SPILLWAY 3, MAY 2001

Month	May		May	May	May	May	May	May	May	May	May	May	May	May	May	Spillway #3	Spillway #3	Spillway #3
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3	Sp. 3			
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																		
Sample Time	mil																NA	NA	NA
Turbidity	NTU	150 / 50															ND	ND	ND
pH	units	6.5 - 8.5															ND	ND	ND
Dissolved Oxygen	MG/L																ND	ND	ND
Dissolved Oxygen	% sat																NR	NR	NR
Salinity	ppt																NR	NR	NR
Conductivity	umhos																NR	NR	NR
Temperature	C																NR	NR	NR
Depth	ft.																ND	ND	ND
Flow	MGD																ND	ND	ND
Total Suspended Solids	MG/L	800 / 400															ND	ND	ND
Nitrite	MG/L																ND	ND	ND
Ammonium	MG/L																ND	ND	ND
Total Dissolved P	MG/L																ND	ND	ND
Total Dissolved N	MG/L																ND	ND	ND
Phosphate	MG/L																ND	ND	ND
Nitrate/Nitrite	MG/L																ND	ND	ND
Nitrate	MG/L																ND	ND	ND
Dissolved Organic N	MG/L																ND	ND	ND
Dissolved Organic P	MG/L																ND	ND	ND
Total Antimony	UG/L																ND	ND	ND
Dissolved Antimony	UG/L																ND	ND	ND
Total Arsenic	UG/L																ND	ND	ND
Dissolved Arsenic	UG/L																ND	ND	ND
Total Beryllium	UG/L																ND	ND	ND
Dissolved Beryllium	UG/L																ND	ND	ND
Total Cadmium	UG/L	43															ND	ND	ND
Dissolved Cadmium	UG/L																ND	ND	ND
Total Chromium	UG/L																ND	ND	ND
Dissolved Chromium	UG/L																ND	ND	ND
Total Copper	UG/L	6.1															ND	ND	ND
Dissolved Copper	UG/L																ND	ND	ND
Total Lead	UG/L	210															ND	ND	ND
Dissolved Lead	UG/L																ND	ND	ND
Total Mercury	UG/L	1.8															ND	ND	ND
Dissolved Mercury	UG/L																ND	ND	ND
Total Nickel	UG/L	75															ND	ND	ND
Dissolved Nickel	UG/L																ND	ND	ND
Total Selenium	UG/L	300															ND	ND	ND
Dissolved Selenium	UG/L																ND	ND	ND
Total Silver	UG/L	1.9															ND	ND	ND
Dissolved Silver	UG/L																ND	ND	ND
Total Thallium	UG/L																ND	ND	ND
Dissolved Thallium	UG/L																ND	ND	ND
Total Zinc	UG/L	90															ND	ND	ND
Dissolved Zinc	UG/L																ND	ND	ND

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

Spillway #4

PIERP SPILLWAY 4, MAY 2001

Month	May	State Water	May	May	May	May	May	May	May	May	May	May	May	May	May	May	May	May
Day		Quality Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		at any time / monthly avg.	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

Spillway #4

PIERP SPILLWAY 4, MAY 2001

Month	May		May	May	May	May	May	May	May	May	May	May	May	May	May	Spillway #4	Spillway #4	Spillway #4
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4			
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																		
Sample Time	mil																NA	NA	NA
Turbidity	NTU	150 / 50															ND	ND	ND
pH	units	6.5 - 8.5															ND	ND	ND
Dissolved Oxygen	MG/L																ND	ND	ND
Dissolved Oxygen	% sat																NR	NR	NR
Salinity	ppt																NR	NR	NR
Conductivity	umhos																NR	NR	NR
Temperature	C																NR	NR	NR
Depth	ft.																ND	ND	ND
Flow	MGD																ND	ND	ND
Total Suspended Solids	MG/L	800 / 400															ND	ND	ND
Nitrite	MG/L																ND	ND	ND
Ammonium	MG/L																ND	ND	ND
Total Dissolved P	MG/L																ND	ND	ND
Total Dissolved N	MG/L																ND	ND	ND
Phosphate	MG/L																ND	ND	ND
Nitrate/Nitnte	MG/L																ND	ND	ND
Nitrate	MG/L																ND	ND	ND
Dissolved Organic N	MG/L																ND	ND	ND
Dissolved Organic P	MG/L																ND	ND	ND
Total Anitimony	UG/L																ND	ND	ND
Dissolved Antimony	UG/L																ND	ND	ND
Total Arsenic	UG/L																ND	ND	ND
Dissolved Arsenic	UG/L																ND	ND	ND
Total Beryllium	UG/L																ND	ND	ND
Dissolved Beryllium	UG/L																ND	ND	ND
Total Cadmium	UG/L	43															ND	ND	ND
Dissolved Cadmium	UG/L																ND	ND	ND
Total Chromium	UG/L																ND	ND	ND
Dissolved Chromium	UG/L																ND	ND	ND
Total Copper	UG/L	6.1															ND	ND	ND
Dissolved Copper	UG/L																ND	ND	ND
Total Lead	UG/L	210															ND	ND	ND
Dissolved Lead	UG/L																ND	ND	ND
Total Mercury	UG/L	1.8															ND	ND	ND
Dissolved Mercury	UG/L																ND	ND	ND
Total Nickel	UG/L	75															ND	ND	ND
Dissolved Nickel	UG/L																ND	ND	ND
Total Selenium	UG/L	300															ND	ND	ND
Dissolved Selenium	UG/L																ND	ND	ND
Total Silver	UG/L	1.9															ND	ND	ND
Dissolved Silver	UG/L																ND	ND	ND
Total Thallium	UG/L																ND	ND	ND
Dissolved Thallium	UG/L																ND	ND	ND
Total Zinc	UG/L	90															ND	ND	ND
Dissolved Zinc	UG/L																ND	ND	ND

ND: No discharge < Less than the method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

Spillway #5

PIERP SPILLWAY 5, MAY 2001

Month	May		May	May	May	May	May	May	May	May	May	May	May	May	May	May	May	May
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	5p. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	5p. 5
Frequency		at any time / monthly avg.	w	d	d	d	d	d	d	w	d	d	d	d	d	d	d	d	d
Sample #			P1027	P1032	P1034	P1035	P1037	P1039	ND	P1040	P1045	P1047	P1049	P1051	P1053	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil		0845	1215	1150	0900	1535	0840		1330	1150	1325	1405	1615	1350				
Turbidity	NTU	150 / 50	45	31	66	49	52	46		31	24	24	34	58	60				
pH	units	6.5 - 8.5	8.26	8.73	9.04	9.09	9.27	9.08		9.15	9.04	9.39	9.84	9.90	9.73				
Dissolved Oxygen	MG/L		11.80	17.70 >	20.00 >	20.00	15.35	2.35		13.03	18.31 >	20.00 >	20.00 >	20.00 >	20.00				
Dissolved Oxygen	% sat		NR	NR	NR	NR	NR	NR		NR	NR	NR	NR	NR	NR				
Salinity	ppt		NR	NR	NR	NR	NR	NR		NR	NR	NR	NR	NR	NR				
Conductivity	umhos		NR	NR	NR	NR	NR	NR		NR	NR	NR	NR	NR	NR				
Temperature	C		NR	NR	NR	NR	NR	NR		NR	NR	NR	NR	NR	NR				
Depth	ft.		1	1	1	1	1	1		1	1	1	1	1	1				
Flow	MGD		4.60	2.30	0.68	2.30	1.15	2.30		0.78	0.23	0.89	0.12	0.35	0.92				
Total Suspended Solids	MG/L	800 / 400	64	59	149	145	171	122		50	71	70	140	190	128				
Nitrite	MG/L		0.0313							0.0508									
Ammonium	MG/L		26.900							4.140									
Total Dissolved P	MG/L		0.9650							0.7846									
Total Dissolved N	MG/L		22.93							7.89									
Phosphate	MG/L		0.7990							0.6150									
Nitrate/Nitrite	MG/L		0.187							0.174									
Nitrate	MG/L		0.156							0.123									
Dissolved Organic N	MG/L		0.03							3.58									
Dissolved Organic P	MG/L		0.1660							0.1696									
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

pillway #5

PIERP SPILLWAY 5, MAY 2001

Month	May	May	May	May	May	May	May	May	May	May	May	May	May	May	Spillway #5	Spillway #5	Spillway #5
Day		18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5			
Frequency		d	d	d	d	w	d	d	d	d	d	d	d	d	m			
Sample #		ND	ND	ND	ND	P1055	ND	ND	P1061	P1062	P1065	P1067	P1069	P1071	P1075			
Parameter	Units																	
Sample Time	mil					1130			1245	1330	1145	1300	1345	1355	1025	NA	NA	NA
Turbidity	NTU					61			37	60	33	45	33	138	43	24	138	49
pH	units					8.99			8.91	8.85	8.80	8.76	8.62	8.62	8.81	8.26	9.90	9.04
Dissolved Oxygen	MG/L					12.85			9.01	3.43	6.35	7.32	7.26	6.93	9.45	2.35	20.00	13.06
Dissolved Oxygen	% sat					NR			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Salinity	ppt					NR			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Conductivity	umhos					NR			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Temperature	C					NR			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Depth	ft.					1			1	1	1	1	1	1	1	1	1	1
Flow	MGD					1.76			0.77	1.04	2.47	1.56	1.93	0.94	2.79	0.12	4.60	1.49
Total Suspended Solids	MG/L					160			69	79	37	44	34	221	44	34	221	102
Nitrite	MG/L					0.0329									0.0399	0.0313	0.0508	0.0387
Ammonium	MG/L					5.460									4.820	4.140	26.900	10.330
Total Dissolved P	MG/L					0.2714									1.0444	0.2714	1.0444	0.7664
Total Dissolved N	MG/L					9.45									8.78	7.89	22.93	12.26
Phosphate	MG/L					0.1390									0.9810	0.1390	0.9810	0.6335
Nitrate/Nitrite	MG/L					0.193									0.207	0.174	0.207	0.190
Nitrate	MG/L					0.160									0.167	0.123	0.167	0.152
Dissolved Organic N	MG/L					3.80									3.75	0.03	3.80	2.79
Dissolved Organic P	MG/L					0.1324									0.0634	0.0634	0.1696	0.1329
Total Antimony	UG/L														< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L														< 2.0	< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L														30.0	30.0	30.0	30.0
Dissolved Arsenic	UG/L														27.0	27.0	27.0	27.0
Total Beryllium	UG/L														5.0	5.0	5.0	5.0
Dissolved Beryllium	UG/L														6.0	6.0	6.0	6.0
Total Cadmium	UG/L														< 0.5	< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L														< 0.5	< 0.5	< 0.5	< 0.5
Total Chromium	UG/L														4.0	4.0	4.0	4.0
Dissolved Chromium	UG/L														< 2.0	< 2.0	< 2.0	< 2.0
Total Copper	UG/L														15.0	15.0	15.0	15.0
Dissolved Copper	UG/L														5.0	5.0	5.0	5.0
Total Lead	UG/L														3.0	3.0	3.0	3.0
Dissolved Lead	UG/L														< 2.0	< 2.0	< 2.0	< 2.0
Total Mercury	UG/L														< 0.2	< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L														< 0.2	< 0.2	< 0.2	< 0.2
Total Nickel	UG/L														8.0	8.0	8.0	8.0
Dissolved Nickel	UG/L														5.0	5.0	5.0	5.0
Total Selenium	UG/L														9.0	9.0	9.0	9.0
Dissolved Selenium	UG/L														8.0	8.0	8.0	8.0
Total Silver	UG/L														< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L														< 1.0	< 1.0	< 1.0	< 1.0
Total Thallium	UG/L														< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L														< 2.0	< 2.0	< 2.0	< 2.0
Total Zinc	UG/L														5.0	5.0	5.0	5.0
Dissolved Zinc	UG/L														< 3.0	< 3.0	< 3.0	< 3.0

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

Spillway # 6

PIERP SPILLWAY 6, MAY 2001

Month	May		May	May	May	May	May	May	May	May	May	May	May	May	May	May	May	May	May
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Duality Standards	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6
Frequency		at any time / monthly avg.	w	d	d	d	d	d	d	w	d	d	d	d	d	d	d	d	d
Sample #			P1029	P1033	**	P1036	P1038	ND	ND	P1042	P1046	P1048	P1050	P1052	P1054	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil		0830	1225	**	0910	0915			1315	1140	1310	1345	1600	1330				
Turbidity	NTU	150 / 50	46	58	**	46	48			52	25	26	40	37	61				
pH	units	6.5 - 8.5	8.21	8.86	**	9.13	9.32			9.16	9.13	9.53	9.66	9.94	9.92				
Dissolved Oxygen	MG/L		11.10 >	20.00	**	18.56	16.14			14.31	13.71 >	20.00 >	20.00 >	20.00 >	20.00				
Dissolved Oxygen	% sat		NR	NR	NR	NR	NR			NR	NR	NR	NR	NR	NR				
Salinity	ppt		NR	NR	NR	NR	NR			NR	NR	NR	NR	NR	NR				
Conductivity	umhos		NR	NR	NR	NR	NR			NR	NR	NR	NR	NR	NR				
Temperature	C		NR	NR	NR	NR	NR			NR	NR	NR	NR	NR	NR				
Depth	ft.		1	1	**	1	1			1	1	1	1	1	1				
Flow	MGD		4.60	2.30	0.48	2.30	1.15			0.34	0.23	0.49	0.12	0.35	0.92				
Total Suspended Solids	MG/L	800 / 400	64	104	**	140	156			97	58	125	143	99	130				
Nitrite	MG/L		0.0319							0.0482									
Ammonium	MG/L		26.400							3.310									
Total Dissolved P	MG/L		0.9187							0.7797									
Total Dissolved N	MG/L		23.20							7.38									
Phosphate	MG/L		0.9110							0.5930									
Nitrate/Nitrite	MG/L		0.185							0.175									
Nitrate	MG/L		0.153							0.127									
Dissolved Organic N	MG/L		< 0.03							3.90									
Dissolved Organic P	MG/L		0.0077							0.1867									
Total Anitimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required
**Inadvertently no sample was collected on 05/03/01 at Spillway 6

Spillway # 6

PIERP SPILLWAY 6, MAY 2001

Month	May		May	May	May	May	May	May	May	May	May	May	May	May	May	Spillway # 6	Spillway # 6	Spillway # 6
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6			
Frequency		at any time / monthly avg.	d	d	d	d	w	d	d	d	d	d	d	d	d	m			
Sample #			ND	ND	ND	ND	P1056	ND	ND	P1060	P1063	P1066	P1068	P1070	P1072	P1076			
Parameter	Units																		
Sample Time	mil						1120			1230	1345	1155	1315	1355	1340	1000	NA	NA	NA
Turbidity	NTU	150 / 50					61			39	40	26	19	37	33	44	19	61	41
pH	units	6.5 - 8.5					9.35			8.90	8.89	8.80	8.72	8.62	8.62	8.73	8.21	9.94	9.08
Dissolved Oxygen	MG/L						> 20.00			8.55	3.65	5.91	6.33	7.02	11.21	8.33	3.65	20.00	13.60
Dissolved Oxygen	% sat						NR			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Salinity	ppt						NR			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Conductivity	umhos						NR			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Temperature	C						NR			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Depth	ft						1			1	1	1	1	1	1	1	1	1	1
Flow	MGD						1.76			0.77	1.04	2.47	1.56	1.93	0.94	2.79	0.12	4.60	1.40
Total Suspended Solids	MG/L	800 / 400					212			69	45	30	21	51	31	39	21	212	90
Nitrite	MG/L						0.0356									0.0463	0.0319	0.0482	0.0405
Ammonium	MG/L						3.810									4.960	3.310	26.400	9.620
Total Dissolved P	MG/L						0.2186									1.1954	0.2186	1.1954	0.7781
Total Dissolved N	MG/L						6.89									7.33	6.89	23.20	11.20
Phosphate	MG/L						0.0928									1.0000	0.0928	1.0000	0.6492
Nitrate/Nitrite	MG/L						0.171									0.249	0.171	0.249	0.195
Nitrate	MG/L						0.135									0.203	0.127	0.203	0.155
Dissolved Organic N	MG/L						2.91									2.12	0.03	3.90	2.24
Dissolved Organic P	MG/L						0.1258									0.1954	0.0077	0.1954	0.1289
Total Antimony	UG/L															< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L															< 2.0	< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L															30.0	30.0	30.0	30.0
Dissolved Arsenic	UG/L															27.0	27.0	27.0	27.0
Total Beryllium	UG/L															5.0	5.0	5.0	5.0
Dissolved Beryllium	UG/L															6.0	6.0	6.0	6.0
Total Cadmium	UG/L	43														< 0.5	< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L															< 0.5	< 0.5	< 0.5	< 0.5
Total Chromium	UG/L															3.0	3.0	3.0	3.0
Dissolved Chromium	UG/L															2.0	2.0	2.0	2.0
Total Copper	UG/L	6.1														7.0	7.0	7.0	7.0
Dissolved Copper	UG/L															< 3.0	< 3.0	< 3.0	< 3.0
Total Lead	UG/L	210														3.0	3.0	3.0	3.0
Dissolved Lead	UG/L															< 2.0	< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8														< 0.2	< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L															< 0.2	< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75														8.0	8.0	8.0	8.0
Dissolved Nickel	UG/L															5.0	5.0	5.0	5.0
Total Selenium	UG/L	300														9.0	9.0	9.0	9.0
Dissolved Selenium	UG/L															8.0	8.0	8.0	8.0
Total Silver	UG/L	1.9														< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L															< 1.0	< 1.0	< 1.0	< 1.0
Total Thallium	UG/L															< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L															< 2.0	< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90														< 3.0	< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L															5.0	5.0	5.0	5.0

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

**Inadvertently no sample was collected on 05/03/01 at Spillway 6

00 Yard #1

PIERP 100 YD-1, MAY 2001

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	May 1 100yd-1 d NA	May 2 100yd-1 d NA	May 3 100yd-1 d NA	May 4 100yd-1 d NA	May 5 100yd-1 d NA	May 6 100yd-1 d NA	May 7 100yd-1 d NA	May 8 100yd-1 d NA	May 9 100yd-1 d NA	May 10 100yd-1 d NA	May 11 100yd-1 d NA	May 12 100yd-1 d NA	May 13 100yd-1 d NA	May 14 100yd-1 d NA	May 15 100yd-1 d NA	May 16 100yd-1 d NA	May 17 100yd-1 d NA
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

100 Yard #1

PIERP 100 YD-1, MAY 2001

Month	May	State Water	May	May	May	May	May	May	May	May	May	May	May	May	May	100 Yard #1	100 Yard #1	100 Yard #1
Day		Quality Standards	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		at any time / monthly avg.	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1			
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Parameter	Units																		
Sample Time	mil																NA	NA	NA
Turbidity	NTU	150 / 50															NA	NA	NA
pH	units	6.5 - 8.5															NA	NA	NA
Dissolved Oxygen	MG/L																NA	NA	NA
Dissolved Oxygen	% sat																NR	NR	NR
Salinity	ppt																NR	NR	NR
Conductivity	umhos																NR	NR	NR
Temperature	C																NR	NR	NR
Depth	ft.																NA	NA	NA
Flow	MGD																NA	NA	NA
Total Suspended Solids	MG/L	800 / 400															NA	NA	NA
Nitrite	MG/L																NA	NA	NA
Ammonium	MG/L																NA	NA	NA
Total Dissolved P	MG/L																NA	NA	NA
Total Dissolved N	MG/L																NA	NA	NA
Phosphate	MG/L																NA	NA	NA
Nitrate/Nitrite	MG/L																NA	NA	NA
Nitrate	MG/L																NA	NA	NA
Dissolved Organic N	MG/L																NA	NA	NA
Dissolved Organic P	MG/L																NA	NA	NA
Total Antimony	UG/L																NA	NA	NA
Dissolved Antimony	UG/L																NA	NA	NA
Total Arsenic	UG/L																NA	NA	NA
Dissolved Arsenic	UG/L																NA	NA	NA
Total Beryllium	UG/L																NA	NA	NA
Dissolved Beryllium	UG/L																NA	NA	NA
Total Cadmium	UG/L	43															NA	NA	NA
Dissolved Cadmium	UG/L																NA	NA	NA
Total Chromium	UG/L																NA	NA	NA
Dissolved Chromium	UG/L																NA	NA	NA
Total Copper	UG/L	6.1															NA	NA	NA
Dissolved Copper	UG/L																NA	NA	NA
Total Lead	UG/L	210															NA	NA	NA
Dissolved Lead	UG/L																NA	NA	NA
Total Mercury	UG/L	1.8															NA	NA	NA
Dissolved Mercury	UG/L																NA	NA	NA
Total Nickel	UG/L	75															NA	NA	NA
Dissolved Nickel	UG/L																NA	NA	NA
Total Selenium	UG/L	300															NA	NA	NA
Dissolved Selenium	UG/L																NA	NA	NA
Total Silver	UG/L	1.9															NA	NA	NA
Dissolved Silver	UG/L																NA	NA	NA
Total Thallium	UG/L																NA	NA	NA
Dissolved Thallium	UG/L																NA	NA	NA
Total Zinc	UG/L	90															NA	NA	NA
Dissolved Zinc	UG/L																NA	NA	NA

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

00 Yard #2

PIERP 100 YD-2, MAY 2001

Month	May	State Water Quality Standards at any time / monthly avg.	May	May	May	May	May	May	May	May	May	May	May	May	May	May	May
Day			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location			100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

00 Yard #2

PIERP 100 YD-2, MAY 2001

Month	May		May	May	May	May	May	May	May	May	May	May	May	May	May	100 Yard #2	100 Yard #2	100 Yard #2
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2			
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Parameter	Units																		
Sample Time	mil																NA	NA	NA
Turbidity	NTU	150 / 50															NA	NA	NA
oH	units	6.5 - 8.5															NA	NA	NA
Dissolved Oxygen	MG/L																NA	NA	NA
Dissolved Oxygen	% sat																NR	NR	NR
Salinity	ppt																NR	NR	NR
Conductivity	umhos																NR	NR	NR
Temperature	C																NR	NR	NR
Depth	ft.																NA	NA	NA
Flow	MGD																NA	NA	NA
Total Suspended Solids	MG/L	800 / 400															NA	NA	NA
Nitrite	MG/L																NA	NA	NA
Ammonium	MG/L																NA	NA	NA
Total Dissolved P	MG/L																NA	NA	NA
Total Dissolved N	MG/L																NA	NA	NA
Phosphate	MG/L																NA	NA	NA
Nitrate/Nitrite	MG/L																NA	NA	NA
Nitrate	MG/L																NA	NA	NA
Dissolved Organic N	MG/L																NA	NA	NA
Dissolved Organic P	MG/L																NA	NA	NA
Total Anitimony	UG/L																NA	NA	NA
Dissolved Antimony	UG/L																NA	NA	NA
Total Arsenic	UG/L																NA	NA	NA
Dissolved Arsenic	UG/L																NA	NA	NA
Total Beryllium	UG/L																NA	NA	NA
Dissolved Beryllium	UG/L																NA	NA	NA
Total Cadmium	UG/L	43															NA	NA	NA
Dissolved Cadmium	UG/L																NA	NA	NA
Total Chromium	UG/L																NA	NA	NA
Dissolved Chromium	UG/L																NA	NA	NA
Total Copper	UG/L	6.1															NA	NA	NA
Dissolved Copper	UG/L																NA	NA	NA
Total Lead	UG/L	210															NA	NA	NA
Dissolved Lead	UG/L																NA	NA	NA
Total Mercury	UG/L	1.8															NA	NA	NA
Dissolved Mercury	UG/L																NA	NA	NA
Total Nickel	UG/L	75															NA	NA	NA
Dissolved Nickel	UG/L																NA	NA	NA
Total Selenium	UG/L	300															NA	NA	NA
Dissolved Selenium	UG/L																NA	NA	NA
Total Silver	UG/L	1.9															NA	NA	NA
Dissolved Silver	UG/L																NA	NA	NA
Total Thallium	UG/L																NA	NA	NA
Dissolved Thallium	UG/L																NA	NA	NA
Total Zinc	UG/L	90															NA	NA	NA
Dissolved Zinc	UG/L																NA	NA	NA

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

100 Yard #4

PIERP 100 YD-4, MAY 2001

Month	May	State Water	May	May	May	May	May	May	May	May	May	May	May	May	May	May	May	May
Day		Quality Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		at any time / monthly avg.	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge < Less than method detection limit AD: Awaiting data > Greater than value noted NA: Not applicable NR: Not required

100 Yard #4

PIERP 100 YD-4, MAY 2001

Month	May	State Water Quality Standards at any time / monthly avg.	May	May	May	May	May	May	May	May	May	May	May	May	May	100 Yard #4 Minimum	100 Yard #4 Maximum	100 Yard #4 Average
Day			18	19	20	21	22	23	24	25	26	27	28	29	30			
Location			100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4			
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Parameter	Units																	
Sample Time	mil															NA	NA	NA
Turbidity	NTU	150 / 50														NA	NA	NA
pH	units	6.5 - 8.5														NA	NA	NA
Dissolved Oxygen	MG/L															NR	NR	NR
Dissolved Oxygen	% sat															NR	NR	NR
Salinity	ppt															NR	NR	NR
Conductivity	umhos															NR	NR	NR
Temperature	C															NA	NA	NA
Depth	ft.															NA	NA	NA
Flow	MGD															NA	NA	NA
Total Suspended Solids	MG/L	800 / 400														NA	NA	NA
Nitrite	MG/L															NA	NA	NA
Ammonium	MG/L															NA	NA	NA
Total Dissolved P	MG/L															NA	NA	NA
Total Dissolved N	MG/L															NA	NA	NA
Phosphate	MG/L															NA	NA	NA
Nitrate/Nitrite	MG/L															NA	NA	NA
Nitrate	MG/L															NA	NA	NA
Dissolved Organic N	MG/L															NA	NA	NA
Dissolved Organic P	MG/L															NA	NA	NA
Total Anitimony	UG/L															NA	NA	NA
Dissolved Antimony	UG/L															NA	NA	NA
Total Arsenic	UG/L															NA	NA	NA
Dissolved Arsenic	UG/L															NA	NA	NA
Total Beryllium	UG/L															NA	NA	NA
Dissolved Beryllium	UG/L															NA	NA	NA
Total Cadmium	UG/L	43														NA	NA	NA
Dissolved Cadmium	UG/L															NA	NA	NA
Total Chromium	UG/L															NA	NA	NA
Dissolved Chromium	UG/L															NA	NA	NA
Total Copper	UG/L	6.1														NA	NA	NA
Dissolved Copper	UG/L															NA	NA	NA
Total Lead	UG/L	210														NA	NA	NA
Dissolved Lead	UG/L															NA	NA	NA
Total Mercury	UG/L	1.8														NA	NA	NA
Dissolved Mercury	UG/L															NA	NA	NA
Total Nickel	UG/L	75														NA	NA	NA
Dissolved Nickel	UG/L															NA	NA	NA
Total Selenium	UG/L	300														NA	NA	NA
Dissolved Selenium	UG/L															NA	NA	NA
Total Silver	UG/L	1.9														NA	NA	NA
Dissolved Silver	UG/L															NA	NA	NA
Total Thallium	UG/L															NA	NA	NA
Dissolved Thallium	UG/L															NA	NA	NA
Total Zinc	UG/L	90														NA	NA	NA
Dissolved Zinc	UG/L															NA	NA	NA

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

100 Yard #5

PIERP 100YD- 5, MAY 2001

Month	May	State Water	May	May	May	May	May	May	May	May	May	May	May	May	May	May	May	May
Day		Quality Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		at any time / monthly avg.	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5
Frequency			w	d	d	d	d	d	d	w	d	d	d	d	d	d	d	d	d
Sample #			P1028	NA	NA	NA	NA	NA	NA	P1041	NA	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																		
Sample Time	mil		1100							1400									
Turbidity	NTU	150 / 50	7							5									
pH	units	6.5 - 8.5	8.22							8.62									
Dissolved Oxygen	MG/L		10.38							11.00									
Dissolved Oxygen	% sat		NR							NR									
Salinity	ppt		NR							NR									
Conductivity	umhos		NR							NR									
Temperature	C		NR							NR									
Depth	ft.		2							2									
Flow	MGD		NA							NA									
Total Suspended Solids	MG/L	800 / 400	19							15									
Nitrite	MG/L		0.0136							0.0089									
Ammonium	MG/L		1.000							0.030									
Total Dissolved P	MG/L		0.0438							0.0093									
Total Dissolved N	MG/L		2.44							0.64									
Phosphate	MG/L		0.0281							0.0033									
Nitrate/Nitrite	MG/L		0.489							0.312									
Nitrate	MG/L		0.475							0.303									
Dissolved Organic N	MG/L		0.95							0.30									
Dissolved Organic P	MG/L		0.0157							0.0060									
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

100 Yard #5

PIERP 100YD- 5, MAY 2001

Month	May		May	May	May	May	May	May	May	May	May	May	May	May	May	100 Yard #5	100 Yard #5	100 Yard #5
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5			
Frequency		at any time / monthly avg.	d	d	d	d	w	d	d	d	d	d	d	d	d	m			
Sample #			NA	NA	NA	NA	P1057	NA	NA	NA	NA	NA	NA	NA	NA	P1077			
Parameter	Units																		
Sample Time	mil						1340									1140	NA	NA	NA
Turbidity	NTU	150 / 50					6									4	4	7	6
pH	units	6.5 - 8.5					8.24									8.15	8.15	8.62	8.31
Dissolved Oxygen	MG/L						8.06									7.71	7.71	11.00	9.29
Dissolved Oxygen	% sat						NR									NR	NR	NR	NR
Salinity	ppt						NR									NR	NR	NR	NR
Conductivity	umhos						NR									NR	NR	NR	NR
Temperature	C						NR									NR	NR	NR	NR
Depth	ft.						2									2	2	2	2
Flow	MGD						NA									NA	NA	NA	NA
Total Suspended Solids	MG/L	800 / 400					17									12	12	19	16
Nitrite	MG/L						0.0082									0.0080	0.0080	0.0136	0.0097
Ammonium	MG/L						0.285									0.186	0.030	1.000	0.375
Total Dissolved P	MG/L						0.0275									0.0361	0.0093	0.0438	0.0292
Total Dissolved N	MG/L						0.87									0.74	0.64	2.44	1.17
Phosphate	MG/L						0.0132									0.0233	0.0033	0.0281	0.0170
Nitrate/Nitrite	MG/L						0.229									0.188	0.188	0.489	0.305
Nitrate	MG/L						0.221									0.180	0.180	0.475	0.295
Dissolved Organic N	MG/L						0.36									0.37	0.30	0.95	0.50
Dissolved Organic P	MG/L						0.0143									0.0128	0.0060	0.0157	0.0122
Total Anitimony	UG/L															< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L															< 2.0	< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L															14.0	14.0	14.0	14.0
Dissolved Arsenic	UG/L															12.0	12.0	12.0	12.0
Total Beryllium	UG/L															5.0	5.0	5.0	5.0
Dissolved Beryllium	UG/L															6.0	6.0	6.0	6.0
Total Cadmium	UG/L	43														< 0.5	< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L															< 0.5	< 0.5	< 0.5	< 0.5
Total Chromium	UG/L															< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Chromium	UG/L															< 2.0	< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1														< 3.0	< 3.0	< 3.0	< 3.0
Dissolved Copper	UG/L															5.0	5.0	5.0	5.0
Total Lead	UG/L	210														< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L															< 2.0	< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8														< 0.2	< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L															< 0.2	< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75														3.0	3.0	3.0	3.0
Dissolved Nickel	UG/L															< 2.0	< 2.0	< 2.0	< 2.0
Total Selenium	UG/L	300														7.0	7.0	7.0	7.0
Dissolved Selenium	UG/L															8.0	8.0	8.0	8.0
Total Silver	UG/L	1.9														< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L															< 1.0	< 1.0	< 1.0	< 1.0
Total Thallium	UG/L															< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L															< 2.0	< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90														< 3.0	< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L															< 3.0	< 3.0	< 3.0	< 3.0

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

100 Yard #6

PIERP 100 YD-6, MAY 2001

Month	May	State Water	May	May	May	May	May	May	May	May	May	May	May	May	May	May	May	May
Day		Quality Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		at any time / monthly avg.	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6
Frequency			w	d	d	d	d	d	d	w	d	d	d	d	d	d	d	d	d
Sample #			P1030	ND	ND	ND	ND	ND	ND	P1043	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil		1115							1420									
Turbidity	NTU	150 / 50	4							4									
pH	units	6.5 - 8.5	8.14							8.56									
Dissolved Oxygen	MG/L		10.16							9.17									
Dissolved Oxygen	% sat		NR							NR									
Salinity	ppt		NR							NR									
Conductivity	umhos		NR							NR									
Temperature	C		NR							NR									
Depth	ft.		2							2									
Flow	MGD		NA							NA									
Total Suspended Solids	MG/L	800 / 400	13							13									
Nitrite	MG/L		0.0108							0.0086									
Ammonium	MG/L		0.079							0.035									
Total Dissolved P	MG/L		0.0117							0.0086									
Total Dissolved N	MG/L		0.86							0.60									
Phosphate	MG/L		0.0035							0.0025									
Nitrate/Nitrite	MG/L		0.493							0.312									
Nitrate	MG/L		0.482							0.303									
Dissolved Organic N	MG/L		0.29							0.25									
Dissolved Organic P	MG/L		0.0082							0.0061									
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No Discharge < Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

100 Yard #6

PIERP 100 YD-6, MAY 2001

Month	May	State Water	May	May	May	May	May	May	May	May	May	May	May	May	May	100 Yard #6	100 Yard #6	100 Yard #6
Day		Quality Standards	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location			100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6			
Frequency		at any time / monthly avg.	d	d	d	d	w	d	d	d	d	d	d	d	d	m			
Sample #			ND	ND	ND	ND	P1058	ND	ND	ND	ND	ND	ND	ND	ND	P1078			
Parameter	Units																		
Sample Time	mil						1355									1200	NA	NA	NA
Turbidity	NTU	150 / 50					4									4	4	4	4
pH	units	6.5 - 8.5					7.77									8.09	7.77	8.56	8.14
Dissolved Oxygen	MG/L						7.18									7.93	7.18	10.16	8.61
Dissolved Oxygen	% sat						NR									NR	NR	NR	NR
Salinity	ppt						NR									NR	NR	NR	NR
Conductivity	umhos						NR									NR	NR	NR	NR
Temperature	C						NR									NR	NR	NR	NR
Depth	ft.						2									2	2	2	2
Flow	MGD						NA									NA	NA	NA	NA
Total Suspended Solids	MG/L	800 / 400					9									36	9	36	18
Nitrite	MG/L						0.0061									0.0074	0.0061	0.0108	0.0082
Ammonium	MG/L						0.120									0.189	0.035	0.189	0.106
Total Dissolved P	MG/L						0.014									0.0284	0.0086	0.0284	0.0157
Total Dissolved N	MG/L						0.56									0.67	0.56	0.86	0.67
Phosphate	MG/L						0.0076									0.0183	0.0025	0.0183	0.0080
Nitrate/Nitrite	MG/L						0.203									0.186	0.186	0.493	0.299
Nitrate	MG/L						0.197									0.179	0.179	0.482	0.290
Dissolved Organic N	MG/L						0.24									0.30	0.24	0.30	0.27
Dissolved Organic P	MG/L						0.0064									0.0101	0.0061	0.0101	0.0077
Total Antimony	UG/L															< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L															< 2.0	< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L															13.0	13.0	13.0	13.0
Dissolved Arsenic	UG/L															13.0	13.0	13.0	13.0
Total Beryllium	UG/L															5.0	5.0	5.0	5.0
Dissolved Beryllium	UG/L															6.0	6.0	6.0	6.0
Total Cadmium	UG/L	43														< 0.5	< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L															< 0.5	< 0.5	< 0.5	< 0.5
Total Chromium	UG/L															< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Chromium	UG/L															< 2.0	< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1														7.0	7.0	7.0	7.0
Dissolved Copper	UG/L															< 3.0	< 3.0	< 3.0	< 3.0
Total Lead	UG/L	210														3.0	3.0	3.0	3.0
Dissolved Lead	UG/L															< 2.0	< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8														< 0.2	< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L															< 0.2	< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75														6.0	6.0	6.0	6.0
Dissolved Nickel	UG/L															< 2.0	< 2.0	< 2.0	< 2.0
Total Selenium	UG/L	300														6.0	6.0	6.0	6.0
Dissolved Selenium	UG/L															8.0	8.0	8.0	8.0
Total Silver	UG/L	1.9														< 1.0	< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L															< 1.0	< 1.0	< 1.0	< 1.0
Total Thallium	UG/L															< 2.0	< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L															< 2.0	< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90														< 3.0	< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L															< 3.0	< 3.0	< 3.0	< 3.0

ND: No Discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

eference Point WQR1

PIERP WQR1, JUNE 2001

Month	June	State Water Quality Standards at any time / monthly avg.	June	June	June	June	June	June	June	June	June	June	June	June	June	June	June	June
Day			1	2	3	4	5	6	7	8	9	10	11	12	13	14	16	16	17
Location			WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1
Frequency			d	d	d	d	d	d	d	m	d	d	d	d	d	w	d	d	d
Sample #			NA	NA	NA	NA	NA	NA	NA	P1096	NA	NA	NA	NA	NA	P1104	NA	NA	NA
Parameter	Units																		
ample Time	mil									1055						1225			
urbidity	NTU	150 / 50								42						6			
H	units	6.5 - 8.5								7.83						8.22			
issolved Oxygen	MG/L									6.44						8.96			
issolved Oxygen	% sat									NR						NR			
alinity	ppt									NR						NR			
onductivity	umhos									NR						NR			
emperature	C									NR						NR			
epth	ft									6						6			
low	MGD									NA						NA			
otal Suspended Solids	MG/L	800 / 400								10						15			
itrite	MG/L									0.0055						0.0022			
Ammonium	MG/L									0.188						0.020			
otal Dissolved P	MG/L									0.0165						0.0273			
otal Dissolved N	MG/L									0.68						0.87			
hosphate	MG/L									0.0050						0.0018			
itrate/Nitrite	MG/L									0.120						0.025			
itrate	MG/L									0.115						0.022			
issolved Organic N	MG/L									0.37						0.83			
issolved Organic P	MG/L									0.0115						0.0255			
Total Antimony	UG/L									< 2.0									
issolved Antimony	UG/L									< 2.0									
Total Arsenic	UG/L									15.0									
issolved Arsenic	UG/L									15.0									
otal Beryllium	UG/L									< 2.0									
issolved Beryllium	UG/L									< 2.0									
Total Cadmium	UG/L	43								< 0.5									
issolved Cadmium	UG/L									< 0.5									
Total Chromium	UG/L									< 2.0									
issolved Chromium	UG/L									< 2.0									
Total Copper	UG/L	6.1								13.0									
Dissolved Copper	UG/L									3.0									
Total Lead	UG/L	210								< 2.0									
issolved Lead	UG/L									< 2.0									
Total Mercury	UG/L	1.8								< 0.2									
issolved Mercury	UG/L									< 0.2									
Total Nickel	UG/L	75								5.0									
issolved Nickel	UG/L									< 2.0									
Total Selenium	UG/L	300								11.0									
issolved Selenium	UG/L									10.0									
Total Silver	UG/L	1.9								< 1.0									
issolved Silver	UG/L									< 1.0									
Total Thallium	UG/L									< 2.0									
issolved Thallium	UG/L									< 2.0									
Total Zinc	UG/L	90								< 3.0									
issolved Zinc	UG/L									< 3.0									

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

eference Point WQR1

PIERP WQR1, JUNE 2001

Month	June	State Water Quality Standards at any time / monthly avg.	June 18	June 19	June 20	June 21	June 22	June 23	June 24	June 25	June 26	June 27	June 28	June 29	June 30	Reference Point WQR1 Minimum	Reference Point WQR1 Maximum	Reference Point WQR1 Average
Day			WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1			
Location			w	d	d	w	d	d	d	w	d	d	d	d	d			
Frequency			P1114	NA	NA	NA	NA	NA	NA	P1133	NA	NA	NA	NA	NA			
Sample #																		
Parameter	Units																	
Sample Time	mil		1315							1450						NA	NA	NA
Turbidity	NTU	150 / 50	5							3						3	42	14
pH	units	6.5 - 8.5	7.70							8.00						7.70	8.22	7.94
Dissolved Oxygen	MG/L		7.31							7.74						6.44	8.96	7.61
Dissolved Oxygen	% sat		NR							NR						NR	NR	NR
Salinity	ppt		NR							NR						NR	NR	NR
Conductivity	umhos		NR							NR						NR	NR	NR
Temperature	C		NR							NR						NR	NR	NR
Depth	ft		6							6						6	6	6
Flow	MGD		NA							NA						NA	NA	NA
Total Suspended Solids	MG/L	800 / 400	7							13						7	15	11
Nitrite	MG/L		0.0024							0.0024						0.0022	0.0055	0.0031
Ammonium	MG/L		0.018							0.020						0.018	0.188	0.062
Total Dissolved P	MG/L		0.0218							0.0178						0.0165	0.0273	0.0209
Total Dissolved N	MG/L		0.68							0.57						0.57	0.87	0.70
Phosphate	MG/L		0.0012							0.0011						0.0011	0.0050	0.0023
Nitrate Nitrite	MG/L		0.029							0.019						0.019	0.120	0.048
Nitrate	MG/L		0.026							0.016						0.016	0.115	0.045
Dissolved Organic N	MG/L		0.63							0.53						0.37	0.83	0.59
Dissolved Organic P	MG/L		0.0206							0.0167						0.0115	0.0255	0.0186
Total Anitimony	UG/L															< 2.0	< 2.0	2.0
Dissolved Antimony	UG/L															< 2.0	< 2.0	2.0
Total Arsenic	UG/L															15.0	15.0	15.0
Dissolved Arsenic	UG/L															15.0	15.0	15.0
Total Beryllium	UG/L															< 2.0	< 2.0	2.0
Dissolved Beryllium	UG/L															< 2.0	< 2.0	2.0
Total Cadmium	UG/L	43														< 0.5	< 0.5	0.5
Dissolved Cadmium	UG/L															< 0.5	< 0.5	0.5
Total Chromium	UG/L															< 2.0	< 2.0	2.0
Dissolved Chromium	UG/L															< 2.0	< 2.0	2.0
Total Copper	UG/L	6.1														13.0	13.0	13.0
Dissolved Copper	UG/L															3.0	3.0	3.0
Total Lead	UG/L	210														< 2.0	< 2.0	2.0
Dissolved Lead	UG/L															< 2.0	< 2.0	2.0
Total Mercury	UG/L	1.8														< 0.2	< 0.2	0.2
Dissolved Mercury	UG/L															< 0.2	< 0.2	0.2
Total Nickel	UG/L	75														5.0	5.0	5.0
Dissolved Nickel	UG/L															< 2.0	< 2.0	2.0
Total Selenium	UG/L	300														11.0	11.0	11.0
Dissolved Selenium	UG/L															10.0	10.0	10.0
Total Silver	UG/L	1.9														< 1.0	< 1.0	1.0
Dissolved Silver	UG/L															< 1.0	< 1.0	1.0
Total Thallium	UG/L															< 2.0	< 2.0	2.0
Dissolved Thallium	UG/L															< 2.0	< 2.0	2.0
Total Zinc	UG/L	90														< 3.0	< 3.0	3.0
Dissolved Zinc	UG/L															< 3.0	< 3.0	3.0

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

Spillway #1

PIERP SPILLWAY 1, JUNE 2001

Month	June	State Water Quality Standards at any time / monthly avg.	June	June	June	June	June	June	June	June	June	June	June	June	June	June	June
Day			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Location			Sp. 1	Sp.1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1
Frequency			d	d	d	d	d	d	d	m	d	d	d	d	d	w	d	d
Sample #			ND	ND	ND	ND	P1083	P1086	P1089	P1094	P1097	P1098	P1099	P1100	P1101	P1102	P1105	P1106
Parameter	Units																	
Sample Time	mil						1215	1210	1140	0850	0830	0800	0800	0800	0740	1120	0745	0845
Turbidity	NTU	150 / 50					26	33	23	10	6	7	10	11	8	13	7	7
pH	units	6.5 - 8.5					8.52	8.40	8.34	8.42	8.41	8.60	8.53	8.56	8.65	8.55	8.56	8.59
Dissolved Oxygen	MG/L						7.51	5.83	5.72	7.44	7.76	8.68	8.95	7.25	12.30	11.89	8.69	7.64
Dissolved Oxygen	% sat						NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Salinity	ppt						NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Conductivity	umhos						NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Temperature	C						NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Depth	ft.						1	1	1	1	1	1	1	1	1	1	1	1
Flow	MGD						7.74	6.99	14.29	5.52	1.03	4.99	16.55	4.51	0.27	8.63	12.43	19.26
Total Suspended Solids	MG/L	800 / 400					29	43	29	14	10	18	28	18	20	24	10	12
Nitrite	MG/L									0.0180						0.0181		
Ammonium	MG/L									10.400						4.904		
Total Dissolved P	MG/L									0.2765						0.2938		
Total Dissolved N	MG/L									12.90						14.08		
Phosphate	MG/L									0.2340						0.0629		
Nitrate/Nitrite	MG/L									0.094						0.065		
Nitrate	MG/L									0.076						0.047		
Dissolved Organic N	MG/L									2.41						9.11		
Dissolved Organic P	MG/L									0.0425						0.2309		
Total Antimony	UG/L									< 2.0								
Dissolved Antimony	UG/L									< 2.0								
Total Arsenic	UG/L									24.0								
Dissolved Arsenic	UG/L									24.0								
Total Beryllium	UG/L									< 2.0								
Dissolved Beryllium	UG/L									< 2.0								
Total Cadmium	UG/L	43								< 0.5								
Dissolved Cadmium	UG/L									< 0.5								
Total Chromium	UG/L									< 2.0								
Dissolved Chromium	UG/L									< 2.0								
Total Copper	UG/L	6.1								29.0								
Dissolved Copper	UG/L									9.0								
Total Lead	UG/L	210								< 2.0								
Dissolved Lead	UG/L									< 2.0								
Total Mercury	UG/L	1.8								< 0.2								
Dissolved Mercury	UG/L									< 0.2								
Total Nickel	UG/L	75								8.0								
Dissolved Nickel	UG/L									5.0								
Total Selenium	UG/L	300								13.0								
Dissolved Selenium	UG/L									11.0								
Total Silver	UG/L	1.9								< 1.0								
Dissolved Silver	UG/L									< 1.0								
Total Thallium	UG/L									< 2.0								
Dissolved Thallium	UG/L									< 2.0								
Total Zinc	UG/L	90								6.0								
Dissolved Zinc	UG/L									< 3.0								

ND: No discharge < Less than method detection limit AD: Awaiting data > Greater than value noted NA: Not applicable NR: Not required

Spillway #1

PIERP SPILLWAY 1, JUNE 2001

Month: June Day Location Frequency Sample # Parameter	Units	State Water Quality Standards at any time / monthly avg.	June 17 Sp. 1 d P1107	June 18 Sp. 1 w P1108	June 19 Sp. 1 d P1117	June 20 Sp. 1 d P1118	June 21 Sp. 1 d P1121	June 22 Sp. 1 d P1124	June 23 Sp. 1 d ND	June 24 Sp. 1 d P1126	June 25 Sp. 1 w P1134	June 26 Sp. 1 d P1135	June 27 Sp. 1 d P1137	June 28 Sp. 1 d P1138	June 29 Sp. 1 d P1139	June 30 Sp. 1 d P1140	Spillway #1 Minimum	Spillway #1 Maximum	Spillway #1 Average
Sample Time	mil		0800	0810	0815	0750	0750	1230		1045	1330	0215	0515	1230	0750	0750	NA	NA	NA
Turbidity	NTU	150 / 50	20	9	9	17	10	23		15	10	12	28	11	32	119	6	119	19
pH	units	6.5 - 8.5	8.45	8.49	8.52	8.49	8.44	8.62		8.46	8.59	8.69	8.88	8.68	8.66	8.71	8.34	8.88	8.55
Dissolved Oxygen	MG/L		3.47	5.43	7.42	6.48	6.24	9.20		7.23	9.44	9.90	15.88	9.48	7.05	7.60	3.47	15.88	8.18
Dissolved Oxygen	% sat		NR	NR	NR	NR	NR	NR		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Salinity	ppt		NR	NR	NR	NR	NR	NR		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Conductivity	umhos		NR	NR	NR	NR	NR	NR		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Temperature	C		NR	NR	NR	NR	NR	NR		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Depth	ft.		1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1
Flow	MGD		16.79	6.44	1.73	8.77	4.48	1.24		3.73	3.84	6.05	5.26	20.18	7.30	1.60	0.27	20.18	7.58
Total Suspended Solids	MG/L	800 / 400	22	14	14	20	15	33		18	14	15	25	26	34	94	10	94	24
Nitrite	MG/L			0.0340							0.0489						0.0180	0.0489	0.0298
Ammonium	MG/L			5.494							3.985						3.985	10.400	6.196
Total Dissolved P	MG/L			0.2389							0.4505						0.2389	0.4505	0.3149
Total Dissolved N	MG/L			14.07							15.09						12.90	15.09	14.04
Phosphate	MG/L			0.0656							0.0942						0.0629	0.2340	0.1142
Nitrate/Nitrite	MG/L			0.097							0.101						0.065	0.101	0.089
Nitrate	MG/L			0.063							0.052						0.047	0.076	0.060
Dissolved Organic N	MG/L			8.48							11.00						2.41	11.00	7.75
Dissolved Organic P	MG/L			0.1733							0.3563						0.0425	0.3563	0.2008
Total Antimony	UG/L																< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L																< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L																24.0	24.0	24.0
Dissolved Arsenic	UG/L																24.0	24.0	24.0
Total Beryllium	UG/L																< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L																< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43															< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L																< 0.5	< 0.5	< 0.5
Total Chromium	UG/L																< 2.0	< 2.0	< 2.0
Dissolved Chromium	UG/L																< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1															29.0	29.0	29.0
Dissolved Copper	UG/L																9.0	9.0	9.0
Total Lead	UG/L	210															< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L																< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8															< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L																< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75															8.0	8.0	8.0
Dissolved Nickel	UG/L																5.0	5.0	5.0
Total Selenium	UG/L	300															13.0	13.0	13.0
Dissolved Selenium	UG/L																11.0	11.0	11.0
Total Silver	UG/L	1.9															< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L																< 1.0	< 1.0	< 1.0
Total Thallium	UG/L																< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L																< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90															6.0	6.0	6.0
Dissolved Zinc	UG/L																< 3.0	< 3.0	< 3.0

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

Spillway #2

PIERP SPILLWAY 2, JUNE 2001

Month	June	State Water Quality Standards at any time / monthly avg.	June	June	June	June	June	June	June	June	June	June	June	June	June	June	June
Day			1	2	3	4	S	6	7	8	9	10	11	12	13	14	1S	16
Location			Sp. 2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																	
Sample Time	mil																	
Turbidity	NTU	150 / 50																
pH	units	6.5 - 8.5																
Dissolved Oxygen	MG/L																	
Dissolved Oxygen	% sat																	
Salinity	ppt																	
Conductivity	umhos																	
Temperature	C																	
Depth	ft.																	
Flow	MGD																	
Total Suspended Solids	MG/L	800 / 400																
Nitrite	MG/L																	
Ammonium	MG/L																	
Total Dissolved P	MG/L																	
Total Dissolved N	MG/L																	
Phosphate	MG/L																	
Nitrate/Nitrite	MG/L																	
Nitrate	MG/L																	
Dissolved Organic N	MG/L																	
Dissolved Organic P	MG/L																	
Total Antimony	UG/L																	
Dissolved Antimony	UG/L																	
Total Arsenic	UG/L																	
Dissolved Arsenic	UG/L																	
Total Beryllium	UG/L																	
Dissolved Beryllium	UG/L																	
Total Cadmium	UG/L	43																
Dissolved Cadmium	UG/L																	
Total Chromium	UG/L																	
Dissolved Chromium	UG/L																	
Total Copper	UG/L	6.1																
Dissolved Copper	UG/L																	
Total Lead	UG/L	210																
Dissolved Lead	UG/L																	
Total Mercury	UG/L	1.8																
Dissolved Mercury	UG/L																	
Total Nickel	UG/L	75																
Dissolved Nickel	UG/L																	
Total Selenium	UG/L	300																
Dissolved Selenium	UG/L																	
Total Silver	UG/L	1.9																
Dissolved Silver	UG/L																	
Total Thallium	UG/L																	
Dissolved Thallium	UG/L																	
Total Zinc	UG/L	90																
Dissolved Zinc	UG/L																	

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #2

PIERP SPILLWAY 2, JUNE 2001

Month	June		June	June	June	June	June	June	June	June	June	June	June	June	June	Spillway #2	Spillway #2	Spillway #2
Day		State Water	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Minimum	Maximum	Average
Location		Quality Standards	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2			
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	o	d	d	d	d	d			
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																		
Sample Time	mil																NA	NA	NA
Turbidity	NTU	150 / 50															ND	ND	ND
pH	units	6.5 - 8.5															ND	ND	ND
Dissolved Oxygen	MG/L																ND	ND	ND
Dissolved Oxygen	% sat																NR	NR	NR
Salinity	ppt																NR	NR	NR
Conductivity	umhos																NR	NR	NR
Temperature	C																NR	NR	NR
Depth	ft																ND	ND	ND
Flow	MGD																ND	ND	ND
Total Suspended Solids	MG/L	800 / 400															ND	ND	ND
Nitrite	MG/L																ND	ND	ND
Ammonium	MG/L																ND	ND	ND
Total Dissolved P	MG/L																ND	ND	ND
Total Dissolved N	MG/L																ND	ND	ND
Phosphate	MG/L																ND	ND	ND
Nitrate/Nitrite	MG/L																ND	ND	ND
Nitrate	MG/L																ND	ND	ND
Dissolved Organic N	MG/L																ND	ND	ND
Dissolved Organic P	MG/L																ND	ND	ND
Total Antimony	UG/L																ND	ND	ND
Dissolved Antimony	UG/L																ND	ND	ND
Total Arsenic	UG/L																ND	ND	ND
Dissolved Arsenic	UG/L																ND	ND	ND
Total Beryllium	UG/L																ND	ND	ND
Dissolved Beryllium	UG/L																ND	ND	ND
Total Cadmium	UG/L	43															ND	ND	ND
Dissolved Cadmium	UG/L																ND	ND	ND
Total Chromium	UG/L																ND	ND	ND
Dissolved Chromium	UG/L																ND	ND	ND
Total Copper	UG/L	6.1															ND	ND	ND
Dissolved Copper	UG/L																ND	ND	ND
Total Lead	UG/L	210															ND	ND	ND
Dissolved Lead	UG/L																ND	ND	ND
Total Mercury	UG/L	1.8															ND	ND	ND
Dissolved Mercury	UG/L																ND	ND	ND
Total Nickel	UG/L	75															ND	ND	ND
Dissolved Nickel	UG/L																ND	ND	ND
Total Selenium	UG/L	300															ND	ND	ND
Dissolved Selenium	UG/L																ND	ND	ND
Total Silver	UG/L	1.9															ND	ND	ND
Dissolved Silver	UG/L																ND	ND	ND
Total Thallium	UG/L																ND	ND	ND
Dissolved Thallium	UG/L																ND	ND	ND
Total Zinc	UG/L	90															ND	ND	ND
Dissolved Zinc	UG/L																ND	ND	ND

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #4

PIERP SPILLWAY 4, JUNE 2001

Month	June	State Water Quality Standards at any time / monthly avg.	June	June	June	June	June	June	June	June	June	June	June	June	June	June
Day			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Location			Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																	
Sample Time	mil																	
Turbidity	NTU	150 / 50																
pH	units	6.5 - 8.5																
Dissolved Oxygen	MG/L																	
Dissolved Oxygen	% sat																	
Salinity	ppt																	
Conductivity	umhos																	
Temperature	C																	
Depth	ft.																	
Flow	MGD																	
Total Suspended Solids	MG/L	800 / 400																
Nitrite	MG/L																	
Ammonium	MG/L																	
Total Dissolved P	MG/L																	
Total Dissolved N	MG/L																	
Phosphate	MG/L																	
Nitrate/Nitrite	MG/L																	
Nitrate	MG/L																	
Dissolved Organic N	MG/L																	
Dissolved Organic P	MG/L																	
Total Anitimony	UG/L																	
Dissolved Antimony	UG/L																	
Total Arsenic	UG/L																	
Dissolved Arsenic	UG/L																	
Total Beryllium	UG/L																	
Dissolved Beryllium	UG/L																	
Total Cadmium	UG/L	43																
Dissolved Cadmium	UG/L																	
Total Chromium	UG/L																	
Dissolved Chromium	UG/L																	
Total Copper	UG/L	6.1																
Dissolved Copper	UG/L																	
Total Lead	UG/L	210																
Dissolved Lead	UG/L																	
Total Mercury	UG/L	1.8																
Dissolved Mercury	UG/L																	
Total Nickel	UG/L	75																
Dissolved Nickel	UG/L																	
Total Selenium	UG/L	300																
Dissolved Selenium	UG/L																	
Total Silver	UG/L	1.9																
Dissolved Silver	UG/L																	
Total Thallium	UG/L																	
Dissolved Thallium	UG/L																	
Total Zinc	UG/L	90																
Dissolved Zinc	UG/L																	

ND: No discharge < Less than the method detection limit AD: Awaiting data > Greater than the value noted NA: Not applicable NR: Not required

Spillway #4

PIERP SPILLWAY 4, JUNE 2001

Month	June	State Water Quality Standards at any time / monthly avg.	June	June	June	June	June	June	June	June	June	June	June	June	June	Spillway #4 Minimum	Spillway #4 Maximum	Spillway #4 Average
Day			17	18	19	20	21	22	23	24	25	26	27	28	29	30			
Location			Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4			
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																		
Sample Time	mil																NA	NA	NA
Turbidity	NTU	150 / 50															ND	ND	ND
pH	units	6.5 - 8.5															ND	ND	ND
Dissolved Oxygen	MG/L																NR	NR	NR
Dissolved Oxygen	% sat																NR	NR	NR
Salinity	ppt																NR	NR	NR
Conductivity	umhos																NR	NR	NR
Temperature	C																ND	ND	ND
Depth	ft.																ND	ND	ND
Flow	MGD																ND	ND	ND
Total Suspended Solids	MG/L	800 / 400															ND	ND	ND
Nitrite	MG/L																ND	ND	ND
Ammonium	MG/L																ND	ND	ND
Total Dissolved P	MG/L																ND	ND	ND
Total Dissolved N	MG/L																ND	ND	ND
Phosphate	MG/L																ND	ND	ND
Nitrate/Nitrite	MG/L																ND	ND	ND
Nitrate	MG/L																ND	ND	ND
Dissolved Organic N	MG/L																ND	ND	ND
Dissolved Organic P	MG/L																ND	ND	ND
Total Anitimony	UG/L																ND	ND	ND
Dissolved Antimony	UG/L																ND	ND	ND
Total Arsenic	UG/L																ND	ND	ND
Dissolved Arsenic	UG/L																ND	ND	ND
Total Beryllium	UG/L																ND	ND	ND
Dissolved Beryllium	UG/L																ND	ND	ND
Total Cadmium	UG/L	43															ND	ND	ND
Dissolved Cadmium	UG/L																ND	ND	ND
Total Chromium	UG/L																ND	ND	ND
Dissolved Chromium	UG/L																ND	ND	ND
Total Copper	UG/L	6.1															ND	ND	ND
Dissolved Copper	UG/L																ND	ND	ND
Total Lead	UG/L	210															ND	ND	ND
Dissolved Lead	UG/L																ND	ND	ND
Total Mercury	UG/L	1.8															ND	ND	ND
Dissolved Mercury	UG/L																ND	ND	ND
Total Nickel	UG/L	75															ND	ND	ND
Dissolved Nickel	UG/L																ND	ND	ND
Total Selenium	UG/L	300															ND	ND	ND
Dissolved Selenium	UG/L																ND	ND	ND
Total Silver	UG/L	1.9															ND	ND	ND
Dissolved Silver	UG/L																ND	ND	ND
Total Thallium	UG/L																ND	ND	ND
Dissolved Thallium	UG/L																ND	ND	ND
Total Zinc	UG/L	90															ND	ND	ND
Dissolved Zinc	UG/L																ND	ND	ND

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

spillway #5

PIERP SPILLWAY 5, JUNE 2001

Month	June	State Water Quality Standards at any time / monthly avg.	June	June	June	June	June	June	June	June	June	June	June	June	June	June	June	June
Day			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location			Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5
Frequency			d	d	d	d	d	d	d	w	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	P1081	P1085	P1088	P1091	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil						1115	1150	1125	1000									
Turbidity	NTU	150 / 50					51	34	53	42									
pH	units	6.5 - 8.5					8.79	8.88	8.98	9.13									
Dissolved Oxygen	MG/L						12.70	9.68	9.35	16.25									
Dissolved Oxygen	% sat						NR	NR	NR	NR									
Salinity	ppt						NR	NR	NR	NR									
Conductivity	umhos						NR	NR	NR	NR									
Temperature	C						NR	NR	NR	NR									
Depth	ft						1	1	1	1									
Flow	MGD						2.02	0.72	1.07	**									
Total Suspended Solids	MG/L	800 / 400					69	39	63	75									
Nitrite	MG/L									0.0478									
Ammonium	MG/L									0.463									
Total Dissolved P	MG/L									1.203									
Total Dissolved N	MG/L									4.85									
Phosphate	MG/L									0.937									
Nitrate/Nitrite	MG/L									0.181									
Nitrate	MG/L									0.133									
Dissolved Organic N	MG/L									4.21									
Dissolved Organic P	MG/L									0.0833									
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge < Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required
**6/8/01 sample collected while spillway closed due to high pH, data not included in calculations.

