



**Wisconsin Public Service Corporation**

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February 20, 2015

FERC Project No. 2595  
NATDAM No. WI00754

Ms. Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street NE  
Washington, DC 20426

Dear Secretary Bose:

High Falls Hydroelectric Project  
Article 406 - 2014 Annual Water Quality Monitoring Report

Per the Order Amending Water Quality Monitoring Plans under Article 406, dated April 30, 2002, Wisconsin Public Service (WPS) is submitting water quality monitoring data collected during the 2014 monitoring season at the High Falls Hydroelectric project.

Per the Project License, WPS is required to ensure flow releases from the project, as measured immediately downstream from the dam, maintain the following standards, except when natural conditions prohibit attainment of the standards: (1) DO concentrations shall not be less than 5.0 milligrams per liter (mg/L) (minus the precision of the monitoring instrument) for more than 24 hours per year; (2) water temperature shall not exceed 89 degrees Fahrenheit; and (3) the pH shall be within the range of 6.0 to 9.0, with no change greater than 0.5 units outside the estimated natural seasonal maximum and minimum. Natural conditions include inflows to the project less than the 95 percent exceedance flow.

As described in the monitoring plan, water quality monitoring is conducted downstream of the powerhouse annually from June 1 through September 30. Monitoring downstream of the powerhouse is conducted where High Falls Road crosses the Peshtigo River. Monitoring upstream of the project occurs every five years in conjunction with water quality monitoring conducted at the Caldron Falls Hydroelectric Project. Upstream monitoring was conducted in 2011 and is scheduled to occur again in 2016.

Monitoring data for dissolved oxygen (D.O.), temperature, and pH is collected at one-hour intervals on a continuous basis. As described in the water quality monitoring plan for the project, the instrumentation was cleaned and calibrated according to manufacturer specification every 7 to 10 days during the monitoring period. A post deployment calibration was conducted to determine the extent of calibration drift. Raw data was adjusted assuming a linear degradation of calibration based upon a post calibration of the equipment. The water quality monitoring equipment used to monitor D.O. has an accuracy of +/- 0.1 mg/l, per the manufacturer. For compliance purposes, dissolved oxygen concentrations more than 0.1 mg/l below the applicable water quality standard are potential deviations.

Ms. Kimberly D. Bose, Secretary

February 20, 2015

Page 2 of 2

No deviations from the dissolved oxygen, pH, or temperature water quality standards were observed during the 2014 monitoring season. There was one hour of missing monitoring data during the monitoring season due to the maintenance and calibration of the monitoring equipment. Monitoring data can be found in Appendix A. WPSC provided the 2014 water quality monitoring data to the Wisconsin Department of Natural Resources (WDNR), and the U.S. Fish and Wildlife Service (FWS) on November 14, 2014 for review and comment. No comments were received from the WDNR or the FWS during the 30 day comment period. Documentation of consultation can be found in Appendix B.

Should you have any questions or concerns with this submittal, please do not hesitate to call Mr. Mark Metcalf at (920) 433-1833.

Sincerely,

A handwritten signature in black ink, appearing to read "Gil Snyder", with a long horizontal flourish extending to the right.

Gil Snyder

Manager – Regional Generation

mwm/rjf

Enc: Appendix A – 2014 Water Quality Monitoring Data  
Appendix B – Documentation of Agency Consultation

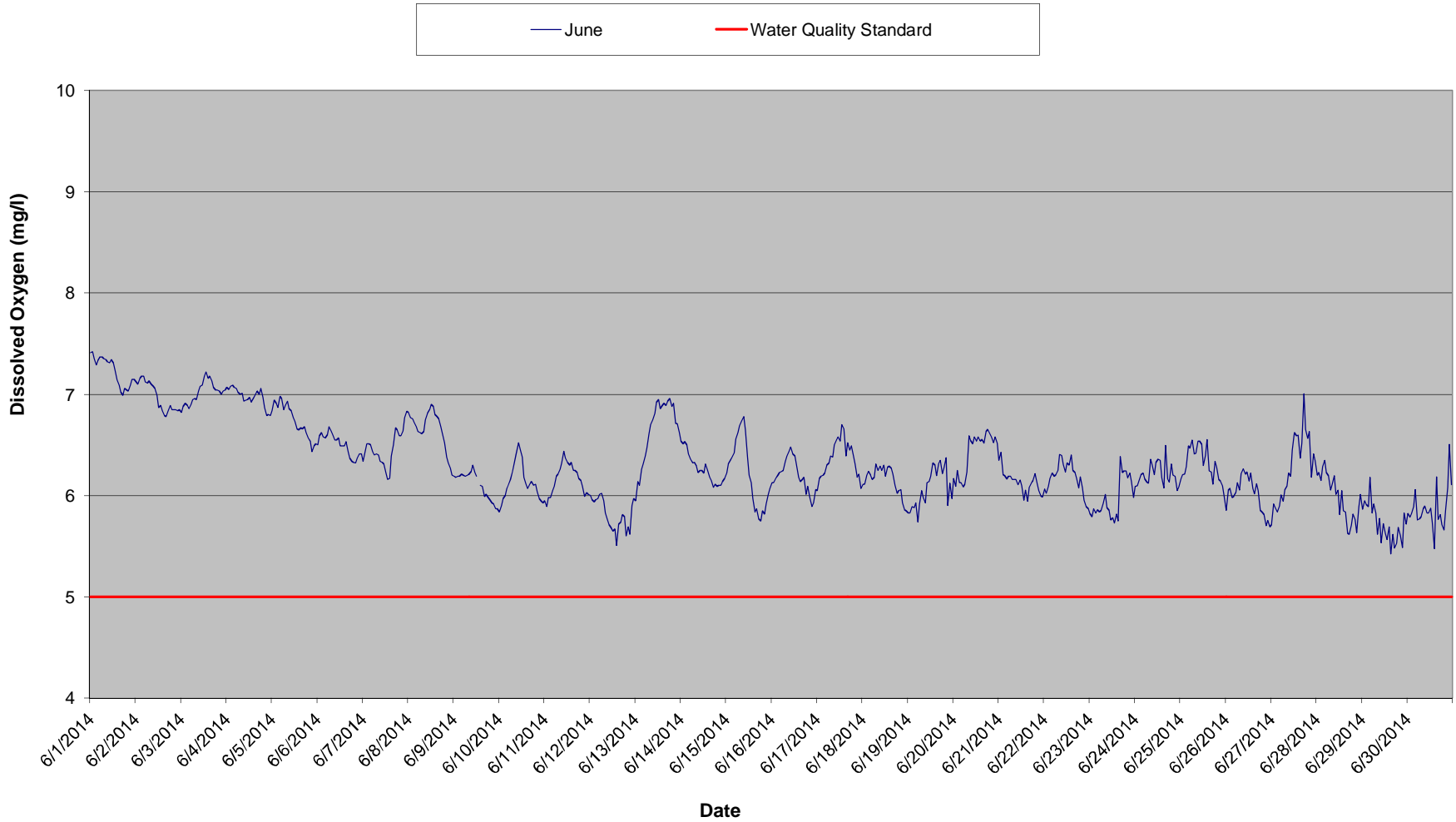
cc: Mr. John Meyers, IBS - D2                      Ms. Katie Bartelt, WPS - D2  
Mr. Shawn Puzen, IBS - D2                      Mr. Edward Brandt, WPS - CRI  
Ms. Joan Johaneck, WPSC - D2                      Mr. John Zygaj, FERC - CRO  
Mr. William Bosacki, WPSC – D2

**Appendix A**  
**High Falls Hydroelectric Project**  
**FERC No. 2595**  
**2014 Water Quality Monitoring Data**

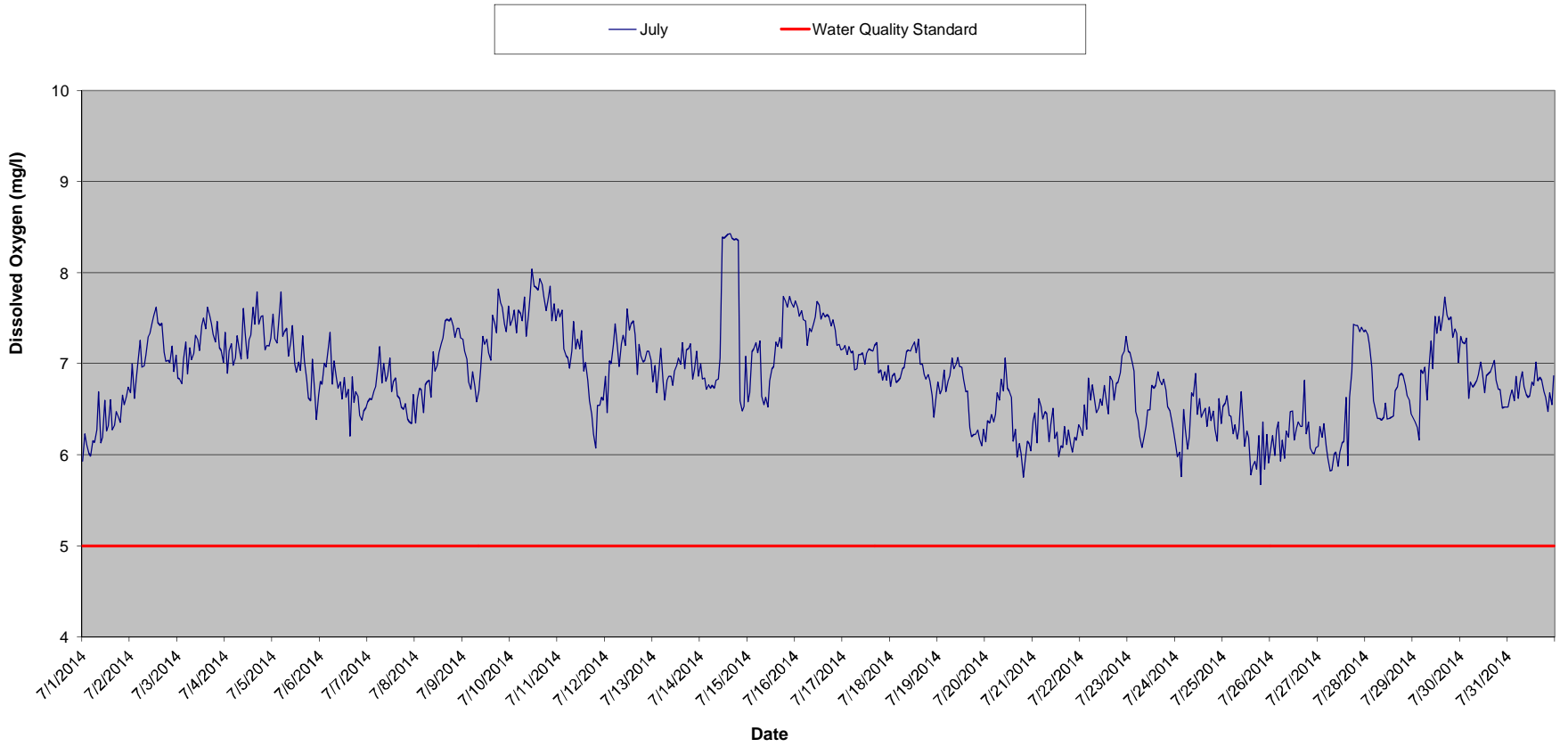
## **High Falls Hydroelectric Project**

### **2014 Dissolved Oxygen Monitoring Data**

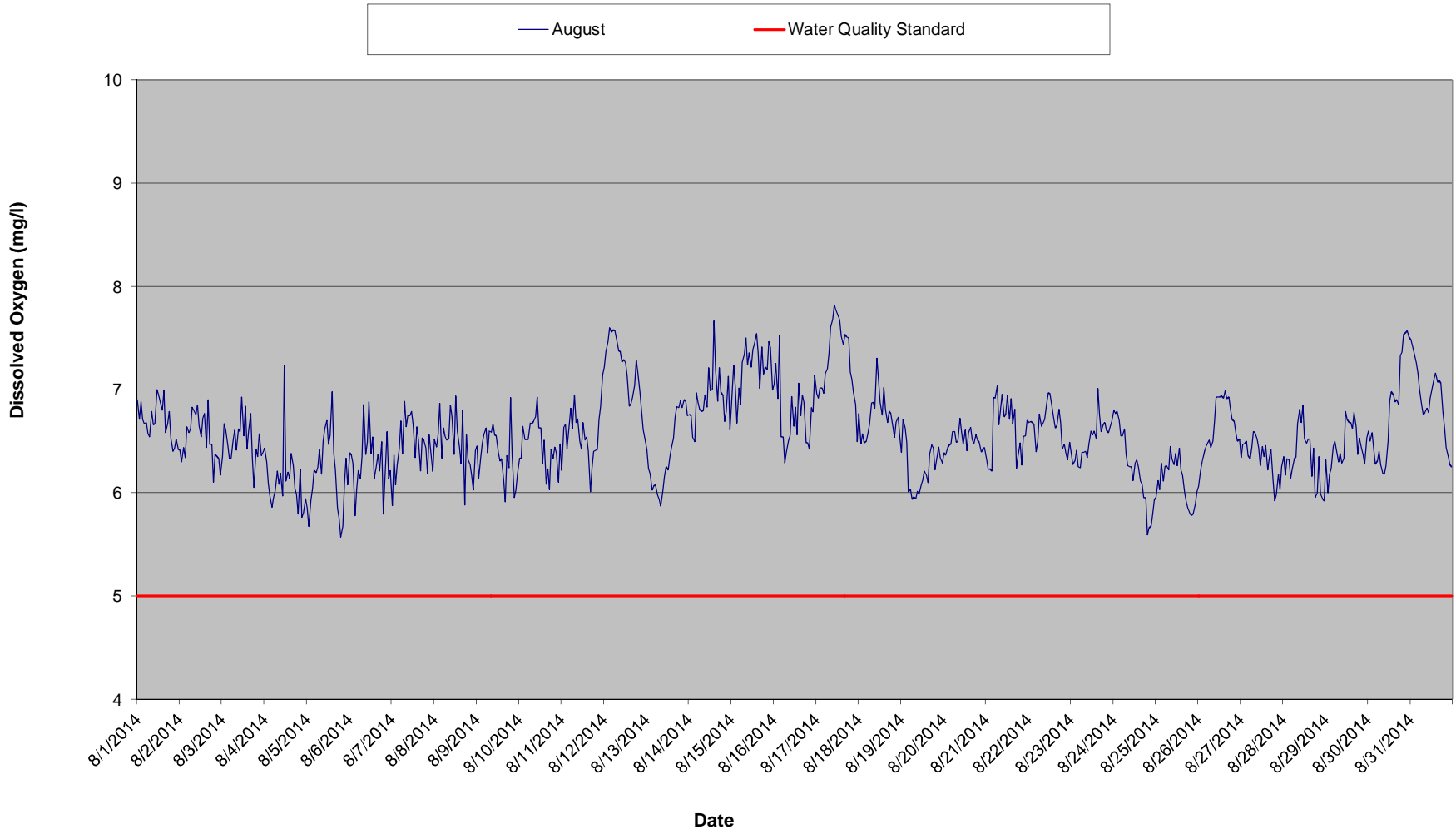
### High Falls Tailrace Dissolved Oxygen - June 2014



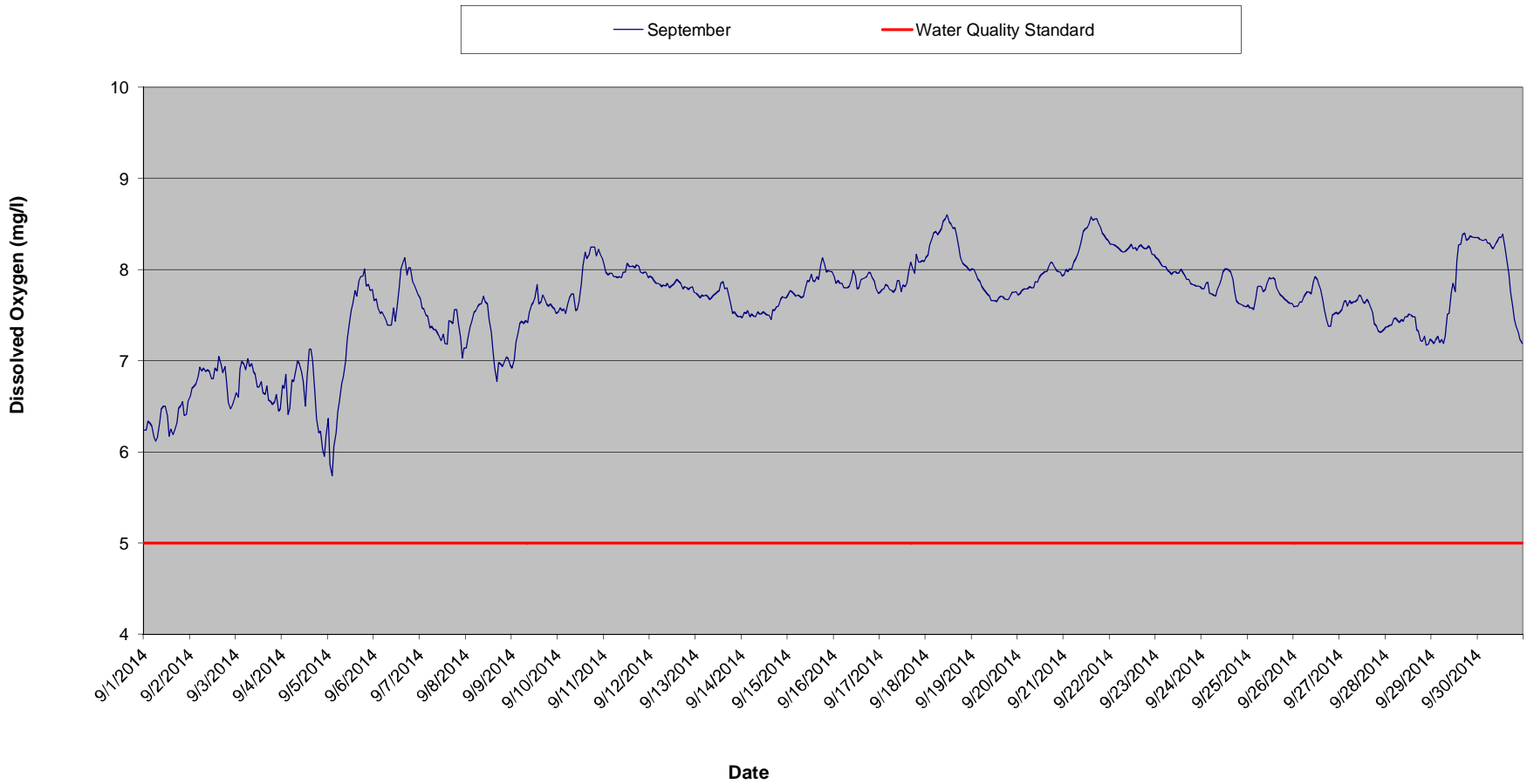
### High Falls Tailrace Dissolved Oxygen - July 2014



