



Wisconsin Public Service Corporation

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[www.wisconsinpublicservice.com](http://www.wisconsinpublicservice.com)

January 15, 2016

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 - 2015 Annual Water Quality Monitoring Report

In accordance with the Order Amending Water Quality Monitoring Plans under Article 406, dated April 30, 2002, and the Order Amending Approved Water Quality Monitoring Plans dated October 13, 2015, Wisconsin Public Service (WPS) is submitting water quality monitoring data collected during the 2015 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) dissolved oxygen (D.O.) 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 is scheduled to occur in 2016.

Monitoring data for D.O., temperature, and pH was collected at one-hour intervals on a continuous basis. Water quality 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, D.O. concentrations more than 0.1 mg/l below the applicable water quality standard are potential deviations.

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No deviations from the D.O., pH, or temperature water quality standards were observed during the 2015 monitoring season. Monitoring data can be found in Appendix A. WPS provided the 2015 water quality monitoring data to the Wisconsin Department of Natural Resources (WDNR), and the U.S. Fish and Wildlife Service (FWS) on October 16, 2015 for review and comment. Documentation of Agency Consultation can be found in Appendix B.

Should you have any questions or concerns with this submittal, please call Mr. Mark Metcalf at (920) 433-1833.

Sincerely,



Todd Jastremski  
Asset Manager Hydro Operations  
We Energies  
800 Industrial Park Drive  
Iron Mountain, MI 49801

MWM/rjv

Enc: Appendix A – 2015 Water Quality Monitoring Data  
Appendix B – Documentation of Agency Consultation

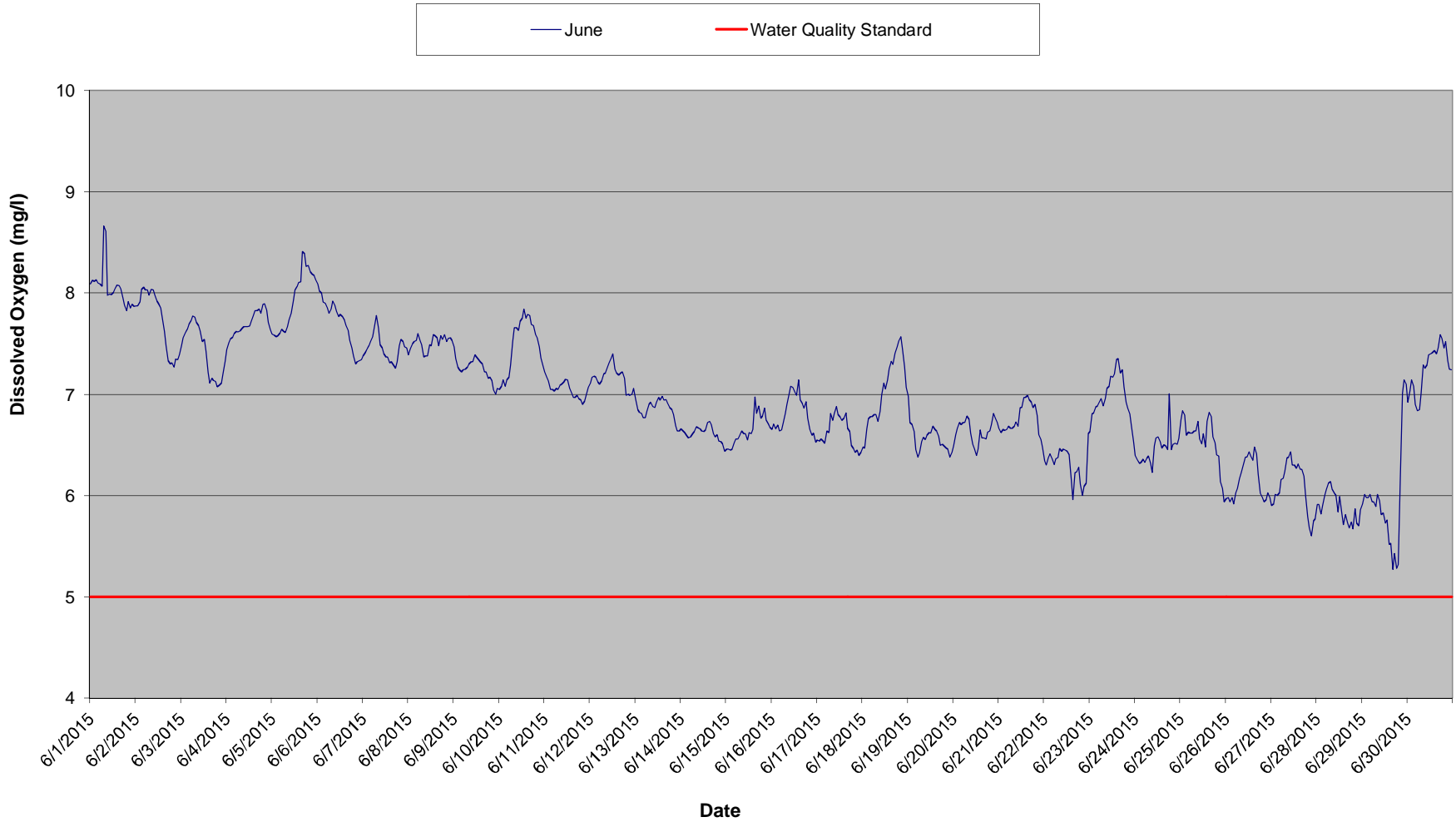
cc: Mr. John Zygaj, FERC - CRO

**Appendix A**  
**High Falls Hydroelectric Project**  
**FERC No. 2595**  
**2015 Water Quality Monitoring Data**

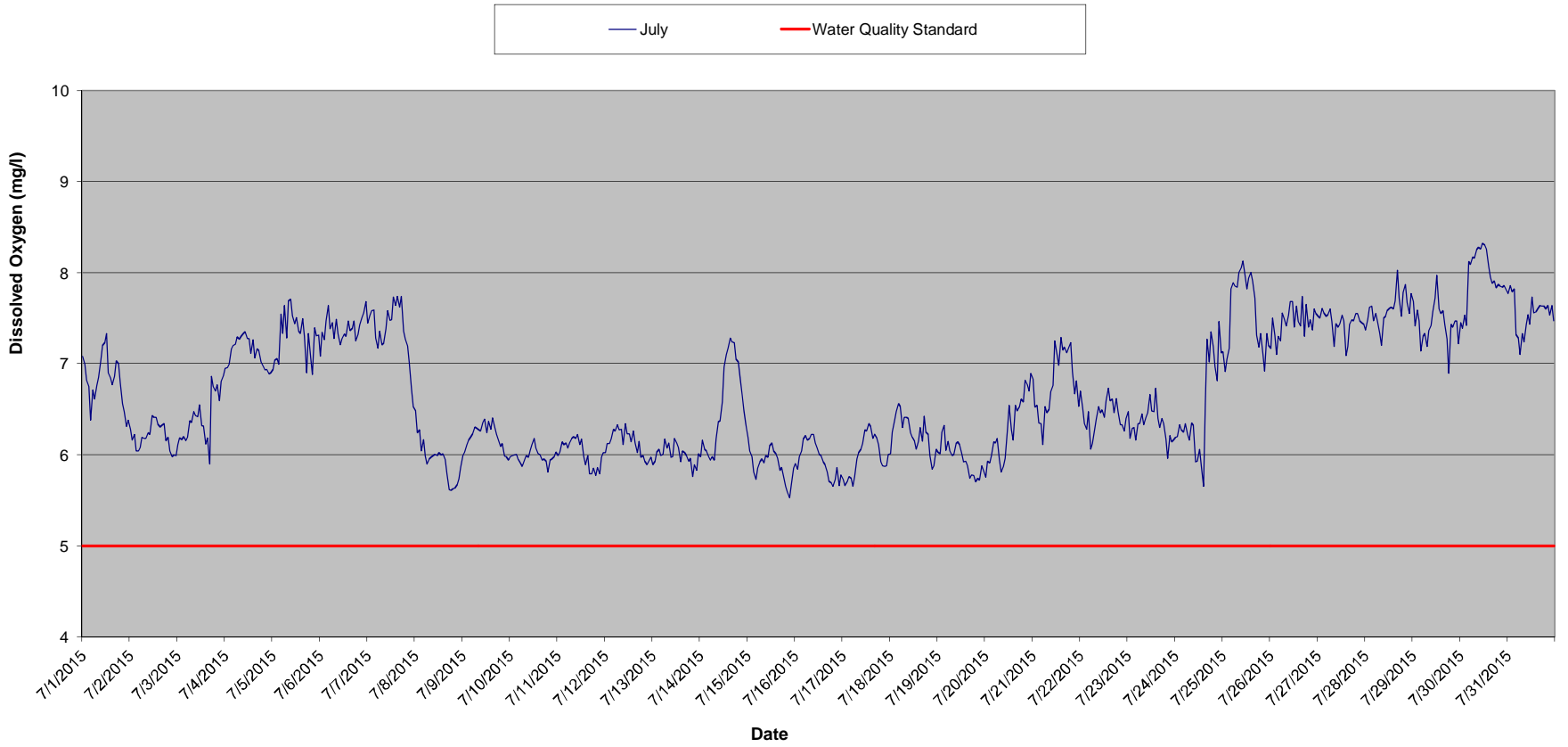
## **High Falls Hydroelectric Project**

### **2015 Dissolved Oxygen Monitoring Data**

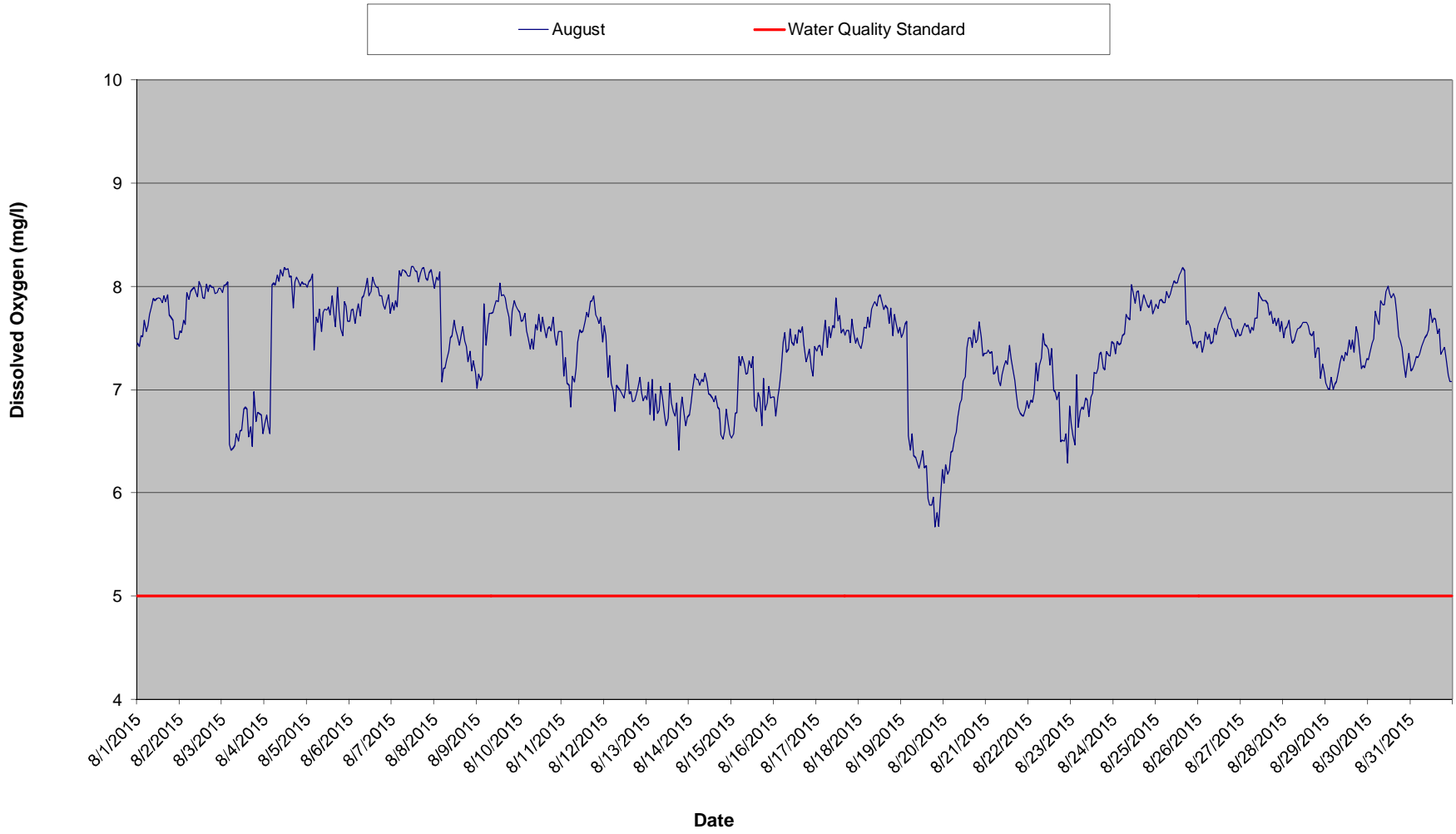
### High Falls Tailrace Dissolved Oxygen - June 2015