Spillway #5

PIERP SPILLWAY 5, JUNE 2001

Month	June		June	June	June	June	June	June	June	June	June	June	June	June	June	Spillway #5	Spillway #5	Spillway #5
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	Minimum	Maximum	Average
Location		Quality Standards	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5			
Frequency		at any time / monthly avg.	w	d	d	d	d	d	d	m	d	d	d	d	d			
Sample #			P1110	P1116	P1119	P1123	ND	ND	ND	P1128	ND	ND	ND	ND	ND			
Parameter	Units																	
Sample Time	mil		1315	0800	0800	1045				1240						NA	NA	NA
Turbidity	NTU	150 / 50	70	60	101	50				85						34	101	63
pH	units	6.5 - 8.5	8.38	8.47	8.61	8.55				8.92						8.38	8.98	8.70
Dissolved Oxygen	MG/L		2.20	4.17	5.82	2.17				8.78						2.17	12.70	6.86
Dissolved Oxygen	% sat		NR	NR	NR	NR				NR						NR	NR	NR
Salinity	ppt		NR	NR	NR	NR				NR						NR	NR	NR
Conductivity	umhos		NR	NR	NR	NR				NR						NR	NR	NR
Temperature	C		NR	NR	NR	NR				NR						NR	NR	NR
Depth	ft		1	1	1	1				1						1	1	1
Flow	MGD		1.15	0.46	1.68	0.69				0.27						0.27	2.02	1.01
Total Suspended Solids	MG/L	800 / 400	79	70	164	39				59						39	164	73
Nitrite	MG/L		0.0152							0.0147						0.0147	0.0152	0.0150
Ammonium	MG/L		1.564							0.097						0.097	1.564	0.831
Total Dissolved P	MG/L		1.5620							2.1172						1.5620	2.1172	1.8396
Total Dissolved N	MG/L		9.43							4.06						4.06	9.43	6.75
Phosphate	MG/L		0.6520							0.4120						0.4120	0.6520	0.5320
Nitrate/Nitrite	MG/L		0.075							0.052						0.052	0.075	0.064
Nitrate	MG/L		0.060							0.038						0.038	0.060	0.049
Dissolved Organic N	MG/L		7.79							3.91						3.91	7.79	5.85
Dissolved Organic P	MG/L		0.9100							1.7052						0.9100	1.7052	1.3076
Total Antimony	UG/L									< 2.0						< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L									< 2.0						< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L									48.0						48.0	48.0	48.0
Dissolved Arsenic	UG/L									44.0						44.0	44.0	44.0
Total Beryllium	UG/L									< 2.0						< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L									< 2.0						< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43								< 0.5						< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L									< 0.5						< 0.5	< 0.5	< 0.5
Total Chromium	UG/L									3.0						3.0	3.0	3.0
Dissolved Chromium	UG/L									< 2.0						< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1								17.0						17.0	17.0	17.0
Dissolved Copper	UG/L									7.0						7.0	7.0	7.0
Total Lead	UG/L	210								2.0						2.0	2.0	2.0
Dissolved Lead	UG/L									< 2.0						< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8								< 0.2						< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L									< 0.2						< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75								17.0						17.0	17.0	17.0
Dissolved Nickel	UG/L									5.0						5.0	5.0	5.0
Total Selenium	UG/L	300								32.0						32.0	32.0	32.0
Dissolved Selenium	UG/L									30.0						30.0	30.0	30.0
Total Silver	UG/L	1.9								< 1.0						< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L									< 1.0						< 1.0	< 1.0	< 1.0
Total Thallium	UG/L									< 2.0						< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L									< 2.0						< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90								9.0						9.0	9.0	9.0
Dissolved Zinc	UG/L									< 3.0						< 3.0	< 3.0	< 3.0

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required
**6/8/01 sample collected while spillway closed due to high pH, data not included in calculations.

Spillway # 6

PIERP SPILLWAY 6, JUNE 2001

Month	June	State Water Quality Standards at any time / monthly avg.	June	June	June	June	June	June	June	June	June	June	June	June	June	June	June
Day			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Location			Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6
Frequency			d	d	d	d	d	d	d	w	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	P1082	P1084	P1087	P1090	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																	
Sample Time	mil						1100	1140	1120	0950								
Turbidity	NTU	150 / 50					40	51	43	95								
pH	units	6.5 - 8.5					8.73	8.86	8.93	9.3								
Dissolved Oxygen	MG/L						8.52	10.87	9.83	13.32								
Dissolved Oxygen	% sat						NR	NR	NR	NR								
Salinity	ppt						NR	NR	NR	NR								
Conductivity	umhos						NR	NR	NR	NR								
Temperature	C						NR	NR	NR	NR								
Depth	ft.						1	1	1	1								
Flow	MGD						2.02	0.72	1.07	**								
Total Suspended Solids	MG/L	800 / 400					44	61	64	130								
Nitrite	MG/L									0.0454								
Ammonium	MG/L									0.069								
Total Dissolved P	MG/L									0.8404								
Total Dissolved N	MG/L									2.2								
Phosphate	MG/L									0.626								
Nitrate/Nitrite	MG/L									0.16								
Nitrate	MG/L									0.115								
Dissolved Organic N	MG/L									1.97								
Dissolved Organic P	MG/L									0.2144								
Total Antimony	UG/L																	
Dissolved Antimony	UG/L																	
Total Arsenic	UG/L																	
Dissolved Arsenic	UG/L																	
Total Beryllium	UG/L																	
Dissolved Beryllium	UG/L																	
Total Cadmium	UG/L	43																
Dissolved Cadmium	UG/L																	
Total Chromium	UG/L																	
Dissolved Chromium	UG/L																	
Total Copper	UG/L	6.1																
Dissolved Copper	UG/L																	
Total Lead	UG/L	210																
Dissolved Lead	UG/L																	
Total Mercury	UG/L	1.8																
Dissolved Mercury	UG/L																	
Total Nickel	UG/L	75																
Dissolved Nickel	UG/L																	
Total Selenium	UG/L	300																
Dissolved Selenium	UG/L																	
Total Silver	UG/L	1.9																
Dissolved Silver	UG/L																	
Total Thallium	UG/L																	
Dissolved Thallium	UG/L																	
Total Zinc	UG/L	90																
Dissolved Zinc	UG/L																	

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required
**6/8/01 sample collected while spillway closed due to high pH, data not included in calculations.

Spillway # 6

PIERP SPILLWAY 6, JUNE 2001

Month	June		June	June	June	June	June	June	June	June	June	June	June	June	June	Spillway # 6	Spillway # 6	Spillway # 6
Day		State Water	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Minimum	Maximum	Average
Location		Quality Standards	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6			
Frequency		at any time / monthly avg.	d	w	d	d	d	d	d	d	m	d	d	d	d	d			
Sample #			ND	P1109	P1115	P1120	P1122	ND	ND	ND	P1130	ND	ND	ND	ND	ND			
Parameter	Units																		
Sample Time	mil			0745	0740	0815	1035				1300						NA	NA	NA
Turbidity	NTU	150 / 50		84	80	113	73				170						40	170	82
pH	units	6.5 - 8.5		8.28	8.42	8.60	8.65				8.95						8.28	8.95	8.68
Dissolved Oxygen	MG/L			2.01	3.09	5.05	6.64				18.68						2.01	18.68	8.09
Dissolved Oxygen	% sat			NR	NR	NR	NR				NR						NR	NR	NR
Salinity	ppt			NR	NR	NR	NR				NR						NR	NR	NR
Conductivity	umhos			NR	NR	NR	NR				NR						NR	NR	NR
Temperature	C			NR	NR	NR	NR				NR						NR	NR	NR
Depth	ft			1	1	1	1				1						1	1	1
Flow	MGD			1.15	0.46	1.68	0.84				0.27						0.27	2.02	1.03
Total Suspended Solids	MG/L	800 / 400		93	81	128	75				92						44	128	80
Nitrite	MG/L			0.0088							0.0321						0.0088	0.0321	0.0205
Ammonium	MG/L			0.917							0.045						0.045	0.917	0.481
Total Dissolved P	MG/L			2.3731							1.3720						1.3720	2.3731	1.8726
Total Dissolved N	MG/L			9.04							3.51						3.51	9.04	6.28
Phosphate	MG/L			0.4700							0.4480						0.4480	0.4700	0.4590
Nitrate/Nitrite	MG/L			0.043							0.092						0.043	0.092	0.067
Nitrate	MG/L			0.034							0.060						0.034	0.060	0.047
Dissolved Organic N	MG/L			8.08							3.37						3.37	8.08	5.73
Dissolved Organic P	MG/L			1.9031							0.9240						0.924	1.903	1.414
Total Anitimony	UG/L										< 2.0						< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L										< 2.0						< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L										46.0						46.0	46.0	46.0
Dissolved Arsenic	UG/L										44.0						44.0	44.0	44.0
Total Beryllium	UG/L										< 2.0						< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L										< 2.0						< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43									< 0.5						< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L										< 0.5						< 0.5	< 0.5	< 0.5
Total Chromium	UG/L										4.0						4.0	4.0	4.0
Dissolved Chromium	UG/L										< 2.0						< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1									12.0						12.0	12.0	12.0
Dissolved Copper	UG/L										8.0						8.0	8.0	8.0
Total Lead	UG/L	210									< 2.0						< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L										< 2.0						< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8									< 0.2						< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L										< 0.2						< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75									13.0						13.0	13.0	13.0
Dissolved Nickel	UG/L										5.0						5.0	5.0	5.0
Total Selenium	UG/L	300									27.0						27.0	27.0	27.0
Dissolved Selenium	UG/L										27.0						27.0	27.0	27.0
Total Silver	UG/L	1.9									< 1.0						< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L										< 1.0						< 1.0	< 1.0	< 1.0
Total Thallium	UG/L										< 2.0						< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L										< 2.0						< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90									7.0						7.0	7.0	7.0
Dissolved Zinc	UG/L										< 3.0						< 3.0	< 3.0	< 3.0

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

**6/8/01 sample collected while spillway closed due to high pH, data not included in calculations.

00 Yard #1

PIERP 100 YD-1, JUNE 2001

Month	June		June	June	June	June	June	June	June	June	June	June	June	June	June	June	June
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Location		Quality Standards	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	m	d	d	d	d	d	w	d	d
Sample #			NA	NA	NA	NA	NA	NA	NA	P1095	NA	NA	NA	NA	NA	P1103	NA	NA
Parameter	Units																	
Sample Time	mil									1110						1200		
Turbidity	NTU	150 / 50								3						4		
pH	units	6.5 - 8.5								7.75						8.08		
Dissolved Oxygen	MG/L									7.09						9.91		
Dissolved Oxygen	% sat									NR						NR		
Salinity	ppt									NR						NR		
Conductivity	umhos									NR						NR		
Temperature	C									NR						NR		
Depth	ft									5						5		
Flow	MGD									NA						NA		
Total Suspended Solids	MG/L	800 / 400								11						13		
Nitrite	MG/L									0.0042						0.0040		
Ammonium	MG/L									0.081						0.037		
Total Dissolved P	MG/L									0.0154						0.0170		
Total Dissolved N	MG/L									0.48						0.46		
Phosphate	MG/L									0.0024						0.0033		
Nitrate/Nitrite	MG/L									0.150						0.038		
Nitrate	MG/L									0.146						0.034		
Dissolved Organic N	MG/L									0.25						0.38		
Dissolved Organic P	MG/L									0.0130						0.0137		
Total Antimony	UG/L									< 2.0								
Dissolved Antimony	UG/L									< 2.0								
Total Arsenic	UG/L									17.0								
Dissolved Arsenic	UG/L									14.0								
Total Beryllium	UG/L									< 2.0								
Dissolved Beryllium	UG/L									< 2.0								
Total Cadmium	UG/L	43								< 0.5								
Dissolved Cadmium	UG/L									< 0.5								
Total Chromium	UG/L									< 2.0								
Dissolved Chromium	UG/L									< 2.0								
Total Copper	UG/L	6.1								8.0								
Dissolved Copper	UG/L									6.0								
Total Lead	UG/L	210								< 2.0								
Dissolved Lead	UG/L									< 2.0								
Total Mercury	UG/L	1.8								< 0.2								
Dissolved Mercury	UG/L									0.2								
Total Nickel	UG/L	75								2.0								
Dissolved Nickel	UG/L									2.0								
Total Selenium	UG/L	300								14.0								
Dissolved Selenium	UG/L									10.0								
Total Silver	UG/L	1.9								< 1.0								
Dissolved Silver	UG/L									< 1.0								
Total Thallium	UG/L									< 2.0								
Dissolved Thallium	UG/L									< 2.0								
Total Zinc	UG/L	90								< 3.0								
Dissolved Zinc	UG/L									< 3.0								

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

100 Yard #1

PIERP 100 YD-1, JUNE 2001

Month	June		June	June	June	June	June	June	June	June	June	June	June	June	June	June	100 Yard #1	100 Yard #1	100 Yard #1
Day		State Water	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Minimum	Maximum	Average
Location		Quality Standards	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1			
Frequency		at any time / monthly avg.	d	w	d	d	d	d	d	d	w	d	d	d	d	d			
Sample #			NA	P1113	NA	NA	NA	NA	NA	NA	P1132	NA	NA	NA	NA	NA			
Parameter	Units																		
Sample Time	mil			1355							1440						NA	NA	NA
Turbidity	NTU	150 / 50		4							5						3	5	4
pH	units	6.5 - 8.5		7.96							8.03						7.75	8.08	7.96
Dissolved Oxygen	MG/L			7.42							8.03						7.09	9.91	8.11
Dissolved Oxygen	% sat			NR							NR						NR	NR	NR
Salinity	ppt			NR							NR						NR	NR	NR
Conductivity	umhos			NR							NR						NR	NR	NR
Temperature	C			NR							NR						NR	NR	NR
Depth	ft			5							5						5	5	5
Flow	MGD			NA							NA						NA	NA	NA
Total Suspended Solids	MG/L	800 / 400		17							7						7	17	12
Nitrite	MG/L			0.0030							0.0015						0.0015	0.0042	0.0032
Ammonium	MG/L			0.029							0.009						0.009	0.081	0.039
Total Dissolved P	MG/L			0.0188							0.0249						0.0154	0.0249	0.0190
Total Dissolved N	MG/L			0.54							0.73						0.46	0.73	0.55
Phosphate	MG/L			0.0018							0.0015						0.0015	0.0033	0.0023
Nitrate Nitrite	MG/L			0.029							0.012						0.012	0.150	0.057
Nitrate	MG/L			0.026							0.011						0.011	0.146	0.054
Dissolved Organic N	MG/L			0.48							0.71						0.25	0.71	0.46
Dissolved Organic P	MG/L			0.0170							0.0234						0.0130	0.0234	0.0168
Total Antimony	UG/L																< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L																< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L																17.0	17.0	17.0
Dissolved Arsenic	UG/L																14.0	14.0	14.0
Total Beryllium	UG/L																< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L																< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43															< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L																< 0.5	< 0.5	< 0.5
Total Chromium	UG/L																< 2.0	< 2.0	< 2.0
Dissolved Chromium	UG/L																< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1															8.0	8.0	8.0
Dissolved Copper	UG/L																6.0	6.0	6.0
Total Lead	UG/L	210															< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L																< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8															< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L																0.2	0.2	0.2
Total Nickel	UG/L	75															2.0	2.0	2.0
Dissolved Nickel	UG/L																2.0	2.0	2.0
Total Selenium	UG/L	300															14.0	14.0	14.0
Dissolved Selenium	UG/L																10.0	10.0	10.0
Total Silver	UG/L	1.9															< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L																< 1.0	< 1.0	< 1.0
Total Thallium	UG/L																< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L																< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90															< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L																< 3.0	< 3.0	< 3.0

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

100 Yard #2

PIERP 100YD-2, JUNE 2001

Month	June	State Water	June	June	June	June	June	June	June	June	June	June	June	June	June	June	June
Day		Quality Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Location		at any time / monthly avg.	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																	
Sample Time	mil																	
Turbidity	NTU	150 / 50																
pH	units	6.5 - 8.5																
Dissolved Oxygen	MG/L																	
Dissolved Oxygen	% sat																	
Salinity	ppt																	
CoNAuctivity	umhos																	
Temperature	C																	
Depth	ft.																	
Flow	MGD																	
Total SuspeNAed Solids	MG/L	800 / 400																
Nitrite	MG/L																	
Ammonium	MG/L																	
Total Dissolved P	MG/L																	
Total Dissolved N	MG/L																	
Phosphate	MG/L																	
Nitrate/Nitrite	MG/L																	
Nitrate	MG/L																	
Dissolved Organic N	MG/L																	
Dissolved Organic P	MG/L																	
Total Anitimony	UG/L																	
Dissolved Antimony	UG/L																	
Total Arsenic	UG/L																	
Dissolved Arsenic	UG/L																	
Total Beryllium	UG/L																	
Dissolved Beryllium	UG/L																	
Total Cadmium	UG/L	43																
Dissolved Cadmium	UG/L																	
Total Chromium	UG/L																	
Dissolved Chromium	UG/L																	
Total Copper	UG/L	6.1																
Dissolved Copper	UG/L																	
Total Lead	UG/L	210																
Dissolved Lead	UG/L																	
Total Mercury	UG/L	1.8																
Dissolved Mercury	UG/L																	
Total Nickel	UG/L	75																
Dissolved Nickel	UG/L																	
Total Selenium	UG/L	300																
Dissolved Selenium	UG/L																	
Total Silver	UG/L	1.9																
Dissolved Silver	UG/L																	
Total Thallium	UG/L																	
Dissolved Thallium	UG/L																	
Total Zinc	UG/L	90																
Dissolved Zinc	UG/L																	

ND: No discharge < Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

PIERP 100YD-2, JUNE 2001

Month	June	State Water	June	June	June	June	June	June	June	June	June	June	June	June	June	100 Yard #2	100 Yard #2	100 Yard #2
Day		Quality Standards	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Minimum	Maximum	Average
Location		at any time / monthly avg.	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2			
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Parameter	Units																		
Sample Time	mil																NA	NA	NA
Turbidity	NTU	150 / 50															NA	NA	NA
pH	units	6.5 - 8.5															NA	NA	NA
Dissolved Oxygen	MG/L																NA	NA	NA
Dissolved Oxygen	% sat																NR	NR	NR
Salinity	ppt																NR	NR	NR
CoNAuctivity	umhos																NR	NR	NR
Temperature	C																NR	NR	NR
Depth	ft.																NA	NA	NA
Flow	MGD																NA	NA	NA
Total SuspeNAed Solids	MG/L	800 / 400															NA	NA	NA
Nitrite	MG/L																NA	NA	NA
Ammonium	MG/L																NA	NA	NA
Total Dissolved P	MG/L																NA	NA	NA
Total Dissolved N	MG/L																NA	NA	NA
Phosphate	MG/L																NA	NA	NA
Nitrate/Nitrite	MG/L																NA	NA	NA
Nitrate	MG/L																NA	NA	NA
Dissolved Organic N	MG/L																NA	NA	NA
Dissolved Organic P	MG/L																NA	NA	NA
Total Antimony	UG/L																NA	NA	NA
Dissolved Antimony	UG/L																NA	NA	NA
Total Arsenic	UG/L																NA	NA	NA
Dissolved Arsenic	UG/L																NA	NA	NA
Total Beryllium	UG/L																NA	NA	NA
Dissolved Beryllium	UG/L																NA	NA	NA
Total Cadmium	UG/L	43															NA	NA	NA
Dissolved Cadmium	UG/L																NA	NA	NA
Total Chromium	UG/L																NA	NA	NA
Dissolved Chromium	UG/L																NA	NA	NA
Total Copper	UG/L	6.1															NA	NA	NA
Dissolved Copper	UG/L																NA	NA	NA
Total Lead	UG/L	210															NA	NA	NA
Dissolved Lead	UG/L																NA	NA	NA
Total Mercury	UG/L	1.8															NA	NA	NA
Dissolved Mercury	UG/L																NA	NA	NA
Total Nickel	UG/L	75															NA	NA	NA
Dissolved Nickel	UG/L																NA	NA	NA
Total Selenium	UG/L	300															NA	NA	NA
Dissolved Selenium	UG/L																NA	NA	NA
Total Silver	UG/L	1.9															NA	NA	NA
Dissolved Silver	UG/L																NA	NA	NA
Total Thallium	UG/L																NA	NA	NA
Dissolved Thallium	UG/L																NA	NA	NA
Total Zinc	UG/L	90															NA	NA	NA
Dissolved Zinc	UG/L																NA	NA	NA

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #4

PIERP 100YD-4, JUNE 2001

Month	June	State Water	June	June	June	June	June	June	June	June	June	June	June	June	June	June	June
Day		Quality Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Location		at any time / monthly avg.	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																	
Sample Time	mil																	
Turbidity	NTU	150 / 50																
pH	units	6.5 - 8.5																
Dissolved Oxygen	MG/L																	
Dissolved Oxygen	% sat																	
Salinity	ppt																	
CoNAuctivity	umhos																	
Temperature	C																	
Depth	ft																	
Flow	MGD																	
Total SuspeNAed Solids	MG/L	800 / 400																
Nitrite	MG/L																	
Ammonium	MG/L																	
Total Dissolved P	MG/L																	
Total Dissolved N	MG/L																	
Phosphate	MG/L																	
Nitrate/Nitrite	MG/L																	
Nitrate	MG/L																	
Dissolved Organic N	MG/L																	
Dissolved Organic P	MG/L																	
Total Anitimony	UG/L																	
Dissolved Antimony	UG/L																	
Total Arsenic	UG/L																	
Dissolved Arsenic	UG/L																	
Total Beryllium	UG/L																	
Dissolved Beryllium	UG/L																	
Total Cadmium	UG/L	43																
Dissolved Cadmium	UG/L																	
Total Chromium	UG/L																	
Dissolved Chromium	UG/L																	
Total Copper	UG/L	6.1																
Dissolved Copper	UG/L																	
Total Lead	UG/L	210																
Dissolved Lead	UG/L																	
Total Mercury	UG/L	1.8																
Dissolved Mercury	UG/L																	
Total Nickel	UG/L	75																
Dissolved Nickel	UG/L																	
Total Selenium	UG/L	300																
Dissolved Selenium	UG/L																	
Total Silver	UG/L	1.9																
Dissolved Silver	UG/L																	
Total Thallium	UG/L																	
Dissolved Thallium	UG/L																	
Total Zinc	UG/L	90																
Dissolved Zinc	UG/L																	

ND: No discharge < Less than the method detection limit AD: Awaiting data > Greater than the value noted NA: Not applicable NR: Not required

100 Yard #4

PIERP 100YD-4, JUNE 2001

Month	June		June	June	June	June	June	June	June	June	June	June	June	June	June	100 Yard #4	100 Yard #4	100 Yard #4
Day		State Water	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Minimum	Maximum	Average
Location		Quality Standards	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4			
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Parameter	Units																		
Sample Time	mil																NA	NA	NA
Turbidity	NTU	150 / 50															NA	NA	NA
pH	units	6.5 - 8.5															NA	NA	NA
Dissolved Oxygen	MG/L																NA	NA	NA
Dissolved Oxygen	% sat																NR	NR	NR
Salinity	ppt																NR	NR	NR
CoNAuctivity	umhos																NR	NR	NR
Temperature	C																NR	NR	NR
Depth	ft																NA	NA	NA
Flow	MGD																NA	NA	NA
Total SuspeNAed Solids	MG/L	800 / 400															NA	NA	NA
Nitrite	MG/L																NA	NA	NA
Ammonium	MG/L																NA	NA	NA
Total Dissolved P	MG/L																NA	NA	NA
Total Dissolved N	MG/L																NA	NA	NA
Phosphate	MG/L																NA	NA	NA
Nitrate/Nitrite	MG/L																NA	NA	NA
Nitrate	MG/L																NA	NA	NA
Dissolved Organic N	MG/L																NA	NA	NA
Dissolved Organic P	MG/L																NA	NA	NA
Total Antimony	UG/L																NA	NA	NA
Dissolved Antimony	UG/L																NA	NA	NA
Total Arsenic	UG/L																NA	NA	NA
Dissolved Arsenic	UG/L																NA	NA	NA
Total Beryllium	UG/L																NA	NA	NA
Dissolved Beryllium	UG/L																NA	NA	NA
Total Cadmium	UG/L	43															NA	NA	NA
Dissolved Cadmium	UG/L																NA	NA	NA
Total Chromium	UG/L																NA	NA	NA
Dissolved Chromium	UG/L																NA	NA	NA
Total Copper	UG/L	6.1															NA	NA	NA
Dissolved Copper	UG/L																NA	NA	NA
Total Lead	UG/L	210															NA	NA	NA
Dissolved Lead	UG/L																NA	NA	NA
Total Mercury	UG/L	1.8															NA	NA	NA
Dissolved Mercury	UG/L																NA	NA	NA
Total Nickel	UG/L	75															NA	NA	NA
Dissolved Nickel	UG/L																NA	NA	NA
Total Selenium	UG/L	300															NA	NA	NA
Dissolved Selenium	UG/L																NA	NA	NA
Total Silver	UG/L	1.9															NA	NA	NA
Dissolved Silver	UG/L																NA	NA	NA
Total Thallium	UG/L																NA	NA	NA
Dissolved Thallium	UG/L																NA	NA	NA
Total Zinc	UG/L	90															NA	NA	NA
Dissolved Zinc	UG/L																NA	NA	NA

ND: No discharge < Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

00 Yard #5

PIERP 100 YD-5, JUNE 2001

Month	June	State Water	June	June	June	June	June	June	June	June	June	June	June	June	June	June	June	June
Day		Quality Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Location		at any time / monthly avg.	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5
Frequency			d	d	d	d	d	d	d	w	d	d	d	d	d	d	d	d
Sample #			NA	NA	NA	NA	NA	NA	NA	P1093	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																	
Sample Time	mil									1140								
Turbidity	NTU	150 / 50								9								
pH	units	6.5 - 8.5								7.75								
Dissolved Oxygen	MG/L									5.78								
Dissolved Oxygen	% sat									NR								
Salinity	ppt									NR								
COND uctivity	umhos									NR								
Temperature	C									NR								
Depth	ft.									2								
Flow	MGD									NA								
Total Suspended Solids	MG/L	800 / 400								13								
Nitrite	MG/L									0.0105								
Ammonium	MG/L									0.243								
Total Dissolved P	MG/L									0.0252								
Total Dissolved N	MG/L									0.78								
Phosphate	MG/L									0.0094								
Nitrate/Nitrite	MG/L									0.164								
Nitrate	MG/L									0.154								
Dissolved Organic N	MG/L									0.37								
Dissolved Organic P	MG/L									0.0158								
Total Antimony	UG/L																	
Dissolved Antimony	UG/L																	
Total Arsenic	UG/L																	
Dissolved Arsenic	UG/L																	
Total Beryllium	UG/L																	
Dissolved Beryllium	UG/L																	
Total Cadmium	UG/L	43																
Dissolved Cadmium	UG/L																	
Total Chromium	UG/L																	
Dissolved Chromium	UG/L																	
Total Copper	UG/L	6.1																
Dissolved Copper	UG/L																	
Total Lead	UG/L	210																
Dissolved Lead	UG/L																	
Total Mercury	UG/L	1.8																
Dissolved Mercury	UG/L																	
Total Nickel	UG/L	75																
Dissolved Nickel	UG/L																	
Total Selenium	UG/L	300																
Dissolved Selenium	UG/L																	
Total Silver	UG/L	1.9																
Dissolved Silver	UG/L																	
Total Thallium	UG/L																	
Dissolved Thallium	UG/L																	
Total Zinc	UG/L	90																
Dissolved Zinc	UG/L																	

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

PIERP 100 YD-5, JUNE 2001

Month	June	State Water	June	June	June	June	June	June	June	June	June	June	June	June	June	100 Yard #5	100 Yard #5	100 Yard #5
Day		Quality Standards	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Minimum	Maximum	Average
Location			100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5			
Frequency		at any time / monthly avg.	d	w	d	d	d	d	d	d	m	d	d	d	d	d			
Sample #			NA	P1112	NA	NA	NA	NA	NA	NA	P1129	NA	NA	NA	NA	NA			
Parameter	Units																		
Sample Time	mil			1400							1415						NA	NA	NA
Turbidity	NTU	150 / 50		9							15						9	15	11
pH	units	6.5 - 8.5		7.81							7.97						7.75	7.97	7.84
Dissolved Oxygen	MG/L			6.88							7.64						5.78	7.64	6.77
Dissolved Oxygen	% sat			NR							NR						NR	NR	NR
Salinity	ppt			NR							NR						NR	NR	NR
CoNAuctivity	umhos			NR							NR						NR	NR	NR
Temperature	C			NR							NR						NR	NR	NR
Depth	ft.			2							2						2	2	2
Flow	MGD			NA							NA						NA	NA	NA
Total SuspeNAed Solids	MG/L	800 / 400		13							13						13	13	13
Nitrite	MG/L			0.0039							0.0039						0.0039	0.0105	0.0061
Ammonium	MG/L			0.058							0.025						0.025	0.243	0.109
Total Dissolved P	MG/L			0.0192							0.0331						0.0192	0.0331	0.0258
Total Dissolved N	MG/L			0.68							0.76						0.68	0.78	0.74
Phosphate	MG/L			0.0026							0.0013						0.0013	0.0094	0.0044
Nitrate/Nitrite	MG/L			0.036							0.024						0.024	0.164	0.075
Nitrate	MG/L			0.032							0.020						0.020	0.154	0.069
Dissolved Organic N	MG/L			0.59							0.71						0.37	0.71	0.56
Dissolved Organic P	MG/L			0.0166							0.0318						0.0158	0.0318	0.0214
Total Antimony	UG/L									<	2.0						< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L									<	2.0						< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L										25.0						25.0	25.0	25.0
Dissolved Arsenic	UG/L										24.0						24.0	24.0	24.0
Total Beryllium	UG/L									<	2.0						< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L									<	2.0						< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43								<	0.5						< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L									<	0.5						< 0.5	< 0.5	< 0.5
Total Chromium	UG/L									<	2.0						< 2.0	< 2.0	< 2.0
Dissolved Chromium	UG/L									<	2.0						< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1								<	3.0						< 3.0	< 3.0	< 3.0
Dissolved Copper	UG/L										4.0						4.0	4.0	4.0
Total Lead	UG/L	210								<	2.0						< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L									<	2.0						< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8								<	0.2						< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L									<	0.2						< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75									2.0						2.0	2.0	2.0
Dissolved Nickel	UG/L										3.0						3.0	3.0	3.0
Total Selenium	UG/L	300									29.0						29.0	29.0	29.0
Dissolved Selenium	UG/L										27.0						27.0	27.0	27.0
Total Silver	UG/L	1.9								<	1.0						< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L									<	1.0						< 1.0	< 1.0	< 1.0
Total Thallium	UG/L									<	2.0						< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L									<	2.0						< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90								<	3.0						< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L									<	3.0						< 3.0	< 3.0	< 3.0

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

100 Yard #6

PIERP 100 YD-6, JUNE 2001

Month	June	State Water	June	June	June	June	June	June	June	June	June	June	June	June	June	June	June
Day		Quality Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Location		at any time / monthly avg.	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6
Frequency			d	d	d	d	d	d	d	w	d	d	d	d	d	d	d	d
Sample #			NA	NA	NA	NA	NA	NA	NA	P1092	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																	
Sample Time	mil									1145								
Turbidity	NTU	150 / 50								16								
pH	units	6.5 - 8.5								7.91								
Dissolved Oxygen	MG/L									6.18								
Dissolved Oxygen	% sat									NR								
Salinity	ppt									NR								
CoNAuctivity	umhos									NR								
Temperature	C									NR								
Depth	ft.									2								
Flow	MGD									NA								
Total SuspeNAed Solids	MG/L	800 / 400								15								
Nitrite	MG/L									0.0103								
Ammonium	MG/L									0.181								
Total Dissolved P	MG/L									0.0263								
Total Dissolved N	MG/L									0.76								
Phosphate	MG/L									0.0127								
Nitrate/Nitrite	MG/L									0.114								
Nitrate	MG/L									0.104								
Dissolved Organic N	MG/L									0.47								
Dissolved Organic P	MG/L									0.0136								
Total Antimony	UG/L																	
Dissolved Antimony	UG/L																	
Total Arsenic	UG/L																	
Dissolved Arsenic	UG/L																	
Total Beryllium	UG/L																	
Dissolved Beryllium	UG/L																	
Total Cadmium	UG/L	43																
Dissolved Cadmium	UG/L																	
Total Chromium	UG/L																	
Dissolved Chromium	UG/L																	
Total Copper	UG/L	6.1																
Dissolved Copper	UG/L																	
Total Lead	UG/L	210																
Dissolved Lead	UG/L																	
Total Mercury	UG/L	1.8																
Dissolved Mercury	UG/L																	
Total Nickel	UG/L	75																
Dissolved Nickel	UG/L																	
Total Selenium	UG/L	300																
Dissolved Selenium	UG/L																	
Total Silver	UG/L	1.9																
Dissolved Silver	UG/L																	
Total Thallium	UG/L																	
Dissolved Thallium	UG/L																	
Total Zinc	UG/L	90																
Dissolved Zinc	UG/L																	

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

100 Yard #6

PIERP 100 YD-6, JUNE 2001

Month	June		June	June	June	June	June	June	June	June	June	June	June	June	June	100 Yard #6	100 Yard #6	100 Yard #6
Day		State Water	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Minimum	Maximum	Average
Location		Quality Standards	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6			
Frequency		at any time / monthly avg.	d	w	d	d	d	d	d	d	m	d	d	d	d	d			
Sample #			NA	P1111	NA	NA	NA	NA	NA	NA	P1131	NA	NA	NA	NA	NA			
Parameter	Units																		
Sample Time	mil			1415							1345						NA	NA	NA
Turbidity	NTU	150 / 50		6							10						6	16	11
pH	units	6.5 - 8.5		7.80							7.87						7.80	7.91	7.86
Dissolved Oxygen	MG/L			6.85							7.40						6.18	7.40	6.81
Dissolved Oxygen	% sat			NR							NR						NR	NR	NR
Salinity	ppt			NR							NR						NR	NR	NR
CoNAuctivity	umhos			NR							NR						NR	NR	NR
Temperature	C			NR							NR						NR	NR	NR
Depth	ft.			2							2						2	2	2
Flow	MGD			NA							NA						NA	NA	NA
Total SuspeNAed Solids	MG/L	800 / 400		10							26						10	26	17
Nitrite	MG/L			0.0071							0.0042						0.0042	0.0103	0.0072
Ammonium	MG/L			0.143							0.020						0.020	0.181	0.115
Total Dissolved P	MG/L			0.0543							0.0263						0.0263	0.0543	0.0356
Total Dissolved N	MG/L			0.89							0.64						0.64	0.89	0.76
Phosphate	MG/L			0.0109							0.0027						0.0027	0.0127	0.0088
Nitrate/Nitrite	MG/L			0.047							0.033						0.033	0.114	0.065
Nitrate	MG/L			0.040							0.029						0.029	0.104	0.058
Dissolved Organic N	MG/L			0.70							0.59						0.47	0.70	0.59
Dissolved Organic P	MG/L			0.0434							0.0236						0.0136	0.0434	0.0269
Total Anitimony	UG/L									<	2.0						< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L									<	2.0						< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L										24.0						24.0	24.0	24.0
Dissolved Arsenic	UG/L										24.0						24.0	24.0	24.0
Total Beryllium	UG/L									<	2.0						< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L									<	2.0						< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43								<	0.5						< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L									<	0.5						< 0.5	< 0.5	< 0.5
Total Chromium	UG/L									<	2.0						< 2.0	< 2.0	< 2.0
Dissolved Chromium	UG/L									<	2.0						< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1								<	3.0						< 3.0	< 3.0	< 3.0
Dissolved Copper	UG/L										5.0						5.0	5.0	5.0
Total Lead	UG/L	210									4.0						4.0	4.0	4.0
Dissolved Lead	UG/L									<	2.0						< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8								<	0.2						< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L									<	0.2						< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75									2.0						2.0	2.0	2.0
Dissolved Nickel	UG/L										2.0						2.0	2.0	2.0
Total Selenium	UG/L	300									21.0						21.0	21.0	21.0
Dissolved Selenium	UG/L										30.0						30.0	30.0	30.0
Total Silver	UG/L	1.9								<	1.0						< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L									<	1.0						< 1.0	< 1.0	< 1.0
Total Thallium	UG/L									<	2.0						< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L									<	2.0						< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90								<	3.0						< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L									<	3.0						< 3.0	< 3.0	< 3.0

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

spillway #1

PIERP SPILLWAY 1, JULY 2001

Month	July		July	July	July	July	July	July	July	July	July	July	July	July	July	July	July	July
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	Sp. 1	Sp.1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1
Frequency		at any time / monthly avg.	d	d	w	d	d	d	d	d	d	d	d	w	d	d	d	d	d
Sample #			P1142	P1143	P1144	P1151	P1152	P1153	P1154	P1155	P1156	P1157	P1158	P1159	P1162	P1163	P1164	ND	ND
Parameter	Units																		
Sample Time	mil		0800	0800	0845	0800	0800	0800	0745	0800	0800	0800	0845	0845	0800	0800	0800		
Turbidity	NTU	150 / 50	64	33	29	40	43	44	45	37	65	65	56	37	30	25	44		
pH	units	6.5 - 8.5	8.67	8.54	8.56	8.68	8.61	8.66	8.68	8.53	8.48	8.59	8.55	8.53	8.56	8.64	8.76		
Dissolved Oxygen	MG/L		6.12	3.13	7.36	6.80	8.02	8.58	9.56	3.83	1.76	8.45	7.14	7.72	6.34	7.55	9.94		
Dissolved Oxygen	% sat		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		
Salinity	ppt		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		
Conductivity	umhos		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		
Temperature	C		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		
Depth	ft.		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Flow	MGD		4.62	1.42	3.17	14.57	22.80	24.21	31.29	24.15	35.38	18.36	25.98	34.16	32.28	33.59	26.59		
Total Suspended Solids	MG/L	800 / 400	46	44	31	41	39	45	41	50	67	51	33	58	24	36	30		
Nitrite	MG/L				0.0121									0.0179					
Ammonium	MG/L				4.94									5.78					
Total Dissolved P	MG/L				0.3013									0.3168					
Total Dissolved N	MG/L				7.30									8.37					
Phosphate	MG/L				0.1700									0.1600					
Nitrate/Nitrite	MG/L				0.2170									0.2870					
Nitrate	MG/L				0.205									0.269					
Dissolved Organic N	MG/L				2.14									2.30					
Dissolved Organic P	MG/L				0.1313									0.1568					
Total Anitimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

Spillway #1

PIERP SPILLWAY 1, JULY 2001

Month	July		July	July	July	July	July	July	July	July	July	July	July	July	July	July	Spillway #1	Spillway #1	Spillway #1
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1			
Frequency		at any time / monthly avg.	d	w	d	d	d	d	d	d	d	m	d	d	d	d			
Sample #			P1165	P1170	P1176	P1178	ND	ND	P1181	P1184	P1185	P1188	P1195	P1196	P1197	P1198			
Parameter	Units																		
Sample Time	mil		0500	0940	0750	0915			0800	1030	0800	1000	0530	0800	0500	0845	NA	NA	NA
Turbidity	NTU	150 / 50	45	12	12	36			55	50	28	26	22	19	17	14	12	65	37
pH	units	6.5 - 8.5	8.51	8.66	8.70	8.85			8.33	8.64	8.59	8.49	8.51	8.41	8.42	8.44	8.33	8.85	8.58
Dissolved Oxygen	MG/L		10.68	4.34	4.16	8.30			3.27	4.03	4.05	4.17	5.07	5.72	3.07	4.88	1.76	10.68	6.08
Dissolved Oxygen	% sat		NR	NR	NR	NR			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Salinity	ppt		NR	NR	NR	NR			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Conductivity	umhos		NR	NR	NR	NR			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Temperature	C		NR	NR	NR	NR			NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Depth	ft		1	1	1	1			1	1	1	1	1	1	1	1	1	1	1
Flow	MGD		10.70	24.12	32.19	14.67			19.19	29.56	29.86	22.30	7.26	5.72	3.98	2.27	1.42	35.38	19.79
Total Suspended Solids	MG/L	800 / 400	36	26	18	41			71	50	47	37	24	24	28	18	18	71	39
Nitrite	MG/L			0.0256								1.4601					0.0121	1.4601	0.3789
Ammonium	MG/L			6.17								2.69					2.69	6.17	4.90
Total Dissolved P	MG/L			0.3488								0.3898					0.3013	0.3898	0.3392
Total Dissolved N	MG/L			8.30								7.78					7.30	8.37	7.94
Phosphate	MG/L			0.1670								0.3270					0.1600	0.3270	0.2060
Nitrate/Nitrite	MG/L			0.3260								2.0500					0.2170	2.0500	0.7200
Nitrate	MG/L			0.300								0.590					0.205	0.590	0.341
Dissolved Organic N	MG/L			1.80								3.04					1.80	3.04	2.32
Dissolved Organic P	MG/L			0.1818								0.0628					0.0628	0.1818	0.1332
Total Antimony	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L											29.0					29.0	29.0	29.0
Dissolved Arsenic	UG/L											29.0					29.0	29.0	29.0
Total Beryllium	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43									<	0.5					< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L										<	0.5					< 0.5	< 0.5	< 0.5
Total Chromium	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Dissolved Chromium	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1										7.0					7.0	7.0	7.0
Dissolved Copper	UG/L											8.0					8.0	8.0	8.0
Total Lead	UG/L	210									<	2.0					< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8									<	0.2					< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L										<	0.2					< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75										6.0					6.0	6.0	6.0
Dissolved Nickel	UG/L											5.0					5.0	5.0	5.0
Total Selenium	UG/L	300										9.0					9.0	9.0	9.0
Dissolved Selenium	UG/L											9.0					9.0	9.0	9.0
Total Silver	UG/L	1.9									<	1.0					< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L										<	1.0					< 1.0	< 1.0	< 1.0
Total Thallium	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90									<	3.0					< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L										<	3.0					< 3.0	< 3.0	< 3.0

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

Spillway #2

PIERP SPILLWAY 2, JULY 2001

Month	July		July	July	July	July	July	July	July	July	July	July	July	July	July	July	July	July
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	Sp. 2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge < Less than the method detection limit AD: Awaiting data > Greater than the value noted NA: Not applicable NR: Not required

Spillway #2

PIERP SPILLWAY 2, JULY 2001

Month	July		July	July	July	July	July	July	July	July	July	July	July	July	July	Spillway #2	Spillway #2	Spillway #2
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2			
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																		
Sample Time	mil																NA	NA	NA
Turbidity	NTU	150 / 50															ND	ND	ND
pH	units	6.5 - 8.5															ND	ND	ND
Dissolved Oxygen	MG/L																ND	ND	ND
Dissolved Oxygen	% sat																ND	ND	ND
Salinity	ppt																ND	ND	ND
Conductivity	umhos																ND	ND	ND
Temperature	C																ND	ND	ND
Depth	ft.																ND	ND	ND
Flow	MGD																ND	ND	ND
Total Suspended Solids	MG/L	800 / 400															ND	ND	ND
Nitrite	MG/L																ND	ND	ND
Ammonium	MG/L																ND	ND	ND
Total Dissolved P	MG/L																ND	ND	ND
Total Dissolved N	MG/L																ND	ND	ND
Phosphate	MG/L																ND	ND	ND
Nitrate/Nitrite	MG/L																ND	ND	ND
Nitrate	MG/L																ND	ND	ND
Dissolved Organic N	MG/L																ND	ND	ND
Dissolved Organic P	MG/L																ND	ND	ND
Total Antimony	UG/L																ND	ND	ND
Dissolved Antimony	UG/L																ND	ND	ND
Total Arsenic	UG/L																ND	ND	ND
Dissolved Arsenic	UG/L																ND	ND	ND
Total Beryllium	UG/L																ND	ND	ND
Dissolved Beryllium	UG/L																ND	ND	ND
Total Cadmium	UG/L	43															ND	ND	ND
Dissolved Cadmium	UG/L																ND	ND	ND
Total Chromium	UG/L																ND	ND	ND
Dissolved Chromium	UG/L																ND	ND	ND
Total Copper	UG/L	6.1															ND	ND	ND
Dissolved Copper	UG/L																ND	ND	ND
Total Lead	UG/L	210															ND	ND	ND
Dissolved Lead	UG/L																ND	ND	ND
Total Mercury	UG/L	1.8															ND	ND	ND
Dissolved Mercury	UG/L																ND	ND	ND
Total Nickel	UG/L	75															ND	ND	ND
Dissolved Nickel	UG/L																ND	ND	ND
Total Selenium	UG/L	300															ND	ND	ND
Dissolved Selenium	UG/L																ND	ND	ND
Total Silver	UG/L	1.9															ND	ND	ND
Dissolved Silver	UG/L																ND	ND	ND
Total Thallium	UG/L																ND	ND	ND
Dissolved Thallium	UG/L																ND	ND	ND
Total Zinc	UG/L	90															ND	ND	ND
Dissolved Zinc	UG/L																ND	ND	ND

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

pillway #4

PIERP SPILLWAY 4, JULY 2001

Month	July		July	July	July	July	July	July	July	July	July	July	July	July	July	July	July	July
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Anitimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #4

PIERP SPILLWAY 4, JULY 2001

Month	July		July	July	July	July	July	July	July	July	July	July	July	July	July	Spillway #4	Spillway #4	Spillway #4
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4			
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																		
Sample Time	mil																NA	NA	NA
Turbidity	NTU	150 / 50															ND	ND	ND
pH	units	6.5 - 8.5															ND	ND	ND
Dissolved Oxygen	MG/L																ND	ND	ND
Dissolved Oxygen	% sat																ND	ND	ND
Salinity	ppt																ND	ND	ND
Conductivity	umhos																ND	ND	ND
Temperature	C																ND	ND	ND
Depth	ft																ND	ND	ND
Flow	MGD																ND	ND	ND
Total Suspended Solids	MG/L	800 / 400															ND	ND	ND
Nitrite	MG/L																ND	ND	ND
Ammonium	MG/L																ND	ND	ND
Total Dissolved P	MG/L																ND	ND	ND
Total Dissolved N	MG/L																ND	ND	ND
Phosphate	MG/L																ND	ND	ND
Nitrate/Nitrite	MG/L																ND	ND	ND
Nitrate	MG/L																ND	ND	ND
Dissolved Organic N	MG/L																ND	ND	ND
Dissolved Organic P	MG/L																ND	ND	ND
Total Antimony	UG/L																ND	ND	ND
Dissolved Antimony	UG/L																ND	ND	ND
Total Arsenic	UG/L																ND	ND	ND
Dissolved Arsenic	UG/L																ND	ND	ND
Total Beryllium	UG/L																ND	ND	ND
Dissolved Beryllium	UG/L																ND	ND	ND
Total Cadmium	UG/L	43															ND	ND	ND
Dissolved Cadmium	UG/L																ND	ND	ND
Total Chromium	UG/L																ND	ND	ND
Dissolved Chromium	UG/L																ND	ND	ND
Total Copper	UG/L	6.1															ND	ND	ND
Dissolved Copper	UG/L																ND	ND	ND
Total Lead	UG/L	210															ND	ND	ND
Dissolved Lead	UG/L																ND	ND	ND
Total Mercury	UG/L	1.8															ND	ND	ND
Dissolved Mercury	UG/L																ND	ND	ND
Total Nickel	UG/L	75															ND	ND	ND
Dissolved Nickel	UG/L																ND	ND	ND
Total Selenium	UG/L	300															ND	ND	ND
Dissolved Selenium	UG/L																ND	ND	ND
Total Silver	UG/L	1.9															ND	ND	ND
Dissolved Silver	UG/L																ND	ND	ND
Total Thallium	UG/L																ND	ND	ND
Dissolved Thallium	UG/L																ND	ND	ND
Total Zinc	UG/L	90															ND	ND	ND
Dissolved Zinc	UG/L																ND	ND	ND

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #5

PIERP SPILLWAY 5, JULY 2001

Month	July	State Water	July	July	July	July	July	July	July	July	July	July	July	July	July	July	July	July
Day		Quality Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		at any time / monthly avg.	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5
Frequency			d	d	w	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	P1145	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil				1000														
Turbidity	NTU	150 / 50			170														
pH	units	6.5 - 8.5			8.85														
Dissolved Oxygen	MG/L				12.92														
Dissolved Oxygen	% sat				NR														
Salinity	ppt				NR														
Conductivity	umhos				NR														
Temperature	C				NR														
Depth	ft.				1														
Flow	MGD				0.49														
Total Suspended Solids	MG/L	800 / 400			159														
Nitrite	MG/L				0.0497														
Ammonium	MG/L				0.089														
Total Dissolved P	MG/L				0.7304														
Total Dissolved N	MG/L				3.01														
Phosphate	MG/L				0.4580														
Nitrate/Nitrite	MG/L				0.2020														
Nitrate	MG/L				0.152														
Dissolved Organic N	MG/L				2.72														
Dissolved Organic P	MG/L				0.2724														
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than method detection limit >: Greater than value noted NA: Not applicable NR: Not required
**Unable to collect monthly sample due to dredged material directly in front of spillway.