### High Falls Tailrace Dissolved Oxygen - August 2014



### High Falls Tailrace Dissolved Oxygen - September 2014






High Falls Tailrace Dissolved Oxygen Summary - June 2014

Time HHMMSS	06/01/14	06/02/14	06/03/14	06/04/14	06/05/14	06/06/14	06/07/14	06/08/14	06/09/14	06/10/14	06/11/14	06/12/14	06/13/14	06/14/14	06/15/14	06/16/14
0	7.4	7.1	6.8	7.1	6.8	6.5	6.3	6.8	6.2	5.8	6.0	6.0	6.0	6.5	6.2	6.1
10000	7.4	7.1	6.9	7.1	6.9	6.6	6.4	6.8	6.2	5.9	5.9	6.0	6.1	6.5	6.3	6.1
20000	7.4	7.2	6.9	7.1	6.9	6.6	6.5	6.8	6.2	6.0	6.0	5.9	6.1	6.5	6.4	6.2
30000	7.3	7.2	6.9	7.1	6.9	6.6	6.5	6.7	6.2	6.0	6.0	6.0	6.3	6.5	6.4	6.2
40000	7.3	7.2	6.9	7.1	7.0	6.6	6.5	6.7	6.2	6.1	6.1	6.0	6.3	6.4	6.4	6.2
50000	7.4	7.1	6.9	7.1	7.0	6.6	6.4	6.6	6.2	6.1	6.1	6.0	6.4	6.4	6.6	6.2
60000	7.4	7.1	7.0	7.0	6.9	6.7	6.4	6.6	6.2	6.2	6.2	6.0	6.5	6.3	6.6	6.3
70000	7.4	7.1	7.0	7.0	6.9	6.6	6.4	6.6	6.2	6.3	6.2	6.0	6.6	6.3	6.7	6.3
80000	7.3	7.1	7.0	7.0	6.9	6.6	6.4	6.6	6.2	6.3	6.3	5.8	6.7	6.3	6.7	6.4
90000	7.3	7.1	7.0	6.9	6.9	6.6	6.3	6.8	6.2	6.4	6.3	5.8	6.8	6.2	6.8	6.4
100000	7.3	7.1	7.1	6.9	6.8	6.6	6.3	6.8	6.3	6.5	6.4	5.7	6.8	6.3	6.7	6.5
110000	7.3	7.0	7.1	7.0	6.8	6.6	6.3	6.9	6.2	6.5	6.4	5.7	6.9	6.3	6.4	6.4
120000	7.3	6.9	7.2	7.0	6.7	6.5	6.2	6.9	6.2	6.4	6.3	5.7	7.0	6.2	6.2	6.4
130000	7.2	6.9	7.2	6.9	6.7	6.5	6.2	6.9	6.2	6.2	6.3	5.7	6.9	6.3	6.1	6.3
140000	7.1	6.8	7.2	7.0	6.7	6.5	6.2	6.8	6.1	6.1	6.3	5.5	6.9	6.3	6.0	6.2
150000	7.1	6.8	7.2	7.0	6.7	6.5	6.4	6.8	6.1	6.1	6.3	5.7	6.9	6.2	5.8	6.1
160000	7.0	6.8	7.1	7.0	6.7	6.4	6.5	6.8	6.0	6.1	6.3	5.7	6.9	6.2	5.9	6.2
170000	7.0	6.8	7.1	7.0	6.7	6.4	6.7	6.7	6.0	6.1	6.2	5.8	6.9	6.1	5.8	6.2
180000	7.1	6.9	7.0	7.1	6.6	6.3	6.7	6.6	6.0	6.1	6.2	5.8	7.0	6.1	5.8	6.0
190000	7.0	6.9	7.0	7.0	6.6	6.3	6.6	6.5	6.0	6.1	6.2	5.6	6.9	6.1	5.9	6.1
200000	7.0	6.9	7.0	6.9	6.5	6.3	6.6	6.4	5.9	6.0	6.1	5.7	6.9	6.1	5.8	6.0
210000	7.1	6.9	7.0	6.8	6.4	6.4	6.6	6.3	5.9	6.0	6.0	5.6	6.7	6.1	5.9	5.9
220000	7.2	6.8	7.0	6.8	6.5	6.4	6.8	6.3	5.9	6.0	6.0	5.9	6.7	6.1	6.0	5.9
230000	7.2	6.9	7.0	6.8	6.5	6.4	6.8	6.2	5.9	5.9	6.0	6.0	6.6	6.2	6.1	6.1
Daily Max	7.4	7.2	7.2	7.1	7.0	6.7	6.8	6.9	6.3	6.5	6.4	6.0	7.0	6.5	6.8	6.5
Daily Min	7.0	6.8	6.8	6.8	6.4	6.3	6.2	6.2	5.9	5.8	5.9	5.5	6.0	6.1	5.8	5.9
Average	7.2	7.0	7.0	7.0	6.7	6.5	6.5	6.7	6.1	6.1	6.2	5.8	6.7	6.3	6.2	6.2

License Minimum DO: 5.0 mg/l

 Missing data - equipment maintenance

High Falls Tailrace Dissolved Oxygen Summary - June 2014

Time HHMMSS	06/17/14	06/18/14	06/19/14	06/20/14	06/21/14	06/22/14	06/23/14	06/24/14	06/25/14	06/26/14	06/27/14	06/28/14	06/29/14	06/30/14
0	6.1	6.1	5.8	6.2	6.3	6.1	5.8	6.1	6.2	5.9	5.7	6.2	5.9	5.8
10000	6.2	6.1	5.8	6.1	6.4	6.0	5.8	6.1	6.2	6.1	5.9	6.2	6.0	5.8
20000	6.2	6.2	5.9	6.2	6.2	6.1	5.9	6.2	6.2	6.1	5.9	6.1	5.9	5.8
30000	6.2	6.2	5.9	6.1	6.2	6.2	5.8	6.2	6.3	6.0	5.8	6.3	5.9	5.9
40000	6.2	6.2	5.9	6.1	6.2	6.2	5.9	6.2	6.5	6.0	5.9	6.3	6.2	6.1
50000	6.3	6.2	5.7	6.1	6.2	6.2	5.8	6.2	6.5	6.0	6.0	6.2	5.8	5.8
60000	6.3	6.2	5.9	6.1	6.2	6.2	5.9	6.1	6.6	6.1	5.9	6.2	5.9	5.8
70000	6.4	6.3	6.1	6.2	6.2	6.2	5.9	6.1	6.4	6.1	6.1	6.1	5.8	5.8
80000	6.4	6.3	6.0	6.6	6.2	6.4	6.0	6.4	6.4	6.2	6.1	6.1	5.6	5.9
90000	6.5	6.3	5.9	6.5	6.2	6.4	5.9	6.3	6.5	6.3	6.2	6.2	5.8	5.9
100000	6.6	6.3	6.1	6.5	6.1	6.3	5.9	6.2	6.5	6.2	6.2	6.0	5.5	5.8
110000	6.6	6.3	6.1	6.6	6.2	6.2	5.8	6.3	6.5	6.2	6.5	6.1	5.7	5.8
120000	6.5	6.2	6.2	6.5	6.1	6.3	5.8	6.4	6.3	6.1	6.6	5.8	5.6	5.9
130000	6.7	6.3	6.3	6.6	6.0	6.3	5.7	6.3	6.4	6.2	6.6	6.1	5.6	5.7
140000	6.7	6.3	6.3	6.5	6.1	6.4	5.8	6.2	6.6	6.1	6.6	5.8	5.7	5.5
150000	6.4	6.3	6.2	6.6	5.9	6.2	5.7	6.1	6.2	6.0	6.4	5.8	5.4	6.2
160000	6.5	6.2	6.3	6.5	6.1	6.2	6.4	6.5	6.2	6.1	6.5	5.6	5.6	5.8
170000	6.5	6.1	6.3	6.6	6.1	6.2	6.2	6.2	6.1	6.0	7.0	5.6	5.5	5.8
180000	6.5	6.0	6.2	6.7	6.1	6.1	6.2	6.1	6.3	5.9	6.7	5.7	5.5	5.7
190000	6.4	6.1	6.3	6.6	6.2	6.2	6.2	6.3	6.3	5.8	6.6	5.8	5.7	5.7
200000	6.3	6.1	6.4	6.6	6.1	6.1	6.2	6.2	6.2	5.8	6.6	5.8	5.6	5.9
210000	6.2	5.9	5.9	6.5	6.0	6.0	6.2	6.2	6.1	5.7	6.2	5.6	5.5	6.1
220000	6.2	5.9	6.1	6.6	6.0	5.9	6.1	6.0	6.1	5.8	6.4	5.9	5.8	6.5
230000	6.1	5.9	6.0	6.5	6.0	5.9	6.0	6.1	6.0	5.7	6.3	6.0	5.7	6.1
Daily Max	6.7	6.3	6.4	6.7	6.4	6.4	6.4	6.5	6.6	6.3	7.0	6.3	6.2	6.5
Daily Min	6.1	5.9	5.7	6.1	5.9	5.9	5.7	6.0	6.0	5.7	5.7	5.6	5.4	5.5
Average	6.4	6.2	6.1	6.4	6.1	6.2	6.0	6.2	6.3	6.0	6.3	6.0	5.7	5.9

High Falls Tailrace Dissolved Oxygen Summary - July 2014

Time HHMMSS	07/01/14	07/02/14	07/03/14	07/04/14	07/05/14	07/06/14	07/07/14	07/08/14	07/09/14	07/10/14	07/11/14	07/12/14	07/13/14	07/14/14	07/15/14	07/16/14
0	5.9	6.7	6.8	7.3	7.5	6.8	6.6	6.4	7.3	7.4	7.6	6.9	6.8	7.0	6.6	7.7
10000	6.2	7.0	6.8	6.9	7.3	6.8	6.6	6.6	7.1	7.5	7.5	6.5	7.0	6.8	6.7	7.6
20000	6.1	6.6	6.8	7.1	7.2	7.0	6.6	6.7	7.1	7.6	7.6	7.0	6.7	6.8	7.1	7.5
30000	6.0	6.8	7.0	7.2	7.5	7.0	6.7	6.7	6.8	7.3	7.2	7.0	6.9	6.7	7.2	7.6
40000	6.0	7.1	7.2	7.0	7.8	7.2	6.7	6.5	6.7	7.6	7.1	7.2	7.2	6.8	7.2	7.5
50000	6.2	7.3	6.9	7.1	7.3	7.3	7.0	6.8	6.9	7.6	7.1	7.4	6.8	6.7	7.1	7.5
60000	6.1	7.0	7.2	7.3	7.4	6.8	7.2	6.8	6.8	7.5	7.0	7.2	6.6	6.8	7.3	7.2
70000	6.3	7.0	7.0	7.1	7.4	7.0	6.8	6.8	6.6	7.7	7.1	7.0	6.8	6.7	6.6	7.4
80000	6.7	7.1	7.1	7.0	7.1	6.9	7.0	6.6	6.7	7.3	7.5	7.2	6.9	6.8	6.6	7.4
90000	6.1	7.3	7.3	7.6	7.2	6.7	6.8	7.1	6.9	7.5	7.2	7.3	6.9	6.8	6.6	7.4
100000	6.2	7.3	7.3	7.3	7.4	6.8	6.9	6.9	7.3	7.8	7.3	7.2	6.8	7.1	6.5	7.5
110000	6.6	7.5	7.1	7.1	7.0	6.6	7.1	7.0	7.2	8.0	7.2	7.6	6.9	8.4	6.8	7.7
120000	6.3	7.5	7.4	7.3	6.9	6.8	6.7	7.1	7.3	7.9	7.4	7.4	7.0	8.4	6.9	7.6
130000	6.3	7.6	7.5	7.3	7.0	6.6	6.8	7.2	7.1	7.8	6.9	7.4	7.1	8.4	7.0	7.5
140000	6.6	7.4	7.4	7.6	6.9	6.7	6.8	7.3	7.0	7.8	7.0	7.5	7.0	8.4	7.2	7.6
150000	6.3	7.4	7.6	7.4	7.3	6.2	6.7	7.5	7.5	7.9	6.8	7.3	7.2	8.4	7.2	7.5
160000	6.3	7.4	7.5	7.8	7.0	6.9	6.6	7.5	7.4	7.9	6.6	6.9	6.9	8.4	7.3	7.5
170000	6.5	7.1	7.4	7.4	6.8	6.6	6.5	7.5	7.3	7.7	6.4	7.2	7.2	8.4	7.2	7.5
180000	6.4	7.0	7.3	7.5	6.6	6.7	6.5	7.5	7.8	7.6	6.2	7.1	7.2	8.4	7.7	7.4
190000	6.4	7.0	7.2	7.5	6.6	6.6	6.6	7.4	7.7	7.7	6.1	7.0	7.2	8.4	7.7	7.5
200000	6.7	7.0	7.5	7.1	7.0	6.4	6.4	7.3	7.6	7.9	6.5	7.0	6.8	6.6	7.6	7.4
210000	6.6	7.2	7.2	7.2	6.7	6.4	6.4	7.4	7.4	7.5	6.5	7.1	6.9	6.5	7.7	7.2
220000	6.6	6.9	7.1	7.2	6.4	6.5	6.3	7.4	7.4	7.7	6.6	7.1	7.1	6.5	7.7	7.2
230000	6.7	7.1	7.0	7.3	6.7	6.5	6.7	7.3	7.6	7.5	6.6	7.0	6.9	7.1	7.6	7.2
Daily Max	6.7	7.6	7.6	7.8	7.8	7.3	7.2	7.5	7.8	8.0	7.6	7.6	7.2	8.4	7.7	7.7
Daily Min	5.9	6.6	6.8	6.9	6.4	6.2	6.3	6.4	6.6	7.3	6.1	6.5	6.6	6.5	6.5	7.2
Average	6.3	7.1	7.2	7.3	7.1	6.7	6.7	7.1	7.2	7.6	7.0	7.2	6.9	7.4	7.1	7.5