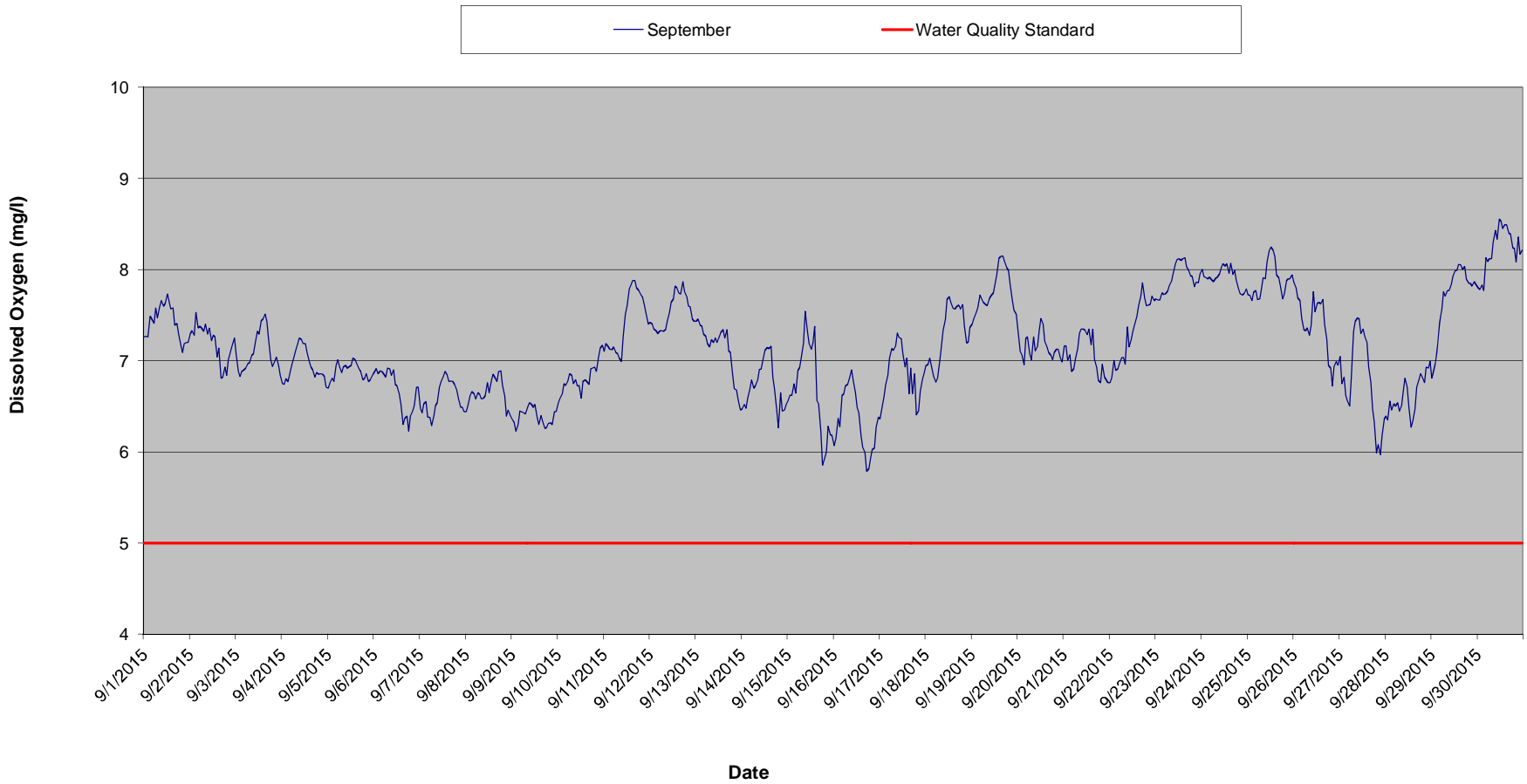
### High Falls Tailrace Dissolved Oxygen - July 2015



### High Falls Tailrace Dissolved Oxygen - August 2015



### High Falls Tailrace Dissolved Oxygen - September 2015





High Falls Tailrace Dissolved Oxygen Summary - June 2015

Time HHMMSS	06/01/15	06/02/15	06/03/15	06/04/15	06/05/15	06/06/15	06/07/15	06/08/15	06/09/15	06/10/15	06/11/15	06/12/15	06/13/15	06/14/15	06/15/15	06/16/15
0	8.1	7.9	7.5	7.4	7.6	8.1	7.4	7.4	7.5	7.1	7.2	7.1	7.0	6.7	6.5	6.7
10000	8.1	7.9	7.6	7.5	7.6	8.0	7.4	7.5	7.4	7.1	7.2	7.2	6.9	6.6	6.5	6.7
20000	8.1	7.9	7.6	7.5	7.6	8.0	7.4	7.5	7.3	7.1	7.1	7.2	6.8	6.6	6.5	6.7
30000	8.1	8.0	7.6	7.6	7.6	7.9	7.5	7.5	7.2	7.1	7.1	7.2	6.8	6.6	6.5	6.7
40000	8.1	8.1	7.7	7.6	7.6	7.9	7.5	7.5	7.2	7.1	7.1	7.1	6.8	6.6	6.5	6.6
50000	8.1	8.0	7.7	7.6	7.6	7.9	7.6	7.6	7.2	7.2	7.0	7.1	6.8	6.6	6.6	6.6
60000	8.1	8.0	7.8	7.6	7.6	7.8	7.7	7.5	7.3	7.3	7.1	7.1	6.8	6.6	6.6	6.7
70000	8.7	8.0	7.8	7.6	7.6	7.8	7.8	7.5	7.3	7.5	7.1	7.2	6.9	6.6	6.6	6.8
80000	8.6	8.0	7.7	7.7	7.7	7.9	7.7	7.4	7.3	7.7	7.1	7.2	6.9	6.7	6.6	6.9
90000	8.0	8.0	7.7	7.7	7.7	7.9	7.5	7.4	7.3	7.7	7.1	7.3	6.9	6.7	6.6	7.0
100000	8.0	8.0	7.6	7.7	7.8	7.8	7.5	7.4	7.3	7.6	7.1	7.3	6.9	6.7	6.6	7.1
110000	8.0	7.9	7.5	7.7	7.9	7.8	7.4	7.5	7.4	7.7	7.2	7.4	6.9	6.6	6.6	7.1
120000	8.0	7.9	7.5	7.7	8.0	7.8	7.4	7.5	7.4	7.8	7.1	7.4	7.0	6.6	6.6	7.0
130000	8.0	7.9	7.4	7.7	8.1	7.8	7.4	7.6	7.3	7.8	7.1	7.3	6.9	6.7	6.6	7.0
140000	8.1	7.8	7.2	7.8	8.1	7.7	7.3	7.6	7.3	7.8	7.0	7.2	7.0	6.7	6.7	7.1
150000	8.1	7.6	7.1	7.8	8.1	7.7	7.3	7.6	7.3	7.8	7.0	7.2	6.9	6.7	7.0	6.9
160000	8.0	7.5	7.2	7.8	8.4	7.6	7.3	7.5	7.2	7.8	7.0	7.2	7.0	6.7	6.8	6.9
170000	8.0	7.3	7.1	7.8	8.4	7.5	7.3	7.6	7.2	7.7	7.0	7.2	6.9	6.6	6.9	6.9
180000	7.9	7.3	7.1	7.8	8.3	7.5	7.3	7.5	7.2	7.7	7.0	7.2	6.9	6.6	6.8	6.9
190000	7.8	7.3	7.1	7.9	8.3	7.4	7.5	7.6	7.2	7.6	6.9	7.0	6.9	6.6	6.8	6.8
200000	7.9	7.3	7.1	7.9	8.2	7.3	7.5	7.5	7.1	7.6	6.9	7.0	6.8	6.5	6.9	6.7
210000	7.9	7.3	7.1	7.8	8.2	7.3	7.5	7.6	7.0	7.5	6.9	7.0	6.7	6.5	6.7	6.6
220000	7.9	7.3	7.2	7.7	8.2	7.3	7.5	7.6	7.0	7.4	7.0	7.0	6.6	6.5	6.7	6.6
230000	7.9	7.4	7.3	7.6	8.1	7.3	7.5	7.5	7.1	7.3	7.1	7.1	6.6	6.4	6.7	6.5
Daily Max	8.7	8.1	7.8	7.9	8.4	8.1	7.8	7.6	7.5	7.8	7.2	7.4	7.0	6.7	7.0	7.1
Daily Min	7.8	7.3	7.1	7.4	7.6	7.3	7.3	7.4	7.0	7.1	6.9	7.0	6.6	6.4	6.5	6.5
Average	8.1	7.7	7.4	7.7	7.9	7.7	7.5	7.5	7.2	7.5	7.0	7.2	6.9	6.6	6.6	6.8

License Minimum DO: 5.0 mg/l

High Falls Tailrace Dissolved Oxygen Summary - June 2015

Time HHMMSS	06/17/15	06/18/15	06/19/15	06/20/15	06/21/15	06/22/15	06/23/15	06/24/15	06/25/15	06/26/15	06/27/15	06/28/15	06/29/15	06/30/15
0	6.5	6.5	7.0	6.5	6.7	6.3	6.6	6.4	6.7	6.0	5.9	5.9	5.9	6.9
10000	6.5	6.5	6.7	6.6	6.6	6.3	6.8	6.4	6.8	6.0	5.9	5.9	6.0	7.0
20000	6.6	6.7	6.7	6.7	6.7	6.4	6.8	6.3	6.8	5.9	6.0	5.8	6.0	7.1
30000	6.5	6.8	6.6	6.7	6.6	6.4	6.9	6.3	6.6	6.0	6.0	5.9	6.0	7.1
40000	6.5	6.8	6.5	6.7	6.7	6.4	6.9	6.4	6.6	5.9	6.0	6.0	6.0	6.9
50000	6.6	6.8	6.4	6.7	6.7	6.3	6.9	6.3	6.6	6.0	6.2	6.1	5.9	6.8
60000	6.6	6.8	6.4	6.7	6.7	6.4	7.0	6.4	6.6	6.1	6.2	6.1	5.9	6.9
70000	6.8	6.8	6.5	6.8	6.7	6.4	6.9	6.4	6.6	6.2	6.2	6.1	5.9	7.0
80000	6.7	6.7	6.6	6.8	6.7	6.5	7.0	6.3	6.6	6.2	6.4	6.1	6.0	7.3
90000	6.8	6.8	6.6	6.6	6.7	6.4	7.1	6.2	6.7	6.3	6.4	6.0	6.0	7.3
100000	6.9	7.0	6.6	6.5	6.7	6.5	7.1	6.5	6.6	6.4	6.4	6.0	5.8	7.3
110000	6.8	7.1	6.6	6.5	6.9	6.4	7.2	6.6	6.5	6.4	6.3	5.8	5.8	7.4
120000	6.8	7.1	6.6	6.4	6.9	6.4	7.2	6.6	6.6	6.4	6.3	6.0	5.7	7.4
130000	6.7	7.1	6.7	6.5	7.0	6.4	7.2	6.5	6.5	6.4	6.3	5.8	5.8	7.4
140000	6.8	7.3	6.7	6.6	7.0	6.2	7.3	6.5	6.7	6.4	6.3	5.7	5.5	7.4
150000	6.8	7.3	6.6	6.6	7.0	6.0	7.4	6.5	6.8	6.5	6.3	5.8	5.5	7.4
160000	6.7	7.3	6.6	6.6	6.9	6.2	7.2	6.5	6.8	6.4	6.3	5.7	5.3	7.5
170000	6.6	7.4	6.5	6.6	6.9	6.2	7.2	6.5	6.6	6.2	6.2	5.7	5.4	7.6
180000	6.5	7.5	6.5	6.6	6.9	6.3	7.1	7.0	6.5	6.0	6.0	5.7	5.3	7.6
190000	6.5	7.5	6.5	6.6	6.9	6.1	6.9	6.5	6.4	6.0	5.8	5.7	5.3	7.5
200000	6.4	7.6	6.5	6.7	6.8	6.0	6.9	6.5	6.4	5.9	5.7	5.9	6.2	7.5
210000	6.4	7.4	6.5	6.8	6.6	6.1	6.8	6.5	6.1	6.0	5.6	5.7	7.0	7.3
220000	6.4	7.3	6.4	6.8	6.6	6.1	6.7	6.5	6.1	6.0	5.8	5.7	7.1	7.3
230000	6.4	7.1	6.4	6.7	6.5	6.6	6.5	6.6	5.9	6.0	5.8	5.9	7.1	7.2
Daily Max	6.9	7.6	7.0	6.8	7.0	6.6	7.4	7.0	6.8	6.5	6.4	6.1	7.1	7.6
Daily Min	6.4	6.5	6.4	6.4	6.5	6.0	6.5	6.2	5.9	5.9	5.6	5.7	5.3	6.8
Average	6.6	7.0	6.6	6.6	6.8	6.3	7.0	6.5	6.6	6.1	6.1	5.9	5.9	7.3

High Falls Tailrace Dissolved Oxygen Summary - July 2015

Time HHMMSS	07/01/15	07/02/15	07/03/15	07/04/15	07/05/15	07/06/15	07/07/15	07/08/15	07/09/15	07/10/15	07/11/15	07/12/15	07/13/15	07/14/15	07/15/15	07/16/15
0	7.1	6.3	6.1	6.9	6.9	7.1	7.4	6.5	6.0	6.0	6.0	6.0	5.9	6.0	6.2	5.9
10000	7.0	6.2	6.2	7.0	7.0	7.3	7.5	6.2	6.0	6.0	6.0	6.1	5.9	6.2	6.0	5.8
20000	6.8	6.2	6.2	7.0	7.1	7.3	7.6	6.3	6.1	6.0	6.1	6.1	6.0	6.1	6.0	6.0
30000	6.8	6.0	6.2	7.2	7.0	7.5	7.6	6.0	6.2	6.0	6.1	6.2	6.1	6.0	5.8	6.0
40000	6.4	6.0	6.2	7.2	7.5	7.6	7.3	6.2	6.2	5.9	6.1	6.3	6.0	6.0	5.7	6.2
50000	6.7	6.1	6.2	7.2	7.3	7.4	7.2	6.0	6.2	5.9	6.1	6.3	6.0	5.9	5.9	6.2
60000	6.6	6.2	6.4	7.3	7.6	7.4	7.4	5.9	6.3	5.9	6.1	6.3	6.2	6.0	5.9	6.2
70000	6.8	6.2	6.4	7.3	7.3	7.3	7.2	6.0	6.3	5.9	6.2	6.3	6.1	5.9	6.0	6.2
80000	6.9	6.2	6.5	7.3	7.7	7.5	7.2	6.0	6.3	6.0	6.2	6.3	6.1	6.2	5.9	6.2
90000	7.0	6.2	6.4	7.3	7.7	7.3	7.4	6.0	6.3	6.0	6.2	6.1	6.0	6.4	6.0	6.2
100000	7.2	6.2	6.4	7.3	7.5	7.2	7.6	6.0	6.4	6.1	6.2	6.3	6.0	6.4	6.0	6.1
110000	7.2	6.4	6.5	7.3	7.4	7.3	7.5	6.0	6.4	6.1	6.1	6.2	6.2	6.6	6.1	6.1
120000	7.3	6.4	6.3	7.3	7.5	7.3	7.5	6.0	6.2	6.2	6.2	6.2	6.1	7.0	6.1	6.0
130000	6.9	6.4	6.3	7.1	7.4	7.3	7.7	6.0	6.4	6.1	6.0	6.1	6.1	7.1	6.0	6.0
140000	6.8	6.3	6.1	7.3	7.3	7.5	7.6	6.0	6.3	6.0	5.9	6.3	5.9	7.2	6.0	5.9
150000	6.8	6.3	6.2	7.1	7.5	7.4	7.7	5.9	6.4	6.0	6.0	6.1	6.0	7.3	6.0	5.9
160000	6.9	6.3	5.9	7.2	7.3	7.4	7.6	5.8	6.3	5.9	5.8	6.0	6.0	7.2	5.8	5.8
170000	7.0	6.3	6.9	7.1	6.9	7.5	7.7	5.6	6.2	6.0	5.8	6.2	6.0	7.2	5.9	5.7
180000	7.0	6.2	6.8	7.0	7.3	7.2	7.4	5.6	6.2	5.9	5.9	6.0	5.9	7.1	5.8	5.7
190000	6.8	6.2	6.7	7.0	7.1	7.3	7.3	5.6	6.1	5.8	5.8	6.0	6.0	7.0	5.7	5.7
200000	6.6	6.0	6.8	6.9	6.9	7.4	7.2	5.6	6.1	5.9	5.9	5.9	5.8	6.9	5.6	5.7
210000	6.5	6.0	6.6	6.9	7.4	7.5	7.0	5.7	6.0	6.0	5.8	5.9	5.9	6.7	5.5	5.9
220000	6.3	6.0	6.8	6.9	7.3	7.6	6.7	5.7	6.0	6.0	6.0	5.9	5.8	6.5	5.7	5.7
230000	6.4	6.0	6.9	6.9	7.3	7.7	6.5	5.9	5.9	6.0	6.0	6.0	6.0	6.3	5.9	5.8
Daily Max	7.3	6.4	6.9	7.3	7.7	7.7	7.7	6.5	6.4	6.2	6.2	6.3	6.2	7.3	6.2	6.2
Daily Min	6.3	6.0	5.9	6.9	6.9	7.1	6.5	5.6	5.9	5.8	5.8	5.9	5.8	5.9	5.5	5.7
Average	6.8	6.2	6.4	7.1	7.3	7.4	7.4	5.9	6.2	6.0	6.0	6.1	6.0	6.5	5.9	6.0