Spillway #5

PIERP SPILLWAY 5, JULY 2001

Month	July		July	July	July	July	July	July	July	July	July	July	July	July	July	July	Spillway #5	Spillway #5	Spillway #5
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5			
Frequency		at any time / monthly avg.	d	w	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			P1166	P1169	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																		
Sample Time	mil		0800	0925													NA	NA	NA
Turbidity	NTU	150 / 50	100	108													100	170	126
pH	units	6.5 - 8.5	8.53	8.54													8.53	8.85	8.64
Dissolved Oxygen	MG/L		2.61	3.67													2.61	12.92	6.40
Dissolved Oxygen	% sat		NR	NR													NR	NR	NR
Salinity	ppt		NR	NR													NR	NR	NR
Conductivity	umhos		NR	NR													NR	NR	NR
Temperature	C		NR	NR													NR	NR	NR
Depth	ft.		1	1													1	1	1
Flow	MGD		4.09	4.53													0.49	4.53	3.04
Total Suspended Solids	MG/L	800 / 400	106	118													106	159	128
Nitrite	MG/L			0.0196													0.02	0.05	0.03
Ammonium	MG/L			5.220													0.09	5.22	2.65
Total Dissolved P	MG/L			0.9754													0.73	0.98	0.85
Total Dissolved N	MG/L			10.13													3.01	10.13	6.57
Phosphate	MG/L			0.7730													0.4580	0.7730	0.6155
Nitrate/Nitrite	MG/L			0.1460													0.1460	0.2020	0.1740
Nitrate	MG/L			0.126													0.13	0.15	0.14
Dissolved Organic N	MG/L			4.76													2.72	4.76	3.74
Dissolved Organic P	MG/L			0.2024													0.20	0.27	0.24
Total Antimony	UG/L																**	**	**
Dissolved Antimony	UG/L																**	**	**
Total Arsenic	UG/L																**	**	**
Dissolved Arsenic	UG/L																**	**	**
Total Beryllium	UG/L																**	**	**
Dissolved Beryllium	UG/L																**	**	**
Total Cadmium	UG/L	43															**	**	**
Dissolved Cadmium	UG/L																**	**	**
Total Chromium	UG/L																**	**	**
Dissolved Chromium	UG/L																**	**	**
Total Copper	UG/L	6.1															**	**	**
Dissolved Copper	UG/L																**	**	**
Total Lead	UG/L	210															**	**	**
Dissolved Lead	UG/L																**	**	**
Total Mercury	UG/L	1.8															**	**	**
Dissolved Mercury	UG/L																**	**	**
Total Nickel	UG/L	75															**	**	**
Dissolved Nickel	UG/L																**	**	**
Total Selenium	UG/L	300															**	**	**
Dissolved Selenium	UG/L																**	**	**
Total Silver	UG/L	1.9															**	**	**
Dissolved Silver	UG/L																**	**	**
Total Thallium	UG/L																**	**	**
Dissolved Thallium	UG/L																**	**	**
Total Zinc	UG/L	90															**	**	**
Dissolved Zinc	UG/L																**	**	**

ND: No discharge <: Less than method detection limit >: Greater than value noted NA: Not applicable NR: Not required

**Unable to collect monthly sample due to dredged material directly in front of spillway.

Spillway # 6

PIERP SPILLWAY 6, JULY 2001

Month	July	State Water	July	July	July	July	July	July	July	July	July	July	July	July	July	July	July	July
Day		Quality Standards	1	2	3	4	S	6	7	8	9	10	11	12	13	14	1S	16	17
Location		at any time / monthly avg.	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6
Frequency			d	d	w	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	P1146	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil				101S														
Turbidity	NTU	150 / 50			180														
pH	units	6.S - 8.S			8.98														
Dissolved Oxygen	MG/L				13.36														
Dissolved Oxygen	% sat				NR														
Salinity	ppt				NR														
Conductivity	umhos				NR														
Temperature	C				NR														
Depth	ft.				1														
Flow	MGD				0.49														
Total Suspended Solids	MG/L	800 / 400			150														
Nitrite	MG/L				0.0422														
Ammonium	MG/L				0.118														
Total Dissolved P	MG/L				0.782S														
Total Dissolved N	MG/L				3.10														
Phosphate	MG/L				0.4820														
Nitrate/Nitrite	MG/L				0.189														
Nitrate	MG/L				0.147														
Dissolved Organic N	MG/L				2.79														
Dissolved Organic P	MG/L				0.3005														
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	7S																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

spillway # 6

PIERP SPILLWAY 6, JULY 2001

Month	July		July	July	July	July	July	July	July	July	July	July	July	July	July	Spillway # 6	Spillway # 6	Spillway # 6
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6			
Frequency		at any time / monthly avg.	d	w	d	d	d	d	d	d	d	m	d	d	d	d			
Sample #			P1167	P1168	P1175	P1177	P1179	P1180	P1182	P1183	P1186	P1189	ND	ND	ND	ND			
Parameter	Units																		
Sample Time	mil		0810	0915	0300	0900	0600	0800	0815	0830	0820	0930					NA	NA	NA
Turbidity	NTU	150 / 50	114	90	49	45	45	47	73	182	101	100					45	182	93
pH	units	6.5 - 8.5	8.57	8.53	8.84	8.78	8.73	8.76	8.57	8.64	8.78	8.78					8.53	8.98	8.72
Dissolved Oxygen	MG/L		1.25	4.46	8.77	13.73	15.50	7.92	8.14	9.03	8.59	8.63					1.25	15.50	9.03
Dissolved Oxygen	% sat		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR					NR	NR	NR
Salinity	ppt		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR					NR	NR	NR
Conductivity	umhos		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR					NR	NR	NR
Temperature	C		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR					NR	NR	NR
Depth	ft.		1	1	1	1	1	1	1	1	1	1					1	1	1
Flow	MGD		4.84	8.03	3.86	12.73	19.12	18.98	6.08	0.73	11.47	24.37					0.49	24.37	10.06
Total Suspended Solids	MG/L	800 / 400	118	92	77	84	90	104	145	350	225	220					77	350	150
Nitrite	MG/L			0.0286								0.0544					0.0286	0.0544	0.0417
Ammonium	MG/L			5.535								6.390					0.118	6.390	4.014
Total Dissolved P	MG/L			0.9644								0.6123					0.6123	0.9644	0.7864
Total Dissolved N	MG/L			10.79								10.34					3.10	10.79	8.08
Phosphate	MG/L			0.7520								0.4790					0.4790	0.7520	0.5710
Nitrate/Nitrite	MG/L			0.183								0.204					0.183	0.204	0.192
Nitrate	MG/L			0.154								0.150					0.147	0.154	0.150
Dissolved Organic N	MG/L			5.07								3.75					2.79	5.07	3.87
Dissolved Organic P	MG/L			0.2124								0.1333					0.1333	0.3005	0.2154
Total Antimony	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L											33.0					33.0	33.0	33.0
Dissolved Arsenic	UG/L											32.0					32.0	32.0	32.0
Total Beryllium	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43									<	0.5					< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L										<	0.5					< 0.5	< 0.5	< 0.5
Total Chromium	UG/L											4.0					4.0	4.0	4.0
Dissolved Chromium	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1										10.0					10.0	10.0	10.0
Dissolved Copper	UG/L											5.0					5.0	5.0	5.0
Total Lead	UG/L	210										3.0					3.0	3.0	3.0
Dissolved Lead	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8									<	0.2					< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L										<	0.2					< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75										9.0					9.0	9.0	9.0
Dissolved Nickel	UG/L											5.0					5.0	5.0	5.0
Total Selenium	UG/L	300										10.0					10.0	10.0	10.0
Dissolved Selenium	UG/L											9.0					9.0	9.0	9.0
Total Silver	UG/L	1.9									<	1.0					< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L										<	1.0					< 1.0	< 1.0	< 1.0
Total Thallium	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90										9.0					9.0	9.0	9.0
Dissolved Zinc	UG/L										<	3.0					< 3.0	< 3.0	< 3.0

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

100 Yard #1

PIERP 100 YD-1, JULY 2001

Month	July	State Water	July	July	July	July	July	July	July	July	July	July	July	July	July	July	July	July
Day		Quality Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		at any time / monthly avg.	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1
Frequency			d	d	w	d	d	d	d	d	d	d	d	w	d	d	d	d	d
Sample #			NA	NA	P1147	NA	NA	NA	NA	NA	NA	NA	NA	P1160	NA	NA	NA	NA	NA
Parameter	Units																		
Sample Time	mil				1120									1000					
Turbidity	NTU	150 / 50			8									7					
pH	units	6.5 - 8.5			7.82									7.91					
Dissolved Oxygen	MG/L				7.31									6.03					
Dissolved Oxygen	% sat				NR									NR					
Salinity	ppt				NR									NR					
Conductivity	umhos				NR									NR					
Temperature	C				NR									NR					
Depth	ft.				2									2					
Flow	MGD				NA									NA					
Total Suspended Solids	MG/L	800 / 400			26									13					
Nitrite	MG/L				0.0016									0.0278					
Ammonium	MG/L				0.019									0.811					
Total Dissolved P	MG/L				0.0275									0.0539					
Total Dissolved N	MG/L				0.35									1.30					
Phosphate	MG/L				0.0147									0.0369					
Nitrate/Nitrite	MG/L				0.027									0.110					
Nitrate	MG/L				0.025									0.082					
Dissolved Organic N	MG/L				0.30									0.38					
Dissolved Organic P	MG/L				0.0128									0.0170					
Total Anitimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

100 Yard #1

PIERP 100 YD-1, JULY 2001

Month		July	July	July	July	July	July	July	July	July	July	July	July	July	July	100 Yard #1	100 Yard #1	100 Yard #1
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1			
Frequency		at any time / monthly avg.	d	w	d	d	d	d	d	d	d	m	d	d	d	d			
Sample #			NA	P1171	NA	NA	NA	NA	NA	NA	NA	P1190	NA	NA	NA	NA			
Parameter	Units																		
Sample Time	mil			1245								1200					NA	NA	NA
Turbidity	NTU	150 / 50		3								2					2	8	5
pH	units	6.5 - 8.5		7.84								7.74					7.74	7.91	7.83
Dissolved Oxygen	MG/L			7.05								6.79					6.03	7.31	6.80
Dissolved Oxygen	% sat			NR								NR					NR	NR	NR
Salinity	ppt			NR								NR					NR	NR	NR
Conductivity	umhos			NR								NR					NR	NR	NR
Temperature	C			NR								NR					NR	NR	NR
Depth	ft.			2								2					2	2	2
Flow	MGD			NA								NA					NA	NA	NA
Total Suspended Solids	MG/L	800 / 400		16								12					12	26	17
Nitrite	MG/L			0.0062								0.0020					0.0016	0.0278	0.0094
Ammonium	MG/L			0.128								0.036					0.019	0.811	0.249
Total Dissolved P	MG/L			0.0235								0.0256					0.0235	0.0539	0.0326
Total Dissolved N	MG/L			0.54								0.39					0.35	1.30	0.65
Phosphate	MG/L			0.0082								0.0069					0.0069	0.0369	0.0167
Nitrate/Nitrite	MG/L			0.026								0.016					0.016	0.110	0.045
Nitrate	MG/L			0.020								0.014					0.014	0.082	0.035
Dissolved Organic N	MG/L			0.39								0.34					0.30	0.39	0.35
Dissolved Organic P	MG/L			0.0153								0.0187					0.0128	0.0187	0.0160
Total Antimony	UG/L											< 2.0					< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L											< 2.0					< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L											14.0					14.0	14.0	14.0
Dissolved Arsenic	UG/L											16.0					16.0	16.0	16.0
Total Beryllium	UG/L											< 2.0					< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L											< 2.0					< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43										< 0.5					< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L											< 0.5					< 0.5	< 0.5	< 0.5
Total Chromium	UG/L											< 2.0					< 2.0	< 2.0	< 2.0
Dissolved Chromium	UG/L											< 2.0					< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1										5.0					5.0	5.0	5.0
Dissolved Copper	UG/L											< 3.0					< 3.0	< 3.0	< 3.0
Total Lead	UG/L	210										< 2.0					< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L											< 2.0					< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8										< 0.2					< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L											< 0.2					< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75										3.0					3.0	3.0	3.0
Dissolved Nickel	UG/L											< 2.0					< 2.0	< 2.0	< 2.0
Total Selenium	UG/L	300										9.0					9.0	9.0	9.0
Dissolved Selenium	UG/L											13.0					13.0	13.0	13.0
Total Silver	UG/L	1.9										< 1.0					< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L											< 1.0					< 1.0	< 1.0	< 1.0
Total Thallium	UG/L											2.0					2.0	2.0	2.0
Dissolved Thallium	UG/L											3.0					3.0	3.0	3.0
Total Zinc	UG/L	90										< 3.0					< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L											< 3.0					< 3.0	< 3.0	< 3.0

ND: No discharge < Less than method detection limit AD: Awaiting data > Greater than value noted NA: Not applicable NR: Not required

100 Yard #2

PIERP 100YD-2, JULY 2001

Month			July	July	July	July	July	July	July	July	July	July	July	July	July	July	July	July
Day			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		State Water	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2
Frequency		Quality Standards	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #		at any time / monthly avg.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge < Less than the method detection limit AD: Awaiting data > Greater than the value noted NA: Not applicable NR: Not required

100 Yard #2

PIERP 100YD-2, JULY 2001

Month			July	July	July	July	July	July	July	July	July	July	July	July	July	July	100 Yard #2	100 Yard #2	100 Yard #2
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2			
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Parameter	Units																		
Sample Time	mil																NA	NA	NA
Turbidity	NTU	150 / 50															NA	NA	NA
pH	units	6.5 - 8.5															NA	NA	NA
Dissolved Oxygen	MG/L																NA	NA	NA
Dissolved Oxygen	% sat																NR	NR	NR
Salinity	ppt																NR	NR	NR
Conductivity	umhos																NR	NR	NR
Temperature	C																NR	NR	NR
Depth	ft.																NA	NA	NA
Flow	MGD																NA	NA	NA
Total Suspended Solids	MG/L	800 / 400															NA	NA	NA
Nitrite	MG/L																NA	NA	NA
Ammonium	MG/L																NA	NA	NA
Total Dissolved P	MG/L																NA	NA	NA
Total Dissolved N	MG/L																NA	NA	NA
Phosphate	MG/L																NA	NA	NA
Nitrate/Nitrite	MG/L																NA	NA	NA
Nitrate	MG/L																NA	NA	NA
Dissolved Organic N	MG/L																NA	NA	NA
Dissolved Organic P	MG/L																NA	NA	NA
Total Antimony	UG/L																NA	NA	NA
Dissolved Antimony	UG/L																NA	NA	NA
Total Arsenic	UG/L																NA	NA	NA
Dissolved Arsenic	UG/L																NA	NA	NA
Total Beryllium	UG/L																NA	NA	NA
Dissolved Beryllium	UG/L																NA	NA	NA
Total Cadmium	UG/L	43															NA	NA	NA
Dissolved Cadmium	UG/L																NA	NA	NA
Total Chromium	UG/L																NA	NA	NA
Dissolved Chromium	UG/L																NA	NA	NA
Total Copper	UG/L	6.1															NA	NA	NA
Dissolved Copper	UG/L																NA	NA	NA
Total Lead	UG/L	210															NA	NA	NA
Dissolved Lead	UG/L																NA	NA	NA
Total Mercury	UG/L	1.8															NA	NA	NA
Dissolved Mercury	UG/L																NA	NA	NA
Total Nickel	UG/L	75															NA	NA	NA
Dissolved Nickel	UG/L																NA	NA	NA
Total Selenium	UG/L	300															NA	NA	NA
Dissolved Selenium	UG/L																NA	NA	NA
Total Silver	UG/L	1.9															NA	NA	NA
Dissolved Silver	UG/L																NA	NA	NA
Total Thallium	UG/L																NA	NA	NA
Dissolved Thallium	UG/L																NA	NA	NA
Total Zinc	UG/L	90															NA	NA	NA
Dissolved Zinc	UG/L																NA	NA	NA

ND: No discharge < Less than the method detection limit AD: Awaiting data > Greater than the value noted NA: Not applicable NR: Not required

100 Yard #4

PIERP 100YD-4, JULY 2001

Month	July	State Water	July	July	July	July	July	July	July	July	July	July	July	July	July	July	July	July
Day		Quality Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		at any time / monthly avg.	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater then the value noted NA: Not applicable NR: Not required

100 Yard #4

PIERP 100YD-4, JULY 2001

Month	July	State Water	July	July	July	July	July	July	July	July	July	July	July	July	July	100 Yard #4	100 Yard #4	100 Yard #4
Day		Quality Standards	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		at any time / monthly avg.	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4			
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Parameter	Units																		
Sample Time	mil																NA	NA	NA
Turbidity	NTU	150 / 50															NA	NA	NA
pH	units	6.5 - 8.5															NA	NA	NA
Dissolved Oxygen	MG/L																NA	NA	NA
Dissolved Oxygen	% sat																NA	NA	NA
Salinity	ppt																NR	NR	NR
Conductivity	umhos																NR	NR	NR
Temperature	C																NR	NR	NR
Depth	ft																NR	NR	NR
Flow	MGD																NA	NA	NA
Total Suspended Solids	MG/L	800 / 400															NA	NA	NA
Nitrite	MG/L																NA	NA	NA
Ammonium	MG/L																NA	NA	NA
Total Dissolved P	MG/L																NA	NA	NA
Total Dissolved N	MG/L																NA	NA	NA
Phosphate	MG/L																NA	NA	NA
Nitrate/Nitrite	MG/L																NA	NA	NA
Nitrate	MG/L																NA	NA	NA
Dissolved Organic N	MG/L																NA	NA	NA
Dissolved Organic P	MG/L																NA	NA	NA
Total Antimony	UG/L																NA	NA	NA
Dissolved Antimony	UG/L																NA	NA	NA
Total Arsenic	UG/L																NA	NA	NA
Dissolved Arsenic	UG/L																NA	NA	NA
Total Beryllium	UG/L																NA	NA	NA
Dissolved Beryllium	UG/L																NA	NA	NA
Total Cadmium	UG/L	43															NA	NA	NA
Dissolved Cadmium	UG/L																NA	NA	NA
Total Chromium	UG/L																NA	NA	NA
Dissolved Chromium	UG/L																NA	NA	NA
Total Copper	UG/L	6.1															NA	NA	NA
Dissolved Copper	UG/L																NA	NA	NA
Total Lead	UG/L	210															NA	NA	NA
Dissolved Lead	UG/L																NA	NA	NA
Total Mercury	UG/L	1.8															NA	NA	NA
Dissolved Mercury	UG/L																NA	NA	NA
Total Nickel	UG/L	75															NA	NA	NA
Dissolved Nickel	UG/L																NA	NA	NA
Total Selenium	UG/L	300															NA	NA	NA
Dissolved Selenium	UG/L																NA	NA	NA
Total Silver	UG/L	1.9															NA	NA	NA
Dissolved Silver	UG/L																NA	NA	NA
Total Thallium	UG/L																NA	NA	NA
Dissolved Thallium	UG/L																NA	NA	NA
Total Zinc	UG/L	90															NA	NA	NA
Dissolved Zinc	UG/L																NA	NA	NA

ND: No discharge < Less than the method detection limit AD: Awaiting data > Greater then the value noted NA: Not applicable NR: Not required

00 Yard #5

PIERP 100 YD-5, JULY 2001

Month	July	State Water Quality Standards at any time / monthly avg.	July	July	July	July	July	July	July	July	July	July	July	July	July	July	July	July	July
Day			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Location			100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5
Frequency			d	d	w	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			NA	NA	P1148	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																			
Sample Time	mil				1140															
Turbidity	NTU	150 / 50			16															
pH	units	6.5 - 8.5			7.88															
Dissolved Oxygen	MG/L				7.67															
Dissolved Oxygen	% sat				NR															
Salinity	ppt				NR															
Conductivity	umhos				NR															
Temperature	C				NR															
Depth	ft.				2															
Flow	MGD				NA															
Total Suspended Solids	MG/L	800 / 400			19															
Nitrite	MG/L				0.0066															
Ammonium	MG/L				0.023															
Total Dissolved P	MG/L				0.0397															
Total Dissolved N	MG/L				0.33															
Phosphate	MG/L				0.0303															
Nitrate/Nitrite	MG/L				0.031															
Nitrate	MG/L				0.025															
Dissolved Organic N	MG/L				0.28															
Dissolved Organic P	MG/L				0.0094															
Total Antimony	UG/L																			
Dissolved Antimony	UG/L																			
Total Arsenic	UG/L																			
Dissolved Arsenic	UG/L																			
Total Beryllium	UG/L																			
Dissolved Beryllium	UG/L																			
Total Cadmium	UG/L	43																		
Dissolved Cadmium	UG/L																			
Total Chromium	UG/L																			
Dissolved Chromium	UG/L																			
Total Copper	UG/L	6.1																		
Dissolved Copper	UG/L																			
Total Lead	UG/L	210																		
Dissolved Lead	UG/L																			
Total Mercury	UG/L	1.8																		
Dissolved Mercury	UG/L																			
Total Nickel	UG/L	75																		
Dissolved Nickel	UG/L																			
Total Selenium	UG/L	300																		
Dissolved Selenium	UG/L																			
Total Silver	UG/L	1.9																		
Dissolved Silver	UG/L																			
Total Thallium	UG/L																			
Dissolved Thallium	UG/L																			
Total Zinc	UG/L	90																		
Dissolved Zinc	UG/L																			

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required
** No monthly sample collected, no discharge from Spillway 5.

00 Yard #5

PIERP 100 YD-5, JULY 2001

Month	July		July	July	July	July	July	July	July	July	July	July	July	July	July	100 Yard #5	100 Yard #5	100 Yard #5
Day		State Water	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5			
Frequency		at any time / monthly avg.	w	d	d	d	d	d	d	d	** m	d	d	d	d			
Sample #			P1172	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Parameter	Units																	
Sample Time	mil		1220													NA	NA	NA
Turbidity	NTU	150 / 50	11													11	16	14
pH	units	6.5 - 8.5	7.72													7.72	7.88	7.80
Dissolved Oxygen	MG/L		7.24													7.24	7.67	7.46
Dissolved Oxygen	% sat		NR													NR	NR	NR
Salinity	ppt		NR													NR	NR	NR
Conductivity	umhos		NR													NR	NR	NR
Temperature	C		NR													NR	NR	NR
Depth	ft.		2													2	2	2
Flow	MGD		NA													NA	NA	NA
Total Suspended Solids	MG/L	800 / 400	20													19	20	20
Nitrite	MG/L		0.0050													0.0050	0.0066	0.0058
Ammonium	MG/L		0.054													0.023	0.054	0.039
Total Dissolved P	MG/L		0.0175													0.0175	0.0397	0.0286
Total Dissolved N	MG/L		0.40													0.33	0.40	0.37
Phosphate	MG/L		0.0072													0.0072	0.0303	0.0188
Nitrate/Nitrite	MG/L		0.030													0.030	0.031	0.030
Nitrate	MG/L		0.025													0.025	0.025	0.025
Dissolved Organic N	MG/L		0.32													0.28	0.32	0.30
Dissolved Organic P	MG/L		0.0103													0.0094	0.0103	0.0099
Total Antimony	UG/L															**	**	**
Dissolved Antimony	UG/L															**	**	**
Total Arsenic	UG/L															**	**	**
Dissolved Arsenic	UG/L															**	**	**
Total Beryllium	UG/L															**	**	**
Dissolved Beryllium	UG/L															**	**	**
Total Cadmium	UG/L	43														**	**	**
Dissolved Cadmium	UG/L															**	**	**
Total Chromium	UG/L															**	**	**
Dissolved Chromium	UG/L															**	**	**
Total Copper	UG/L	6.1														**	**	**
Dissolved Copper	UG/L															**	**	**
Total Lead	UG/L	210														**	**	**
Dissolved Lead	UG/L															**	**	**
Total Mercury	UG/L	1.8														**	**	**
Dissolved Mercury	UG/L															**	**	**
Total Nickel	UG/L	75														**	**	**
Dissolved Nickel	UG/L															**	**	**
Total Selenium	UG/L	300														**	**	**
Dissolved Selenium	UG/L															**	**	**
Total Silver	UG/L	1.9														**	**	**
Dissolved Silver	UG/L															**	**	**
Total Thallium	UG/L															**	**	**
Dissolved Thallium	UG/L															**	**	**
Total Zinc	UG/L	90														**	**	**
Dissolved Zinc	UG/L															**	**	**

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required
** No monthly sample collected, no discharge from Spillway 5.

100 Yard #6

PIERP 100 YD-6, JULY 2001

Month		July	July	July	July	July	July	July	July	July	July	July	July	July	July	July	July	July
Day			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		State Water	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6
Frequency		Quality Standards	d	d	w	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #		at any time / monthly avg.	NA	NA	P1149	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																		
Sample Time	mil				1150														
Turbidity	NTU	150 / 50			25														
pH	units	6.5 - 8.5			7.86														
Dissolved Oxygen	MG/L				7.26														
Dissolved Oxygen	% sat				NR														
Salinity	ppt				NR														
Conductivity	umhos				NR														
Temperature	C				NR														
Depth	ft.				2														
Flow	MGD				NA														
Total Suspended Solids	MG/L	800 / 400			34														
Nitrite	MG/L				0.0031														
Ammonium	MG/L				0.023														
Total Dissolved P	MG/L				0.0115														
Total Dissolved N	MG/L				0.30														
Phosphate	MG/L				0.0034														
Nitrate/Nitnte	MG/L				0.031														
Nitrate	MG/L				0.028														
Dissolved Organic N	MG/L				0.25														
Dissolved Organic P	MG/L				0.0081														
Total Anitimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

100 Yard #6

PIERP 100 YD-6, JULY 2001

Month	July		July	July	July	July	July	July	July	July	July	July	July	July	July	July	100 Yard #6	100 Yard #6	100 Yard #6
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6			
Frequency		at any time / monthly avg.	d	w	d	d	d	d	d	d	d	m	d	d	d	d			
Sample #			NA	P1173	NA	NA	NA	NA	NA	NA	NA	P1193	NA	NA	NA	NA			
Parameter	Units																		
Sample Time	mil			1210								1230					NA	NA	NA
Turbidity	NTU	150 / 50		9								44					9	44	26
pH	units	6.5 - 8.5		7.75								8.55					7.75	8.55	8.05
Dissolved Oxygen	MG/L			7.10								9.32					7.10	9.32	7.89
Dissolved Oxygen	% sat			NR								NR					NR	NR	NR
Salinity	ppt			NR								NR					NR	NR	NR
Conductivity	umhos			NR								NR					NR	NR	NR
Temperature	C			NR								NR					NR	NR	NR
Depth	ft.			2								2					2	2	2
Flow	MGD			NA								NA					NA	NA	NA
Total Suspended Solids	MG/L	800 / 400		24								97					24	97	52
Nitrite	MG/L			0.0018								0.0221					0.0018	0.0221	0.0090
Ammonium	MG/L			0.060								2.200					0.023	2.200	0.761
Total Dissolved P	MG/L			0.0194								0.1931					0.0115	0.1931	0.0747
Total Dissolved N	MG/L			0.39								2.61					0.30	2.61	1.10
Phosphate	MG/L			0.0062								0.1600					0.0034	0.1600	0.0565
Nitrate/Nitrite	MG/L			0.026								0.083					0.026	0.083	0.046
Nitrate	MG/L			0.024								0.061					0.024	0.061	0.038
Dissolved Organic N	MG/L			0.30								0.33					0.25	0.33	0.29
Dissolved Organic P	MG/L			0.0132								0.0331					0.0081	0.0331	0.0181
Total Antimony	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L											19.0					19.0	19.0	19.0
Dissolved Arsenic	UG/L											19.0					19.0	19.0	19.0
Total Beryllium	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43									<	0.5					< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L										<	0.5					< 0.5	< 0.5	< 0.5
Total Chromium	UG/L											2.0					2.0	2.0	2.0
Dissolved Chromium	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1										8.0					8.0	8.0	8.0
Dissolved Copper	UG/L											5.0					5.0	5.0	5.0
Total Lead	UG/L	210									<	2.0					< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8									<	0.2					< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L										<	0.2					< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75										5.0					5.0	5.0	5.0
Dissolved Nickel	UG/L											3.0					3.0	3.0	3.0
Total Selenium	UG/L	300										9.0					9.0	9.0	9.0
Dissolved Selenium .	UG/L											11.0					11.0	11.0	11.0
Total Silver	UG/L	1.9									<	1.0					< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L										<	1.0					< 1.0	< 1.0	< 1.0
Total Thallium	UG/L											3.0					3.0	3.0	3.0
Dissolved Thallium	UG/L										<	2.0					< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90									<	3.0					< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L										<	3.0					< 3.0	< 3.0	< 3.0

ND: No discharge <: Less than method detection limit AD: Awaiting data >: Greater than value noted NA: Not applicable NR: Not required

Reference Point
WQR1

PIERP WQR1, AUGUST 2001

Month	August		August	August	August	August	August	August	August	August	August	August	August	August	August	August	August	August	August	August
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Location		Quality Standards	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1
Frequency		at any time / monthly avg.	d	w	d	d	d	d	y	w	d	d	d	d	d	w	d	d	d	d
Sample #			NA	P1201	NA	NA	NA	NA	P1207	P1212	NA	NA	NA	NA	NA	P1225	NA	NA	NA	NA
Parameter	Units																			
Sample Time	mil			0930					0900	0930						1030				
Turbidity	NTU	150 / 50		5					4	5						2				
pH	units	6.5 - 8.5		7.82					7.87	7.99						7.71				
Dissolved Oxygen	MG/L			7.29					7.74	7.59						4.12				
Dissolved Oxygen	% sat			NR					NR	NR						NR				
Salinity	ppt			NR					NR	NR						NR				
Conductivity	umhos			NR					NR	NR						NR				
Temperature	C			NR					NR	NR						NR				
Depth	ft			6					6	6						6				
Flow	MGD			NA					NA	NA						NA				
Total Suspended Solids	MG/L	800 / 400		14					8	9						8				
Nitrite	MG/L			0.0016					0.0024	0.0017						0.0038				
Ammonium	MG/L			0.018					0.019	0.016						0.053				
Total Dissolved P	MG/L			0.0166					0.0159	0.0175						0.0159				
Total Dissolved N	MG/L			0.35					0.38	0.38						0.41				
Phosphate	MG/L			0.0042					0.0029	0.0033						0.0032				
Nitrate/Nitrite	MG/L			0.027					0.037	0.020						0.036				
Nitrate	MG/L			0.025					0.035	0.018						0.032				
Dissolved Organic N	MG/L			0.31					0.32	0.34						0.32				
Dissolved Organic P	MG/L			0.0124					0.0130	0.0142						0.0127				
Total Antimony	UG/L								5.0											
Dissolved Antimony	UG/L								5.0											
Total Arsenic	UG/L							<	2.0											
Dissolved Arsenic	UG/L							<	2.0											
Total Beryllium	UG/L							<	2.0											
Dissolved Beryllium	UG/L							<	2.0											
Total Cadmium	UG/L	43						<	0.5											
Dissolved Cadmium	UG/L							<	0.5											
Total Chromium	UG/L							<	2.0											
Dissolved Chromium	UG/L							<	2.0											
Total Copper	UG/L	6.1							5.0											
Dissolved Copper	UG/L								2.0											
Total Lead	UG/L	210						<	2.0											
Dissolved Lead	UG/L							<	2.0											
Total Mercury	UG/L	1.8						<	0.2											
Dissolved Mercury	UG/L							<	0.2											
Total Nickel	UG/L	75							6.0											
Dissolved Nickel	UG/L								5.0											
Total Selenium	UG/L	300						<	2.0											
Dissolved Selenium	UG/L							<	2.0											
Total Silver	UG/L	1.9						<	1.0											
Dissolved Silver	UG/L							<	1.0											
Total Thallium	UG/L							<	2.0											
Dissolved Thallium	UG/L							<	2.0											
Total Zinc	UG/L	90							18.0											
Dissolved Zinc	UG/L								14.0											

ND: No Discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Reference Point
WQR1

PIERP WQR1, AUGUST 2001

Month	August	State Water Quality Standards	August 19	August 20	August 21	August 22	August 23	August 24	August 25	August 26	August 27	August 28	August 29	August 30	August 31	Reference Point WQR1 Minimum	Reference Point WQR1 Maximum	Reference Point WQR1 Average
Day			WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1			
Location			d	d	d	w	d	d	d	d	d	w	d	d	d			
Frequency		at any time / monthly avg.	NA	NA	NA	P1240	NA	NA	NA	NA	NA	P1249	NA	NA	NA			
Sample #																		
Parameter	Units																	
Sample Time	mil					1345						1145						
Turbidity	NTU	150 / 50				4						4				NA	NA	NA
pH	units	6.5 - 8.5				8.09						8.01				2	5	4
Dissolved Oxygen	MG/L					6.60						5.34				7.71	8.09	7.92
Dissolved Oxygen	% sat					NR						NR				4.12	7.74	6.45
Salinity	ppt					NR						NR				NR	NR	NR
Conductivity	umhos					NR						NR				NR	NR	NR
Temperature	C					NR						NR				NR	NR	NR
Depth	ft					6						6				NR	NR	NR
Flow	MGD					NA						NA				6	6	6
Total Suspended Solids	MG/L	800 / 400				9						11				NA	NA	NA
Nitrite	MG/L					0.0030						0.0010				8	14	10
Ammonium	MG/L					0.030						0.027				0.0010	0.0038	0.0023
Total Dissolved P	MG/L					0.0155						0.0167				0.016	0.053	0.027
Total Dissolved N	MG/L					0.48						0.52				0.0155	0.0175	0.0164
Phosphate	MG/L					0.0025						0.0029				0.35	0.52	0.42
Nitrate/Nitrite	MG/L					0.030						0.021				0.0025	0.0042	0.0032
Nitrate	MG/L					0.027						0.020				0.020	0.037	0.028
Dissolved Organic N	MG/L					0.42						0.47				0.018	0.035	0.026
Dissolved Organic P	MG/L					0.0130						0.0138				0.31	0.47	0.36
Total Antimony	UG/L															0.0124	0.0142	0.0132
Dissolved Antimony	UG/L															5.0	5.0	5.0
Total Arsenic	UG/L															5.0	5.0	5.0
Dissolved Arsenic	UG/L															< 2.0	< 2.0	< 2.0
Total Beryllium	UG/L															< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L															< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43														< 2.0	< 2.0	< 2.0
Dissolved Cadmium	UG/L															< 0.5	< 0.5	< 0.5
Total Chromium	UG/L															< 0.5	< 0.5	< 0.5
Dissolved Chromium	UG/L															< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1														< 2.0	< 2.0	< 2.0
Dissolved Copper	UG/L															5.0	5.0	5.0
Total Lead	UG/L	210														2.0	2.0	2.0
Dissolved Lead	UG/L															2.0	2.0	2.0
Total Mercury	UG/L	1.8														< 2.0	< 2.0	< 2.0
Dissolved Mercury	UG/L															< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75														< 0.2	< 0.2	< 0.2
Dissolved Nickel	UG/L															6.0	6.0	6.0
Total Selenium	UG/L	300														5.0	5.0	5.0
Dissolved Selenium	UG/L															< 2.0	< 2.0	< 2.0
Total Silver	UG/L	1.9														< 2.0	< 2.0	< 2.0
Dissolved Silver	UG/L															< 1.0	< 1.0	< 1.0
Total Thallium	UG/L															< 1.0	< 1.0	< 1.0
Dissolved Thallium	UG/L															< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90														< 2.0	< 2.0	< 2.0
Dissolved Zinc	UG/L															18.0	18.0	18.0
																14.0	14.0	14.0

ND: No Discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #1

PIERP SPILLWAY 1, AUGUST 2001

Month	August		August	August	August	August	August	August	August	August	August	August	August	August	August	August	August	August
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	Sp. 1	Sp.1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1
Frequency		at any time / monthly avg.	d	w	d	d	d	d	m	d	d	d	d	d	d	w	d	d	d
Sample #			P1199	P1200	P1203	P1204	P1205	P1206	P1209	P1210	P1215	P1216	P1217	P1218	P1219	P1223	P1227	P1228	P1230
Parameter	Units																		
Sample Time	mil		0800	0805	0800	1030	1000	1045	1300	0130	0200	1330	1100	1430	0800	0900	0810	0600	0500
Turbidity	NTU	150 / 50	10	10	17	13	12	12	23	14	18	17	11	28	14	12	12	9	47
pH	units	6.5 - 8.5	8.36	8.32	8.26	8.39	8.33	8.43	8.71	8.81	8.95	8.92	8.68	8.64	8.56	8.53	8.55	8.66	8.51
Dissolved Oxygen	MG/L		4.35	4.93	4.70	7.92	9.08	12.33 >	20.00	14.00	12.45	6.14	8.82	7.48	5.39	2.96	6.84	7.93	4.23
Dissolved Oxygen	% sat		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Salinity	ppt		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Conductivity	umhos		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Temperature	C		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Depth	ft.		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Flow	MGD		4.28	7.06	7.13	5.85	4.14	5.84	5.55	8.77	8.06	2.10	3.46	3.63	6.93	13.53	7.52	17.47	17.88
Total Suspended Solids	MG/L	800 / 400	6	18	24	18	40	12	20	38	39	34	16	44	24	25	24	44	68
Nitrite	MG/L			2.2130					1.8410							1.2340			
Ammonium	MG/L			2.690					1.180							1.710			
Total Dissolved P	MG/L			0.4498					0.3628							0.4553			
Total Dissolved N	MG/L			8.94					7.92							7.18			
Phosphate	MG/L			0.3020					0.2430							0.3780			
Nitrate/Nitrite	MG/L			2.5300					2.0800							2.2400			
Nitrate	MG/L			0.317					0.239							1.006			
Dissolved Organic N	MG/L			3.72					4.66							3.23			
Dissolved Organic P	MG/L			0.1478					0.1198							0.0773			
Total Antimony	UG/L								10.0										
Dissolved Antimony	UG/L								6.0										
Total Arsenic	UG/L								29.0										
Dissolved Arsenic	UG/L								22.0										
Total Beryllium	UG/L							<	2.0										
Dissolved Beryllium	UG/L							<	2.0										
Total Cadmium	UG/L	43						<	0.5										
Dissolved Cadmium	UG/L							<	0.5										
Total Chromium	UG/L							<	2.0										
Dissolved Chromium	UG/L							<	2.0										
Total Copper	UG/L	6.1							5.0										
Dissolved Copper	UG/L								4.0										
Total Lead	UG/L	210						<	2.0										
Dissolved Lead	UG/L							<	2.0										
Total Mercury	UG/L	1.8						<	0.2										
Dissolved Mercury	UG/L							<	0.2										
Total Nickel	UG/L	75							9.0										
Dissolved Nickel	UG/L								9.0										
Total Selenium	UG/L	300						<	2.0										
Dissolved Selenium	UG/L							<	2.0										
Total Silver	UG/L	1.9						<	1.0										
Dissolved Silver	UG/L							<	1.0										
Total Thallium	UG/L							<	2.0										
Dissolved Thallium	UG/L							<	2.0										
Total Zinc	UG/L	90							15.0										
Dissolved Zinc	UG/L								20.0										

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #1

PIERP SPILLWAY 1, AUGUST 2001

Month	August		August	August	August	August	August	August	August	August	August	August	August	August	August	August	Spillway #1	Spillway #1	Spillway #1
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1			
Frequency		at any time / monthly avg.	d	d	d	d	w	d	d	d	d	d	w	d	d	d			
Sample #			P1232	P1233	P1234	P1236	P1237	P1242	P1243	P1244	P1245	P1246	P1247	P1250	P1251	P1252			
Parameter	Units																		
Sample Time	mil		0200	0800	0445	0800	0900	0815	0800	0800	0800	0800	0800	0800	0800	0800	NA	NA	NA
Turbidity	NTU	150 / 50	15	15	17	14	18	52	29	17	12	37	17	13	11	18	9	52	18
pH	units	6.5 - 8.5	8.56	8.46	8.55	8.60	8.46	8.60	8.48	8.54	8.47	8.54	8.58	8.35	8.63	8.45	8.26	8.95	8.54
Dissolved Oxygen	MG/L		8.42	7.42	7.62	10.08	6.70	10.47	6.69	5.68	7.87	5.30	7.54	2.02	9.66	5.75	2.02	> 20.00	7.77
Dissolved Oxygen	% sat		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Salinity	ppt		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Conductivity	umhos		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Temperature	C		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Depth	ft.		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Flow	MGD		33.24	38.94	32.79	39.80	31.29	30.07	29.84	27.51	25.35	25.17	25.72	25.63	25.12	21.24	2.10	39.80	17.45
Total Suspended Solids	MG/L	800 / 400	24	19	26	21	31	70	41	39	27	50	33	42	23	47	6	70	32
Nitrite	MG/L						0.6510						0.5208				0.5208	2.2130	1.2920
Ammonium	MG/L						6.480						9.620				1.180	9.620	4.336
Total Dissolved P	MG/L						0.4542						0.3513				0.3513	0.4553	0.4147
Total Dissolved N	MG/L						11.01						17.98				7.18	17.98	10.61
Phosphate	MG/L						0.3800						0.2880				0.2430	0.3800	0.3182
Nitrate/Nitrite	MG/L						0.8320						0.6760				0.6760	2.5300	1.6716
Nitrate	MG/L						0.181						0.155				0.155	1.006	0.380
Dissolved Organic N	MG/L						3.70						7.68				3.23	7.68	4.60
Dissolved Organic P	MG/L						0.0742						0.0633				0.0633	0.1478	0.0965
Total Antimony	UG/L																10.0	10.0	10.0
Dissolved Antimony	UG/L																6.0	6.0	6.0
Total Arsenic	UG/L																29.0	29.0	29.0
Dissolved Arsenic	UG/L																22.0	22.0	22.0
Total Beryllium	UG/L																< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L																< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43															< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L																< 0.5	< 0.5	< 0.5
Total Chromium	UG/L																< 2.0	< 2.0	< 2.0
Dissolved Chromium	UG/L																< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1															5.0	5.0	5.0
Dissolved Copper	UG/L																4.0	4.0	4.0
Total Lead	UG/L	210															< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L																< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8															< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L																< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75															9.0	9.0	9.0
Dissolved Nickel	UG/L																9.0	9.0	9.0
Total Selenium	UG/L	300															< 2.0	< 2.0	< 2.0
Dissolved Selenium	UG/L																< 2.0	< 2.0	< 2.0
Total Silver	UG/L	1.9															< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L																< 1.0	< 1.0	< 1.0
Total Thallium	UG/L																< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L																< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90															15.0	15.0	15.0
Dissolved Zinc	UG/L																20.0	20.0	20.0

ND: No discharge < Less than the method detection limit AD: Awaiting data > Greater than the value noted NA: Not applicable NR: Not required

Spillway #2

PIERP SPILLWAY 2, AUGUST 2001

Month	August	State Water	August	August	August	August	August	August	August	August	August	August	August	August	August	August	August	August
Day		Quality Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		at any time / monthly avg.	Sp. 2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #2

PIERP SPILLWAY 2, AUGUST 2001

Month	August		August	August	August	August	August	August	August	August	August	August	August	August	August	Spillway #2	Spillway #2	Spillway #2
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2			
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50															NA	NA	NA
pH	units	6.5 - 8.5															ND	ND	ND
Dissolved Oxygen	MG/L																ND	ND	ND
Dissolved Oxygen	% sat																ND	ND	ND
Salinity	ppt																NR	NR	NR
Conductivity	umhos																NR	NR	NR
Temperature	C																NR	NR	NR
Depth	ft																NR	NR	NR
Flow	MGD																ND	ND	ND
Total Suspended Solids	MG/L	800 / 400															ND	ND	ND
Nitrite	MG/L																ND	ND	ND
Ammonium	MG/L																ND	ND	ND
Total Dissolved P	MG/L																ND	ND	ND
Total Dissolved N	MG/L																ND	ND	ND
Phosphate	MG/L																ND	ND	ND
Nitrate/Nitrite	MG/L																ND	ND	ND
Nitrate	MG/L																ND	ND	ND
Dissolved Organic N	MG/L																ND	ND	ND
Dissolved Organic P	MG/L																ND	ND	ND
Total Antimony	UG/L																ND	ND	ND
Dissolved Antimony	UG/L																ND	ND	ND
Total Arsenic	UG/L																ND	ND	ND
Dissolved Arsenic	UG/L																ND	ND	ND
Total Beryllium	UG/L																ND	ND	ND
Dissolved Beryllium	UG/L																ND	ND	ND
Total Cadmium	UG/L	43															ND	ND	ND
Dissolved Cadmium	UG/L																ND	ND	ND
Total Chromium	UG/L																ND	ND	ND
Dissolved Chromium	UG/L																ND	ND	ND
Total Copper	UG/L	6.1															ND	ND	ND
Dissolved Copper	UG/L																ND	ND	ND
Total Lead	UG/L	210															ND	ND	ND
Dissolved Lead	UG/L																ND	ND	ND
Total Mercury	UG/L	1.8															ND	ND	ND
Dissolved Mercury	UG/L																ND	ND	ND
Total Nickel	UG/L	75															ND	ND	ND
Dissolved Nickel	UG/L																ND	ND	ND
Total Selenium	UG/L	300															ND	ND	ND
Dissolved Selenium	UG/L																ND	ND	ND
Total Silver	UG/L	1.9															ND	ND	ND
Dissolved Silver	UG/L																ND	ND	ND
Total Thallium	UG/L																ND	ND	ND
Dissolved Thallium	UG/L																ND	ND	ND
Total Zinc	UG/L	90															ND	ND	ND
Dissolved Zinc	UG/L																ND	ND	ND

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #4

PIERP SPILLWAY 4, AUGUST 2001

Month	August		August	August	August	August	August	August	August	August	August	August	August	August	August	August	August	August
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge < Less than the method detection limit AD: Awaiting data > Greater than the value noted NA: Not applicable NR: Not required

Spillway #4

PIERP SPILLWAY 4, AUGUST 2001

Month	August		August	August	August	August	August	August	August	August	August	August	August	August	August	Spillway #4	Spillway #4	Spillway #4
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4			
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																		
Sample Time	mil																NA	NA	NA
Turbidity	NTU	150 / 50															ND	ND	ND
pH	units	6.5 - 8.5															ND	ND	ND
Dissolved Oxygen	MG/L																ND	ND	ND
Dissolved Oxygen	% sat																NR	NR	NR
Salinity	ppt																NR	NR	NR
Conductivity	umhos																NR	NR	NR
Temperature	C																NR	NR	NR
Depth	ft.																NR	NR	NR
Flow	MGD																ND	ND	ND
Total Suspended Solids	MG/L	800 / 400															ND	ND	ND
Nitrite	MG/L																ND	ND	ND
Ammonium	MG/L																ND	ND	ND
Total Dissolved P	MG/L																ND	ND	ND
Total Dissolved N	MG/L																ND	ND	ND
Phosphate	MG/L																ND	ND	ND
Nitrate/Nitrite	MG/L																ND	ND	ND
Nitrate	MG/L																ND	ND	ND
Dissolved Organic N	MG/L																ND	ND	ND
Dissolved Organic P	MG/L																ND	ND	ND
Total Antimony	UG/L																ND	ND	ND
Dissolved Antimony	UG/L																ND	ND	ND
Total Arsenic	UG/L																ND	ND	ND
Dissolved Arsenic	UG/L																ND	ND	ND
Total Beryllium	UG/L																ND	ND	ND
Dissolved Beryllium	UG/L																ND	ND	ND
Total Cadmium	UG/L	43															ND	ND	ND
Dissolved Cadmium	UG/L																ND	ND	ND
Total Chromium	UG/L																ND	ND	ND
Dissolved Chromium	UG/L																ND	ND	ND
Total Copper	UG/L	6.1															ND	ND	ND
Dissolved Copper	UG/L																ND	ND	ND
Total Lead	UG/L	210															ND	ND	ND
Dissolved Lead	UG/L																ND	ND	ND
Total Mercury	UG/L	1.8															ND	ND	ND
Dissolved Mercury	UG/L																ND	ND	ND
Total Nickel	UG/L	75															ND	ND	ND
Dissolved Nickel	UG/L																ND	ND	ND
Total Selenium	UG/L	300															ND	ND	ND
Dissolved Selenium	UG/L																ND	ND	ND
Total Silver	UG/L	1.9															ND	ND	ND
Dissolved Silver	UG/L																ND	ND	ND
Total Thallium	UG/L																ND	ND	ND
Dissolved Thallium	UG/L																ND	ND	ND
Total Zinc	UG/L	90															ND	ND	ND
Dissolved Zinc	UG/L																ND	ND	ND

ND: No discharge < Less than the method detection limit AD: Awaiting data > Greater than the value noted NA: Not applicable NR: Not required

Spillway #5

PIERP SPILLWAY 5, AUGUST 2001

Month	August	State Water Quality Standards at any time / monthly avg.	August	August	August	August	August	August	August	August	August	August	August	August	August	August	August	August
Day			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location			Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No Discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #5

PIERP SPILLWAY 5, AUGUST 2001

Month	August		August	August	August	August	August	August	August	August	August	August	August	August	August	August	Spillway #5	Spillway #5	Spillway #5
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	Sp. 5	Sp. 5	5p. 5	5p. 5	5p. 5	Sp. 5	5p. 5	5p. 5	5p. 5	Sp. 5	5p. 5	5p. 5	5p. 5	5p. 5			
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																		
Sample Time	mil																NA	NA	NA
Turbidity	NTU	150 / 50															ND	ND	ND
pH	units	6.5 - 8.5															ND	ND	ND
Dissolved Oxygen	MG/L																ND	ND	ND
Dissolved Oxygen	% sat																NR	NR	NR
Salinity	ppt																NR	NR	NR
Conductivity	umhos																NR	NR	NR
Temperature	C																NR	NR	NR
Depth	ft.																ND	ND	ND
Flow	MGD																ND	ND	ND
Total Suspended Solids	MG/L	800 / 400															ND	ND	ND
Nitrite	MG/L																ND	ND	ND
Ammonium	MG/L																ND	ND	ND
Total Dissolved P	MG/L																ND	ND	ND
Total Dissolved N	MG/L																ND	ND	ND
Phosphate	MG/L																ND	ND	ND
Nitrate/Nitrite	MG/L																ND	ND	ND
Nitrate	MG/L																ND	ND	ND
Dissolved Organic N	MG/L																ND	ND	ND
Dissolved Organic P	MG/L																ND	ND	ND
Total Antimony	UG/L																ND	ND	ND
Dissolved Antimony	UG/L																ND	ND	ND
Total Arsenic	UG/L																ND	ND	ND
Dissolved Arsenic	UG/L																ND	ND	ND
Total Beryllium	UG/L																ND	ND	ND
Dissolved Beryllium	UG/L																ND	ND	ND
Total Cadmium	UG/L	43															ND	ND	ND
Dissolved Cadmium	UG/L																ND	ND	ND
Total Chromium	UG/L																ND	ND	ND
Dissolved Chromium	UG/L																ND	ND	ND
Total Copper	UG/L	6.1															ND	ND	ND
Dissolved Copper	UG/L																ND	ND	ND
Total Lead	UG/L	210															ND	ND	ND
Dissolved Lead	UG/L																ND	ND	ND
Total Mercury	UG/L	1.8															ND	ND	ND
Dissolved Mercury	UG/L																ND	ND	ND
Total Nickel	UG/L	75															ND	ND	ND
Dissolved Nickel	UG/L																ND	ND	ND
Total Selenium	UG/L	300															ND	ND	ND
Dissolved Selenium	UG/L																ND	ND	ND
Total Silver	UG/L	1.9															ND	ND	ND
Dissolved Silver	UG/L																ND	ND	ND
Total Thallium	UG/L																ND	ND	ND
Dissolved Thallium	UG/L																ND	ND	ND
Total Zinc	UG/L	90															ND	ND	ND
Dissolved Zinc	UG/L																ND	ND	ND

ND: No Discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway # 6

PIERP SPILLWAY 6, AUGUST 2001

Month	August	State Water Quality Standards at any time / monthly avg.	August	August	August	August	August	August	August	August	August	August	August	August	August	August	August	August
Day			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location			Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6
Frequency			d	d	d	d	d	d	d	w	d	d	d	d	d	m	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	P1211	P1214	ND	ND	ND	P1220	P1221	P1226	P1229	ND
Parameter	Units																		
Sample Time	mil									0830	0200				0810	0845	0745	0830	
Turbidity	NTU	150 / 50								20	50				59	45	33	37	
pH	units	6.5 - 8.5								8.89	8.77				8.51	8.76	8.93	8.97	
Dissolved Oxygen	MG/L									4.30	1.36				0.42	2.86	6.84	7.15	
Dissolved Oxygen	% sat									NR	NR				NR	NR	NR	NR	
Salinity	ppt									NR	NR				NR	NR	NR	NR	
Conductivity	umhos									NR	NR				NR	NR	NR	NR	
Temperature	C									NR	NR				NR	NR	NR	NR	
Depth	ft.									1	1				1	1	1	1	
Flow	MGD									7.31	5.30				2.69	8.16	3.08	1.58	
Total Suspended Solids	MG/L	800 / 400								42	91				82	59	46	61	
Nitrite	MG/L									0.0079						0.0195			
Ammonium	MG/L									0.460						0.935			
Total Dissolved P	MG/L									0.4623						0.7313			
Total Dissolved N	MG/L									5.60						6.31			
Phosphate	MG/L									0.2950						0.6130			
Nitrate/Nitrite	MG/L									0.075						0.143			
Nitrate	MG/L									0.067						0.124			
Dissolved Organic N	MG/L									5.06						5.23			
Dissolved Organic P	MG/L									0.1673						0.1183			
Total Antimony	UG/L														<	2.0			
Dissolved Antimony	UG/L														<	2.0			
Total Arsenic	UG/L															36.0			
Dissolved Arsenic	UG/L															36.0			
Total Beryllium	UG/L															2.0			
Dissolved Beryllium	UG/L															3.0			
Total Cadmium	UG/L	43													<	0.5			
Dissolved Cadmium	UG/L														<	0.5			
Total Chromium	UG/L														<	2.0			
Dissolved Chromium	UG/L														<	2.0			
Total Copper	UG/L	6.1														5.0			
Dissolved Copper	UG/L															4.0			
Total Lead	UG/L	210													<	2.0			
Dissolved Lead	UG/L														<	2.0			
Total Mercury	UG/L	1.8													<	0.2			
Dissolved Mercury	UG/L														<	0.2			
Total Nickel	UG/L	75														11.0			
Dissolved Nickel	UG/L															5.0			
Total Selenium	UG/L	300														11.0			
Dissolved Selenium	UG/L															12.0			
Total Silver	UG/L	1.9													<	1.0			
Dissolved Silver	UG/L														<	1.0			
Total Thallium	UG/L														<	2.0			
Dissolved Thallium	UG/L														<	2.0			
Total Zinc	UG/L	90													<	3.0			
Dissolved Zinc	UG/L														<	3.0			

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway # 6

PIERP SPILLWAY 6, AUGUST 2001

Month	August	State Water	August	August	August	August	August	August	August	August	August	August	August	August	August	Spillway # 6	Spillway # 6	Spillway # 6
Day		Quality Standards	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		at any time / monthly avg.	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6			
Frequency			d	d	d	d	w	d	d	d	d	d	d	d	d	d			
Sample #			ND	ND	P1235	ND	P1238	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																		
Sample Time	mil				1000		1300												
Turbidity	NTU	150 / 50			53		47										20	59	43
pH	units	6.5 - 8.5			8.94		8.71										8.51	8.97	8.81
Dissolved Oxygen	MG/L				13.81		16.68										0.42	16.68	6.68
Dissolved Oxygen	% sat				NR		NR										NR	NR	NR
Salinity	ppt				NR		NR										NR	NR	NR
Conductivity	umhos				NR		NR										NR	NR	NR
Temperature	C				NR		NR										NR	NR	NR
Depth	ft.				1		1										1	1	1
Flow	MGD				2.44		0.35										0.35	8.16	3.86
Total Suspended Solids	MG/L	800 / 400			70		87										42	91	67
Nitrite	MG/L						0.0054										0.0054	0.0195	0.0109
Ammonium	MG/L						0.065										0.065	0.935	0.487
Total Dissolved P	MG/L						0.5839										0.4623	0.7313	0.5925
Total Dissolved N	MG/L						2.34										2.34	6.31	4.75
Phosphate	MG/L						0.3720										0.2950	0.6130	0.4267
Nitrate/Nitrite	MG/L						0.120										0.075	0.143	0.113
Nitrate	MG/L						0.115										0.067	0.124	0.102
Dissolved Organic N	MG/L						2.16										2.16	5.23	4.15
Dissolved Organic P	MG/L						0.2119										0.1183	0.2119	0.1658
Total Antimony	UG/L																< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L																< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L																36.0	36.0	36.0
Dissolved Arsenic	UG/L																36.0	36.0	36.0
Total Beryllium	UG/L																2.0	2.0	2.0
Dissolved Beryllium	UG/L																3.0	3.0	3.0
Total Cadmium	UG/L	43															< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L																< 0.5	< 0.5	< 0.5
Total Chromium	UG/L																< 2.0	< 2.0	< 2.0
Dissolved Chromium	UG/L																< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1															5.0	5.0	5.0
Dissolved Copper	UG/L																4.0	4.0	4.0
Total Lead	UG/L	210															< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L																< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8															< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L																< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75															11.0	11.0	11.0
Dissolved Nickel	UG/L																5.0	5.0	5.0
Total Selenium	UG/L	300															11.0	11.0	11.0
Dissolved Selenium	UG/L																12.0	12.0	12.0
Total Silver	UG/L	1.9															< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L																< 1.0	< 1.0	< 1.0
Total Thallium	UG/L																< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L																< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90															< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L																< 3.0	< 3.0	< 3.0

ND: No discharge < Less than the method detection limit AD: Awaiting data > Greater than the value noted NA: Not applicable NR: Not required

00 Yard #1

PIERP 100YD-1, AUGUST 2001

Month	August	State Water Quality Standards at any time / monthly avg.	August	August	August	August	August	August	August	August	August	August	August	August	August	August	August	August
Day			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location			100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1
Frequency			d	w	d	d	d	d	y	d	d	d	d	d	d	w	d	d	d
Sample #			NA	P1202	NA	NA	NA	NA	P1208	NA	NA	NA	NA	NA	NA	P1224	NA	NA	NA
Parameter	Units																		
Sample Time	mil			0950					1030							1100			
Turbidity	NTU	150 / 50		3					6							2			
pH	units	6.5 - 8.5		7.85					7.90							7.65			
Dissolved Oxygen	MG/L			6.68					6.64							3.90			
Dissolved Oxygen	% sat			NR					NR							NR			
Salinity	ppt			NR					NR							NR			
Conductivity	umhos			NR					NR							NR			
Temperature	C			NR					NR							NR			
Depth	ft.			2					2							2			
Flow	MGD			NA					NA							NA			
Total Suspended Solids	MG/L	800 / 400		16					10							5			
Nitrite	MG/L			0.0037					0.0016							0.0042			
Ammonium	MG/L			0.031					0.025							0.072			
Total Dissolved P	MG/L			0.0149					0.0171							0.0171			
Total Dissolved N	MG/L			0.39					0.37							0.56			
Phosphate	MG/L			0.0029					0.0036							0.0061			
Nitrate/Nitrite	MG/L			0.026					0.026							0.036			
Nitrate	MG/L			0.022					0.025							0.032			
Dissolved Organic N	MG/L			0.33					0.32							0.45			
Dissolved Organic P	MG/L			0.0120					0.0135							0.0110			
Total Antimony	UG/L								5.0										
Dissolved Antimony	UG/L								4.0										
Total Arsenic	UG/L								< 2.0										
Dissolved Arsenic	UG/L								< 2.0										
Total Beryllium	UG/L								< 2.0										
Dissolved Beryllium	UG/L								< 2.0										
Total Cadmium	UG/L	43							< 0.5										
Dissolved Cadmium	UG/L								< 0.5										
Total Chromium	UG/L								< 2.0										
Dissolved Chromium	UG/L								< 2.0										
Total Copper	UG/L	6.1							< 3.0										
Dissolved Copper	UG/L								< 3.0										
Total Lead	UG/L	210							< 2.0										
Dissolved Lead	UG/L								< 2.0										
Total Mercury	UG/L	1.8							< 0.2										
Dissolved Mercury	UG/L								< 0.2										
Total Nickel	UG/L	75							3.0										
Dissolved Nickel	UG/L								3.0										
Total Selenium	UG/L	300							< 2.0										
Dissolved Selenium	UG/L								< 2.0										
Total Silver	UG/L	1.9							< 1.0										
Dissolved Silver	UG/L								< 1.0										
Total Thallium	UG/L								< 2.0										
Dissolved Thallium	UG/L								< 2.0										
Total Zinc	UG/L	90							< 3.0										
Dissolved Zinc	UG/L								< 3.0										

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #1

PIERP 100YD-1, AUGUST 2001

Month	August	State Water Quality Standards at any time / monthly avg.	August	August	August	August	August	August	August	August	August	August	August	August	August	August	100 Yard #1	100 Yard #1	100 Yard #1
Day			18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location			100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1			
Frequency			d	d	d	d	w	d	d	d	d	d	d	d	d	d			
Sample #			NA	NA	NA	NA	P1241	NA	NA	NA	NA	NA	P1248	NA	NA	NA			
Parameter	Units																		
Sample Time	mil						0200						1130				NA	NA	NA
Turbidity	NTU	150 / 50					4						7				2	7	4
pH	units	6.5 - 8.5					8.03						8.33				7.65	8.33	7.95
Dissolved Oxygen	MG/L						6.56						5.79				3.90	6.68	5.91
Dissolved Oxygen	% sat						NR						NR				NR	NR	NR
Salinity	ppt						NR						NR				NR	NR	NR
Conductivity	umhos						NR						NR				NR	NR	NR
Temperature	C						NR						NR				NR	NR	NR
Depth	ft.						2						2				2	2	2
Flow	MGD						NA						NA				NA	NA	NA
Total Suspended Solids	MG/L	800 / 400					6						16				5	16	11
Nitrite	MG/L						0.0010						0.1015				0.0010	0.1015	0.0224
Ammonium	MG/L						0.022						1.825				0.022	1.825	0.395
Total Dissolved P	MG/L						0.0173						0.0925				0.0149	0.0925	0.0318
Total Dissolved N	MG/L						0.42						2.44				0.37	2.44	0.84
Phosphate	MG/L						0.0032						0.0645				0.0029	0.0645	0.0161
Nitrate/Nitrite	MG/L						0.028						0.138				0.026	0.138	0.051
Nitrate	MG/L						0.027						0.037				0.022	0.037	0.029
Dissolved Organic N	MG/L						0.37						0.48				0.32	0.48	0.39
Dissolved Organic P	MG/L						0.0141						0.0280				0.0110	0.0280	0.0157
Total Antimony	UG/L																5.0	5.0	5.0
Dissolved Antimony	UG/L																4.0	4.0	4.0
Total Arsenic	UG/L																< 2.0	< 2.0	< 2.0
Dissolved Arsenic	UG/L																< 2.0	< 2.0	< 2.0
Total Beryllium	UG/L																< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L																< 0.5	< 0.5	< 0.5
Total Cadmium	UG/L	43															< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L																< 2.0	< 2.0	< 2.0
Total Chromium	UG/L																< 2.0	< 2.0	< 2.0
Dissolved Chromium	UG/L																< 3.0	< 3.0	< 3.0
Total Copper	UG/L	6.1															< 3.0	< 3.0	< 3.0
Dissolved Copper	UG/L																< 2.0	< 2.0	< 2.0
Total Lead	UG/L	210															< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L																< 0.2	< 0.2	< 0.2
Total Mercury	UG/L	1.8															< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L																3.0	3.0	3.0
Total Nickel	UG/L	75															3.0	3.0	3.0
Dissolved Nickel	UG/L																< 2.0	< 2.0	< 2.0
Total Selenium	UG/L	300															< 2.0	< 2.0	< 2.0
Dissolved Selenium	UG/L																< 1.0	< 1.0	< 1.0
Total Silver	UG/L	1.9															< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L																< 2.0	< 2.0	< 2.0
Total Thallium	UG/L																< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L																< 3.0	< 3.0	< 3.0
Total Zinc	UG/L	90															< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

00 Yard #2

PIERP 100YD-2, AUGUST 2001

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	August 1 100yd-2 d NA	August 2 100yd-2 d NA	August 3 100yd-2 d NA	August 4 100yd-2 d NA	August 5 100yd-2 d NA	August 6 100yd-2 d NA	August 7 100yd-2 d NA	August 8 100yd-2 d NA	August 9 100yd-2 d NA	August 10 100yd-2 d NA	August 11 100yd-2 d NA	August 12 100yd-2 d NA	August 13 100yd-2 d NA	August 14 100yd-2 d NA	August 15 100yd-2 d NA	August 16 100yd-2 d NA	August 17 100yd-2 d NA
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #2