License Minimum Dissolved Oxygen: 5.0 mg/l

High Falls Tailrace Dissolved Oxygen Summary - July 2014

Time HHMMSS	07/17/14	07/18/14	07/19/14	07/20/14	07/21/14	07/22/14	07/23/14	07/24/14	07/25/14	07/26/14	07/27/14	07/28/14	07/29/14	07/30/14	07/31/14
0	7.2	6.8	6.8	6.1	6.4	6.3	7.1	6.1	6.5	6.1	6.1	7.4	6.4	7.3	6.5
10000	7.2	6.9	6.7	6.4	6.5	6.2	7.1	6.0	6.6	6.2	6.3	7.3	6.4	7.2	6.7
20000	7.1	6.9	6.7	6.4	6.1	6.6	7.0	6.0	6.7	6.0	6.2	7.2	6.3	7.2	6.7
30000	7.2	6.8	6.9	6.4	6.6	6.3	6.9	5.8	6.4	6.3	6.3	7.0	6.2	7.3	6.6
40000	7.1	6.8	6.7	6.4	6.5	6.8	6.5	6.5	6.4	6.4	6.1	6.6	6.9	6.6	6.9
50000	7.1	6.8	6.8	6.4	6.4	6.6	6.4	6.3	6.2	5.9	6.0	6.5	6.9	6.8	6.6
60000	6.9	6.9	6.9	6.7	6.5	6.8	6.2	6.1	6.3	6.2	5.8	6.4	7.0	6.7	6.8
70000	6.9	7.0	7.1	6.6	6.5	6.6	6.1	6.2	6.2	6.0	5.8	6.4	6.6	6.8	6.9
80000	7.1	7.1	6.9	6.8	6.1	6.5	6.2	6.7	6.3	6.3	6.0	6.4	6.9	6.8	6.8
90000	7.1	7.2	7.0	6.7	6.3	6.5	6.3	6.6	6.7	6.2	6.0	6.4	7.3	6.9	6.7
100000	7.1	7.1	7.1	7.1	6.5	6.6	6.5	6.9	6.4	6.5	5.9	6.6	6.9	7.0	6.6
110000	7.0	7.2	7.0	6.7	6.2	6.5	6.5	6.4	6.1	6.5	6.0	6.4	7.5	6.9	6.7
120000	7.1	7.2	7.0	6.7	6.3	6.8	6.8	6.6	6.3	6.2	6.1	6.4	7.3	6.7	6.8
130000	7.2	7.1	6.8	6.6	6.0	6.6	6.7	6.4	6.2	6.3	6.2	6.4	7.5	6.9	6.8
140000	7.2	7.3	6.7	6.2	6.1	6.5	6.8	6.5	5.8	6.4	6.6	6.4	7.4	6.9	7.0
150000	7.1	7.0	6.7	6.3	6.1	6.9	6.9	6.5	5.9	6.3	5.9	6.7	7.5	6.9	6.8
160000	7.2	7.0	6.3	6.0	6.3	6.8	6.8	6.3	5.9	6.3	6.6	6.7	7.7	7.0	6.9
170000	7.2	6.9	6.2	6.1	6.1	6.6	6.8	6.5	5.8	6.8	6.9	6.9	7.5	7.0	6.8
180000	6.9	6.8	6.2	6.0	6.3	6.8	6.8	6.4	6.2	6.2	7.4	6.9	7.5	6.8	6.7
190000	6.9	6.9	6.2	5.8	6.1	6.8	6.7	6.5	5.7	6.4	7.4	6.9	7.5	6.7	6.6
200000	6.8	6.8	6.3	5.9	6.0	6.9	6.5	6.3	6.4	6.1	7.4	6.8	7.3	6.7	6.5
210000	6.9	6.7	6.2	6.2	6.2	7.1	6.5	6.2	5.8	6.0	7.4	6.7	7.4	6.5	6.7
220000	6.8	6.4	6.1	6.1	6.2	7.1	6.4	6.6	6.2	6.0	7.4	6.6	7.3	6.5	6.6
230000	7.0	6.6	6.3	6.0	6.3	7.3	6.3	6.3	5.9	6.1	7.4	6.5	7.0	6.5	6.9
Daily Max	7.2	7.3	7.1	7.1	6.6	7.3	7.1	6.9	6.7	6.8	7.4	7.4	7.7	7.3	7.0
Daily Min	6.8	6.4	6.1	5.8	6.0	6.2	6.1	5.8	5.7	5.9	5.8	6.4	6.2	6.5	6.5
Average	7.1	6.9	6.6	6.4	6.3	6.7	6.6	6.4	6.2	6.2	6.5	6.7	7.1	6.9	6.7

High Falls Tailrace Dissolved Oxygen Summary - August 2014

Time HHMMSS	08/01/14	08/02/14	08/03/14	08/04/14	08/05/14	08/06/14	08/07/14	08/08/14	08/09/14	08/10/14	08/11/14	08/12/14	08/13/14	08/14/14	08/15/14	08/16/14
0	6.9	6.4	6.4	6.4	5.9	6.4	5.9	6.5	6.5	6.3	6.2	7.2	6.4	6.8	6.9	7.1
10000	6.7	6.3	6.7	6.3	5.7	6.4	6.4	6.4	6.1	6.3	6.6	7.4	6.2	6.7	7.2	7.3
20000	6.9	6.4	6.6	6.1	5.9	6.3	6.1	6.6	6.3	6.6	6.7	7.5	6.2	6.5	7.0	6.9
30000	6.7	6.3	6.5	6.0	6.0	5.8	6.3	6.9	6.5	6.5	6.4	7.6	6.0	6.5	6.7	7.5
40000	6.7	6.6	6.3	5.9	6.2	6.0	6.4	6.3	6.6	6.5	6.6	7.6	6.1	7.0	7.0	6.5
50000	6.7	6.6	6.3	6.0	6.2	6.2	6.7	6.6	6.6	6.5	6.8	7.6	6.1	6.9	6.9	6.5
60000	6.6	6.6	6.5	6.0	6.2	6.1	6.4	6.5	6.4	6.7	6.6	7.6	6.0	6.8	7.3	6.3
70000	6.5	6.8	6.6	6.2	6.4	6.3	6.9	6.5	6.6	6.7	6.9	7.5	5.9	6.8	7.3	6.4
80000	6.8	6.8	6.4	6.1	6.2	6.9	6.6	6.5	6.6	6.7	6.7	7.4	5.9	6.8	7.5	6.5
90000	6.7	6.8	6.6	6.2	6.5	6.4	6.7	6.8	6.7	6.7	6.7	7.4	6.0	6.9	7.2	6.6
100000	6.7	6.9	6.6	6.0	6.6	6.5	6.7	6.7	6.6	6.9	6.5	7.3	6.2	6.8	7.4	6.9
110000	7.0	6.7	6.9	7.2	6.7	6.9	6.8	6.4	6.5	6.6	6.4	7.3	6.2	7.2	7.2	6.6
120000	7.0	6.5	6.6	6.1	6.5	6.4	6.7	6.9	6.4	6.6	6.7	7.3	6.2	7.0	7.4	6.8
130000	6.9	6.7	6.8	6.2	6.5	6.5	6.3	6.6	6.3	6.3	6.5	7.1	6.3	7.0	7.4	6.6
140000	6.8	6.8	6.4	6.1	7.0	6.1	6.6	6.4	6.3	6.5	6.5	6.8	6.4	7.7	7.5	7.1
150000	7.0	6.4	6.6	6.4	6.4	6.3	6.5	6.3	6.1	6.1	6.4	6.9	6.5	7.2	7.4	6.7
160000	6.6	6.9	6.8	6.3	6.2	6.4	6.2	6.8	5.9	6.2	6.0	6.9	6.7	6.9	7.0	6.9
170000	6.7	6.5	6.3	6.0	5.9	6.2	6.5	5.9	6.4	6.0	6.2	7.0	6.8	7.2	7.4	6.9
180000	6.8	6.5	6.1	6.0	5.8	6.5	6.5	6.6	6.2	6.4	6.4	7.3	6.8	7.0	7.1	6.5
190000	6.5	6.1	6.4	5.8	5.6	5.8	6.4	6.3	6.9	6.3	6.4	7.2	6.9	6.9	7.2	6.5
200000	6.4	6.4	6.4	6.2	5.7	6.1	6.2	6.3	6.4	6.4	6.4	7.0	6.8	6.7	7.2	6.4
210000	6.4	6.4	6.6	5.8	6.1	6.6	6.6	6.2	6.0	6.4	6.7	6.8	6.9	6.8	7.5	6.8
220000	6.5	6.3	6.4	5.8	6.3	6.1	6.4	6.0	6.0	6.1	6.8	6.6	6.9	7.1	7.4	6.8
230000	6.4	6.2	6.4	5.9	6.1	6.2	6.2	6.4	6.2	6.5	7.1	6.5	6.7	6.6	7.0	7.1
Daily Max	7.0	6.9	6.9	7.2	7.0	6.9	6.9	6.9	6.9	6.9	7.1	7.6	6.9	7.7	7.5	7.5
Daily Min	6.4	6.1	6.1	5.8	5.6	5.8	5.9	5.9	5.9	6.0	6.0	6.5	5.9	6.5	6.7	6.3
Average	6.7	6.5	6.5	6.1	6.2	6.3	6.5	6.5	6.4	6.5	6.6	7.2	6.4	6.9	7.2	6.8

License Minimum Dissolved Oxygen: 5.0 mg/l

High Falls Tailrace Dissolved Oxygen Summary - August 2014

Time HHMMSS	08/17/14	08/18/14	08/19/14	08/20/14	08/21/14	08/22/14	08/23/14	08/24/14	08/25/14	08/26/14	08/27/14	08/28/14	08/29/14	08/30/14	08/31/14
0	7.0	6.8	6.4	6.4	6.3	6.7	6.4	6.8	6.0	6.1	6.5	6.4	6.3	6.6	7.5
10000	6.9	6.5	6.7	6.4	6.2	6.7	6.3	6.8	6.1	6.2	6.5	6.2	6.0	6.5	7.4
20000	7.0	6.6	6.6	6.4	6.2	6.7	6.3	6.8	6.0	6.3	6.3	6.3	6.2	6.6	7.4
30000	7.0	6.5	6.5	6.5	6.2	6.7	6.4	6.7	6.3	6.4	6.5	6.3	6.2	6.4	7.3
40000	7.0	6.5	6.0	6.5	6.9	6.4	6.3	6.6	6.1	6.4	6.5	6.1	6.5	6.3	7.2
50000	7.2	6.6	6.0	6.6	6.9	6.5	6.2	6.6	6.3	6.5	6.5	6.2	6.5	6.3	7.0
60000	7.2	6.7	5.9	6.6	7.0	6.8	6.4	6.6	6.3	6.5	6.4	6.3	6.4	6.4	6.9
70000	7.4	6.9	6.0	6.5	6.7	6.6	6.4	6.4	6.2	6.4	6.3	6.4	6.3	6.3	6.8
80000	7.6	6.9	5.9	6.5	6.8	6.7	6.4	6.3	6.5	6.5	6.4	6.7	6.4	6.2	6.8
90000	7.7	6.8	6.0	6.7	7.0	6.7	6.3	6.3	6.3	6.7	6.6	6.8	6.3	6.2	6.8
100000	7.8	7.3	6.0	6.6	6.7	6.9	6.5	6.3	6.3	6.9	6.6	6.7	6.3	6.3	6.8
110000	7.8	7.1	6.1	6.5	6.8	7.0	6.6	6.1	6.4	6.9	6.5	6.9	6.8	6.5	6.9
120000	7.7	6.9	6.1	6.6	6.9	7.0	6.6	6.3	6.3	6.9	6.4	6.5	6.7	6.9	7.0
130000	7.7	6.8	6.2	6.4	6.7	6.9	6.6	6.3	6.4	6.9	6.3	6.5	6.7	7.0	7.1
140000	7.5	7.0	6.2	6.6	6.9	6.7	6.5	6.3	6.2	6.9	6.5	6.5	6.7	7.0	7.2
150000	7.4	6.8	6.1	6.6	6.7	6.6	7.0	6.1	6.2	7.0	6.4	6.5	6.6	6.9	7.1
160000	7.5	6.7	6.4	6.5	6.8	6.7	6.8	6.1	6.0	6.9	6.5	6.2	6.8	6.9	7.1
170000	7.5	6.8	6.5	6.5	6.2	6.8	6.6	6.0	5.9	6.9	6.2	6.4	6.6	6.9	7.1
180000	7.5	6.8	6.4	6.6	6.4	6.7	6.7	6.0	5.9	6.8	6.3	6.0	6.4	7.3	6.8
190000	7.2	6.6	6.2	6.5	6.5	6.4	6.7	5.6	5.8	6.7	6.4	6.0	6.5	7.4	6.6
200000	7.1	6.5	6.4	6.5	6.3	6.5	6.6	5.7	5.8	6.7	6.1	6.4	6.4	7.5	6.4
210000	7.0	6.7	6.4	6.4	6.5	6.4	6.6	5.7	5.8	6.6	5.9	6.0	6.4	7.6	6.4
220000	6.9	6.7	6.3	6.4	6.6	6.3	6.6	5.8	5.9	6.5	6.0	5.9	6.3	7.6	6.3
230000	6.5	6.5	6.3	6.4	6.7	6.5	6.7	5.9	6.0	6.5	6.2	5.9	6.5	7.5	6.3
Daily Max	7.8	7.3	6.7	6.7	7.0	7.0	7.0	6.8	6.5	7.0	6.6	6.9	6.8	7.6	7.5
Daily Min	6.5	6.5	5.9	6.4	6.2	6.3	6.2	5.6	5.8	6.1	5.9	5.9	6.0	6.2	6.3
Average	7.3	6.7	6.2	6.5	6.6	6.7	6.5	6.2	6.1	6.6	6.4	6.3	6.5	6.8	6.9

High Falls Tailrace Dissolved Oxygen Summary - September 2014

Time HHMMSS	09/01/14	09/02/14	09/03/14	09/04/14	09/05/14	09/06/14	09/07/14	09/08/14	09/09/14	09/10/14	09/11/14	09/12/14	09/13/14	09/14/14	09/15/14	09/16/14
0	6.2	6.6	6.7	6.7	6.4	7.7	7.7	7.1	6.9	7.5	8.1	7.9	7.7	7.5	7.7	7.9
10000	6.2	6.7	6.6	6.7	5.9	7.7	7.6	7.3	7.0	7.6	8.0	7.9	7.7	7.5	7.8	7.9
20000	6.3	6.7	6.9	6.9	5.7	7.6	7.6	7.4	7.2	7.6	7.9	7.9	7.7	7.5	7.8	7.9
30000	6.3	6.8	7.0	6.4	6.1	7.5	7.5	7.4	7.3	7.6	8.0	7.9	7.7	7.6	7.7	7.9
40000	6.3	6.8	7.0	6.5	6.2	7.5	7.5	7.5	7.4	7.5	8.0	7.9	7.7	7.5	7.7	7.9
50000	6.2	6.9	6.9	6.8	6.4	7.5	7.4	7.6	7.4	7.6	7.9	7.8	7.7	7.5	7.7	7.8
60000	6.1	6.9	7.0	6.8	6.6	7.5	7.4	7.6	7.4	7.7	7.9	7.8	7.7	7.5	7.7	7.8
70000	6.2	6.9	6.9	6.9	6.8	7.4	7.3	7.6	7.4	7.7	7.9	7.8	7.7	7.5	7.7	7.8
80000	6.3	6.9	7.0	7.0	6.8	7.4	7.3	7.6	7.4	7.7	7.9	7.8	7.7	7.5	7.7	7.8
90000	6.5	6.9	6.9	7.0	7.0	7.4	7.3	7.7	7.5	7.6	7.9	7.9	7.7	7.5	7.8	7.9
100000	6.5	6.9	6.9	6.9	7.2	7.6	7.3	7.7	7.6	7.6	8.0	7.8	7.7	7.5	7.9	8.0
110000	6.5	6.8	6.7	6.8	7.4	7.4	7.2	7.6	7.6	7.7	8.0	7.8	7.8	7.5	7.9	7.9
120000	6.4	6.8	6.7	6.5	7.6	7.6	7.3	7.5	7.7	7.8	8.1	7.8	7.8	7.5	8.0	7.8
130000	6.2	6.9	6.8	6.8	7.6	7.8	7.2	7.3	7.8	8.0	8.0	7.9	7.9	7.5	7.9	7.8
140000	6.3	6.9	6.7	7.1	7.8	8.0	7.2	7.1	7.6	8.2	8.0	7.9	7.9	7.5	7.9	7.9
150000	6.2	7.1	6.6	7.1	7.7	8.1	7.4	6.9	7.7	8.1	8.0	7.9	7.8	7.5	7.9	7.9
160000	6.2	7.0	6.7	7.0	7.9	8.1	7.4	6.8	7.7	8.2	8.0	7.9	7.8	7.6	7.9	7.9
170000	6.3	6.9	6.6	6.7	7.9	7.9	7.4	7.0	7.7	8.3	8.1	7.8	7.7	7.6	8.1	7.9
180000	6.5	6.9	6.6	6.4	7.9	8.0	7.6	7.0	7.6	8.3	8.0	7.8	7.6	7.6	8.1	8.0
190000	6.5	6.8	6.5	6.2	8.0	8.0	7.6	6.9	7.6	8.3	8.0	7.8	7.5	7.6	8.1	8.0
200000	6.6	6.5	6.6	6.2	7.8	7.9	7.4	7.0	7.6	8.2	8.0	7.8	7.5	7.7	8.0	7.9
210000	6.4	6.5	6.6	6.0	7.8	7.8	7.3	7.0	7.6	8.2	8.0	7.8	7.5	7.7	8.0	7.9
220000	6.4	6.5	6.5	6.0	7.8	7.8	7.0	7.0	7.6	8.2	8.0	7.8	7.5	7.7	8.0	7.8
230000	6.6	6.6	6.5	6.2	7.8	7.7	7.1	7.0	7.5	8.1	7.9	7.8	7.5	7.7	8.0	7.7
Daily Max	6.6	7.1	7.0	7.1	8.0	8.1	7.7	7.7	7.8	8.3	8.1	7.9	7.9	7.7	8.1	8.0
Daily Min	6.1	6.5	6.5	6.0	5.7	7.4	7.0	6.8	6.9	7.5	7.9	7.8	7.5	7.5	7.7	7.7
Average	6.3	6.8	6.7	6.6	7.2	7.7	7.4	7.3	7.5	7.9	8.0	7.8	7.7	7.5	7.9	7.9

