



Wisconsin Public Service Corporation
Hydro Operations
1111 Mira Ave.
Crivitz, WI 54114
www.wisconsinpublicservice.com

January 12, 2022

Electronically Filed

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

Dear Ms. Bose:

Subject: Peshtigo River Hydroelectric Projects – 2021 Water Quality Monitoring Report

<u>Hydro</u>	<u>FERC Project No.</u>	<u>NATDAM No.</u>	<u>License Article</u>
Caldron Falls	2525	WI00759	409
High Falls	2595	WI00754	406
Johnson Falls	2522	WI00785	407
Sandstone Rapids	2546	WI00760	408
Potato Rapids	2560	WI00757	406
Peshtigo	2581	WI00756	405

Pursuant to the water quality monitoring plans for the Wisconsin Public Service (WPS) Hydroelectric facilities along the Peshtigo River, WPS is submitting water quality monitoring data collected during the 2021 monitoring season.

Monitoring for dissolved oxygen (DO), temperature, and pH was conducted continuously on an hourly basis from June 1 through September 30. The water quality monitoring plan requirements at all facilities except Johnson Falls are as follows:

Ensure flow releases from the project, as measured immediately downstream from the dam and maintain the following standards, except when natural conditions prohibit attainment of the standards:

- (1) Dissolved Oxygen concentrations shall not be less than 5.0 milligrams per liter (mg/L) (minus the precision of the monitoring equipment) for more than 24 hours per year;
- (2) Water temperature shall not exceed 89 degrees Fahrenheit (°F), and;
- (3) The pH shall be within the range of 6.0 to 9.0 standard units (s.u.), with no change greater than 0.5 units outside the natural seasonal maximum and minimum.

Natural conditions include inflows to the project less than the 95 percent exceedances flow.

January 12, 2022

Page 2 of 6

At the Johnson Falls Hydroelectric Project, the water quality monitoring plan requirements are as follows:

Ensure flow releases from the project, as measured immediately downstream from the dam and maintain the following standards, except when natural conditions prohibit attainment of the standards:

- (1) DO concentrations shall not be less than 6.0 milligrams per liter (mg/L) at any time or 7.0 mg/L during the spawning season (minus the precision of the monitoring equipment) for more than 24 hours per year;
- (2) Water temperature shall not be altered from natural background to the extent that trout populations are adversely affected, 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.

During the 2021 monitoring season, data was collected using portable water quality monitoring equipment manufactured by YSI, Inc. As described in the water quality monitoring plans for the projects, the instrumentation was cleaned and calibrated according to manufacturer specification every 14 days during the monitoring period. A post deployment calibration of the DO sensor 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 DO has an accuracy of +/- 0.1 mg/l, per the manufacturer. For compliance purposes, DO concentrations more than 0.1 mg/l below the applicable water quality standard are potential deviations. The following is a summary of the results for the 2021 monitoring season:

Caldron Falls

Water quality monitoring at Caldron Falls was conducted at the following locations:

- Upstream monitoring shall consist of bi-monthly DO, temperature, and pH profiles of the Caldron Falls Reservoir. Readings were taken at 0.5 meter intervals just above the dam near the powerhouse intake.
- Monitoring downstream of the Project shall occur approximately 770' downstream of the powerhouse in a location that is unaffected by changes in water elevation due to fluctuations in release flow volumes (NW ¼ of NE ¼, T33N, R18E, Section 10, approximately at 88° 13' 39.9"N, 45° 21' 25.7"W).

Vertical profiles conducted near the powerhouse intake showed that the reservoir exhibited characteristics of stratification from mid-June through the end of August. Profile data from September 7, 2021 indicates the reservoir was no longer stratified.

No deviations from the DO, pH or temperature standards were observed at the downstream monitoring location. The lowest DO concentration observed during the monitoring season was 5.4 mg/l, pH values ranged between 7.5 s.u. and 8.4 s.u., and water temperatures were less than 77°F. Please note that

January 12, 2022

Page 3 of 6

historical monitoring data indicated periods of low DO levels typically occur between July 15 and September 1. Therefore, in accordance with the Water Quality Monitoring Plan, on an annual basis WPS releases a minimum flow of 56 CFS out of a sluice gate to mitigate low DO concentrations downstream of the facility during the time period between July 15 and September 1. In 2021 WPS began releasing aeration flow through the sluice gate on July 15 and continued to release 56 cfs through a gate until October 1.

High Falls

Water quality monitoring at High Falls was conducted at the following locations:

- Upstream monitoring occurs on a five-year basis and is conducted with the same equipment utilized for the downstream monitoring of the Caldron Falls project.
- The downstream monitoring equipment shall be located on the High Falls Road Bridge near the middle of the river.

During the monitoring season, there were no observed deviations from the DO, pH or temperature water quality standards at the upstream or downstream monitoring locations during the monitoring season. The lowest DO concentration observed during the monitoring season was 5.1 mg/l, pH values ranged between 7.3 s.u. and 8.1 s.u., and water temperatures were less than 78°F.

In response to decreasing DO levels downstream of the Project, WPS began releasing aeration flow through a spillway gate on July 23 and continued to provide aeration flow for the remainder of monitoring season except for a short period on August 6 from 09:50 to 13:15.

Johnson Falls

Water quality monitoring at Johnson Falls was conducted at the following locations:

- Upstream monitoring is conducted with the same equipment as the downstream monitor at High Falls.
- The downstream monitor is located in the tailrace, approximately 15 feet downstream of the powerhouse.

No deviations from the DO or pH water quality standards were observed during the monitoring season. The lowest DO concentration observed during the monitoring season was 6.0 mg/l and pH values ranged between 7.3 s.u. and 8.1 s.u.. At the time of the low DO readings, the facility was in run-of-river operation and DO concentrations of 8.1 mg/l were observed before and after the low reading. A review of plant operational data did not show any changes in operation or release flow rates that could have caused or contributed to the low reading.

A comparison of water temperatures between the upstream monitoring location (High Falls tailrace) and the Johnson Falls tailrace monitoring location shows the tailrace temperatures were equal to or slightly

January 12, 2022

Page 4 of 6

lower than the temperatures observed at the upstream monitoring location. This suggests the water temperature was not altered from the natural background to the extent that trout populations may have been adversely affected.

Sandstone Rapids

Water quality monitoring at Sandstone Rapids was conducted at the following locations:

- The upstream monitoring is conducted with the same equipment as the downstream monitor at Johnson Falls.
- The downstream monitor at Sandstone Rapids is located in the tailrace.

At the Sandstone Rapids monitoring location, no deviations from the DO, pH or temperature water quality standards were observed during the monitoring season. All DO readings were above 6.9 mg/l, pH values fluctuated between 7.7 s.u. and 8.2 s.u., and water temperatures did not exceed 77°F.

Potato Rapids

Water quality monitoring at Potato Rapids was conducted at the following locations:

- Upstream monitoring shall consist of bi-monthly DO, temperature, and pH profiles of the Potato Rapids Reservoir. Readings were taken at half (0.5) meter intervals just above the dam near the powerhouse intake.
- The downstream monitor is located in the tailrace below the dam

Profile data collected upstream of the powerhouse did not reveal stratification in the impoundment or potential deviations from the water quality standards. DO levels were above 7.0 mg/l at all depths and times. Downstream of the Potato Rapids powerhouse, no deviations from the DO, pH or temperature water quality standards were observed. All DO readings were above 5.8 mg/l, pH values fluctuated between 7.6 s.u. and 8.3 s.u., and water temperatures did not exceed 83°F.

At the tailrace monitoring location WPS did experience equipment failures that resulted in periods of missing data. A water quality monitor was deployed at the downstream location on May 26 and it suddenly stopped working on May 30. This resulted in a period of missing data from June 1 at 00:00 through June 2 and 12:00. The monitor was shipped to the manufacturer for evaluation and it was determined that a sensor on the sonde had failed which caused the sonde to malfunction and stop recording data. Prior to the equipment malfunction DO concentrations ranged between 9.3 mg/l and 9.8 mg/l, pH levels were between 7.8 and 7.9 s.u., and water temperatures were below 70°F.

Monitoring data collected after the period of missing data indicated DO concentrations were above 8 mg/l, the water pH was fluctuating between 7.7 s.u. and 7.8 s.u., and water temperatures were less than 70°F. Therefore, the monitoring data does not suggest there was a deviation from the applicable water quality standards during the period of missing data.

January 12, 2022

Page 5 of 6

A second equipment malfunction occurred in September that resulted in intermittent periods of missing pH data between September 9 and September 22. All available pH data during this time period varied between 8.0 s.u. and 8.3 s.u.. No missing data or deviations from the DO and temperature standards were observed during the time period of the intermittent missing pH data. Consequently, WPS does not believe there were any deviations from the pH water quality standards.

Peshtigo

Water quality monitoring at Peshtigo was conducted at the following locations:

- The upstream monitoring is conducted with the same equipment as the downstream monitor at Potato Rapids.
- The downstream monitor at Peshtigo Rapids is located in the tailrace.

No deviations from the DO, pH, or temperature water quality standards were observed during the 2021 monitoring season. All DO readings were above 5.4 mg/l, pH values fluctuated between 7.5 s.u. and 8.1 s.u., and water temperatures did not exceed 81°F.

Agency Consultation

WPS provided the 2021 water quality monitoring data to the Wisconsin Department of Natural Resources (WDNR) and the U.S. Fish and Wildlife Service (USFWS) on October 12, 2021 for review and comment. WPS did not receive comments from the USFWS on the 2021 water quality monitoring report. Monitoring data is enclosed with this report in Attachment A. Documentation of Agency Consultation can be found in Attachment B.

Future Monitoring

Water quality monitoring at the High Falls tailrace location is conducted on an annual basis. Water quality monitoring at the other locations occurs every five years and is scheduled to occur in 2026 and every five years thereafter for the term of the License.

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

Sincerely,



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

January 12, 2022

Page 6 of 6

Enc: Attachment A – 2021 Water Quality Monitoring Data (228 pages)
Attachment B – Documentation of Agency Consultation (17 pages)

Cc: Mr. John Zyga, FERC – CRO
Mr. Darin Simpkins, USFWS
Ms. Cheryl Laatsch, WDNR

Attachment A

Wisconsin Public Service Corporation
Peshtigo River Hydroelectric Projects

2021 Water Quality Monitoring Data

Caldron Falls Hydroelectric Project (FERC No. 2525)

**Caldron Falls Hydroelectric Project -
2021 Reservoir Profile Data**

Date 6/4/2021
 Time 9:45
 Weather: Sunny, 70F, light wind

Date 6/15/2021
 Time 13:20
 Weather: Sunny & warm

Date 6/29/2021
 Time 12:45
 Weather: Cloudy and humid, 74 degrees

Depth (meters)	DO mg/l	Temp °F	pH S.U.
0.5	9.1	67.5	8.2
1.0	9.1	67.4	8.2
1.5	9.1	67.2	8.2
2.0	8.9	64.8	8.1
2.5	8.7	62.9	8.0
3.0	8.6	62.4	7.9
3.5	8.5	62.0	7.9
4.0	8.4	61.0	7.8
4.5	8.2	60.3	7.8
5.0	8.1	59.9	7.7
5.5	8.0	59.3	7.7
6.0	7.7	57.7	7.6
6.5	7.4	55.7	7.5
7.0	7.1	54.8	7.5

Hit bottom between 6.5 and 7.0 meters

Depth (m)	DO mg/l	Temp °F	pH S.U.
0.5	8.3	76.4	8.4
1.0	8.3	76.3	8.1
1.5	8.2	75.9	8.1
2.0	8.2	75.8	8.1
2.5	8.1	75.8	8.1
3.0	8.1	75.8	8.1
3.5	8.1	75.8	8.1
4.0	6.7	73.4	7.5
4.5	6.4	72.4	7.4
5.0	6.3	72.3	7.3
5.5	6.1	70.2	7.3
6.0	5.8	66.9	7.2
6.5	5.2	59.7	7.1
7.0	5.1	56.4	7.0
7.5	5.1	57.0	7.0
8.0	5.1	56.6	7.0