License Minimum Dissolved Oxygen: 5.0 mg/l

High Falls Tailrace Dissolved Oxygen Summary - July 2015

Time HHMMSS	07/17/15	07/18/15	07/19/15	07/20/15	07/21/15	07/22/15	07/23/15	07/24/15	07/25/15	07/26/15	07/27/15	07/28/15	07/29/15	07/30/15	07/31/15
0	5.7	6.0	6.0	5.8	6.8	6.7	6.5	6.2	7.1	7.2	7.5	7.4	7.7	7.5	7.8
10000	5.7	6.3	6.0	5.9	6.5	6.5	6.2	6.2	6.9	7.5	7.5	7.5	7.4	7.4	7.9
20000	5.7	6.4	6.3	5.9	6.5	6.3	6.3	6.3	7.1	7.3	7.6	7.6	7.6	7.5	7.8
30000	5.8	6.5	6.3	6.0	6.4	6.3	6.3	6.3	7.2	7.1	7.6	7.6	7.5	7.4	7.8
40000	5.7	6.6	6.1	6.1	6.3	6.5	6.2	6.3	7.8	7.3	7.5	7.5	7.1	8.1	7.3
50000	5.7	6.5	6.2	6.1	6.1	6.1	6.3	6.3	7.9	7.3	7.5	7.6	7.3	8.1	7.3
60000	5.8	6.3	6.0	6.2	6.5	6.1	6.3	6.2	7.9	7.6	7.6	7.5	7.3	8.2	7.1
70000	6.0	6.4	6.0	5.9	6.5	6.3	6.5	6.2	7.8	7.5	7.5	7.3	7.2	8.2	7.3
80000	6.0	6.4	6.0	5.8	6.5	6.4	6.3	6.4	8.0	7.4	7.2	7.2	7.4	8.3	7.2
90000	6.1	6.4	6.1	5.9	6.7	6.5	6.4	6.3	8.1	7.5	7.4	7.5	7.4	8.3	7.4
100000	6.1	6.2	6.1	6.0	6.8	6.5	6.5	5.9	8.1	7.7	7.4	7.5	7.6	8.3	7.5
110000	6.3	6.2	6.1	6.3	7.3	6.5	6.7	5.9	8.0	7.7	7.4	7.6	7.7	8.3	7.4
120000	6.3	6.2	6.0	6.5	7.1	6.4	6.5	6.1	7.8	7.4	7.5	7.6	8.0	8.3	7.7
130000	6.3	6.1	5.9	6.3	7.0	6.6	6.5	5.9	7.9	7.6	7.5	7.6	7.6	8.3	7.6
140000	6.3	6.2	5.9	6.2	7.3	6.7	6.7	5.7	8.0	7.5	7.1	7.6	7.6	8.1	7.6
150000	6.2	6.3	5.9	6.5	7.2	6.6	6.4	6.6	7.9	7.4	7.2	7.7	7.6	8.0	7.6
160000	6.2	6.2	5.7	6.5	7.2	6.6	6.3	7.3	7.7	7.7	7.4	8.0	7.4	7.9	7.6
170000	6.2	6.4	5.8	6.5	7.1	6.5	6.4	7.0	7.3	7.3	7.5	7.7	7.3	7.9	7.6
180000	6.1	6.3	5.8	6.6	7.2	6.6	6.3	7.4	7.2	7.7	7.5	7.5	6.9	7.8	7.6
190000	5.9	6.2	5.7	6.6	7.2	6.5	6.2	7.2	7.3	7.4	7.6	7.8	7.4	7.9	7.6
200000	5.9	6.0	5.7	6.8	6.9	6.3	6.0	7.0	7.1	7.5	7.6	7.9	7.4	7.9	7.6
210000	5.9	5.8	5.7	6.8	6.7	6.3	6.2	6.8	6.9	7.4	7.5	7.7	7.5	7.8	7.5
220000	5.9	5.9	5.9	6.7	6.8	6.3	6.1	7.5	7.3	7.6	7.5	7.6	7.5	7.9	7.6
230000	6.0	6.1	5.8	6.9	6.5	6.4	6.2	7.1	7.2	7.6	7.4	7.8	7.2	7.8	7.5
Daily Max	6.3	6.6	6.3	6.9	7.3	6.7	6.7	7.5	8.1	7.7	7.6	8.0	8.0	8.3	7.9
Daily Min	5.7	5.8	5.7	5.8	6.1	6.1	6.0	5.7	6.9	7.1	7.1	7.2	6.9	7.4	7.1
Average	6.0	6.2	6.0	6.3	6.8	6.4	6.3	6.5	7.6	7.5	7.5	7.6	7.4	8.0	7.5

High Falls Tailrace Dissolved Oxygen Summary - August 2015

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

License Minimum Dissolved Oxygen: 5.0 mg/l

High Falls Tailrace Dissolved Oxygen Summary - August 2015

Time HHMMSS	08/17/15	08/18/15	08/19/15	08/20/15	08/21/15	08/22/15	08/23/15	08/24/15	08/25/15	08/26/15	08/27/15	08/28/15	08/29/15	08/30/15	08/31/15
0	7.4	7.4	7.5	6.1	7.4	6.8	6.7	7.4	7.8	7.5	7.6	7.5	7.1	7.3	7.2
10000	7.4	7.4	7.5	6.3	7.4	6.9	6.6	7.3	7.8	7.5	7.5	7.6	7.0	7.4	7.2
20000	7.4	7.5	7.6	6.2	7.3	6.9	6.5	7.5	7.9	7.4	7.5	7.6	7.0	7.5	7.2
30000	7.3	7.6	7.7	6.2	7.4	7.0	7.1	7.4	7.9	7.4	7.6	7.7	7.1	7.5	7.3
40000	7.5	7.6	6.6	6.4	7.1	7.3	6.6	7.5	7.8	7.6	7.6	7.5	7.0	7.8	7.3
50000	7.7	7.7	6.4	6.4	7.2	7.1	6.8	7.5	7.8	7.5	7.6	7.5	7.1	7.7	7.3
60000	7.4	7.6	6.6	6.5	7.2	7.2	6.8	7.5	7.9	7.5	7.6	7.5	7.1	7.6	7.4
70000	7.6	7.8	6.4	6.6	7.1	7.3	6.8	7.7	7.9	7.4	7.5	7.5	7.2	7.9	7.5
80000	7.5	7.8	6.3	6.7	7.0	7.5	6.9	7.7	7.9	7.5	7.6	7.6	7.3	7.8	7.5
90000	7.6	7.8	6.3	6.9	7.1	7.4	6.9	7.7	8.0	7.6	7.6	7.6	7.3	7.8	7.5
100000	7.6	7.8	6.2	6.9	7.2	7.4	6.7	8.0	8.1	7.5	7.7	7.6	7.3	8.0	7.6
110000	7.9	7.9	6.3	7.1	7.3	7.4	6.9	7.9	8.0	7.6	7.7	7.7	7.4	8.0	7.8
120000	7.7	7.9	6.4	7.1	7.2	7.2	7.0	7.8	8.0	7.7	7.9	7.7	7.3	7.9	7.7
130000	7.7	7.8	6.2	7.4	7.4	7.4	7.2	7.9	8.1	7.7	7.9	7.7	7.5	7.9	7.7
140000	7.5	7.8	6.3	7.5	7.3	7.0	7.2	8.0	8.1	7.8	7.9	7.6	7.4	7.9	7.7
150000	7.6	7.8	5.9	7.5	7.2	7.0	7.2	7.8	8.2	7.8	7.9	7.5	7.5	7.9	7.5
160000	7.5	7.8	5.9	7.4	7.1	6.9	7.3	7.8	8.1	7.7	7.9	7.5	7.4	7.8	7.6
170000	7.6	7.6	5.9	7.6	6.9	7.0	7.4	7.9	7.6	7.7	7.8	7.6	7.6	7.5	7.3
180000	7.6	7.8	6.0	7.5	6.8	6.5	7.2	7.9	7.7	7.7	7.7	7.3	7.5	7.5	7.4
190000	7.5	7.5	5.7	7.5	6.8	6.5	7.2	7.8	7.6	7.6	7.8	7.4	7.4	7.4	7.4
200000	7.7	7.7	5.8	7.7	6.8	6.5	7.4	7.8	7.5	7.6	7.6	7.4	7.2	7.3	7.3
210000	7.6	7.6	5.7	7.5	6.7	6.6	7.3	7.9	7.4	7.5	7.7	7.1	7.2	7.1	7.1
220000	7.4	7.5	5.9	7.3	6.8	6.3	7.3	7.7	7.5	7.6	7.6	7.3	7.2	7.2	7.1
230000	7.5	7.6	6.2	7.4	6.9	6.8	7.5	7.8	7.4	7.5	7.7	7.2	7.3	7.4	7.1
Daily Max	7.9	7.9	7.7	7.7	7.4	7.5	7.5	8.0	8.2	7.8	7.9	7.7	7.6	8.0	7.8
Daily Min	7.3	7.4	5.7	6.1	6.7	6.3	6.5	7.3	7.4	7.4	7.5	7.1	7.0	7.1	7.1
Average	7.5	7.7	6.4	7.0	7.1	7.0	7.0	7.7	7.8	7.6	7.7	7.5	7.3	7.6	7.4

High Falls Tailrace Dissolved Oxygen Summary - September 2015

Time HHMMSS	09/01/15	09/02/15	09/03/15	09/04/15	09/05/15	09/06/15	09/07/15	09/08/15	09/09/15	09/10/15	09/11/15	09/12/15	09/13/15	09/14/15	09/15/15	09/16/15
0	7.3	7.3	7.1	6.8	6.7	6.9	6.5	6.4	6.4	6.5	7.1	7.4	7.4	6.5	6.6	6.1
10000	7.3	7.3	6.9	6.7	6.8	6.9	6.4	6.5	6.3	6.6	7.2	7.4	7.5	6.5	6.6	6.1
20000	7.3	7.3	6.8	6.8	6.8	6.9	6.5	6.6	6.2	6.6	7.2	7.4	7.4	6.5	6.6	6.4
30000	7.5	7.5	6.9	6.8	6.8	6.9	6.6	6.7	6.3	6.8	7.1	7.3	7.4	6.6	6.7	6.3
40000	7.5	7.4	6.9	6.9	7.0	6.9	6.4	6.6	6.5	6.7	7.1	7.3	7.3	6.7	6.6	6.6
50000	7.4	7.4	6.9	7.0	7.0	6.9	6.4	6.6	6.4	6.8	7.2	7.3	7.3	6.8	6.9	6.6
60000	7.6	7.4	7.0	7.0	6.9	6.8	6.3	6.7	6.4	6.9	7.1	7.3	7.2	6.7	6.9	6.7
70000	7.5	7.3	7.0	7.1	6.9	6.9	6.4	6.6	6.4	6.8	7.1	7.3	7.2	6.7	7.0	6.7
80000	7.6	7.4	7.1	7.2	6.9	6.9	6.5	6.6	6.5	6.8	7.0	7.3	7.2	6.8	7.2	6.8
90000	7.7	7.3	7.1	7.3	7.0	6.8	6.5	6.6	6.5	6.8	7.0	7.4	7.2	6.9	7.5	6.9
100000	7.6	7.4	7.2	7.2	6.9	6.9	6.7	6.6	6.5	6.7	7.3	7.5	7.3	6.9	7.3	6.8
110000	7.6	7.2	7.3	7.2	6.9	6.7	6.8	6.8	6.5	6.7	7.5	7.6	7.2	7.0	7.2	6.7
120000	7.7	7.3	7.3	7.2	7.0	6.7	6.8	6.7	6.5	6.6	7.6	7.7	7.3	7.1	7.1	6.5
130000	7.7	7.3	7.4	7.1	7.0	6.6	6.9	6.8	6.4	6.8	7.8	7.8	7.3	7.1	7.2	6.4
140000	7.6	7.0	7.5	7.0	7.0	6.5	6.8	6.9	6.3	6.8	7.8	7.8	7.3	7.1	7.4	6.2
150000	7.6	7.1	7.5	6.9	7.0	6.3	6.8	6.8	6.4	6.8	7.9	7.7	7.3	7.2	6.6	6.0
160000	7.4	6.8	7.4	6.9	6.9	6.4	6.8	6.8	6.3	6.7	7.9	7.7	7.3	6.8	6.5	6.0
170000	7.4	6.8	7.2	6.8	6.9	6.4	6.8	6.9	6.3	6.9	7.8	7.9	7.1	6.7	6.2	5.8
180000	7.3	6.9	7.0	6.9	6.8	6.2	6.7	6.9	6.3	6.9	7.8	7.8	7.1	6.5	5.9	5.8
190000	7.2	6.8	6.9	6.9	6.8	6.4	6.7	6.7	6.3	6.9	7.7	7.7	6.9	6.3	5.9	5.9
200000	7.1	7.0	7.0	6.9	6.9	6.5	6.6	6.6	6.3	6.9	7.7	7.6	6.7	6.7	6.0	6.0
210000	7.2	7.1	7.0	6.9	6.8	6.5	6.5	6.4	6.3	7.0	7.6	7.6	6.7	6.4	6.3	6.0
220000	7.2	7.2	7.0	6.8	6.8	6.7	6.5	6.5	6.4	7.1	7.5	7.5	6.6	6.5	6.2	6.3
230000	7.2	7.3	6.8	6.7	6.8	6.7	6.4	6.4	6.4	7.2	7.4	7.4	6.5	6.5	6.2	6.4
Daily Max	7.7	7.5	7.5	7.3	7.0	6.9	6.9	6.9	6.5	7.2	7.9	7.9	7.5	7.2	7.5	6.9
Daily Min	7.1	6.8	6.8	6.7	6.7	6.2	6.3	6.4	6.2	6.5	7.0	7.3	6.5	6.3	5.9	5.8
Average	7.4	7.2	7.1	6.9	6.9	6.7	6.6	6.6	6.4	6.8	7.4	7.5	7.1	6.7	6.7	6.3