License Minimum Dissolved Oxygen: 5.0 mg/l

High Falls Tailrace Dissolved Oxygen Summary - September 2014

Time HHMMSS	09/17/14	09/18/14	09/19/14	09/20/14	09/21/14	09/22/14	09/23/14	09/24/14	09/25/14	09/26/14	09/27/14	09/28/14	09/29/14	09/30/14
0	7.8	8.1	8.0	7.7	8.0	8.3	8.1	7.8	7.6	7.6	7.5	7.4	7.2	8.4
10000	7.8	8.2	8.0	7.7	8.0	8.3	8.1	7.8	7.6	7.6	7.6	7.4	7.2	8.3
20000	7.8	8.3	8.0	7.8	8.0	8.3	8.1	7.9	7.6	7.6	7.7	7.4	7.2	8.3
30000	7.8	8.3	7.9	7.8	8.0	8.3	8.0	7.9	7.6	7.7	7.7	7.4	7.3	8.3
40000	7.8	8.4	7.9	7.8	8.0	8.2	8.0	7.7	7.7	7.6	7.6	7.5	7.2	8.3
50000	7.8	8.4	7.8	7.8	8.1	8.2	8.0	7.7	7.8	7.7	7.7	7.5	7.2	8.3
60000	7.8	8.4	7.8	7.8	8.1	8.2	8.0	7.7	7.8	7.7	7.6	7.4	7.2	8.3
70000	7.8	8.4	7.8	7.8	8.2	8.2	8.0	7.7	7.8	7.8	7.7	7.4	7.3	8.3
80000	7.8	8.5	7.7	7.8	8.2	8.2	8.0	7.8	7.8	7.8	7.7	7.5	7.5	8.2
90000	7.9	8.5	7.7	7.9	8.3	8.2	8.0	7.8	7.8	7.7	7.7	7.4	7.5	8.3
100000	7.9	8.6	7.7	7.9	8.4	8.2	8.0	7.9	7.9	7.9	7.7	7.5	7.8	8.3
110000	7.8	8.6	7.7	7.9	8.4	8.3	8.0	8.0	7.9	7.9	7.7	7.5	7.9	8.4
120000	7.8	8.5	7.7	7.9	8.5	8.2	8.0	8.0	7.9	7.9	7.7	7.5	7.8	8.4
130000	7.8	8.5	7.7	8.0	8.5	8.2	8.0	8.0	7.9	7.8	7.6	7.5	8.1	8.4
140000	7.9	8.5	7.7	8.0	8.6	8.2	8.0	8.0	7.9	7.8	7.7	7.5	8.3	8.3
150000	8.0	8.5	7.7	8.0	8.5	8.3	7.9	8.0	7.8	7.7	7.6	7.5	8.3	8.1
160000	8.1	8.4	7.7	8.0	8.6	8.3	7.9	7.9	7.8	7.6	7.6	7.3	8.4	8.0
170000	8.0	8.3	7.7	8.1	8.6	8.3	7.9	7.8	7.7	7.4	7.5	7.3	8.4	7.8
180000	8.0	8.1	7.7	8.1	8.5	8.2	7.9	7.7	7.7	7.4	7.4	7.2	8.3	7.6
190000	8.2	8.1	7.7	8.0	8.5	8.2	7.8	7.6	7.7	7.4	7.4	7.2	8.3	7.5
200000	8.1	8.1	7.7	8.0	8.4	8.3	7.8	7.6	7.7	7.5	7.3	7.3	8.4	7.4
210000	8.1	8.0	7.8	8.0	8.4	8.2	7.8	7.6	7.6	7.5	7.3	7.2	8.4	7.3
220000	8.1	8.0	7.8	8.0	8.3	8.2	7.8	7.6	7.6	7.5	7.3	7.2	8.4	7.2
230000	8.1	8.0	7.8	7.9	8.3	8.2	7.8	7.6	7.6	7.5	7.4	7.2	8.4	7.2
Daily Max	8.2	8.6	8.0	8.1	8.6	8.3	8.1	8.0	7.9	7.9	7.7	7.5	8.4	8.4
Daily Min	7.8	8.0	7.7	7.7	8.0	8.2	7.8	7.6	7.6	7.4	7.3	7.2	7.2	7.2
Average	7.9	8.3	7.8	7.9	8.3	8.2	8.0	7.8	7.7	7.6	7.6	7.4	7.8	8.0



## **High Falls Hydroelectric Project**

### **2014 pH Monitoring Data**

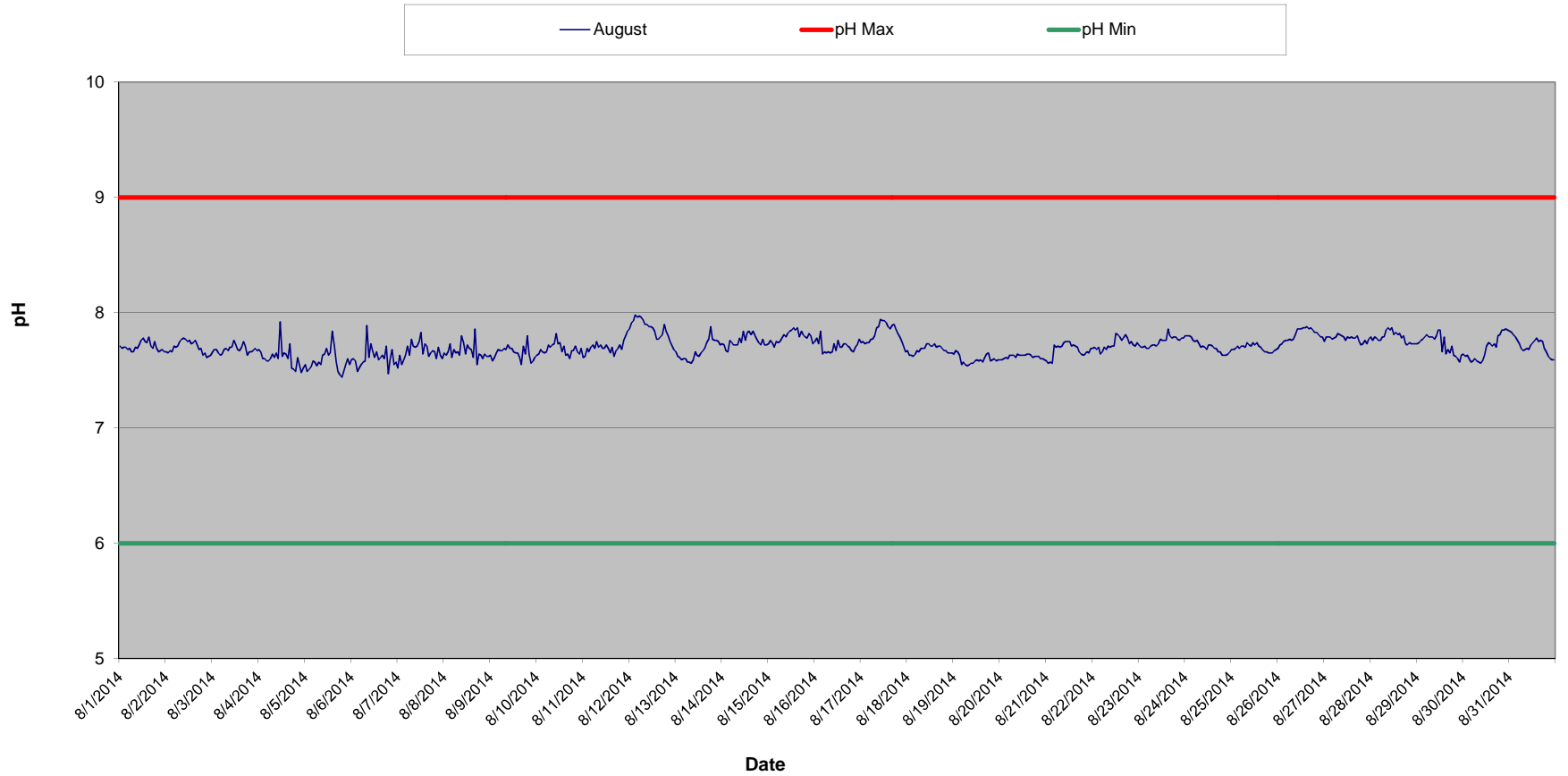
### High Falls Tailrace pH Summary - June 2014



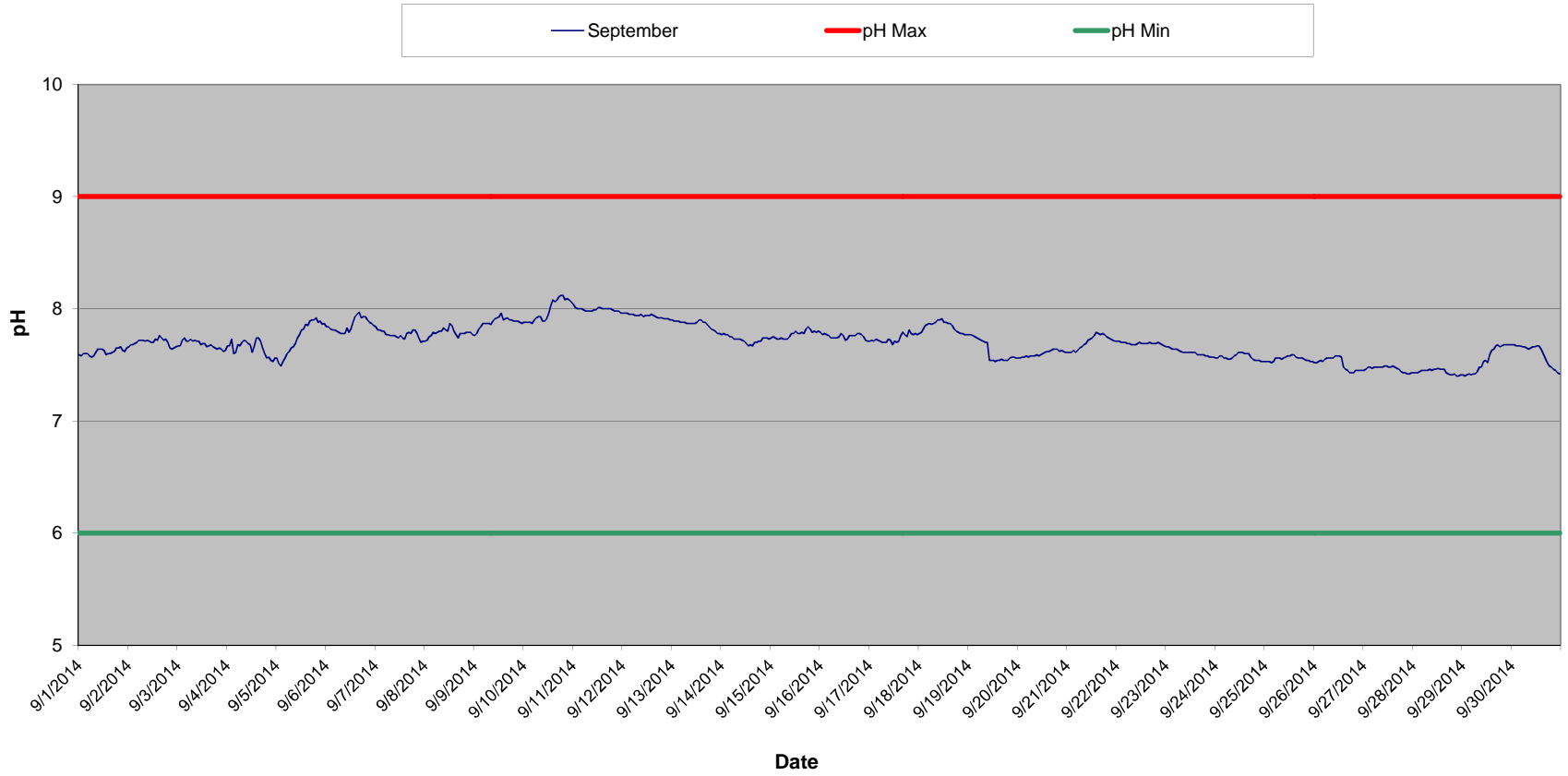
### High Falls Tailrace pH Summary - July 2014



### High Falls Tailrace pH Summary - August 2014



### High Falls Tailrace pH Summary - September 2014




High Falls Tailrace pH Summary - June 2014

Time HHMMSS	06/01/14	06/02/14	06/03/14	06/04/14	06/05/14	06/06/14	06/07/14	06/08/14	06/09/14	06/10/14	06/11/14	06/12/14	06/13/14	06/14/14	06/15/14	06/16/14
0	7.3	7.3	7.3	7.4	7.4	7.3	7.3	7.4	7.3	7.2	7.2	7.2	7.2	7.3	7.3	7.3
10000	7.3	7.3	7.3	7.4	7.4	7.3	7.3	7.4	7.3	7.2	7.2	7.2	7.3	7.3	7.3	7.3
20000	7.3	7.3	7.3	7.4	7.4	7.3	7.3	7.4	7.3	7.2	7.2	7.2	7.3	7.3	7.3	7.3
30000	7.3	7.3	7.3	7.4	7.4	7.3	7.3	7.4	7.3	7.2	7.2	7.2	7.3	7.3	7.3	7.3
40000	7.3	7.3	7.3	7.4	7.4	7.3	7.3	7.4	7.3	7.3	7.3	7.2	7.3	7.3	7.3	7.3
50000	7.3	7.3	7.3	7.4	7.4	7.3	7.3	7.4	7.3	7.3	7.3	7.2	7.3	7.3	7.3	7.3
60000	7.3	7.3	7.3	7.4	7.4	7.4	7.3	7.4	7.3	7.3	7.3	7.2	7.3	7.3	7.3	7.3
70000	7.3	7.3	7.3	7.4	7.4	7.3	7.3	7.4	7.3	7.3	7.3	7.2	7.3	7.3	7.4	7.3
80000	7.3	7.3	7.3	7.4	7.4	7.3	7.3	7.4	7.3	7.3	7.3	7.2	7.4	7.3	7.4	7.3
90000	7.3	7.3	7.3	7.4	7.4	7.3	7.3	7.4	7.3	7.3	7.3	7.2	7.4	7.3	7.4	7.3
100000	7.3	7.3	7.4	7.4	7.3	7.3	7.3	7.4	7.3	7.3	7.3	7.2	7.4	7.3	7.3	7.3
110000	7.3	7.3	7.4	7.4	7.3	7.3	7.3	7.4	7.3	7.3	7.3	7.2	7.4	7.3	7.3	7.3
120000	7.3	7.3	7.4	7.4	7.3	7.3	7.3	7.4	7.3	7.3	7.3	7.2	7.4	7.3	7.3	7.3
130000	7.3	7.3	7.4	7.4	7.3	7.3	7.3	7.4	7.3	7.3	7.3	7.2	7.4	7.3	7.3	7.3
140000	7.3	7.3	7.4	7.4	7.3	7.3	7.3	7.4	7.3	7.3	7.3	7.2	7.4	7.3	7.2	7.3
150000	7.3	7.3	7.4	7.4	7.3	7.3	7.3	7.4	7.3	7.3	7.3	7.2	7.4	7.3	7.2	7.3
160000	7.3	7.3	7.4	7.4	7.3	7.3	7.3	7.4	7.3	7.3	7.3	7.2	7.4	7.3	7.2	7.3
170000	7.3	7.3	7.3	7.4	7.3	7.3	7.4	7.4	7.3	7.3	7.3	7.2	7.4	7.3	7.2	7.3
180000	7.3	7.3	7.3	7.4	7.3	7.3	7.4	7.4	7.3	7.3	7.3	7.2	7.4	7.3	7.2	7.3
190000	7.3	7.3	7.3	7.4	7.3	7.3	7.4	7.4	7.3	7.3	7.3	7.2	7.4	7.3	7.2	7.3
200000	7.3	7.3	7.3	7.4	7.3	7.3	7.4	7.3	7.3	7.3	7.3	7.2	7.4	7.3	7.2	7.2
210000	7.3	7.3	7.3	7.3	7.3	7.3	7.4	7.3	7.3	7.2	7.2	7.2	7.4	7.3	7.2	7.2
220000	7.3	7.3	7.4	7.4	7.3	7.3	7.4	7.3	7.2	7.2	7.2	7.2	7.4	7.3	7.3	7.2
230000	7.3	7.3	7.4	7.3	7.3	7.3	7.4	7.3	7.2	7.2	7.2	7.2	7.3	7.3	7.3	7.3
Daily Max	7.3	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.3	7.3	7.3	7.2	7.4	7.3	7.4	7.3
Daily Min	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.2	7.2	7.2	7.2	7.2	7.3	7.2	7.2
Average	7.3	7.3	7.3	7.4	7.3	7.3	7.3	7.4	7.3	7.3	7.3	7.2	7.3	7.3	7.3	7.3