Hit bottom between 8 and 8.5 meters

Depth (m)	DO mg/l	Temp °F	pH S.U.
0.5	8.7	73.9	8.2
1.0	8.7	73.9	8.3
1.5	8.7	73.9	8.3
2.0	8.6	73.8	8.3
2.5	7.3	72.0	8.2
3.0	6.9	71.0	8.1
3.5	6.8	70.7	8.0
4.0	6.7	70.6	8.0
4.5	6.7	70.4	8.0
5.0	6.6	70.3	8.0
5.5	6.5	70.0	8.0
6.0	6.2	69.2	7.9
6.5	5.6	67.9	7.9
7.0	3.8	64.9	7.7
7.5	3.2	62.8	7.6

Hit bottom between 7 and 7.5 meters

**Caldron Falls Hydroelectric Project -
2021 Reservoir Profile Data**

Date 7/13/2021
 Time 1:00 PM
 Weather: Sunny & hot

Depth (m)	DO mg/l	Temp °F	pH S.U.
0.5	9.3	79.3	8.5
1.0	9.4	79.1	8.6
1.5	9.5	79.0	8.6
2.0	9.4	78.9	8.6
2.5	9.4	78.9	8.6
3.0	9.3	78.8	8.6
3.5	9.2	78.0	8.6
4.0	7.7	74.4	8.3
4.5	6.3	72.2	8.1
5.0	5.9	71.3	8.0
5.5	5.6	70.5	7.9
6.0	5.1	69.6	7.8
6.5	4.9	68.9	7.8
7.0	5.2	67.4	7.7
7.5	3.9	66.6	7.7

Hit bottom between 7 and 7.5 meters

Date 7/27/2021
 Time 1:10pm
 Weather: Overcast, hot, 79 degrees

Depth (m)	DO mg/l	Temp °F	pH S.U.
0.5	8.7	79.1	8.4
1.0	8.8	79.0	8.5
1.5	8.7	78.7	8.5
2.0	8.6	78.5	8.5
2.5	8.6	78.4	8.5
3.0	8.4	78.1	8.5
3.5	8.4	78.1	8.5
4.0	8.4	78.1	8.5
4.5	8.3	78.0	8.5
5.0	6.8	76.2	8.2
5.5	6.2	75.3	8.1
6.0	4.6	73.0	7.9
6.5	3.4	71.1	7.8
7.0	2.8	69.3	7.7
7.5	1.7	66.5	7.6
	8.0	65.6	7.5
	8.5	65.5	7.5

Hit bottom between 8 and 8.5

Date 8/10/2021
 Time 1:00pm
 Weather: Sunny, hot, partly cloudy

Depth (m)	DO mg/l	Temp °F	pH S.U.
0.5	8.7	78.6	8.5
1.0	8.7	78.5	8.5
1.5	8.7	78.3	8.5
2.0	8.8	78.1	8.6
2.5	7.9	75.2	8.4
3.0	7.0	74.0	8.2
3.5	6.5	73.8	8.1
4.0	6.4	73.6	8.1
4.5	6.4	73.5	8.1
5.0	6.4	73.5	8.1
5.5	6.3	73.2	8.1
6.0	5.9	72.6	8.0
6.5	5.5	72.2	8.0
7.0	4.3	70.5	7.8
7.5	3.3	69.3	7.7
	8.0	68.8	7.7
	8.5	68.7	7.7

Hit bottom between 8 and 8.5

**Caldron Falls Hydroelectric Project -
2021 Reservoir Profile Data**

Date: 8/24/2021
 Time 1:10pm
 Weather: Overcast, rainy, 70°

Date 9/7/2021
 Time 12:30pm
 Weather: Sunny & warm

Date 9/21/2021
 Time 12:40pm
 Weather: Sunny, 62°

Depth (m)	DO mg/l	Temp °F	pH S.U.
0.5	8.9	76.9	8.6
1.0	8.9	76.9	8.6
1.5	8.9	77.0	8.6
2.0	8.8	77.0	8.7
2.5	8.8	77.0	8.7
3.0	8.8	77.0	8.7
3.5	8.6	76.7	8.6
4.0	6.5	74.5	8.2
4.5	6.0	73.5	8.0
5.0	5.9	73.3	8.0
5.5	5.8	73.2	8.0
6.0	5.6	72.9	8.0
6.5	5.5	72.8	8.0
7.0	5.3	72.1	7.9
7.5	4.8	71.1	7.8
8.0	2.0	67.0	7.6

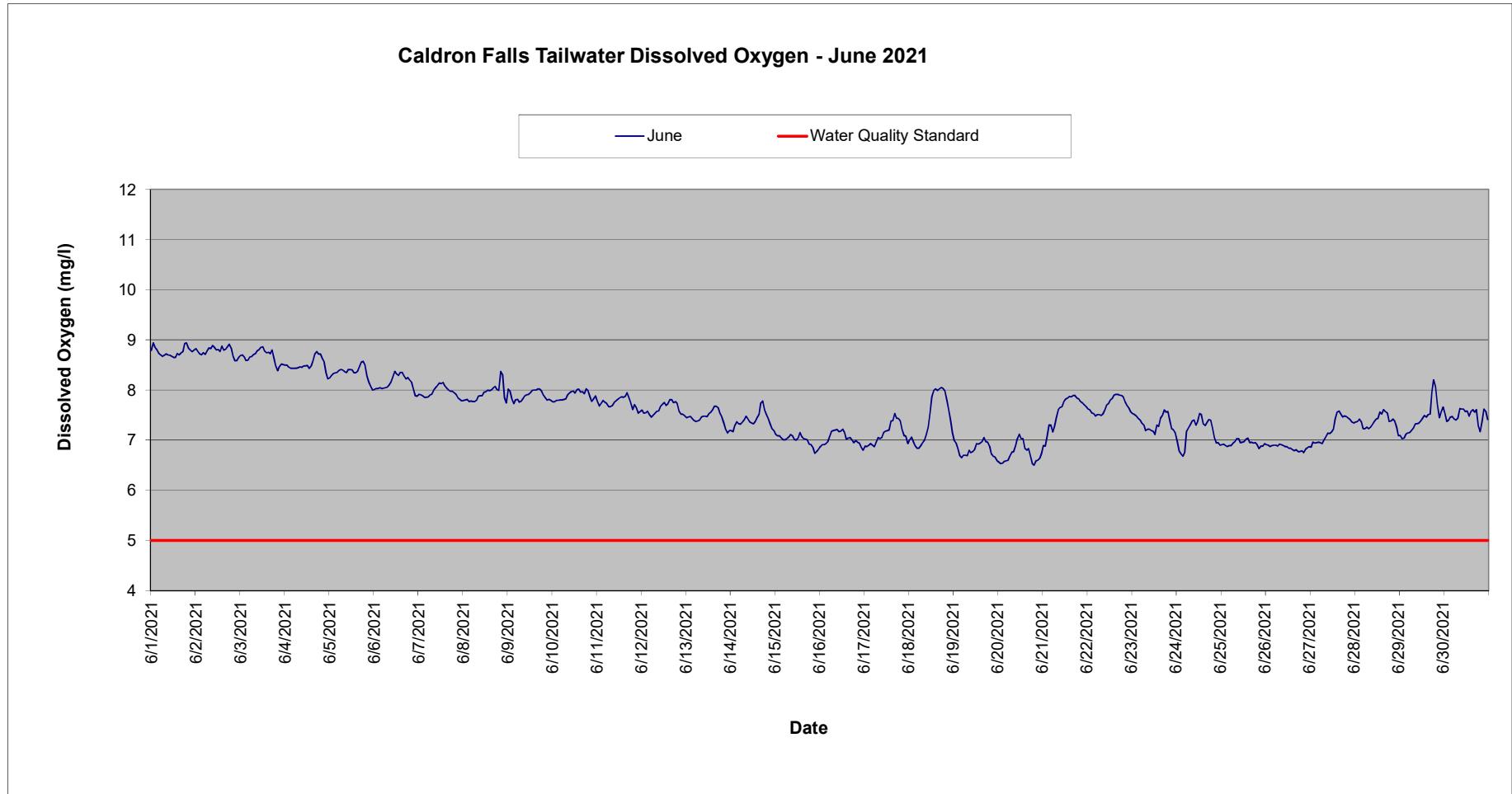
Hit bottom at 8 meters

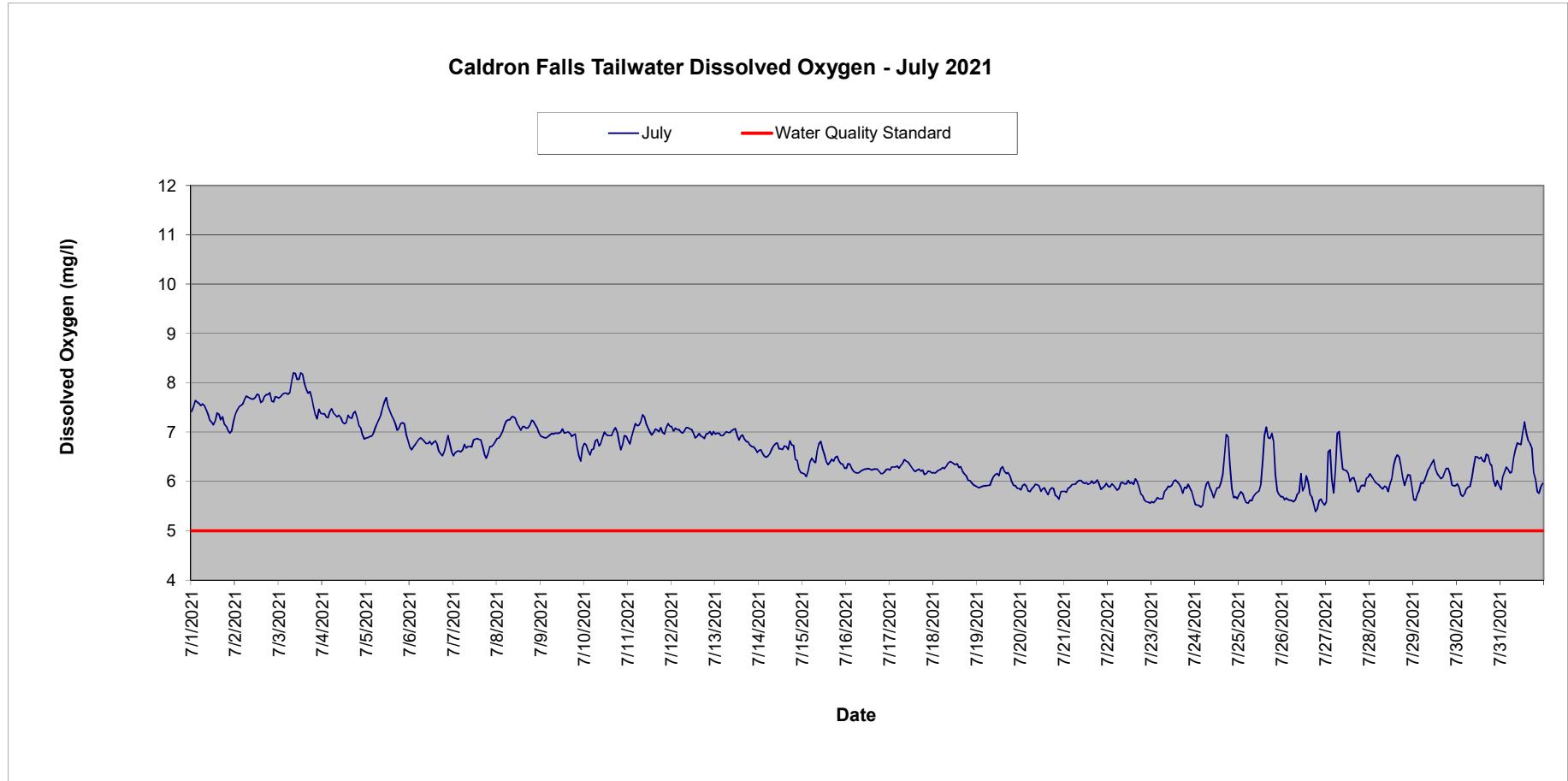
Depth (m)	DO mg/l	Temp °F	pH S.U.
0.5	8.5	70.8	8.7
1.0	8.5	70.6	8.6
1.5	8.5	70.5	8.6
2.0	8.5	70.5	8.6
2.5	8.5	70.5	8.6
3.0	8.4	70.5	8.6
3.5	8.4	70.5	8.5
4.0	8.4	70.5	8.6
4.5	8.4	70.5	8.5
5.0	8.4	70.5	8.6
5.5	8.4	70.4	8.5
6.0	8.4	70.4	8.5
6.5	8.4	70.4	8.5
7.0	8.3	70.4	8.5
7.5	8.3	70.4	8.6
8.0	8.2	70.3	8.5
8.5	4.1	67.2	8.0