PIERP 100YD-2, AUGUST 2001

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	August 18 100yd-2 d NA	August 19 100yd-2 d NA	August 20 100yd-2 d NA	August 21 100yd-2 d NA	August 22 100yd-2 d NA	August 23 100yd-2 d NA	August 24 100yd-2 d NA	August 25 100yd-2 d NA	August 26 100yd-2 d NA	August 27 100yd-2 d NA	August 28 100yd-2 d NA	August 29 100yd-2 d NA	August 30 100yd-2 d NA	August 31 100yd-2 d NA	100 Yard #2 Minimum	100 Yard #2 Maximum	100 Yard #2 Average
Sample Time	mil																NA	NA	NA
Turbidity	NTU	150 / 50															NA	NA	NA
pH	units	6.5 - 8.5															NA	NA	NA
Dissolved Oxygen	MG/L																NA	NA	NA
Dissolved Oxygen	% sat																NR	NR	NR
Salinity	ppt																NR	NR	NR
Conductivity	umhos																NR	NR	NR
Temperature	C																NR	NR	NR
Depth	ft.																NA	NA	NA
Flow	MGD																NA	NA	NA
Total Suspended Solids	MG/L	800 / 400															NA	NA	NA
Nitrite	MG/L																NA	NA	NA
Ammonium	MG/L																NA	NA	NA
Total Dissolved P	MG/L																NA	NA	NA
Total Dissolved N	MG/L																NA	NA	NA
Phosphate	MG/L																NA	NA	NA
Nitrate/Nitrite	MG/L																NA	NA	NA
Nitrate	MG/L																NA	NA	NA
Dissolved Organic N	MG/L																NA	NA	NA
Dissolved Organic P	MG/L																NA	NA	NA
Total Antimony	UG/L																NA	NA	NA
Dissolved Antimony	UG/L																NA	NA	NA
Total Arsenic	UG/L																NA	NA	NA
Dissolved Arsenic	UG/L																NA	NA	NA
Total Beryllium	UG/L																NA	NA	NA
Dissolved Beryllium	UG/L																NA	NA	NA
Total Cadmium	UG/L	43															NA	NA	NA
Dissolved Cadmium	UG/L																NA	NA	NA
Total Chromium	UG/L																NA	NA	NA
Dissolved Chromium	UG/L																NA	NA	NA
Total Copper	UG/L	6.1															NA	NA	NA
Dissolved Copper	UG/L																NA	NA	NA
Total Lead	UG/L	210															NA	NA	NA
Dissolved Lead	UG/L																NA	NA	NA
Total Mercury	UG/L	1.8															NA	NA	NA
Dissolved Mercury	UG/L																NA	NA	NA
Total Nickel	UG/L	75															NA	NA	NA
Dissolved Nickel	UG/L																NA	NA	NA
Total Selenium	UG/L	300															NA	NA	NA
Dissolved Selenium	UG/L																NA	NA	NA
Total Silver	UG/L	1.9															NA	NA	NA
Dissolved Silver	UG/L																NA	NA	NA
Total Thallium	UG/L																NA	NA	NA
Dissolved Thallium	UG/L																NA	NA	NA
Total Zinc	UG/L	90															NA	NA	NA
Dissolved Zinc	UG/L																NA	NA	NA

ND: No discharge < Less than the method detection limit AD: Awaiting data > Greater than the value noted NA: Not applicable NR: Not required

100 Yard #4

PIERP 100YD-4, AUGUST 2001

Month		August	August	August	August	August	August	August	August	August	August	August	August	August	August	August	August	August
Day			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		State Water	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4
Frequency		Quality Standards	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #		at any time / monthly avg.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #4

PIERP 100YD-4, AUGUST 2001

Month	August	State Water Quality Standards at any time / monthly avg.	August 18	August 19	August 20	August 21	August 22	August 23	August 24	August 25	August 26	August 27	August 28	August 29	August 30	August 31	100 Yard #4 Minimum	100 Yard #4 Maximum	100 Yard #4 Average
Day			100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4			
Location			d	d	d	d	d	d	d	d	d	d	d	d	d	d			
Frequency			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Sample #																			
Parameter	Units																		
Sample Time	mil																NA	NA	NA
Turbidity	NTU	150 / 50															NA	NA	NA
pH	units	6.5 - 8.5															NA	NA	NA
Dissolved Oxygen	MG/L																NR	NR	NR
Dissolved Oxygen	% sat																NR	NR	NR
Salinity	ppt																NR	NR	NR
Conductivity	umhos																NR	NR	NR
Temperature	C																NA	NA	NA
Depth	ft.																NA	NA	NA
Flow	MGD																NA	NA	NA
Total Suspended Solids	MG/L	800 / 400															NA	NA	NA
Nitrite	MG/L																NA	NA	NA
Ammonium	MG/L																NA	NA	NA
Total Dissolved P	MG/L																NA	NA	NA
Total Dissolved N	MG/L																NA	NA	NA
Phosphate	MG/L																NA	NA	NA
Nitrate/Nitrite	MG/L																NA	NA	NA
Nitrate	MG/L																NA	NA	NA
Dissolved Organic N	MG/L																NA	NA	NA
Dissolved Organic P	MG/L																NA	NA	NA
Total Antimony	UG/L																NA	NA	NA
Dissolved Antimony	UG/L																NA	NA	NA
Total Arsenic	UG/L																NA	NA	NA
Dissolved Arsenic	UG/L																NA	NA	NA
Total Beryllium	UG/L																NA	NA	NA
Dissolved Beryllium	UG/L																NA	NA	NA
Total Cadmium	UG/L	43															NA	NA	NA
Dissolved Cadmium	UG/L																NA	NA	NA
Total Chromium	UG/L																NA	NA	NA
Dissolved Chromium	UG/L																NA	NA	NA
Total Copper	UG/L	6.1															NA	NA	NA
Dissolved Copper	UG/L																NA	NA	NA
Total Lead	UG/L	210															NA	NA	NA
Dissolved Lead	UG/L																NA	NA	NA
Total Mercury	UG/L	1.8															NA	NA	NA
Dissolved Mercury	UG/L																NA	NA	NA
Total Nickel	UG/L	75															NA	NA	NA
Dissolved Nickel	UG/L																NA	NA	NA
Total Selenium	UG/L	300															NA	NA	NA
Dissolved Selenium	UG/L																NA	NA	NA
Total Silver	UG/L	1.9															NA	NA	NA
Dissolved Silver	UG/L																NA	NA	NA
Total Thallium	UG/L																NA	NA	NA
Dissolved Thallium	UG/L																NA	NA	NA
Total Zinc	UG/L	90															NA	NA	NA
Dissolved Zinc	UG/L																NA	NA	NA

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #5

PIERP 100YD-5, AUGUST 2001

Month	August	State Water Quality Standards at any time / monthly avg.	August	August	August	August	August	August	August	August	August	August	August	August	August	August	August	August
Day			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location			100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge < Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #5

PIERP 100YD-5, AUGUST 2001

Month	August	State Water Quality Standards at any time / monthly avg.	August 18	August 19	August 20	August 21	August 22	August 23	August 24	August 25	August 26	August 27	August 28	August 29	August 30	August 31	100 Yard #5 Minimum	100 Yard #5 Maximum	100 Yard #5 Average
Day			100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5			
Location			d	d	d	d	d	d	d	d	d	d	d	d	d	d			
Frequency			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Sample #																			
Parameter	Units																		
Sample Time	mil																NA	NA	NA
Turbidity	NTU	150 / 50															NA	NA	NA
pH	units	6.5 - 8.5															NA	NA	NA
Dissolved Oxygen	MG/L																NA	NA	NA
Dissolved Oxygen	% sat																NR	NR	NR
Salinity	ppt																NR	NR	NR
Conductivity	umhos																NR	NR	NR
Temperature	C																NR	NR	NR
Depth	ft																NA	NA	NA
Flow	MGD																NA	NA	NA
Total Suspended Solids	MG/L	800 / 400															NA	NA	NA
Nitrite	MG/L																NA	NA	NA
Ammonium	MG/L																NA	NA	NA
Total Dissolved P	MG/L																NA	NA	NA
Total Dissolved N	MG/L																NA	NA	NA
Phosphate	MG/L																NA	NA	NA
Nitrate/Nitrite	MG/L																NA	NA	NA
Nitrate	MG/L																NA	NA	NA
Dissolved Organic N	MG/L																NA	NA	NA
Dissolved Organic P	MG/L																NA	NA	NA
Total Antimony	UG/L																NA	NA	NA
Dissolved Antimony	UG/L																NA	NA	NA
Total Arsenic	UG/L																NA	NA	NA
Dissolved Arsenic	UG/L																NA	NA	NA
Total Beryllium	UG/L																NA	NA	NA
Dissolved Beryllium	UG/L																NA	NA	NA
Total Cadmium	UG/L	43															NA	NA	NA
Dissolved Cadmium	UG/L																NA	NA	NA
Total Chromium	UG/L																NA	NA	NA
Dissolved Chromium	UG/L																NA	NA	NA
Total Copper	UG/L	6.1															NA	NA	NA
Dissolved Copper	UG/L																NA	NA	NA
Total Lead	UG/L	210															NA	NA	NA
Dissolved Lead	UG/L																NA	NA	NA
Total Mercury	UG/L	1.8															NA	NA	NA
Dissolved Mercury	UG/L																NA	NA	NA
Total Nickel	UG/L	75															NA	NA	NA
Dissolved Nickel	UG/L																NA	NA	NA
Total Selenium	UG/L	300															NA	NA	NA
Dissolved Selenium	UG/L																NA	NA	NA
Total Silver	UG/L	1.9															NA	NA	NA
Dissolved Silver	UG/L																NA	NA	NA
Total Thallium	UG/L																NA	NA	NA
Dissolved Thallium	UG/L																NA	NA	NA
Total Zinc	UG/L	90															NA	NA	NA
Dissolved Zinc	UG/L																NA	NA	NA

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #6

PIERP 100YD-6, AUGUST 2001

Month	August	State Water	August	August	August	August	August	August	August	August	August	August	August	August	August	August	August	August
Day		Quality Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		at any time / monthly avg.	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6
Frequency			d	d	d	d	d	d	d	w	d	d	d	d	d	m	d	d	d
Sample #			NA	NA	NA	NA	NA	NA	NA	P1213	NA	NA	NA	NA	NA	P1222	NA	NA	NA
Parameter	Units																		
Sample Time	mil									1000						0915			
Turbidity	NTU	150 / 50								25						19			
pH	units	6.5 - 8.5								8.43						7.58			
Dissolved Oxygen	MG/L									5.10						3.95			
Dissolved Oxygen	% sat									NR						NR			
Salinity	ppt									NR						NR			
Conductivity	umhos									NR						NR			
Temperature	C									NR						NR			
Depth	ft.									2						2			
Flow	MGD									NA						NA			
Total Suspended Solids	MG/L	800 / 400								39						30			
Nitrite	MG/L									0.0024						0.0052			
Ammonium	MG/L									0.156						0.122			
Total Dissolved P	MG/L									0.0904						0.0164			
Total Dissolved N	MG/L									1.03						0.49			
Phosphate	MG/L									0.0519						0.0038			
Nitrate/Nitrite	MG/L									0.040						0.059			
Nitrate	MG/L									0.038						0.054			
Dissolved Organic N	MG/L									0.83						0.31			
Dissolved Organic P	MG/L									0.0385						0.0126			
Total Antimony	UG/L															< 2.0			
Dissolved Antimony	UG/L															< 2.0			
Total Arsenic	UG/L															18.0			
Dissolved Arsenic	UG/L															17.0			
Total Beryllium	UG/L															2.0			
Dissolved Beryllium	UG/L															2.0			
Total Cadmium	UG/L	43														< 0.5			
Dissolved Cadmium	UG/L															< 0.5			
Total Chromium	UG/L															< 2.0			
Dissolved Chromium	UG/L															< 2.0			
Total Copper	UG/L	6.1														3.0			
Dissolved Copper	UG/L															3.0			
Total Lead	UG/L	210														< 2.0			
Dissolved Lead	UG/L															< 2.0			
Total Mercury	UG/L	1.8														< 0.2			
Dissolved Mercury	UG/L															< 0.2			
Total Nickel	UG/L	75														3.0			
Dissolved Nickel	UG/L															2.0			
Total Selenium	UG/L	300														10.0			
Dissolved Selenium	UG/L															13.0			
Total Silver	UG/L	1.9														< 1.0			
Dissolved Silver	UG/L															< 1.0			
Total Thallium	UG/L															< 2.0			
Dissolved Thallium	UG/L															< 2.0			
Total Zinc	UG/L	90														< 3.0			
Dissolved Zinc	UG/L															< 3.0			

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #6

PIERP 100YD-6, AUGUST 2001

Month	August	State Water Quality Standards at any time / monthly avg.	August 18	August 19	August 20	August 21	August 22	August 23	August 24	August 25	August 26	August 27	August 28	August 29	August 30	August 31	100 Yard #6 Minimum	100 Yard #6 Maximum	100 Yard #6 Average
Day			100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6			
Location			w	d	d	w	w	d	d	d	d	m	d	d	d	d			
Frequency			NA	NA	NA	NA	P1239	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Sample #																			
Parameter	Units																		
Sample Time	mil						1330										NA	NA	NA
Turbidity	NTU	150 / 50					15										15	25	20
pH	units	6.5 - 8.5					8.23										7.58	8.43	8.08
Dissolved Oxygen	MG/L						6.17										3.95	6.17	5.07
Dissolved Oxygen	% sat						NR										NR	NR	NR
Salinity	ppt						NR										NR	NR	NR
Conductivity	umhos						NR										NR	NR	NR
Temperature	C						NR										NR	NR	NR
Depth	ft						2										2	2	2
Flow	MGD						NA										NA	NA	NA
Total Suspended Solids	MG/L	800 / 400					20										20	39	30
Nitrite	MG/L						0.0060										0.0024	0.0060	0.0045
Ammonium	MG/L						0.042										0.042	0.156	0.107
Total Dissolved P	MG/L						0.0190										0.0164	0.0904	0.0419
Total Dissolved N	MG/L						0.75										0.49	1.03	0.76
Phosphate	MG/L						0.0050										0.0038	0.0519	0.0202
Nitrate/Nitrite	MG/L						0.061										0.040	0.061	0.054
Nitrate	MG/L						0.055										0.038	0.055	0.049
Dissolved Organic N	MG/L						0.65										0.31	0.83	0.60
Dissolved Organic P	MG/L						0.0140										0.0126	0.0385	0.0217
Total Antimony	UG/L																< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L																< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L																18.0	18.0	18.0
Dissolved Arsenic	UG/L																17.0	17.0	17.0
Total Beryllium	UG/L																2.0	2.0	2.0
Dissolved Beryllium	UG/L																2.0	2.0	2.0
Total Cadmium	UG/L	43															< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L																< 0.5	< 0.5	< 0.5
Total Chromium	UG/L																< 2.0	< 2.0	< 2.0
Dissolved Chromium	UG/L																< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1															3.0	3.0	3.0
Dissolved Copper	UG/L																3.0	3.0	3.0
Total Lead	UG/L	210															< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L																< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8															< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L																< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75															3.0	3.0	3.0
Dissolved Nickel	UG/L																2.0	2.0	2.0
Total Selenium	UG/L	300															10.0	10.0	10.0
Dissolved Selenium	UG/L																13.0	13.0	13.0
Total Silver	UG/L	1.9															< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L																< 1.0	< 1.0	< 1.0
Total Thallium	UG/L																< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L																< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90															< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L																< 3.0	< 3.0	< 3.0

ND: No discharge < Less than the method detection limit AD: Awaiting data > Greater than the value noted NA: Not applicable NR: Not required

Reference Point WQR1

PIERP WQR 1, SEPTEMBER 2001

Month	September		September	September	September	September	September	September	September	September	September	September	September	September	September	September	September	September
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1
Frequency		at any time / monthly avg.	d	d	d	d	d	d	m	d	d	d	d	w	d	d	d	d	d
Sample #			NA	NA	NA	NA	NA	NA	P1267	NA	NA	NA	NA	P1278	NA	NA	NA	NA	NA
Parameter	Units																		
Sample Time	mil								1355					1415					
Turbidity	NTU	150 / 50							3					2					
pH	units	6.5 - 8.5							8.09					8.90					
Dissolved Oxygen	MG/L								7.90					7.23					
Dissolved Oxygen	% sat								NR					NR					
Salinity	ppt								NR					NR					
Conductivity	umhos								NR					NR					
Temperature	C								NR					NR					
Depth	ft								6					6					
Flow	MGD								NA					NA					
Total Suspended Solids	MG/L	800 / 400							7					7					
Nitrite	MG/L								AD					AD					
Ammonium	MG/L								AD					AD					
Total Dissolved P	MG/L								AD					AD					
Total Dissolved N	MG/L								AD					AD					
Phosphate	MG/L								AD					AD					
Nitrate/Nitrite	MG/L								AD					AD					
Nitrate	MG/L								AD					AD					
Dissolved Organic N	MG/L								AD					AD					
Dissolved Organic P	MG/L								AD					AD					
Total Antimony	UG/L								< 2.0										
Dissolved Antimony	UG/L								< 2.0										
Total Arsenic	UG/L								20.0										
Dissolved Arsenic	UG/L								17.0										
Total Beryllium	UG/L								< 2.0										
Dissolved Beryllium	UG/L								< 2.0										
Total Cadmium	UG/L	43							< 0.5										
Dissolved Cadmium	UG/L								< 0.5										
Total Chromium	UG/L								< 2.0										
Dissolved Chromium	UG/L								< 2.0										
Total Copper	UG/L	6.1							< 3.0										
Dissolved Copper	UG/L								< 3.0										
Total Lead	UG/L	210							< 2.0										
Dissolved Lead	UG/L								< 2.0										
Total Mercury	UG/L	1.8							< 0.2										
Dissolved Mercury	UG/L								< 0.2										
Total Nickel	UG/L	75							2.0										
Dissolved Nickel	UG/L								2.0										
Total Selenium	UG/L	300							12.0										
Dissolved Selenium	UG/L								12.0										
Total Silver	UG/L	1.9							< 1.0										
Dissolved Silver	UG/L								< 1.0										
Total Thallium	UG/L								< 2.0										
Dissolved Thallium	UG/L								< 2.0										
Total Zinc	UG/L	90							< 3.0										
Dissolved Zinc	UG/L								< 3.0										

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Reference Point WQR1

PIERP WQR 1, SEPTEMBER 2001

Month	September		September	September	September	September	September	September	September	September	September	September	September	September	Reference Point	Reference Point	Reference Point
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	WQR1	WQR1	WQR1
Location		Quality Standards	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	Minimum	Maximum	Average
Frequency		at any time / monthly avg.	d	d	w	d	d	d	d	d	d	d	w	d	d			
Sample #			NA	NA	P1288	NA	NA	NA	NA	NA	NA	NA	P1298	NA	NA			
Parameter	Units																	
Sample Time	mil				1410								0905			NA	NA	NA
Turbidity	NTU	150 / 50			2								3			2	3	3
pH	units	6.5 - 8.5			7.61								7.82			7.61	8.90	8.11
Dissolved Oxygen	MG/L				5.71								8.30			5.71	8.30	7.29
Dissolved Oxygen	% sat				NR								98.60			98.60	98.60	98.60
Salinity	ppt				NR								16			16	16	16
Conductivity	umhos				NR								23			23	23	23
Temperature	C				NR								20.00			20.00	20.00	20.00
Depth	ft				6								6			6	6	6
Flow	MGD				NA								NA			NA	NA	NA
Total Suspended Solids	MG/L	800 / 400			19								10			7	19	11
Nitrite	MG/L				AD								AD			AD	AD	AD
Ammonium	MG/L				AD								AD			AD	AD	AD
Total Dissolved P	MG/L				AD								AD			AD	AD	AD
Total Dissolved N	MG/L				AD								AD			AD	AD	AD
Phosphate	MG/L				AD								AD			AD	AD	AD
Nitrate/Nitrite	MG/L				AD								AD			AD	AD	AD
Nitrate	MG/L				AD								AD			AD	AD	AD
Dissolved Organic N	MG/L				AD								AD			AD	AD	AD
Dissolved Organic P	MG/L				AD								AD			AD	AD	AD
Total Antimony	UG/L															< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L															< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L															20.0	20.0	20.0
Dissolved Arsenic	UG/L															17.0	17.0	17.0
Total Beryllium	UG/L															< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L															< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43														< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L															< 0.5	< 0.5	< 0.5
Total Chromium	UG/L															< 2.0	< 2.0	< 2.0
Dissolved Chromium	UG/L															< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1														< 3.0	< 3.0	< 3.0
Dissolved Copper	UG/L															< 3.0	< 3.0	< 3.0
Total Lead	UG/L	210														< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L															< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8														< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L															< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75														2.0	2.0	2.0
Dissolved Nickel	UG/L															2.0	2.0	2.0
Total Selenium	UG/L	300														12.0	12.0	12.0
Dissolved Selenium	UG/L															12.0	12.0	12.0
Total Silver	UG/L	1.9														< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L															< 1.0	< 1.0	< 1.0
Total Thallium	UG/L															< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L															< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90														< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L															< 3.0	< 3.0	< 3.0

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #1

PIERP SPILLWAY 1, SEPTEMBER 2001

Month	September		September	September	September	September	September	September	September	September	September	September	September	September	September	September	September	September
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	Sp. 1	Sp.1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1
Frequency		at any time / monthly avg.	d	d	d	d	d	d	m	d	d	d	d	w	d	d	d	d	d
Sample #			P1253	P1254	P1255	P1256	P1261	P1262	P1265	P1268	P1269	P1271	P1273	P1276	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil		0830	0830	0330	0500	0030	0030	1630	1230	1200	1315	0845	0930					
Turbidity	NTU	150 / 50	16	19	18	19	31	22	21	24	17	23	12	10					
pH	units	6.5 - 8.5	8.59	8.68	8.58	8.68	8.69	8.66	8.65	8.48	8.59	8.59	8.52	8.47					
Dissolved Oxygen	MG/L		12.44	13.65	14.17	11.14	14.65	11.30	13.30	11.01	10.05	7.55	4.75	6.63					
Dissolved Oxygen	% sat		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR					
Salinity	ppt		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR					
Conductivity	umhos		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR					
Temperature	C		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR					
Depth	ft		1	1	1	1	1	1	1	1	1	1	1	1					
Flow	MGD		15.60	12.36	5.74	6.62	9.64	6.98	1.73	3.29	2.67	2.92	5.92	3.75					
Total Suspended Solids	MG/L	800 / 400	42	54	49	48	68	69	52	54	49	51	30	20					
Nitrite	MG/L								AD					AD					
Ammonium	MG/L								AD					AD					
Total Dissolved P	MG/L								AD					AD					
Total Dissolved N	MG/L								AD					AD					
Phosphate	MG/L								AD					AD					
Nitrate/Nitrite	MG/L								AD					AD					
Nitrate	MG/L								AD					AD					
Dissolved Organic N	MG/L								AD					AD					
Dissolved Organic P	MG/L								AD					AD					
Total Antimony	UG/L							<	2.0										
Dissolved Antimony	UG/L							<	2.0										
Total Arsenic	UG/L								40.0										
Dissolved Arsenic	UG/L								42.0										
Total Beryllium	UG/L							<	2.0										
Dissolved Beryllium	UG/L							<	2.0										
Total Cadmium	UG/L	43						<	0.5										
Dissolved Cadmium	UG/L							<	0.5										
Total Chromium	UG/L							<	2.0										
Dissolved Chromium	UG/L								5.0										
Total Copper	UG/L	6.1							16.0										
Dissolved Copper	UG/L								13.0										
Total Lead	UG/L	210						<	2.0										
Dissolved Lead	UG/L							<	2.0										
Total Mercury	UG/L	1.8						<	0.2										
Dissolved Mercury	UG/L							<	0.2										
Total Nickel	UG/L	75							10.0										
Dissolved Nickel	UG/L								8.0										
Total Selenium	UG/L	300							14.0										
Dissolved Selenium	UG/L								14.0										
Total Silver	UG/L	1.9						<	1.0										
Dissolved Silver	UG/L							<	1.0										
Total Thallium	UG/L							<	2.0										
Dissolved Thallium	UG/L							<	2.0										
Total Zinc	UG/L	90						<	3.0										
Dissolved Zinc	UG/L							<	3.0										

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #1

PIERP SPILLWAY 1, SEPTEMBER 2001

Month	September	State Water Quality Standards at any time / monthly avg.	September	September	September	September	September	September	September	September	September	September	September	September	Spillway #1	Spillway #1	Spillway #1
Day			18	19	20	21	22	23	24	25	26	27	28	29	30	Minimum	Maximum	Average
Location			Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. t	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1			
Frequency			d	d	w	d	d	d	d	d	d	d	w	d	d			
Sample #			P1284	P1285	P1286	ND	P1293	P1294	ND	ND	P1295	P1296	P1297	P1300	ND			
Parameter	Units																	
Sample Time	mil		1325	1230	1320		1220	0330			0900	1030	0545	1230		NA	NA	NA
Turbidity	NTU	150 / 50	23	18	34		24	13			20	16	17	19		10	34	20
pH	units	6.5 - 8.5	8.82	8.81	8.56		8.66	8.60			8.60	8.58	8.16	8.71		8.16	8.82	8.60
Dissolved Oxygen	MG/L		20.00	15.90	6.79		9.04	9.44			6.60	11.36	9.75	8.64		4.75	20.00	10.86
Dissolved Oxygen	% sat		NR	NR	NR		NR	131.00			78.30	127.30	117.60	95.00		78.30	131.00	109.84
Salinity	ppt		NR	NR	NR		NR	14			14	14	14	14		14	14	14
Conductivity	umhos		NR	NR	NR		NR	24			20	23	20	23		20	24	22
Temperature	C		NR	NR	NR		NR	26.90			18.70	18.80	17.30	16.50		16.50	26.90	19.64
Depth	ft		1	1	1		1	1			1	1	t	t		1	1	1
Flow	MGD		0.85	1.24	1.67		1.01	0.45			1.25	0.84	1.25	0.84		0.45	15.60	4.12
Total Suspended Solids	MG/L	800 / 400	69	52	56		40	40			37	30	40	46		20	69	47
Nitrite	MG/L				AD								AD			AD	AD	AD
Ammonium	MG/L				AD								AD			AD	AD	AD
Total Dissolved P	MG/L				AD								AD			AD	AD	AD
Total Dissolved N	MG/L				AD								AD			AD	AD	AD
Phosphate	MG/L				AD								AD			AD	AD	AD
Nitrate/Nitrite	MG/L				AD								AD			AD	AD	AD
Nitrate	MG/L				AD								AD			AD	AD	AD
Dissolved Organic N	MG/L				AD								AD			AD	AD	AD
Dissolved Organic P	MG/L				AD								AD			AD	AD	AD
Total Antimony	UG/L															< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L															< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L															40.0	40.0	40.0
Dissolved Arsenic	UG/L															42.0	42.0	42.0
Total Beryllium	UG/L															< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L															< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43														< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L															< 0.5	< 0.5	< 0.5
Total Chromium	UG/L															< 2.0	< 2.0	< 2.0
Dissolved Chromium	UG/L															< 5.0	< 5.0	< 5.0
Total Copper	UG/L	6.1														16.0	16.0	16.0
Dissolved Copper	UG/L															13.0	13.0	13.0
Total Lead	UG/L	210														< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L															< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8														< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L															< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75														10.0	10.0	10.0
Dissolved Nickel	UG/L															8.0	8.0	8.0
Total Selenium	UG/L	300														14.0	14.0	14.0
Dissolved Selenium	UG/L															14.0	14.0	14.0
Total Silver	UG/L	1.9														< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L															< 1.0	< 1.0	< 1.0
Total Thallium	UG/L															< 2.0	< 2.0	< 2.0
Dissolved Thallium	UG/L															< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90														< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L															< 3.0	< 3.0	< 3.0

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #2

PIERP SPILLWAY 2, SEPTEMBER 2001

Month	September		September	September	September	September	September	September	September	September	September	September	September	September	September	September	September	September
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	Sp. 2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #2

PIERP SPILLWAY 2, SEPTEMBER 2001

Month	September		September	September	September	September	September	September	September	September	September	September	September	September	Spillway #2	Spillway #2	Spillway #2
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	Minimum	Maximum	Average
Location		Quality Standards	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2			
Frequency		at any time / monthly avg.	w	d	d	d	d	d	d	d	d	m	d	d	d			
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																	
Sample Time	mil															NA	NA	NA
Turbidity	NTU	150 / 50														ND	ND	ND
pH	units	6.5 - 8.5														ND	ND	ND
Dissolved Oxygen	MG/L															ND	ND	ND
Dissolved Oxygen	% sat															ND	ND	ND
Salinity	ppt															ND	ND	ND
Conductivity	umhos															ND	ND	ND
Temperature	C															ND	ND	ND
Depth	ft.															ND	ND	ND
Flow	MGD															ND	ND	ND
Total Suspended Solids	MG/L	800 / 400														ND	ND	ND
Nitrite	MG/L															ND	ND	ND
Ammonium	MG/L															ND	ND	ND
Total Dissolved P	MG/L															ND	ND	ND
Total Dissolved N	MG/L															ND	ND	ND
Phosphate	MG/L															ND	ND	ND
Nitrate/Nitrite	MG/L															ND	ND	ND
Nitrate	MG/L															ND	ND	ND
Dissolved Organic N	MG/L															ND	ND	ND
Dissolved Organic P	MG/L															ND	ND	ND
Total Antimony	UG/L															ND	ND	ND
Dissolved Antimony	UG/L															ND	ND	ND
Total Arsenic	UG/L															ND	ND	ND
Dissolved Arsenic	UG/L															ND	ND	ND
Total Beryllium	UG/L															ND	ND	ND
Dissolved Beryllium	UG/L															ND	ND	ND
Total Cadmium	UG/L	43														ND	ND	ND
Dissolved Cadmium	UG/L															ND	ND	ND
Total Chromium	UG/L															ND	ND	ND
Dissolved Chromium	UG/L															ND	ND	ND
Total Copper	UG/L	6.1														ND	ND	ND
Dissolved Copper	UG/L															ND	ND	ND
Total Lead	UG/L	210														ND	ND	ND
Dissolved Lead	UG/L															ND	ND	ND
Total Mercury	UG/L	1.8														ND	ND	ND
Dissolved Mercury	UG/L															ND	ND	ND
Total Nickel	UG/L	75														ND	ND	ND
Dissolved Nickel	UG/L															ND	ND	ND
Total Selenium	UG/L	300														ND	ND	ND
Dissolved Selenium	UG/L															ND	ND	ND
Total Silver	UG/L	1.9														ND	ND	ND
Dissolved Silver	UG/L															ND	ND	ND
Total Thallium	UG/L															ND	ND	ND
Dissolved Thallium	UG/L															ND	ND	ND
Total Zinc	UG/L	90														ND	ND	ND
Dissolved Zinc	UG/L															ND	ND	ND

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #4

PIERP SPILLWAY 4, SEPTEMBER 2001

Month			September	September	September	September	September	September	September	September	September	September	September	September	September	September	September	September
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #4

PIERP SPILLWAY 4, SEPTEMBER 2001

Month	September		September	September	September	September	September	September	September	September	September	September	September	September	Spillway #4	Spillway #4	Spillway #4
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	Minimum	Maximum	Average
Location		Quality Standards	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4			
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																	
Sample Time	mil															NA	NA	NA
Turbidity	NTU	150 / 50														ND	ND	ND
pH	units	6.5 - 8.5														ND	ND	ND
Dissolved Oxygen	MG/L															ND	ND	ND
Dissolved Oxygen	% sat															ND	ND	ND
Salinity	ppt															ND	ND	ND
Conductivity	umhos															ND	ND	ND
Temperature	C															ND	ND	ND
Depth	ft.															ND	ND	ND
Flow	MGD															ND	ND	ND
Total Suspended Solids	MG/L	800 / 400														ND	ND	ND
Nitrite	MG/L															ND	ND	ND
Ammonium	MG/L															ND	ND	ND
Total Dissolved P	MG/L															ND	ND	ND
Total Dissolved N	MG/L															ND	ND	ND
Phosphate	MG/L															ND	ND	ND
Nitrate/Nitrite	MG/L															ND	ND	ND
Nitrate	MG/L															ND	ND	ND
Dissolved Organic N	MG/L															ND	ND	ND
Dissolved Organic P	MG/L															ND	ND	ND
Total Antimony	UG/L															ND	ND	ND
Dissolved Antimony	UG/L															ND	ND	ND
Total Arsenic	UG/L															ND	ND	ND
Dissolved Arsenic	UG/L															ND	ND	ND
Total Beryllium	UG/L															ND	ND	ND
Dissolved Beryllium	UG/L															ND	ND	ND
Total Cadmium	UG/L	43														ND	ND	ND
Dissolved Cadmium	UG/L															ND	ND	ND
Total Chromium	UG/L															ND	ND	ND
Dissolved Chromium	UG/L															ND	ND	ND
Total Copper	UG/L	6.1														ND	ND	ND
Dissolved Copper	UG/L															ND	ND	ND
Total Lead	UG/L	210														ND	ND	ND
Dissolved Lead	UG/L															ND	ND	ND
Total Mercury	UG/L	1.8														ND	ND	ND
Dissolved Mercury	UG/L															ND	ND	ND
Total Nickel	UG/L	75														ND	ND	ND
Dissolved Nickel	UG/L															ND	ND	ND
Total Selenium	UG/L	300														ND	ND	ND
Dissolved Selenium	UG/L															ND	ND	ND
Total Silver	UG/L	1.9														ND	ND	ND
Dissolved Silver	UG/L															ND	ND	ND
Total Thallium	UG/L															ND	ND	ND
Dissolved Thallium	UG/L															ND	ND	ND
Total Zinc	UG/L	90														ND	ND	ND
Dissolved Zinc	UG/L															ND	ND	ND

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #5

PIERP SPILLWAY 5, SEPTEMBER 2001

Month	September	State Water	September	September	September	September	September	September	September	September	September	September	September	September	September	September	September	September
Day		Quality Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		at any time / monthly avg.	Sp. S	Sp. S	Sp. S	Sp. 5	Sp. S	Sp. S	Sp. S	Sp. 5	Sp. S	Sp. S	Sp. 5	Sp. S	Sp. S	Sp. S	Sp. S	Sp. S	Sp. S
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge < Less than the method detection limit AD: Awaiting data > Greater than the value noted NA: Not applicable NR: Not required

Spillway #5

PIERP SPILLWAY 5, SEPTEMBER 2001

Month	September		September	September	September	September	September	September	September	September	September	September	September	September	Spillway #5	Spillway #5	Spillway #5
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	Minimum	Maximum	Average
Location		Quality Standards	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5			
Frequency		at any time / monthly avg.	w	d	d	w	d	d	d	d	d	m	d	d	d			
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																	
Sample Time	mil															NA	NA	NA
Turbidity	NTU	150 / 50														ND	ND	ND
pH	units	6.5 - 8.5														ND	ND	ND
Dissolved Oxygen	MG/L															ND	ND	ND
Dissolved Oxygen	% sat															ND	ND	ND
Salinity	ppt															ND	ND	ND
Conductivity	umhos															ND	ND	ND
Temperature	C															ND	ND	ND
Depth	ft.															ND	ND	ND
Flow	MGD															ND	ND	ND
Total Suspended Solids	MG/L	800 / 400														ND	ND	ND
Nitrite	MG/L															ND	ND	ND
Ammonium	MG/L															ND	ND	ND
Total Dissolved P	MG/L															ND	ND	ND
Total Dissolved N	MG/L															ND	ND	ND
Phosphate	MG/L															ND	ND	ND
Nitrate/Nitrite	MG/L															ND	ND	ND
Nitrate	MG/L															ND	ND	ND
Dissolved Organic N	MG/L															ND	ND	ND
Dissolved Organic P	MG/L															ND	ND	ND
Total Antimony	UG/L															ND	ND	ND
Dissolved Antimony	UG/L															ND	ND	ND
Total Arsenic	UG/L															ND	ND	ND
Dissolved Arsenic	UG/L															ND	ND	ND
Total Beryllium	UG/L															ND	ND	ND
Dissolved Beryllium	UG/L															ND	ND	ND
Total Cadmium	UG/L	43														ND	ND	ND
Dissolved Cadmium	UG/L															ND	ND	ND
Total Chromium	UG/L															ND	ND	ND
Dissolved Chromium	UG/L															ND	ND	ND
Total Copper	UG/L	6.1														ND	ND	ND
Dissolved Copper	UG/L															ND	ND	ND
Total Lead	UG/L	210														ND	ND	ND
Dissolved Lead	UG/L															ND	ND	ND
Total Mercury	UG/L	1.8														ND	ND	ND
Dissolved Mercury	UG/L															ND	ND	ND
Total Nickel	UG/L	75														ND	ND	ND
Dissolved Nickel	UG/L															ND	ND	ND
Total Selenium	UG/L	300														ND	ND	ND
Dissolved Selenium	UG/L															ND	ND	ND
Total Silver	UG/L	1.9														ND	ND	ND
Dissolved Silver	UG/L															ND	ND	ND
Total Thallium	UG/L															ND	ND	ND
Dissolved Thallium	UG/L															ND	ND	ND
Total Zinc	UG/L	90														ND	ND	ND
Dissolved Zinc	UG/L															ND	ND	ND

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway # 6

PIERP SPILLWAY 6, SEPTEMBER 2001

Month			September	September	September	September	September	September	September	September	September	September	September	September	September	September	September	September	September
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6
Frequency		at any time / monthly avg.	d	d	d	d	d	d	m	d	d	d	d	w	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	Pt263	ND	ND	Pt270	Pt272	Pt274	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil								1600			t300	0815	1010					
Turbidity	NTU	150 / 50							95			148	45	38					
pH	units	6.5 - 8.5							8.98			8.89	8.91	8.99					
Dissolved Oxygen	MG/L								11.30			10.84	3.05	9.38					
Dissolved Oxygen	% sat								NR			NR	NR	NR					
Salinity	ppt								NR			NR	NR	NR					
Conductivity	umhos								NR			NR	NR	NR					
Temperature	C								NR			NR	NR	NR					
Depth	ft.								t			t	1	1					
Flow	MGD								1.00			0.44	1.84	1.12					
Total Suspended Solids	MG/L	800 / 400							135			386	120	121					
Nitrite	MG/L								AD					AD					
Ammonium	MG/L								AD					AD					
Total Dissolved P	MG/L								AD					AD					
Total Dissolved N	MG/L								AD					AD					
Phosphate	MG/L								AD					AD					
Nitrate/Nitrite	MG/L								AD					AD					
Nitrate	MG/L								AD					AD					
Dissolved Organic N	MG/L								AD					AD					
Dissolved Organic P	MG/L								AD					AD					
Total Anitimony	UG/L							<	2.0										
Dissolved Antimony	UG/L							<	2.0										
Total Arsenic	UG/L								37.0										
Dissolved Arsenic	UG/L								39.0										
Total Beryllium	UG/L							<	2.0										
Dissolved Beryllium	UG/L							<	2.0										
Total Cadmium	UG/L	43						<	0.5										
Dissolved Cadmium	UG/L							<	0.5										
Total Chromium	UG/L								7.0										
Dissolved Chromium	UG/L								4.0										
Total Copper	UG/L	6.1							9.0										
Dissolved Copper	UG/L								7.0										
Total Lead	UG/L	210							6.0										
Dissolved Lead	UG/L							<	2.0										
Total Mercury	UG/L	1.8						<	0.2										
Dissolved Mercury	UG/L							<	0.2										
Total Nickel	UG/L	75							12.0										
Dissolved Nickel	UG/L								6.0										
Total Selenium	UG/L	300							14.0										
Dissolved Selenium	UG/L								15.0										
Total Silver	UG/L	1.9						<	1.0										
Dissolved Silver	UG/L							<	1.0										
Total Thallium	UG/L							<	2.0										
Dissolved Thallium	UG/L							<	2.0										
Total Zinc	UG/L	90							16.0										
Dissolved Zinc	UG/L								4.0										

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway # 6

PIERP SPILLWAY 6, SEPTEMBER 2001

Month	September		September	September	September	September	September	September	September	September	September	September	September	September	September	Spillway # 6	Spillway # 6	Spillway # 6
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	Minimum	Maximum	Average
Location		Quality Standards	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6			
Frequency		at any time / monthly avg.	w	d	d	w	d	d	d	d	d	m	d	d	d			
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																	
Sample Time	mil																	
Turbidity	NTU	150 / 50														NA	NA	NA
pH	units	6.5 - 8.5														38	148	82
Dissolved Oxygen	MG/L															8.89	8.99	8.94
Dissolved Oxygen	% sat															3.05	11.30	8.64
Salinity	ppt															NR	NR	NR
Conductivity	umhos															NR	NR	NR
Temperature	C															NR	NR	NR
Depth	ft.															NR	NR	NR
Flow	MGD															1	1	1
Total Suspended Solids	MG/L	800 / 400														0.44	1.84	1.10
Nitrite	MG/L															120	386	191
Ammonium	MG/L															AD	AD	AD
Total Dissolved P	MG/L															AD	AD	AD
Total Dissolved N	MG/L															AD	AD	AD
Phosphate	MG/L															AD	AD	AD
Nitrate/Nitrite	MG/L															AD	AD	AD
Nitrate	MG/L															AD	AD	AD
Dissolved Organic N	MG/L															AD	AD	AD
Dissolved Organic P	MG/L															AD	AD	AD
Total Antimony	UG/L															AD	AD	AD
Dissolved Antimony	UG/L															< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L															< 2.0	< 2.0	< 2.0
Dissolved Arsenic	UG/L															37.0	37.0	37.0
Total Beryllium	UG/L															39.0	39.0	39.0
Dissolved Beryllium	UG/L															< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43														< 2.0	< 2.0	< 2.0
Dissolved Cadmium	UG/L															< 0.5	< 0.5	< 0.5
Total Chromium	UG/L															< 0.5	< 0.5	< 0.5
Dissolved Chromium	UG/L															7.0	7.0	7.0
Total Copper	UG/L	6.1														4.0	4.0	4.0
Dissolved Copper	UG/L															9.0	9.0	9.0
Total Lead	UG/L	210														7.0	7.0	7.0
Dissolved Lead	UG/L															6.0	6.0	6.0
Total Mercury	UG/L	1.8														< 2.0	< 2.0	< 2.0
Dissolved Mercury	UG/L															< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75														< 0.2	< 0.2	< 0.2
Dissolved Nickel	UG/L															12.0	12.0	12.0
Total Selenium	UG/L	300														6.0	6.0	6.0
Dissolved Selenium	UG/L															14.0	14.0	14.0
Total Silver	UG/L	1.9														15.0	15.0	15.0
Dissolved Silver	UG/L															< 1.0	< 1.0	< 1.0
Total Thallium	UG/L															< 1.0	< 1.0	< 1.0
Dissolved Thallium	UG/L															< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90														< 2.0	< 2.0	< 2.0
Dissolved Zinc	UG/L															16.0	16.0	16.0
																4.0	4.0	4.0

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #1

PIERP 100YD-1, SEPTEMBER 2001

Month	September		September	September	September	September	September	September	September	September	September	September	September	September	September	September	September	September
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1
Frequency		at any time / monthly avg.	d	d	d	d	d	d	m	d	d	d	d	w	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	P1266	ND	ND	ND	ND	P1277	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil								1430					1430					
Turbidity	NTU	150 / 50							3					3					
pH	units	6.5 - 8.5							7.86					8.05					
Dissolved Oxygen	MG/L								8.20					7.44					
Dissolved Oxygen	% sat								NR					NR					
Salinity	ppt								NR					NR					
Conductivity	umhos								NR					NR					
Temperature	C								NR					NR					
Depth	ft.								S					S					
Flow	MGD								NA					NA					
Total Suspended Solids	MG/L	800 / 400							9					6					
Nitrite	MG/L								AD					AD					
Ammonium	MG/L								AD					AD					
Total Dissolved P	MG/L								AD					AD					
Total Dissolved N	MG/L								AD					AD					
Phosphate	MG/L								AD					AD					
Nitrate/Nitrite	MG/L								AD					AD					
Nitrate	MG/L								AD					AD					
Dissolved Organic N	MG/L								AD					AD					
Dissolved Organic P	MG/L								AD					AD					
Total Antimony	UG/L								< 2.0										
Dissolved Antimony	UG/L								< 2.0										
Total Arsenic	UG/L								21.0										
Dissolved Arsenic	UG/L								14.0										
Total Beryllium	UG/L								< 2.0										
Dissolved Beryllium	UG/L								< 2.0										
Total Cadmium	UG/L	43							< 0.5										
Dissolved Cadmium	UG/L								< 0.5										
Total Chromium	UG/L								< 2.0										
Dissolved Chromium	UG/L								< 2.0										
Total Copper	UG/L	6.1							< 3.0										
Dissolved Copper	UG/L								< 3.0										
Total Lead	UG/L	210							< 2.0										
Dissolved Lead	UG/L								< 2.0										
Total Mercury	UG/L	1.8							< 0.2										
Dissolved Mercury	UG/L								< 0.2										
Total Nickel	UG/L	75							2.0										
Dissolved Nickel	UG/L								< 2.0										
Total Selenium	UG/L	300							13.0										
Dissolved Selenium	UG/L								12.0										
Total Silver	UG/L	1.9							< 1.0										
Dissolved Silver	UG/L								< 1.0										
Total Thallium	UG/L								< 2.0										
Dissolved Thallium	UG/L								< 2.0										
Total Zinc	UG/L	90							< 3.0										
Dissolved Zinc	UG/L								< 3.0										

ND: No discharge < Less than the method detection limit AD: Awaiting data > Greater than the value noted NA: Not applicable NR: Not required

100 Yard #1

PIERP 100YD-1, SEPTEMBER 2001

Month	September		September	September	September	September	September	September	September	September	September	September	September	September	100 Yard #1	100 Yard #1	100 Yard #1
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	Minimum	Maximum	Average
Location		Quality Standards	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1			
Frequency		at any time / monthly avg.	d	d	w	d	d	d	d	d	d	d	w	d	d			
Sample #			ND	ND	P1287	ND	ND	ND	ND	ND	ND	ND	P1299	ND	ND			
Parameter	Units																	
Sample Time	mil				1350								0925					
Turbidity	NTU	150 / 50			5								3			NA	NA	NA
pH	units	6.5 - 8.5			7.69								7.75			3	5	4
Dissolved Oxygen	MG/L				6.23								7.19			7.69	8.05	7.84
Dissolved Oxygen	% sat				NR								84.00			6.23	8.20	7.27
Salinity	ppt				NR								15			84.00	84.00	84.00
Conductivity	umhos				NR								22			15	15	15
Temperature	C				NR								19.90			22	22	22
Depth	ft				5								5			19.90	19.90	19.90
Flow	MGD				NA								NA			5	5	5
Total Suspended Solids	MG/L	800 / 400			18								16			NA	NA	NA
Nitrite	MG/L				AD								AD			6	18	12
Ammonium	MG/L				AD								AD			AD	AD	AD
Total Dissolved P	MG/L				AD								AD			AD	AD	AD
Total Dissolved N	MG/L				AD								AD			AD	AD	AD
Phosphate	MG/L				AD								AD			AD	AD	AD
Nitrate/Nitrite	MG/L				AD								AD			AD	AD	AD
Nitrate	MG/L				AD								AD			AD	AD	AD
Dissolved Organic N	MG/L				AD								AD			AD	AD	AD
Dissolved Organic P	MG/L				AD								AD			AD	AD	AD
Total Antimony	UG/L															AD	AD	AD
Dissolved Antimony	UG/L															< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L															< 2.0	< 2.0	< 2.0
Dissolved Arsenic	UG/L															21.0	21.0	21.0
Total Beryllium	UG/L															14.0	14.0	14.0
Dissolved Beryllium	UG/L															< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43														< 2.0	< 2.0	< 2.0
Dissolved Cadmium	UG/L															< 0.5	< 0.5	< 0.5
Total Chromium	UG/L															< 0.5	< 0.5	< 0.5
Dissolved Chromium	UG/L															< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1														< 2.0	< 2.0	< 2.0
Dissolved Copper	UG/L															< 3.0	< 3.0	< 3.0
Total Lead	UG/L	210														< 3.0	< 3.0	< 3.0
Dissolved Lead	UG/L															< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8														< 2.0	< 2.0	< 2.0
Dissolved Mercury	UG/L															< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75														< 0.2	< 0.2	< 0.2
Dissolved Nickel	UG/L															2.0	2.0	2.0
Total Selenium	UG/L	300														< 2.0	< 2.0	< 2.0
Dissolved Selenium	UG/L															13.0	13.0	13.0
Total Silver	UG/L	1.9														12.0	12.0	12.0
Dissolved Silver	UG/L															< 1.0	< 1.0	< 1.0
Total Thallium	UG/L															< 1.0	< 1.0	< 1.0
Dissolved Thallium	UG/L															< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90														< 2.0	< 2.0	< 2.0
Dissolved Zinc	UG/L															< 3.0	< 3.0	< 3.0

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #2

PIERP 100YD-2, SEPTEMBER 2001

Month	September	State Water	September	September	September	September	September	September	September	September	September	September	September	September	September	September	September	September
Day		Quality Standards	1	2	3	4	5	6	8	9	10	11	12	13	14	15	16	17	18
Location		at any time / monthly avg.	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge < Less than the method detection limit AD: Awaiting data > Greater than the value noted NA: Not applicable NR: Not required

100 Yard #2

PIERP 100YD-2, SEPTEMBER 2001

Month	September		September	September	September	September	September	September	September	September	September	September	September	100 Yard #2	100 Yard #2	100 Yard #2
Day		State Water	19	20	21	22	23	24	25	26	27	28	29	30	Minimum	Maximum	Average
Location		Quality Standards	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2			
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Parameter	Units																
Sample Time	mil														NA	NA	NA
Turbidity	NTU	150 / 50													NA	NA	NA
pH	units	6.5 - 8.5													NA	NA	NA
Dissolved Oxygen	MG/L														NA	NA	NA
Dissolved Oxygen	% sat														NA	NA	NA
Salinity	ppt														NA	NA	NA
Conductivity	umhos														NA	NA	NA
Temperature	C														NA	NA	NA
Depth	ft.														NA	NA	NA
Flow	MGD														NA	NA	NA
Total Suspended Solids	MG/L	800 / 400													NA	NA	NA
Nitrite	MG/L														NA	NA	NA
Ammonium	MG/L														NA	NA	NA
Total Dissolved P	MG/L														NA	NA	NA
Total Dissolved N	MG/L														NA	NA	NA
Phosphate	MG/L														NA	NA	NA
Nitrate/Nitrite	MG/L														NA	NA	NA
Nitrate	MG/L														NA	NA	NA
Dissolved Organic N	MG/L														NA	NA	NA
Dissolved Organic P	MG/L														NA	NA	NA
Total Anitimony	UG/L														NA	NA	NA
Dissolved Antimony	UG/L														NA	NA	NA
Total Arsenic	UG/L														NA	NA	NA
Dissolved Arsenic	UG/L														NA	NA	NA
Total Beryllium	UG/L														NA	NA	NA
Dissolved Beryllium	UG/L														NA	NA	NA
Total Cadmium	UG/L	43													NA	NA	NA
Dissolved Cadmium	UG/L														NA	NA	NA
Total Chromium	UG/L														NA	NA	NA
Dissolved Chromium	UG/L														NA	NA	NA
Total Copper	UG/L	6.1													NA	NA	NA
Dissolved Copper	UG/L														NA	NA	NA
Total Lead	UG/L	210													NA	NA	NA
Dissolved Lead	UG/L														NA	NA	NA
Total Mercury	UG/L	1.8													NA	NA	NA
Dissolved Mercury	UG/L														NA	NA	NA
Total Nickel	UG/L	75													NA	NA	NA
Dissolved Nickel	UG/L														NA	NA	NA
Total Selenium	UG/L	300													NA	NA	NA
Dissolved Selenium	UG/L														NA	NA	NA
Total Silver	UG/L	1.9													NA	NA	NA
Dissolved Silver	UG/L														NA	NA	NA
Total Thallium	UG/L														NA	NA	NA
Dissolved Thallium	UG/L														NA	NA	NA
Total Zinc	UG/L	90													NA	NA	NA
Dissolved Zinc	UG/L														NA	NA	NA

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #4

PIERP 100YD-4, SEPTEMBER 2001

Month		State Water	September	September	September	September	September	September	September	September	September	September	September	September	September	September	September	September
Day		Quality Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		at any time / monthly avg.	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #4

PIERP 100YD-4, SEPTEMBER 2001

Month	September	State Water Quality Standards at any time / monthly avg.	September 18	September 19	September 20	September 21	September 22	September 23	September 24	September 25	September 26	September 27	September 28	September 29	September 30	100 Yard #4 Minimum	100 Yard #4 Maximum	100 Yard #4 Average
Day			100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4			
Location			d	d	d	d	d	d	d	d	d	d	d	d	d			
Frequency			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Sample #																		
Parameter	Units																	
Sample Time	mil																	
Turbidity	NTU	150 / 50														NA	NA	NA
pH	units	6.5 - 8.5														NA	NA	NA
Dissolved Oxygen	MG/L															NA	NA	NA
Dissolved Oxygen	% sat															NA	NA	NA
Salinity	ppt															NA	NA	NA
Conductivity	umhos															NA	NA	NA
Temperature	C															NA	NA	NA
Depth	ft.															NA	NA	NA
Flow	MGD															NA	NA	NA
Total Suspended Solids	MG/L	800 / 400														NA	NA	NA
Nitrite	MG/L															NA	NA	NA
Ammonium	MG/L															NA	NA	NA
Total Dissolved P	MG/L															NA	NA	NA
Total Dissolved N	MG/L															NA	NA	NA
Phosphate	MG/L															NA	NA	NA
Nitrate/Nitrite	MG/L															NA	NA	NA
Nitrate	MG/L															NA	NA	NA
Dissolved Organic N	MG/L															NA	NA	NA
Dissolved Organic P	MG/L															NA	NA	NA
Total Antimony	UG/L															NA	NA	NA
Dissolved Antimony	UG/L															NA	NA	NA
Total Arsenic	UG/L															NA	NA	NA
Dissolved Arsenic	UG/L															NA	NA	NA
Total Beryllium	UG/L															NA	NA	NA
Dissolved Beryllium	UG/L															NA	NA	NA
Total Cadmium	UG/L	43														NA	NA	NA
Dissolved Cadmium	UG/L															NA	NA	NA
Total Chromium	UG/L															NA	NA	NA
Dissolved Chromium	UG/L															NA	NA	NA
Total Copper	UG/L	6.1														NA	NA	NA
Dissolved Copper	UG/L															NA	NA	NA
Total Lead	UG/L	210														NA	NA	NA
Dissolved Lead	UG/L															NA	NA	NA
Total Mercury	UG/L	1.8														NA	NA	NA
Dissolved Mercury	UG/L															NA	NA	NA
Total Nickel	UG/L	75														NA	NA	NA
Dissolved Nickel	UG/L															NA	NA	NA
Total Selenium	UG/L	300														NA	NA	NA
Dissolved Selenium	UG/L															NA	NA	NA
Total Silver	UG/L	1.9														NA	NA	NA
Dissolved Silver	UG/L															NA	NA	NA
Total Thallium	UG/L															NA	NA	NA
Dissolved Thallium	UG/L															NA	NA	NA
Total Zinc	UG/L	90														NA	NA	NA
Dissolved Zinc	UG/L															NA	NA	NA

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #5

PIERP 100YD-5, SEPTEMBER 2001

Month	September	State Water Quality Standards at any time / monthly avg.	September	September	September	September	September	September	September	September	September	September	September	September	September	September	September	September	September
Day			1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Location			100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	w
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #5

PIERP 100YD-5, SEPTEMBER 2001

Month	September	State Water	September	September	September	September	September	September	September	September	September	September	September	100 Yard #5	100 Yard #5	100 Yard #5
Day		Quality Standards	19	20	21	22	23	24	25	26	27	28	29	30	Minimum	Maximum	Average
Location		at any time / monthly avg.	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5			
Frequency			d	d	w	d	d	d	d	d	m	d	d	d			
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Parameter	Units																
Sample Time	mil																
Turbidity	NTU	150 / 50													NA	NA	NA
pH	units	6.5 - 8.5													NA	NA	NA
Dissolved Oxygen	MG/L														NA	NA	NA
Dissolved Oxygen	% sat														NA	NA	NA
Salinity	ppt														NA	NA	NA
Conductivity	umhos														NA	NA	NA
Temperature	C														NA	NA	NA
Depth	ft.														NA	NA	NA
Flow	MGD														NA	NA	NA
Total Suspended Solids	MG/L	800 / 400													NA	NA	NA
Nitrite	MG/L														NA	NA	NA
Ammonium	MG/L														NA	NA	NA
Total Dissolved P	MG/L														NA	NA	NA
Total Dissolved N	MG/L														NA	NA	NA
Phosphate	MG/L														NA	NA	NA
Nitrate/Nitrite	MG/L														NA	NA	NA
Nitrate	MG/L														NA	NA	NA
Dissolved Organic N	MG/L														NA	NA	NA
Dissolved Organic P	MG/L														NA	NA	NA
Total Antimony	UG/L														NA	NA	NA
Dissolved Antimony	UG/L														NA	NA	NA
Total Arsenic	UG/L														NA	NA	NA
Dissolved Arsenic	UG/L														NA	NA	NA
Total Beryllium	UG/L														NA	NA	NA
Dissolved Beryllium	UG/L														NA	NA	NA
Total Cadmium	UG/L	43													NA	NA	NA
Dissolved Cadmium	UG/L														NA	NA	NA
Total Chromium	UG/L														NA	NA	NA
Dissolved Chromium	UG/L														NA	NA	NA
Total Copper	UG/L	6.1													NA	NA	NA
Dissolved Copper	UG/L														NA	NA	NA
Total Lead	UG/L	210													NA	NA	NA
Dissolved Lead	UG/L														NA	NA	NA
Total Mercury	UG/L	1.8													NA	NA	NA
Dissolved Mercury	UG/L														NA	NA	NA
Total Nickel	UG/L	75													NA	NA	NA
Dissolved Nickel	UG/L														NA	NA	NA
Total Selenium	UG/L	300													NA	NA	NA
Dissolved Selenium	UG/L														NA	NA	NA
Total Silver	UG/L	1.9													NA	NA	NA
Dissolved Silver	UG/L														NA	NA	NA
Total Thallium	UG/L														NA	NA	NA
Dissolved Thallium	UG/L														NA	NA	NA
Total Zinc	UG/L	90													NA	NA	NA
Dissolved Zinc	UG/L														NA	NA	NA