License maximum pH: 9

License minimum pH: 6

 Missing data - equipment maintenance

High Falls Tailrace pH Summary - June 2014

Time HHMMSS	06/17/14	06/18/14	06/19/14	06/20/14	06/21/14	06/22/14	06/23/14	06/24/14	06/25/14	06/26/14	06/27/14	06/28/14	06/29/14	06/30/14
0	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.2	7.1	7.1
10000	7.3	7.3	7.3	7.3	7.4	7.3	7.3	7.3	7.3	7.3	7.3	7.2	7.1	7.1
20000	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.2	7.2	7.1
30000	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.4	7.4	7.3	7.3	7.2	7.1	7.1
40000	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.4	7.4	7.3	7.3	7.2	7.2	7.2
50000	7.3	7.3	7.3	7.3	7.4	7.3	7.3	7.3	7.4	7.3	7.3	7.2	7.1	7.1
60000	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.4	7.4	7.3	7.2	7.1	7.1
70000	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.4	7.3	7.3	7.1	7.1	7.1
80000	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.4	7.4	7.4	7.4	7.1	7.1	7.1
90000	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.4	7.4	7.4	7.4	7.2	7.1	7.1
100000	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.4	7.4	7.4	7.4	7.1	7.1
110000	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.4	7.4	7.4	7.5	7.2	7.1	7.1
120000	7.4	7.3	7.3	7.3	7.3	7.3	7.3	7.4	7.4	7.4	7.3	7.1	7.1	7.2
130000	7.4	7.3	7.4	7.3	7.3	7.3	7.3	7.4	7.4	7.4	7.2	7.2	7.1	7.1
140000	7.4	7.3	7.4	7.3	7.3	7.4	7.3	7.3	7.4	7.3	7.2	7.1	7.1	7.1
150000	7.4	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.4	7.3	7.2	7.2	7.1	7.2
160000	7.3	7.3	7.3	7.3	7.3	7.4	7.4	7.4	7.4	7.4	7.2	7.2	7.1	7.1
170000	7.3	7.3	7.4	7.4	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.1	7.1	7.1
180000	7.3	7.3	7.3	7.4	7.3	7.3	7.3	7.3	7.4	7.3	7.3	7.1	7.1	7.1
190000	7.3	7.3	7.4	7.4	7.3	7.3	7.3	7.4	7.4	7.3	7.2	7.1	7.1	7.1
200000	7.3	7.3	7.4	7.4	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.1	7.1	7.2
210000	7.3	7.3	7.3	7.4	7.3	7.3	7.3	7.3	7.3	7.3	7.2	7.1	7.1	7.2
220000	7.3	7.3	7.3	7.4	7.3	7.3	7.3	7.3	7.3	7.3	7.2	7.1	7.1	7.3
230000	7.3	7.3	7.3	7.4	7.3	7.3	7.3	7.3	7.3	7.3	7.2	7.1	7.1	7.2
Daily Max	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.5	7.2	7.2	7.3
Daily Min	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.2	7.1	7.1	7.1
Average	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.4	7.3	7.3	7.1	7.1	7.1

High Falls Tailrace pH Summary - July 2014

Time HHMMSS	07/01/14	07/02/14	07/03/14	07/04/14	07/05/14	07/06/14	07/07/14	07/08/14	07/09/14	07/10/14	07/11/14	07/12/14	07/13/14	07/14/14	07/15/14	07/16/14
0	7.2	7.3	7.4	7.5	7.5	7.4	7.4	7.5	7.7	7.8	7.8	7.6	7.6	7.6	7.7	7.9
10000	7.2	7.4	7.4	7.5	7.5	7.4	7.4	7.6	7.7	7.8	7.8	7.5	7.7	7.6	7.6	7.9
20000	7.2	7.3	7.4	7.4	7.5	7.5	7.4	7.6	7.7	7.8	7.8	7.7	7.6	7.6	7.7	7.8
30000	7.2	7.4	7.4	7.5	7.5	7.4	7.4	7.6	7.6	7.7	7.7	7.7	7.7	7.7	7.7	7.8
40000	7.2	7.5	7.4	7.4	7.5	7.5	7.4	7.5	7.6	7.8	7.7	7.7	7.7	7.6	7.8	7.8
50000	7.2	7.5	7.4	7.4	7.5	7.6	7.4	7.6	7.6	7.8	7.6	7.7	7.6	7.6	7.8	7.8
60000	7.2	7.4	7.4	7.4	7.5	7.4	7.5	7.6	7.7	7.8	7.6	7.7	7.6	7.6	7.8	7.8
70000	7.3	7.4	7.4	7.5	7.5	7.4	7.4	7.6	7.6	7.8	7.7	7.7	7.6	7.6	7.6	7.8
80000	7.3	7.4	7.4	7.4	7.5	7.4	7.4	7.6	7.6	7.7	7.7	7.7	7.6	7.6	7.6	7.8
90000	7.2	7.5	7.5	7.5	7.5	7.4	7.4	7.7	7.7	7.8	7.7	7.8	7.7	7.6	7.6	7.8
100000	7.2	7.5	7.5	7.5	7.5	7.4	7.4	7.7	7.7	7.9	7.7	7.7	7.7	7.7	7.6	7.8
110000	7.3	7.5	7.5	7.4	7.5	7.4	7.4	7.6	7.7	8.0	7.7	7.8	7.7	8.1	7.7	7.8
120000	7.3	7.5	7.5	7.5	7.5	7.4	7.4	7.7	7.8	7.9	7.7	7.8	7.7	8.1	7.7	7.8
130000	7.2	7.6	7.5	7.5	7.4	7.5	7.6	7.9	7.7	7.9	7.6	7.8	7.7	8.1	7.8	7.7
140000	7.3	7.5	7.6	7.6	7.4	7.4	7.6	7.8	7.7	7.9	7.6	7.8	7.7	8.1	7.8	7.7
150000	7.3	7.5	7.6	7.6	7.5	7.3	7.6	7.8	7.9	8.0	7.6	7.8	7.7	8.1	7.8	7.7
160000	7.3	7.6	7.6	7.6	7.5	7.4	7.6	7.9	7.9	7.9	7.6	7.7	7.7	8.1	7.8	7.7
170000	7.3	7.4	7.5	7.6	7.4	7.4	7.5	7.8	7.8	7.9	7.5	7.8	7.8	8.1	7.8	7.7
180000	7.3	7.4	7.5	7.6	7.4	7.4	7.6	7.8	8.0	7.8	7.5	7.7	7.7	8.1	7.9	7.7
190000	7.3	7.5	7.5	7.6	7.4	7.4	7.7	7.8	7.9	7.9	7.5	7.7	7.8	8.1	7.9	7.7
200000	7.3	7.5	7.6	7.5	7.5	7.3	7.7	7.8	7.9	7.9	7.6	7.7	7.7	7.6	7.9	7.7
210000	7.3	7.5	7.5	7.5	7.4	7.3	7.5	7.8	7.8	7.8	7.6	7.7	7.7	7.6	7.9	7.6
220000	7.4	7.4	7.4	7.5	7.4	7.4	7.5	7.8	7.8	7.8	7.6	7.7	7.7	7.6	7.9	7.6
230000	7.3	7.4	7.4	7.5	7.4	7.4	7.6	7.7	7.8	7.8	7.6	7.7	7.6	7.7	7.9	7.7
Daily Max	7.4	7.6	7.6	7.6	7.5	7.6	7.7	7.9	8.0	8.0	7.8	7.8	7.8	8.1	7.9	7.9
Daily Min	7.2	7.3	7.4	7.4	7.4	7.3	7.4	7.5	7.6	7.7	7.5	7.5	7.6	7.6	7.6	7.6
Average	7.3	7.5	7.5	7.5	7.4	7.4	7.5	7.7	7.7	7.8	7.6	7.7	7.7	7.8	7.8	7.7

License maximum pH: 9

License minimum pH: 6



High Falls Tailrace pH Summary - July 2014

Time HHMMSS	07/17/14	07/18/14	07/19/14	07/20/14	07/21/14	07/22/14	07/23/14	07/24/14	07/25/14	07/26/14	07/27/14	07/28/14	07/29/14	07/30/14	07/31/14
0	7.6	7.5	7.5	7.4	7.5	7.5	7.8	7.5	7.6	7.6	7.6	7.9	7.6	7.8	7.7
10000	7.6	7.5	7.5	7.5	7.5	7.5	7.7	7.5	7.6	7.6	7.6	7.9	7.6	7.8	7.7
20000	7.6	7.5	7.5	7.5	7.5	7.6	7.7	7.5	7.6	7.6	7.6	7.8	7.6	7.8	7.7
30000	7.6	7.5	7.6	7.5	7.6	7.5	7.7	7.4	7.6	7.6	7.6	7.8	7.6	7.8	7.7
40000	7.6	7.5	7.5	7.5	7.5	7.6	7.5	7.5	7.5	7.6	7.6	7.6	7.7	7.7	7.7
50000	7.6	7.5	7.6	7.5	7.5	7.6	7.5	7.5	7.5	7.6	7.5	7.6	7.7	7.7	7.7
60000	7.5	7.6	7.6	7.5	7.5	7.6	7.5	7.5	7.5	7.6	7.5	7.6	7.7	7.7	7.7
70000	7.5	7.6	7.6	7.5	7.5	7.6	7.5	7.5	7.5	7.6	7.5	7.6	7.7	7.7	7.7
80000	7.6	7.6	7.6	7.6	7.5	7.6	7.5	7.6	7.5	7.6	7.6	7.6	7.7	7.7	7.7
90000	7.6	7.6	7.6	7.5	7.5	7.6	7.5	7.6	7.6	7.6	7.6	7.6	7.7	7.7	7.7
100000	7.6	7.6	7.6	7.7	7.6	7.6	7.5	7.7	7.6	7.7	7.5	7.6	7.8	7.7	7.7
110000	7.6	7.6	7.6	7.6	7.5	7.6	7.5	7.6	7.6	7.6	7.6	7.6	8.0	7.7	7.7
120000	7.6	7.7	7.6	7.6	7.5	7.6	7.6	7.6	8.0	7.7	7.6	7.6	7.9	7.7	7.7
130000	7.6	7.6	7.6	7.5	7.4	7.6	7.6	7.6	7.7	7.6	7.6	7.6	8.0	7.7	7.8
140000	7.6	7.7	7.5	7.4	7.4	7.6	7.6	7.6	7.5	7.7	7.7	7.6	8.0	7.8	7.8
150000	7.6	7.6	7.5	7.5	7.6	7.7	7.7	7.6	7.6	7.6	7.6	7.7	8.0	7.8	7.8
160000	7.6	7.6	7.5	7.4	7.5	7.7	7.6	7.6	7.6	7.6	7.7	7.7	8.1	7.7	7.8
170000	7.6	7.6	7.4	7.4	7.4	7.6	7.6	7.6	7.5	7.7	7.8	7.7	8.0	7.8	7.8
180000	7.5	7.6	7.4	7.4	7.5	7.7	7.6	7.6	7.5	7.6	7.9	7.7	8.0	7.7	7.7
190000	7.6	7.6	7.5	7.4	7.5	7.7	7.6	7.6	7.5	7.6	7.9	7.7	8.0	7.7	7.7
200000	7.5	7.6	7.5	7.4	7.4	7.7	7.6	7.6	7.6	7.6	7.9	7.7	7.9	7.7	7.7
210000	7.6	7.5	7.5	7.5	7.5	7.7	7.6	7.5	7.5	7.6	7.9	7.7	7.9	7.6	7.7
220000	7.5	7.5	7.4	7.4	7.5	7.7	7.5	7.5	7.6	7.6	7.9	7.7	7.9	7.7	7.7
230000	7.6	7.5	7.5	7.4	7.5	7.8	7.5	7.6	7.5	7.6	7.9	7.6	7.8	7.7	7.7
Daily Max	7.6	7.7	7.6	7.7	7.6	7.8	7.8	7.7	8.0	7.7	7.9	7.9	8.1	7.8	7.8
Daily Min	7.5	7.5	7.4	7.4	7.4	7.5	7.5	7.4	7.5	7.6	7.5	7.6	7.6	7.6	7.7
Average	7.6	7.6	7.5	7.5	7.5	7.6	7.6	7.5	7.6	7.6	7.7	7.7	7.8	7.7	7.7

High Falls Tailrace pH Summary - August 2014

Time HHMMSS	08/01/14	08/02/14	08/03/14	08/04/14	08/05/14	08/06/14	08/07/14	08/08/14	08/09/14	08/10/14	08/11/14	08/12/14	08/13/14	08/14/14	08/15/14	08/16/14
0	7.7	7.7	7.7	7.7	7.6	7.6	7.5	7.7	7.6	7.6	7.6	7.9	7.7	7.7	7.7	7.8
10000	7.7	7.7	7.7	7.7	7.5	7.6	7.6	7.6	7.6	7.6	7.6	7.9	7.6	7.7	7.8	7.8
20000	7.7	7.7	7.7	7.6	7.5	7.6	7.6	7.7	7.6	7.7	7.7	7.9	7.6	7.7	7.7	7.7
30000	7.7	7.7	7.7	7.6	7.5	7.5	7.6	7.7	7.7	7.7	7.7	8.0	7.6	7.7	7.7	7.8
40000	7.7	7.7	7.6	7.6	7.6	7.5	7.6	7.6	7.7	7.7	7.7	8.0	7.6	7.8	7.8	7.6
50000	7.7	7.7	7.6	7.6	7.6	7.6	7.7	7.7	7.7	7.7	7.7	8.0	7.6	7.7	7.7	7.7
60000	7.7	7.7	7.7	7.6	7.5	7.6	7.6	7.7	7.7	7.7	7.7	8.0	7.6	7.7	7.8	7.7
70000	7.7	7.8	7.7	7.6	7.6	7.6	7.8	7.7	7.7	7.7	7.8	7.9	7.6	7.7	7.8	7.7
80000	7.7	7.8	7.7	7.6	7.6	7.9	7.7	7.6	7.7	7.7	7.7	7.9	7.6	7.7	7.8	7.7
90000	7.7	7.8	7.7	7.7	7.6	7.6	7.7	7.8	7.7	7.7	7.7	7.9	7.6	7.8	7.8	7.7
100000	7.7	7.8	7.7	7.6	7.6	7.7	7.7	7.7	7.7	7.8	7.7	7.9	7.7	7.7	7.8	7.7
110000	7.8	7.8	7.8	7.9	7.7	7.7	7.8	7.6	7.7	7.7	7.7	7.9	7.6	7.8	7.8	7.7
120000	7.8	7.8	7.7	7.6	7.6	7.6	7.8	7.7	7.7	7.7	7.7	7.9	7.6	7.8	7.9	7.8
130000	7.8	7.7	7.7	7.7	7.7	7.7	7.6	7.7	7.7	7.7	7.7	7.8	7.7	7.8	7.9	7.7
140000	7.7	7.7	7.7	7.6	7.8	7.6	7.7	7.7	7.7	7.7	7.7	7.8	7.7	7.8	7.9	7.7
150000	7.8	7.8	7.7	7.6	7.7	7.6	7.7	7.6	7.6	7.6	7.7	7.8	7.7	7.8	7.9	7.7
160000	7.7	7.7	7.8	7.7	7.6	7.6	7.6	7.9	7.6	7.6	7.6	7.8	7.7	7.8	7.8	7.7
170000	7.7	7.7	7.7	7.5	7.5	7.6	7.7	7.6	7.7	7.6	7.7	7.8	7.8	7.8	7.8	7.7
180000	7.8	7.7	7.6	7.5	7.5	7.7	7.7	7.6	7.6	7.7	7.7	7.9	7.9	7.8	7.8	7.7
190000	7.7	7.6	7.7	7.5	7.4	7.5	7.7	7.6	7.8	7.7	7.7	7.8	7.8	7.7	7.8	7.7
200000	7.7	7.7	7.7	7.6	7.5	7.6	7.6	7.6	7.6	7.7	7.7	7.8	7.8	7.7	7.8	7.7
210000	7.7	7.6	7.7	7.6	7.6	7.7	7.7	7.6	7.6	7.7	7.8	7.8	7.8	7.8	7.8	7.7
220000	7.7	7.6	7.7	7.5	7.6	7.6	7.6	7.6	7.6	7.6	7.8	7.7	7.8	7.7	7.8	7.7
230000	7.7	7.6	7.7	7.5	7.6	7.6	7.6	7.6	7.6	7.7	7.8	7.7	7.7	7.7	7.7	7.8
Daily Max	7.8	7.8	7.8	7.9	7.8	7.9	7.8	7.9	7.8	7.8	7.8	8.0	7.9	7.8	7.9	7.8
Daily Min	7.7	7.6	7.6	7.5	7.4	7.5	7.5	7.6	7.6	7.6	7.6	7.7	7.6	7.7	7.7	7.6
Average	7.7	7.7	7.7	7.6	7.6	7.6	7.7	7.7	7.7	7.7	7.7	7.9	7.7	7.8	7.8	7.7