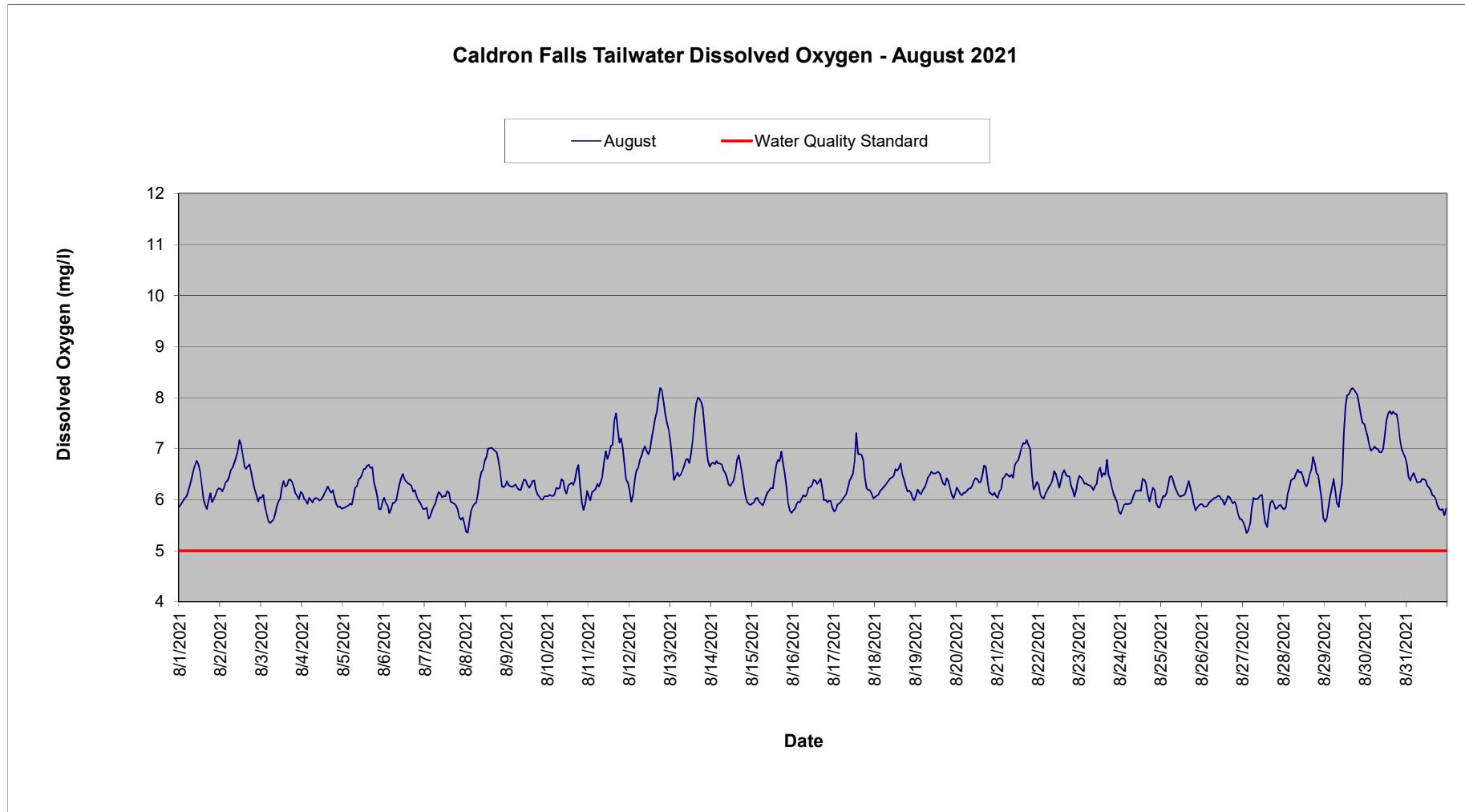
Hit bottom between 8 & 8.5 meters

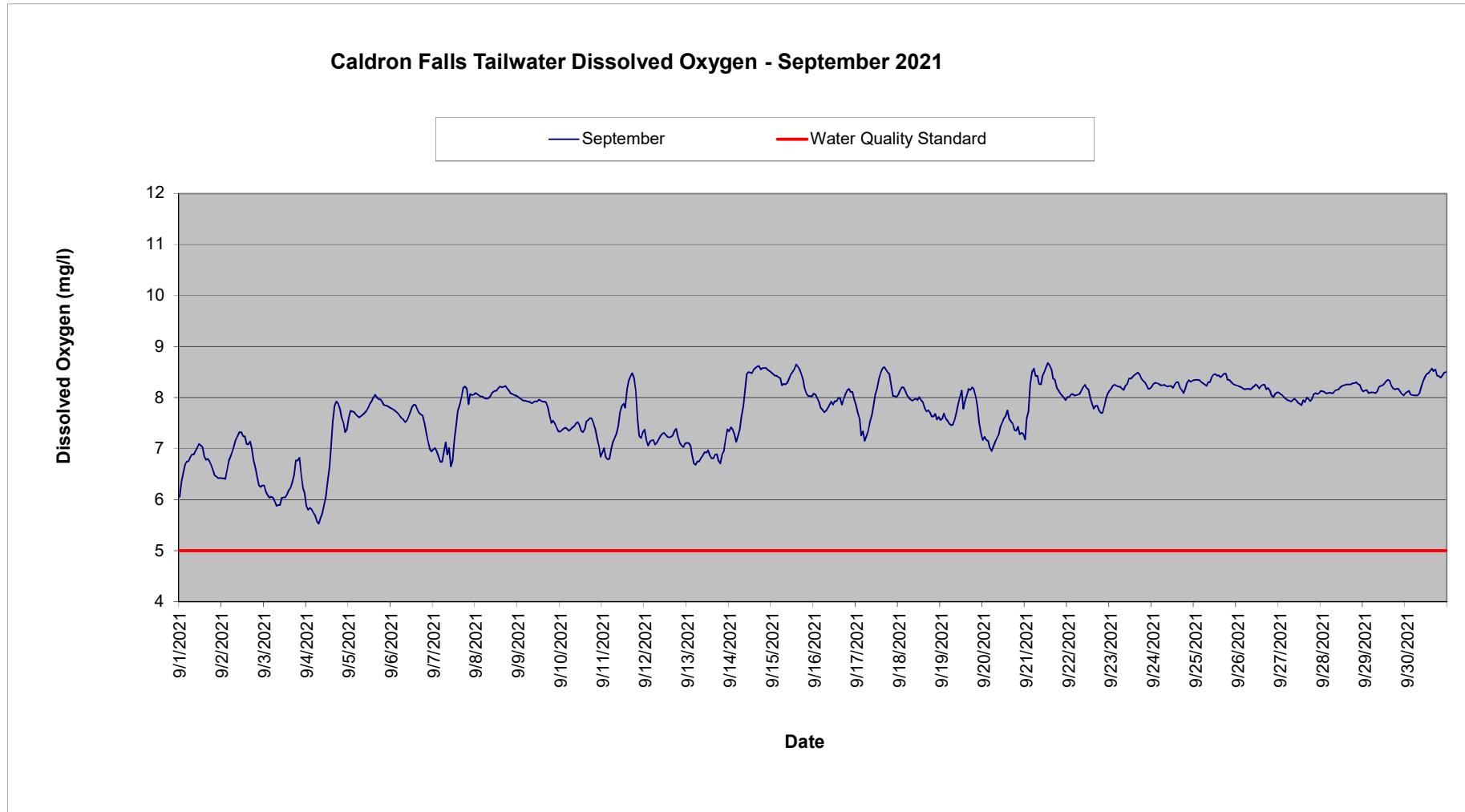
Depth (m)	DO mg/l	Temp °F	pH S.U.
0.5	9.1	68.4	8.3
1.0	9.1	68.3	8.5
1.5	9.0	68.2	8.5
2.0	9.0	68.2	8.5
2.5	9.0	68.2	8.5
3.0	9.0	68.1	8.5
3.5	9.0	68.1	8.5
4.0	9.0	68.0	8.5
4.5	9.0	68.0	8.5
5.0	8.9	68.0	8.5
5.5	8.9	68.0	8.5
6.0	8.9	68.0	8.5
6.5	8.9	68.0	8.5
7.0	8.9	68.0	8.5
7.5	8.8	67.9	8.5
8.0	8.8	67.8	8.5
8.8	8.7	67.7	8.5

Hit bottom between 8 & 8.5 meters









Caldron Falls Tailwater Dissolved Oxygen Summary - June 2021

Time HHMMSS	06/01/21	06/02/21	06/03/21	06/04/21	06/05/21	06/06/21	06/07/21	06/08/21	06/09/21	06/10/21	06/11/21	06/12/21	06/13/21	06/14/21	06/15/21	06/16/21
0	8.8	8.8	8.7	8.5	8.2	8.0	7.9	7.8	8.0	7.8	7.8	7.6	7.4	7.2	7.1	6.9
10000	8.9	8.8	8.7	8.5	8.3	8.0	7.9	7.8	8.0	7.8	7.7	7.5	7.5	7.2	7.1	6.9
20000	8.9	8.7	8.7	8.5	8.3	8.0	7.9	7.8	7.8	7.8	7.7	7.5	7.5	7.3	7.1	6.9
30000	8.8	8.7	8.6	8.4	8.3	8.0	7.9	7.8	7.7	7.8	7.8	7.6	7.4	7.4	7.0	6.9
40000	8.7	8.7	8.6	8.4	8.3	8.0	7.9	7.8	7.8	7.8	7.8	7.5	7.4	7.3	7.0	7.0
50000	8.7	8.7	8.7	8.4	8.4	8.0	7.9	7.8	7.8	7.8	7.7	7.5	7.4	7.3	7.0	7.1
60000	8.7	8.8	8.7	8.4	8.4	8.0	7.9	7.8	7.8	7.8	7.7	7.5	7.4	7.4	7.0	7.2
70000	8.7	8.8	8.7	8.4	8.4	8.1	7.9	7.8	7.8	7.8	7.7	7.5	7.4	7.4	7.1	7.2
80000	8.7	8.8	8.7	8.5	8.4	8.1	8.0	7.9	7.8	7.9	7.7	7.6	7.5	7.5	7.1	7.2
90000	8.7	8.9	8.8	8.5	8.3	8.2	8.0	7.9	7.9	7.9	7.7	7.6	7.5	7.4	7.1	7.2
100000	8.7	8.8	8.8	8.5	8.4	8.3	8.1	7.9	7.9	8.0	7.8	7.7	7.5	7.4	7.0	7.2
110000	8.7	8.8	8.9	8.5	8.4	8.4	8.1	8.0	7.9	8.0	7.8	7.7	7.5	7.3	7.0	7.2
120000	8.7	8.8	8.9	8.5	8.4	8.3	8.1	8.0	8.0	8.0	7.9	7.8	7.8	7.5	7.3	7.0
130000	8.7	8.8	8.8	8.4	8.3	8.3	8.1	8.0	8.0	8.0	7.9	7.7	7.6	7.4	7.2	7.2
140000	8.7	8.9	8.7	8.5	8.3	8.4	8.1	8.0	8.0	8.0	7.9	7.7	7.6	7.5	7.1	7.0
150000	8.7	8.8	8.8	8.6	8.4	8.3	8.0	8.0	8.0	8.0	7.9	7.8	7.7	7.5	7.0	7.0
160000	8.7	8.8	8.7	8.7	8.5	8.3	8.0	8.0	8.0	8.0	7.9	7.8	7.8	7.7	7.0	7.1
170000	8.8	8.9	8.8	8.8	8.6	8.2	8.0	8.1	8.0	7.9	7.9	7.7	7.6	7.8	7.0	7.0
180000	8.9	8.9	8.6	8.7	8.6	8.2	8.0	8.0	8.0	8.0	7.7	7.8	7.5	7.6	6.9	7.0
190000	8.9	8.8	8.5	8.7	8.5	8.2	7.9	8.0	7.9	8.0	7.6	7.7	7.5	7.5	6.9	7.0
200000	8.8	8.7	8.4	8.6	8.3	8.2	7.9	8.4	7.8	7.9	7.7	7.6	7.3	7.4	6.9	7.0
210000	8.8	8.6	8.5	8.6	8.2	8.0	7.8	8.3	7.8	7.8	7.6	7.5	7.2	7.3	6.7	6.9
220000	8.8	8.6	8.5	8.3	8.1	7.9	7.8	7.8	7.8	7.8	7.5	7.5	7.1	7.2	6.8	6.9
230000	8.8	8.6	8.5	8.2	8.0	7.9	7.8	7.7	7.8	7.9	7.9	7.6	7.5	7.2	6.8	6.8
Daily Max	8.9	8.9	8.9	8.8	8.6	8.4	8.1	8.4	8.0	8.0	7.9	7.8	7.7	7.8	7.2	7.2
Daily Min	8.7	8.6	8.4	8.2	8.0	7.9	7.8	7.7	7.7	7.8	7.5	7.5	7.1	7.2	6.7	6.8
Average	8.8	8.8	8.7	8.5	8.3	8.1	8.0	7.9	7.9	7.9	7.7	7.6	7.5	7.4	7.0	7.0