License Minimum Dissolved Oxygen: 5.0 mg/l

High Falls Tailrace Dissolved Oxygen Summary - September 2015

Time HHMMSS	09/17/15	09/18/15	09/19/15	09/20/15	09/21/15	09/22/15	09/23/15	09/24/15	09/25/15	09/26/15	09/27/15	09/28/15	09/29/15	09/30/15
0	6.4	6.9	7.4	7.3	7.2	6.8	7.7	8.0	7.7	7.9	7.1	6.4	6.8	7.8
10000	6.5	7.0	7.5	7.1	7.2	6.8	7.7	7.9	7.7	7.8	6.8	6.4	6.9	7.8
20000	6.6	7.0	7.5	7.1	7.0	7.0	7.7	7.9	7.7	7.7	6.8	6.6	7.0	7.8
30000	6.7	6.9	7.6	7.0	7.1	6.9	7.7	7.9	7.8	7.7	6.6	6.5	7.2	7.8
40000	6.8	6.8	7.7	7.2	6.9	6.9	7.7	7.9	7.8	7.5	6.6	6.5	7.4	8.1
50000	7.0	6.8	7.7	7.3	6.9	7.0	7.7	7.9	7.7	7.3	6.5	6.5	7.6	8.1
60000	7.1	6.8	7.6	7.1	7.0	7.0	7.8	7.9	7.7	7.3	6.8	6.5	7.8	8.1
70000	7.1	7.0	7.6	7.0	7.1	7.0	7.8	7.9	7.8	7.4	7.3	6.5	7.7	8.1
80000	7.2	7.2	7.6	7.3	7.3	7.0	7.9	7.9	7.9	7.3	7.4	6.5	7.8	8.3
90000	7.3	7.3	7.7	7.1	7.3	7.4	8.0	8.0	7.9	7.4	7.5	6.7	7.8	8.4
100000	7.3	7.5	7.7	7.2	7.3	7.2	8.1	8.0	8.1	7.8	7.5	6.8	7.8	8.3
110000	7.2	7.7	7.7	7.3	7.3	7.2	8.1	8.1	8.2	7.5	7.3	6.7	7.9	8.6
120000	7.1	7.7	7.8	7.5	7.3	7.3	8.1	8.0	8.3	7.6	7.4	6.5	8.0	8.5
130000	6.9	7.6	7.9	7.4	7.3	7.4	8.1	8.1	8.2	7.6	7.3	6.3	8.0	8.5
140000	7.0	7.6	8.1	7.2	7.2	7.5	8.1	8.0	8.1	7.6	7.2	6.3	8.1	8.5
150000	6.6	7.6	8.1	7.2	7.3	7.6	8.1	8.1	7.9	7.7	6.9	6.5	8.1	8.5
160000	6.9	7.6	8.2	7.1	7.0	7.7	8.0	8.0	7.9	7.4	6.8	6.7	8.0	8.4
170000	6.6	7.6	8.1	7.1	6.9	7.9	8.0	8.0	7.8	7.2	6.5	6.8	8.0	8.4
180000	6.9	7.6	8.0	7.0	6.8	7.7	7.9	7.9	7.7	7.0	6.3	6.9	7.9	8.2
190000	6.4	7.6	8.0	7.1	6.8	7.6	7.9	7.8	7.7	6.9	6.0	6.8	7.9	8.2
200000	6.4	7.4	7.8	7.1	7.0	7.6	7.8	7.7	7.9	6.7	6.1	6.8	7.9	8.1
210000	6.7	7.2	7.7	7.1	6.8	7.6	7.9	7.7	7.9	6.9	6.0	6.9	7.8	8.4
220000	6.8	7.2	7.5	7.0	6.8	7.7	7.9	7.7	7.9	7.0	6.2	6.9	7.9	8.2
230000	6.9	7.4	7.5	7.0	6.8	7.7	8.0	7.8	7.9	7.0	6.4	7.0	7.8	8.2
Daily Max	7.3	7.7	8.2	7.5	7.3	7.9	8.1	8.1	8.3	7.9	7.5	7.0	8.1	8.6
Daily Min	6.4	6.8	7.4	7.0	6.8	6.8	7.7	7.7	7.7	6.7	6.0	6.3	6.8	7.8
Average	6.9	7.3	7.8	7.2	7.1	7.3	7.9	7.9	7.9	7.4	6.8	6.6	7.7	8.2



## **High Falls Hydroelectric Project**

### **2015 pH Monitoring Data**

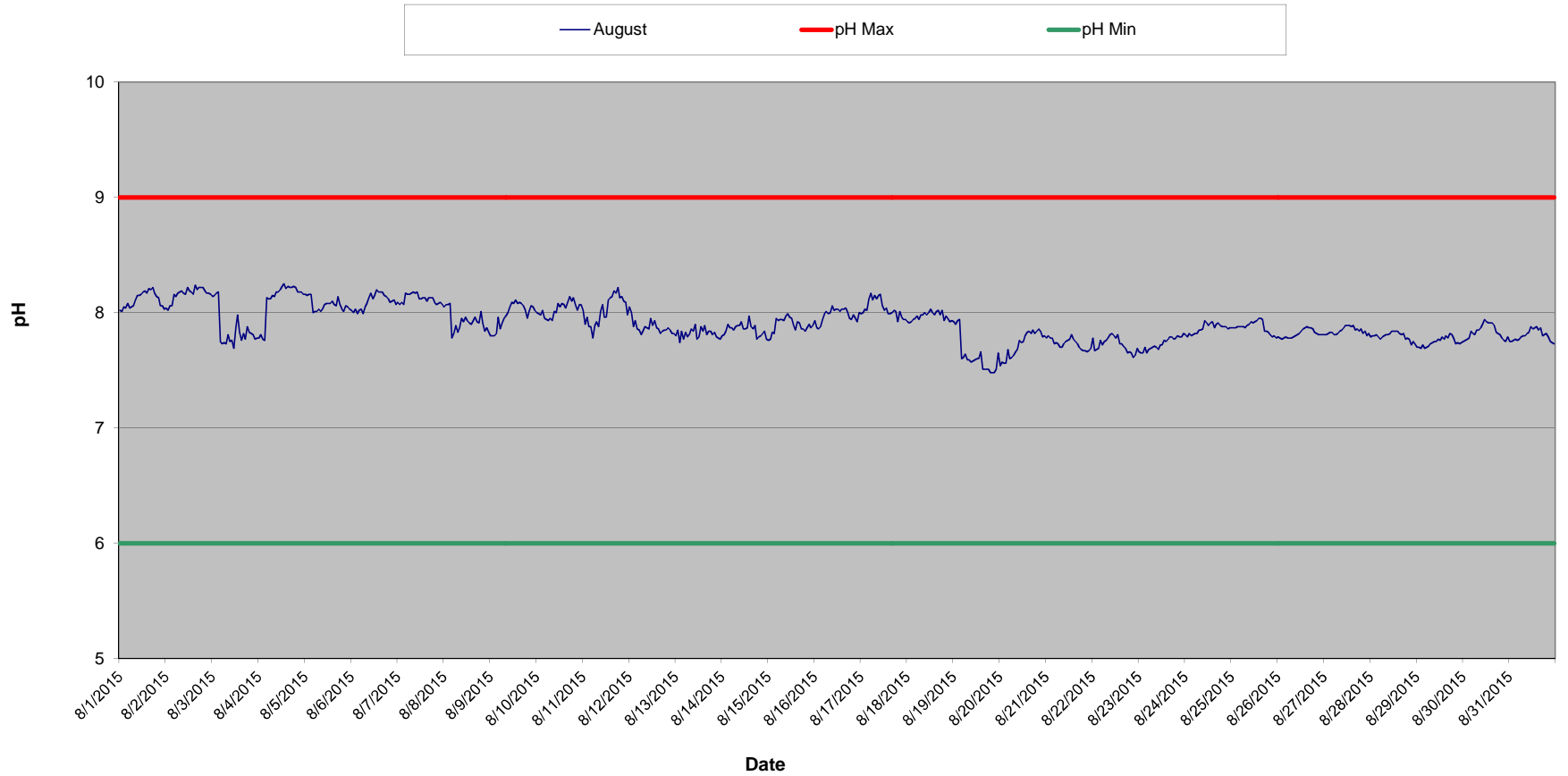
### High Falls Tailrace pH Summary - June 2015



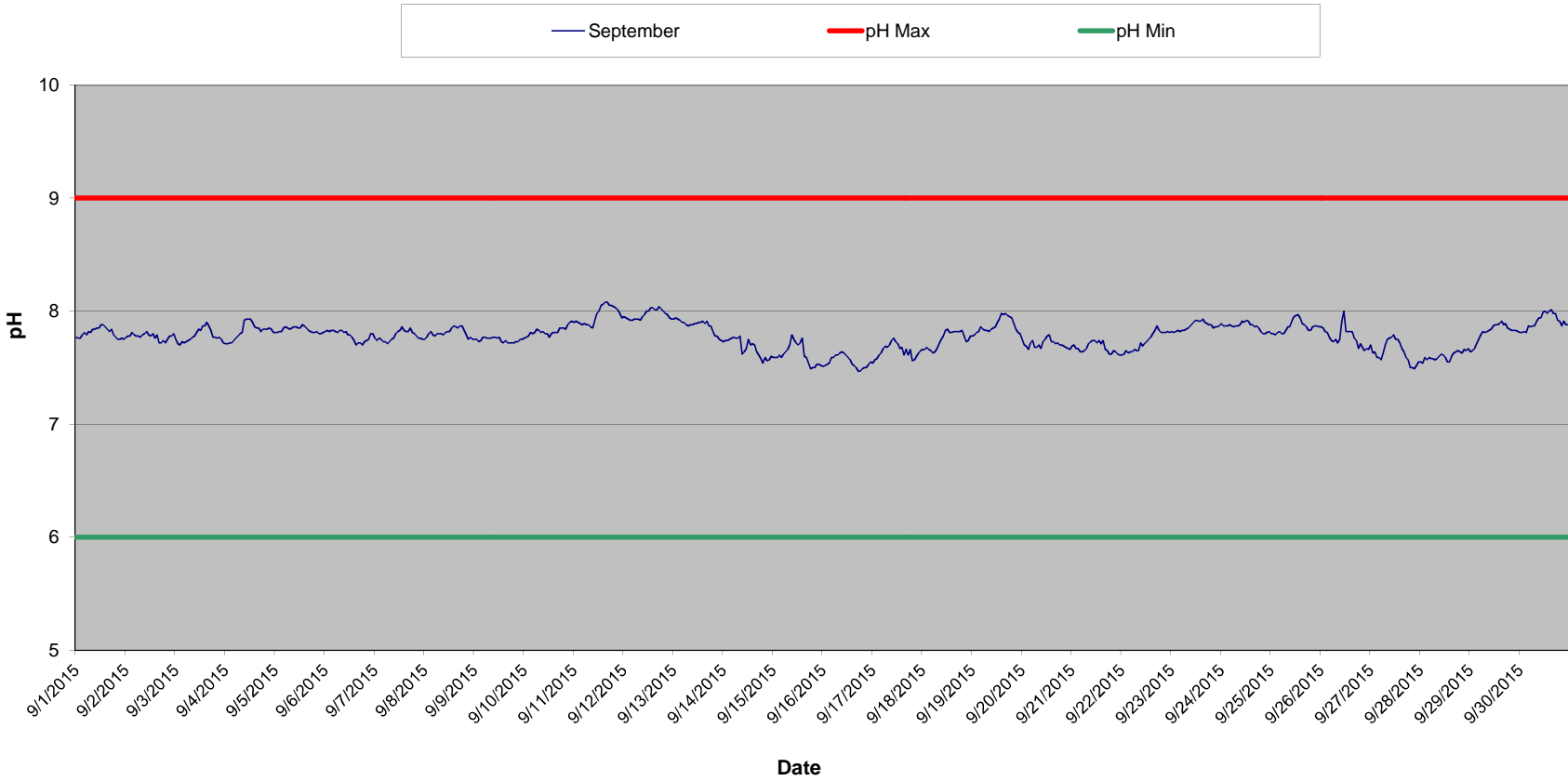
### High Falls Tailrace pH Summary - July 2015