License maximum pH: 9

License minimum pH: 6

High Falls Tailrace pH Summary - August 2014

Time	08/17/14	08/18/14	08/19/14	08/20/14	08/21/14	08/22/14	08/23/14	08/24/14	08/25/14	08/26/14	08/27/14	08/28/14	08/29/14	08/30/14	08/31/14
HHMMSS															
0	7.7	7.7	7.6	7.6	7.6	7.7	7.7	7.8	7.7	7.7	7.8	7.8	7.7	7.6	7.8
10000	7.8	7.6	7.7	7.6	7.6	7.7	7.7	7.8	7.7	7.7	7.8	7.8	7.7	7.6	7.8
20000	7.7	7.6	7.7	7.6	7.6	7.7	7.7	7.8	7.7	7.7	7.8	7.8	7.8	7.6	7.8
30000	7.7	7.6	7.6	7.6	7.6	7.7	7.7	7.8	7.7	7.8	7.8	7.8	7.8	7.6	7.8
40000	7.7	7.6	7.6	7.6	7.7	7.6	7.7	7.8	7.7	7.8	7.8	7.8	7.8	7.6	7.8
50000	7.8	7.7	7.6	7.6	7.7	7.7	7.7	7.8	7.7	7.8	7.8	7.8	7.8	7.6	7.7
60000	7.8	7.7	7.6	7.6	7.7	7.7	7.7	7.8	7.7	7.8	7.8	7.8	7.8	7.6	7.7
70000	7.8	7.7	7.5	7.6	7.7	7.7	7.7	7.7	7.7	7.8	7.8	7.8	7.8	7.6	7.7
80000	7.9	7.7	7.6	7.6	7.7	7.7	7.7	7.7	7.7	7.8	7.8	7.9	7.8	7.6	7.7
90000	7.9	7.7	7.6	7.6	7.7	7.7	7.7	7.7	7.7	7.8	7.8	7.9	7.8	7.6	7.7
100000	7.9	7.7	7.6	7.6	7.8	7.7	7.7	7.7	7.7	7.9	7.8	7.9	7.8	7.6	7.7
110000	7.9	7.7	7.6	7.6	7.8	7.7	7.8	7.7	7.7	7.9	7.8	7.9	7.9	7.6	7.7
120000	7.9	7.7	7.6	7.6	7.8	7.8	7.8	7.7	7.7	7.9	7.8	7.8	7.9	7.7	7.7
130000	7.9	7.7	7.6	7.6	7.7	7.8	7.8	7.7	7.7	7.9	7.8	7.8	7.7	7.7	7.8
140000	7.9	7.7	7.6	7.6	7.7	7.8	7.8	7.7	7.7	7.9	7.8	7.8	7.8	7.7	7.8
150000	7.9	7.7	7.6	7.6	7.7	7.8	7.9	7.7	7.7	7.9	7.8	7.8	7.6	7.7	7.8
160000	7.9	7.7	7.6	7.6	7.7	7.8	7.8	7.7	7.7	7.9	7.8	7.8	7.7	7.7	7.8
170000	7.9	7.7	7.6	7.6	7.7	7.8	7.8	7.7	7.7	7.9	7.8	7.8	7.7	7.7	7.8
180000	7.9	7.7	7.7	7.6	7.6	7.8	7.8	7.7	7.7	7.9	7.8	7.7	7.7	7.8	7.7
190000	7.8	7.7	7.6	7.6	7.6	7.7	7.8	7.6	7.7	7.8	7.7	7.7	7.6	7.8	7.7
200000	7.8	7.7	7.6	7.6	7.6	7.8	7.8	7.6	7.7	7.8	7.7	7.7	7.6	7.9	7.6
210000	7.8	7.7	7.6	7.6	7.7	7.7	7.8	7.6	7.7	7.8	7.8	7.7	7.6	7.9	7.6
220000	7.7	7.7	7.6	7.6	7.7	7.7	7.8	7.6	7.7	7.8	7.7	7.7	7.6	7.9	7.6
230000	7.7	7.7	7.6	7.6	7.7	7.7	7.8	7.7	7.7	7.8	7.8	7.7	7.6	7.9	7.6
Daily Max	7.9	7.7	7.7	7.6	7.8	7.8	7.9	7.8	7.7	7.9	7.8	7.9	7.9	7.9	7.8
Daily Min	7.7	7.6	7.5	7.6	7.6	7.6	7.7	7.6	7.7	7.7	7.7	7.7	7.6	7.6	7.6
Average	7.8	7.7	7.6	7.6	7.7	7.7	7.7	7.7	7.7	7.8	7.8	7.8	7.7	7.7	7.7

High Falls Tailrace pH Summary - September 2014

Time HHMMSS	09/01/14	09/02/14	09/03/14	09/04/14	09/05/14	09/06/14	09/07/14	09/08/14	09/09/14	09/10/14	09/11/14	09/12/14	09/13/14	09/14/14	09/15/14	09/16/14
0	7.6	7.7	7.7	7.7	7.6	7.8	7.8	7.7	7.8	7.9	8.0	8.0	7.9	7.8	7.7	7.8
10000	7.6	7.7	7.7	7.7	7.5	7.8	7.8	7.7	7.8	7.9	8.0	8.0	7.9	7.8	7.8	7.8
20000	7.6	7.7	7.7	7.7	7.5	7.8	7.8	7.8	7.8	7.9	8.0	8.0	7.9	7.8	7.7	7.8
30000	7.6	7.7	7.7	7.6	7.5	7.8	7.8	7.8	7.8	7.9	8.0	8.0	7.9	7.8	7.7	7.8
40000	7.6	7.7	7.7	7.6	7.6	7.8	7.8	7.8	7.9	7.9	8.0	8.0	7.9	7.8	7.7	7.8
50000	7.6	7.7	7.7	7.7	7.6	7.8	7.8	7.8	7.9	7.9	8.0	8.0	7.9	7.8	7.7	7.7
60000	7.6	7.7	7.7	7.7	7.6	7.8	7.8	7.8	7.9	7.9	8.0	7.9	7.9	7.7	7.7	7.7
70000	7.6	7.7	7.7	7.7	7.7	7.8	7.8	7.8	7.9	7.9	8.0	7.9	7.9	7.7	7.7	7.7
80000	7.6	7.7	7.7	7.7	7.7	7.8	7.8	7.8	7.9	7.9	8.0	7.9	7.9	7.7	7.7	7.7
90000	7.6	7.7	7.7	7.7	7.7	7.8	7.8	7.8	7.9	7.9	8.0	8.0	7.9	7.7	7.8	7.8
100000	7.6	7.7	7.7	7.7	7.7	7.8	7.8	7.8	7.9	7.9	8.0	7.9	7.9	7.7	7.8	7.8
110000	7.6	7.7	7.7	7.7	7.8	7.8	7.7	7.8	7.9	7.9	8.0	7.9	7.9	7.7	7.8	7.8
120000	7.6	7.7	7.7	7.6	7.8	7.8	7.8	7.9	7.9	8.0	8.0	7.9	7.9	7.7	7.8	7.7
130000	7.6	7.7	7.7	7.7	7.8	7.9	7.7	7.9	8.0	8.0	8.0	7.9	7.9	7.7	7.8	7.7
140000	7.6	7.7	7.7	7.7	7.9	7.9	7.7	7.8	7.9	8.1	8.0	8.0	7.9	7.7	7.8	7.8
150000	7.6	7.8	7.7	7.7	7.9	8.0	7.8	7.8	7.9	8.1	8.0	7.9	7.9	7.7	7.8	7.8
160000	7.6	7.7	7.7	7.7	7.9	8.0	7.8	7.7	7.9	8.1	8.0	7.9	7.9	7.7	7.8	7.8
170000	7.6	7.7	7.7	7.7	7.9	7.9	7.8	7.8	7.9	8.1	8.0	7.9	7.9	7.7	7.8	7.8
180000	7.7	7.7	7.7	7.6	7.9	7.9	7.8	7.8	7.9	8.1	8.0	7.9	7.8	7.7	7.8	7.8
190000	7.7	7.7	7.6	7.6	7.9	7.9	7.8	7.8	7.9	8.1	8.0	7.9	7.8	7.7	7.8	7.8
200000	7.7	7.7	7.7	7.6	7.9	7.9	7.8	7.8	7.9	8.1	8.0	7.9	7.8	7.7	7.8	7.8
210000	7.6	7.6	7.6	7.5	7.9	7.9	7.7	7.8	7.9	8.1	8.0	7.9	7.8	7.7	7.8	7.8
220000	7.6	7.7	7.6	7.5	7.9	7.9	7.7	7.8	7.9	8.1	8.0	7.9	7.8	7.7	7.8	7.7
230000	7.7	7.7	7.6	7.6	7.9	7.9	7.7	7.8	7.9	8.1	8.0	7.9	7.8	7.7	7.8	7.7
Daily Max	7.7	7.8	7.7	7.7	7.9	8.0	7.8	7.9	8.0	8.1	8.0	8.0	7.9	7.8	7.8	7.8
Daily Min	7.6	7.6	7.6	7.5	7.5	7.8	7.7	7.7	7.8	7.9	8.0	7.9	7.8	7.7	7.7	7.7
Average	7.6	7.7	7.7	7.7	7.7	7.9	7.8	7.8	7.9	8.0	8.0	7.9	7.9	7.7	7.8	7.8

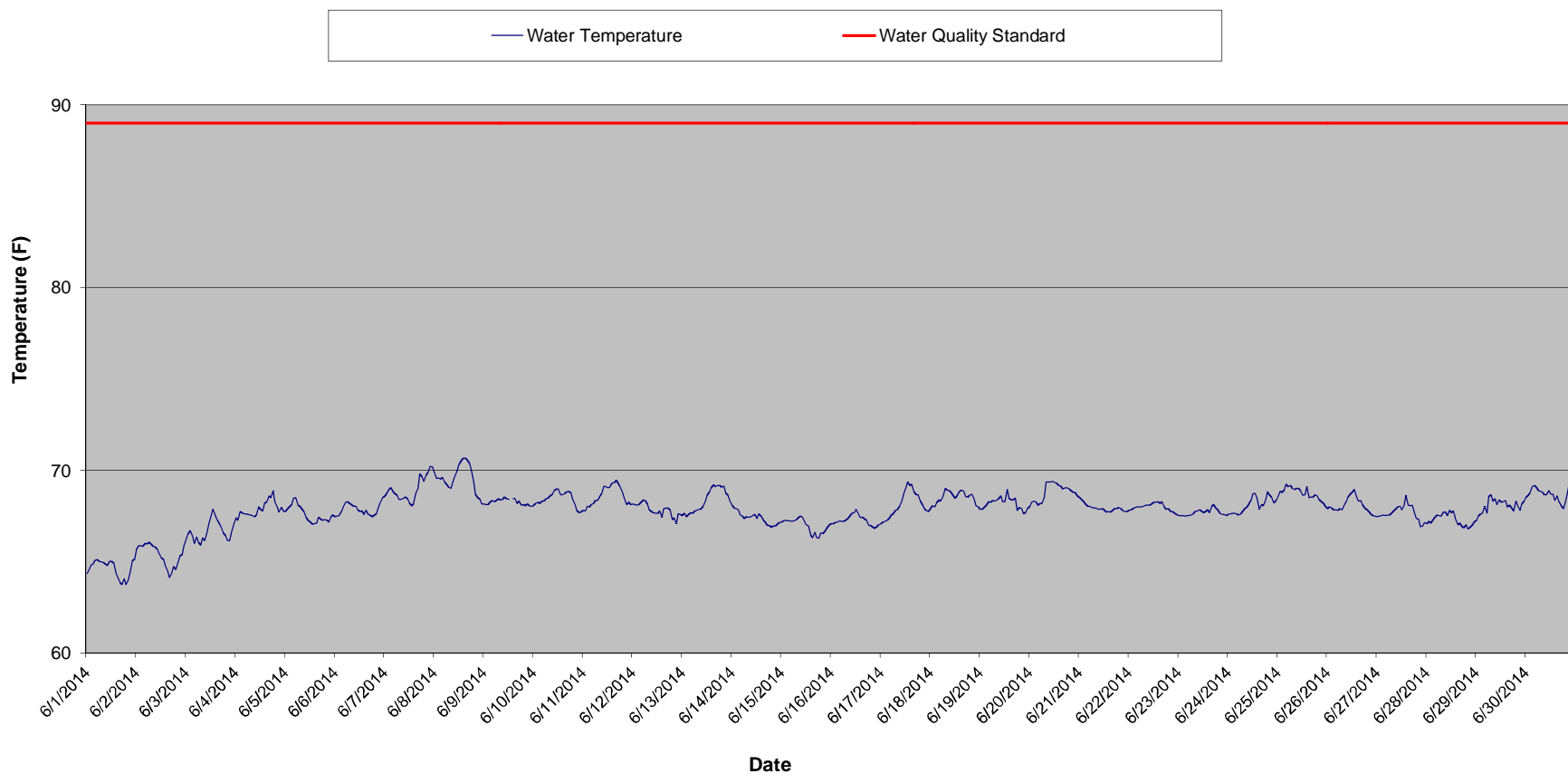
License maximum pH: 9  
License minimum pH: 6

High Falls Tailrace pH Summary - September 2014

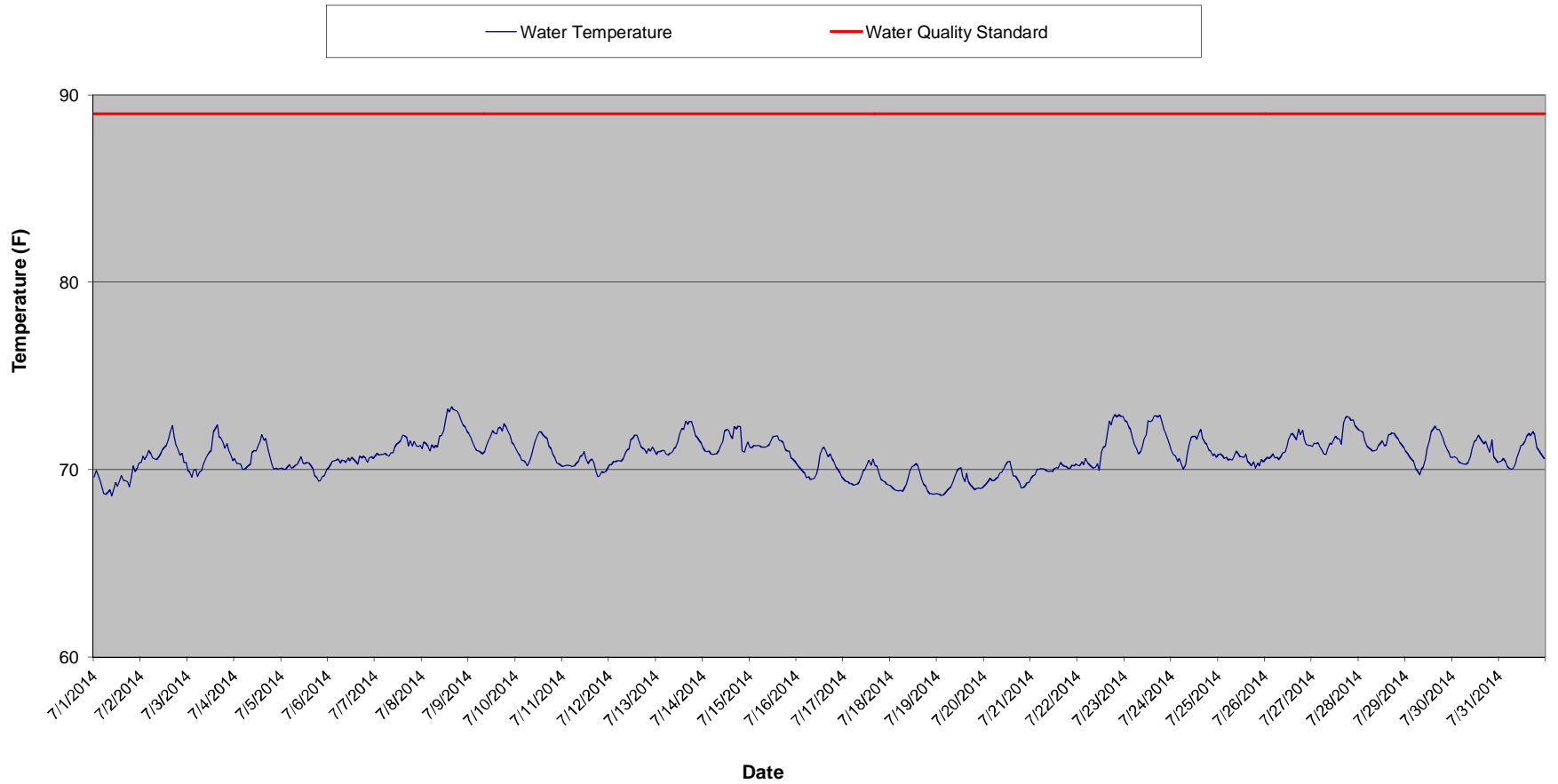
Time HHMMSS	09/17/14	09/18/14	09/19/14	09/20/14	09/21/14	09/22/14	09/23/14	09/24/14	09/25/14	09/26/14	09/27/14	09/28/14	09/29/14	09/30/14
0	7.7	7.8	7.8	7.6	7.6	7.7	7.7	7.6	7.5	7.5	7.5	7.4	7.4	7.7
10000	7.7	7.8	7.8	7.6	7.6	7.7	7.7	7.6	7.5	7.5	7.5	7.4	7.4	7.7
20000	7.7	7.8	7.8	7.6	7.6	7.7	7.7	7.6	7.5	7.5	7.5	7.4	7.4	7.7
30000	7.7	7.9	7.8	7.6	7.6	7.7	7.6	7.6	7.5	7.5	7.5	7.4	7.4	7.7
40000	7.7	7.9	7.7	7.6	7.6	7.7	7.6	7.6	7.5	7.5	7.5	7.5	7.4	7.7
50000	7.7	7.9	7.7	7.6	7.6	7.7	7.6	7.6	7.6	7.6	7.5	7.5	7.4	7.7
60000	7.7	7.9	7.7	7.6	7.7	7.7	7.6	7.6	7.6	7.6	7.5	7.5	7.4	7.7
70000	7.7	7.9	7.7	7.6	7.7	7.7	7.6	7.6	7.6	7.6	7.5	7.5	7.4	7.7
80000	7.7	7.9	7.7	7.6	7.7	7.7	7.6	7.6	7.6	7.6	7.5	7.5	7.5	7.6
90000	7.7	7.9	7.7	7.6	7.7	7.7	7.6	7.6	7.6	7.6	7.5	7.5	7.5	7.7
100000	7.7	7.9	7.5	7.6	7.7	7.7	7.6	7.6	7.6	7.6	7.5	7.5	7.5	7.7
110000	7.7	7.9	7.5	7.6	7.7	7.7	7.6	7.6	7.6	7.6	7.5	7.5	7.5	7.7
120000	7.7	7.9	7.5	7.6	7.7	7.7	7.6	7.6	7.6	7.6	7.5	7.5	7.5	7.7
130000	7.7	7.9	7.5	7.6	7.8	7.7	7.6	7.6	7.6	7.6	7.5	7.5	7.6	7.7
140000	7.7	7.9	7.5	7.6	7.8	7.7	7.6	7.6	7.6	7.5	7.5	7.5	7.6	7.6
150000	7.8	7.9	7.5	7.6	7.8	7.7	7.6	7.6	7.6	7.5	7.5	7.5	7.6	7.6
160000	7.8	7.9	7.6	7.6	7.8	7.7	7.6	7.6	7.6	7.5	7.5	7.4	7.7	7.6
170000	7.8	7.8	7.5	7.6	7.8	7.7	7.6	7.6	7.6	7.4	7.5	7.4	7.7	7.5
180000	7.8	7.8	7.5	7.6	7.8	7.7	7.6	7.6	7.6	7.4	7.4	7.4	7.7	7.5
190000	7.8	7.8	7.5	7.6	7.8	7.7	7.6	7.5	7.6	7.4	7.4	7.4	7.7	7.5
200000	7.8	7.8	7.6	7.6	7.7	7.7	7.6	7.5	7.5	7.5	7.4	7.4	7.7	7.5
210000	7.8	7.8	7.6	7.6	7.7	7.7	7.6	7.5	7.5	7.5	7.4	7.4	7.7	7.5
220000	7.8	7.8	7.6	7.6	7.7	7.7	7.6	7.5	7.5	7.5	7.4	7.4	7.7	7.4
230000	7.8	7.8	7.6	7.6	7.7	7.7	7.6	7.5	7.5	7.5	7.4	7.4	7.7	7.4
Daily Max	7.8	7.9	7.8	7.6	7.8	7.7	7.7	7.6	7.6	7.6	7.5	7.5	7.7	7.7
Daily Min	7.7	7.8	7.5	7.6	7.6	7.7	7.6	7.5	7.5	7.4	7.4	7.4	7.4	7.4
Average	7.7	7.8	7.6	7.6	7.7	7.7	7.6	7.6	7.6	7.5	7.5	7.4	7.5	7.6