License Minimum DO: 5.0 mg/l

Caldron Falls Tailwater Dissolved Oxygen Summary - June 2021

Time HHMMSS	06/17/21	06/18/21	06/19/21	06/20/21	06/21/21	06/22/21	06/23/21	06/24/21	06/25/21	06/26/21	06/27/21	06/28/21	06/29/21	06/30/21
0	6.9	7.0	7.0	6.6	6.9	7.6	7.5	7.0	6.9	6.9	6.9	7.4	7.1	7.5
10000	6.9	7.1	6.9	6.5	6.9	7.6	7.5	6.8	6.9	6.9	7.0	7.4	7.0	7.4
20000	6.9	7.0	6.8	6.5	7.1	7.5	7.5	6.7	6.9	6.9	6.9	7.4	7.0	7.4
30000	6.9	6.9	6.7	6.6	7.3	7.5	7.4	6.7	6.9	6.9	7.0	7.4	7.1	7.5
40000	6.9	6.8	6.7	6.6	7.3	7.5	7.4	6.8	6.9	6.9	7.0	7.2	7.1	7.5
50000	6.9	6.8	6.7	6.6	7.2	7.5	7.3	7.2	6.9	6.9	7.0	7.2	7.2	7.4
60000	7.0	6.9	6.7	6.7	7.3	7.5	7.3	7.2	6.9	6.9	6.9	7.3	7.2	7.4
70000	7.1	7.0	6.7	6.8	7.5	7.5	7.2	7.3	7.0	6.9	7.0	7.2	7.2	7.4
80000	7.0	7.0	6.8	6.8	7.6	7.5	7.2	7.4	7.0	6.9	7.1	7.3	7.3	7.6
90000	7.1	7.1	6.8	6.9	7.7	7.6	7.2	7.4	7.0	6.9	7.1	7.3	7.3	7.6
100000	7.2	7.3	6.8	7.0	7.7	7.7	7.2	7.3	7.0	6.9	7.1	7.4	7.3	7.6
110000	7.2	7.6	6.8	7.1	7.8	7.7	7.2	7.4	7.0	6.9	7.2	7.4	7.4	7.6
120000	7.2	7.9	6.9	7.0	7.8	7.8	7.1	7.5	7.0	6.8	7.2	7.4	7.4	7.6
130000	7.2	8.0	6.9	7.0	7.8	7.8	7.3	7.5	7.0	6.8	7.4	7.6	7.5	7.5
140000	7.4	8.0	6.9	6.8	7.9	7.9	7.3	7.3	7.0	6.8	7.6	7.5	7.5	7.6
150000	7.4	8.0	7.0	6.8	7.9	7.9	7.4	7.3	7.0	6.8	7.6	7.6	7.5	7.6
160000	7.5	8.0	7.1	6.8	7.9	7.9	7.5	7.4	7.0	6.8	7.5	7.6	7.5	7.6
170000	7.4	8.1	7.0	6.7	7.9	7.9	7.6	7.4	6.9	6.8	7.5	7.5	8.0	7.6
180000	7.4	8.0	7.0	6.5	7.8	7.9	7.6	7.4	7.0	6.8	7.5	7.4	8.2	7.3
190000	7.4	8.0	6.9	6.5	7.8	7.9	7.6	7.2	6.9	6.8	7.5	7.4	8.1	7.2
200000	7.2	7.8	6.7	6.6	7.8	7.8	7.4	7.1	6.8	6.8	7.4	7.4	7.7	7.4
210000	7.1	7.6	6.7	6.6	7.7	7.7	7.2	6.9	6.9	6.8	7.4	7.4	7.5	7.6
220000	7.1	7.4	6.7	6.6	7.7	7.6	7.2	7.0	6.9	6.9	7.4	7.3	7.6	7.6
230000	6.9	7.2	6.6	6.7	7.7	7.6	7.1	6.9	6.9	6.9	7.3	7.1	7.7	7.4
Daily Max	7.5	8.1	7.1	7.1	7.9	7.9	7.6	7.5	7.0	6.9	7.6	7.6	8.2	7.6
Daily Min	6.9	6.8	6.6	6.5	6.9	7.5	7.1	6.7	6.8	6.8	6.9	7.1	7.0	7.2
Average	7.1	7.4	6.8	6.7	7.6	7.7	7.3	7.2	6.9	6.9	7.2	7.4	7.4	7.5

Caldron Falls Tailwater Dissolved Oxygen Summary - July 2021

Time HHMMSS	07/01/21	07/02/21	07/03/21	07/04/21	07/05/21	07/06/21	07/07/21	07/08/21	07/09/21	07/10/21	07/11/21	07/12/21	07/13/21	07/14/21	07/15/21	07/16/21
0	7.4	7.4	7.7	7.4	6.9	6.7	6.5	6.9	6.9	6.8	6.8	7.1	7.0	6.6	6.2	6.3
10000	7.5	7.5	7.7	7.4	6.9	6.6	6.6	6.9	6.9	6.7	6.8	7.0	7.0	6.6	6.2	6.4
20000	7.6	7.5	7.8	7.3	6.9	6.7	6.6	6.9	6.9	6.6	6.9	7.1	7.0	6.6	6.1	6.4
30000	7.6	7.5	7.8	7.3	6.9	6.8	6.6	7.0	6.9	6.5	7.1	7.1	6.9	6.5	6.2	6.3
40000	7.6	7.6	7.8	7.4	7.0	6.8	6.6	7.1	6.9	6.6	7.2	7.1	6.9	6.5	6.4	6.2
50000	7.5	7.7	7.8	7.5	7.1	6.9	6.6	7.2	6.9	6.7	7.1	7.0	7.0	6.5	6.5	6.2
60000	7.6	7.7	7.8	7.4	7.2	6.9	6.8	7.3	7.0	6.8	7.1	7.0	7.0	6.6	6.4	6.2
70000	7.5	7.7	8.0	7.4	7.3	6.9	6.7	7.3	7.0	6.9	7.2	7.0	7.0	6.7	6.4	6.2
80000	7.5	7.7	8.2	7.3	7.4	6.8	6.7	7.3	7.0	6.7	7.4	7.1	7.0	6.7	6.6	6.2
90000	7.4	7.7	8.2	7.3	7.5	6.8	6.7	7.3	7.0	6.8	7.3	7.1	7.0	6.8	6.8	6.2
100000	7.2	7.7	8.1	7.3	7.6	6.8	6.7	7.3	7.0	6.9	7.2	7.1	7.1	6.8	6.8	6.3
110000	7.2	7.7	8.1	7.2	7.7	6.8	6.8	7.2	7.0	7.0	7.1	7.1	7.1	6.7	6.7	6.3
120000	7.2	7.8	8.2	7.2	7.5	6.8	6.9	7.1	7.1	7.0	7.0	7.0	6.9	6.7	6.5	6.3
130000	7.2	7.8	8.2	7.2	7.4	6.8	6.9	7.0	7.0	6.9	6.9	6.9	6.8	6.7	6.4	6.3
140000	7.4	7.6	8.0	7.3	7.3	6.8	6.9	7.1	7.0	6.9	7.0	6.9	6.9	6.7	6.3	6.2
150000	7.4	7.6	7.9	7.3	7.3	6.8	6.8	7.1	7.0	6.9	7.1	7.0	6.9	6.7	6.4	6.3
160000	7.3	7.7	7.8	7.3	7.2	6.6	6.7	7.1	7.0	7.0	7.0	6.9	6.9	6.7	6.5	6.3
170000	7.3	7.8	7.8	7.4	7.0	6.6	6.6	7.1	6.9	7.1	7.0	6.9	6.8	6.8	6.4	6.3
180000	7.2	7.8	7.7	7.4	7.1	6.5	6.5	7.1	6.9	7.0	7.1	6.9	6.8	6.7	6.5	6.2
190000	7.1	7.8	7.5	7.3	7.2	6.6	6.6	7.2	7.0	6.8	7.0	7.0	6.7	6.7	6.5	6.2
200000	7.0	7.6	7.4	7.1	7.2	6.8	6.7	7.2	6.7	6.6	7.0	7.0	6.7	6.5	6.4	6.2
210000	7.0	7.6	7.3	7.1	7.2	6.9	6.7	7.2	6.5	6.8	7.1	7.0	6.7	6.4	6.4	6.2
220000	7.0	7.7	7.5	6.9	7.0	6.8	6.8	7.1	6.4	6.9	7.2	6.9	6.7	6.3	6.4	6.2
230000	7.2	7.7	7.4	6.9	6.8	6.6	6.8	7.0	6.7	6.9	7.1	7.0	6.6	6.2	6.3	6.3
Daily Max	7.6	7.8	8.2	7.5	7.7	6.9	6.9	7.3	7.1	7.1	7.4	7.1	7.1	6.8	6.8	6.4
Daily Min	7.0	7.4	7.3	6.9	6.8	6.5	6.5	6.9	6.4	6.5	6.8	6.9	6.6	6.2	6.1	6.2
Average	7.3	7.7	7.8	7.3	7.2	6.7	6.7	7.1	6.9	6.8	7.1	7.0	6.9	6.6	6.4	6.2

License Minimum Dissolved Oxygen: 5.0 mg/l

Release of 56 cfs aeration flow through spillway gate initiated on 7/15/21 at 11:35