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #6

PIERP 100YD-6, SEPTEMBER 2001

Month	September		September	September	September	September	September	September	September	September	September	September	September	September	September	September	September
Day		State Water	1	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6
Frequency		at any time / monthly avg.	d	d	d	d	d	m	d	d	d	d	w	d	d	d	d	d
Sample #			NA	NA	NA	NA	NA	P1264	NA	NA	NA	NA	P1275	NA	NA	NA	NA	NA
Parameter	Units																	
Sample Time	mil							1340					1400					
Turbidity	NTU	150 / 50						4					4					
pH	units	6.5 - 8.5						7.87					8.01					
Dissolved Oxygen	MG/L							8.47					9.27					
Dissolved Oxygen	% sat							NR					NR					
Salinity	ppt							NR					NR					
Conductivity	umhos							NR					NR					
Temperature	C							NR					NR					
Depth	ft							2					2					
Flow	MGD							NA					NA					
Total Suspended Solids	MG/L	800 / 400						7					17					
Nitrite	MG/L							AD					AD					
Ammonium	MG/L							AD					AD					
Total Dissolved P	MG/L							AD					AD					
Total Dissolved N	MG/L							AD					AD					
Phosphate	MG/L							AD					AD					
Nitrate/Nitrite	MG/L							AD					AD					
Nitrate	MG/L							AD					AD					
Dissolved Organic N	MG/L							AD					AD					
Dissolved Organic P	MG/L							AD					AD					
Total Antimony	UG/L						<	2.0										
Dissolved Antimony	UG/L						<	2.0										
Total Arsenic	UG/L							21.0										
Dissolved Arsenic	UG/L							21.0										
Total Beryllium	UG/L						<	2.0										
Dissolved Beryllium	UG/L						<	2.0										
Total Cadmium	UG/L	43					<	0.5										
Dissolved Cadmium	UG/L						<	0.5										
Total Chromium	UG/L						<	2.0										
Dissolved Chromium	UG/L						<	2.0										
Total Copper	UG/L	6.1					<	3.0										
Dissolved Copper	UG/L						<	3.0										
Total Lead	UG/L	210					<	2.0										
Dissolved Lead	UG/L						<	2.0										
Total Mercury	UG/L	1.8					<	0.2										
Dissolved Mercury	UG/L						<	0.2										
Total Nickel	UG/L	75						3.0										
Dissolved Nickel	UG/L							2.0										
Total Selenium	UG/L	300						12.0										
Dissolved Selenium	UG/L							14.0										
Total Silver	UG/L	1.9					<	1.0										
Dissolved Silver	UG/L						<	1.0										
Total Thallium	UG/L							3.0										
Dissolved Thallium	UG/L						<	2.0										
Total Zinc	UG/L	90					<	3.0										
Dissolved Zinc	UG/L						<	3.0										

ND: No discharge < Less than the method detection limit AD: Awaiting data > Greater than the value noted NA: Not applicable NR: Not required

00 Yard #6

PIERP 100YD-6, SEPTEMBER 2001

Month / Day / Location / Frequency / Sample # / Parameter	Units	State Water Quality Standards at any time / monthly avg.	September 18 100yd-6 w NA	September 19 100yd-6 d NA	September 20 100yd-6 d NA	September 21 100yd-6 w NA	September 22 100yd-6 d NA	September 23 100yd-6 d NA	September 24 100yd-6 d NA	September 25 100yd-6 d NA	September 26 100yd-6 d NA	September 27 100yd-6 m NA	September 28 100yd-6 d NA	September 29 100yd-6 d NA	September 30 100yd-6 d NA	100 Yard #6 Minimum	100 Yard #6 Maximum	100 Yard #6 Average
Sample Time	mil															NA	NA	NA
Turbidity	NTU	150 / 50														4	4	4
pH	units	6.5 - 8.5														7.87	8.01	7.94
Dissolved Oxygen	MG/L															8.47	9.27	8.87
Dissolved Oxygen	% sat															NR	NR	NR
Salinity	ppt															NR	NR	NR
Conductivity	umhos															NR	NR	NR
Temperature	C															NR	NR	NR
Depth	ft															2	2	2
Flow	MGD															NA	NA	NA
Total Suspended Solids	MG/L	800 / 400														7	17	12
Nitrite	MG/L															AD	AD	AD
Ammonium	MG/L															AD	AD	AD
Total Dissolved P	MG/L															AD	AD	AD
Total Dissolved N	MG/L															AD	AD	AD
Phosphate	MG/L															AD	AD	AD
Nitrate-Nitrite	MG/L															AD	AD	AD
Nitrate	MG/L															AD	AD	AD
Dissolved Organic N	MG/L															AD	AD	AD
Dissolved Organic P	MG/L															AD	AD	AD
Total Antimony	UG/L															< 2.0	< 2.0	< 2.0
Dissolved Antimony	UG/L															< 2.0	< 2.0	< 2.0
Total Arsenic	UG/L															21.0	21.0	21.0
Dissolved Arsenic	UG/L															21.0	21.0	21.0
Total Beryllium	UG/L															< 2.0	< 2.0	< 2.0
Dissolved Beryllium	UG/L															< 2.0	< 2.0	< 2.0
Total Cadmium	UG/L	43														< 0.5	< 0.5	< 0.5
Dissolved Cadmium	UG/L															< 0.5	< 0.5	< 0.5
Total Chromium	UG/L															< 2.0	< 2.0	< 2.0
Dissolved Chromium	UG/L															< 2.0	< 2.0	< 2.0
Total Copper	UG/L	6.1														< 3.0	< 3.0	< 3.0
Dissolved Copper	UG/L															< 3.0	< 3.0	< 3.0
Total Lead	UG/L	210														< 2.0	< 2.0	< 2.0
Dissolved Lead	UG/L															< 2.0	< 2.0	< 2.0
Total Mercury	UG/L	1.8														< 0.2	< 0.2	< 0.2
Dissolved Mercury	UG/L															< 0.2	< 0.2	< 0.2
Total Nickel	UG/L	75														3.0	3.0	3.0
Dissolved Nickel	UG/L															2.0	2.0	2.0
Total Selenium	UG/L	300														12.0	12.0	12.0
Dissolved Selenium	UG/L															14.0	14.0	14.0
Total Silver	UG/L	1.9														< 1.0	< 1.0	< 1.0
Dissolved Silver	UG/L															< 1.0	< 1.0	< 1.0
Total Thallium	UG/L															3.0	3.0	3.0
Dissolved Thallium	UG/L															< 2.0	< 2.0	< 2.0
Total Zinc	UG/L	90														< 3.0	< 3.0	< 3.0
Dissolved Zinc	UG/L															< 3.0	< 3.0	< 3.0

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Reference Point
WQR1

PIERP WQR1, OCTOBER 2001

Month	October	State Water Quality Standards at any time / monthly avg.	October	October	October	October	October	October	October	October	October	October	October	October	October	October	October	October	October
Day			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Location			WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1
Frequency			d	d	d	w	d	d	d	d	d	w	d	d	d	d	d	d	d	w
Sample #			NA	NA	NA	P1303	NA	NA	NA	NA	NA	P1312	NA	NA	NA	NA	NA	NA	NA	P1346
Parameter	Units																			
Sample Time	mil					1045						1430								1540
Turbidity	NTU	150 / 50				1						3								3
pH	units	6.5 - 8.5				7.79						7.92								7.72
Dissolved Oxygen	MG/L					8.64						9.75								6.92
Dissolved Oxygen	% sat					103.10						106.00								78.00
Salinity	ppt					16						16								16
Conductivity	umhos					23						23								22
Temperature	C					20.10						17.30								16.20
Depth	ft					6						6								6
Flow	MGD					NA						NA								NA
Total Suspended Solids	MG/L	800 / 400				28						18								19
Nitrite	MG/L					AD						AD								AD
Ammonium	MG/L					AD						AD								AD
Total Dissolved P	MG/L					AD						AD								AD
Total Dissolved N	MG/L					AD						AD								AD
Phosphate	MG/L					AD						AD								AD
Nitrate/Nitrite	MG/L					AD						AD								AD
Nitrate	MG/L					AD						AD								AD
Dissolved Organic N	MG/L					AD						AD								AD
Dissolved Organic P	MG/L					AD						AD								AD
Total Antimony	UG/L																			
Dissolved Antimony	UG/L																			
Total Arsenic	UG/L																			
Dissolved Arsenic	UG/L																			
Total Beryllium	UG/L																			
Dissolved Beryllium	UG/L																			
Total Cadmium	UG/L	43																		
Dissolved Cadmium	UG/L																			
Total Chromium	UG/L																			
Dissolved Chromium	UG/L																			
Total Copper	UG/L	6.1																		
Dissolved Copper	UG/L																			
Total Lead	UG/L	210																		
Dissolved Lead	UG/L																			
Total Mercury	UG/L	1.8																		
Dissolved Mercury	UG/L																			
Total Nickel	UG/L	75																		
Dissolved Nickel	UG/L																			
Total Selenium	UG/L	300																		
Dissolved Selenium	UG/L																			
Total Silver	UG/L	1.9																		
Dissolved Silver	UG/L																			
Total Thallium	UG/L																			
Dissolved Thallium	UG/L																			
Total Zinc	UG/L	90																		
Dissolved Zinc	UG/L																			

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Reference Point
WQR1

PIERP WQR1, OCTOBER 2001

Month	October	State Water Quality Standards at any time / monthly avg.	October 19	October 20	October 21	October 22	October 23	October 24	October 25	October 26	October 27	October 28	October 29	October 30	October 31	Reference Point WQR1 Minimum	Reference Point WQR1 Maximum	Reference Point WQR1 Average
Day			WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1	WQR1			
Location			d	d	w	d	w	d	d	m	d	d	d	d	d			
Frequency			NA	NA	NA	NA	P1375	NA	NA	P1398	NA	NA	NA	NA	NA			
Sample #																		
Parameter	Units																	
Sample Time	mil						1300			1240								
Turbidity	NTU	150 / 50					3			4						NA	NA	NA
pH	units	6.5 - 8.5					7.68			7.72						1	4	3
Dissolved Oxygen	MG/L						8.12			8.53						7.68	7.92	7.77
Dissolved Oxygen	% sat						93.60			94.30						6.92	9.75	8.39
Salinity	ppt						17			17						78.00	106.00	95.00
Conductivity	umhos						24			23						16	17	16
Temperature	C						18.30			16.40						22	24	23
Depth	ft						6			6						16.20	20.10	17.66
Flow	MGD						NA			NA						6	6	6
Total Suspended Solids	MG/L	800 / 400					4			AD						NA	NA	NA
Nitrite	MG/L						AD			AD						4	28	17
Ammonium	MG/L						AD			AD						AD	AD	AD
Total Dissolved P	MG/L						AD			AD						AD	AD	AD
Total Dissolved N	MG/L						AD			AD						AD	AD	AD
Phosphate	MG/L						AD			AD						AD	AD	AD
Nitrate/Nitrite	MG/L						AD			AD						AD	AD	AD
Nitrate	MG/L						AD			AD						AD	AD	AD
Dissolved Organic N	MG/L						AD			AD						AD	AD	AD
Dissolved Organic P	MG/L						AD			AD						AD	AD	AD
Total Antimony	UG/L									AD						AD	AD	AD
Dissolved Antimony	UG/L									AD						AD	AD	AD
Total Arsenic	UG/L									AD						AD	AD	AD
Dissolved Arsenic	UG/L									AD						AD	AD	AD
Total Beryllium	UG/L									AD						AD	AD	AD
Dissolved Beryllium	UG/L									AD						AD	AD	AD
Total Cadmium	UG/L	43								AD						AD	AD	AD
Dissolved Cadmium	UG/L									AD						AD	AD	AD
Total Chromium	UG/L									AD						AD	AD	AD
Dissolved Chromium	UG/L									AD						AD	AD	AD
Total Copper	UG/L	6.1								AD						AD	AD	AD
Dissolved Copper	UG/L									AD						AD	AD	AD
Total Lead	UG/L	210								AD						AD	AD	AD
Dissolved Lead	UG/L									AD						AD	AD	AD
Total Mercury	UG/L	1.8								AD						AD	AD	AD
Dissolved Mercury	UG/L									AD						AD	AD	AD
Total Nickel	UG/L	75								AD						AD	AD	AD
Dissolved Nickel	UG/L									AD						AD	AD	AD
Total Selenium	UG/L	300								AD						AD	AD	AD
Dissolved Selenium	UG/L									AD						AD	AD	AD
Total Silver	UG/L	1.9								AD						AD	AD	AD
Dissolved Silver	UG/L									AD						AD	AD	AD
Total Thallium	UG/L									AD						AD	AD	AD
Dissolved Thallium	UG/L									AD						AD	AD	AD
Total Zinc	UG/L	90								AD						AD	AD	AD
Dissolved Zinc	UG/L									AD						AD	AD	AD

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

spillway #1

PIERP SPILLWAY 1, OCTOBER 2001

Month	October		October	October	October	October	October	October	October	October	October	October	October	October	October	October	October	October
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	Sp. 1	Sp.1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1
Frequency		at any time / monthly avg.	d	d	d	w	d	d	d	d	d	w	d	d	d	d	d	d	d
Sample #			ND	ND	P1301	P1302	P1305	P1306	P1307	P1308	P1309	P1310	P1313	P1328	P1331	P1332	P1333	P1336	P1339
Parameter	Units																		
Sample Time	mil				1200	1000	0000	0015	0030	0030	0230	0030	0230	0500	0530	1000	0800	0005	0030
Turbidity	NTU	150 / 50			19	19	23	34	33	24	18	58	40	27	28	22	40	21	45
pH	units	6.5 - 8.5			8.61	8.68	8.80	8.70	8.86	8.92	8.66	8.75	8.69	8.67	8.55	8.53	8.68	8.67	8.71
Dissolved Oxygen	MG/L				15.30	15.82	15.30	8.94	9.67	9.36	12.04	17.01	14.64	12.06	10.63	12.83	9.17	12.39	8.27
Dissolved Oxygen	% sat				184.40	124.60	180.00	110.20	115.50	100.20	121.20	122.00	159.60	131.80	121.20	141.50	98.60	145.70	83.30
Salinity	ppt				14	14	14	14	15	15	15	15	15	15	15	15	15	15	15
Conductivity	umhos				21	21	21	24	24	24	24	19	20	21	24	21	21	21	21
Temperature	C				19.40	19.40	20.60	19.50	19.58	24.06	12.80	14.20	15.30	16.20	17.90	18.40	18.10	18.10	24.80
Depth	ft.				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Flow	MGD				2.88	1.82	0.76	0.99	2.86	0.86	0.47	1.32	0.24	0.49	0.23	0.24	0.14	0.47	3.12
Total Suspended Solids	MG/L	800 / 400			46	38	56	36	42	54	52	124	55	47	40	34	65	55	68
Nitrite	MG/L					AD						AD							
Ammonium	MG/L					AD						AD							
Total Dissolved P	MG/L					AD						AD							
Total Dissolved N	MG/L					AD						AD							
Phosphate	MG/L					AD						AD							
Nitrate/Nitrite	MG/L					AD						AD							
Nitrate	MG/L					AD						AD							
Dissolved Organic N	MG/L					AD						AD							
Dissolved Organic P	MG/L					AD						AD							
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than the method detection limit AD: Awaiting Data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #1

PIERP SPILLWAY 1, OCTOBER 2001

Month	October		October	October	October	October	October	October	October	October	October	October	October	October	October	Spillway #1	Spillway #1	Spillway #1
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1	Sp. 1			
Frequency		at any time / monthly avg.	w	d	d	d	d	w	d	d	d	d	d	d	d	d			
Sample #			P1344	P1350	P1358	P1362	P1366	P1371	P1380	P1386	P1390	P1400	P1406	P1408	P1413	P1420			
Parameter	Units																		
Sample Time	mil		0030	0030	0920	0030	0115	0100	0200	0800	0010	0015	0030	0100	0030	1230	NA	NA	NA
Turbidity	NTU	150 / 50	58	29	35	28	38	20	35	66	37	74	45	36	35	42	18	74	35
pH	units	6.5 - 8.5	8.73	8.53	8.52	8.35	8.35	8.41	8.21	8.05	8.16	8.19	8.30	7.99	8.21	8.11	7.99	8.92	8.50
Dissolved Oxygen	MG/L		7.11	7.55	8.64	8.89	9.40	9.58	9.82	6.82	7.06	6.88	7.35	9.98	11.35	8.54	6.82	17.01	10.43
Dissolved Oxygen	% sat		76.20	71.10	90.40	98.60	101.80	109.90	91.40	79.50	78.50	75.30	73.60	91.90	113.10	83.00	71.10	184.40	109.45
Salinity	ppt		15	15	15	15	15	15	15	16	16	16	16	16	16	16	14	16	15
Conductivity	umhos		19	20	20	12	21	22	22	23	22	20	20	19	20	19	12	24	21
Temperature	C		13.20	13.60	13.60	15.90	16.20	18.70	20.90	18.90	18.00	12.70	11.70	10.40	11.40	10.70	10.40	24.80	16.70
Depth	ft.		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Flow	MGD		0.98	4.29	8.14	4.27	2.97	4.64	2.05	0.26	7.47	4.12	4.56	3.88	1.85	7.08	0.14	8.14	2.53
Total Suspended Solids	MG/L	800 / 400	89	83	58	51	95	36	76	101	78	127	73	57	54	48	34	127	63
Nitrite	MG/L		AD					AD			NR						AD	AD	AD
Ammonium	MG/L		AD					AD			NR						AD	AD	AD
Total Dissolved P	MG/L		AD					AD			NR						AD	AD	AD
Total Dissolved N	MG/L		AD					AD			NR						AD	AD	AD
Phosphate	MG/L		AD					AD			NR						AD	AD	AD
Nitrate/Nitrite	MG/L		AD					AD			NR						AD	AD	AD
Nitrate	MG/L		AD					AD			NR						AD	AD	AD
Dissolved Organic N	MG/L		AD					AD			NR						AD	AD	AD
Dissolved Organic P	MG/L		AD					AD			NR						AD	AD	AD
Total Antimony	UG/L										NR						NA	NA	NA
Dissolved Antimony	UG/L										NR						NA	NA	NA
Total Arsenic	UG/L										NR						NA	NA	NA
Dissolved Arsenic	UG/L										NR						NA	NA	NA
Total Beryllium	UG/L										NR						NA	NA	NA
Dissolved Beryllium	UG/L										NR						NA	NA	NA
Total Cadmium	UG/L	43									NR						NA	NA	NA
Dissolved Cadmium	UG/L										NR						NA	NA	NA
Total Chromium	UG/L										NR						NA	NA	NA
Dissolved Chromium	UG/L										NR						NA	NA	NA
Total Copper	UG/L	6.1									NR						NA	NA	NA
Dissolved Copper	UG/L										NR						NA	NA	NA
Total Lead	UG/L	210									NR						NA	NA	NA
Dissolved Lead	UG/L										NR						NA	NA	NA
Total Mercury	UG/L	1.8									NR						NA	NA	NA
Dissolved Mercury	UG/L										NR						NA	NA	NA
Total Nickel	UG/L	75									NR						NA	NA	NA
Dissolved Nickel	UG/L										NR						NA	NA	NA
Total Selenium	UG/L	300									NR						NA	NA	NA
Dissolved Selenium	UG/L										NR						NA	NA	NA
Total Silver	UG/L	1.9									NR						NA	NA	NA
Dissolved Silver	UG/L										NR						NA	NA	NA
Total Thallium	UG/L										NR						NA	NA	NA
Dissolved Thallium	UG/L										NR						NA	NA	NA
Total Zinc	UG/L	90									NR						NA	NA	NA
Dissolved Zinc	UG/L										NR						NA	NA	NA

ND: No discharge <: Less than the method detection limit AD: Awaiting Data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #2

PIERP SPILLWAY 2, OCTOBER 2001

Month	October	State Water	October	October	October	October	October	October	October	October	October	October	October	October	October	October	October	October
Day		Quality Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		at any time / monthly avg.	Sp. 2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	P1335	P1337	P1341
Parameter	Units																		
Sample Time	mil																1210	0017	1115
Turbidity	NTU	150 / 50															68	26	66
pH	units	6.5 - 8.5															7.84	7.97	7.98
Dissolved Oxygen	MG/L																9.59	8.37	7.18
Dissolved Oxygen	% sat																110.10	98.40	76.10
Salinity	ppt																13	13	13
Conductivity	umhos																18	18	17
Temperature	C																18.70	18.70	15.10
Depth	ft.																1	1	1
Flow	MGD																0.58	0.20	3.07
Total Suspended Solids	MG/L	800 / 400															85	54	148
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than the method detection limit AD: Awaiting Data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #2

PIERP SPILLWAY 2, OCTOBER 2001

Month	October	State Water	October	October	October	October	October	October	October	October	October	October	October	October	October	Spillway #2	Spillway #2	Spillway #2
Day		Quality Standards	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		at any time / monthly avg.	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2	Sp.2			
Frequency			w	d	d	d	d	d	d	d	m	d	d	d	d	d			
Sample #			P1342	P1351	P1359	P1363	P1367	P1372	P1382	P1389	P1394	P1401	P1405	P1409	P1416	P1419			
Parameter	Units																		
Sample Time	mil		0045	0045	0920	0045	0300	0130	0930	1645	1045	0030	0020	1010	0845	1215	NA	NA	NA
Turbidity	NTU	150 / 50	45	22	21	16	21	15	35	28	36	54	54	23	17	17	15	68	33
pH	units	6.5 - 8.5	7.91	7.83	7.72	7.63	7.76	7.74	7.40	7.95	7.77	8.11	8.11	8.18	8.24	8.23	7.40	8.24	7.90
Dissolved Oxygen	MG/L		7.22	4.43	6.76	5.12	7.87	5.08	8.21	10.56	9.52	8.08	8.89	9.35	12.60	11.60	4.43	12.60	8.26
Dissolved Oxygen	% sat		75.70	47.60	67.20	79.80	85.30	57.40	78.90	116.70	111.70	83.00	89.80	90.30	124.30	112.40	47.60	124.30	88.51
Salinity	ppt		13	13	13	13	13	13	13	13	13	13	14	14	14	14	13	14	13
Conductivity	umhos		17	21	17	21	18	19	19	19	18	17	17	16	16	16	16	21	18
Temperature	C		14.20	13.50	13.70	14.40	16.20	18.90	18.30	18.80	15.50	12.70	11.90	10.40	10.70	15.40	10.40	18.90	15.12
Depth	ft.		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Flow	MGD		6.96	2.07	3.64	2.01	0.14	0.51	0.16	0.51	5.38	2.54	3.34	0.22	1.12	0.17	0.14	6.96	1.92
Total Suspended Solids	MG/L	800 / 400	88	48	33	35	55	18	43	46	AD	90	81	30	26	32	18.00	148.00	57.00
Nitrite	MG/L		AD								AD						AD	AD	AD
Ammonium	MG/L		AD								AD						AD	AD	AD
Total Dissolved P	MG/L		AD								AD						AD	AD	AD
Total Dissolved N	MG/L		AD								AD						AD	AD	AD
Phosphate	MG/L		AD								AD						AD	AD	AD
Nitrate/Nitrite	MG/L		AD								AD						AD	AD	AD
Nitrate	MG/L		AD								AD						AD	AD	AD
Dissolved Organic N	MG/L		AD								AD						AD	AD	AD
Dissolved Organic P	MG/L		AD								AD						AD	AD	AD
Total Antimony	UG/L										AD						AD	AD	AD
Dissolved Antimony	UG/L										AD						AD	AD	AD
Total Arsenic	UG/L										AD						AD	AD	AD
Dissolved Arsenic	UG/L										AD						AD	AD	AD
Total Beryllium	UG/L										AD						AD	AD	AD
Dissolved Beryllium	UG/L										AD						AD	AD	AD
Total Cadmium	UG/L	43									AD						AD	AD	AD
Dissolved Cadmium	UG/L										AD						AD	AD	AD
Total Chromium	UG/L										AD						AD	AD	AD
Dissolved Chromium	UG/L										AD						AD	AD	AD
Total Copper	UG/L	6.1									AD						AD	AD	AD
Dissolved Copper	UG/L										AD						AD	AD	AD
Total Lead	UG/L	210									AD						AD	AD	AD
Dissolved Lead	UG/L										AD						AD	AD	AD
Total Mercury	UG/L	1.8									AD						AD	AD	AD
Dissolved Mercury	UG/L										AD						AD	AD	AD
Total Nickel	UG/L	75									AD						AD	AD	AD
Dissolved Nickel	UG/L										AD						AD	AD	AD
Total Selenium	UG/L	300									AD						AD	AD	AD
Dissolved Selenium	UG/L										AD						AD	AD	AD
Total Silver	UG/L	1.9									AD						AD	AD	AD
Dissolved Silver	UG/L										AD						AD	AD	AD
Total Thallium	UG/L										AD						AD	AD	AD
Dissolved Thallium	UG/L										AD						AD	AD	AD
Total Zinc	UG/L	90									AD						AD	AD	AD
Dissolved Zinc	UG/L										AD						AD	AD	AD

ND: No discharge <: Less than the method detection limit AD: Awaiting Data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #4

PIERP SPILLWAY 4, OCTOBER 2001

Month	October		October	October	October	October	October	October	October	October	October	October	October	October	October	October	October	October
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	P1334	P1338	P1340
Parameter	Units																		
Sample Time	mil																1130	0030	1030
Turbidity	NTU	150 / 50															68	25	27
pH	units	6.5 - 8.5															8.11	8.02	7.81
Dissolved Oxygen	MG/L																9.72	8.33	6.42
Dissolved Oxygen	% sat																109.70	98.00	66.10
Salinity	ppt																13	13	13
Conductivity	umhos																18	18	17
Temperature	C																17.90	18.60	15.00
Depth	ft.																1	1	1
Flow	MGD																0.58	0.20	3.07
Total Suspended Solids	MG/L	800 / 400															85	74	41
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge < Less than the method detection limit AD: Awaiting Data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #4

PIERP SPILLWAY 4, OCTOBER 2001

Month	October	State Water Quality Standards at any time / monthly avg.	October	October	October	October	October	October	October	October	October	October	October	October	October	Spillway #4	Spillway #4	Spillway #4
Day			18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location			Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4	Sp. 4			
Frequency			w	d	d	d	d	d	d	d	m	d	d	d	d	d			
Sample #			P1343	P1352	P1361	P1365	P1369	P1373	P1383	P1388	P1395	P1402	P1404	P1410	P1415	P1418			
Parameter	Units																		
Sample Time	mil		0015	0100	0910	0100	0300	0200	0500	1630	1020	0045	0010	1000	0830	1200	NA	NA	NA
Turbidity	NTU	150 / 50	41	18	27	19	18	31	27	27	40	56	60	26	20	15	15	68	32
pH	units	6.5 - 8.5	7.26	7.80	7.61	7.43	7.66	7.50	7.43	7.92	7.46	8.21	8.10	8.15	8.25	8.27	7.26	8.27	7.82
Dissolved Oxygen	MG/L		6.92	5.66	5.58	6.97	7.07	4.33	7.66	12.61	9.96	8.31	9.22	9.76	9.71	13.70	4.33	13.70	8.35
Dissolved Oxygen	% sat		71.10	56.60	58.80	99.30	49.10	39.30	74.00	140.20	101.60	87.80	89.40	90.70	94.40	128.90	39.30	140.20	85.59
Salinity	ppt		13	13	13	13	13	13	13	13	13	14	14	14	14	14	13	14	13
Conductivity	umhos		16	21	17	21	18	18	19	20	18	16	16	16	16	17	16	21	18
Temperature	C		12.30	12.90	13.70	14.50	16.20	17.10	18.10	19.90	14.90	10.10	10.10	9.10	10.00	16.70	9.10	19.90	14.54
Depth	ft.		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Flow	MGD		6.96	2.07	3.64	2.01	0.14	0.51	0.16	0.51	5.38	2.54	3.34	0.22	1.12	0.17	0.14	6.96	1.92
Total Suspended Solids	MG/L	800 / 400	76	50	44	51	53	32	55	60	AD	100	93	45	36	24	24	100	57
Nitrite	MG/L		AD								AD						AD	AD	AD
Ammonium	MG/L		AD								AD						AD	AD	AD
Total Dissolved P	MG/L		AD								AD						AD	AD	AD
Total Dissolved N	MG/L		AD								AD						AD	AD	AD
Phosphate	MG/L		AD								AD						AD	AD	AD
Nitrate/Nitrite	MG/L		AD								AD						AD	AD	AD
Nitrate	MG/L		AD								AD						AD	AD	AD
Dissolved Organic N	MG/L		AD								AD						AD	AD	AD
Dissolved Organic P	MG/L		AD								AD						AD	AD	AD
Total Antimony	UG/L										AD						AD	AD	AD
Dissolved Antimony	UG/L										AD						AD	AD	AD
Total Arsenic	UG/L										AD						AD	AD	AD
Dissolved Arsenic	UG/L										AD						AD	AD	AD
Total Beryllium	UG/L										AD						AD	AD	AD
Dissolved Beryllium	UG/L										AD						AD	AD	AD
Total Cadmium	UG/L	43									AD						AD	AD	AD
Dissolved Cadmium	UG/L										AD						AD	AD	AD
Total Chromium	UG/L										AD						AD	AD	AD
Dissolved Chromium	UG/L										AD						AD	AD	AD
Total Copper	UG/L	6.1									AD						AD	AD	AD
Dissolved Copper	UG/L										AD						AD	AD	AD
Total Lead	UG/L	210									AD						AD	AD	AD
Dissolved Lead	UG/L										AD						AD	AD	AD
Total Mercury	UG/L	1.8									AD						AD	AD	AD
Dissolved Mercury	UG/L										AD						AD	AD	AD
Total Nickel	UG/L	75									AD						AD	AD	AD
Dissolved Nickel	UG/L										AD						AD	AD	AD
Total Selenium	UG/L	300									AD						AD	AD	AD
Dissolved Selenium	UG/L										AD						AD	AD	AD
Total Silver	UG/L	1.9									AD						AD	AD	AD
Dissolved Silver	UG/L										AD						AD	AD	AD
Total Thallium	UG/L										AD						AD	AD	AD
Dissolved Thallium	UG/L										AD						AD	AD	AD
Total Zinc	UG/L	90									AD						AD	AD	AD
Dissolved Zinc	UG/L										AD						AD	AD	AD

ND: No discharge <: Less than the method detection limit AD: Awaiting Data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #5

PIERP SPILLWAY 5, OCTOBER 2001

Month	October		October	October	October	October	October	October	October	October	October	October	October	October	October	October	October	October
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5	Sp. 5
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

Spillway #5

PIERP SPILLWAY 5, OCTOBER 2001

Month	October		October	October	October	October	October	October	October	October	October	October	October	October	October	Spillway #5	Spillway #5	Spillway #5
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	5p. 5	Sp. 5	5p. 5	Sp. 5	Sp. 5	Sp. 5	5p. 5	Sp. 5	5p. 5	Sp. 5	Sp. 5	5p. 5	5p. 5	5p. 5			
Frequency		at any time / monthly avg.	w	d	d	w	d	d	d	d	d	d	d	d	d	d			
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50															NA	NA	NA
pH	units	6.5 - 8.5															ND	ND	ND
Dissolved Oxygen	MG/L																ND	ND	ND
Dissolved Oxygen	% sat																ND	ND	ND
Salinity	ppt																ND	ND	ND
Conductivity	umhos																ND	ND	ND
Temperature	C																ND	ND	ND
Depth	ft.																ND	ND	ND
Flow	MGD																ND	ND	ND
Total Suspended Solids	MG/L	800 / 400															ND	ND	ND
Nitrite	MG/L																ND	ND	ND
Ammonium	MG/L																ND	ND	ND
Total Dissolved P	MG/L																ND	ND	ND
Total Dissolved N	MG/L																ND	ND	ND
Phosphate	MG/L																ND	ND	ND
Nitrate/Nitrite	MG/L																ND	ND	ND
Nitrate	MG/L																ND	ND	ND
Dissolved Organic N	MG/L																ND	ND	ND
Dissolved Organic P	MG/L																ND	ND	ND
Total Antimony	UG/L																ND	ND	ND
Dissolved Antimony	UG/L																ND	ND	ND
Total Arsenic	UG/L																ND	ND	ND
Dissolved Arsenic	UG/L																ND	ND	ND
Total Beryllium	UG/L																ND	ND	ND
Dissolved Beryllium	UG/L																ND	ND	ND
Total Cadmium	UG/L	43															ND	ND	ND
Dissolved Cadmium	UG/L																ND	ND	ND
Total Chromium	UG/L																ND	ND	ND
Dissolved Chromium	UG/L																ND	ND	ND
Total Copper	UG/L	6.1															ND	ND	ND
Dissolved Copper	UG/L																ND	ND	ND
Total Lead	UG/L	210															ND	ND	ND
Dissolved Lead	UG/L																ND	ND	ND
Total Mercury	UG/L	1.8															ND	ND	ND
Dissolved Mercury	UG/L																ND	ND	ND
Total Nickel	UG/L	75															ND	ND	ND
Dissolved Nickel	UG/L																ND	ND	ND
Total Selenium	UG/L	300															ND	ND	ND
Dissolved Selenium	UG/L																ND	ND	ND
Total Silver	UG/L	1.9															ND	ND	ND
Dissolved Silver	UG/L																ND	ND	ND
Total Thallium	UG/L																ND	ND	ND
Dissolved Thallium	UG/L																ND	ND	ND
Total Zinc	UG/L	90															ND	ND	ND
Dissolved Zinc	UG/L																ND	ND	ND

ND: No discharge < Less than the method detection limit AD: Awaiting data > Greater than the value noted NA: Not applicable NR: Not required

Spillway # 6

PIERP SPILLWAY 6, OCTOBER 2001

Month	October		October	October	October	October	October	October	October	October	October	October	October	October	October	October	October	October
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required
**Field data inadvertantly not collected.

Spillway # 6

PIERP SPILLWAY 6, OCTOBER 2001

Month	October		October	October	October	October	October	October	October	October	October	October	October	October	October	Spillway # 6	Spillway # 6	Spillway # 6
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6	Sp. 6			
Frequency		at any time / monthly avg.	d	d	d	d	d	w	d	d	d**	d	d	d	d	d			
Sample #			ND	ND	ND	ND	ND	P1374	ND	ND	P1399	P1403	ND	P1411	P1414	P1421			
Parameter	Units																		
Sample Time	mil							1000			0900	0100		1100	0800	0830	NA	NA	NA
Turbidity	NTU	150 / 50						57			97	149		47	55	52	47	149	76
pH	units	6.5 - 8.5						8.54			8.57	8.74		8.59	8.70	8.64	8.54	8.74	8.63
Dissolved Oxygen	MG/L							7.77			9.05	9.06		13.67	10.81	14.55	7.77	14.55	10.82
Dissolved Oxygen	% sat							91.70			**	80.20		141.20	102.60	147.70	80.20	147.70	112.68
Salinity	ppt							17			**	18		18	18	19	17	19	18
Conductivity	umhos							25			**	19		22	20	22	19	25	22
Temperature	C							19.20			**	5.80		11.80	8.20	10.70	5.80	19.20	11.14
Depth	ft.							1			1	1		1	1	1	1	1	1
Flow	MGD							0.41			1.79	0.32		0.03	0.83	0.23	0.03	1.79	0.60
Total Suspended Solids	MG/L	800 / 400						84			128	1577		99	106	110	84	1577	351
Nitrite	MG/L							AD			NR						AD	AD	AD
Ammonium	MG/L							AD			NR						AD	AD	AD
Total Dissolved P	MG/L							AD			NR						AD	AD	AD
Total Dissolved N	MG/L							AD			NR						AD	AD	AD
Phosphate	MG/L							AD			NR						AD	AD	AD
Nitrate/Nitrite	MG/L							AD			NR						AD	AD	AD
Nitrate	MG/L							AD			NR						AD	AD	AD
Dissolved Organic N	MG/L							AD			NR						AD	AD	AD
Dissolved Organic P	MG/L							AD			NR						AD	AD	AD
Total Antimony	UG/L										NR						NA	NA	NA
Dissolved Antimony	UG/L										NR						NA	NA	NA
Total Arsenic	UG/L										NR						NA	NA	NA
Dissolved Arsenic	UG/L										NR						NA	NA	NA
Total Beryllium	UG/L										NR						NA	NA	NA
Dissolved Beryllium	UG/L										NR						NA	NA	NA
Total Cadmium	UG/L	43									NR						NA	NA	NA
Dissolved Cadmium	UG/L										NR						NA	NA	NA
Total Chromium	UG/L										NR						NA	NA	NA
Dissolved Chromium	UG/L										NR						NA	NA	NA
Total Copper	UG/L	6.1									NR						NA	NA	NA
Dissolved Copper	UG/L										NR						NA	NA	NA
Total Lead	UG/L	210									NR						NA	NA	NA
Dissolved Lead	UG/L										NR						NA	NA	NA
Total Mercury	UG/L	1.8									NR						NA	NA	NA
Dissolved Mercury	UG/L										NR						NA	NA	NA
Total Nickel	UG/L	75									NR						NA	NA	NA
Dissolved Nickel	UG/L										NR						NA	NA	NA
Total Selenium	UG/L	300									NR						NA	NA	NA
Dissolved Selenium	UG/L										NR						NA	NA	NA
Total Silver	UG/L	1.9									NR						NA	NA	NA
Dissolved Silver	UG/L										NR						NA	NA	NA
Total Thallium	UG/L										NR						NA	NA	NA
Dissolved Thallium	UG/L										NR						NA	NA	NA
Total Zinc	UG/L	90									NR						NA	NA	NA
Dissolved Zinc	UG/L										NR						NA	NA	NA

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required
**Field data inadvertantly not collected.

100 Yard #1

PIERP 100YD-1, OCTOBER 2001

Month	October		October	October	October	October	October	October	October	October	October	October	October	October	October	October	October	October
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1
Frequency		at any time / monthly avg.	d	d	d	w	d	d	d	d	d	w	d	d	d	d	d	d	d
Sample #			NA	NA	NA	P1304	NA	NA	NA	NA	NA	P1311	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																		
Sample Time	mil					1100						1415							
Turbidity	NTU	150 / 50				2						2							
pH	units	6.5 - 8.5				7.73						7.82							
Dissolved Oxygen	MG/L					8.66						7.64							
Dissolved Oxygen	% sat					104.20						87.30							
Salinity	ppt					16						16							
Conductivity	umhos					23						22							
Temperature	C					19.90						19.60							
Depth	ft.					2						2							
Flow	MGD					NA						NA							
Total Suspended Solids	MG/L	800 / 400				16						16							
Nitrite	MG/L					AD						AD							
Ammonium	MG/L					AD						AD							
Total Dissolved P	MG/L					AD						AD							
Total Dissolved N	MG/L					AD						AD							
Phosphate	MG/L					AD						AD							
Nitrate/Nitrite	MG/L					AD						AD							
Nitrate	MG/L					AD						AD							
Dissolved Organic N	MG/L					AD						AD							
Dissolved Organic P	MG/L					AD						AD							
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #1

PIERP 100YD-1, OCTOBER 2001

Month	October		October	October	October	October	October	October	October	October	October	October	October	October	October	100 Yard #1	100 Yard #1	100 Yard #1
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1	100yd-1			
Frequency		at any time / monthly avg.	w	d	d	d	d	w	d	d	d	d	d	d	d	d			
Sample #			P1349					P1379											
Parameter	Units																		
Sample Time	mil		1600					1420			NR						NA	NA	NA
Turbidity	NTU	150 / 50	2					5			NR						2	5	3
pH	units	6.5 - 8.5	7.80					7.80			NR						7.73	7.82	7.79
Dissolved Oxygen	MG/L		6.49					9.57			NR						6.49	9.57	8.09
Dissolved Oxygen	% sat		75.00					11.36			NR						11.36	104.20	69.47
Salinity	ppt		16					17			NR						16	17	16
Conductivity	umhos		23					24			NR						22	24	23
Temperature	C		17.40					18.60			NR						17.40	19.90	18.88
Depth	ft		2					2			NR						2	2	2
Flow	MGD		NA					NA			NR						NA	NA	NA
Total Suspended Solids	MG/L	800 / 400	20					14			NR						14	20	17
Nitrite	MG/L		AD					AD			NR						AD	AD	AD
Ammonium	MG/L		AD					AD			NR						AD	AD	AD
Total Dissolved P	MG/L		AD					AD			NR						AD	AD	AD
Total Dissolved N	MG/L		AD					AD			NR						AD	AD	AD
Phosphate	MG/L		AD					AD			NR						AD	AD	AD
Nitrate/Nitrite	MG/L		AD					AD			NR						AD	AD	AD
Nitrate	MG/L		AD					AD			NR						AD	AD	AD
Dissolved Organic N	MG/L		AD					AD			NR						AD	AD	AD
Dissolved Organic P	MG/L		AD					AD			NR						AD	AD	AD
Total Antimony	UG/L										NR						NA	NA	NA
Dissolved Antimony	UG/L										NR						NA	NA	NA
Total Arsenic	UG/L										NR						NA	NA	NA
Dissolved Arsenic	UG/L										NR						NA	NA	NA
Total Beryllium	UG/L										NR						NA	NA	NA
Dissolved Beryllium	UG/L										NR						NA	NA	NA
Total Cadmium	UG/L	43									NR						NA	NA	NA
Dissolved Cadmium	UG/L										NR						NA	NA	NA
Total Chromium	UG/L										NR						NA	NA	NA
Dissolved Chromium	UG/L										NR						NA	NA	NA
Total Copper	UG/L	6.1									NR						NA	NA	NA
Dissolved Copper	UG/L										NR						NA	NA	NA
Total Lead	UG/L	210									NR						NA	NA	NA
Dissolved Lead	UG/L										NR						NA	NA	NA
Total Mercury	UG/L	1.8									NR						NA	NA	NA
Dissolved Mercury	UG/L										NR						NA	NA	NA
Total Nickel	UG/L	75									NR						NA	NA	NA
Dissolved Nickel	UG/L										NR						NA	NA	NA
Total Selenium	UG/L	300									NR						NA	NA	NA
Dissolved Selenium	UG/L										NR						NA	NA	NA
Total Silver	UG/L	1.9									NR						NA	NA	NA
Dissolved Silver	UG/L										NR						NA	NA	NA
Total Thallium	UG/L										NR						NA	NA	NA
Dissolved Thallium	UG/L										NR						NA	NA	NA
Total Zinc	UG/L	90									NR						NA	NA	NA
Dissolved Zinc	UG/L										NR						NA	NA	NA

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #2

PIERP 100YD-2, OCTOBER 2001

Month		State Water	October	October	October	October	October	October	October	October	October	October	October	October	October	October	October	October
Day		Quality Standards	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		at any time / monthly avg.	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #2

PIERP 100YD-2, OCTOBER 2001

Month	October	State Water Quality Standards at any time / monthly avg.	October	October	October	October	October	October	October	October	October	October	October	October	October	October	100 Yard #2	100 Yard #2	100 Yard #2
Day			18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location			100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2	100yd-2			
Frequency			w	d	d	d	d	w	d	d	m	d	d	d	d	d			
Sample #			P1348	NA	NA	NA	NA	P1378	NA	NA	P1396	NA	NA	NA	NA	NA			
Parameter	Units																		
Sample Time	mil		1610					1410			1310								
Turbidity	NTU	150 / 50	2					3			7						NA	NA	NA
pH	units	6.5 - 8.5	7.97					7.81			7.75						2	7	4
Dissolved Oxygen	MG/L		6.38					8.21			8.30						7.75	7.97	7.84
Dissolved Oxygen	% sat		72.50					115.60			93.10						6.38	8.30	7.63
Salinity	ppt		16					17			17						72.50	115.60	93.73
Conductivity	umhos		22					24			23						16	17	17
Temperature	C		16.90					19.00			16.90						22	24	23
Depth	ft.		2					2			2						16.90	19.00	17.60
Flow	MGD		NA					NA			NA						2	2	2
Total Suspended Solids	MG/L	800 / 400	19					18			AD						NA	NA	NA
Nitrite	MG/L		AD					AD			AD						18	19	19
Ammonium	MG/L		AD					AD			AD						AD	AD	AD
Total Dissolved P	MG/L		AD					AD			AD						AD	AD	AD
Total Dissolved N	MG/L		AD					AD			AD						AD	AD	AD
Phosphate	MG/L		AD					AD			AD						AD	AD	AD
Nitrate/Nitrite	MG/L		AD					AD			AD						AD	AD	AD
Nitrate	MG/L		AD					AD			AD						AD	AD	AD
Dissolved Organic N	MG/L		AD					AD			AD						AD	AD	AD
Dissolved Organic P	MG/L		AD					AD			AD						AD	AD	AD
Total Antimony	UG/L										AD						AD	AD	AD
Dissolved Antimony	UG/L										AD						AD	AD	AD
Total Arsenic	UG/L										AD						AD	AD	AD
Dissolved Arsenic	UG/L										AD						AD	AD	AD
Total Beryllium	UG/L										AD						AD	AD	AD
Dissolved Beryllium	UG/L										AD						AD	AD	AD
Total Cadmium	UG/L	43									AD						AD	AD	AD
Dissolved Cadmium	UG/L										AD						AD	AD	AD
Total Chromium	UG/L										AD						AD	AD	AD
Dissolved Chromium	UG/L										AD						AD	AD	AD
Total Copper	UG/L	6.1									AD						AD	AD	AD
Dissolved Copper	UG/L										AD						AD	AD	AD
Total Lead	UG/L	210									AD						AD	AD	AD
Dissolved Lead	UG/L										AD						AD	AD	AD
Total Mercury	UG/L	1.8									AD						AD	AD	AD
Dissolved Mercury	UG/L										AD						AD	AD	AD
Total Nickel	UG/L	75									AD						AD	AD	AD
Dissolved Nickel	UG/L										AD						AD	AD	AD
Total Selenium	UG/L	300									AD						AD	AD	AD
Dissolved Selenium	UG/L										AD						AD	AD	AD
Total Silver	UG/L	1.9									AD						AD	AD	AD
Dissolved Silver	UG/L										AD						AD	AD	AD
Total Thallium	UG/L										AD						AD	AD	AD
Dissolved Thallium	UG/L										AD						AD	AD	AD
Total Zinc	UG/L	90									AD						AD	AD	AD
Dissolved Zinc	UG/L										AD						AD	AD	AD

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #4

PIERP 100YD-4, OCTOBER 2001

Month	October		October	October	October	October	October	October	October	October	October	October	October	October	October	October	October	October
Day		State Water	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #4

PIERP 100YD-4, OCTOBER 2001

Month	October		October	October	October	October	October	October	October	October	October	October	October	October	October	October	100 Yard #4	100 Yard #4	100 Yard #4
Day		State Water	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		Quality Standards	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4	100yd-4			
Frequency		at any time / monthly avg.	w	d	d	d	d	w	d	d	m	d	d	d	d	d			
Sample #			P1347	NA	NA	NA	NA	P1377	NA	NA	P1397	NA	NA	NA	NA	NA			
Parameter	Units																		
Sample Time	mil		1620					1400			1320						NA	NA	NA
Turbidity	NTU	150 / 50	6					4			4						4	6	5
pH	units	6.5 - 8.5	7.96					7.75			7.78						7.75	7.96	7.83
Dissolved Oxygen	MG/L		6.68					9.90			9.03						6.68	9.90	8.54
Dissolved Oxygen	% sat		75.30					106.80			98.10						75.30	106.80	93.40
Salinity	ppt		16					17			17						16	17	17
Conductivity	umhos		22					24			22						22	24	23
Temperature	C		16.50					19.40			15.10						15.10	19.40	17.00
Depth	ft.		2					2			2						2	2	2
Flow	MGD		NA					NA			NA						NA	NA	NA
Total Suspended Solids	MG/L	800 / 400	24					16			AD						16	24	20
Nitrite	MG/L		AD					AD			AD						AD	AD	AD
Ammonium	MG/L		AD					AD			AD						AD	AD	AD
Total Dissolved P	MG/L		AD					AD			AD						AD	AD	AD
Total Dissolved N	MG/L		AD					AD			AD						AD	AD	AD
Phosphate	MG/L		AD					AD			AD						AD	AD	AD
Nitrate/Nitrite	MG/L		AD					AD			AD						AD	AD	AD
Nitrate	MG/L		AD					AD			AD						AD	AD	AD
Dissolved Organic N	MG/L		AD					AD			AD						AD	AD	AD
Dissolved Organic P	MG/L		AD					AD			AD						AD	AD	AD
Total Antimony	UG/L										AD						AD	AD	AD
Dissolved Antimony	UG/L										AD						AD	AD	AD
Total Arsenic	UG/L										AD						AD	AD	AD
Dissolved Arsenic	UG/L										AD						AD	AD	AD
Total Beryllium	UG/L										AD						AD	AD	AD
Dissolved Beryllium	UG/L										AD						AD	AD	AD
Total Cadmium	UG/L	43									AD						AD	AD	AD
Dissolved Cadmium	UG/L										AD						AD	AD	AD
Total Chromium	UG/L										AD						AD	AD	AD
Dissolved Chromium	UG/L										AD						AD	AD	AD
Total Copper	UG/L	6.1									AD						AD	AD	AD
Dissolved Copper	UG/L										AD						AD	AD	AD
Total Lead	UG/L	210									AD						AD	AD	AD
Dissolved Lead	UG/L										AD						AD	AD	AD
Total Mercury	UG/L	1.8									AD						AD	AD	AD
Dissolved Mercury	UG/L										AD						AD	AD	AD
Total Nickel	UG/L	75									AD						AD	AD	AD
Dissolved Nickel	UG/L										AD						AD	AD	AD
Total Selenium	UG/L	300									AD						AD	AD	AD
Dissolved Selenium	UG/L										AD						AD	AD	AD
Total Silver	UG/L	1.9									AD						AD	AD	AD
Dissolved Silver	UG/L										AD						AD	AD	AD
Total Thallium	UG/L										AD						AD	AD	AD
Dissolved Thallium	UG/L										AD						AD	AD	AD
Total Zinc	UG/L	90									AD						AD	AD	AD
Dissolved Zinc	UG/L										AD						AD	AD	AD

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #5

PIERP 100YD-5, OCTOBER 2001

Month	October	State Water	October	October	October	October	October	October	October	October	October	October	October	October	October	October	October	October
Day			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location		Quality Standards	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5
Frequency		at any time / monthly avg.	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #5

PIERP 100YD-5, OCTOBER 2001

Month	October	State Water Quality Standards at any time / monthly avg.	October	October	October	October	October	October	October	October	October	October	October	October	October	100 Yard #5	100 Yard #5	100 Yard #5
Day			18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location			100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5	100yd-5			
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d			
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																		
Sample Time	mil																NA	NA	NA
Turbidity	NTU	150 / 50															ND	ND	ND
pH	units	6.5 - 8.5															ND	ND	ND
Dissolved Oxygen	MG/L																ND	ND	ND
Dissolved Oxygen	% sat																ND	ND	ND
Salinity	ppt																ND	ND	ND
Conductivity	umhos																ND	ND	ND
Temperature	C																ND	ND	ND
Depth	ft.																ND	ND	ND
Flow	MGD																NA	NA	NA
Total Suspended Solids	MG/L	800 / 400															ND	ND	ND
Nitrite	MG/L																ND	ND	ND
Ammonium	MG/L																ND	ND	ND
Total Dissolved P	MG/L																ND	ND	ND
Total Dissolved N	MG/L																ND	ND	ND
Phosphate	MG/L																ND	ND	ND
Nitrate/Nitrite	MG/L																ND	ND	ND
Nitrate	MG/L																ND	ND	ND
Dissolved Organic N	MG/L																ND	ND	ND
Dissolved Organic P	MG/L																ND	ND	ND
Total Antimony	UG/L																ND	ND	ND
Dissolved Antimony	UG/L																ND	ND	ND
Total Arsenic	UG/L																ND	ND	ND
Dissolved Arsenic	UG/L																ND	ND	ND
Total Beryllium	UG/L																ND	ND	ND
Dissolved Beryllium	UG/L																ND	ND	ND
Total Cadmium	UG/L	43															ND	ND	ND
Dissolved Cadmium	UG/L																ND	ND	ND
Total Chromium	UG/L																ND	ND	ND
Dissolved Chromium	UG/L																ND	ND	ND
Total Copper	UG/L	6.1															ND	ND	ND
Dissolved Copper	UG/L																ND	ND	ND
Total Lead	UG/L	210															ND	ND	ND
Dissolved Lead	UG/L																ND	ND	ND
Total Mercury	UG/L	1.8															ND	ND	ND
Dissolved Mercury	UG/L																ND	ND	ND
Total Nickel	UG/L	75															ND	ND	ND
Dissolved Nickel	UG/L																ND	ND	ND
Total Selenium	UG/L	300															ND	ND	ND
Dissolved Selenium	UG/L																ND	ND	ND
Total Silver	UG/L	1.9															ND	ND	ND
Dissolved Silver	UG/L																ND	ND	ND
Total Thallium	UG/L																ND	ND	ND
Dissolved Thallium	UG/L																ND	ND	ND
Total Zinc	UG/L	90															ND	ND	ND
Dissolved Zinc	UG/L																ND	ND	ND

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

100 Yard #6

PIERP 100YD-6, OCTOBER 2001

Month	October	State Water Quality Standards at anytime / monthly avg.	October	October	October	October	October	October	October	October	October	October	October	October	October	October	October	October
Day			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Location			100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6
Frequency			d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d	d
Sample #			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Parameter	Units																		
Sample Time	mil																		
Turbidity	NTU	150 / 50																	
pH	units	6.5 - 8.5																	
Dissolved Oxygen	MG/L																		
Dissolved Oxygen	% sat																		
Salinity	ppt																		
Conductivity	umhos																		
Temperature	C																		
Depth	ft.																		
Flow	MGD																		
Total Suspended Solids	MG/L	800 / 400																	
Nitrite	MG/L																		
Ammonium	MG/L																		
Total Dissolved P	MG/L																		
Total Dissolved N	MG/L																		
Phosphate	MG/L																		
Nitrate/Nitrite	MG/L																		
Nitrate	MG/L																		
Dissolved Organic N	MG/L																		
Dissolved Organic P	MG/L																		
Total Antimony	UG/L																		
Dissolved Antimony	UG/L																		
Total Arsenic	UG/L																		
Dissolved Arsenic	UG/L																		
Total Beryllium	UG/L																		
Dissolved Beryllium	UG/L																		
Total Cadmium	UG/L	43																	
Dissolved Cadmium	UG/L																		
Total Chromium	UG/L																		
Dissolved Chromium	UG/L																		
Total Copper	UG/L	6.1																	
Dissolved Copper	UG/L																		
Total Lead	UG/L	210																	
Dissolved Lead	UG/L																		
Total Mercury	UG/L	1.8																	
Dissolved Mercury	UG/L																		
Total Nickel	UG/L	75																	
Dissolved Nickel	UG/L																		
Total Selenium	UG/L	300																	
Dissolved Selenium	UG/L																		
Total Silver	UG/L	1.9																	
Dissolved Silver	UG/L																		
Total Thallium	UG/L																		
Dissolved Thallium	UG/L																		
Total Zinc	UG/L	90																	
Dissolved Zinc	UG/L																		

ND: No discharge < Less than the method detection limit A.D: Awaiting data > Greater than the value noted NA: Not applicable NR: Not required

100 Yard #6

PIERP 100YD-6, OCTOBER 2001

Month	October	State Water	October	October	October	October	October	October	October	October	October	October	October	October	October	100 Yard #6	100 Yard #6	100 Yard #6
Day		Quality Standards	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Minimum	Maximum	Average
Location		at anytime / monthly avg.	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6	100yd-6			
Frequency			d	d	d	d	d	w	d	d	d	d	d	d	d	d			
Sample #			ND	ND	ND	ND	ND	P1376	ND	ND	ND	ND	ND	ND	ND	ND			
Parameter	Units																		
Sample Time	mil							1345			NR								
Turbidity	NTU	150 / 50						2			NR						NA	NA	NA
pH	units	6.5 - 8.5						7.74			NR						2	2	2
Dissolved Oxygen	MG/L							8.56			NR						7.74	7.74	7.74
Dissolved Oxygen	% sat							106.10			NR						8.56	8.56	8.56
Salinity	ppt							17			NR						106.10	106.10	106.10
Conductivity	umhos							24			NR						17	17	17
Temperature	C							18.90			NR						24	24	24
Depth	ft.							2			NR						18.90	18.90	18.90
Flow	MGD							NA			NR						2	2	2
Total Suspended Solids	MG/L	800 / 400						10			NR						NA	NA	NA
Nitrite	MG/L							AD			NR						10	10	10
Ammonium	MG/L							AD			NR						AD	AD	AD
Total Dissolved P	MG/L							AD			NR						AD	AD	AD
Total Dissolved N	MG/L							AD			NR						AD	AD	AD
Phosphate	MG/L							AD			NR						AD	AD	AD
Nitrate/Nitrite	MG/L							AD			NR						AD	AD	AD
Nitrate	MG/L							AD			NR						AD	AD	AD
Dissolved Organic N	MG/L							AD			NR						AD	AD	AD
Dissolved Organic P	MG/L							AD			NR						AD	AD	AD
Total Antimony	UG/L										NR						AD	AD	AD
Dissolved Antimony	UG/L										NR						NA	NA	NA
Total Arsenic	UG/L										NR						NA	NA	NA
Dissolved Arsenic	UG/L										NR						NA	NA	NA
Total Beryllium	UG/L										NR						NA	NA	NA
Dissolved Beryllium	UG/L										NR						NA	NA	NA
Total Cadmium	UG/L	43									NR						NA	NA	NA
Dissolved Cadmium	UG/L										NR						NA	NA	NA
Total Chromium	UG/L										NR						NA	NA	NA
Dissolved Chromium	UG/L										NR						NA	NA	NA
Total Copper	UG/L	6.1									NR						NA	NA	NA
Dissolved Copper	UG/L										NR						NA	NA	NA
Total Lead	UG/L	210									NR						NA	NA	NA
Dissolved Lead	UG/L										NR						NA	NA	NA
Total Mercury	UG/L	1.8									NR						NA	NA	NA
Dissolved Mercury	UG/L										NR						NA	NA	NA
Total Nickel	UG/L	75									NR						NA	NA	NA
Dissolved Nickel	UG/L										NR						NA	NA	NA
Total Selenium	UG/L	300									NR						NA	NA	NA
Dissolved Selenium	UG/L										NR						NA	NA	NA
Total Silver	UG/L	1.9									NR						NA	NA	NA
Dissolved Silver	UG/L										NR						NA	NA	NA
Total Thallium	UG/L										NR						NA	NA	NA
Dissolved Thallium	UG/L										NR						NA	NA	NA
Total Zinc	UG/L	90									NR						NA	NA	NA
Dissolved Zinc	UG/L										NR						NA	NA	NA

ND: No discharge <: Less than the method detection limit AD: Awaiting data >: Greater than the value noted NA: Not applicable NR: Not required