**High Falls Hydroelectric Project**  
**2014 Temperature Monitoring Data**

### High Falls Tailrace Water Temperature - June 2014

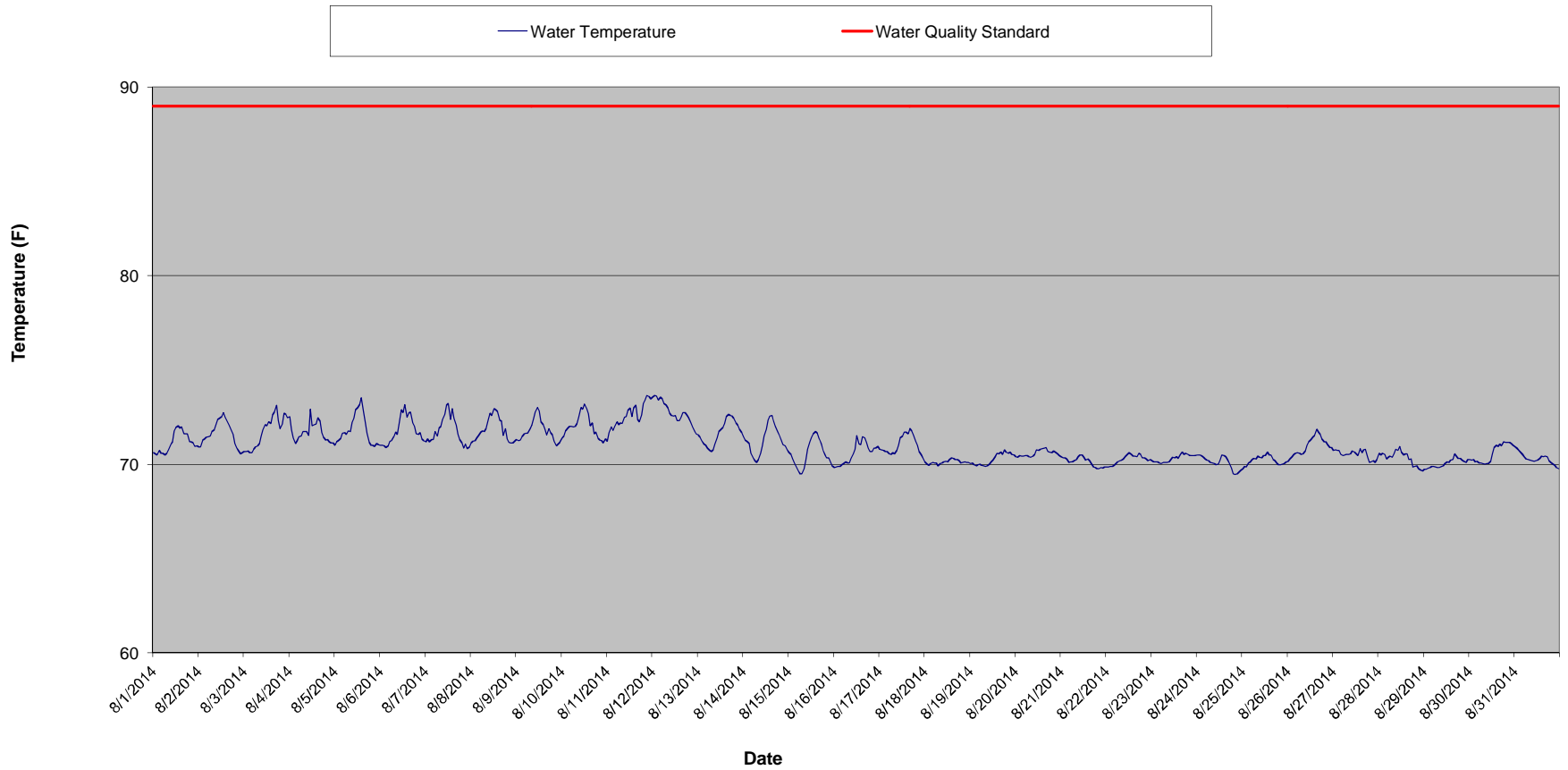


### High Falls Tailrace Water Temperature - July 2014

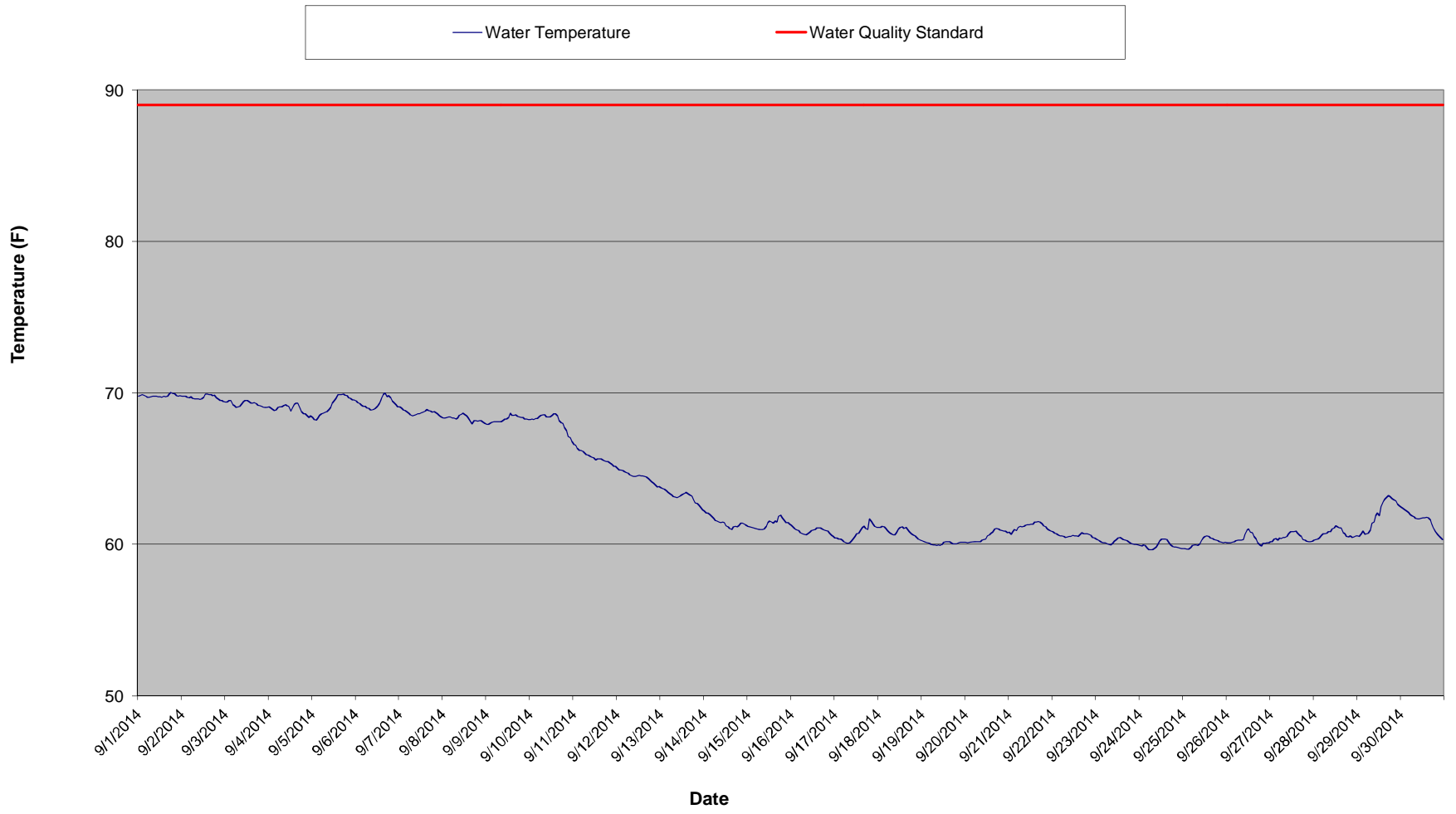




### High Falls Tailrace Water Temperature - August 2014



### High Falls Tailrace Water Temperature - September 2014



High Falls Tailrace Temperature Summary - June 2014

Time HHMMSS	06/01/14	06/02/14	06/03/14	06/04/14	06/05/14	06/06/14	06/07/14	06/08/14	06/09/14	06/10/14	06/11/14	06/12/14	06/13/14	06/14/14	06/15/14	06/16/14
0	64	66	66	67	68	67	69	70	68	68	68	68	68	68	67	67
10000	65	66	66	67	68	68	69	70	68	68	68	68	68	68	67	67
20000	65	66	67	68	68	68	69	70	68	68	68	68	67	68	67	67
30000	65	66	66	68	68	68	69	70	68	68	68	68	68	68	67	67
40000	65	66	66	68	68	68	69	70	68	68	68	68	68	68	67	67
50000	65	66	66	68	68	68	69	69	68	68	68	68	68	67	67	67
60000	65	66	66	68	68	68	69	69	68	68	68	68	68	67	67	67
70000	65	66	66	68	68	68	68	69	68	68	68	68	68	67	67	67
80000	65	66	66	68	68	68	68	69	68	69	69	68	68	67	67	67
90000	65	66	66	67	68	68	68	69	68	69	69	68	68	67	68	68
100000	65	66	67	68	67	68	69	70	69	69	69	68	68	68	67	68
110000	65	65	67	68	67	68	68	70	68	69	69	68	68	68	67	68
120000	65	65	68	68	67	68	68	70	68	69	69	68	69	67	67	68
130000	65	65	68	68	67	68	68	71		69	69	68	69	68	67	68
140000	64	65	68	68	67	68	68	71	68	69	69	67	69	67	66	67
150000	64	64	67	68	67	68	69	71	68	69	69	68	69	67	66	67
160000	64	64	67	69	67	68	69	71	68	69	69	68	69	67	67	67
170000	64	64	67	69	67	68	70	70	68	69	69	68	69	67	66	67
180000	64	65	67	69	67	67	70	70	68	69	69	68	69	67	66	67
190000	64	65	66	68	67	68	69	69	68	68	69	67	69	67	67	67
200000	64	65	66	68	67	68	70	69	68	68	68	67	69	67	67	67
210000	65	65	66	68	67	68	70	68	68	68	68	67	69	67	67	67
220000	65	65	67	68	67	68	70	68	68	68	68	68	69	67	67	67
230000	65	66	67	68	68	68	70	68	68	68	68	68	68	67	67	67
Daily Max	65	66	68	69	68	68	70	71	69	69	69	68	69	68	68	68
Daily Min	64	64	66	67	67	67	68	68	68	68	68	67	67	67	66	67
Average	65	65	67	68	68	68	69	70	68	68	69	68	68	67	67	67

Monthly average Temp: 68  
 License Maximum Temperature: 89 F

Missing data - equipment maintenance.

High Falls Tailrace Temperature Summary - June 2014

Time HHMMSS	06/17/14	06/18/14	06/19/14	06/20/14	06/21/14	06/22/14	06/23/14	06/24/14	06/25/14	06/26/14	06/27/14	06/28/14	06/29/14	06/30/14
0	67	68	68	68	68	68	68	68	69	68	67	67	67	69
10000	67	68	68	68	68	68	68	68	69	68	68	67	67	69
20000	67	68	68	68	68	68	68	68	69	68	68	67	68	69
30000	67	68	68	68	68	68	67	68	69	68	68	67	68	69
40000	67	68	68	68	68	68	68	68	69	68	68	67	68	69
50000	68	68	68	68	68	68	68	68	69	68	68	68	68	69
60000	68	69	68	68	68	68	68	68	69	68	68	68	69	69
70000	68	69	68	69	68	68	68	68	69	68	68	67	69	69
80000	68	69	68	69	68	68	68	68	69	68	68	68	68	69
90000	68	69	68	69	68	68	68	68	69	68	68	68	68	69
100000	68	69	69	69	68	68	68	68	69	69	68	68	68	69
110000	69	69	68	69	68	68	68	68	69	69	68	68	68	69
120000	69	68	68	69	68	68	68	69	69	69	68	68	68	69
130000	69	69	69	69	68	68	68	69	69	69	68	68	68	69
140000	69	69	68	69	68	68	68	68	69	69	69	67	68	68
150000	69	69	68	69	68	68	68	68	69	68	68	67	68	69
160000	69	69	68	69	68	68	68	68	69	68	68	67	68	68
170000	69	69	68	69	68	68	68	68	69	68	68	67	68	68
180000	69	69	68	69	68	68	68	68	69	68	68	67	68	68
190000	68	69	68	69	68	68	68	69	69	68	67	67	68	68
200000	68	69	68	69	68	68	68	69	68	68	67	67	68	69
210000	68	68	68	69	68	68	68	69	68	68	67	67	68	69
220000	68	68	68	69	68	68	68	68	68	68	67	67	68	70
230000	68	68	68	69	68	68	68	68	68	67	67	67	68	70
Daily Max	69	69	69	69	68	68	68	69	69	69	69	68	69	70
Daily Min	67	68	68	68	68	68	67	68	68	67	67	67	67	68
Average	68	69	68	69	68	68	68	68	69	68	68	67	68	69

High Falls Tailrace Temperature Summary - July 2014

Time HHMMSS	07/01/14	07/02/14	07/03/14	07/04/14	07/05/14	07/06/14	07/07/14	07/08/14	07/09/14	07/10/14	07/11/14	07/12/14	07/13/14	07/14/14	07/15/14	07/16/14
0	70	70	70	71	70	70	71	71	72	71	70	70	71	71	71	70
10000	70	71	70	70	70	70	71	71	72	71	70	70	71	71	71	70
20000	70	71	70	70	70	70	71	71	71	71	70	70	71	71	71	70
30000	69	71	70	70	70	70	71	71	71	71	70	70	71	71	71	70
40000	69	71	70	70	70	71	71	71	71	70	70	70	71	71	71	70
50000	69	71	70	70	70	71	71	71	71	70	70	70	71	71	71	70
60000	69	71	70	70	70	70	71	71	71	70	70	70	71	71	71	70
70000	69	71	70	70	70	71	71	71	71	70	70	71	71	71	71	69
80000	69	71	70	70	70	70	71	71	71	71	70	71	71	71	71	69
90000	69	71	71	71	70	70	71	72	71	71	71	71	71	71	71	70
100000	69	71	71	71	71	71	71	72	72	72	71	71	71	72	71	70
110000	69	71	71	71	70	70	71	72	72	72	71	72	71	72	72	70
120000	69	71	71	71	70	71	71	73	72	72	71	72	72	72	72	71
130000	69	71	72	71	70	71	72	73	72	72	70	72	72	72	72	71
140000	70	72	72	72	70	70	72	73	72	72	70	72	72	72	72	71
150000	69	72	72	72	70	70	72	73	72	72	71	72	73	72	72	71
160000	69	72	72	72	70	71	72	73	72	72	70	71	72	72	72	71
170000	69	72	72	71	70	71	71	73	72	71	70	71	73	72	71	71
180000	69	71	71	71	70	71	72	73	72	71	70	71	73	72	71	71
190000	69	71	71	70	69	71	71	73	72	71	70	71	72	72	71	70
200000	70	71	71	70	69	70	72	73	72	71	70	71	72	71	71	70
210000	70	71	71	70	70	71	71	72	72	70	70	71	72	71	71	70
220000	70	70	71	70	70	71	71	72	71	70	70	71	72	71	71	70
230000	70	70	70	70	70	71	71	72	71	70	70	71	71	71	70	70
Daily Max	70	72	72	72	71	71	72	73	72	72	71	72	73	72	72	71
Daily Min	69	70	70	70	69	70	71	71	71	70	70	70	71	71	70	69
Average	69	71	71	71	70	71	71	72	72	71	70	71	72	71	71	70