### High Falls Tailrace pH Summary - August 2015



### High Falls Tailrace pH Summary - September 2015



High Falls Tailrace pH Summary - June 2015

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

License maximum pH: 9

License minimum pH: 6

High Falls Tailrace pH Summary - June 2015

Time HHMMSS	06/17/15	06/18/15	06/19/15	06/20/15	06/21/15	06/22/15	06/23/15	06/24/15	06/25/15	06/26/15	06/27/15	06/28/15	06/29/15	06/30/15
0	7.3	7.3	7.4	7.3	7.4	7.3	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.6
10000	7.3	7.3	7.4	7.3	7.4	7.3	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.6
20000	7.3	7.4	7.4	7.3	7.4	7.3	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.6
30000	7.3	7.4	7.4	7.4	7.4	7.3	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.7
40000	7.3	7.4	7.3	7.4	7.4	7.3	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.6
50000	7.4	7.4	7.3	7.4	7.4	7.3	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.6
60000	7.4	7.4	7.3	7.4	7.4	7.3	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.6
70000	7.4	7.4	7.3	7.4	7.4	7.3	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.6
80000	7.4	7.4	7.3	7.4	7.4	7.3	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.7
90000	7.4	7.4	7.3	7.3	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.7
100000	7.4	7.4	7.3	7.3	7.4	7.3	7.4	7.4	7.5	7.4	7.5	7.4	7.4	7.7
110000	7.4	7.4	7.3	7.3	7.4	7.3	7.5	7.4	7.4	7.4	7.4	7.4	7.4	7.7
120000	7.4	7.4	7.3	7.3	7.4	7.3	7.5	7.4	7.5	7.4	7.4	7.4	7.4	7.7
130000	7.4	7.4	7.4	7.3	7.4	7.3	7.5	7.4	7.4	7.4	7.4	7.4	7.4	7.7
140000	7.4	7.4	7.4	7.3	7.4	7.3	7.5	7.3	7.5	7.4	7.4	7.4	7.3	7.7
150000	7.4	7.5	7.4	7.3	7.4	7.3	7.5	7.4	7.5	7.4	7.4	7.4	7.3	7.7
160000	7.4	7.5	7.3	7.3	7.4	7.3	7.5	7.4	7.5	7.4	7.4	7.4	7.3	7.7
170000	7.3	7.5	7.3	7.3	7.4	7.3	7.5	7.4	7.5	7.4	7.4	7.3	7.3	7.8
180000	7.3	7.5	7.3	7.4	7.4	7.3	7.5	7.5	7.5	7.4	7.4	7.4	7.3	7.8
190000	7.3	7.5	7.3	7.4	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.3	7.7
200000	7.3	7.5	7.3	7.4	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.5	7.8
210000	7.3	7.5	7.3	7.4	7.4	7.3	7.4	7.4	7.4	7.4	7.3	7.4	7.6	7.7
220000	7.3	7.5	7.3	7.4	7.3	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.6	7.7
230000	7.3	7.4	7.3	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.6	7.7
Daily Max	7.4	7.5	7.4	7.4	7.4	7.4	7.5	7.5	7.5	7.4	7.5	7.4	7.6	7.8
Daily Min	7.3	7.3	7.3	7.3	7.3	7.3	7.4	7.3	7.4	7.4	7.3	7.3	7.3	7.6
Average	7.3	7.4	7.3	7.3	7.4	7.3	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.7

High Falls Tailrace pH Summary - July 2015

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

License maximum pH: 9

License minimum pH: 6



High Falls Tailrace pH Summary - July 2015

Time	07/17/15	07/18/15	07/19/15	07/20/15	07/21/15	07/22/15	07/23/15	07/24/15	07/25/15	07/26/15	07/27/15	07/28/15	07/29/15	07/30/15	07/31/15
HHMMSS															
0	7.5	7.6	7.6	7.6	7.6	7.5	7.5	7.5	7.7	7.8	7.8	7.8	7.9	7.9	8.1
10000	7.5	7.6	7.6	7.6	7.5	7.6	7.5	7.5	7.7	7.8	7.8	7.8	7.9	7.9	8.1
20000	7.5	7.6	7.6	7.6	7.6	7.5	7.5	7.5	7.7	7.8	7.8	7.8	7.9	7.9	8.1
30000	7.5	7.7	7.7	7.6	7.5	7.5	7.5	7.5	7.7	7.8	7.8	7.9	7.9	7.9	8.1
40000	7.5	7.7	7.6	7.7	7.6	7.4	7.5	7.5	7.9	7.8	7.8	7.9	7.8	8.1	8.0
50000	7.5	7.7	7.6	7.6	7.5	7.4	7.5	7.5	7.9	7.7	7.9	7.8	7.8	8.0	7.9
60000	7.5	7.6	7.6	7.6	7.6	7.5	7.5	7.5	7.9	7.8	7.8	7.8	7.8	8.1	7.9
70000	7.6	7.7	7.6	7.6	7.6	7.5	7.6	7.5	8.0	7.8	7.8	7.8	7.8	8.1	8.0
80000	7.6	7.7	7.6	7.6	7.6	7.5	7.5	7.5	8.0	7.8	7.8	7.8	7.8	8.1	7.9
90000	7.6	7.7	7.6	7.6	7.6	7.5	7.5	7.5	8.0	7.9	7.9	7.9	7.8	8.1	8.0
100000	7.6	7.6	7.6	7.5	7.6	7.6	7.5	7.5	8.1	7.9	7.9	7.9	7.9	8.1	8.1
110000	7.6	7.6	7.6	7.5	7.8	7.5	7.6	7.5	8.1	7.9	7.9	7.9	7.9	8.2	8.1
120000	7.6	7.6	7.6	7.6	7.7	7.5	7.6	7.4	8.0	7.9	7.9	7.9	8.0	8.2	8.1
130000	7.6	7.6	7.6	7.5	7.7	7.6	7.6	7.5	8.0	7.9	7.9	7.9	7.9	8.2	8.1
140000	7.6	7.6	7.6	7.5	7.8	7.6	7.5	7.4	8.1	7.9	7.9	7.9	7.9	8.3	8.1
150000	7.6	7.7	7.6	7.5	7.8	7.6	7.5	7.6	8.0	7.9	7.8	7.9	7.9	8.2	8.0
160000	7.6	7.6	7.6	7.6	7.8	7.6	7.5	7.8	8.0	7.9	7.9	8.0	7.8	8.2	8.1
170000	7.6	7.7	7.6	7.6	7.8	7.6	7.6	7.7	7.9	7.8	7.9	7.9	7.8	8.2	8.1
180000	7.6	7.7	7.6	7.6	7.8	7.6	7.5	7.7	7.8	7.9	7.9	7.9	7.8	8.2	8.1
190000	7.6	7.6	7.6	7.6	7.8	7.6	7.5	7.7	7.9	7.8	7.9	7.9	7.9	8.2	8.1
200000	7.6	7.6	7.6	7.7	7.7	7.5	7.5	7.7	7.8	7.8	7.8	7.9	7.9	8.2	8.1
210000	7.6	7.6	7.6	7.6	7.6	7.5	7.5	7.7	7.7	7.8	7.8	7.9	7.9	8.2	8.1
220000	7.6	7.6	7.6	7.6	7.6	7.5	7.5	7.7	7.8	7.8	7.9	7.9	7.8	8.2	8.1
230000	7.6	7.6	7.6	7.6	7.6	7.5	7.5	7.7	7.8	7.9	7.8	7.9	7.9	8.1	8.0
Daily Max	7.6	7.7	7.7	7.7	7.8	7.6	7.6	7.8	8.1	7.9	7.9	8.0	8.0	8.3	8.1
Daily Min	7.5	7.6	7.6	7.5	7.5	7.4	7.5	7.4	7.7	7.7	7.8	7.8	7.8	7.9	7.9
Average	7.6	7.6	7.6	7.6	7.7	7.5	7.5	7.6	7.9	7.8	7.8	7.9	7.9	8.1	8.0

High Falls Tailrace pH Summary - August 2015

Time	08/01/15	08/02/15	08/03/15	08/04/15	08/05/15	08/06/15	08/07/15	08/08/15	08/09/15	08/10/15	08/11/15	08/12/15	08/13/15	08/14/15	08/15/15	08/16/15
0	8.0	8.0	8.1	7.8	8.2	8.0	8.1	8.1	7.8	8.0	8.0	8.1	7.8	7.8	7.8	7.9
10000	8.0	8.0	8.2	7.8	8.2	8.0	8.1	8.1	7.8	8.0	7.9	8.0	7.9	7.8	7.8	7.9
20000	8.1	8.1	8.2	7.8	8.2	8.0	8.1	8.1	7.8	8.0	8.0	7.9	7.7	7.8	7.8	7.9
30000	8.0	8.1	8.2	7.8	8.2	8.0	8.1	8.1	7.8	8.0	7.9	7.9	7.8	7.9	7.8	7.9
40000	8.1	8.2	7.8	8.1	8.0	8.0	8.2	7.8	8.0	8.0	7.9	7.9	7.8	7.9	8.0	7.9
50000	8.0	8.1	7.7	8.1	8.0	8.0	8.2	7.8	7.9	7.9	7.8	7.9	7.8	7.9	7.9	8.0
60000	8.1	8.2	7.7	8.1	8.0	8.0	8.2	7.9	7.9	7.9	7.9	7.8	7.8	7.9	7.9	8.0
70000	8.1	8.2	7.7	8.2	8.0	8.1	8.2	7.8	8.0	8.0	7.9	7.8	7.8	7.9	7.9	8.0
80000	8.1	8.2	7.8	8.1	8.0	8.1	8.2	7.9	8.0	7.9	7.9	7.9	7.9	7.9	7.9	8.0
90000	8.2	8.2	7.8	8.2	8.0	8.1	8.2	8.0	8.0	8.0	8.0	7.9	7.8	7.9	8.0	8.1
100000	8.2	8.2	7.8	8.2	8.1	8.2	8.2	7.9	8.1	8.0	8.1	7.9	7.9	7.9	8.0	8.0
110000	8.2	8.2	7.7	8.2	8.1	8.1	8.1	8.0	8.1	8.1	8.0	8.0	7.8	7.9	8.0	8.0
120000	8.2	8.2	7.9	8.2	8.1	8.2	8.1	7.9	8.1	8.1	8.0	7.9	7.8	7.9	8.0	8.0
130000	8.2	8.2	8.0	8.3	8.1	8.2	8.1	7.9	8.1	8.1	8.1	7.9	7.9	7.9	7.9	8.0
140000	8.2	8.2	7.8	8.2	8.1	8.2	8.1	7.9	8.1	8.1	8.1	7.9	7.8	8.0	7.9	8.0
150000	8.2	8.2	7.8	8.2	8.1	8.2	8.1	7.9	8.1	8.0	8.1	7.9	7.9	7.9	7.9	8.0
160000	8.2	8.2	7.8	8.2	8.1	8.2	8.1	8.0	8.1	8.1	8.2	7.8	7.8	7.9	7.9	8.0
170000	8.2	8.2	7.8	8.2	8.1	8.2	8.1	7.9	8.1	8.1	8.2	7.8	7.8	7.9	7.9	8.0
180000	8.2	8.2	7.9	8.2	8.1	8.1	8.1	7.9	8.0	8.1	8.2	7.9	7.8	7.8	7.9	8.0
190000	8.1	8.2	7.8	8.2	8.0	8.1	8.1	8.0	8.0	8.1	8.1	7.9	7.8	7.8	7.8	7.9
200000	8.1	8.2	7.8	8.2	8.0	8.1	8.1	7.9	8.0	8.1	8.1	7.9	7.8	7.8	7.9	8.0
210000	8.1	8.2	7.8	8.2	8.1	8.1	8.1	7.8	8.1	8.0	8.1	7.9	7.8	7.8	7.9	8.0
220000	8.1	8.2	7.8	8.2	8.1	8.1	8.1	7.9	8.1	8.1	8.1	7.8	7.8	7.8	7.9	7.9
230000	8.0	8.2	7.8	8.2	8.0	8.1	8.1	7.8	8.0	8.1	8.0	7.8	7.8	7.8	7.9	8.0
Daily Max	8.2	8.2	8.2	8.3	8.2	8.2	8.2	8.1	8.1	8.1	8.2	8.1	7.9	8.0	8.0	8.1
Daily Min	8.0	8.0	7.7	7.8	8.0	8.0	8.1	7.8	7.8	7.9	7.8	7.8	7.7	7.8	7.8	7.9
Average	8.1	8.2	7.9	8.1	8.1	8.1	8.1	7.9	8.0	8.0	8.0	7.9	7.8	7.9	7.9	8.0

License maximum pH: 9

License minimum pH: 6

High Falls Tailrace pH Summary - August 2015

Time	08/17/15	08/18/15	08/19/15	08/20/15	08/21/15	08/22/15	08/23/15	08/24/15	08/25/15	08/26/15	08/27/15	08/28/15	08/29/15	08/30/15	08/31/15
HHMMSS															
0	8.0	7.9	7.9	7.5	7.8	7.8	7.7	7.8	7.9	7.8	7.8	7.8	7.7	7.8	7.8
10000	8.0	7.9	7.9	7.6	7.8	7.7	7.7	7.8	7.9	7.8	7.8	7.8	7.7	7.8	7.8
20000	8.0	7.9	7.9	7.6	7.8	7.7	7.7	7.8	7.9	7.8	7.8	7.8	7.7	7.8	7.8
30000	8.0	7.9	7.9	7.6	7.8	7.7	7.7	7.8	7.9	7.8	7.8	7.8	7.7	7.8	7.8
40000	8.1	8.0	7.6	7.7	7.7	7.8	7.7	7.8	7.9	7.8	7.8	7.8	7.7	7.8	7.8
50000	8.2	8.0	7.6	7.6	7.7	7.7	7.7	7.8	7.9	7.8	7.8	7.8	7.7	7.8	7.8
60000	8.1	7.9	7.6	7.6	7.7	7.8	7.7	7.8	7.9	7.8	7.8	7.8	7.7	7.8	7.8
70000	8.2	8.0	7.6	7.6	7.7	7.8	7.7	7.9	7.9	7.8	7.8	7.8	7.7	7.9	7.8
80000	8.1	8.0	7.6	7.7	7.7	7.8	7.7	7.9	7.9	7.8	7.8	7.8	7.7	7.9	7.8
90000	8.2	8.0	7.6	7.7	7.7	7.8	7.7	7.9	7.9	7.8	7.9	7.8	7.8	7.9	7.8
100000	8.2	8.0	7.6	7.8	7.8	7.8	7.7	7.9	7.9	7.8	7.9	7.8	7.8	7.9	7.8
110000	8.1	8.0	7.6	7.7	7.8	7.8	7.7	7.9	7.9	7.8	7.9	7.8	7.8	7.9	7.9
120000	8.0	8.0	7.6	7.8	7.8	7.8	7.7	7.9	7.9	7.8	7.9	7.8	7.8	7.9	7.9
130000	8.0	8.0	7.6	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.8	7.8	7.9	7.9
140000	8.0	8.0	7.7	7.8	7.8	7.7	7.8	7.9	8.0	7.9	7.9	7.8	7.8	7.9	7.9
150000	8.0	8.0	7.5	7.8	7.8	7.7	7.8	7.9	8.0	7.9	7.9	7.8	7.8	7.9	7.9
160000	8.0	8.0	7.5	7.8	7.7	7.7	7.8	7.9	7.9	7.9	7.9	7.8	7.8	7.9	7.9
170000	8.0	8.0	7.5	7.9	7.7	7.7	7.8	7.9	7.8	7.9	7.9	7.8	7.8	7.8	7.8
180000	8.0	8.0	7.5	7.8	7.7	7.7	7.8	7.9	7.8	7.9	7.8	7.8	7.8	7.8	7.8
190000	7.9	7.9	7.5	7.8	7.7	7.7	7.8	7.9	7.8	7.8	7.9	7.8	7.8	7.8	7.8
200000	8.0	8.0	7.5	7.9	7.7	7.7	7.8	7.9	7.8	7.8	7.8	7.8	7.7	7.8	7.8
210000	8.0	8.0	7.5	7.8	7.7	7.6	7.8	7.9	7.8	7.8	7.8	7.8	7.7	7.8	7.8
220000	7.9	7.9	7.5	7.8	7.7	7.6	7.8	7.9	7.8	7.8	7.8	7.8	7.7	7.8	7.7
230000	7.9	7.9	7.7	7.8	7.7	7.7	7.8	7.9	7.8	7.8	7.8	7.7	7.7	7.8	7.7
Daily Max	8.2	8.0	7.9	7.9	7.8	7.8	7.8	7.9	8.0	7.9	7.9	7.8	7.8	7.9	7.9
Daily Min	7.9	7.9	7.5	7.5	7.7	7.6	7.7	7.8	7.8	7.8	7.8	7.7	7.7	7.8	7.7
Average	8.0	8.0	7.6	7.7	7.7	7.7	7.7	7.9	7.9	7.8	7.8	7.8	7.7	7.8	7.8