APPENDIX 3

Priority Pollutant Organics Data for Outfalls

PRIORITY POLLUTANT ORGANICS AND CYANIDE MONITORED AT POPLAR ISLAND

SPILLWAY LOCATION AND SAMPLE DATA		PESTICIDES																							
		Aldrin ug/L (ppb)	alpha-BHC ug/L (ppb)	beta-BHC ug/L (ppb)	gamma-BHC (Lindane(ug/L (ppb)	delta-BHC ug/L (ppb)	Chlordane ug/L (ppb)	4,4'-DDT ug/L (ppb(	4,4'-DDE ug/L (ppb)	4,4'-DDD ug/L (ppb)	Dieldrin ug/L (ppb)	Endosulfan I ug/L (ppb)	Endosulfan II ug/L (ppb)	Endosulfan sulfate ug/L (ppb)	Endrin ug/L (ppb)	Endrin Aldehyde ug/L (ppb)	Heptachlor ug/L (ppb(	Heptachlor epoxide ug/L (ppb)	Toxaphene ug/L (ppb(	PCB-1016 ug/L (ppb(	PCB-1221 ug/L (ppb(	PCB-1232 ug/L (ppb)	PCB-1242 ug/L (ppb(	PCB-1248 ug/L (ppb)	PCB-1254 ug/L (ppb(	PCB-1260 ug/L (ppb)
Surface Water Criteria (ppb)		1.3			0.16		0.09	0.13			0.71				0.057		0.052	0.053	0.21						
Sample Location	mm/dd/yy																								
Spillway 1																									
	04/27/01	NOT SAMPLED																							
	05/31/01	NOT SAMPLED																							
	06/08/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	06/25/01	NOT SAMPLED																							
	07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/14/01	NOT SAMPLED																							
	09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Spillway 5																									
	04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	06/08/01	NOT SAMPLED																							
	06/25/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	07/27/01	NOT SAMPLED																							
	08/07/01	NDT SAMPLED																							
	08/14/01	NOT SAMPLED																							
	09/07/01	NOT SAMPLED																							
Spillway 6																									
	04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	06/08/01	NDT SAMPLED																							
	06/25/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/07/01	NDT SAMPLED																							
	08/14/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
100-yd - 1																									
	04/27/01	NOT SAMPLED																							
	05/31/01	NOT SAMPLED																							
	06/08/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	06/25/01	NOT SAMPLED																							
	07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BUL	BDL	BDL	BDL
	08/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/14/01	NOT SAMPLED																							
	09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
100-yd - 5																									
	04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	06/08/01	NOT SAMPLED																							
	06/25/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	07/27/01	NOT SAMPLED																							
	08/07/01	NOT SAMPLED																							
	08/14/01	NOT SAMPLED																							
	09/07/01	NOT SAMPLED																							
100-yd - 6																									
	04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	06/08/01	NOT SAMPLED																							
	06/25/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/07/01	NOT SAMPLED																							
	08/14/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
WQR1																									
	04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0.004	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	06/08/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	06/25/01	NOT SAMPLED																							
	07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/14/01	NOT SAMPLED																							
	09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

BDL = Below Detection Limit

PRIORITY POLLUTANT ORGANICS AND CYANIDE MONITORED AT POPLAR ISLAND

SPILLWAY LOCATION AND SAMPLE DATA		VOLATILES																						
	Methanylcider ug/L (ppb)	Chloro-methane ug/L (ppb)	Bromo-methane ug/L (ppb)	Vinyl Chloride ug/L (ppb)	Chloro-ethane ug/L (ppb)	Methylene chloride ug/L (ppb)	1,1-Dichloro-ethene ug/L (ppb)	1,1-Dichloro-ethane ug/L (ppb)	Trans-1,2-Di-chloroethylene ug/L (ppb)	Chloroform ug/L (ppb)	1,2-Dichloro-ethane ug/L (ppb)	1,1,1-Trichloro-ethane ug/L (ppb)	Carbon Tetrachloride ug/L (ppb)	Bromodi-chloromethane ug/L (ppb)	1,2-Dichloro-propane ug/L (ppb)	Trans-1,3-Dichloropropene ug/L (ppb)	Trichloro-ethene ug/L (ppb)	Dibromo-chloromethane ug/L (ppb)	1,1,2-Trichloro-ethane ug/L (ppb)	cis-1,3-Dichloro-propene ug/L (ppb)	2-Chloroethyl-vinyl ether ug/L (ppb)	Bromoform ug/L (ppb)	1,1,2,2-Tetra-chloroethane ug/L (ppb)	Tetrachloro-ethene ug/L (ppb)
Surface Water Criteria (ppb)																								
Sample Location mm/dd/yy																								
Spillway 1																								
04/27/01	NOT SAMPLED																							
05/31/01	NOT SAMPLED																							
06/08/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
06/25/01	NOT SAMPLED																							
07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
08/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
08/14/01	NOT SAMPLED																							
09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3.70	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Spillway 5																								
04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
06/08/01	NOT SAMPLED																							
06/25/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
07/27/01	NOT SAMPLED																							
08/07/01	NOT SAMPLED																							
08/14/01	NOT SAMPLED																							
09/07/01	NOT SAMPLED																							
Spillway 6																								
04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
06/08/01	NOT SAMPLED																							
06/25/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
08/07/01	NOT SAMPLED																							
08/14/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3.10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
100-yd - 1																								
04/27/01	NOT SAMPLED																							
05/31/01	NOT SAMPLED																							
06/08/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
06/25/01	NOT SAMPLED																							
07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
08/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
08/14/01	NOT SAMPLED																							
09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
100-yd - 5																								
04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
06/08/01	NOT SAMPLED																							
06/25/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
07/27/01	NOT SAMPLED																							
08/07/01	NOT SAMPLED																							
08/14/01	NOT SAMPLED																							
09/07/01	NOT SAMPLED																							
100-yd - 6																								
04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
06/08/01	NOT SAMPLED																							
06/25/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
08/07/01	NOT SAMPLED																							
08/14/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3.60	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
WQR1																								
04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
06/08/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
06/25/01	NOT SAMPLED																							
07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
08/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
08/14/01	NOT SAMPLED																							
09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

BDL = Below Detection Limit

PRIORITY POLLUTANT ORGANICS AND CYANIDE MONITORED AT POPLAR ISLAND

SPILLWAY LOCATION AND SAMPLE DATA		Chloro-benzene mg/L (ppb)	1,2-Dichloro-benzene mg/L (ppb)	1,3-Dichloro-benzene mg/L (ppb)	1,4-Dichloro-benzene mg/L (ppb)	Benzene mg/L (ppb)	Toluene ug/L (ppb)	Ethylbenzene mg/L (ppb)	Acrolein ug/L (ppb)	Acrylonitrile ug/L (ppb)	ACID/BASE/NEUTRAL COMPOUNDS N-Nitroso-dimethylamine mg/L (ppb)	Bis (2-Chloro-ethyl) Ether mg/L (ppb)	1,3-Dichloro-benzene mg/L (ppb)	1,4-Dichloro-benzene mg/L (ppb)	1,2-Dichloro-benzene mg/L (ppb)	Bis (2-Chloroeth-propyl) Ether mg/L (ppb)	Hexachloro-ethane mg/L (ppb)	N-Nitroso-di N-propylamine mg/L (ppb)	Nitrobenzene mg/L (ppb)	Isophorone mg/L (ppb)	Bis (2-Chloro-ethoxy) Methane mg/L (ppb)	1,2,4-Trichloro-benzene mg/L (ppb)	Naphthalene mg/L (ppb)	Hexachloro butadiene mg/L (ppb)	Hexachloro-cyclopentadiene mg/L (ppb)
Surface Water Criteria (ppb)																										
Sample Location	mm/dd/yy																									
Spillway 1																										
	04/27/01	NOT SAMPLED																								
	05/31/01	NOT SAMPLED																								
	06/08/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	06/25/01	NOT SAMPLED																								
	07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/14/01	NOT SAMPLED																								
	09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Spillway 5																										
	04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	06/08/01	NOT SAMPLED																								
	06/25/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	07/27/01	NOT SAMPLED																								
	08/07/01	NOT SAMPLED																								
	08/14/01	NOT SAMPLED																								
	09/07/01	NOT SAMPLED																								
Spillway 6																										
	04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	06/08/01	NOT SAMPLED																								
	06/25/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	07/27/01	BDL	BDL	BDL	BDL	BDL	1 10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/07/01	NOT SAMPLED																								
	08/14/01	BDL	BDL	BDL	BDL	BDL	1 10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
100-yd - 1																										
	04/27/01	NOT SAMPLED																								
	05/31/01	NOT SAMPLED																								
	06/08/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	06/25/01	NOT SAMPLED																								
	07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/14/01	NOT SAMPLED																								
	09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
100-yd - 5																										
	04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	06/08/01	NOT SAMPLED																								
	06/25/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	07/27/01	NOT SAMPLED																								
	08/07/01	NOT SAMPLED																								
	08/14/01	NOT SAMPLED																								
	09/07/01	NOT SAMPLED																								
100-yd - 6																										
	04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	06/08/01	NOT SAMPLED																								
	06/25/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/07/01	NOT SAMPLED																								
	08/14/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
WQR1																										
	04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	06/08/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	06/25/01	NOT SAMPLED																								
	07/27/01	BDL	BDL	BDL	BDL	BDL	2.20	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/14/01	NOT SAMPLED																								
	09/07/01	BDL	BDL	BDL	BDL	BDL	2.20	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

BDL = Below Detection Limit

PRIORITY POLLUTANT ORGANICS AND CYANIDE MONITORED AT POPLAR ISLAND

SPILLWAY LOCATION AND SAMPLE DATA		2-Chloronaphthalene ug/L (ppb)	Acenaphthylene ug/L (ppb)	Dimethyl Phthalate ug/L (ppb)	2,6-Dinitrotoluene ug/L (ppb)	Acenaphthene ug/L (ppb)	2,4-Dinitrotoluene ug/L (ppb)	Fluorene ug/L (ppb)	Diethyl Phthalate ug/L (ppb)	4-Chlorophenyl-Phenylether ug/L (ppb)	N-Nitrosodiphenylamine ug/L (ppb)	1,2-Diphenylhydrazine (azobenzene) ug/L (ppb)	4-Bromophenyl Phenyl Ether ug/L (ppb)	Hexachlorobenzene ug/L (ppb)	Phenanthrene ug/L (ppb)	Anthracene ug/L (ppb)	Di-n-Butyl Phthalate ug/L (ppb)	Fluoranthene ug/L (ppb)	Benzidine ug/L (ppb)	Pyrene ug/L (ppb)	Butyl Benzyl Phthalate ug/L (ppb)	Benzo(a) anthracene ug/L (ppb)	3,3-Dichlorobenzidine ug/L (ppb)	Chrysene ug/L (ppb)	Bis (2-Ethylhexyl) Phthalate ug/L (ppb)
Surface Water Criteria (ppb)																										
Sample Location	mm/dd/yy																									
Spillway 1																										
	04/27/01	NOT SAMPLED																								
	05/31/01	NOT SAMPLED																								
	06/08/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	8 000
	06/25/01	NOT SAMPLED																								
	07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 02	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/14/01	NOT SAMPLED																								
	09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 700
Spillway 5																										
	04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1 000
	05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2 300
	06/08/01	NOT SAMPLED																								
	06/25/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	18 000
	07/27/01	NOT SAMPLED																								
	08/07/01	NOT SAMPLED																								
	08/14/01	NOT SAMPLED																								
	09/07/01	NOT SAMPLED																								
Spillway 6																										
	04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1 600 -	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 700
	05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 700
	06/08/01	NOT SAMPLED																								
	06/25/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	7 300
	07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/07/01	NOT SAMPLED																								
	08/14/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2 800
	09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	9 000
100-yd - 1																										
	04/27/01	NOT SAMPLED																								
	05/31/01	NOT SAMPLED																								
	06/08/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	21 000
	06/25/01	NOT SAMPLED																								
	07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 02	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/14/01	NOT SAMPLED																								
	09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
100-yd - 5																										
	04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(2 000
	06/08/01	NOT SAMPLED																								
	06/25/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3 000
	07/27/01	NOT SAMPLED																								
	08/07/01	NOT SAMPLED																								
	08/14/01	NOT SAMPLED																								
	09/07/01	NOT SAMPLED																								
100-yd - 6																										
	04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(000
	05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1 100
	06/08/01	NOT SAMPLED																								
	06/25/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	9 000
	07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	9 000
	08/07/01	NOT SAMPLED																								
	08/14/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	9 000
	09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1 100
WQR1																										
	04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(800	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 700
	05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	17 000
	06/08/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	(3 000
	06/25/01	NOT SAMPLED																								
	07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	13 000
	08/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 03	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/14/01	NOT SAMPLED																								
	09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	0 80

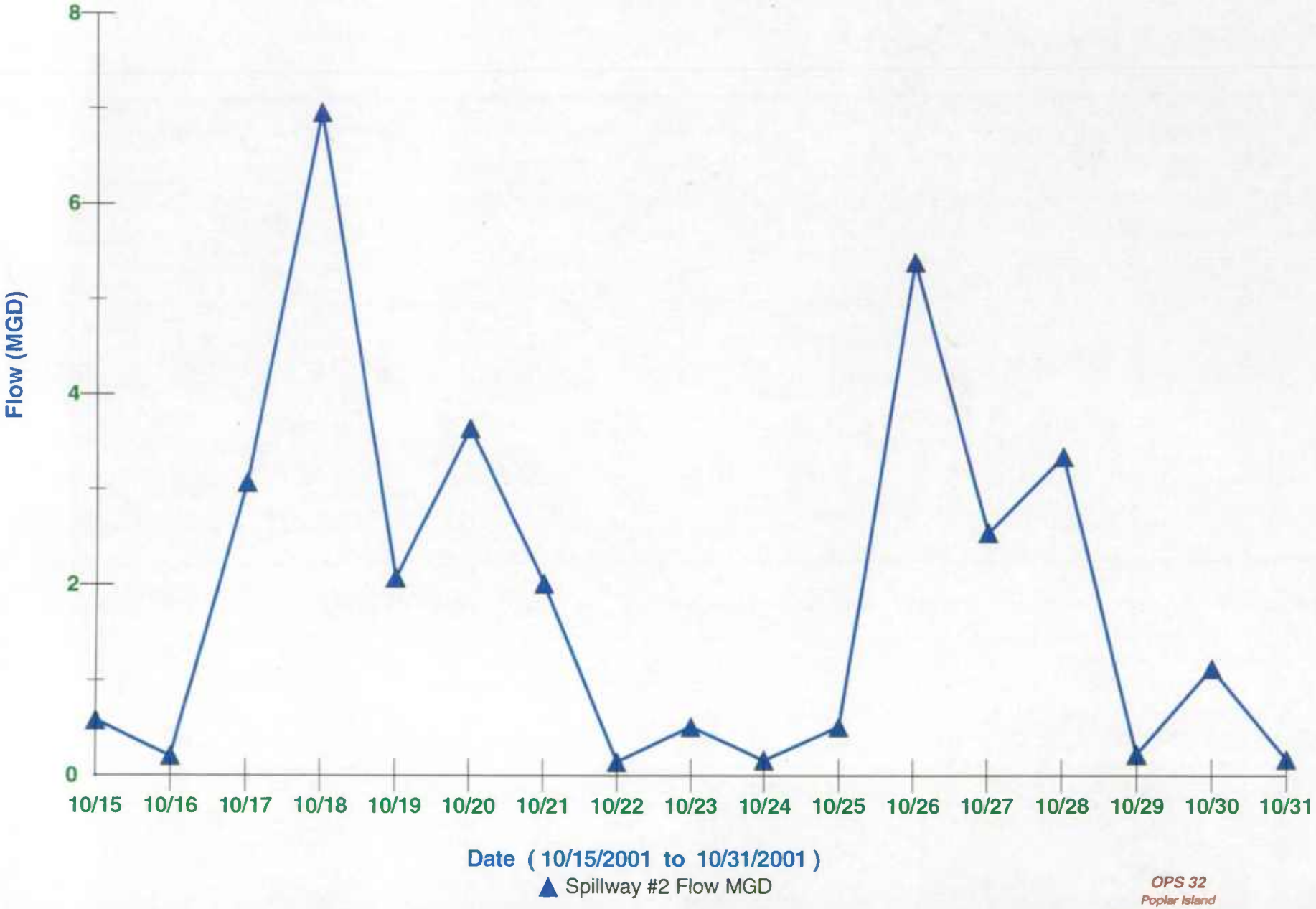
BDL = Below Detection Limit

PRIORITY POLLUTANT ORGANICS AND CYANIDE MONITORED AT POPLAR ISLAND

SPILLWAY LOCATION AND SAMPLE DATA		Di-n-Octyl Phthalate ug/L (ppb)	Benzo[a] pyrene ug/L (ppb)	Benzo[b] fluoranthene ug/L (ppb)	Benzo[k] fluoranthene ug/L (ppb)	Indeno (1,2,3-cd)pyrene ug/L (ppb)	Dibenzo (a,h) Anthracene ug/L (ppb)	Benzo (g,h,i)perylene ug/L (ppb)	Phenol ug/L (ppb)	2-Chloro-phenol ug/L (ppb)	2-Nitro-phenol ug/L (ppb)	2,4-Dimethyl-phenol ug/L (ppb)	2,4-Dichloro-phenol ug/L (ppb)	4-Chloro-3-methylphenol ug/L (ppb)	2,4,6-Trichloro-phenol ug/L (ppb)	2,4-Dinitro-phenol ug/L (ppb)	4-Nitro-phenol ug/L (ppb)	2-Methly-4,6-Dinitrophenol ug/L (ppb)	Pentachloro-phenol ug/L (ppb)	Cyanide ug/L (ppb)
Surface Water Criteria (ppb)																			15	1
Sample Location	mm/dd/yy																			
Spillway 1																				
	04/27/01	NOT SAMPLED																		
	05/31/01	NOT SAMPLED																		
	06/08/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	06/25/01	NOT SAMPLED																		
	07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	9
	08/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/14/01	NOT SAMPLED																		
	09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Spillway 5																				
	04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	20
	06/08/01	NOT SAMPLED																		
	06/25/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	07/27/01	NOT SAMPLED																		
	08/07/01	NOT SAMPLED																		
	08/14/01	NOT SAMPLED																		
	09/07/01	NOT SAMPLED																		
Spillway 6																				
	04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	20
	06/08/01	NOT SAMPLED																		
	06/25/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	14
	08/07/01	NOT SAMPLED																		
	08/14/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
100-yd - 1																				
	04/27/01	NOT SAMPLED																		
	05/31/01	NOT SAMPLED																		
	06/08/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	06/25/01	NOT SAMPLED																		
	07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/14/01	NOT SAMPLED																		
	09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
100-yd - 5																				
	04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	06/08/01	NOT SAMPLED																		
	06/25/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	07/27/01	NOT SAMPLED																		
	08/07/01	NOT SAMPLED																		
	08/14/01	NOT SAMPLED																		
	09/07/01	NOT SAMPLED																		
100-yd - 6																				
	04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	20
	06/08/01	NOT SAMPLED																		
	06/25/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2
	08/07/01	NOT SAMPLED																		
	08/14/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
WQR1																				
	04/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	05/31/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	06/08/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	06/25/01	NOT SAMPLED																		
	07/27/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	9
	08/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	08/14/01	NOT SAMPLED																		
	09/07/01	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

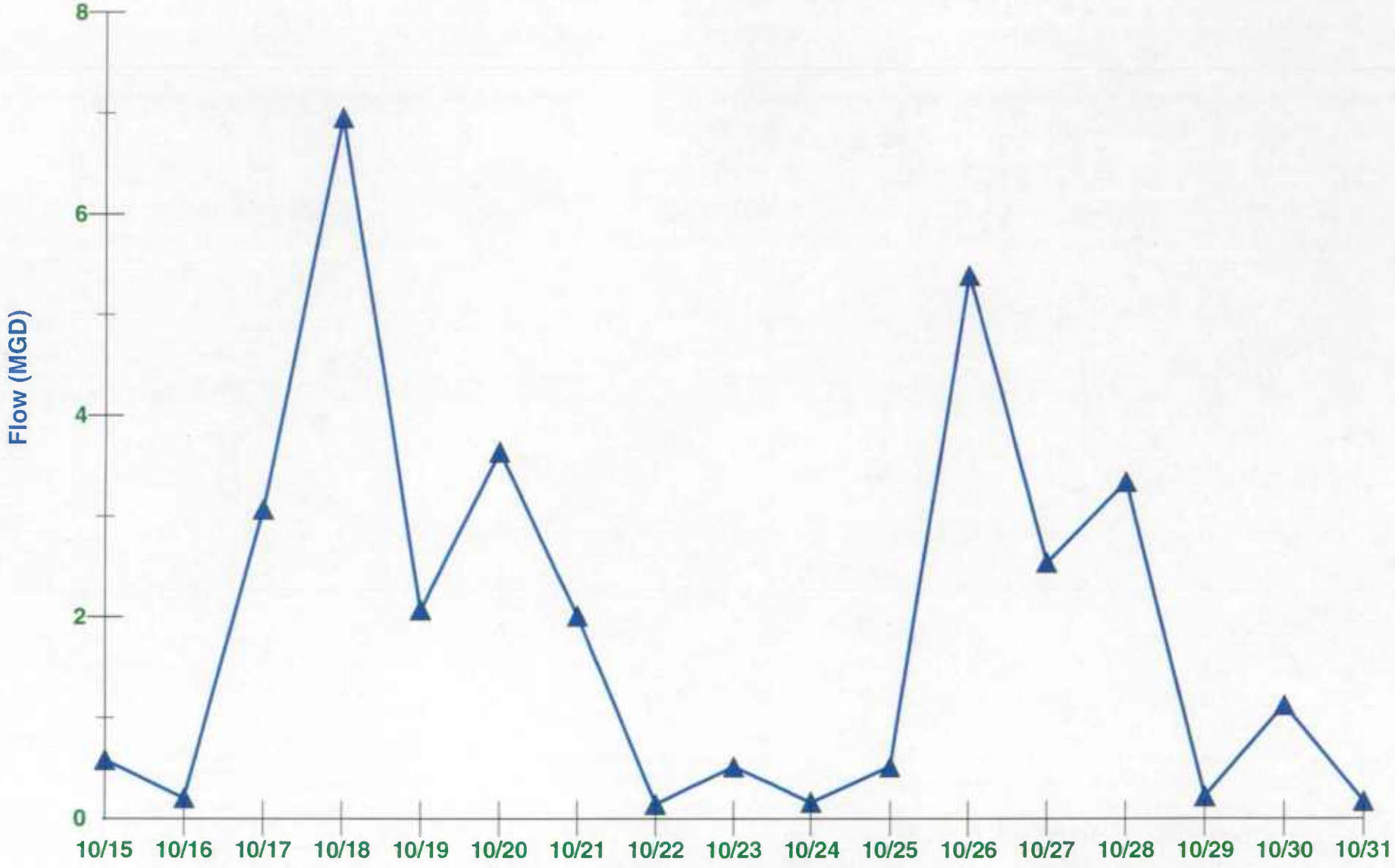
BDL = Below Detection Limit

PIERP: Flow Spillway 2



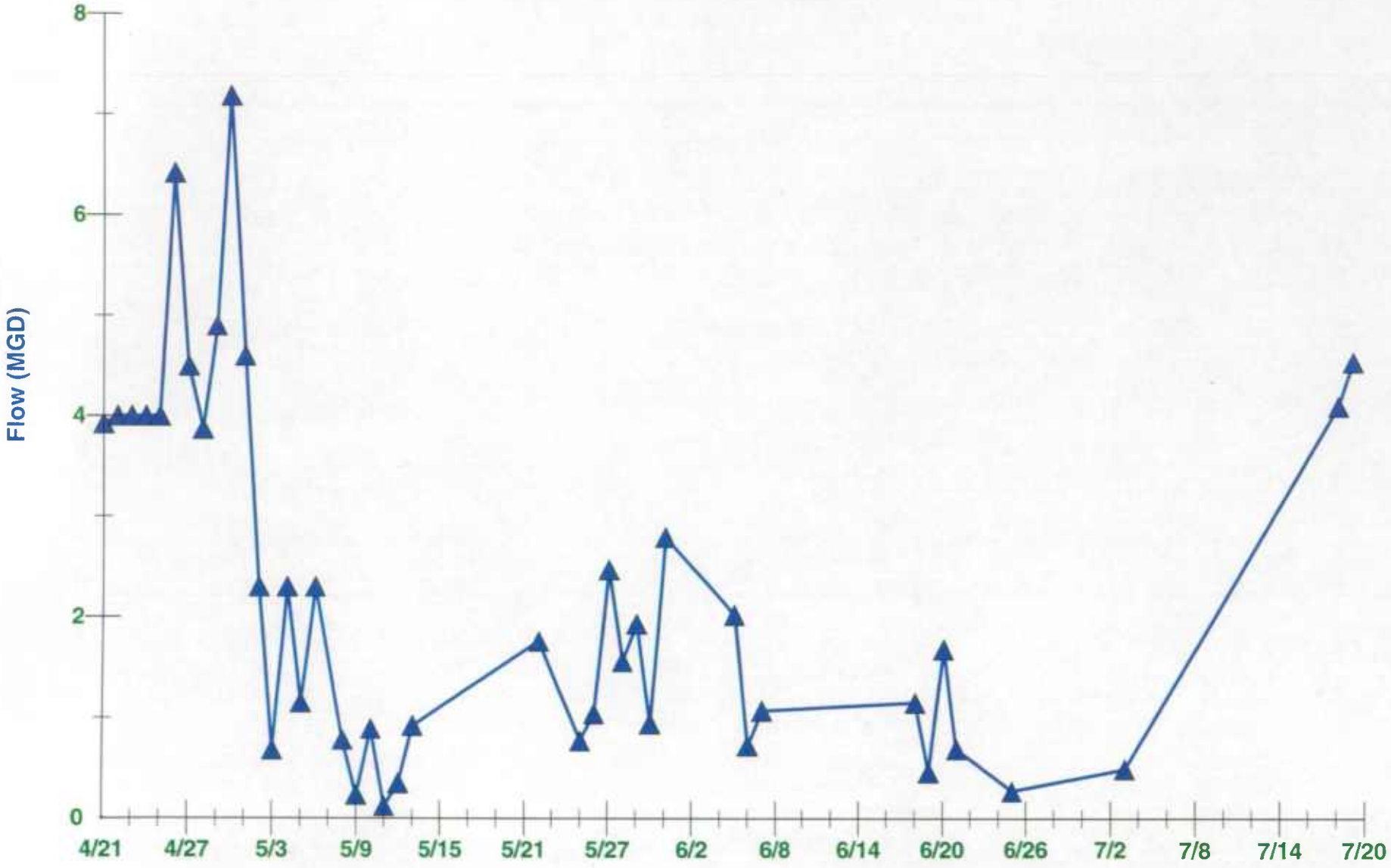
OPS 32
Poplar Island
PIERP: Flow Spillway 2

PIERP: Flow Spillway 4



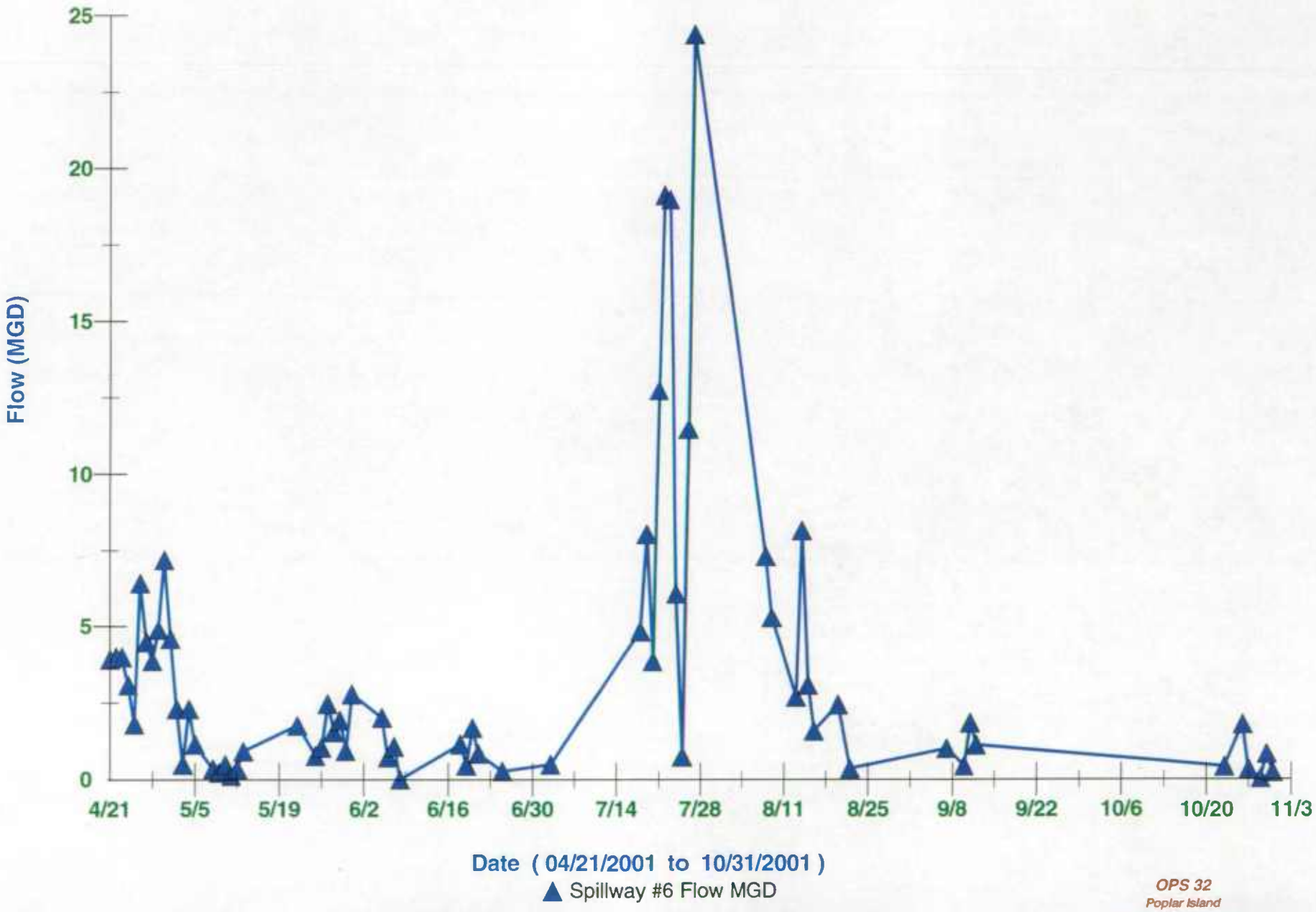
OPS 32
Poplar Island
PIERP: Flow Spillway 4

PIERP: Flow Spillway 5



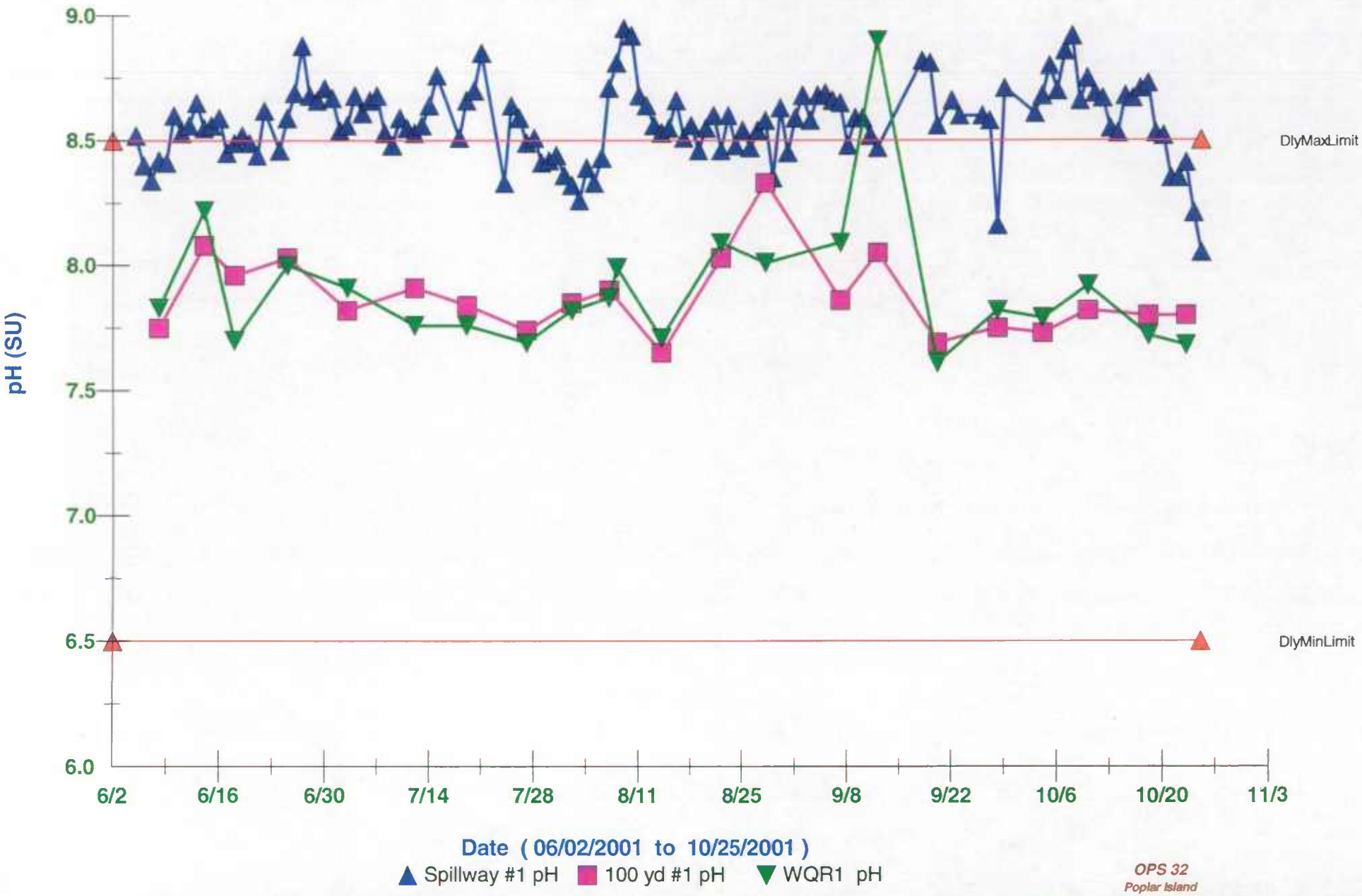
OPS 32
Poplar Island
PIERP: Flow Spillway 5

PIERP: Flow Spillway 6



OPS 32
Poplar Island
PIERP: Flow Spillway 6

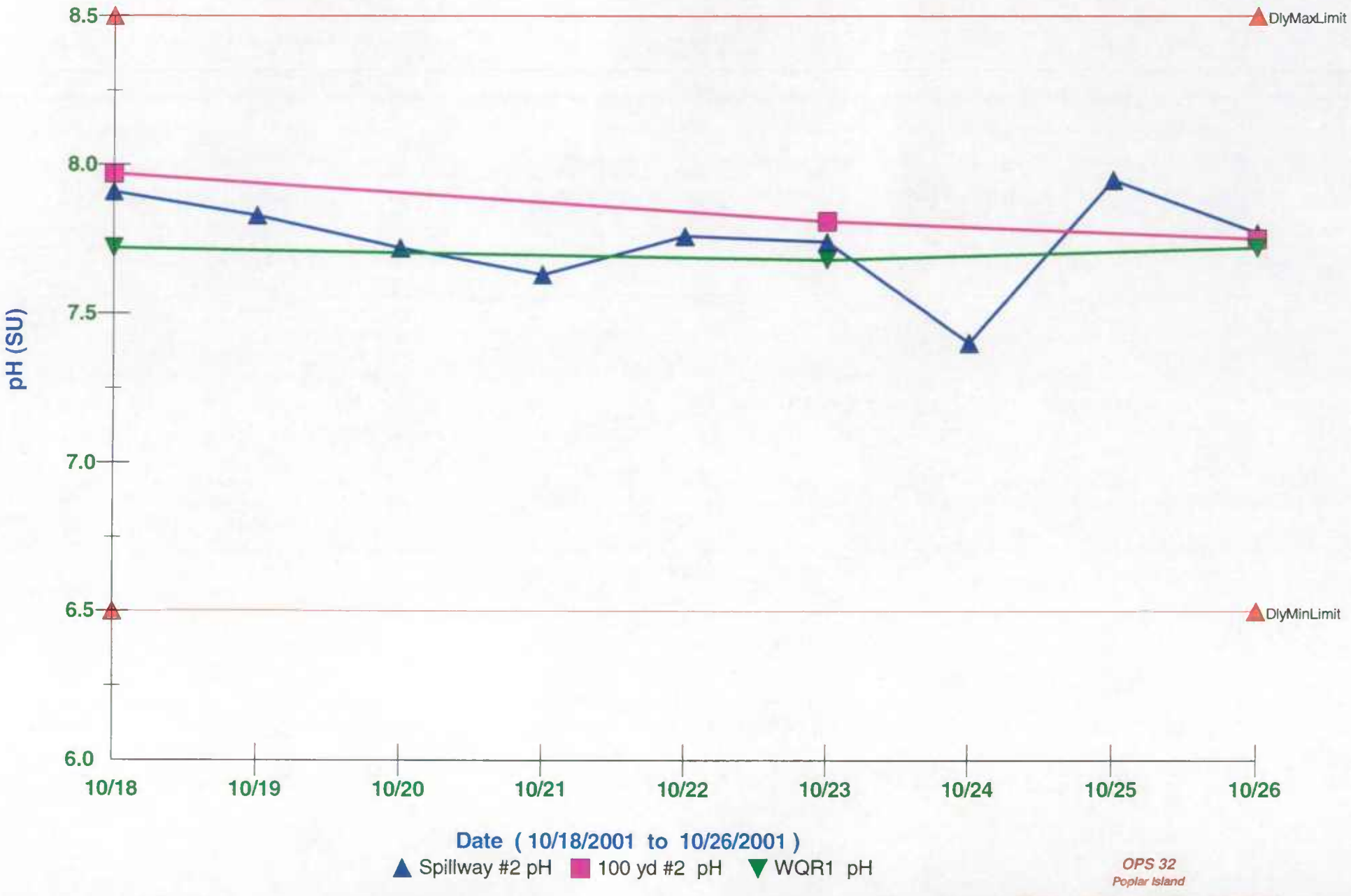
PIERP: pH Spillway 1, 100yd-1, & WQR1



OPS 32
Poplar Island

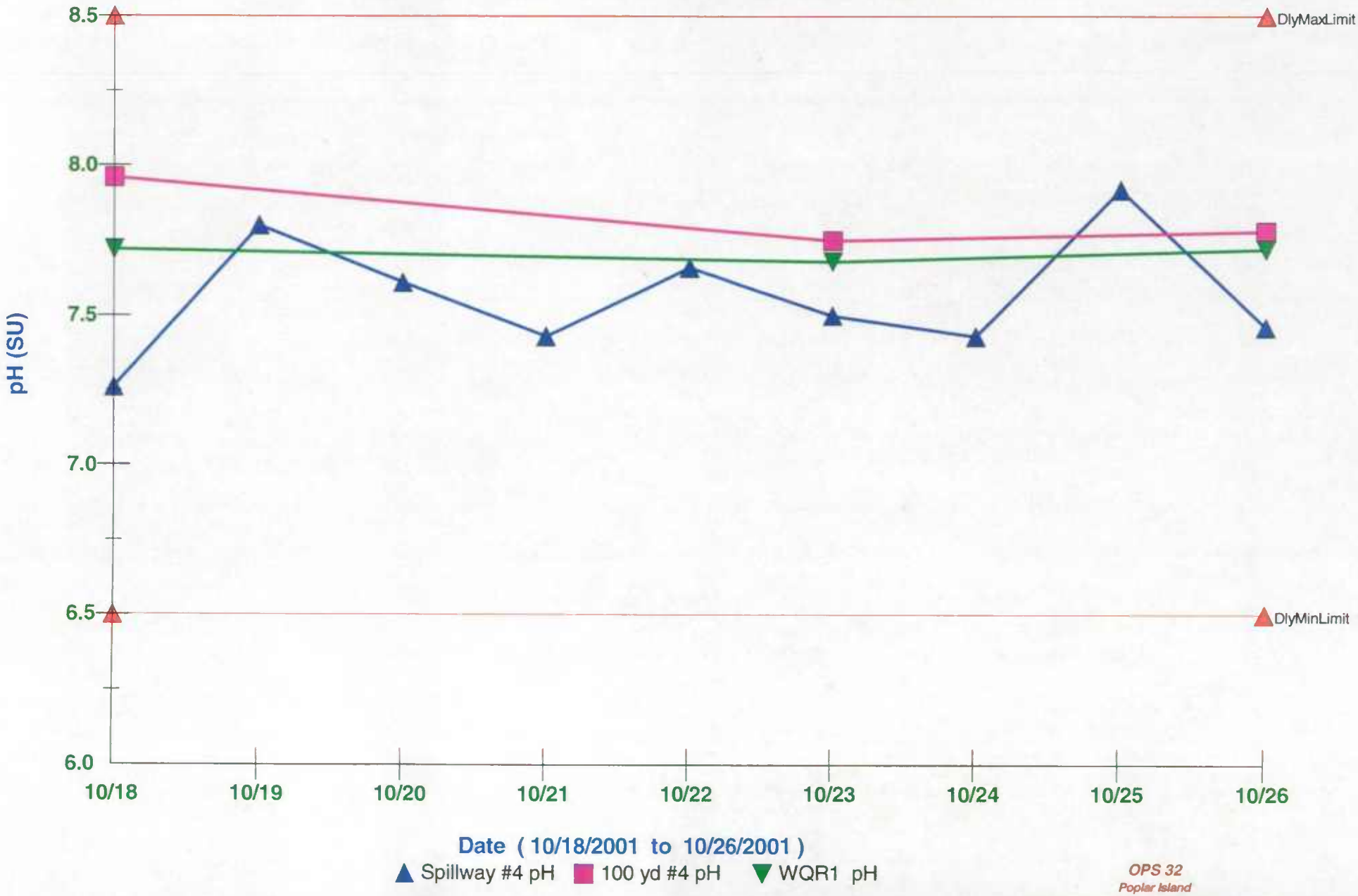
PIERP: pH Spillway 1, 100yd-1, & WQR1

PIERP: pH Spillway 2, 100yd-2, & WQR1



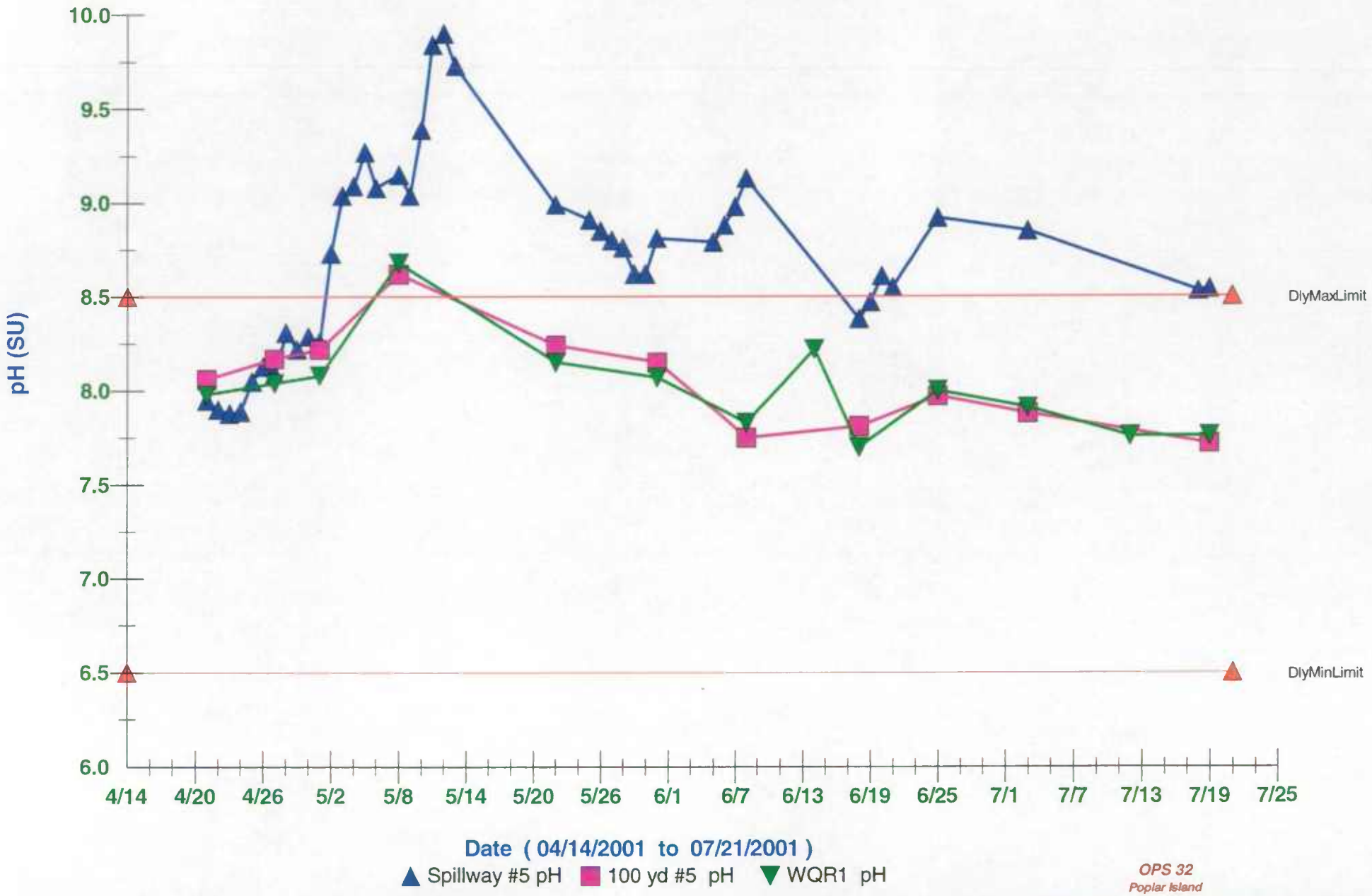
OPS 32
Poplar Island
PIERP: pH Spillway 2, 100yd-2, & WQR1

PIERP: pH Spillway 4, 100yd-4, & WQR1



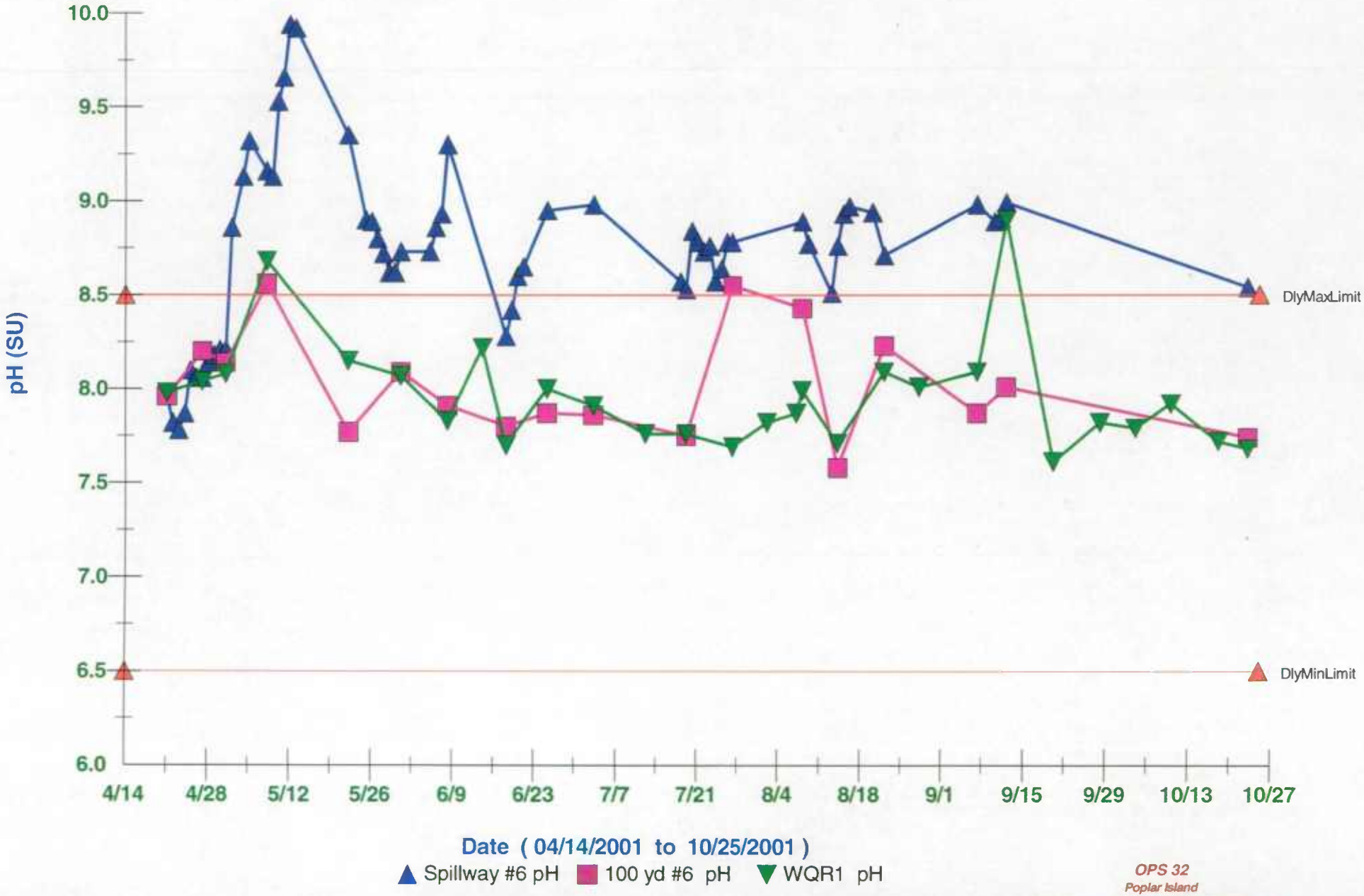
OPS 32
Poplar Island
PIERP: pH Spillway 4, 100yd-4, & WQR1

PIERP: pH Spillway 5, 100yd-5, & WQR1



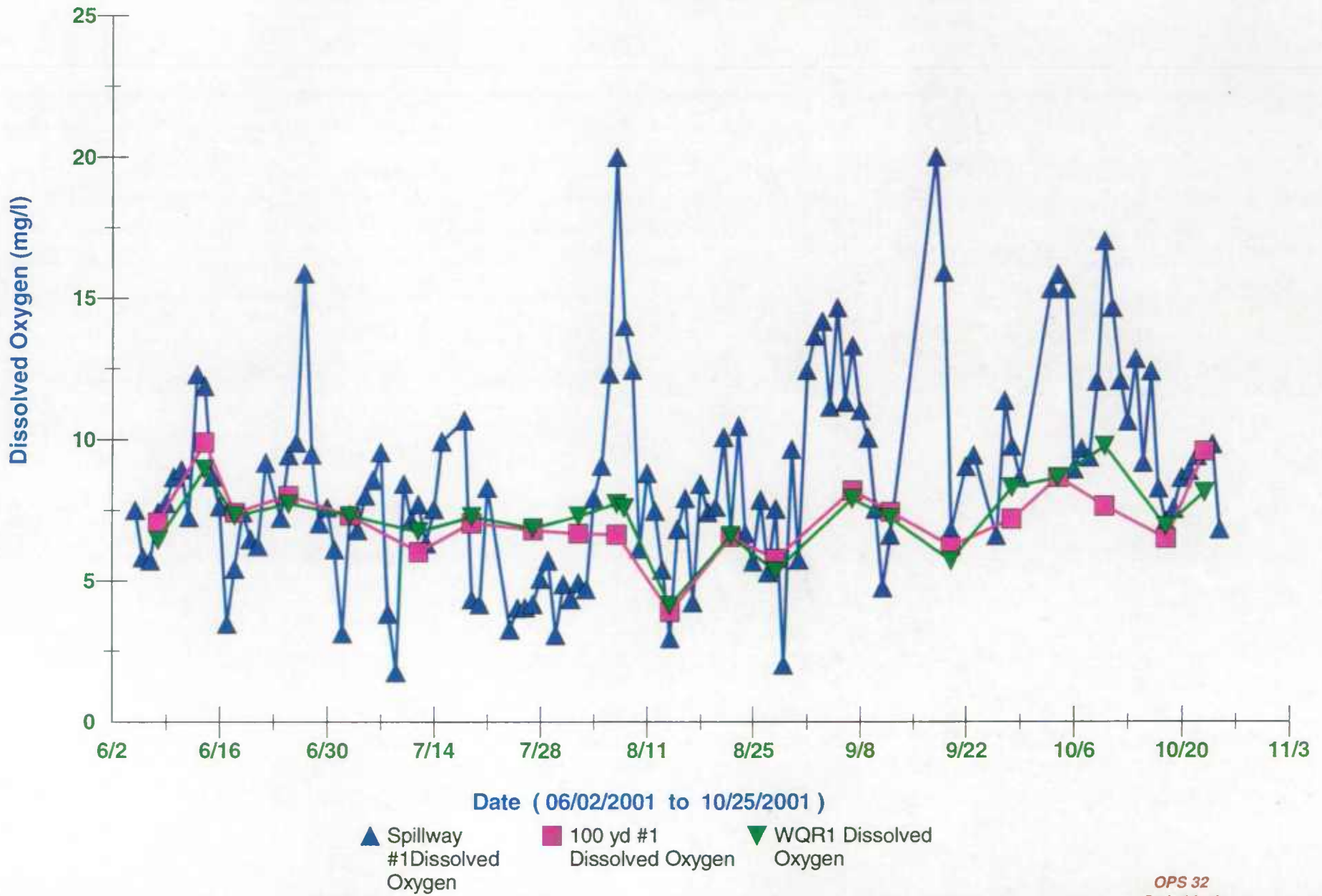
OPS 32
Poplar Island
PIERP: pH Spillway 5, 100yd-5, & WQR1

PIERP: pH Spillway 6, 100yd-6, & WQR1



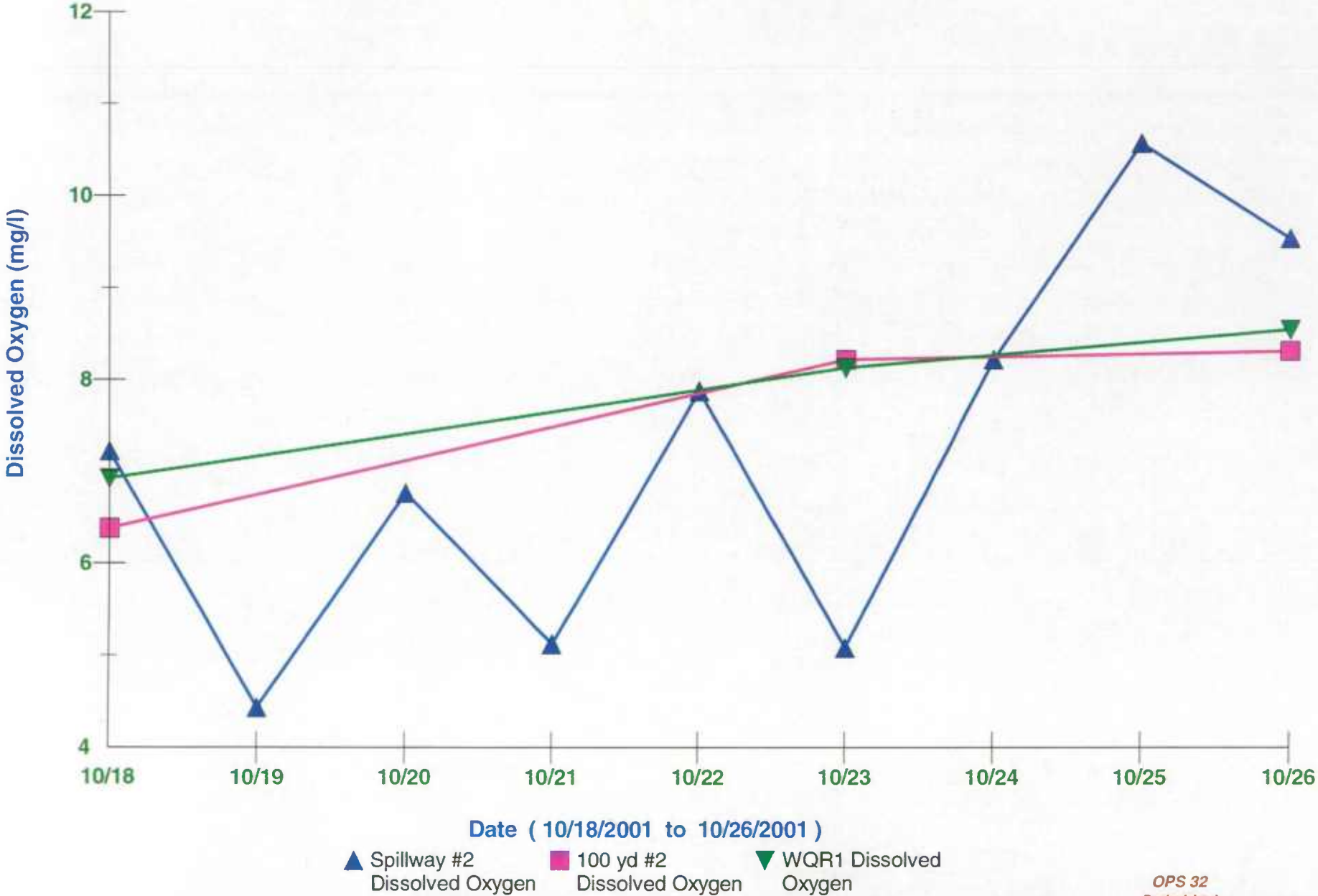
OPS 32
Poplar Island
PIERP: pH Spillway 6, 100yd-6, & WQR1

PIERP: D.O. Spillway 1, 100yd-1, & WQR1



OPS 32
Poplar Island
PIERP: DO Spillway 1, 100yd-1, & WQR1

PIERP: D.O. Spillway 2, 100yd-2, & WQR1



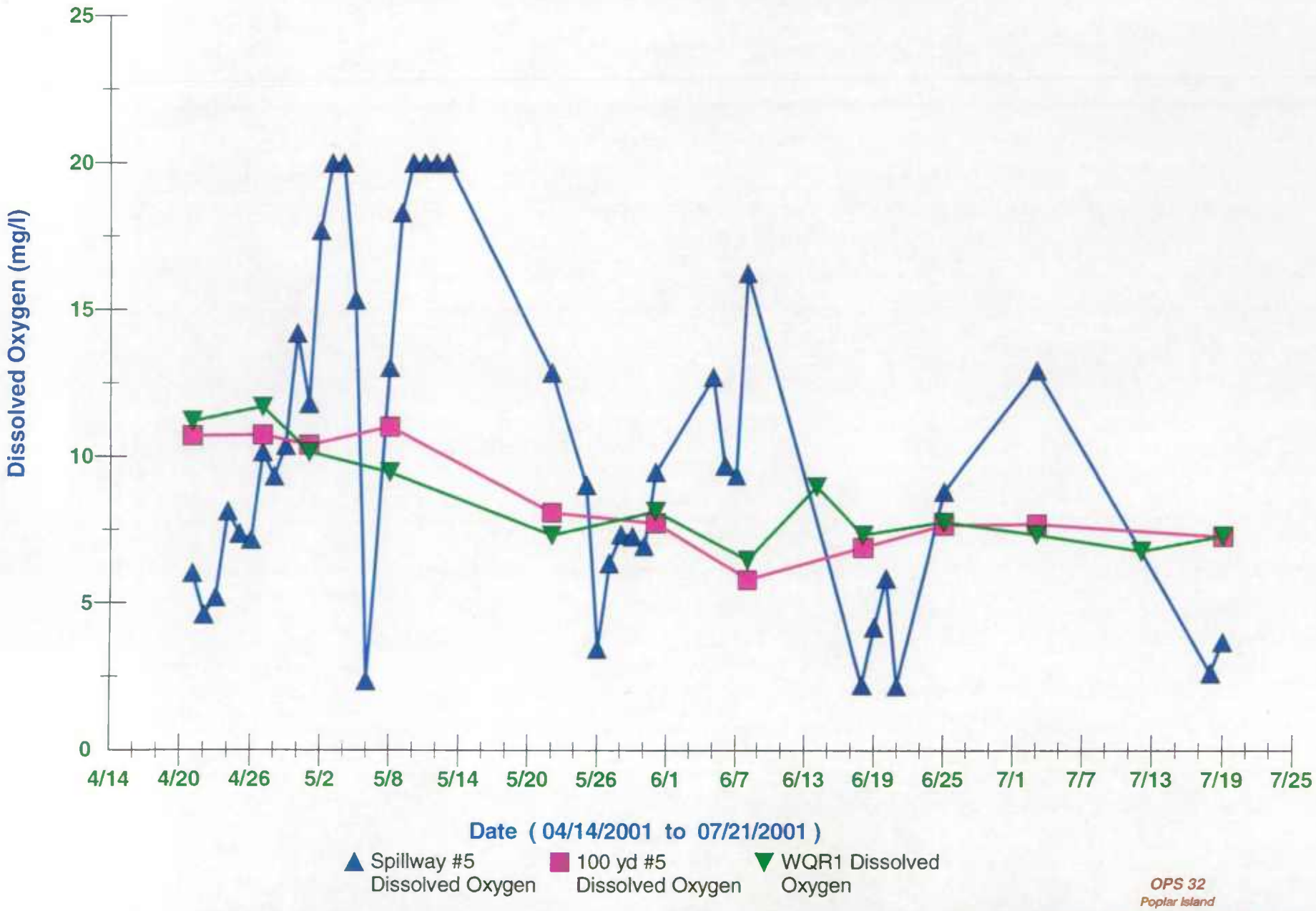
OPS 32
Poplar Island
PIERP: DO Spillway 2, 100yd-2, & WQR1