Caldron Falls Tailwater Dissolved Oxygen Summary - July 2021

Time HHMMSS	07/17/21	07/18/21	07/19/21	07/20/21	07/21/21	07/22/21	07/23/21	07/24/21	07/25/21	07/26/21	07/27/21	07/28/21	07/29/21	07/30/21	07/31/21
0	6.2	6.2	5.9	5.8	5.8	5.9	5.6	5.5	5.7	5.7	5.6	6.2	5.6	5.9	5.8
10000	6.3	6.2	5.9	5.9	5.8	5.9	5.6	5.5	5.8	5.6	6.6	6.1	5.6	5.9	6.1
20000	6.3	6.2	5.9	5.9	5.9	6.0	5.6	5.5	5.8	5.7	6.6	6.0	5.7	5.7	6.2
30000	6.3	6.2	5.9	5.9	5.9	5.9	5.7	5.5	5.6	5.6	6.1	6.0	5.8	5.7	6.3
40000	6.3	6.3	5.9	5.8	5.9	5.9	5.7	5.5	5.6	5.6	5.8	5.9	6.0	5.7	6.2
50000	6.3	6.3	5.9	5.8	5.9	5.8	5.7	5.8	5.6	5.6	6.2	5.9	6.0	5.8	6.2
60000	6.3	6.3	5.9	5.9	5.9	5.9	5.7	6.0	5.6	5.6	7.0	5.9	6.0	5.9	6.2
70000	6.4	6.3	5.9	5.9	6.0	6.0	5.8	6.0	5.6	5.6	7.0	5.8	6.1	5.9	6.5
80000	6.4	6.4	6.0	5.9	6.0	6.0	5.8	5.9	5.7	5.7	6.6	5.9	6.2	6.1	6.6
90000	6.4	6.4	6.1	5.9	6.0	6.0	5.9	5.8	5.8	5.8	6.3	5.9	6.3	6.3	6.8
100000	6.4	6.4	6.1	5.9	6.0	6.0	5.9	5.7	5.8	6.2	6.2	5.8	6.4	6.5	6.8
110000	6.3	6.4	6.2	5.8	6.0	6.0	5.9	5.8	5.8	5.8	6.2	5.9	6.4	6.5	6.7
120000	6.3	6.3	6.1	5.9	6.0	6.0	5.9	6.0	5.9	6.2	6.1	6.3	6.5	7.0	
130000	6.2	6.4	6.3	5.9	5.9	6.0	6.0	5.9	6.4	6.1	6.0	6.3	6.2	6.5	7.2
140000	6.2	6.3	6.3	5.8	6.0	5.9	6.0	6.0	6.9	6.0	6.1	6.5	6.1	6.4	7.0
150000	6.2	6.3	6.2	5.7	6.0	6.1	6.0	6.2	7.1	5.7	6.1	6.5	6.1	6.4	6.8
160000	6.3	6.2	6.2	5.8	6.0	6.0	5.9	6.6	6.9	5.7	6.0	6.5	6.1	6.5	6.8
170000	6.2	6.2	6.2	5.9	6.0	5.9	5.8	7.0	6.9	5.6	5.8	6.3	6.2	6.5	6.7
180000	6.2	6.1	6.1	5.9	6.0	5.8	5.9	6.9	7.0	5.4	5.8	6.1	6.3	6.4	6.2
190000	6.1	6.0	6.0	5.7	6.0	5.7	5.9	6.3	6.8	5.4	5.9	5.9	6.3	6.3	6.0
200000	6.2	6.0	5.9	5.7	5.8	5.6	5.9	5.9	6.1	5.6	5.9	6.0	6.2	6.0	5.8
210000	6.2	6.0	5.9	5.6	5.9	5.6	5.9	5.7	5.8	5.6	5.9	6.1	5.9	5.9	5.8
220000	6.2	5.9	5.9	5.8	5.9	5.6	5.8	5.7	5.7	5.6	6.1	6.1	5.9	6.0	5.9
230000	6.2	5.9	5.9	5.8	6.0	5.6	5.7	5.7	5.7	5.5	6.1	5.9	5.9	5.9	6.0
Daily Max	6.4	6.4	6.3	5.9	6.0	6.1	6.0	7.0	7.1	6.2	7.0	6.5	6.4	6.5	7.2
Daily Min	6.1	5.9	5.9	5.6	5.8	5.6	5.6	5.5	5.6	5.4	5.6	5.8	5.6	5.7	5.8
Average	6.3	6.2	6.0	5.8	5.9	5.9	5.8	5.9	6.1	5.7	6.2	6.1	6.1	6.1	6.4

Caldron Falls Tailwater Dissolved Oxygen Summary - August 2021

Time HHMMSS	08/01/21	08/02/21	08/03/21	08/04/21	08/05/21	08/06/21	08/07/21	08/08/21	08/09/21	08/10/21	08/11/21	08/12/21	08/13/21	08/14/21	08/15/21	08/16/21
0	5.9	6.2	6.0	6.1	5.8	6.0	5.8	5.4	6.4	6.1	6.1	6.2	7.1	6.7	5.9	5.8
10000	5.9	6.2	6.1	6.0	5.8	5.9	5.8	5.4	6.3	6.1	6.0	6.0	6.8	6.7	6.0	5.8
20000	6.0	6.2	5.9	6.0	5.9	5.9	5.6	5.6	6.3	6.1	6.2	6.1	6.4	6.7	6.0	5.9
30000	6.0	6.3	5.7	5.9	5.9	5.7	5.7	5.8	6.3	6.1	6.2	6.4	6.5	6.8	6.0	6.0
40000	6.1	6.4	5.6	6.0	5.9	5.8	5.8	5.9	6.3	6.1	6.2	6.6	6.5	6.7	6.0	6.0
50000	6.2	6.4	5.5	6.0	5.9	5.9	5.9	5.9	6.3	6.2	6.3	6.6	6.5	6.7	5.9	6.0
60000	6.3	6.6	5.6	5.9	6.1	5.9	5.9	5.9	6.2	6.2	6.3	6.8	6.5	6.7	5.9	6.1
70000	6.4	6.6	5.6	6.0	6.2	6.0	6.1	6.1	6.2	6.2	6.4	6.9	6.6	6.6	6.0	6.1
80000	6.6	6.7	5.7	6.0	6.3	6.1	6.1	6.4	6.2	6.4	6.5	7.0	6.7	6.5	6.1	6.1
90000	6.7	6.8	5.9	6.0	6.4	6.3	6.1	6.5	6.3	6.4	6.7	7.1	6.8	6.5	6.2	6.2
100000	6.8	6.9	6.0	6.0	6.4	6.4	6.0	6.6	6.4	6.2	7.0	7.0	6.8	6.3	6.2	6.3
110000	6.7	7.2	6.0	6.0	6.5	6.5	6.1	6.8	6.4	6.1	6.8	6.9	6.7	6.3	6.2	6.3
120000	6.6	7.1	6.3	6.1	6.6	6.4	6.1	6.8	6.3	6.3	6.9	7.0	6.9	6.3	6.2	6.4
130000	6.3	6.9	6.4	6.1	6.6	6.4	6.2	7.0	6.2	6.3	7.1	7.2	7.2	6.4	6.5	6.4
140000	6.0	6.7	6.3	6.2	6.7	6.3	6.1	7.0	6.3	6.3	7.1	7.4	7.6	6.5	6.7	6.3
150000	5.9	6.6	6.3	6.3	6.7	6.3	6.0	7.0	6.4	6.3	7.5	7.6	7.9	6.8	6.8	6.4
160000	5.8	6.7	6.4	6.2	6.6	6.3	5.9	7.0	6.4	6.4	7.7	7.7	8.0	6.9	6.8	6.4
170000	6.0	6.7	6.4	6.1	6.6	6.2	5.9	7.0	6.2	6.6	7.4	8.0	8.0	6.7	6.9	6.2
180000	6.1	6.5	6.3	6.2	6.4	6.2	5.9	6.9	6.1	6.7	7.1	8.2	7.9	6.5	6.7	6.0
190000	6.0	6.4	6.2	6.0	6.2	6.1	5.8	6.8	6.1	6.3	7.2	8.1	7.8	6.3	6.5	6.0
200000	6.0	6.2	6.1	5.9	6.0	6.0	5.7	6.6	6.0	5.9	7.0	7.9	7.4	6.1	6.3	6.0
210000	6.1	6.1	6.1	5.9	5.8	5.9	5.6	6.3	6.0	5.8	6.7	7.7	7.0	6.0	5.9	6.0
220000	6.2	6.0	6.0	5.9	5.8	5.9	5.7	6.2	6.1	5.9	6.4	7.5	6.8	5.9	5.8	6.0
230000	6.2	6.0	6.2	5.8	6.0	5.8	5.5	6.3	6.1	6.2	6.3	7.4	6.7	5.9	5.7	5.8
Daily Max	6.8	7.2	6.4	6.3	6.7	6.5	6.2	7.0	6.4	6.7	7.7	8.2	8.0	6.9	6.9	6.4
Daily Min	5.8	6.0	5.5	5.8	5.8	5.7	5.5	5.4	6.0	5.8	6.0	6.0	6.4	5.9	5.7	5.8
Average	6.2	6.5	6.0	6.0	6.2	6.1	5.9	6.4	6.2	6.2	6.7	7.1	7.0	6.5	6.2	6.1

License Minimum Dissolved Oxygen: 5.0 mg/l

Caldron Falls Tailwater Dissolved Oxygen Summary - August 2021

Time HHMMSS	08/17/21	08/18/21	08/19/21	08/20/21	08/21/21	08/22/21	08/23/21	08/24/21	08/25/21	08/26/21	08/27/21	08/28/21	08/29/21	08/30/21	08/31/21
0	5.8	6.1	6.1	6.2	6.0	6.3	6.5	5.7	6.0	5.9	5.6	5.8	5.6	7.4	6.7
10000	5.8	6.1	6.2	6.2	6.2	6.1	6.4	5.8	6.1	5.9	5.5	5.9	5.6	7.2	6.5
20000	5.9	6.1	6.1	6.1	6.2	6.0	6.4	5.9	6.1	5.9	5.3	6.1	5.9	7.1	6.4
30000	5.9	6.2	6.1	6.1	6.4	6.0	6.3	5.9	6.1	5.9	5.4	6.2	6.1	7.0	6.5
40000	6.0	6.2	6.2	6.1	6.5	6.1	6.3	5.9	6.3	5.9	5.5	6.4	6.2	7.0	6.5
50000	6.0	6.3	6.2	6.1	6.5	6.2	6.3	5.9	6.5	6.0	5.8	6.4	6.4	7.0	6.4
60000	6.1	6.3	6.3	6.2	6.5	6.3	6.3	5.9	6.5	6.0	6.0	6.4	6.2	7.0	6.3
70000	6.1	6.3	6.4	6.2	6.5	6.3	6.3	6.0	6.4	6.0	6.0	6.5	5.9	7.0	6.3
80000	6.2	6.4	6.5	6.2	6.5	6.4	6.2	6.1	6.2	6.0	6.0	6.6	5.9	6.9	6.4
90000	6.4	6.4	6.6	6.3	6.4	6.6	6.3	6.2	6.2	6.1	6.0	6.5	6.1	6.9	6.4
100000	6.4	6.4	6.5	6.4	6.7	6.5	6.3	6.2	6.1	6.1	6.1	6.5	6.3	7.0	6.4
110000	6.5	6.5	6.5	6.4	6.7	6.4	6.6	6.2	6.1	6.0	6.1	6.5	7.3	7.2	6.4
120000	6.8	6.6	6.5	6.4	6.8	6.2	6.6	6.2	6.1	6.0	5.7	6.3	7.8	7.5	6.3
130000	7.3	6.6	6.6	6.3	6.9	6.4	6.5	6.4	6.1	5.9	5.6	6.3	8.0	7.7	6.2
140000	6.9	6.6	6.5	6.4	7.0	6.5	6.5	6.4	6.1	6.0	5.5	6.3	8.1	7.7	6.2
150000	6.9	6.7	6.4	6.5	7.1	6.6	6.5	6.3	6.2	6.1	5.7	6.5	8.1	7.7	6.1
160000	6.9	6.5	6.3	6.7	7.1	6.5	6.8	6.1	6.4	6.1	5.9	6.6	8.2	7.7	6.1
170000	6.8	6.4	6.3	6.6	7.2	6.5	6.5	6.0	6.2	6.0	6.0	6.8	8.2	7.7	6.0
180000	6.5	6.3	6.4	6.4	7.1	6.5	6.4	6.1	6.1	5.9	5.9	6.7	8.1	7.7	5.9
190000	6.2	6.2	6.4	6.2	7.0	6.3	6.2	6.2	5.9	6.0	5.8	6.5	8.0	7.5	5.8
200000	6.2	6.2	6.2	6.1	6.5	6.2	6.1	6.2	5.8	5.9	5.8	6.5	7.9	7.2	5.8
210000	6.2	6.1	6.1	6.1	6.2	6.1	6.0	5.9	5.8	5.7	5.9	6.2	7.7	7.0	5.8
220000	6.1	6.0	6.0	6.1	6.3	6.2	6.0	5.9	5.9	5.6	5.9	6.0	7.5	6.9	5.7
230000	6.0	6.0	6.1	6.1	6.4	6.4	5.8	5.8	5.9	5.6	5.8	5.7	7.5	6.8	5.8
Daily Max	7.3	6.7	6.6	6.7	7.2	6.6	6.8	6.4	6.5	6.1	6.1	6.8	8.2	7.7	6.7
Daily Min	5.8	6.0	6.0	6.1	6.0	6.0	5.8	5.7	5.8	5.6	5.3	5.7	5.6	6.8	5.7
Average	6.3	6.3	6.3	6.3	6.6	6.3	6.3	6.1	6.1	5.9	5.8	6.3	7.0	7.2	6.2