High Falls Tailrace pH Summary - September 2015

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

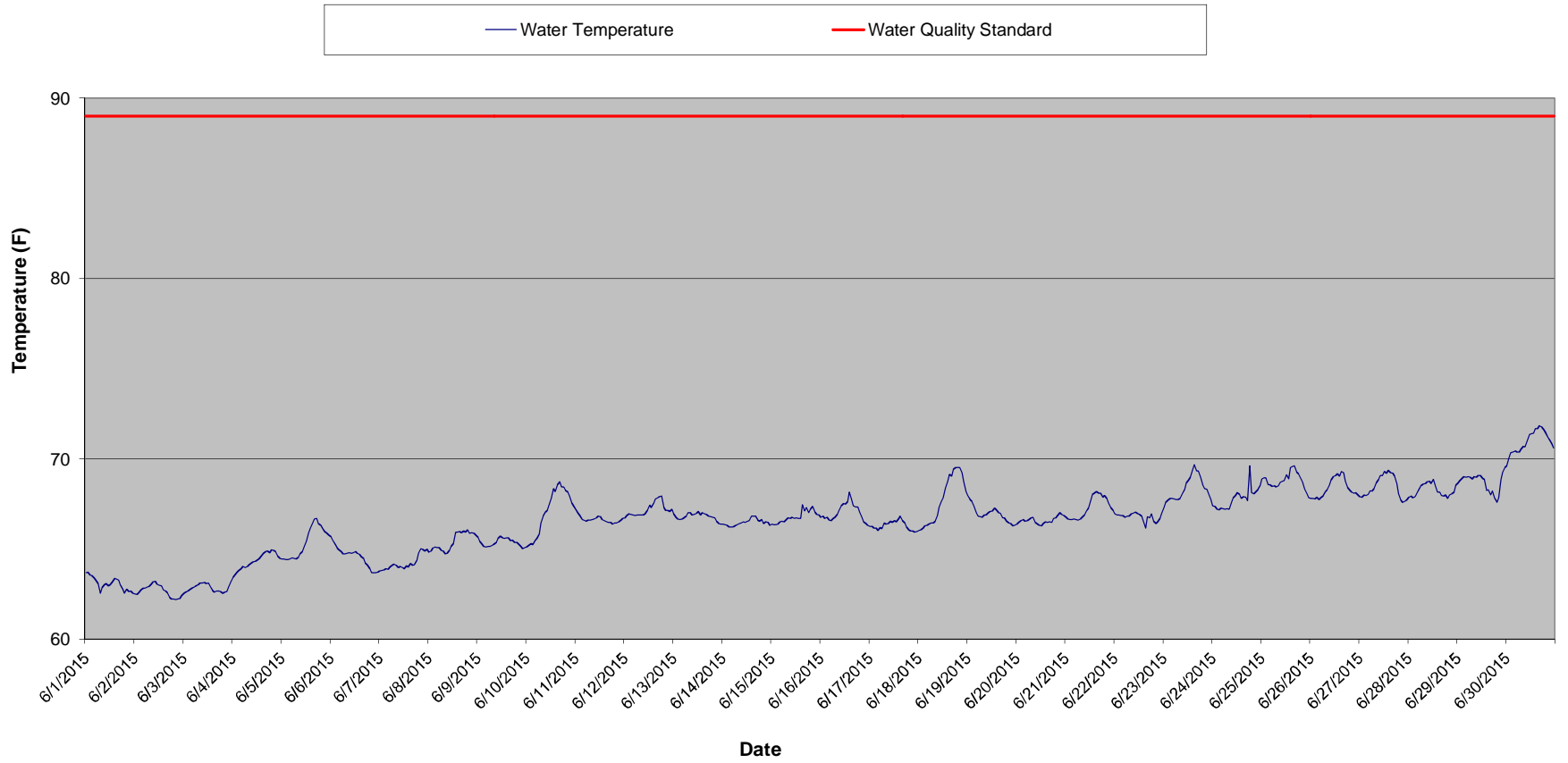
License maximum pH: 9  
 License minimum pH: 6

High Falls Tailrace pH Summary - September 2015

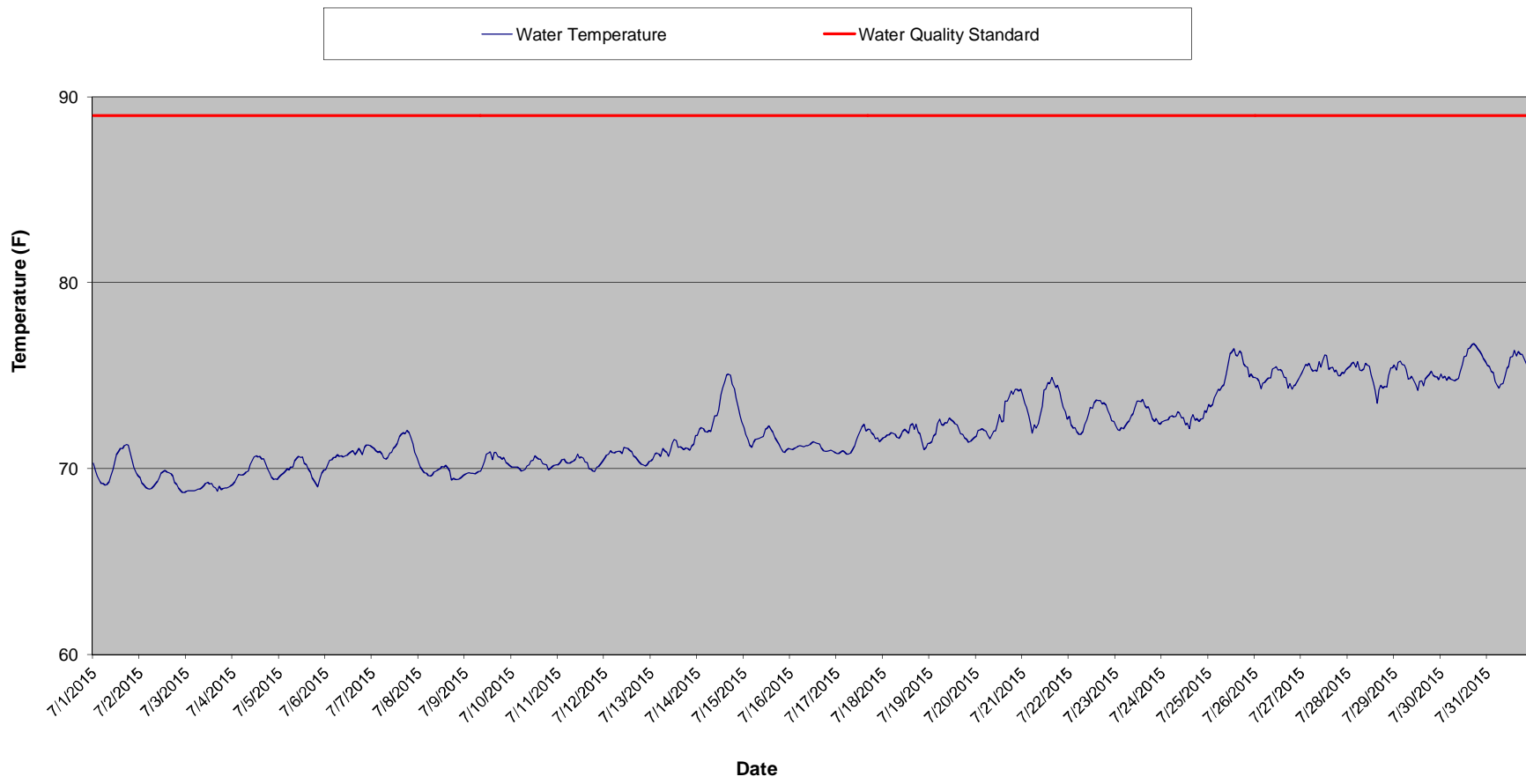
Time HHMMSS	09/17/15	09/18/15	09/19/15	09/20/15	09/21/15	09/22/15	09/23/15	09/24/15	09/25/15	09/26/15	09/27/15	09/28/15	09/29/15	09/30/15
0	7.5	7.7	7.8	7.8	7.7	7.6	7.8	7.9	7.8	7.9	7.7	7.6	7.6	7.8
10000	7.6	7.7	7.8	7.7	7.7	7.6	7.8	7.9	7.8	7.9	7.6	7.5	7.7	7.8
20000	7.6	7.7	7.8	7.7	7.7	7.7	7.8	7.9	7.8	7.8	7.6	7.6	7.7	7.8
30000	7.6	7.7	7.8	7.7	7.7	7.6	7.8	7.9	7.8	7.8	7.6	7.6	7.7	7.8
40000	7.6	7.7	7.9	7.7	7.6	7.6	7.8	7.9	7.8	7.8	7.6	7.6	7.8	7.9
50000	7.7	7.6	7.8	7.7	7.6	7.6	7.8	7.9	7.8	7.7	7.6	7.6	7.8	7.9
60000	7.7	7.6	7.8	7.7	7.7	7.7	7.8	7.9	7.8	7.7	7.6	7.6	7.8	7.9
70000	7.7	7.7	7.8	7.7	7.7	7.7	7.8	7.9	7.8	7.8	7.7	7.6	7.8	7.9
80000	7.7	7.7	7.8	7.7	7.7	7.7	7.9	7.9	7.9	7.7	7.8	7.6	7.8	7.9
90000	7.7	7.8	7.8	7.7	7.7	7.7	7.9	7.9	7.9	7.8	7.8	7.6	7.8	7.9
100000	7.8	7.8	7.9	7.7	7.7	7.7	7.9	7.9	7.9	7.9	7.8	7.6	7.8	7.9
110000	7.7	7.8	7.9	7.8	7.7	7.7	7.9	7.9	8.0	8.0	7.8	7.6	7.9	8.0
120000	7.7	7.8	7.9	7.8	7.7	7.7	7.9	7.9	8.0	7.8	7.8	7.6	7.9	8.0
130000	7.7	7.8	7.9	7.8	7.7	7.8	7.9	7.9	8.0	7.8	7.8	7.6	7.9	8.0
140000	7.7	7.8	8.0	7.7	7.7	7.8	7.9	7.9	7.9	7.8	7.7	7.6	7.9	8.0
150000	7.6	7.8	8.0	7.7	7.7	7.8	7.9	7.9	7.9	7.8	7.7	7.6	7.9	8.0
160000	7.7	7.8	8.0	7.7	7.7	7.8	7.9	7.9	7.9	7.8	7.6	7.6	7.9	8.0
170000	7.6	7.8	8.0	7.7	7.7	7.9	7.9	7.9	7.9	7.7	7.6	7.6	7.9	8.0
180000	7.7	7.8	8.0	7.7	7.6	7.8	7.9	7.9	7.8	7.7	7.6	7.7	7.9	7.9
190000	7.6	7.8	7.9	7.7	7.6	7.8	7.9	7.8	7.8	7.7	7.5	7.6	7.8	7.9
200000	7.6	7.8	7.9	7.7	7.7	7.8	7.9	7.8	7.9	7.7	7.5	7.6	7.8	7.9
210000	7.6	7.7	7.8	7.7	7.6	7.8	7.9	7.8	7.9	7.7	7.5	7.7	7.8	7.9
220000	7.6	7.7	7.8	7.7	7.6	7.8	7.9	7.8	7.9	7.7	7.5	7.7	7.8	7.9
230000	7.7	7.8	7.8	7.7	7.6	7.8	7.9	7.8	7.9	7.7	7.6	7.7	7.8	7.9
Daily Max	7.8	7.8	8.0	7.8	7.7	7.9	7.9	7.9	8.0	8.0	7.8	7.7	7.9	8.0
Daily Min	7.5	7.6	7.8	7.7	7.6	7.6	7.8	7.8	7.8	7.7	7.5	7.5	7.6	7.8
Average	7.6	7.7	7.9	7.7	7.7	7.7	7.9	7.9	7.9	7.8	7.6	7.6	7.8	7.9