PIERP: D.O. Spillway 4, 100yd-4, & WQR1

OPS 32
Poplar Island

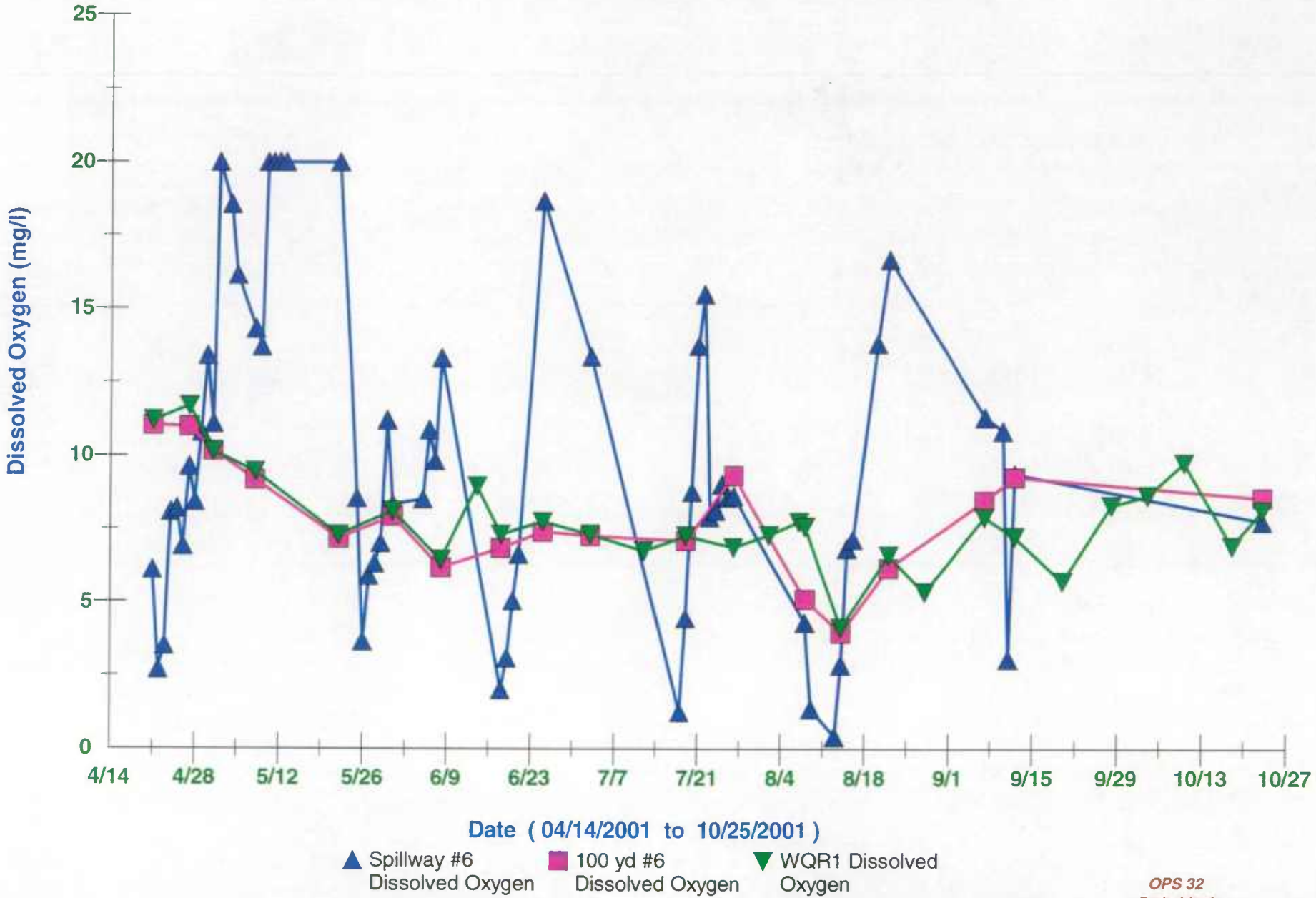
PIERP: DO Spillway 4, 100yd-4, & WQR1

PIERP: D.O. Spillway 5, 100yd-5, & WQR1



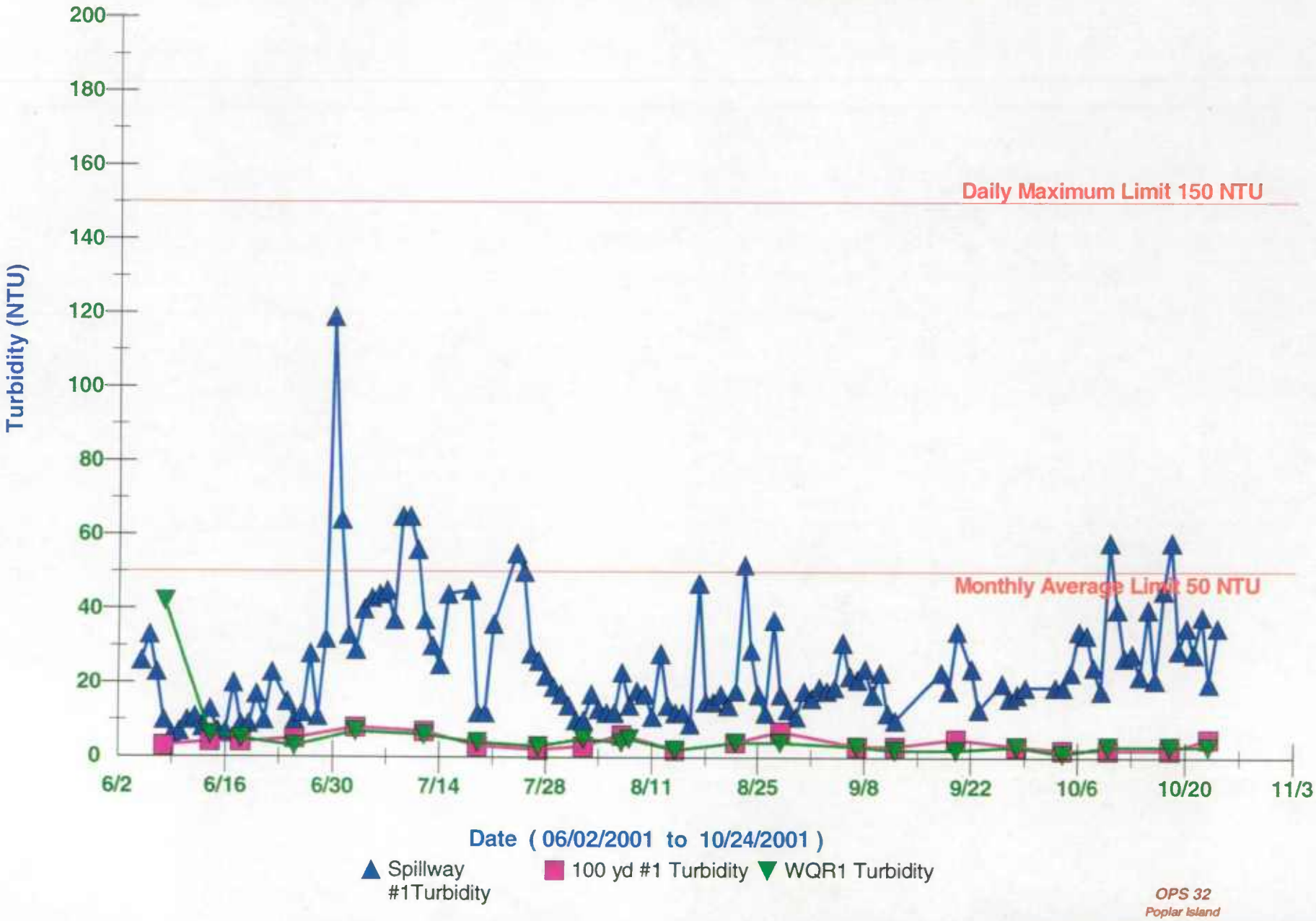
OPS 32
Poplar Island
PIERP: DO Spillway 5, 100yd-5, & WQR1

PIERP: D.O. Spillway 6, 100yd-6, & WQR1



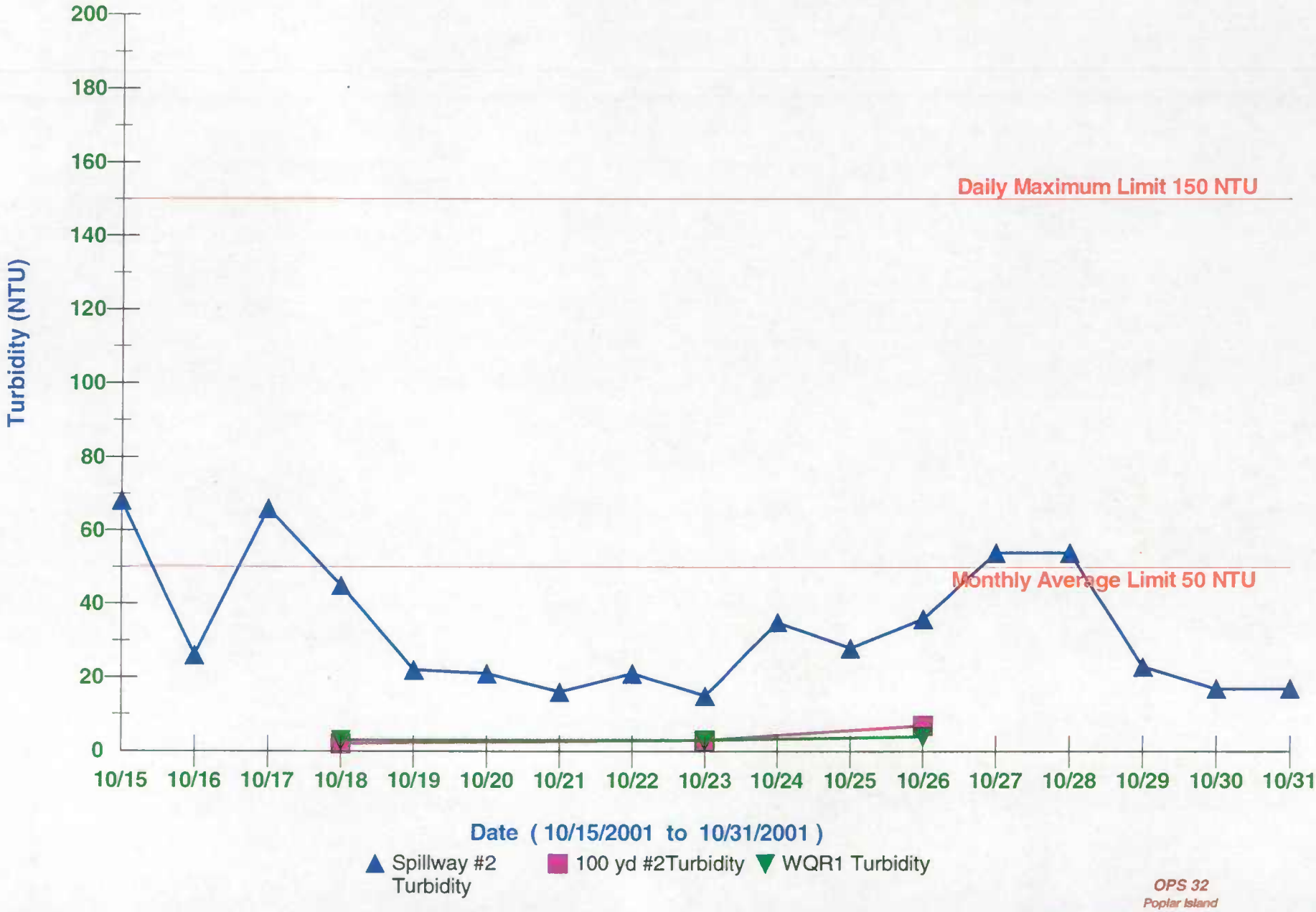
OPS 32
Poplar Island
PIERP: DO Spillway 6, 100yd-6, & WQR1

PIERP: Turbidity Spillway 1, 100yd-1, & WQR1



OPS 32
Poplar Island
PIERP: Turbidity Spillway 1, 100yd-1, & WQR1

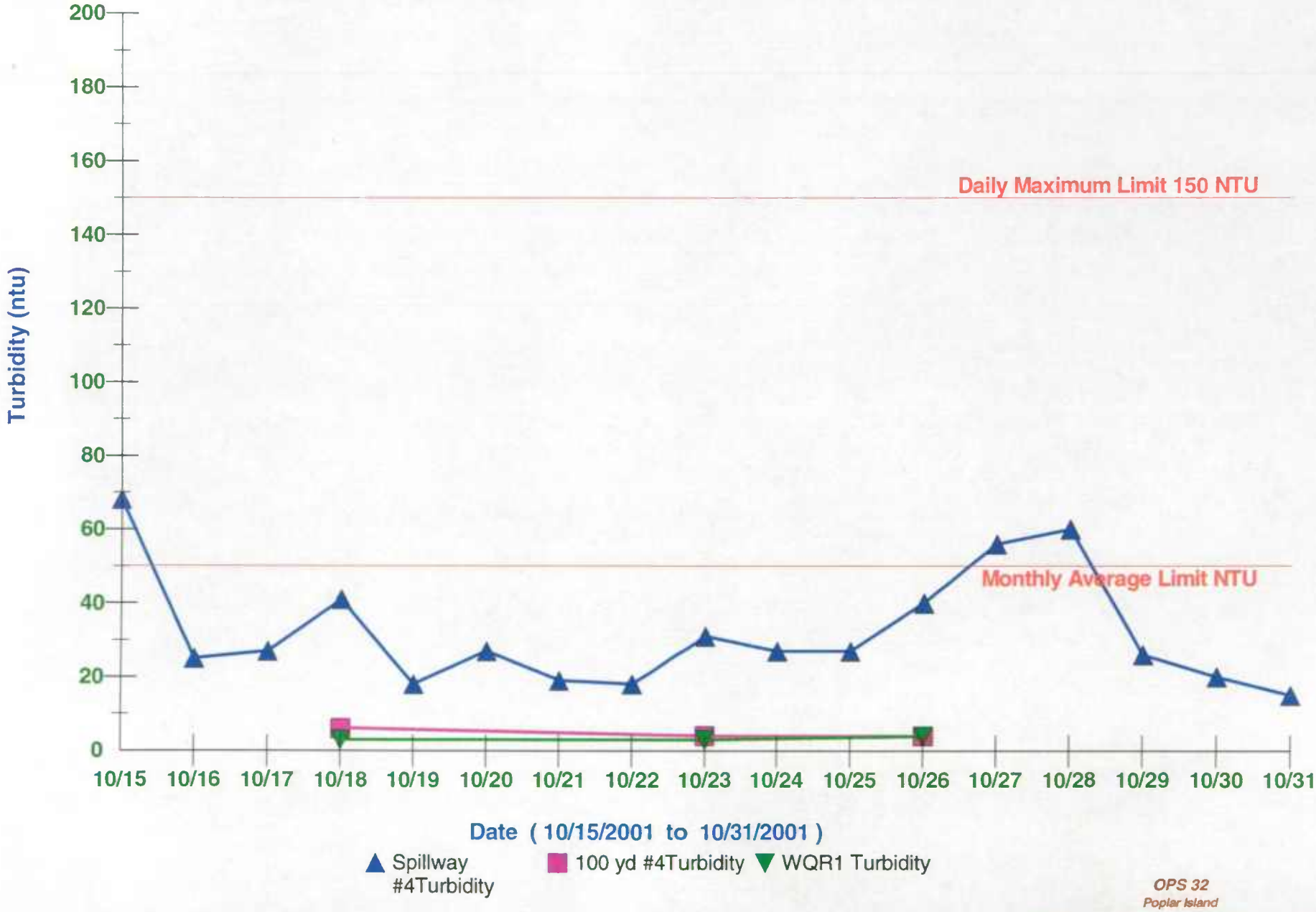
PIERP: Turbidity Spillway 2, 100yd-2, & WQR1



OPS 32
Poplar Island

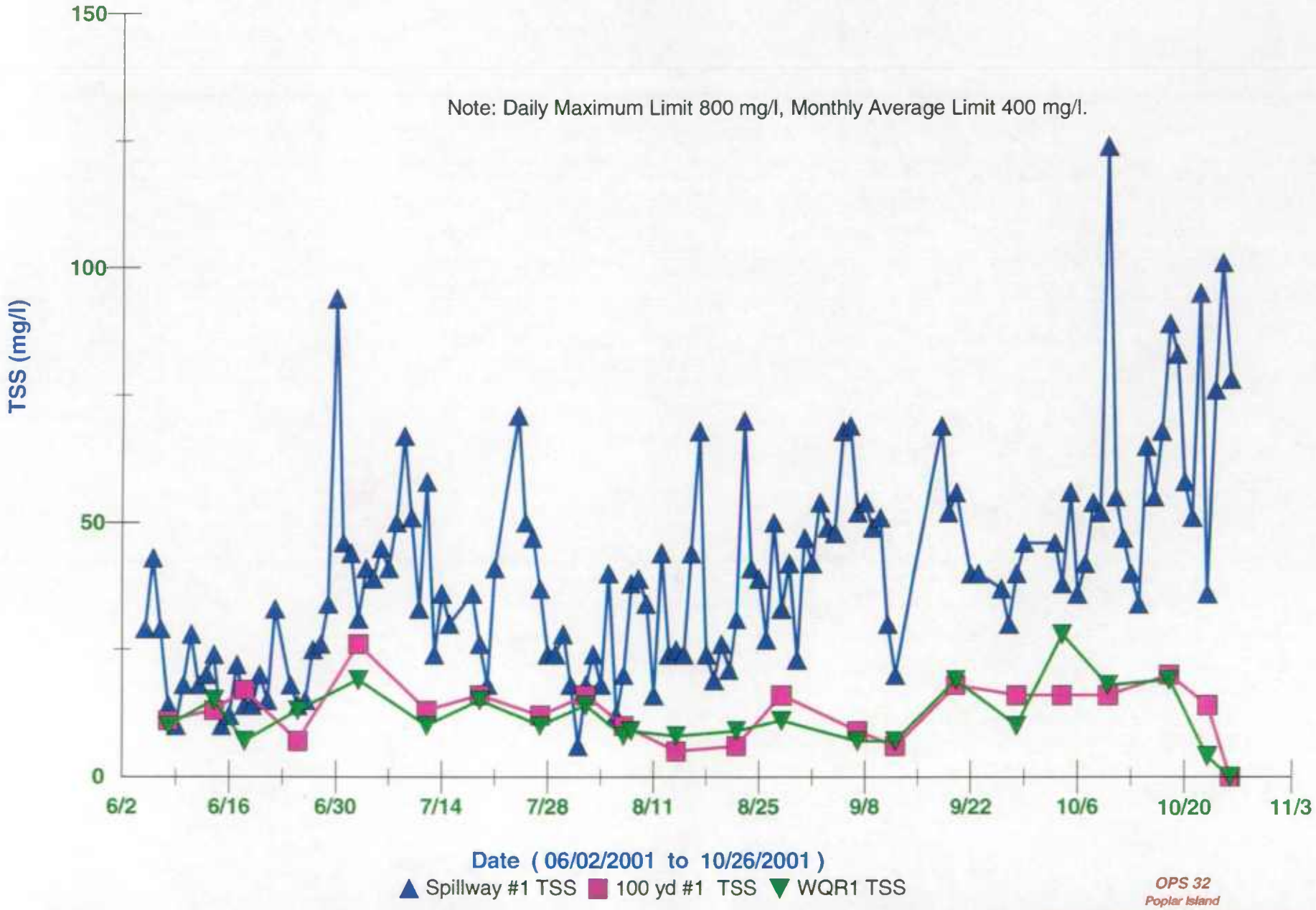
PIERP: Turbidity Spillway 2, 100yd-2, & WQR1

PIERP: Turbidity Spillway 4, 100yd-4, & WQR1



OPS 32
Poplar Island
PIERP: Turbidity Spillway 4, 100yd-4, & WQR1

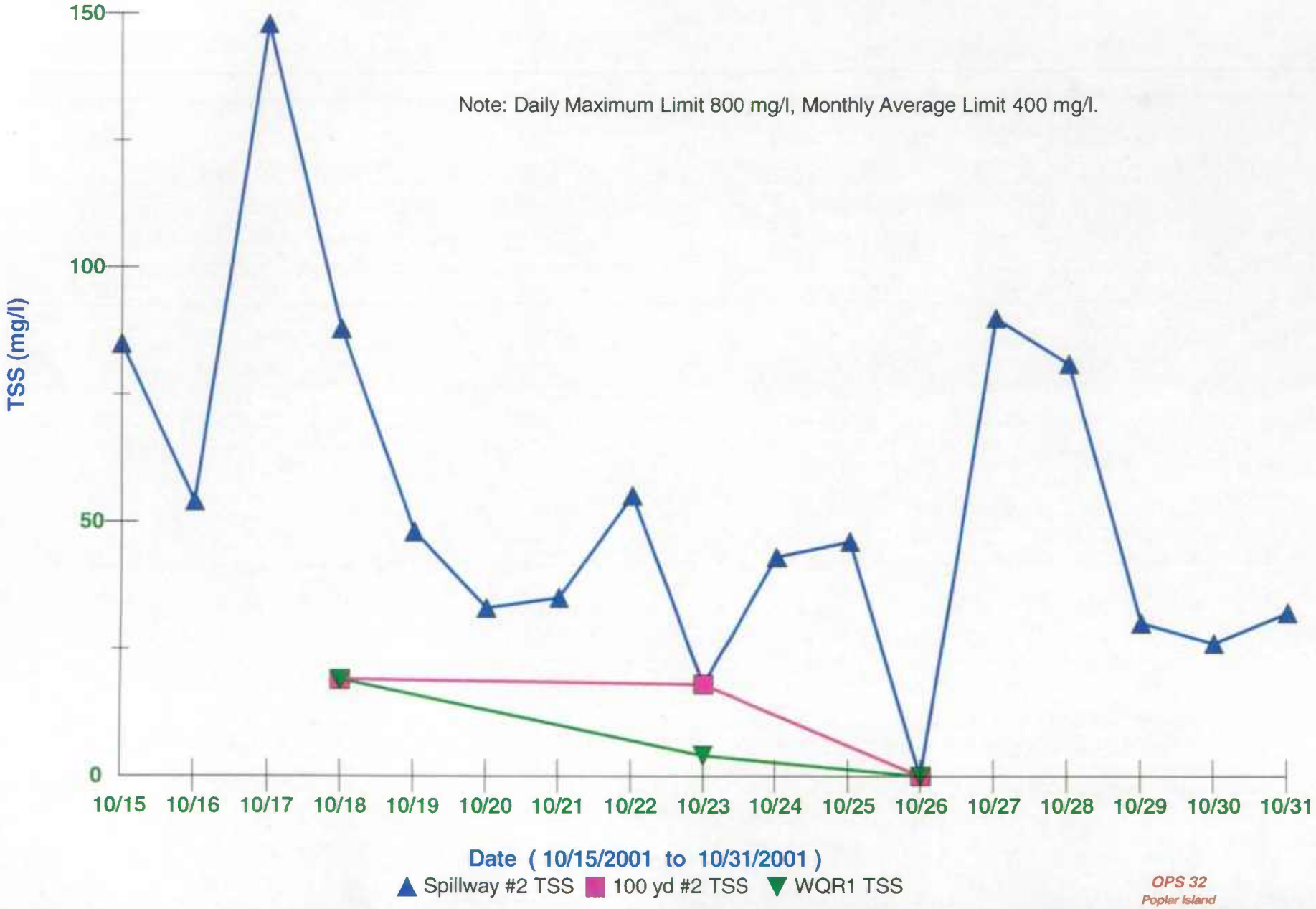
PIERP: TSS Spillway 1, 100yd-1, & WQR1



OPS 32
Poplar Island

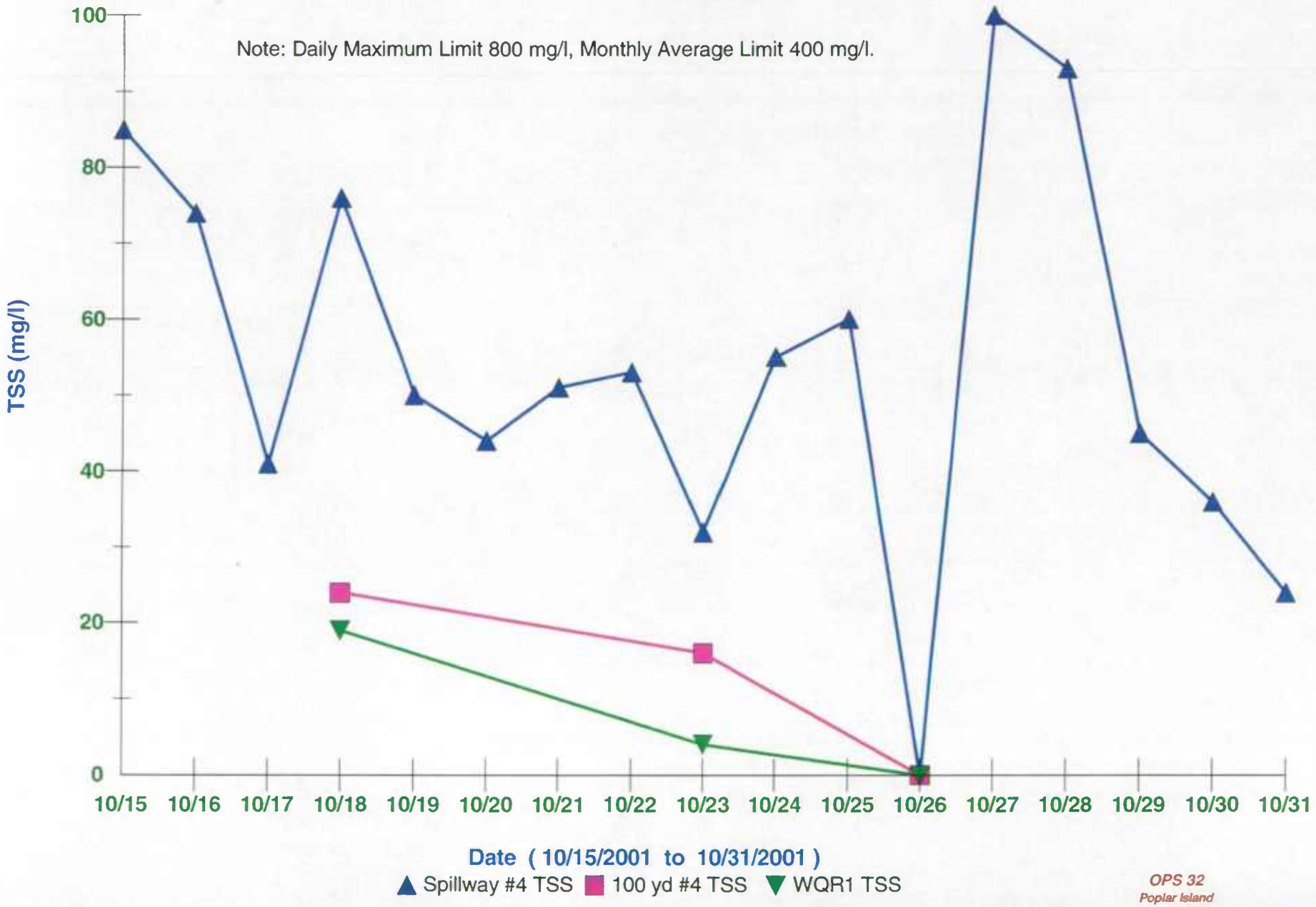
PIERP: TSS Spillway 1, 100yd-1, & WQR1

PIERP: TSS Spillway 2, 100yd-2, & WQR1



OPS 32
Poplar Island
PIERP: TSS Spillway 2, 100yd-2, & WQR1

PIERP: TSS Spillway 4, 100yd-4, & WQR1

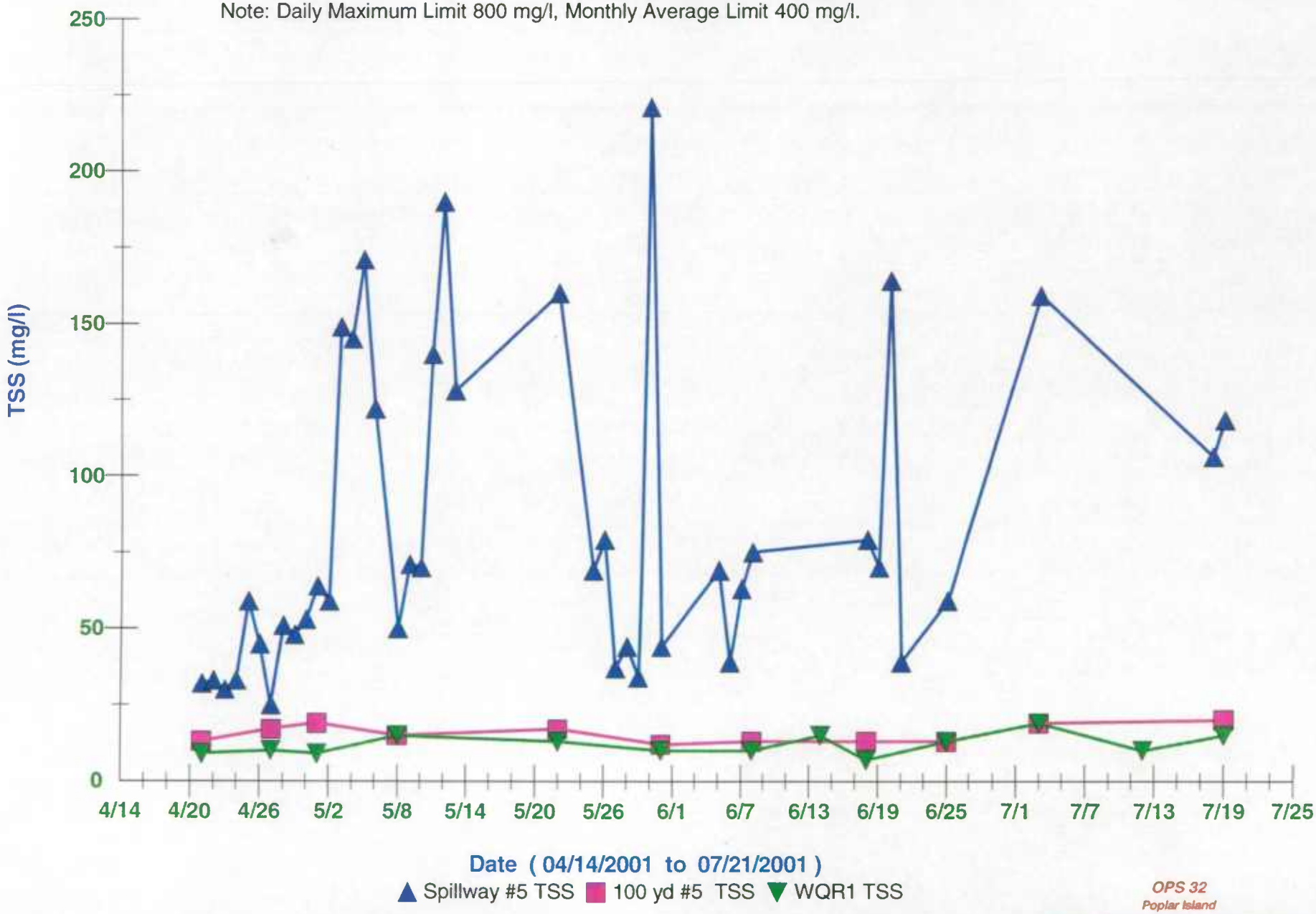


OPS 32
Poplar Island

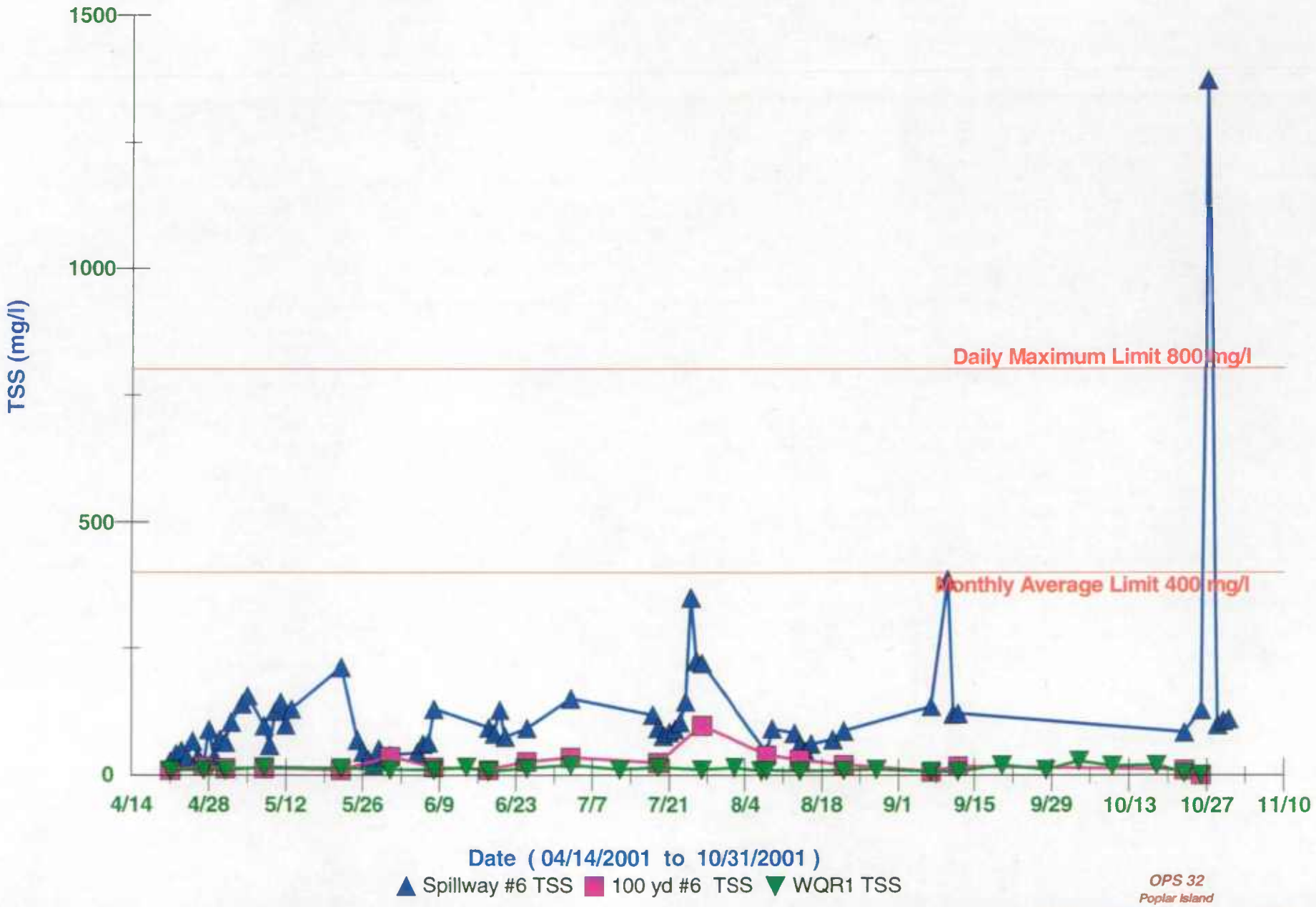
PIERP: TSS Spillway 4, 100yd-4, & WQR1

PIERP: TSS Spillway 5, 100yd-5, & WQR1

Note: Daily Maximum Limit 800 mg/l, Monthly Average Limit 400 mg/l.



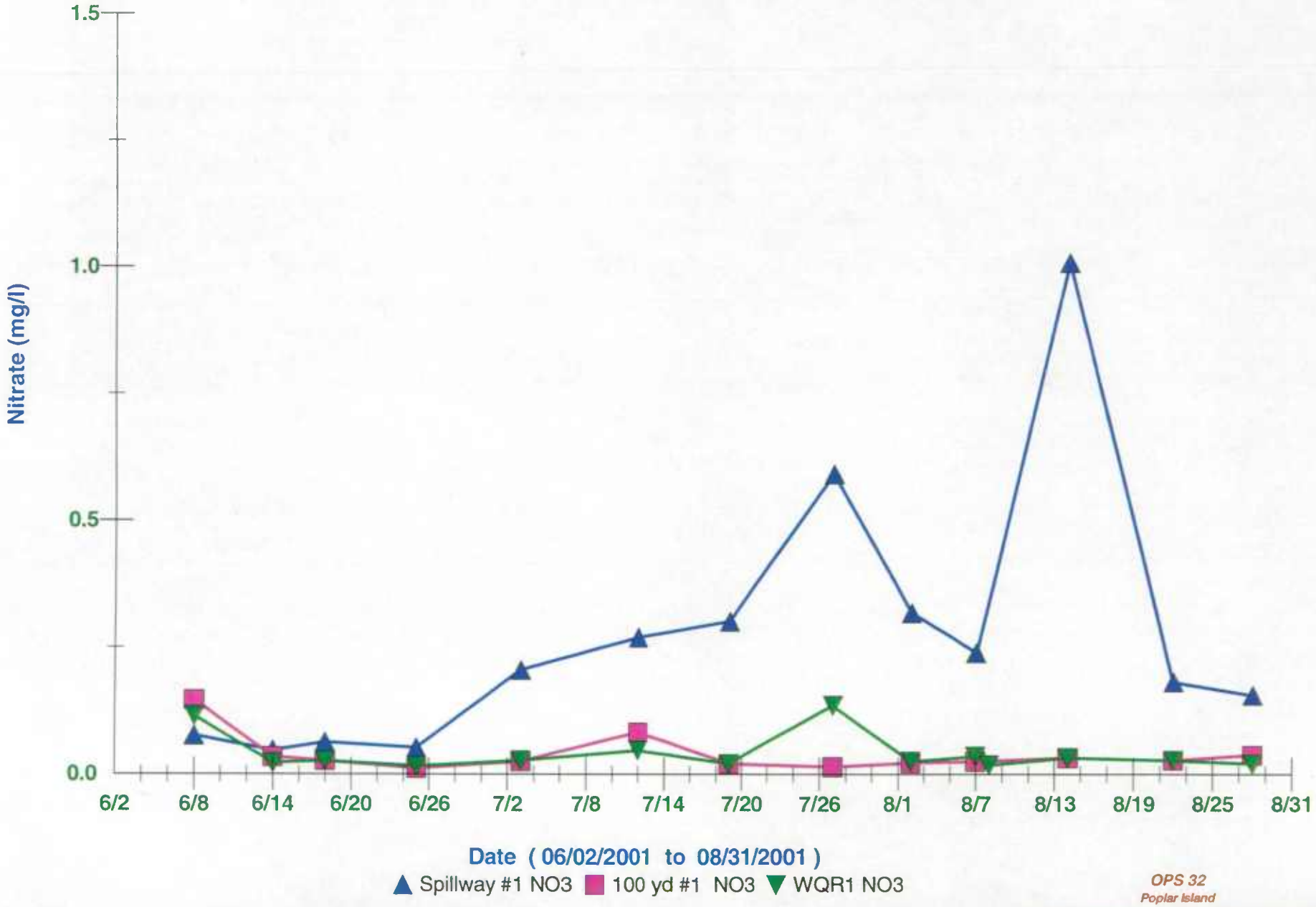
PIERP: TSS Spillway 6, 100yd-6, & WQR1



OPS 32
Poplar Island

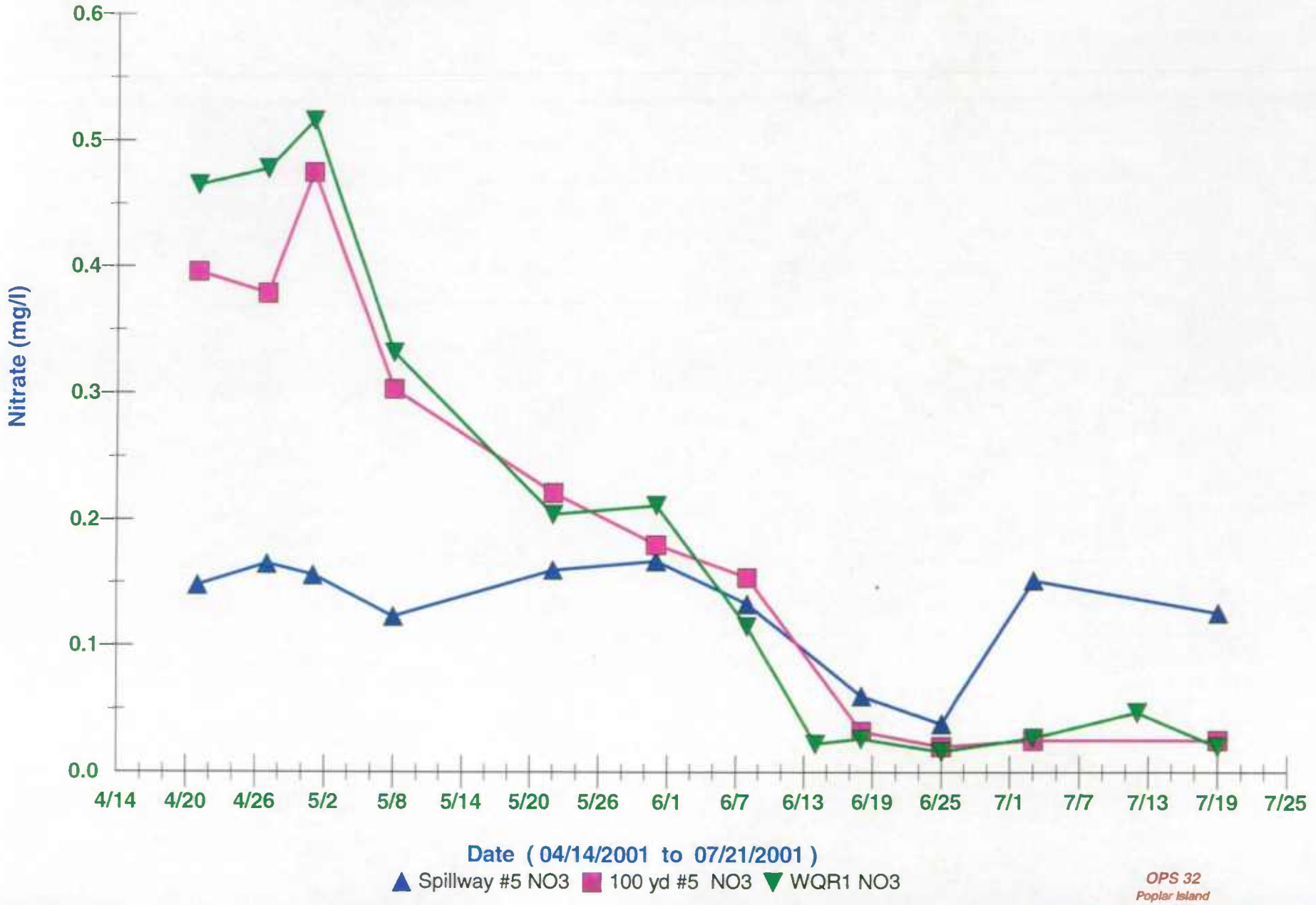
PIERP: TSS Spillway 5, 100yd-5, & WQR1

PIERP: Nitrate Spillway 1, 100yd-1, & WQR1



OPS 32
Poplar Island
PIERP: Nitrate Spillway 1, 100yd-1, & WQR1

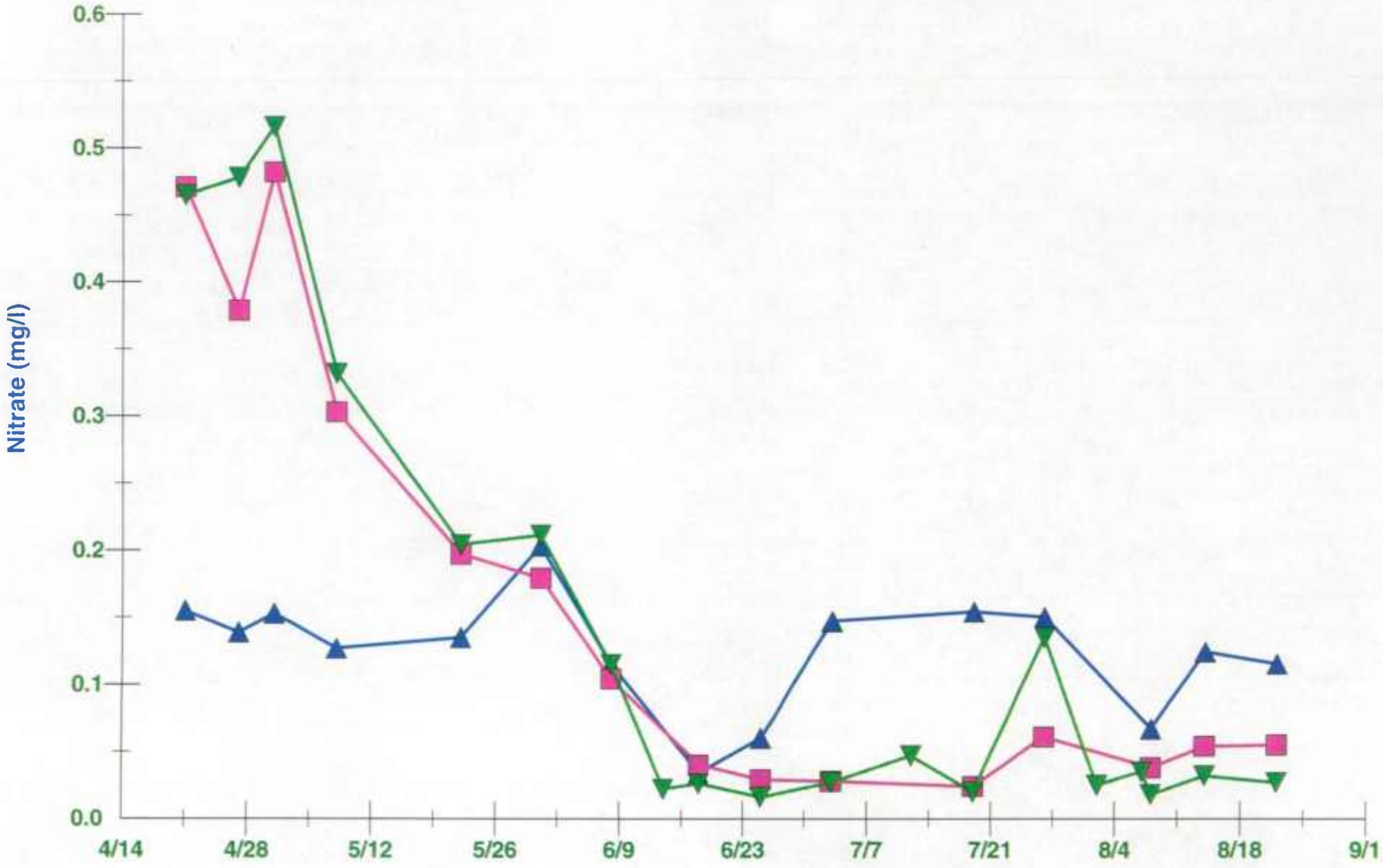
PIERP: Nitrate Spillway 5, 100yd-5, & WQR1



OPS 32
Poplar Island

PIERP: Nitrate Spillway 5, 100yd-5, & WQR1

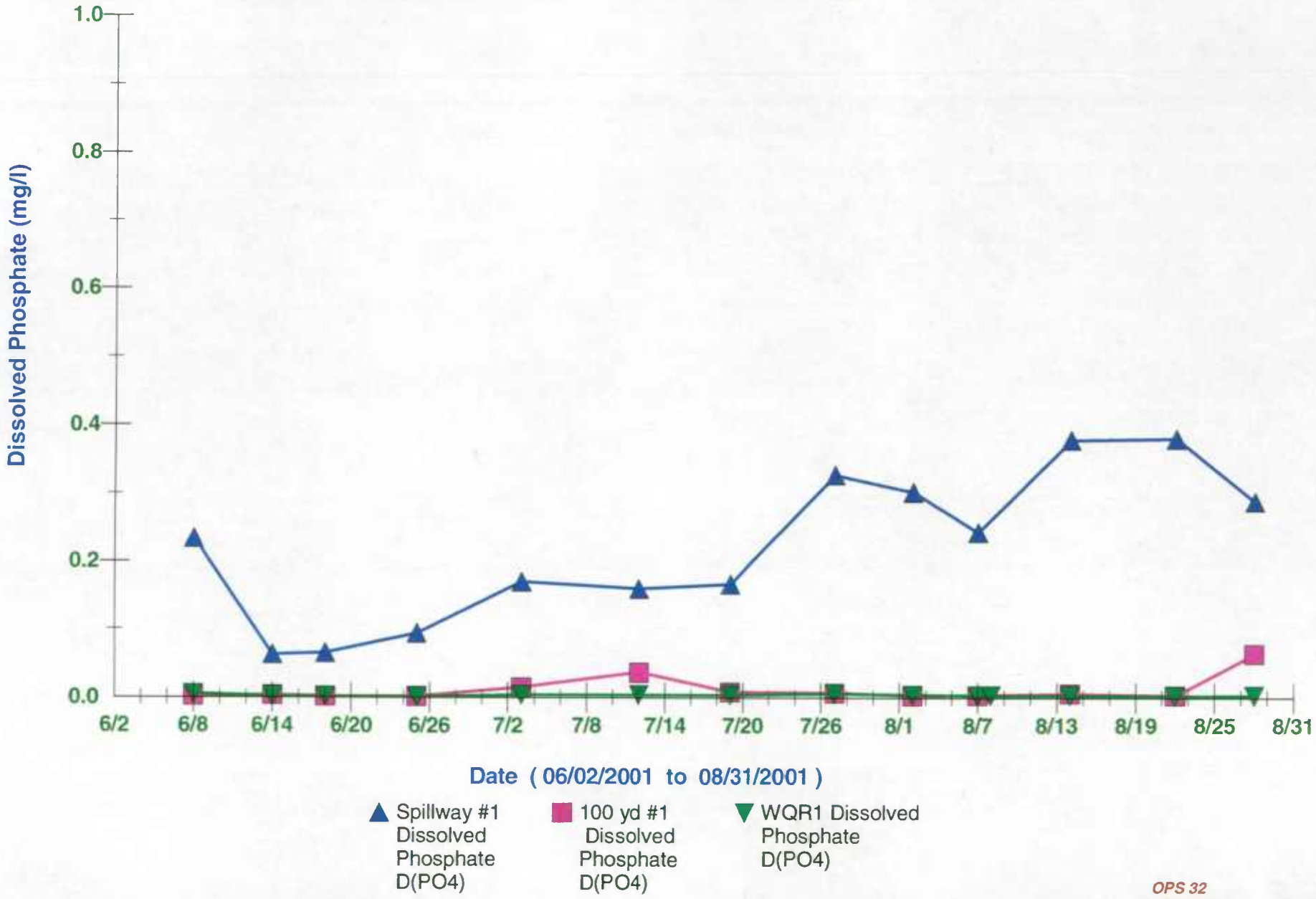
PIERP: Nitrate Spillway 6, 100yd-6, & WQR1



OPS 32
Poplar Island

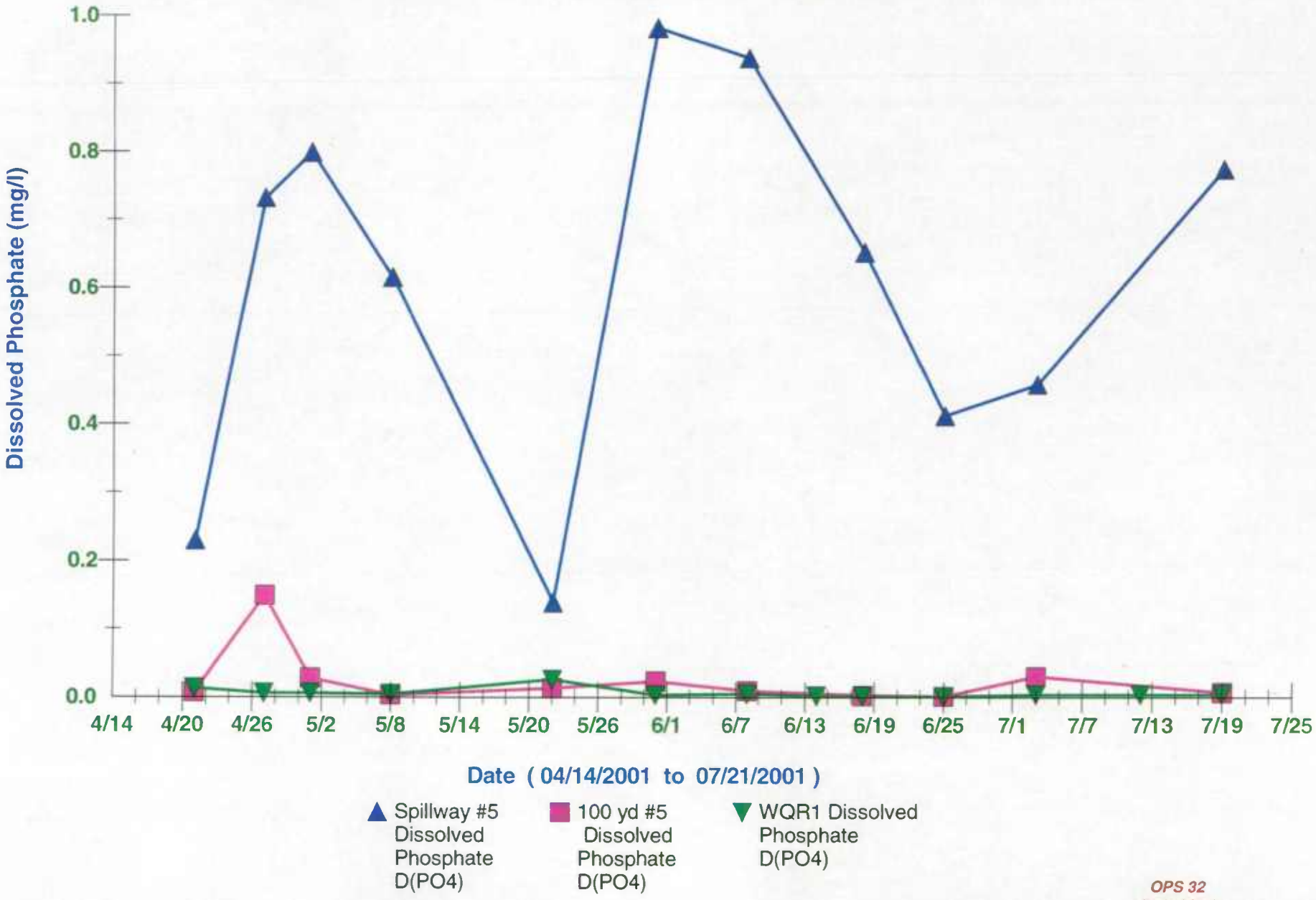
PIERP: Nitrate Spillway 6, 100yd-6, & WQR1

PIERP: Dissolved Phosphate Spillway 1, 100yd-1, & WQR1



OPS 32
Poplar Island
PIERP: Dissolved Phosphate Spillway 1, 100yd-1, & WOR1

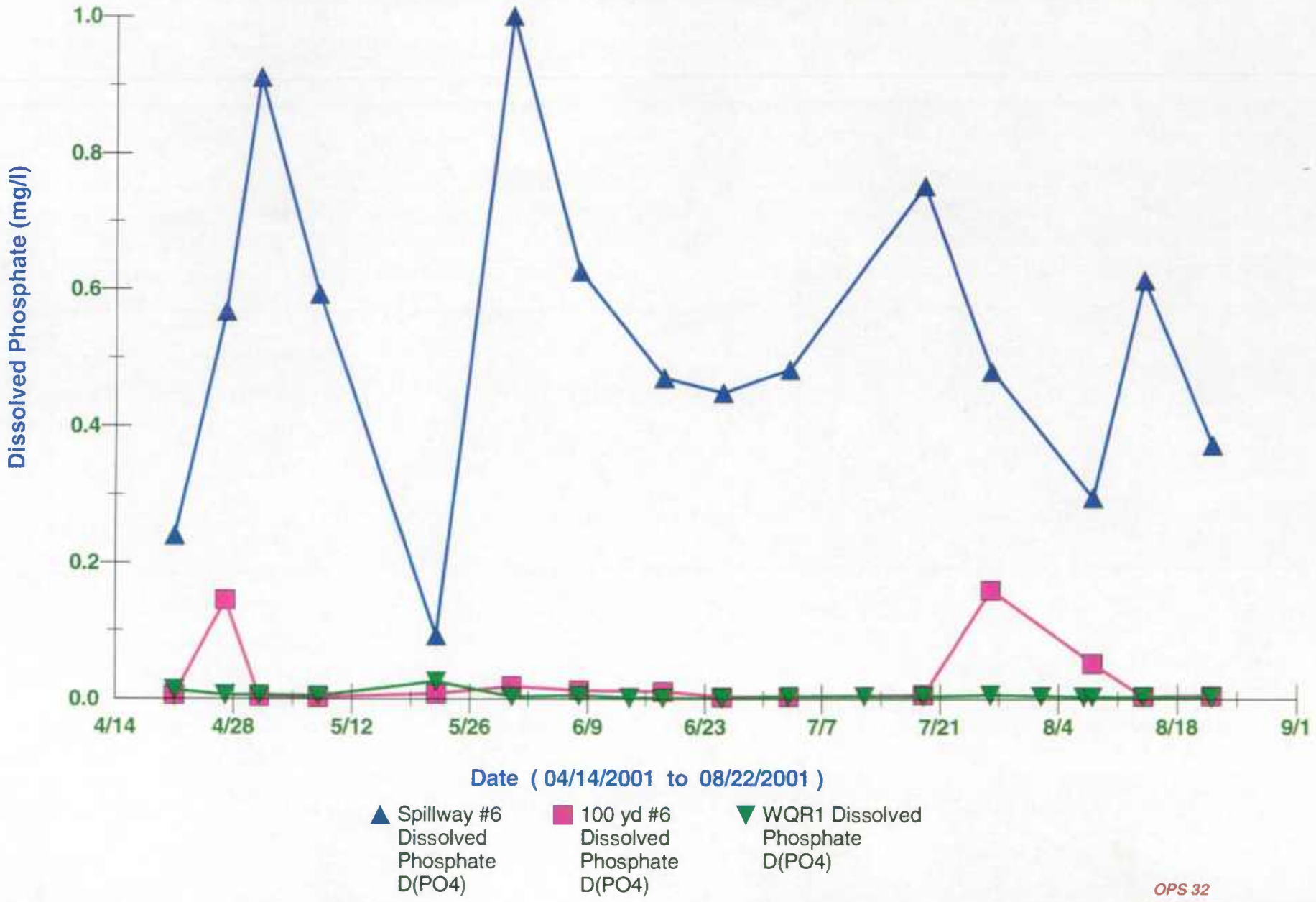
PIERP: Dissolved Phosphate Spillway 5, 100yd-5, & WQR1