Caldron Falls Tailwater Dissolved Oxygen Summary - September 2021

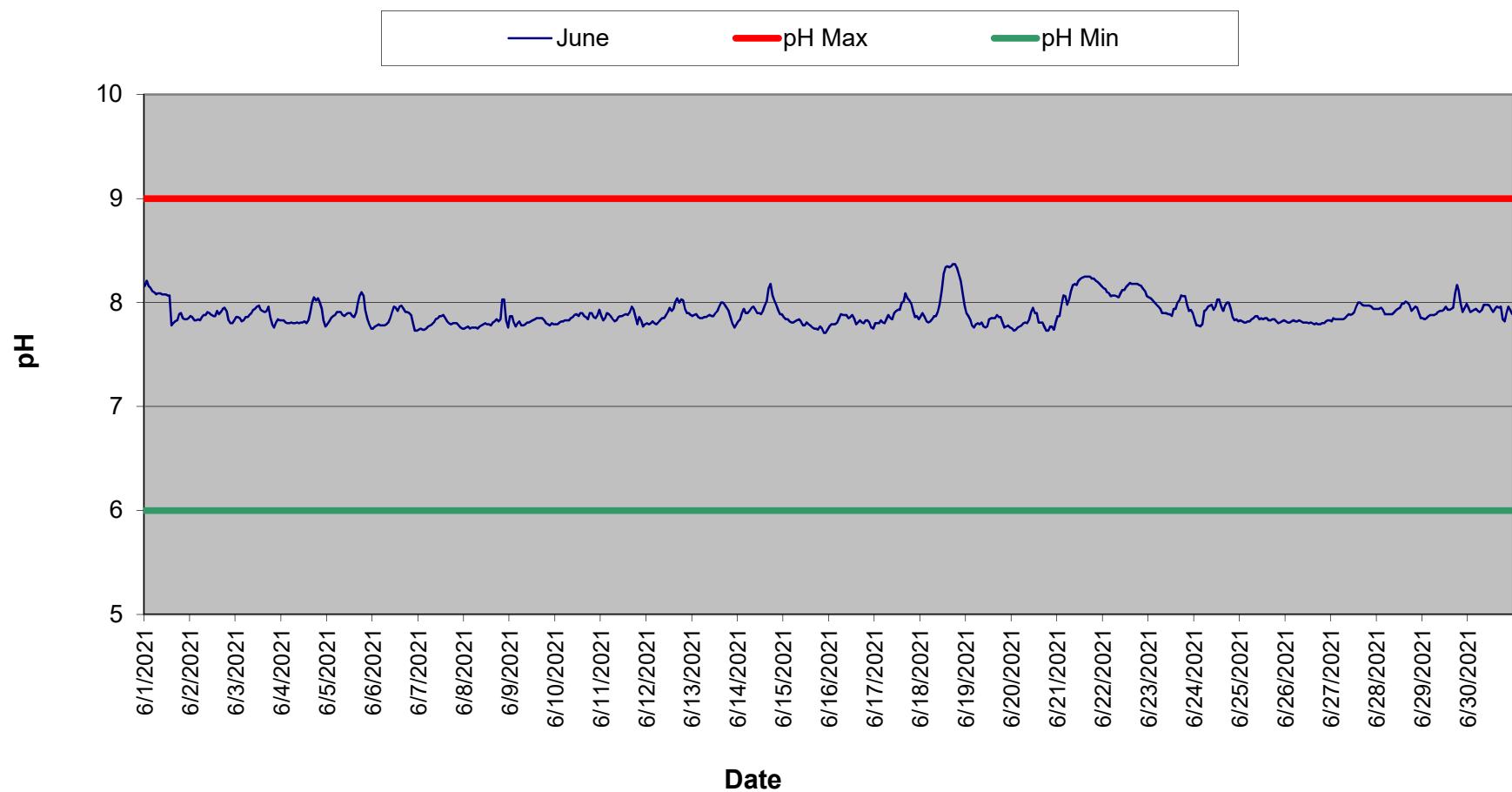
Time HHMMSS	09/01/21	09/02/21	09/03/21	09/04/21	09/05/21	09/06/21	09/07/21	09/08/21	09/09/21	09/10/21	09/11/21	09/12/21	09/13/21	09/14/21	09/15/21	09/16/21
0	6.1	6.4	6.3	5.9	7.6	7.8	7.0	8.1	8.0	7.3	6.9	7.4	7.1	7.3	8.5	8.1
10000	6.3	6.4	6.2	5.8	7.7	7.8	7.0	8.1	8.0	7.4	7.0	7.2	7.1	7.4	8.5	8.1
20000	6.5	6.4	6.1	5.8	7.7	7.8	6.9	8.0	8.0	7.4	6.8	7.1	7.1	7.4	8.4	8.0
30000	6.7	6.6	6.0	5.8	7.7	7.7	6.8	8.0	7.9	7.4	6.8	7.1	6.9	7.3	8.4	7.9
40000	6.7	6.8	6.1	5.7	7.7	7.7	6.7	8.0	7.9	7.4	6.8	7.2	6.7	7.1	8.4	7.8
50000	6.8	6.9	6.0	5.7	7.6	7.6	6.7	8.0	7.9	7.4	7.0	7.2	6.7	7.3	8.4	7.8
60000	6.8	6.9	6.0	5.6	7.6	7.6	6.9	8.0	7.9	7.4	7.1	7.1	6.8	7.4	8.2	7.7
70000	6.9	7.1	5.9	5.5	7.6	7.6	7.1	8.0	7.9	7.4	7.2	7.1	6.8	7.6	8.3	7.7
80000	6.9	7.2	5.9	5.6	7.7	7.5	6.9	8.0	7.9	7.4	7.3	7.2	6.8	7.8	8.3	7.8
90000	7.0	7.3	5.9	5.7	7.7	7.5	7.0	8.1	7.9	7.5	7.4	7.3	6.9	8.1	8.3	7.9
100000	7.0	7.3	6.0	5.9	7.7	7.6	6.7	8.1	7.9	7.5	7.7	7.3	6.9	8.5	8.4	7.9
110000	7.1	7.3	6.0	6.1	7.8	7.7	6.8	8.1	7.9	7.5	7.8	7.3	6.9	8.5	8.5	7.9
120000	7.1	7.2	6.0	6.3	7.9	7.8	7.1	8.1	8.0	7.4	7.9	7.3	7.0	8.5	8.5	7.9
130000	7.0	7.2	6.1	6.6	7.9	7.9	7.5	8.2	7.9	7.3	7.8	7.2	6.9	8.5	8.6	7.9
140000	6.9	7.1	6.2	7.0	8.0	7.8	7.7	8.2	7.9	7.4	8.2	7.2	6.8	8.6	8.7	8.0
150000	6.8	7.1	6.2	7.5	8.1	7.8	7.9	8.2	7.9	7.5	8.3	7.2	6.8	8.6	8.6	8.0
160000	6.8	7.1	6.3	7.8	8.0	7.7	8.0	8.2	7.9	7.6	8.4	7.3	6.9	8.6	8.6	7.9
170000	6.7	7.0	6.5	7.9	8.0	7.7	8.2	8.2	7.8	7.6	8.5	7.4	6.9	8.6	8.5	8.0
180000	6.7	6.8	6.8	7.9	8.0	7.6	8.2	8.2	7.7	7.6	8.4	7.4	6.8	8.6	8.3	8.1
190000	6.6	6.6	6.8	7.8	7.9	7.5	8.2	8.1	7.5	7.5	8.1	7.2	6.7	8.6	8.2	8.1
200000	6.5	6.5	6.8	7.6	7.9	7.3	7.9	8.1	7.6	7.4	7.6	7.1	6.9	8.6	8.1	8.2
210000	6.4	6.3	6.5	7.5	7.8	7.2	8.1	8.1	7.5	7.2	7.3	7.1	7.0	8.6	8.0	8.1
220000	6.4	6.2	6.2	7.3	7.8	7.0	8.1	8.1	7.4	7.1	7.2	7.0	7.2	8.5	8.0	8.1
230000	6.4	6.3	6.1	7.4	7.8	6.9	8.1	8.0	7.3	6.8	7.3	7.1	7.4	8.5	8.0	8.0
Daily Max	7.1	7.3	6.8	7.9	8.1	7.9	8.2	8.2	8.0	7.6	8.5	7.4	7.4	8.6	8.7	8.2
Daily Min	6.1	6.2	5.9	5.5	7.6	6.9	6.7	8.0	7.3	6.8	6.8	7.0	6.7	7.1	8.0	7.7
Average	6.7	6.8	6.2	6.6	7.8	7.6	7.4	8.1	7.8	7.4	7.5	7.2	6.9	8.1	8.4	7.9

License Minimum Dissolved Oxygen: 5.0 mg/l

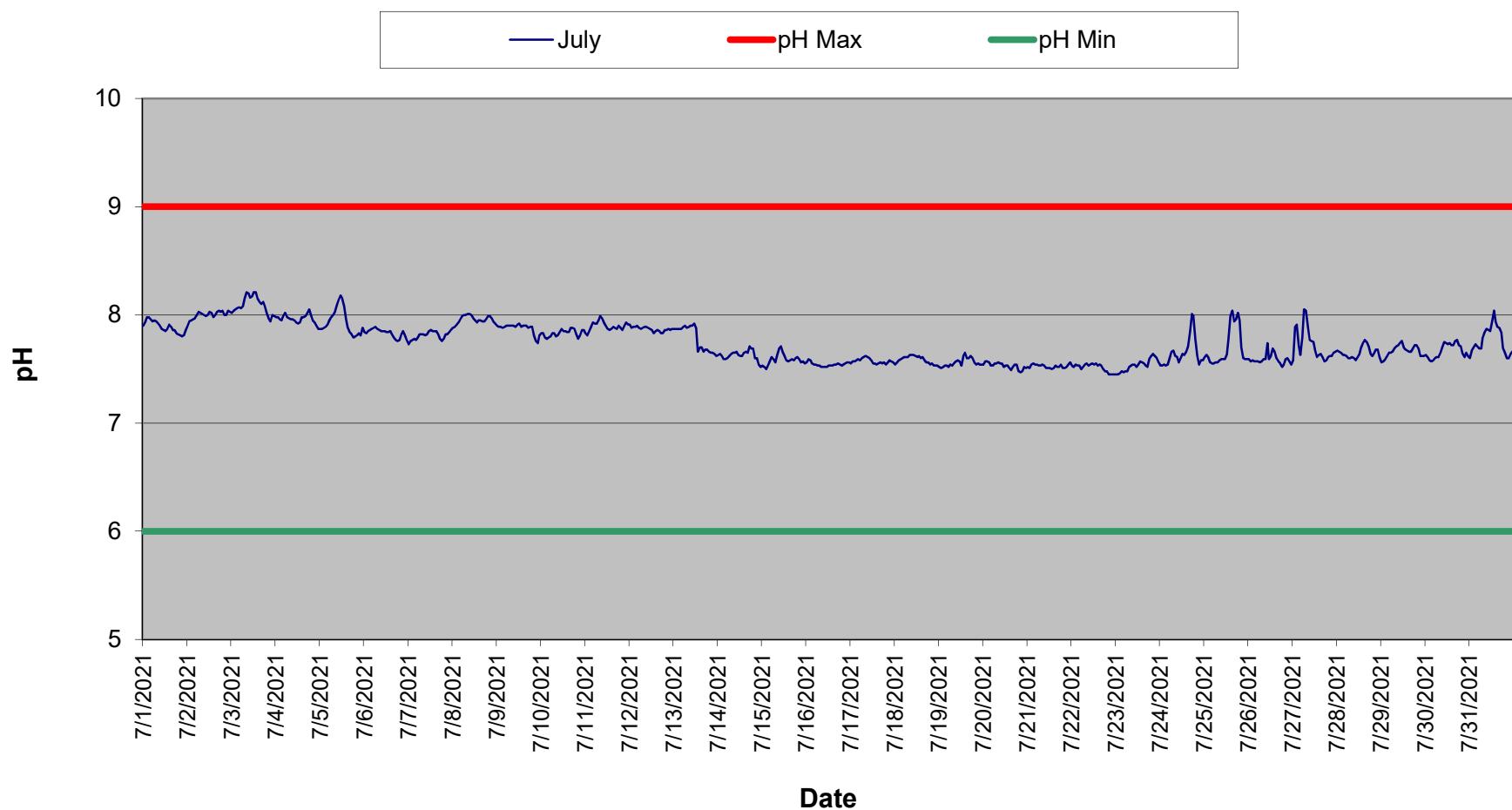
Caldron Falls Tailwater Dissolved Oxygen Summary - September 2021