**High Falls Hydroelectric Project**  
**2015 Temperature Monitoring Data**

### High Falls Tailrace Water Temperature - June 2015

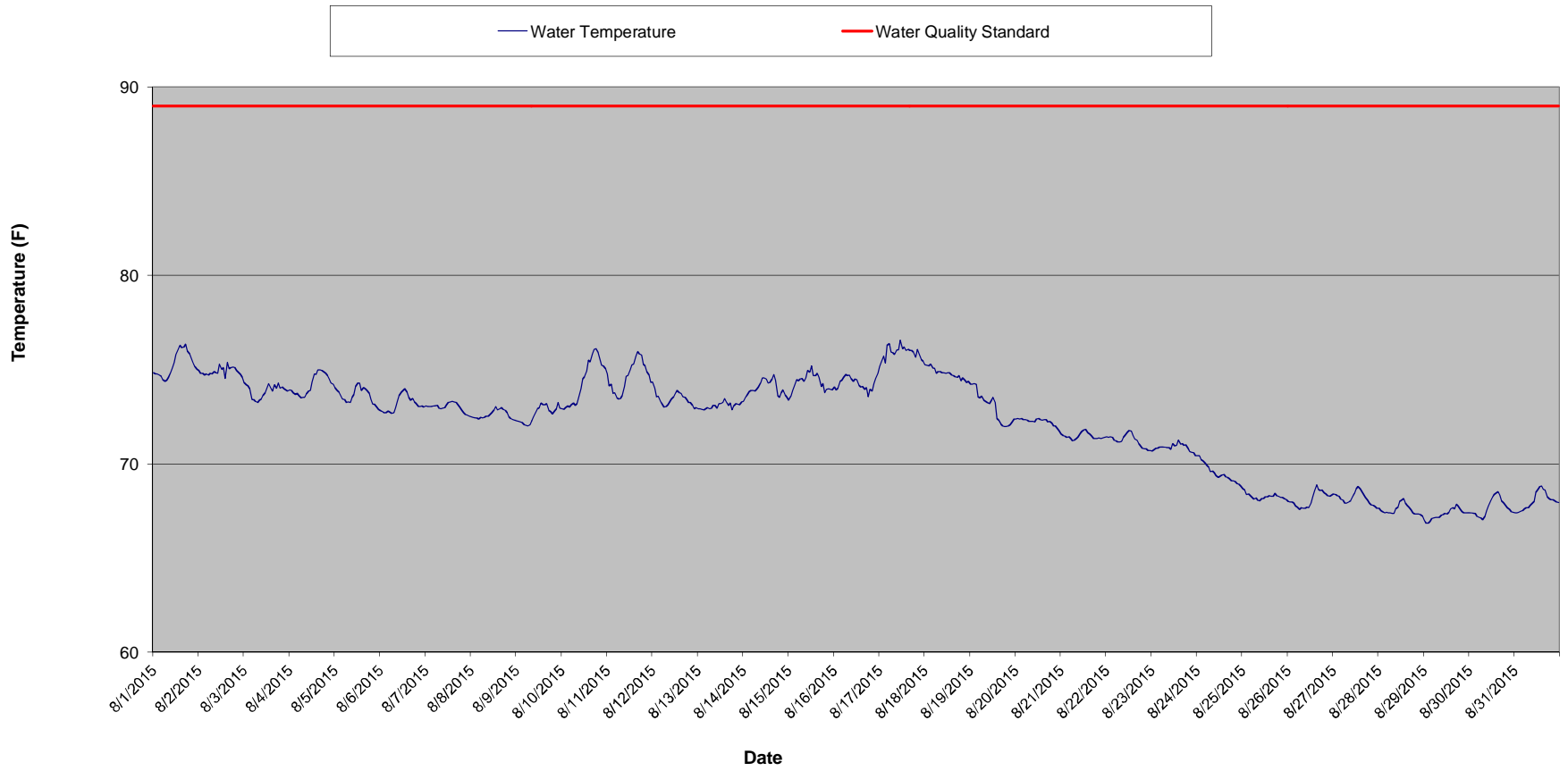


### High Falls Tailrace Water Temperature - July 2015

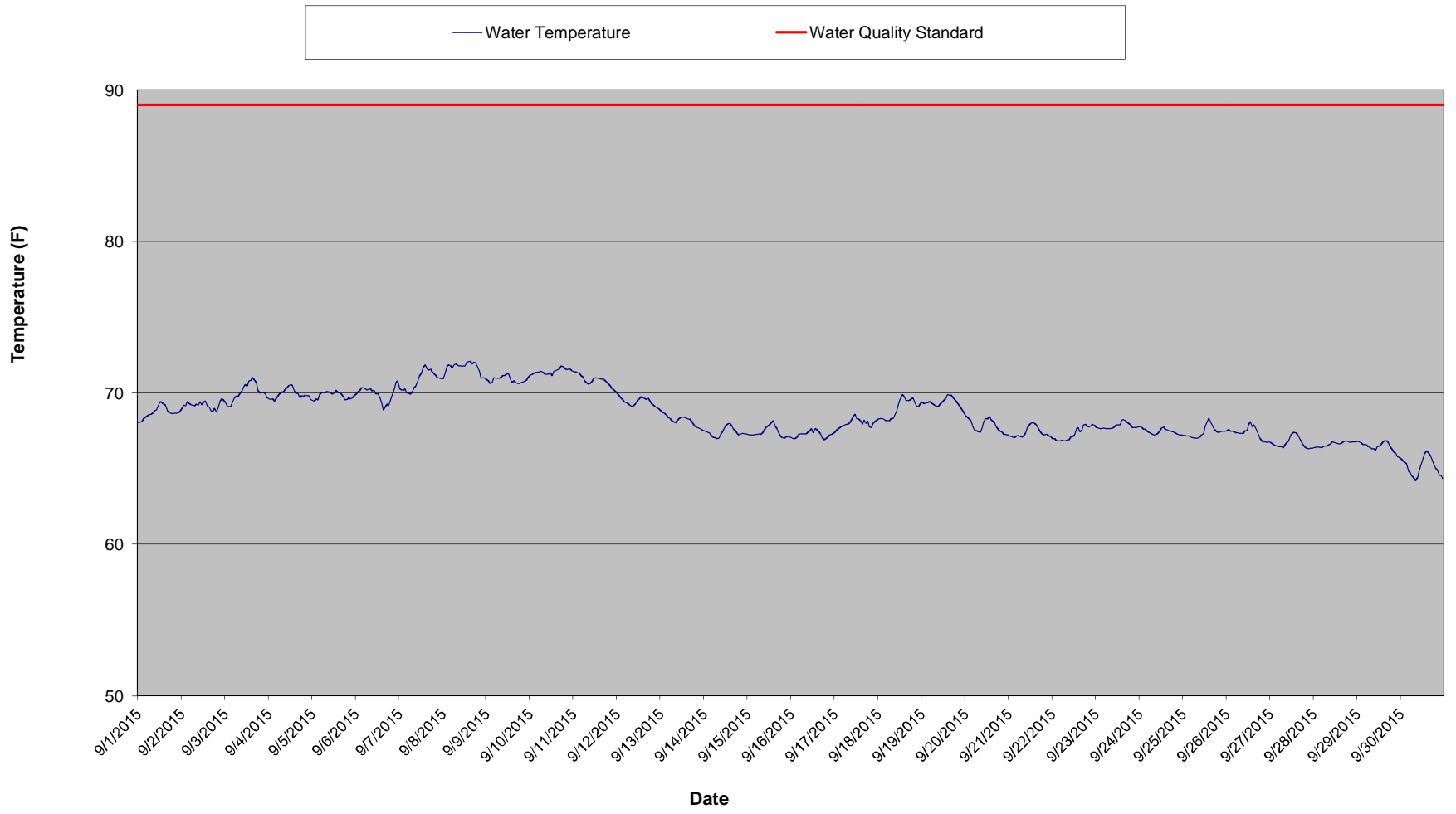




### High Falls Tailrace Water Temperature - August 2015



### High Falls Tailrace Water Temperature - September 2015



High Falls Tailrace Temperature Summary - June 2015

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

Monthly average Temp: 67  
 License Maximum Temperature: 89 F

High Falls Tailrace Temperature Summary - June 2015

Time HHMMSS	06/17/15	06/18/15	06/19/15	06/20/15	06/21/15	06/22/15	06/23/15	06/24/15	06/25/15	06/26/15	06/27/15	06/28/15	06/29/15	06/30/15
0	66	66	68	66	67	67	67	67	69	68	68	68	69	70
10000	66	66	68	66	67	67	68	67	69	68	68	68	69	70
20000	66	66	68	67	67	67	68	67	69	68	68	68	69	70
30000	66	66	67	67	67	67	68	67	69	68	68	68	69	70
40000	66	66	67	67	67	67	68	67	69	68	68	68	69	70
50000	66	66	67	67	67	67	68	67	68	68	68	68	69	70
60000	66	66	67	67	67	67	68	67	69	68	68	69	69	70
70000	66	66	67	67	67	67	68	67	68	68	68	69	69	71
80000	66	67	67	67	67	67	68	67	68	68	69	69	69	71
90000	66	67	67	66	67	67	68	68	69	69	69	69	69	71
100000	67	67	67	66	67	67	68	68	69	69	69	69	69	71
110000	66	68	67	66	67	67	69	68	69	69	69	69	69	71
120000	67	68	67	66	68	67	69	68	69	69	69	69	69	71
130000	67	68	67	66	68	67	69	68	69	69	69	69	69	71
140000	67	69	67	66	68	67	69	68	70	69	69	68	68	72
150000	67	69	67	66	68	66	70	68	70	69	69	68	68	72
160000	67	69	67	67	68	67	69	68	70	69	69	68	68	72
170000	66	69	67	66	68	67	69	68	69	69	69	68	68	72
180000	66	70	67	67	68	67	69	70	69	68	69	68	68	72
190000	66	70	67	67	68	67	69	68	69	68	68	68	68	71
200000	66	70	66	67	68	66	68	68	69	68	68	68	68	71
210000	66	69	66	67	68	67	68	68	68	68	68	68	69	71
220000	66	69	66	67	67	67	68	68	68	68	68	68	69	71
230000	66	68	66	67	67	67	68	69	68	68	68	69	70	71
Daily Max	67	70	68	67	68	67	70	70	70	69	69	69	70	72
Daily Min	66	66	66	66	67	66	67	67	68	68	68	68	68	70
Average	66	68	67	67	67	67	68	68	69	68	68	68	69	71

High Falls Tailrace Temperature Summary - July 2015

Time HHMMSS	07/01/15	07/02/15	07/03/15	07/04/15	07/05/15	07/06/15	07/07/15	07/08/15	07/09/15	07/10/15	07/11/15	07/12/15	07/13/15	07/14/15	07/15/15	07/16/15
0	70	69	69	69	70	70	71	70	70	70	70	71	70	72	72	71
10000	70	69	69	69	70	70	71	70	70	70	70	71	71	72	72	71
20000	70	69	69	69	70	70	71	70	70	70	70	71	71	72	72	71
30000	69	69	69	70	70	70	71	70	70	70	71	71	71	72	71	71
40000	69	69	69	70	70	71	71	70	70	70	70	71	71	72	71	71
50000	69	69	69	70	70	71	71	70	70	70	70	71	71	72	71	71
60000	69	69	69	70	70	71	71	70	70	70	70	71	71	72	72	71
70000	69	69	69	70	70	71	70	70	70	70	70	71	71	72	72	71
80000	69	69	69	70	70	71	71	70	70	70	70	71	71	72	72	71
90000	70	69	69	70	71	71	71	70	70	70	71	71	71	73	72	71
100000	70	69	69	70	71	71	71	70	70	70	71	71	71	73	72	71
110000	70	70	69	71	71	71	71	70	71	70	71	71	71	73	72	71
120000	71	70	69	71	71	71	71	70	71	71	71	71	72	74	72	71
130000	71	70	69	71	70	71	71	70	71	71	71	71	71	74	72	71
140000	71	70	69	71	70	71	72	70	70	70	70	71	71	75	72	71
150000	71	70	69	70	70	71	72	70	71	71	70	71	71	75	72	71
160000	71	70	69	71	70	71	72	70	71	70	70	71	71	75	72	71
170000	71	70	69	70	70	71	72	69	71	70	70	70	71	75	72	71
180000	71	69	69	70	69	71	72	69	71	70	70	70	71	75	71	71
190000	71	69	69	70	69	71	72	69	71	70	70	70	71	74	71	71
200000	70	69	69	70	69	71	72	69	71	70	70	70	71	74	71	71
210000	70	69	69	69	69	71	71	69	70	70	70	70	71	73	71	71
220000	70	69	69	69	70	71	71	70	70	70	70	70	71	73	71	71
230000	70	69	69	69	70	71	71	70	70	70	70	70	72	73	71	71
Daily Max	71	70	69	71	71	71	72	70	71	71	71	71	72	75	72	71
Daily Min	69	69	69	69	69	70	70	69	70	70	70	70	70	72	71	71
Average	70	69	69	70	70	71	71	70	70	70	70	71	71	73	72	71

Monthly Average Temp: 72  
 License Maximum Temperature: 89 F

High Falls Tailrace Temperature Summary - July 2015

Time HHMMSS	07/17/15	07/18/15	07/19/15	07/20/15	07/21/15	07/22/15	07/23/15	07/24/15	07/25/15	07/26/15	07/27/15	07/28/15	07/29/15	07/30/15	07/31/15
0	71	72	71	72	74	73	72	73	73	75	75	75	76	75	76
10000	71	72	71	72	74	72	72	73	73	75	75	75	75	75	75
20000	71	72	72	72	73	72	72	73	73	75	76	76	76	75	75
30000	71	72	72	72	73	72	72	73	74	74	76	76	76	75	75
40000	71	72	72	72	72	72	72	73	74	75	76	75	76	75	75
50000	71	72	73	72	72	72	72	73	74	75	75	76	76	75	74
60000	71	72	72	72	72	72	72	73	74	75	75	75	75	75	74
70000	71	72	72	72	72	72	73	73	74	75	75	75	75	75	75
80000	71	72	72	72	72	72	73	73	75	75	75	75	75	75	75
90000	71	72	72	72	73	73	73	73	75	75	76	76	75	75	75
100000	72	72	73	72	73	73	73	73	76	75	75	76	75	75	75
110000	72	72	73	72	74	73	74	73	76	75	76	76	75	76	76
120000	72	72	73	73	74	73	74	72	76	75	76	75	74	76	76
130000	72	72	72	73	75	74	74	72	76	75	76	75	75	76	76
140000	72	72	72	73	75	74	74	72	76	75	75	74	75	76	76
150000	72	72	72	74	75	74	73	73	76	75	75	74	74	76	76
160000	72	72	72	74	75	74	73	73	76	75	75	74	75	77	76
170000	72	72	72	74	74	73	73	73	76	74	75	74	75	77	76
180000	72	72	72	74	74	74	73	73	76	75	75	74	75	77	76
190000	72	72	72	74	74	73	73	73	76	74	75	74	75	76	76
200000	72	71	71	74	74	73	73	73	75	74	75	74	75	76	76
210000	72	71	71	74	73	73	73	73	75	74	75	75	75	76	75
220000	71	71	72	74	73	73	72	73	75	75	75	75	75	76	75
230000	72	71	72	74	73	73	72	73	75	75	75	75	75	76	75
Daily Max	72	72	73	74	75	74	74	73	76	75	76	76	76	77	76
Daily Min	71	71	71	72	72	72	72	72	73	74	75	74	74	75	74
Average	71	72	72	73	73	73	73	73	75	75	75	75	75	76	75