OPS 32
Poplar Island

PIERP: Dissolved Phosphate Spillway 5, 100yd-5, & WQR1

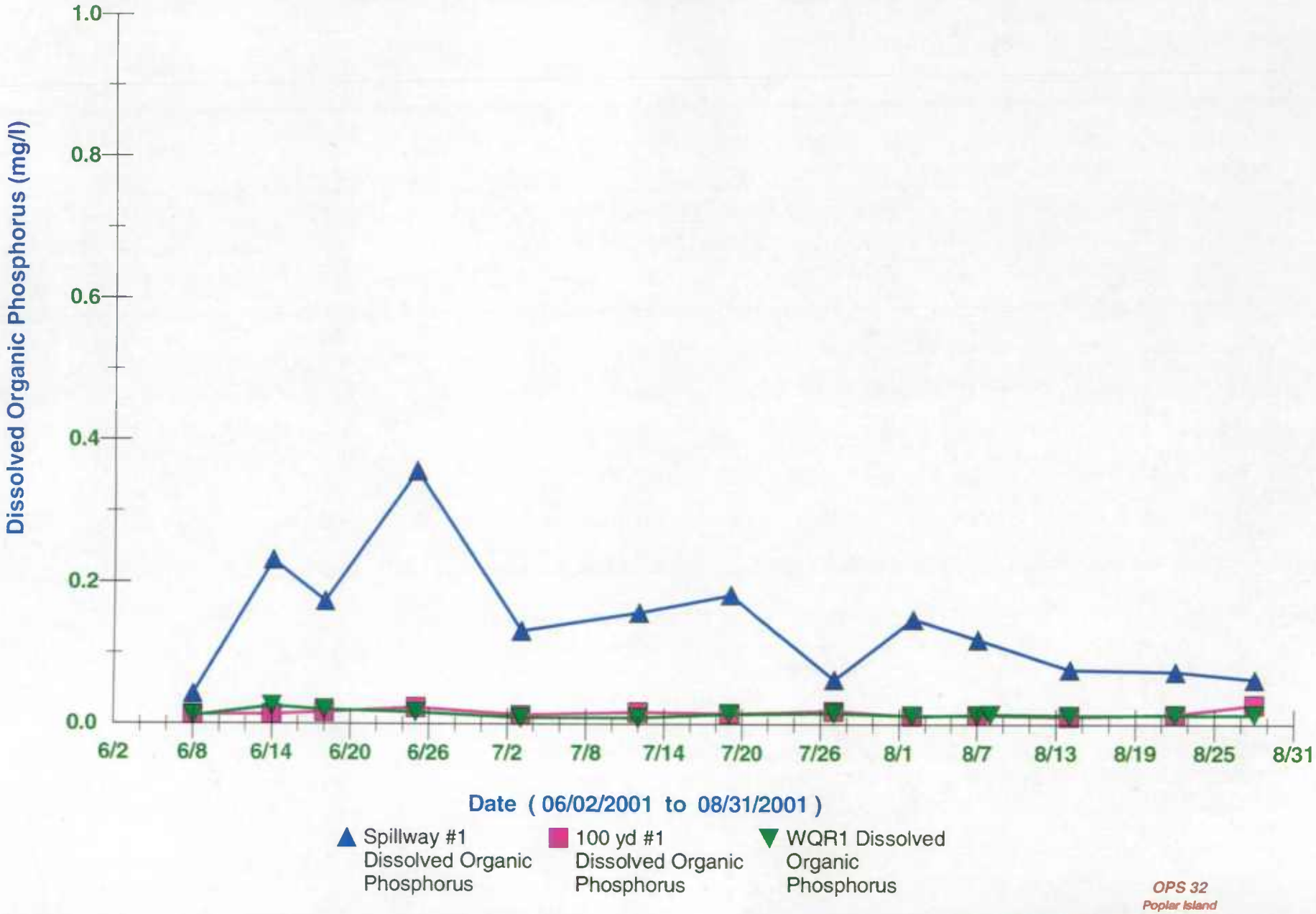
PIERP: Dissolved Phosphate Spillway 6, 100yd-6, & WQR1



OPS 32
Poplar Island

PIERP: Dissolved Phosphate Spillway 6, 100yd-6, & WQR1

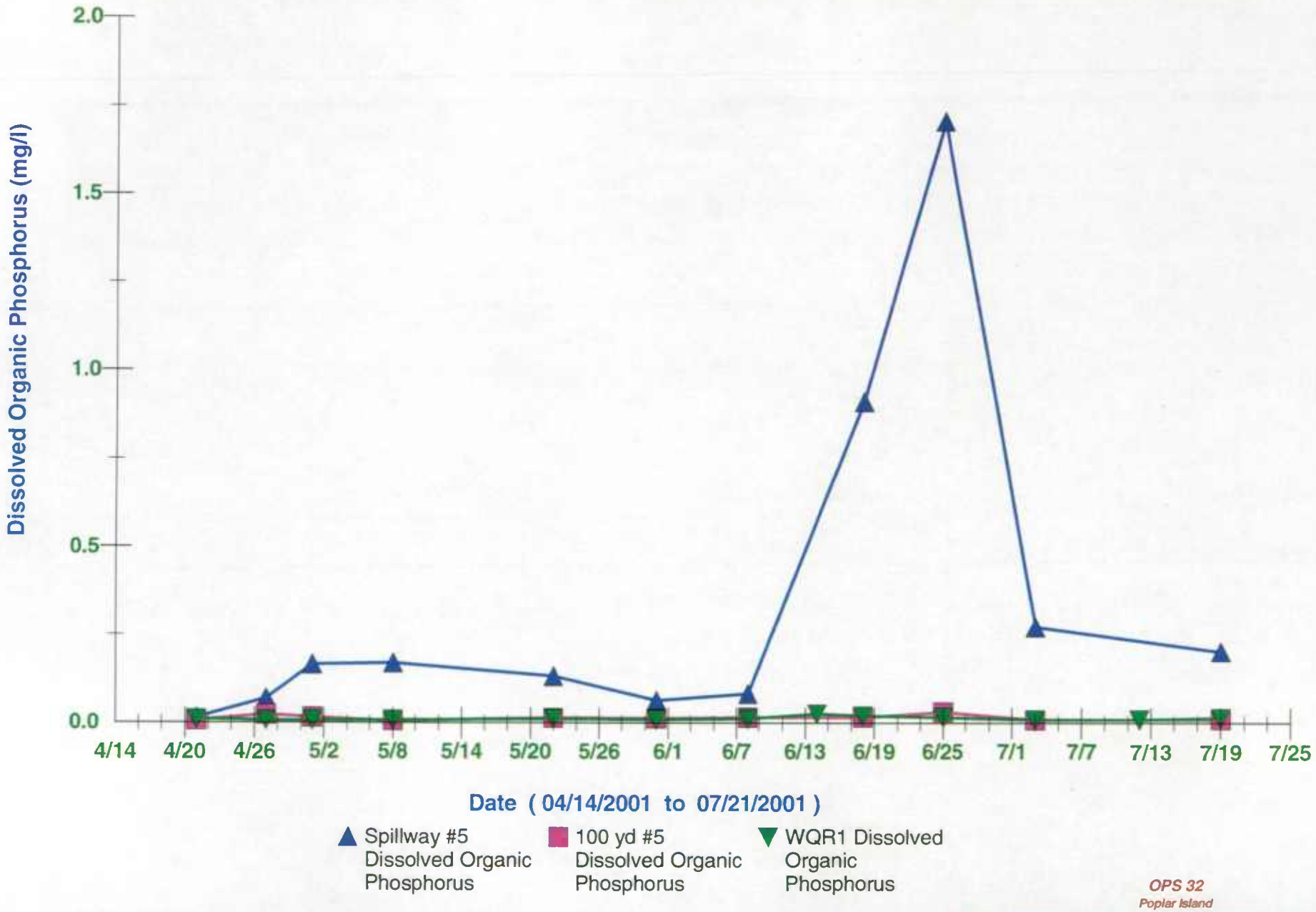
PIERP: Dissolved Organic Phosphorus Spillway 1, 100yd-1, & WQR1



OPS 32
Poplar Island

PIERP: Dissolved Organic Phosphorus Spillway 1, 100yd-1, & WQR1

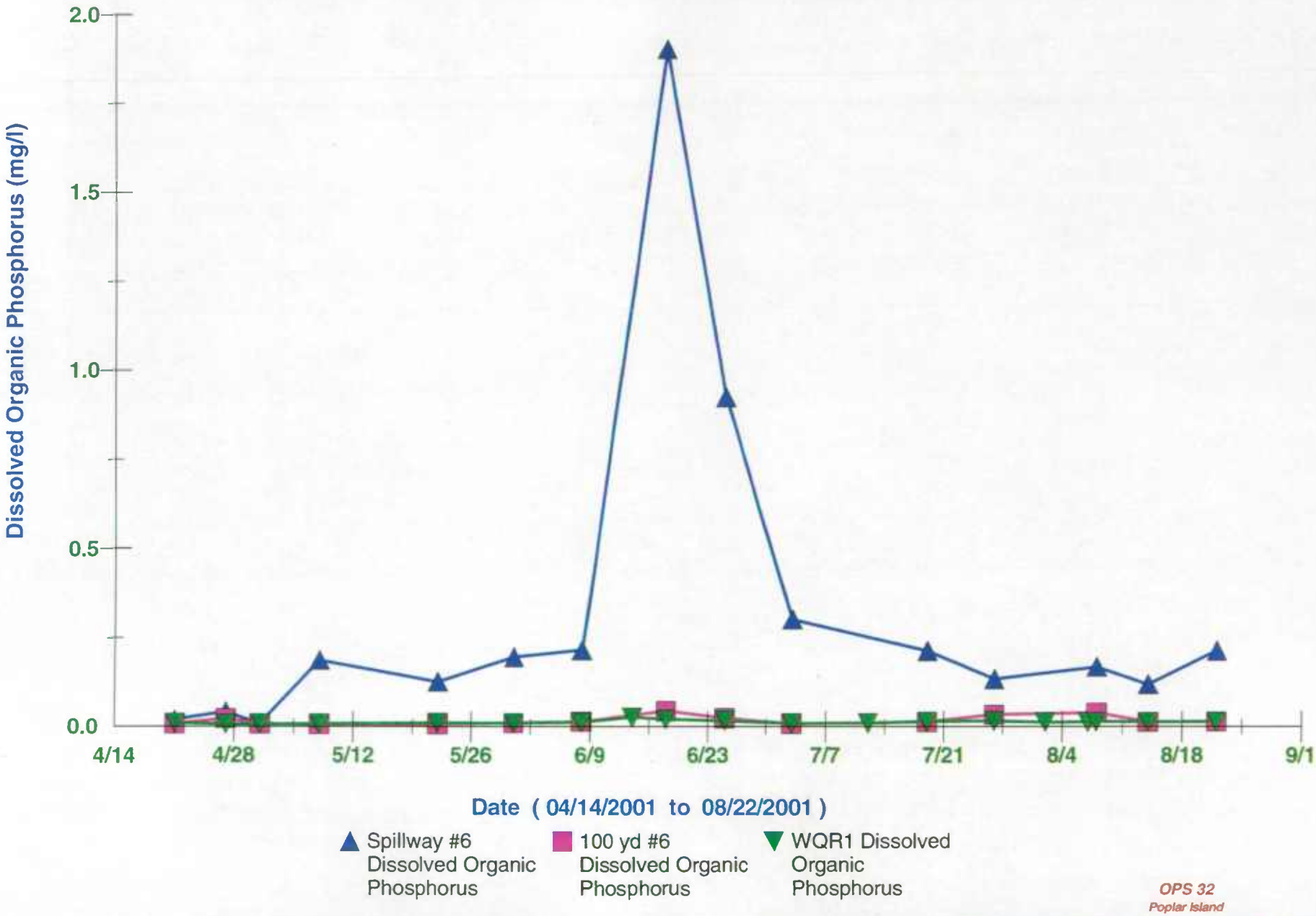
PIERP: Dissolved Organic Phosphorus Spillway 5, 100yd-5, & WQR1



OPS 32
Poplar Island

PIERP: Dissolved Organic Phosphorus Spillway 5, 100yd-5, & WQR1

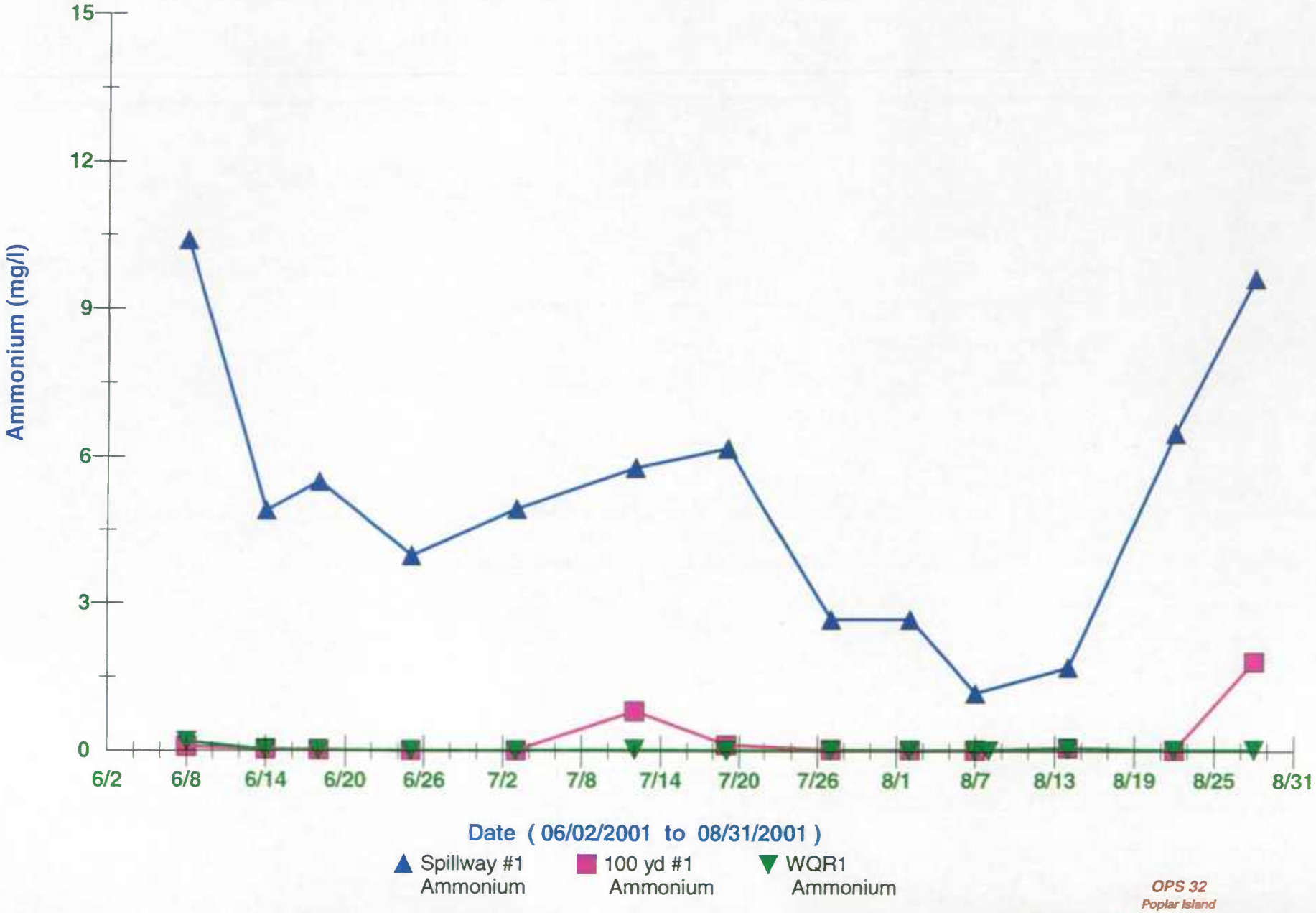
PIERP: Dissolved Organic Phosphorus Spillway 6, 100yd-6, & WQR1



OPS 32
Poplar Island

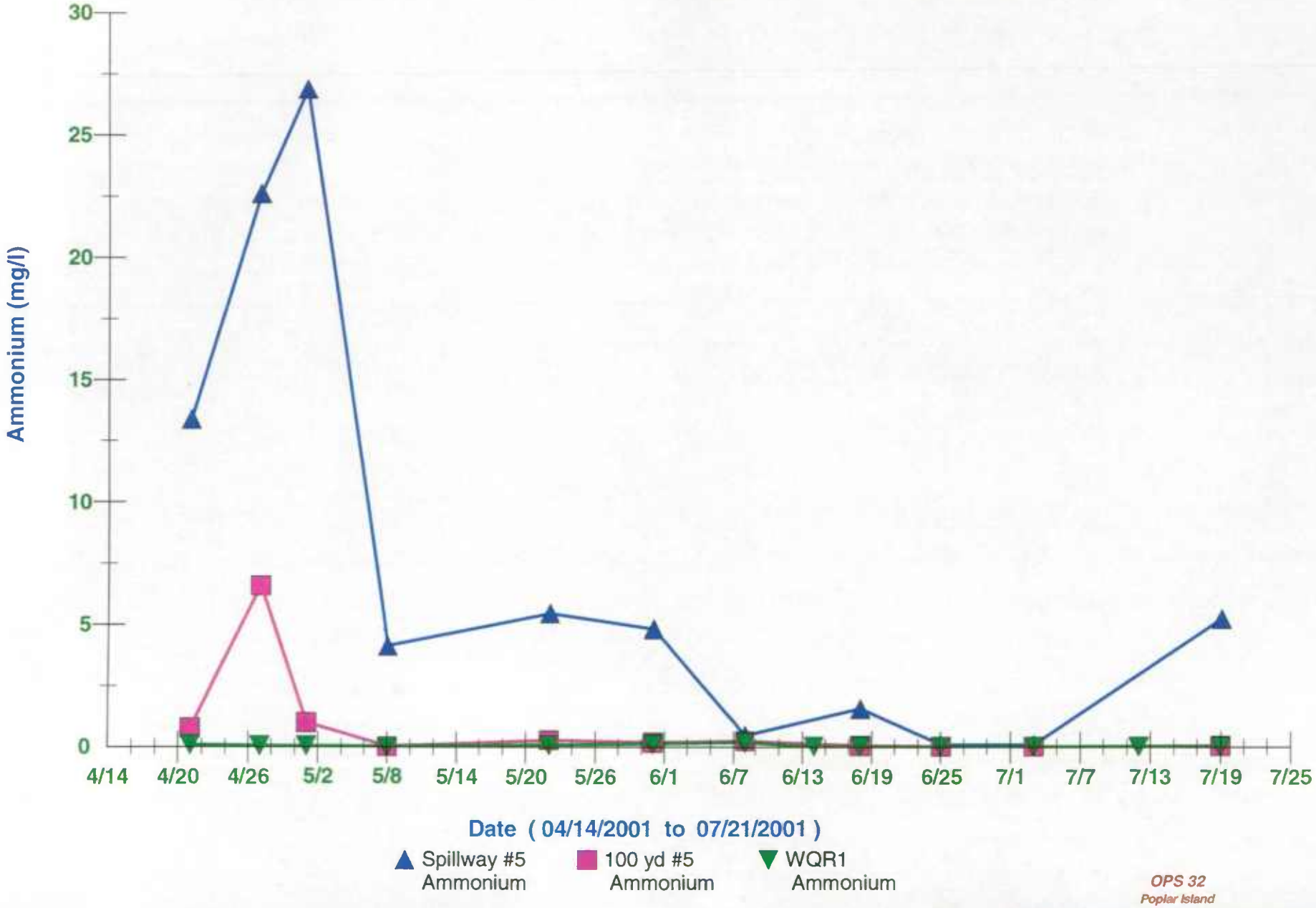
PIERP: Dissolved Organic Phosphorus Spillway 6, 100yd-6, & WQR1

PIERP: Ammonium Spillway 1, 100yd-1, & WQR1



OPS 32
Poplar Island
PIERP: Ammonium Spillway 1, 100yd-1, & WQR1

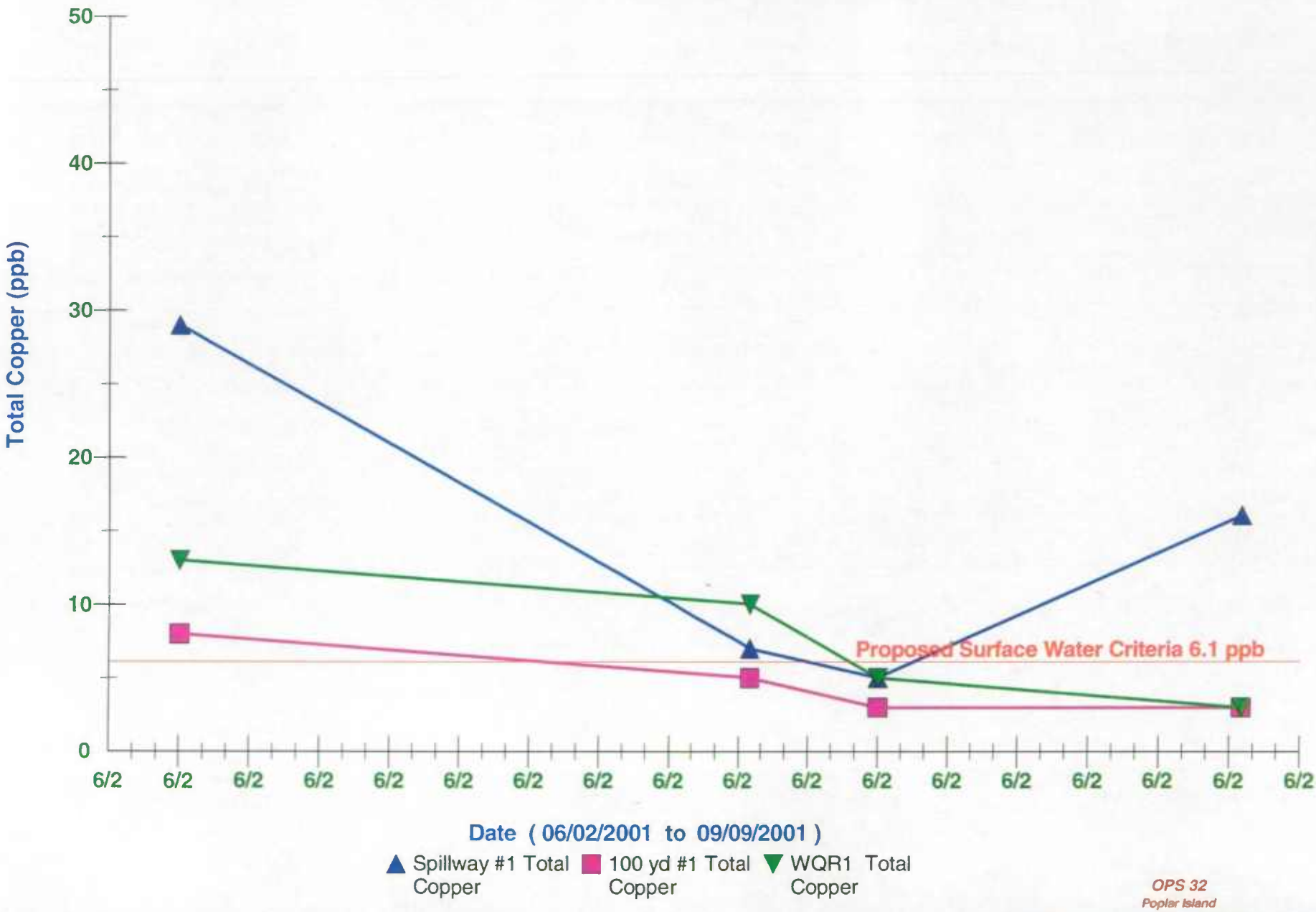
PIERP: Ammonium Spillway 5, 100yd-5, & WQR1



OPS 32
Poplar Island

PIERP: Ammonium Spillway 5, 100yd-5, & WQR1

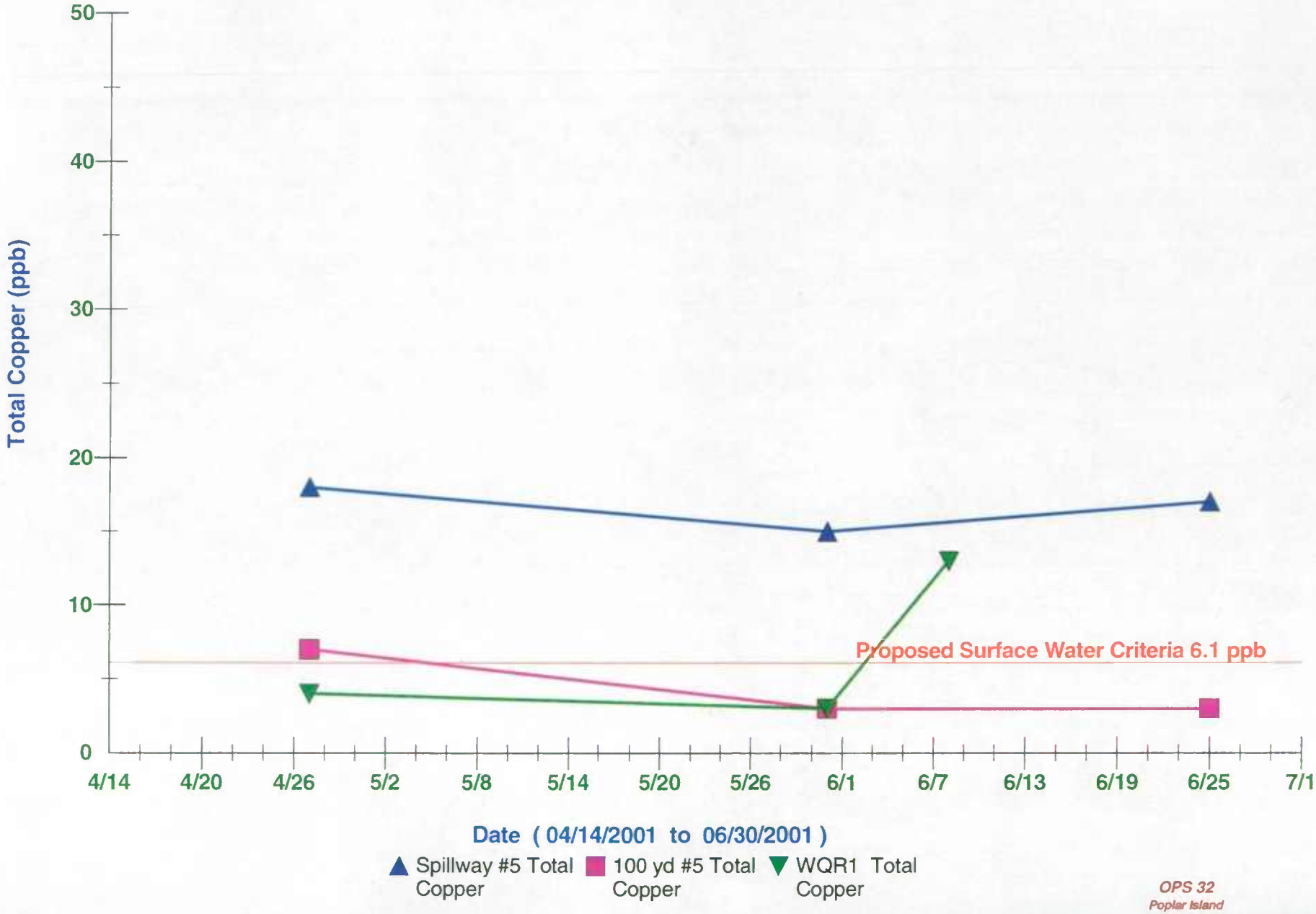
PIERP: Total Copper Spillway 1, 100yd-1, & WQR1



OPS 32
Poplar Island

PIERP: Total Copper Spillway 1, 100yd-1, & WQR1

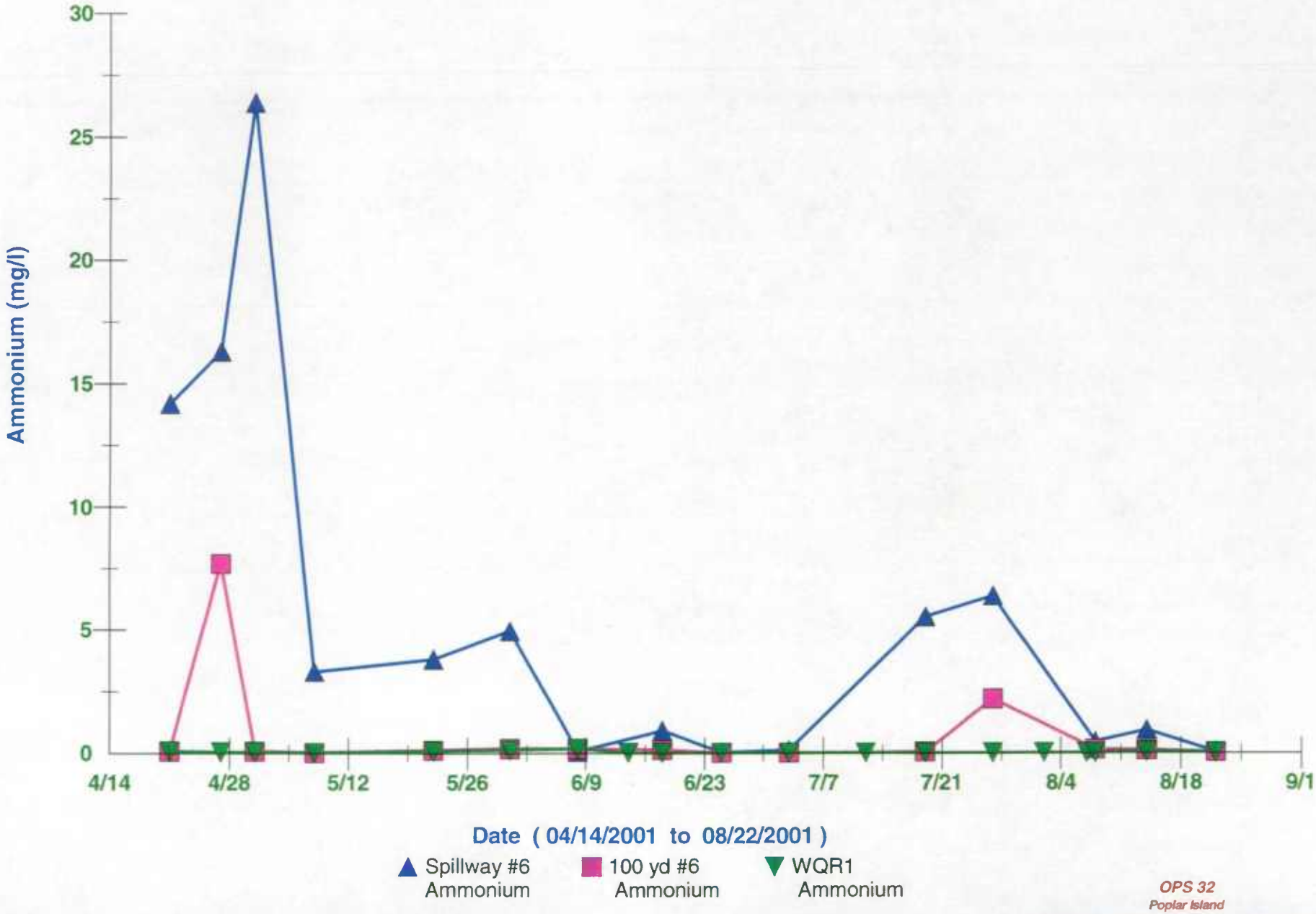
PIERP: Total Copper Spillway 5, 100yd-5, & WQR1



OPS 32
Poplar Island

PIERP: Total Copper Spillway 5, 100yd-5, & WQR1

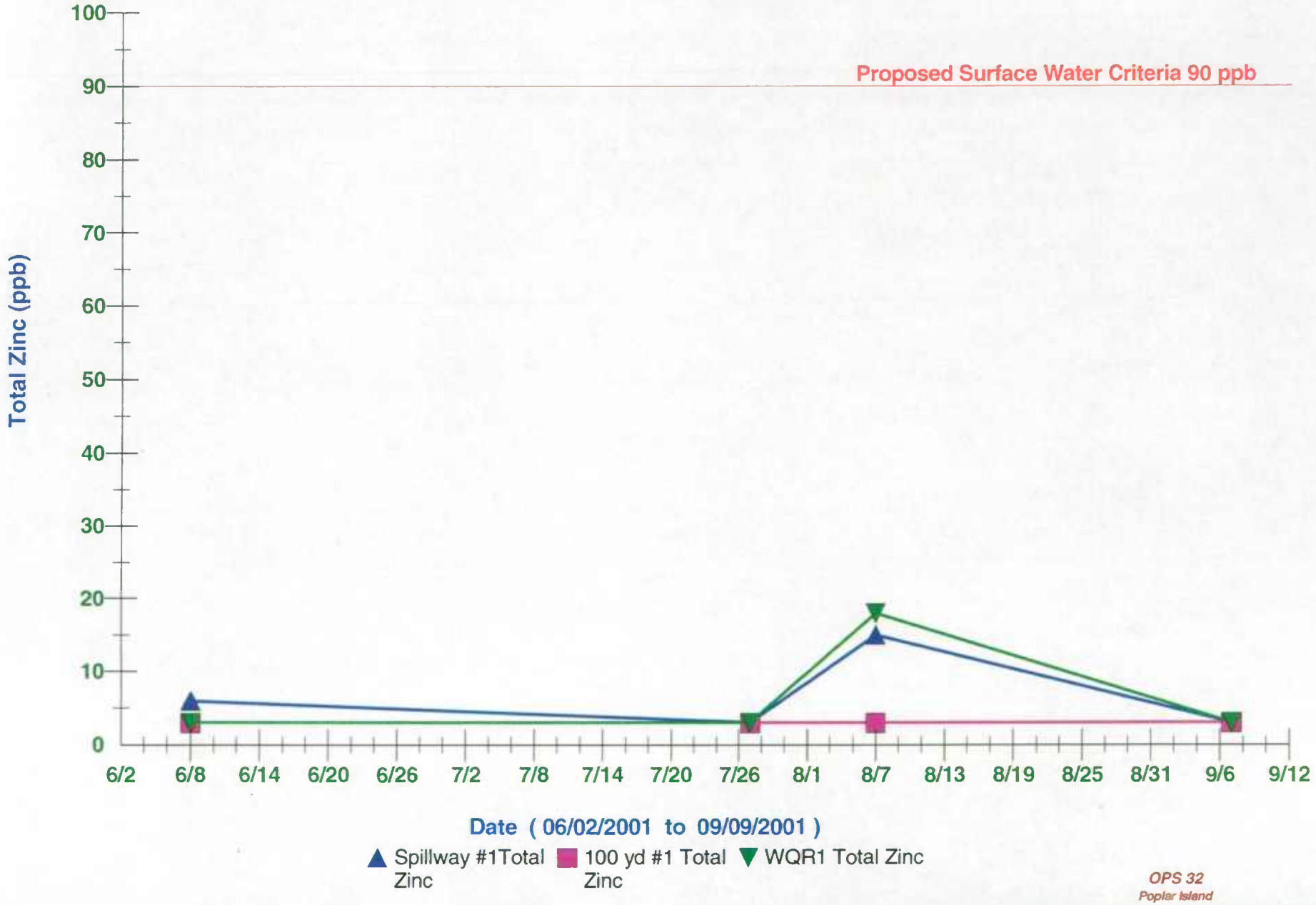
PIERP: Ammonium Spillway 6, 100yd-6, & WQR1



OPS 32
Poplar Island

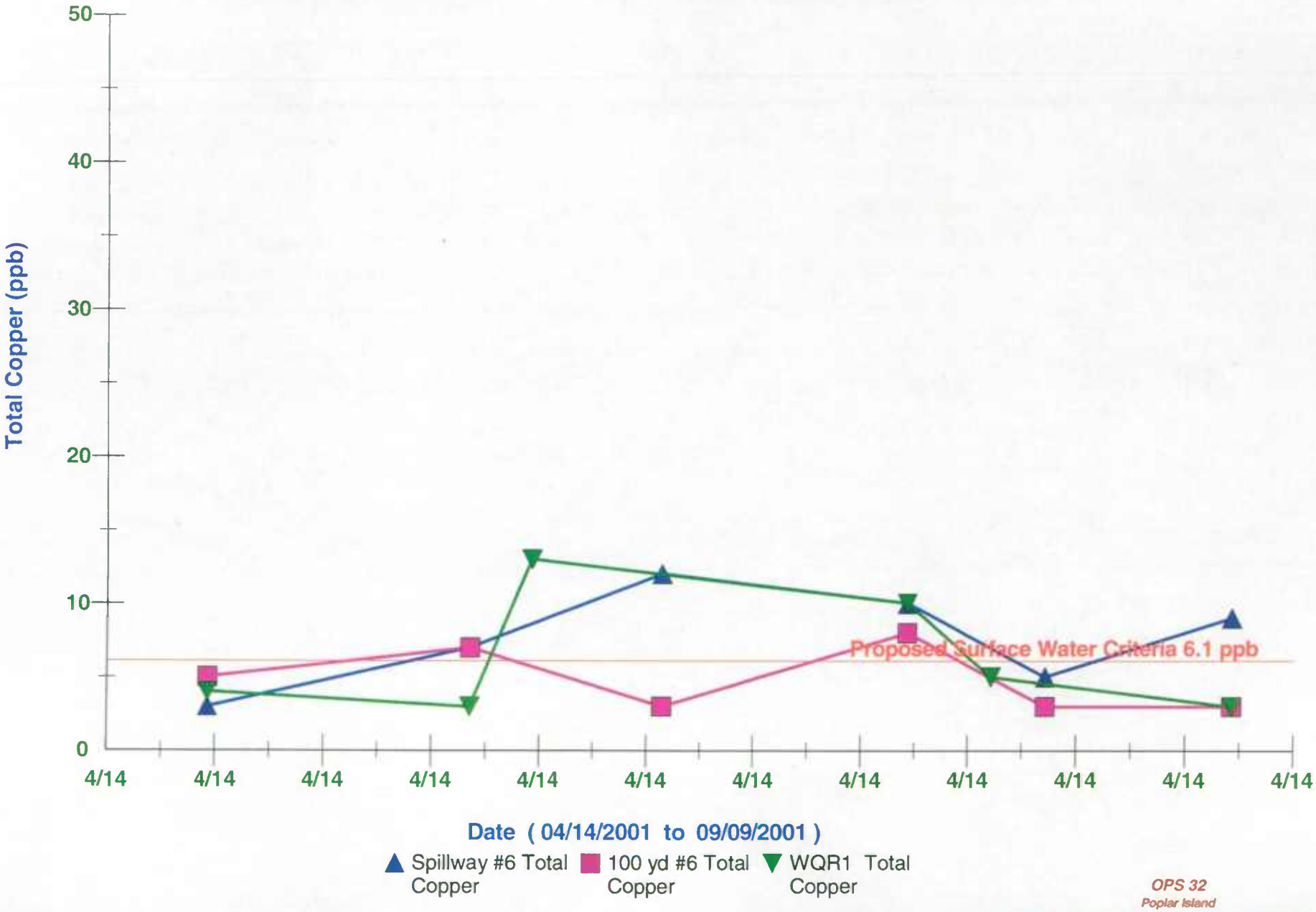
PIERP: Ammonium Spillway 6, 100yd-6 & WQR1

PIERP: Total Zinc Spillway 1, 100yd-1, & WQR1



OPS 32
Poplar Island
PIERP: Total Zinc Spillway 1, 100yd-1, & WQR1

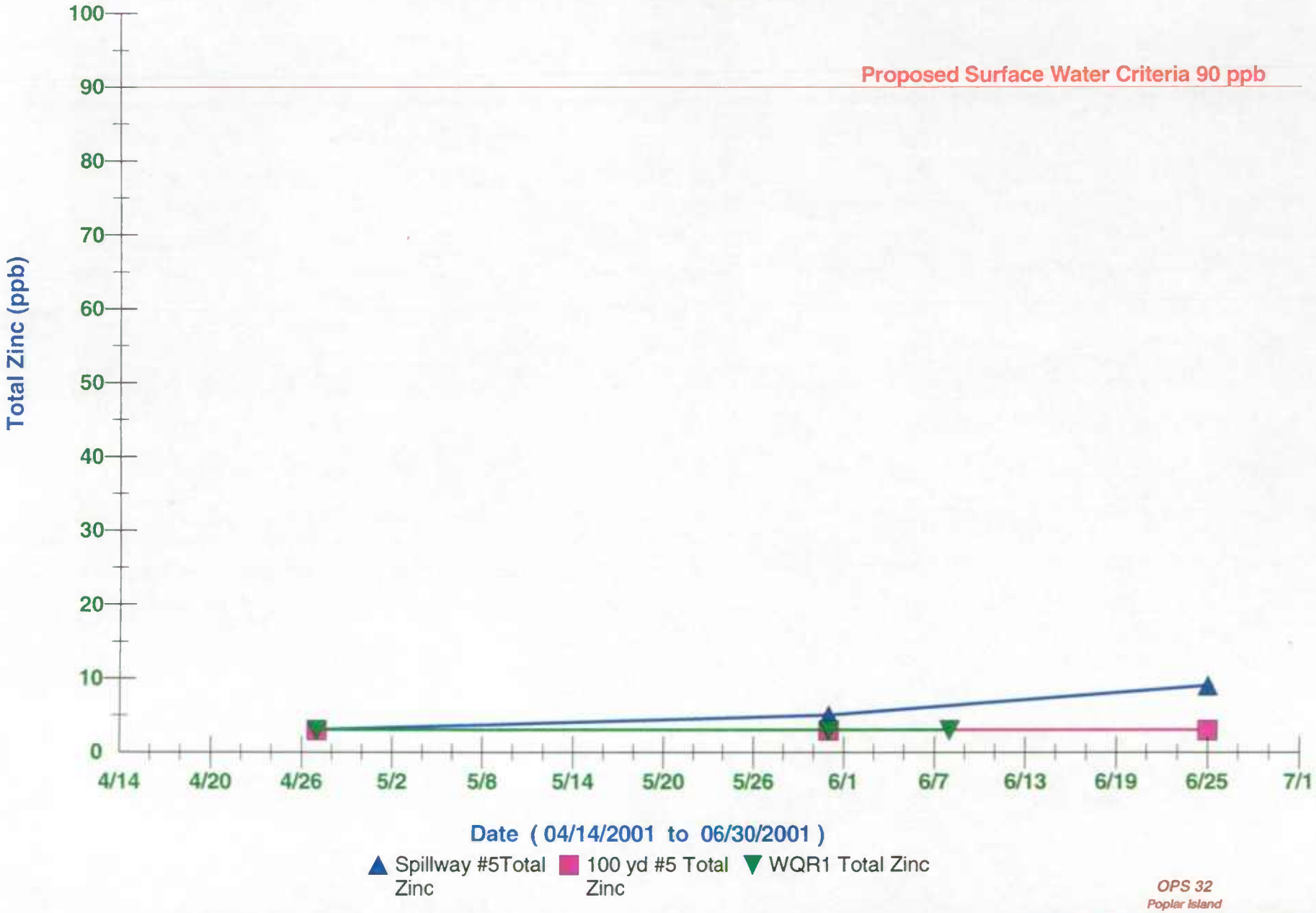
PIERP: Total Copper Spillway 6, 100yd-6, & WQR1



OPS 32
Poplar Island

PIERP: Total Copper Spillway 6, 100yd-6, & WQR1

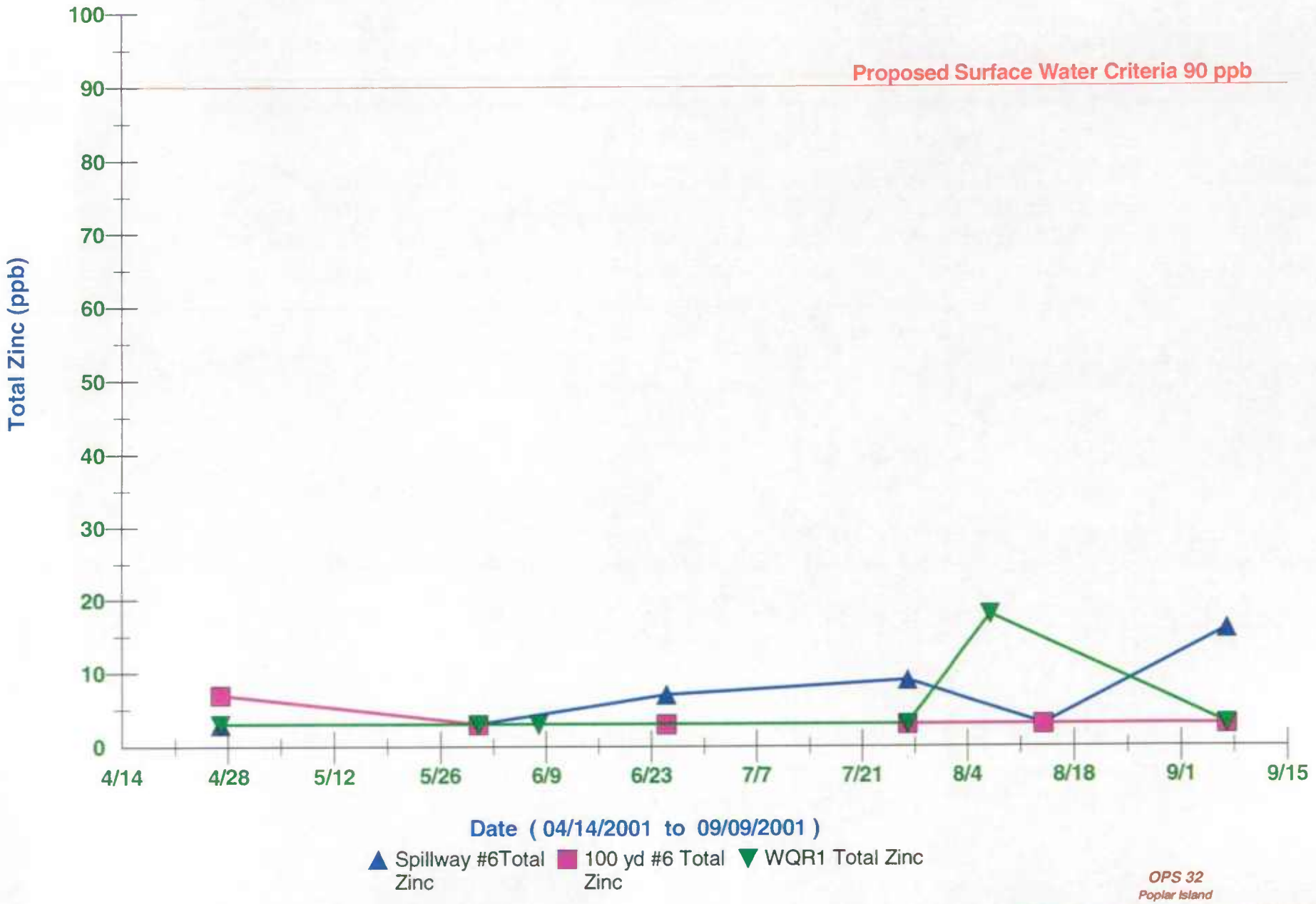
PIERP: Total Zinc Spillway 5, 100yd-5, & WQR1



OPS 32
Poplar Island

PIERP: Total Zinc Spillway 5, 100yd-5, & WQR1

PIERP: Total Zinc Spillway 6, 100yd-6, & WQR1



OPS 32
Poplar Island
PIERP: Total Zinc Spillway 6, 100yd-6, & WQR1

APPENDIX 4

Contract Laboratory Parameters, Methods, and Detection Limits

Poplar Island Environmental Restoration Project
Chemical Analysis Detection Limits

Atlantic Coast Laboratories, Incorporated
Newark, Delaware

METALS & MISC. WET CHEMISTRY
DETECTION LIMITS

PARAMETERS	EPA METHODS	DETECTION LIMITS
Antimony	200.8	0.002
Arsenic	200.8	0.002
Beryllium	200.7	0.002
Cadmium	200.8	0.0005
Chromium	200.8	0.002
Copper	200.7	0.003
Cyanide, Total	335.2	0.01
Lead	200.8	0.002
Mercury	245.1	0.0002
Nickel	200.8	0.002
Phenols, Total	420.1	0.05
Selenium	200.8	0.002
Silver	200.8	0.001
Solids, Total Suspended	160.2	>2.0
Thallium	200.8	0.002
Zinc	200.7	0.003

METHOD 625
PRIORITY POLLUTANT ORGANICS
DETECTION LIMITS

ACID/BASE/NEUTRAL COMPOUNDS	DETECTION LIMITS
N-Nitrosodimethylamine	0.6
Bis (2-Chloroethyl) Ether	1.1
1,3-Dichlorobenzene	2.0
1,4-Dichlorobenzene	1.9
1,2-Dichlorobenzene	1.9
Bis (2-Chloroisopropyl) Ether	1.4
Hexachloroethane	2.0
N-Nitroso-di-N-propylamine	0.8
Nitrobenzene	1.0
Isophorone	0.8
Bis (2-Chloroethoxy) Methane	0.9
1,2,4-Trichlorobenzene	1.6
Naphthalene	1.4
Hexachlorobutadiene	1.9
Hexachlorocyclopentadiene	1.0
2-Chloronaphthalene	1.0
Acenaphthylene	0.8
Dimethyl Phthalate	3.7
2,6-Dinitrotoluene	0.8
Acenaphthene	0.8
2,4-Dinitrotoluene	0.8
Fluorene	0.8
Diethyl Phthalate	2.5
4-Chlorophenyl-Phenylether	0.9
N-Nitrosodiphenylamine	0.5
1,2-Diphenylhydrazine (azobenzene)	0.6
4-Bromophenyl Phenyl Ether	0.7
Hexachlorobenzene	0.9
Phenanthrene	0.7
Anthracene	0.7
Di-n-Butyl Phthalate	1.6
Fluoranthene	0.6
Benzidine	3.6
Pyrene	0.8
Butyl Benzyl Phthalate	3.6
Benzo(a)anthracene	0.7

(CONT.)

METHOD 625 CONT.

PRIORITY POLLUTANT ORGANICS

DETECTION LIMITS

ACID/BASE/NEUTRAL COMPOUNDS	DETECTION LIMITS
3,3 Dichlorobenzidine	0.8
Chrysene	0.6
Bis (2-Ethylhexyl) Phthalate	0.7
Di-n-Octyl Phthalate	1.7
Benzo (a) Pyrene	0.6
Benzo (b) fluoranthene	0.8
Benzo (k) fluoranthene	1.3
Indeno (1,2,3-cd) Pyrene	0.6
Dibenzo (a,h) Anthracene	0.6
Benzo (g,h,i) Perylene	0.7
Phenol	0.8
2-Chlorophenol	1.7
2-Nitrophenol	1.6
2,4-Dimethylphenol	1.0
2,4-Dichlorophenol	1.5
4-Chloro-3-methylphenol	0.9
2,4,6-Trichlorophenol	1.2
2,4-Dinitrophenol	3.2
4-Nitrophenol	0.4
2-Methly-4,6-Dinitrophenol	3.0
Pentachlorophenol	2.9

METHOD 608
PRIORITY POLLUTANT ORGANICS
DETECTION LIMITS

PESTICIDES	DETECTION LIMITS
Aldrin	0.003
alpha-BHC	0.002
beta-BHC	0.002
gamma-BHC (Lindane)	0.002
delta-BHC	0.002
Chlordane	0.34
4,4'-DDT	0.004
4,4'-DDE	0.002
4,4'-DDD	0.003
Dieldrin	0.002
Endosulfan I	0.003
Endosulfan II	0.003
Endosulfan Sulfate	0.003
Endrin	0.002
Endrin Aldehyde	0.003
Heptachlor	0.002
Heptachlor Epoxide	0.002
Toxaphene	0.12
PCB-1016	0.30
PCB-1221	0.50
PCB-1232	0.50
PCB-1242	0.40
PCB-1248	0.10
PCB-1254	0.20
PCB-1260	0.20
Methoxychlor	0.019

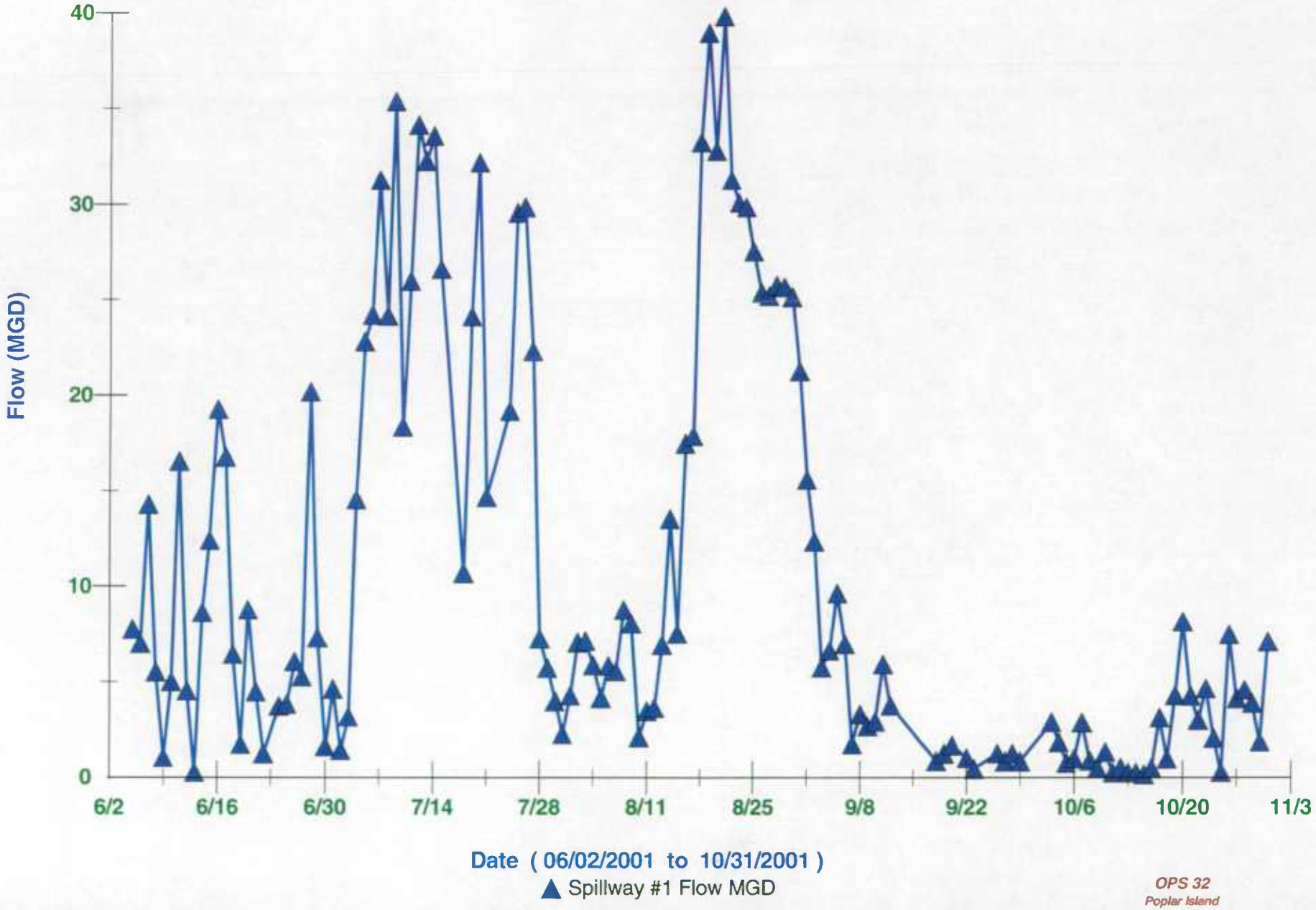
METHOD 624
PRIORITY POLLUTANT ORGANICS
DETECTION LIMITS

VOLATILE ORGANIC COMPOUNDS	DETECTION LIMITS
Chloromethane	2.2
Bromomethane	1.0
Vinyl Chloride	1.4
Chloroethane	1.5
Methylene Chloride	0.70
1,1-Dichloroethene	1.1
1,1-Dichloroethane	0.80
Trans-1,2-Dichloroethylene	0.70
Chloroform	0.60
1,2-Dichloroethane	0.50
1,1,1-Trichloroethane	0.80
Carbon Tetrachloride	0.90
Bromodichloromethane	0.70
1,2-Dichloropropane	0.80
Trans-1,3-Dichloropropene	0.60
Trichloroethene	1.0
Dibromochloromethane	0.70
1,1,2-Trichloroethane	0.70
cis-1,3-Dichloropropene	0.60
2-Chloroethylvinyl ether	0.90
Bromoform	0.40
1,1,2,2,-Tetrachloroethane	1.1
Tetrachloroethene	1.1
Chlorobenzene	0.70
1,2-Dichlorobenzene	0.30
1,3-Dichlorobenzene	0.30
1,4-Dichlorobenzene	0.20
Benzene	0.80
Toluene	0.90
Ethylbenzene	0.80
Acrolein	50
Acrylonitrile	50

APPENDIX 5

Graphs

PIERP: Flow Spillway 1



OPS 32
Poplar Island
PIERP: Flow Spillway 1