Time HHMMSS	09/17/21	09/18/21	09/19/21	09/20/21	09/21/21	09/22/21	09/23/21	09/24/21	09/25/21	09/26/21	09/27/21	09/28/21	09/29/21	09/30/21
0	7.9	8.1	7.6	7.2	7.2	8.0	8.1	8.2	8.3	8.2	8.1	8.1	8.1	8.1
10000	7.7	8.1	7.6	7.2	7.6	8.0	8.2	8.3	8.4	8.2	8.1	8.1	8.1	8.1
20000	7.6	8.2	7.7	7.2	7.7	8.1	8.2	8.3	8.4	8.2	8.1	8.1	8.2	8.1
30000	7.3	8.2	7.6	7.2	8.3	8.1	8.3	8.3	8.3	8.2	8.0	8.1	8.1	8.1
40000	7.3	8.1	7.6	7.0	8.5	8.0	8.2	8.3	8.3	8.2	8.0	8.1	8.1	8.1
50000	7.2	8.1	7.5	7.0	8.6	8.1	8.2	8.2	8.3	8.2	8.0	8.1	8.1	8.1
60000	7.3	8.0	7.5	7.0	8.4	8.1	8.2	8.2	8.3	8.2	7.9	8.1	8.1	8.0
70000	7.4	8.0	7.5	7.1	8.4	8.1	8.2	8.3	8.2	8.2	7.9	8.1	8.1	8.1
80000	7.5	7.9	7.6	7.2	8.3	8.1	8.2	8.2	8.3	8.2	8.0	8.1	8.1	8.1
90000	7.7	8.0	7.7	7.3	8.3	8.2	8.2	8.2	8.3	8.2	8.0	8.2	8.2	8.2
100000	7.8	8.0	7.9	7.4	8.4	8.3	8.3	8.2	8.4	8.2	7.9	8.2	8.2	8.3
110000	8.1	8.0	8.0	7.5	8.5	8.2	8.4	8.2	8.5	8.3	7.9	8.2	8.2	8.4
120000	8.2	8.0	8.1	7.6	8.6	8.2	8.4	8.2	8.5	8.2	7.9	8.2	8.3	8.5
130000	8.4	8.0	7.8	7.6	8.7	8.0	8.4	8.3	8.4	8.2	7.9	8.2	8.3	8.5
140000	8.5	7.9	7.9	7.8	8.6	7.9	8.4	8.3	8.4	8.2	8.0	8.3	8.4	8.5
150000	8.6	7.8	8.1	7.6	8.6	7.8	8.5	8.3	8.4	8.3	7.9	8.3	8.3	8.6
160000	8.6	7.7	8.2	7.5	8.4	7.8	8.5	8.2	8.4	8.3	8.0	8.3	8.2	8.5
170000	8.6	7.8	8.2	7.5	8.4	7.8	8.5	8.2	8.5	8.2	8.0	8.3	8.2	8.6
180000	8.5	7.7	8.2	7.4	8.2	7.8	8.4	8.1	8.5	8.2	7.9	8.3	8.2	8.4
190000	8.5	7.6	8.2	7.4	8.1	7.7	8.3	8.2	8.4	8.1	8.0	8.3	8.2	8.4
200000	8.2	7.6	8.0	7.4	8.1	7.7	8.3	8.3	8.4	8.1	8.1	8.3	8.2	8.4
210000	8.0	7.7	7.8	7.3	8.0	7.8	8.2	8.3	8.3	8.0	8.1	8.3	8.1	8.4
220000	8.0	7.6	7.5	7.3	8.0	8.0	8.2	8.3	8.3	8.1	8.1	8.3	8.1	8.5
230000	8.0	7.6	7.3	7.3	8.0	8.1	8.2	8.3	8.3	8.1	8.1	8.2	8.0	8.5
Daily Max	8.6	8.2	8.2	7.8	8.7	8.3	8.5	8.3	8.5	8.3	8.1	8.3	8.4	8.6
Daily Min	7.2	7.6	7.3	7.0	7.2	7.7	8.1	8.1	8.2	8.0	7.9	8.1	8.0	8.0
Average	7.9	7.9	7.8	7.3	8.2	8.0	8.3	8.2	8.4	8.2	8.0	8.2	8.2	8.3

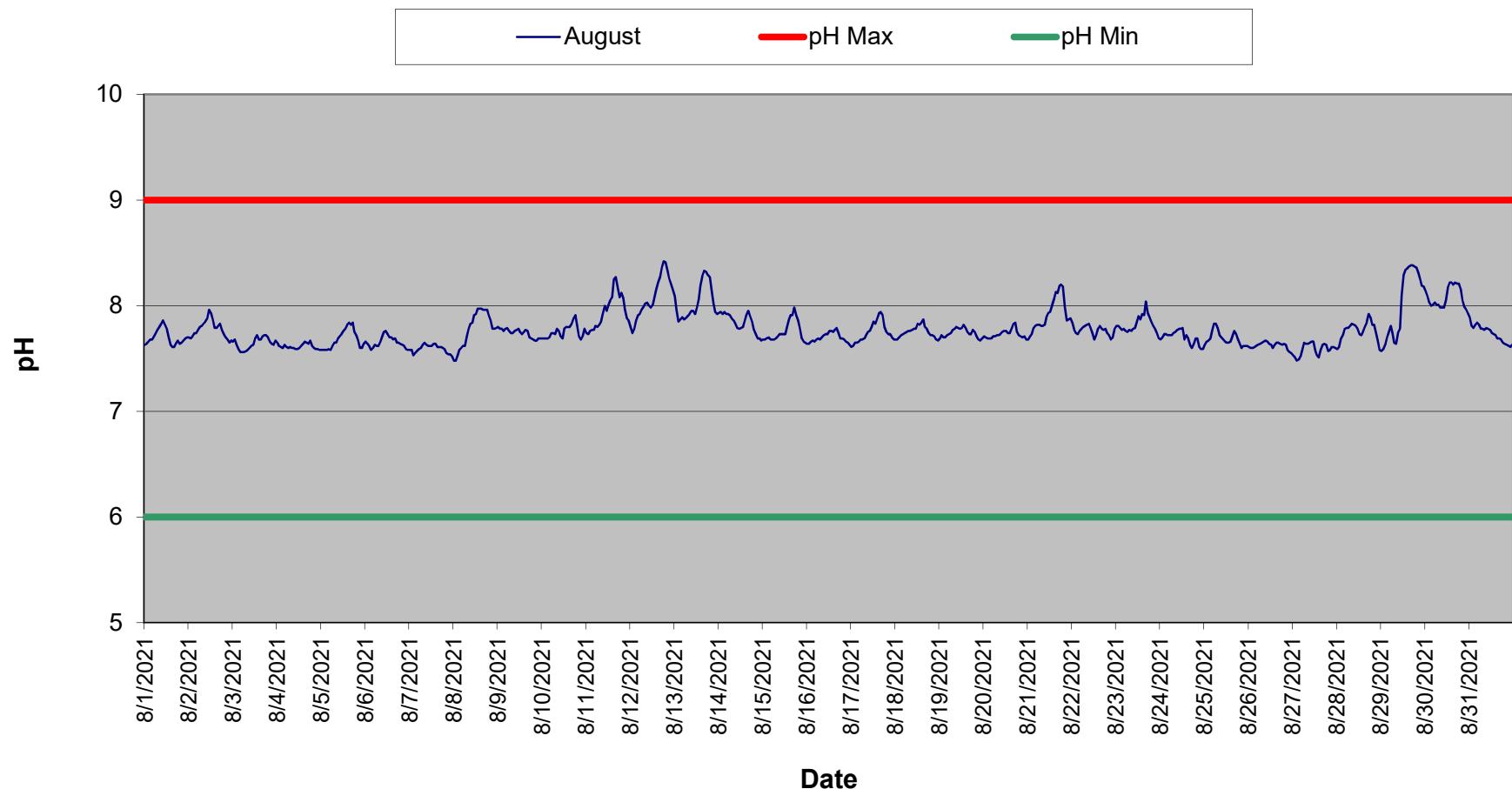
Caldron Falls Tailwater pH Summary - June 2021



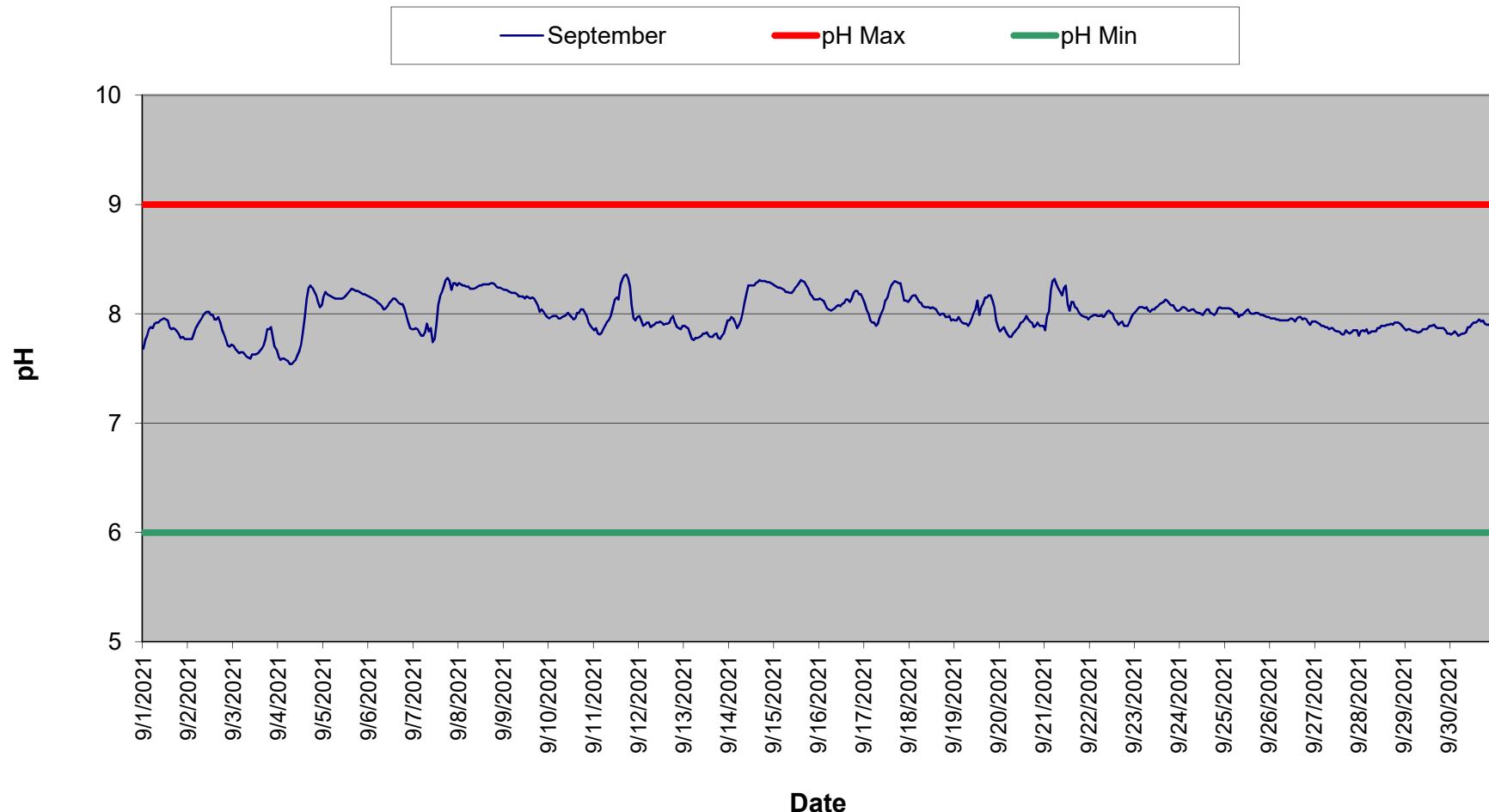
Caldron Falls Tailwater pH Summary - July 2021