High Falls Tailrace Temperature Summary - August 2015

Time HHMMSS	08/01/15	08/02/15	08/03/15	08/04/15	08/05/15	08/06/15	08/07/15	08/08/15	08/09/15	08/10/15	08/11/15	08/12/15	08/13/15	08/14/15	08/15/15	08/16/15
0	75	75	74	74	74	73	73	72	72	73	75	74	73	73	73	74
10000	75	75	74	74	74	73	73	72	72	73	74	74	73	73	74	74
20000	75	75	74	74	74	73	73	72	72	73	74	74	73	74	74	74
30000	75	75	74	74	74	73	73	72	72	73	74	74	73	74	74	74
40000	75	75	73	74	73	73	73	72	72	73	74	73	73	74	74	74
50000	74	75	73	74	73	73	73	72	72	73	73	73	73	74	74	75
60000	74	75	73	74	73	73	73	72	72	73	73	73	73	74	75	75
70000	74	75	73	74	73	73	73	72	72	73	73	73	73	74	75	75
80000	75	75	73	74	73	73	73	73	72	73	74	73	73	74	74	75
90000	75	75	73	74	74	73	73	73	73	74	74	73	73	74	75	75
100000	75	75	74	74	74	74	73	73	73	74	75	73	73	75	75	74
110000	75	75	74	74	74	74	73	73	73	74	75	74	73	75	75	75
120000	76	75	74	74	74	74	73	73	73	75	75	74	73	75	75	74
130000	76	75	74	75	74	74	73	73	73	75	75	74	73	74	75	74
140000	76	75	74	75	74	74	73	73	73	76	75	74	73	74	75	74
150000	76	75	74	75	74	74	73	73	73	75	76	74	73	74	75	74
160000	76	75	74	75	74	73	73	73	73	76	76	74	73	75	75	74
170000	76	75	74	75	74	73	73	73	73	76	76	74	73	74	74	74
180000	76	75	74	75	74	73	73	73	73	76	76	73	73	74	74	74
190000	76	75	74	75	73	73	73	73	73	76	75	73	73	74	74	74
200000	76	75	74	75	73	73	73	73	73	76	75	73	73	74	74	74
210000	75	75	74	74	73	73	73	72	73	75	75	73	73	74	74	74
220000	75	75	74	74	73	73	73	72	73	75	75	73	73	74	74	75
230000	75	75	74	74	73	73	73	72	73	75	74	73	73	74	74	75
Daily Max	76	75	74	75	74	74	73	73	73	76	76	74	73	75	75	75
Daily Min	74	75	73	74	73	73	73	72	72	73	73	73	73	73	73	74
Average	75	75	74	74	74	73	73	73	73	74	75	73	73	74	74	74

Monthly Average Temp: 72  
 License Maximum Temperature: 89 F

High Falls Tailrace Temperature Summary - August 2015

Time HHMMSS	08/17/15	08/18/15	08/19/15	08/20/15	08/21/15	08/22/15	08/23/15	08/24/15	08/25/15	08/26/15	08/27/15	08/28/15	08/29/15	08/30/15	08/31/15
0	75	75	74	72	72	71	71	70	69	68	68	68	67	67	67
10000	75	75	74	72	71	71	71	70	69	68	68	68	67	67	67
20000	76	75	74	72	71	71	71	70	68	68	68	67	67	67	67
30000	75	75	74	72	71	71	71	70	68	68	68	67	67	67	67
40000	76	75	74	72	71	71	71	70	68	68	68	67	67	67	68
50000	76	75	73	72	71	71	71	70	68	68	68	67	67	67	68
60000	76	75	74	72	71	71	71	70	68	68	68	67	67	67	68
70000	76	75	73	72	71	71	71	70	68	68	68	67	67	67	68
80000	76	75	73	72	71	71	71	70	68	68	68	67	67	67	68
90000	76	75	73	72	71	71	71	70	68	68	68	68	67	68	68
100000	76	75	73	72	72	72	71	69	68	68	68	68	67	68	68
110000	77	75	73	72	72	72	71	69	68	68	68	68	67	68	68
120000	76	75	74	72	72	72	71	69	68	68	69	68	67	68	69
130000	76	75	73	72	72	72	71	69	68	68	69	68	67	68	69
140000	76	75	72	72	72	72	71	69	68	69	69	68	68	68	69
150000	76	75	72	72	72	71	71	69	68	69	69	68	68	69	69
160000	76	75	72	72	71	71	71	69	68	69	68	68	68	68	69
170000	76	75	72	72	71	71	71	69	68	69	68	68	68	68	68
180000	76	75	72	72	71	71	71	69	68	69	68	67	68	68	68
190000	76	74	72	72	71	71	71	69	68	68	68	67	68	68	68
200000	76	75	72	72	71	71	71	69	68	68	68	67	67	68	68
210000	76	74	72	72	71	71	71	69	68	68	68	67	67	68	68
220000	76	74	72	72	71	71	71	69	68	68	68	67	67	67	68
230000	75	74	72	72	71	71	70	69	68	68	68	67	67	67	68
Daily Max	77	75	74	72	72	72	71	70	69	69	69	68	68	69	69
Daily Min	75	74	72	72	71	71	70	69	68	68	68	67	67	67	67
Average	76	75	73	72	71	71	71	70	68	68	68	68	67	68	68



High Falls Tailrace Temperature Summary - September 2015

Time HHMMSS	09/01/15	09/02/15	09/03/15	09/04/15	09/05/15	09/06/15	09/07/15	09/08/15	09/09/15	09/10/15	09/11/15	09/12/15	09/13/15	09/14/15	09/15/15	09/16/15
0	68	69	69	70	69	70	70	71	71	71	71	70	69	67	67	67
10000	68	69	69	70	69	70	70	71	71	71	71	70	69	67	67	67
20000	68	69	69	70	70	70	70	72	71	71	71	70	69	67	67	67
30000	68	69	69	69	70	70	70	72	71	71	71	70	69	67	67	67
40000	68	69	69	70	70	70	70	72	71	71	71	69	68	67	67	67
50000	68	69	70	70	70	70	70	72	71	71	71	69	68	67	67	67
60000	69	69	70	70	70	70	70	72	71	71	71	69	68	67	67	67
70000	69	69	70	70	70	70	70	72	71	71	71	69	68	67	67	67
80000	69	69	70	70	70	70	70	72	71	71	71	69	68	67	67	67
90000	69	69	70	70	70	70	70	72	71	71	71	69	68	67	68	67
100000	69	69	70	70	70	70	71	72	71	71	71	69	68	67	68	68
110000	69	69	71	70	70	70	71	72	71	71	71	69	68	68	68	68
120000	69	69	70	71	70	70	71	72	71	71	71	70	68	68	68	67
130000	69	69	71	70	70	70	72	72	71	71	71	70	68	68	68	68
140000	69	69	71	70	70	69	72	72	71	71	71	70	68	68	68	68
150000	69	69	71	70	70	69	72	72	71	72	71	70	68	68	68	67
160000	69	69	71	70	70	69	71	72	71	72	71	70	68	68	68	67
170000	69	69	71	70	70	69	72	72	71	72	71	70	68	67	67	67
180000	69	69	70	70	70	69	71	72	71	72	71	69	68	67	67	67
190000	69	69	70	70	70	70	71	72	71	72	71	69	68	67	67	67
200000	69	69	70	70	70	70	71	71	71	72	70	69	68	67	67	67
210000	69	69	70	70	70	70	71	71	71	72	70	69	68	67	67	67
220000	69	70	70	70	70	71	71	71	71	72	70	69	68	67	67	67
230000	69	70	70	70	70	71	71	71	71	71	70	69	68	67	67	67
Daily Max	69	70	71	71	70	71	72	72	71	72	71	70	69	68	68	68
Daily Min	68	69	69	69	69	69	70	71	71	71	70	69	68	67	67	67
Average	69	69	70	70	70	70	71	72	71	71	71	69	68	67	67	67
Monthly Average Temp:				69												
License Maximum Temperature:				89 F												

High Falls Tailrace Temperature Summary - September 2015

Time HHMMSS	09/17/15	09/18/15	09/19/15	09/20/15	09/21/15	09/22/15	09/23/15	09/24/15	09/25/15	09/26/15	09/27/15	09/28/15	09/29/15	09/30/15
0	67	68	69	68	67	67	68	68	67	68	67	66	67	66
10000	68	68	69	68	67	67	68	68	67	68	67	66	67	66
20000	68	68	69	68	67	67	68	68	67	67	67	66	67	65
30000	68	68	69	68	67	67	68	68	67	67	67	66	67	65
40000	68	68	69	68	67	67	68	67	67	67	66	66	67	65
50000	68	68	69	68	67	67	68	67	67	67	66	66	67	65
60000	68	68	69	67	67	67	68	67	67	67	66	66	66	65
70000	68	68	69	67	67	67	68	67	67	67	66	66	66	64
80000	68	68	69	67	67	67	68	67	67	67	67	67	66	64
90000	68	69	69	68	67	67	68	67	67	67	67	67	66	64
100000	68	69	69	68	68	67	68	67	67	67	67	67	66	65
110000	69	69	69	68	68	67	68	67	67	68	67	67	66	65
120000	68	70	69	68	68	67	68	68	68	68	67	67	66	66
130000	68	70	70	68	68	68	68	68	68	68	67	67	67	66
140000	68	70	70	68	68	68	68	68	68	68	67	67	67	66
150000	68	70	70	68	68	67	68	68	68	68	67	67	67	66
160000	68	69	70	68	68	68	68	67	68	68	67	67	67	66
170000	68	70	70	68	67	68	68	67	68	67	67	67	67	66
180000	68	70	70	68	67	68	68	67	67	67	67	67	66	65
190000	68	70	69	67	67	68	68	67	67	67	66	67	66	65
200000	68	69	69	67	67	68	68	67	67	67	66	67	66	65
210000	68	69	69	67	67	68	68	67	67	67	66	67	66	65
220000	68	69	69	67	67	68	68	67	67	67	66	67	66	65
230000	68	69	69	67	67	68	68	67	67	67	66	67	66	64
Daily Max	69	70	70	68	68	68	68	68	68	68	67	67	67	66
Daily Min	67	68	69	67	67	67	68	67	67	67	66	66	66	64
Average	68	69	69	68	67	67	68	67	67	67	67	67	66	65

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



**Wisconsin Public Service Corporation**

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October 16, 2015

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 - 2015 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 2015 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 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 5 years in conjunction with water quality monitoring conducted at the Caldron Falls Hydroelectric Project. Upstream monitoring is scheduled to occur 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

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Ms. Laatsch and Mr, Utrup  
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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 2015 monitoring season. 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, feel free to call me at (920) 433-1833.

Sincerely,

A handwritten signature in black ink that reads "Mark Metcalf". The signature is written in a cursive, flowing style.

Mark Metcalf  
Environmental Consultant – Air & Water

Enc. – 2015 Water Quality Monitoring Data

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

## **Metcalf, Mark W**

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**From:** Laatsch, Cheryl - DNR <Cheryl.Laatsch@wisconsin.gov>  
**Sent:** Wednesday, November 04, 2015 2:31 PM  
**To:** Metcalf, Mark W  
**Subject:** FW: High Falls - 2015 water quality monitoring report

See below.

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**Cheryl Laatsch**

Phone: 920-387-7869

[Cheryl.laatsch@wisconsin.gov](mailto:Cheryl.laatsch@wisconsin.gov)

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**From:** Hudak, Andrew J - DNR  
**Sent:** Tuesday, November 03, 2015 6:45 PM  
**To:** Laatsch, Cheryl - DNR  
**Subject:** RE: High Falls - 2015 water quality monitoring report

Cheryl- Sorry for the short comment on this one.

The report indicates that WPS conducted and completed their Water Quality monitoring requirements below High Falls hydroelectric project according to their license agreement. Based on the review and summary of the data provided, no exceedances of WQ were observed or documented at this facility and I do not have any questions or concerns over the data that has been provided. It is good to see that water quality conditions remain stable and meet our standards below this project throughout the most stressful months of the year for aquatic life in the Peshtigo River.

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**Andrew Hudak**

Phone: (920) 662-5117

[Andrew.hudak@wisconsin.gov](mailto:Andrew.hudak@wisconsin.gov)

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**From:** Laatsch, Cheryl - DNR  
**Sent:** Friday, October 16, 2015 12:58 PM  
**To:** McLennan, Robin - DNR; Hudak, Andrew J - DNR  
**Subject:** FW: High Falls - 2015 water quality monitoring report

Needs review and comment. Please respond by Oct 31.

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**Cheryl Laatsch**

Phone: 920-387-7869

[Cheryl.laatsch@wisconsin.gov](mailto:Cheryl.laatsch@wisconsin.gov)

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**From:** Metcalf, Mark W [<mailto:MWMetcalf@integrysgroup.com>]  
**Sent:** Friday, October 16, 2015 12:05 PM  
**To:** Laatsch, Cheryl - DNR; Utrup, Nick  
**Cc:** Hudak, Andrew J - DNR; Brandt, Edward S; Bosacki, William K  
**Subject:** High Falls - 2015 water quality monitoring report

Good afternoon Cheryl and Nick,

Per the water quality monitoring plan for the High Falls Hydroelectric Project, Wisconsin Public Service Corporation (WPSC) is providing water quality monitoring data collected during the 2015 monitoring season for your review and comment. There were no deviations from water quality standards during the monitoring season. If you have any questions regarding the monitoring data, please feel free to contact me.

Thanks,  
Mark

**Mark Metcalf**  
Environmental Consultant – Air & Water  
office: 920-433-1833  
mobile: 920-606-8432

**Response to Comments from the U.S. Fish and Wildlife Service on the 2015 Water Quality Monitoring Report for the High Falls Hydroelectric Project:**

The U.S. Fish and Wildlife Service did not provide comments on the 2015 water quality monitoring report.



**Response to Comments from the Wisconsin Department of Natural Resources on the 2015 Water Quality Monitoring Report for the High Falls Hydroelectric Project:**

Comment: “The report indicates that WPS conducted and completed their Water Quality monitoring requirements below High Falls hydroelectric project according to their license agreement. Based on the review and summary of the data provided, no exceedances of WQ were observed or documented at this facility and I do not have any questions or concerns over the data that has been provided. It is good to see that water quality conditions remain stable and meet our standards below this project throughout the most stressful months of the year for aquatic life in the Peshtigo River.”

Response: Comment Noted.

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