Monthly Average Temp: 71  
 License Maximum Temperature: 89 F

High Falls Tailrace Temperature Summary - July 2014

Time HHMMSS	07/17/14	07/18/14	07/19/14	07/20/14	07/21/14	07/22/14	07/23/14	07/24/14	07/25/14	07/26/14	07/27/14	07/28/14	07/29/14	07/30/14	07/31/14
0	69	69	69	69	70	70	73	71	71	71	71	72	71	71	70
10000	69	69	69	69	70	70	73	71	71	71	71	72	71	71	70
20000	69	69	69	69	70	70	72	71	71	71	71	72	71	71	71
30000	69	69	69	70	70	70	72	70	71	71	71	72	71	70	70
40000	69	69	69	69	70	71	72	71	71	71	71	71	70	70	70
50000	69	69	69	69	70	70	71	70	71	71	71	71	70	70	70
60000	69	69	69	70	70	70	71	70	71	71	71	71	70	70	70
70000	69	69	69	70	70	70	71	70	70	71	71	71	70	70	70
80000	69	69	69	70	70	70	71	71	71	71	71	71	70	70	70
90000	70	70	70	70	70	70	71	71	71	71	71	71	70	71	71
100000	70	70	70	70	70	70	72	72	71	71	71	71	71	71	71
110000	70	70	70	70	70	70	72	72	71	71	72	71	71	72	71
120000	70	70	70	70	70	71	73	72	71	72	72	72	72	72	71
130000	70	70	70	70	70	71	73	72	71	72	72	71	72	72	72
140000	70	70	69	70	70	71	73	72	71	72	72	71	72	72	72
150000	71	70	70	70	70	72	73	72	70	72	71	72	72	72	72
160000	70	69	69	70	70	73	73	72	70	72	73	72	72	71	72
170000	70	69	69	70	70	72	73	71	70	72	73	72	72	71	72
180000	70	69	69	69	70	73	73	71	70	72	73	72	72	71	72
190000	70	69	69	69	70	73	73	71	70	72	73	72	72	71	71
200000	69	69	69	69	70	73	72	71	70	72	73	72	71	72	71
210000	69	69	69	69	70	73	72	71	70	71	73	71	71	71	71
220000	69	69	69	69	70	73	72	71	71	71	72	71	71	71	71
230000	69	69	69	69	70	73	71	71	70	71	72	71	71	70	71
Daily Max	71	70	70	70	70	73	73	72	71	72	73	72	72	72	72
Daily Min	69	69	69	69	70	70	71	70	70	71	71	71	70	70	70
Average	70	69	69	70	70	71	72	71	71	71	72	71	71	71	71

High Falls Tailrace Temperature Summary - August 2014

Time HHMMSS	08/01/14	08/02/14	08/03/14	08/04/14	08/05/14	08/06/14	08/07/14	08/08/14	08/09/14	08/10/14	08/11/14	08/12/14	08/13/14	08/14/14	08/15/14	08/16/14
0	71	71	71	73	71	71	71	71	71	71	71	74	72	71	71	70
10000	71	71	71	72	71	71	71	71	71	71	72	74	71	71	71	70
20000	70	71	71	71	71	71	71	71	71	72	72	74	71	71	70	70
30000	71	71	71	71	71	71	71	71	71	72	72	73	71	71	70	70
40000	71	71	71	71	72	71	71	72	72	72	72	74	71	71	70	70
50000	71	71	71	71	72	71	72	72	72	72	72	73	71	70	70	70
60000	70	72	71	71	72	71	72	72	72	72	72	73	71	70	70	70
70000	71	72	71	72	72	71	72	72	72	72	72	73	71	70	70	70
80000	71	72	71	72	72	72	72	72	72	72	72	73	71	70	70	70
90000	71	72	72	72	72	72	72	72	72	73	73	73	71	71	70	70
100000	71	72	72	72	72	72	73	73	73	73	73	73	71	71	71	71
110000	72	72	72	73	73	73	73	73	73	73	73	73	72	71	71	71
120000	72	73	72	72	73	73	73	73	73	73	73	73	72	72	71	72
130000	72	73	72	72	73	73	72	73	72	73	73	72	72	72	72	71
140000	72	72	72	72	74	72	73	73	72	73	73	72	72	73	72	71
150000	72	72	73	72	73	73	72	72	72	72	73	72	73	73	72	71
160000	72	72	73	72	72	73	72	72	72	72	72	73	73	72	71	71
170000	72	72	73	72	72	72	72	72	72	72	72	73	73	72	71	71
180000	72	72	72	71	71	72	71	72	72	72	73	73	73	72	71	71
190000	71	71	72	71	71	72	71	71	72	71	73	72	72	72	71	71
200000	71	71	72	71	71	72	71	71	71	71	73	72	72	71	70	71
210000	71	71	73	71	71	72	71	71	71	71	74	72	72	71	70	71
220000	71	71	73	71	71	71	71	71	71	71	74	72	72	71	70	71
230000	71	71	72	71	71	71	71	71	71	71	73	72	72	71	70	71
Daily Max	72	73	73	73	74	73	73	73	73	73	74	74	73	73	72	72
Daily Min	70	71	71	71	71	71	71	71	71	71	71	72	71	70	70	70
Average	71	72	72	72	72	72	72	72	72	72	73	73	72	71	71	71

Monthly Average Temp: 71  
 License Maximum Temperature: 89 F

High Falls Tailrace Temperature Summary - August 2014

Time HHMMSS	08/17/14	08/18/14	08/19/14	08/20/14	08/21/14	08/22/14	08/23/14	08/24/14	08/25/14	08/26/14	08/27/14	08/28/14	08/29/14	08/30/14	08/31/14
0	71	70	70	70	70	70	70	71	70	70	71	71	70	70	71
10000	71	70	70	70	70	70	70	71	70	70	71	70	70	70	71
20000	71	70	70	70	70	70	70	70	70	70	71	71	70	70	71
30000	71	70	70	70	70	70	70	70	70	71	71	71	70	70	71
40000	71	70	70	70	70	70	70	70	70	71	71	70	70	70	71
50000	71	70	70	70	70	70	70	70	70	71	70	70	70	70	70
60000	71	70	70	70	70	70	70	70	70	71	70	70	70	70	70
70000	71	70	70	70	70	70	70	70	70	71	71	70	70	70	70
80000	71	70	70	70	70	70	70	70	70	71	71	71	70	70	70
90000	71	70	70	70	70	70	70	70	70	71	71	71	70	70	70
100000	71	70	70	71	70	70	70	70	70	71	71	71	70	70	70
110000	71	70	70	71	70	71	70	70	70	71	71	71	70	70	70
120000	71	70	70	71	70	71	70	70	70	71	71	71	70	71	70
130000	72	70	70	71	70	71	70	70	71	71	70	70	70	71	70
140000	72	70	71	71	70	70	70	70	70	72	71	71	70	71	70
150000	72	70	71	71	70	70	71	70	71	72	71	71	70	71	70
160000	72	70	71	71	70	70	71	70	70	72	71	70	71	71	70
170000	72	70	71	71	70	71	71	70	70	72	71	70	70	71	70
180000	72	70	71	71	70	71	71	70	70	71	70	70	70	71	70
190000	71	70	71	71	70	70	71	69	70	71	70	70	70	71	70
200000	71	70	71	71	70	70	70	69	70	71	70	70	70	71	70
210000	71	70	71	71	70	70	70	69	70	71	70	70	70	71	70
220000	70	70	71	71	70	70	70	70	70	71	70	70	70	71	70
230000	70	70	70	70	70	70	70	70	70	71	70	70	70	71	70
Daily Max	72	70	71	71	70	71	71	71	71	72	71	71	71	71	71
Daily Min	70	70	70	70	70	70	70	69	70	70	70	70	70	70	70
Average	71	70	70	71	70	70	70	70	70	71	71	70	70	71	70



High Falls Tailrace Temperature Summary - September 2014

Time HHMMSS	09/01/14	09/02/14	09/03/14	09/04/14	09/05/14	09/06/14	09/07/14	09/08/14	09/09/14	09/10/14	09/11/14	09/12/14	09/13/14	09/14/14	09/15/14	09/16/14
0	70	70	69	69	68	69	69	68	68	68	67	65	64	62	61	61
10000	70	70	69	69	68	69	69	68	68	68	67	65	64	62	61	61
20000	70	70	69	69	68	69	69	68	68	68	66	65	64	62	61	61
30000	70	70	69	69	68	69	69	68	68	68	66	65	64	62	61	61
40000	70	70	69	69	68	69	69	68	68	68	66	65	63	62	61	61
50000	70	70	69	69	69	69	69	68	68	68	66	65	63	62	61	61
60000	70	70	69	69	69	69	69	68	68	69	66	65	63	62	61	61
70000	70	70	69	69	69	69	68	68	68	69	66	65	63	62	61	61
80000	70	70	69	69	69	69	69	68	68	69	66	65	63	61	61	61
90000	70	70	69	69	69	69	69	69	68	68	66	64	63	61	61	61
100000	70	70	69	69	69	69	69	69	68	68	66	64	63	61	61	61
110000	70	70	70	69	69	69	69	69	68	68	66	65	63	61	61	61
120000	70	70	69	69	70	69	69	69	68	69	66	65	63	61	62	61
130000	70	70	69	69	70	69	69	68	69	69	66	65	63	61	61	61
140000	70	70	69	69	70	70	69	68	69	69	66	65	63	61	61	61
150000	70	70	69	69	70	70	69	68	69	68	66	65	63	61	62	61
160000	70	70	69	69	70	70	69	68	69	68	66	64	63	61	61	61
170000	70	70	69	69	70	70	69	68	68	68	66	64	63	61	62	61
180000	70	70	69	69	70	70	69	68	68	68	65	64	63	61	62	61
190000	70	70	69	69	70	70	69	68	68	68	65	64	63	61	62	61
200000	70	70	69	69	70	69	69	68	68	67	65	64	63	61	62	61
210000	70	70	69	68	70	69	69	68	68	67	65	64	63	61	61	61
220000	70	69	69	68	70	69	68	68	68	67	65	64	62	61	61	61
230000	70	69	69	68	70	69	68	68	68	67	65	64	62	61	61	61
Daily Max	70	70	70	69	70	70	69	69	69	69	67	65	64	62	62	61
Daily Min	70	69	69	68	68	69	68	68	68	67	65	64	62	61	61	61
Average	70	70	69	69	69	69	69	68	68	68	66	64	63	61	61	61

Monthly Average Temp: 64  
 License Maximum Temperature: 89 F

High Falls Tailrace Temperature Summary - September 2014

Time HHMMSS	09/17/14	09/18/14	09/19/14	09/20/14	09/21/14	09/22/14	09/23/14	09/24/14	09/25/14	09/26/14	09/27/14	09/28/14	09/29/14	09/30/14
0	60	61	60	60	61	61	60	60	60	60	60	60	61	62
10000	60	61	60	60	61	61	60	60	60	60	60	60	61	62
20000	60	61	60	60	61	61	60	60	60	60	60	60	61	62
30000	60	61	60	60	61	61	60	60	60	60	60	60	61	62
40000	60	61	60	60	61	61	60	60	60	60	60	61	61	62
50000	60	61	60	60	61	61	60	60	60	60	60	61	61	62
60000	60	61	60	60	61	61	60	60	60	60	60	61	61	62
70000	60	61	60	60	61	60	60	60	60	60	60	61	61	62
80000	60	61	60	60	61	60	60	60	60	60	60	61	61	62
90000	60	61	60	60	61	61	60	60	60	60	61	61	61	62
100000	60	61	60	60	61	61	60	60	60	61	61	61	62	62
110000	61	61	60	60	61	61	60	60	60	61	61	61	62	62
120000	61	61	60	61	61	61	60	60	61	61	61	61	62	62
130000	61	61	60	61	61	61	60	60	61	61	61	61	62	62
140000	61	61	60	61	61	61	60	60	61	61	61	61	63	62
150000	61	61	60	61	61	61	60	60	60	61	61	61	63	62
160000	61	61	60	61	61	61	60	60	60	60	61	61	63	62
170000	61	61	60	61	61	61	60	60	60	60	61	61	63	61
180000	61	61	60	61	61	61	60	60	60	60	60	61	63	61
190000	62	61	60	61	61	61	60	60	60	60	60	60	63	61
200000	62	61	60	61	61	61	60	60	60	60	60	61	63	61
210000	61	60	60	61	61	61	60	60	60	60	60	60	63	61
220000	61	60	60	61	61	60	60	60	60	60	60	60	63	60
230000	61	60	60	61	61	60	60	60	60	60	60	61	63	60
Daily Max	62	61	60	61	61	61	60	60	61	61	61	61	63	62
Daily Min	60	60	60	60	61	60	60	60	60	60	60	60	61	60
Average	61	61	60	61	61	61	60	60	60	60	60	61	62	62

**Appendix B**  
**High Falls Hydroelectric Project**  
**FERC No. 2595**  
**Documentation of Agency Consultation**



**Wisconsin Public Service Corporation**

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P.O. Box 19001  
Green Bay, WI 54307-9001  
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November 14, 2014

FERC Project No. 2595

Ms. Cheryl Laatsch  
Wisconsin Department of Natural Resources  
N7725 Hwy 28  
Horicon, WI 53032

Mr. Nicholas Utrup  
U.S. Fish & Wildlife Service  
WI/MN Ecological Services Office  
4101 American Blvd East  
Bloomington, MN 55425

Dear Ms. Laatsch and Mr. Utrup:

High Falls Hydroelectric Project  
[Article 406 - 2014 Annual Water Quality Monitoring Report](#)

Per the Order Amending Water Quality Monitoring Plans under Article 406, dated April 30, 2002, Wisconsin Public Service Corporation (WPSC) is submitting water quality monitoring data collected during the 2014 monitoring season at the High Falls Hydroelectric project for your review and comment.

Per the Project License, WPSC is required to ensure flow releases from the project, as measured immediately downstream from the dam, maintain the following standards, except when natural conditions prohibit attainment of the standards: (1) DO concentrations shall not be less than 5.0 milligrams per liter (mg/L) (minus the precision of the monitoring instrument) for more than 24 hours per year; (2) water temperature shall not exceed 89 degrees Fahrenheit; and (3) the pH shall be within the range of 6.0 to 9.0, with no change greater than 0.5 units outside the estimated natural seasonal maximum and minimum. Natural conditions include inflows to the project less than the 95 percent exceedance flow.

As described in the monitoring plan, water quality monitoring is conducted downstream of the powerhouse annually from June 1<sup>st</sup> through September 30<sup>th</sup>. Monitoring downstream of the powerhouse is conducted where High Falls Road crosses the Peshtigo River. Monitoring upstream of the project occurs every 5 years in conjunction with water quality monitoring conducted at the Caldron Falls Hydroelectric Project. Upstream monitoring was conducted in 2011 and is scheduled to occur again in 2016.

November 14, 2014  
Ms. Laatsch and Mr, Utrup  
Page 2 of 2

Monitoring data for dissolved oxygen (D.O.), temperature, and pH is collected at one-hour intervals on a continuous basis. As described in the water quality monitoring plan for the project, the instrumentation was cleaned and calibrated according to manufacturer specification every 7-10 days during the monitoring period. A post deployment calibration was conducted to determine the extent of calibration drift. Raw data was adjusted assuming a linear degradation of calibration based upon a post calibration of the equipment. The water quality monitoring equipment used to monitor D.O. has an accuracy of +/- 0.1 mg/l, per the manufacturer. For compliance purposes, dissolved oxygen concentrations more than 0.1 mg/l below the applicable water quality standard are potential deviations.

No deviations from the dissolved oxygen, pH or temperature water quality standards were observed during the 2014 monitoring season. There was one hour of missing monitoring data during the monitoring season due to the maintenance and calibration of the monitoring equipment. Enclosed with this report are excel spreadsheets containing the monitoring data, in both tabular and graphical format, with the periods of missing data identified. Please review the enclosed data and provide any comments you may have within 30 days of this letter. Should you have any questions or concerns, please do not hesitate to call me at (920) 433-1833.

Sincerely,



Mark Metcalf  
Environmental Consultant – Air & Water  
Integrays Business Support, LLC  
[mwmetcalf@integrysgroup.com](mailto:mwmetcalf@integrysgroup.com)

Enc. – 2014 Water Quality Monitoring Data

Cc: Mr. Andy Hudak – WDNR  
Mr. Shawn Puzen – IBS  
Mr. Ed Brandt – WPSC  
Mr. William Bosacki – WPSC

**Response to Comments from the U.S. Fish and Wildlife Service on the 2014 Water Quality Monitoring Report for the High Falls Hydroelectric Project:**

The U.S. Fish and Wildlife Service did not provide comments on the 2014 water quality monitoring report.

**Response to Comments from the Wisconsin Department of Natural Resources on the 2014 Water Quality Monitoring Report for the High Falls Hydroelectric Project:**

The Wisconsin Department of Natural Resources did not provide comments on the 2014 water quality monitoring report.

Document Content(s)

20150220 HF FERC WQM Report.PDF.....1-2

20150220 FERC Appendix A and B.PDF.....3-47