Caldron Falls Tailwater pH Summary - August 2021



Caldron Falls Tailwater pH Summary September 2021



Caldron Falls Tailwater pH Summary - June 2021

Time HHMMSS	06/01/21	06/02/21	06/03/21	06/04/21	06/05/21	06/06/21	06/07/21	06/08/21	06/09/21	06/10/21	06/11/21	06/12/21	06/13/21	06/14/21	06/15/21	06/16/21
0	8.2	7.9	7.9	7.8	7.8	7.8	7.7	7.8	7.9	7.8	7.9	7.8	7.9	7.8	7.9	7.8
10000	8.2	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.9	7.8	7.8	7.8	7.9	7.8	7.8	7.8
20000	8.2	7.8	7.9	7.8	7.9	7.8	7.7	7.8	7.8	7.8	7.9	7.8	7.9	7.9	7.8	7.8
30000	8.1	7.8	7.8	7.8	7.9	7.8	7.7	7.8	7.8	7.8	7.9	7.8	7.9	7.9	7.8	7.8
40000	8.1	7.8	7.8	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.9	7.8	7.9	7.9	7.8	7.8
50000	8.1	7.8	7.9	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.9	7.8	7.9	7.9	7.8	7.9
60000	8.1	7.9	7.9	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.8	7.9
70000	8.1	7.9	7.9	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9	8.0	7.8	7.9
80000	8.1	7.9	7.9	7.8	7.9	7.8	7.8	7.8	7.8	7.9	7.8	7.9	7.9	8.0	7.8	7.9
90000	8.1	7.9	7.9	7.8	7.9	7.9	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.9
100000	8.1	7.9	7.9	7.8	7.9	7.9	7.9	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.9
110000	8.1	7.9	8.0	7.8	7.9	8.0	7.9	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.9
120000	8.1	7.9	8.0	7.8	7.9	8.0	7.9	7.8	7.8	7.9	7.9	8.0	7.9	7.9	7.8	7.9
130000	8.1	7.9	7.9	7.8	7.9	7.9	7.9	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.9
140000	7.8	7.9	7.9	7.8	7.9	8.0	7.9	7.8	7.9	7.9	7.9	7.9	8.0	8.0	7.8	7.8
150000	7.8	7.9	7.9	7.9	7.9	8.0	7.8	7.8	7.9	7.9	7.9	8.0	8.0	8.0	7.8	7.8
160000	7.8	7.9	7.9	8.0	8.0	7.9	7.8	7.8	7.9	7.9	8.0	8.0	8.0	8.1	7.8	7.8
170000	7.8	7.9	8.0	8.1	8.1	7.9	7.8	7.8	7.9	7.8	7.9	8.0	8.0	8.2	7.8	7.8
180000	7.9	8.0	7.9	8.0	8.1	7.9	7.8	7.8	7.8	7.9	8.0	8.0	8.0	8.1	7.7	7.8
190000	7.9	7.9	7.8	8.0	8.1	7.9	7.8	7.8	7.9	7.8	8.0	7.9	8.0	7.8	7.8	7.8
200000	7.9	7.8	7.8	8.0	7.9	7.9	7.8	8.0	7.8	7.9	7.9	7.9	7.9	8.0	7.8	7.8
210000	7.8	7.8	7.8	7.9	7.8	7.8	7.8	8.0	7.8	7.9	7.8	7.9	7.8	7.9	7.7	7.8
220000	7.8	7.8	7.8	7.8	7.8	7.7	7.8	7.8	7.8	7.9	7.8	7.9	7.8	7.9	7.7	7.8
230000	7.9	7.8	7.8	7.8	7.8	7.7	7.8	7.8	7.8	7.9	7.8	7.9	7.8	7.9	7.7	7.8
Daily Max	8.2	8.0	8.0	8.1	8.1	8.0	7.9	8.0	7.9	7.9	8.0	8.0	8.0	8.2	7.9	7.9
Daily Min	7.8	7.8	7.8	7.8	7.8	7.7	7.7	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.8
Average	8.0	7.9	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.8

License maximum pH: 9

License minimum pH: 6

Caldron Falls Tailwater pH Summary - June 2021

Time HHMMSS	06/17/21	06/18/21	06/19/21	06/20/21	06/21/21	06/22/21	06/23/21	06/24/21	06/25/21	06/26/21	06/27/21	06/28/21	06/29/21	06/30/21
0	7.8	7.9	7.9	7.8	7.9	8.1	8.1	7.8	7.8	7.8	7.8	7.9	7.9	8.0
10000	7.8	7.9	7.9	7.7	7.9	8.1	8.0	7.8	7.8	7.9	7.9	7.8	7.8	7.9
20000	7.8	7.9	7.8	7.7	8.0	8.1	8.0	7.8	7.8	7.8	7.8	8.0	7.9	7.9
30000	7.8	7.8	7.8	7.8	8.1	8.1	8.0	7.8	7.8	7.8	7.8	7.9	7.9	7.9
40000	7.8	7.8	7.8	7.8	8.1	8.1	8.0	7.8	7.8	7.8	7.8	7.9	7.9	7.9
50000	7.8	7.8	7.8	7.8	8.0	8.1	8.0	7.9	7.8	7.8	7.8	7.9	7.9	7.9
60000	7.8	7.8	7.8	7.8	8.0	8.1	7.9	7.9	7.8	7.8	7.8	7.9	7.9	7.9
70000	7.9	7.9	7.8	7.8	8.1	8.1	7.9	8.0	7.9	7.8	7.9	7.9	7.9	7.9
80000	7.9	7.9	7.8	7.8	8.2	8.1	7.9	8.0	7.9	7.8	7.9	7.9	7.9	8.0
90000	7.8	7.9	7.8	7.8	8.2	8.1	7.9	8.0	7.9	7.8	7.9	7.9	7.9	8.0
100000	7.9	8.0	7.8	7.9	8.2	8.1	7.9	7.9	7.8	7.8	7.9	7.9	7.9	8.0
110000	7.9	8.1	7.8	8.0	8.2	8.1	7.9	8.0	7.9	7.8	7.9	7.9	7.9	8.0
120000	7.9	8.3	7.8	7.9	8.2	8.2	7.9	8.0	7.8	7.8	7.9	8.0	8.0	7.9
130000	7.9	8.3	7.9	7.9	8.2	8.2	7.9	8.0	7.9	7.8	8.0	8.0	7.9	7.9
140000	8.0	8.4	7.9	7.8	8.3	8.2	7.9	8.0	7.9	7.8	8.0	8.0	7.9	7.9
150000	8.0	8.3	7.9	7.8	8.3	8.2	8.0	7.9	7.8	7.8	8.0	8.0	7.9	8.0
160000	8.1	8.4	7.9	7.8	8.3	8.2	8.0	8.0	7.8	7.8	8.0	8.0	8.0	8.0
170000	8.0	8.4	7.9	7.8	8.3	8.2	8.1	8.0	7.8	7.8	8.0	8.0	8.1	8.0
180000	8.0	8.4	7.9	7.7	8.2	8.2	8.1	8.0	7.8	7.8	8.0	7.9	8.2	7.8
190000	8.0	8.3	7.8	7.7	8.2	8.2	8.1	7.9	7.8	7.8	8.0	7.9	8.1	7.8
200000	7.9	8.3	7.8	7.8	8.2	8.2	8.0	7.9	7.8	7.8	8.0	8.0	8.0	7.9
210000	7.9	8.2	7.8	7.8	8.2	8.1	7.9	7.8	7.8	7.8	8.0	8.0	7.9	8.0
220000	7.9	8.1	7.8	7.7	8.2	8.1	7.9	7.8	7.8	7.8	7.9	7.9	8.0	7.9
230000	7.8	8.0	7.8	7.8	8.2	8.1	7.9	7.8	7.8	7.8	7.9	7.9	8.0	7.9
Daily Max	8.1	8.4	7.9	8.0	8.3	8.2	8.1	8.0	7.9	7.8	8.0	8.0	8.2	8.0
Daily Min	7.8	7.8	7.8	7.7	7.9	8.1	7.9	7.8	7.8	7.8	7.9	7.8	7.8	7.8
Average	7.9	8.1	7.8	7.8	8.1	8.1	8.0	7.9	7.8	7.8	7.9	7.9	7.9	7.9

Caldron Falls Tailwater pH Summary - July 2021

Time HHMMSS	07/01/21	07/02/21	07/03/21	07/04/21	07/05/21	07/06/21	07/07/21	07/08/21	07/09/21	07/10/21	07/11/21	07/12/21	07/13/21	07/14/21	07/15/21	07/16/21
0	7.9	7.9	8.0	8.0	7.9	7.8	7.7	7.9	7.9	7.8	7.8	7.9	7.9	7.6	7.5	7.6
10000	7.9	7.9	8.0	8.0	7.9	7.8	7.8	7.9	7.9	7.8	7.8	7.9	7.9	7.6	7.5	7.6
20000	8.0	8.0	8.1	8.0	7.9	7.9	7.8	7.9	7.9	7.8	7.9	7.9	7.9	7.6	7.5	7.6
30000	8.0	8.0	8.1	8.0	7.9	7.9	7.8	7.9	7.9	7.8	7.9	7.9	7.9	7.6	7.5	7.6
40000	8.0	8.0	8.1	8.0	7.9	7.9	7.8	8.0	7.9	7.8	7.9	7.9	7.9	7.6	7.6	7.5
50000	7.9	8.0	8.1	8.0	8.0	7.9	7.8	8.0	7.9	7.8	7.9	7.9	7.9	7.6	7.6	7.5
60000	8.0	8.0	8.1	8.0	8.0	7.9	7.8	8.0	7.9	7.8	7.9	7.9	7.9	7.6	7.6	7.5
70000	7.9	8.0	8.2	8.0	8.0	7.9	7.8	8.0	7.9	7.8	8.0	7.9	7.9	7.6	7.6	7.5
80000	7.9	8.0	8.2	8.0	8.0	7.9	7.8	8.0	7.9	7.8	8.0	7.9	7.9	7.7	7.6	7.5
90000	7.9	8.0	8.2	8.0	8.1	7.9	7.8	8.0	7.9	7.8	8.0	7.9	7.9	7.7	7.7	7.5
100000	7.9	8.0	8.2	8.0	8.1	7.9	7.8	8.0	7.9	7.8	7.9	7.9	7.9	7.7	7.7	7.5
110000	7.9	8.0	8.2	7.9	8.2	7.9	7.9	8.0	7.9	7.9	7.9	7.9	7.9	7.6	7.7	7.5
120000	7.9	8.0	8.2	7.9	8.2	7.8	7.9	8.0	7.9	7.9	7.9	7.9	7.9	7.6	7.6	7.5
130000	7.9	8.0	8.2	7.9	8.1	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.7	7.6	7.6	7.5
140000	7.9	8.0	8.2	8.0	8.0	7.9	7.9	8.0	7.9	7.8	7.9	7.9	7.7	7.7	7.6	7.5
150000	7.9	8.0	8.1	8.0	7.9	7.8	7.9	8.0	7.9	7.8	7.9	7.9	7.7	7.7	7.6	7.5
160000	7.9	8.0	8.1	8.0	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.7	7.7	7.6	7.5
170000	7.9	8.0	8.1	8.0	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.8	7.7	7.7	7.6	7.6
180000	7.8	8.0	8.1	8.1	7.8	7.8	7.8	8.0	7.9	7.9	7.9	7.8	7.7	7.7	7.6	7.5
190000	7.8	8.0	8.0	8.0	7.8	7.8	7.8	8.0	7.9	7.8	7.9	7.9	7.7	7.7	7.6	7.5
200000	7.8	8.0	8.0	8.0	7.8	7.8	7.8	8.0	7.8	7.8	7.9	7.9	7.7	7.6	7.6	7.5
210000	7.8	8.0	7.9	7.9	7.8	7.9	7.8	8.0	7.8	7.8	7.9	7.9	7.7	7.6	7.6	7.6
220000	7.8	8.0	8.0	7.9	7.8	7.8	7.8	7.9	7.7	7.9	7.9	7.9	7.6	7.5	7.6	7.6
230000	7.9	8.0	8.0	7.9	7.9	7.8	7.9	7.9	7.8	7.8	7.9	7.9	7.6	7.5	7.6	7.6
Daily Max	8.0	8.0	8.2	8.1	8.2	7.9	7.9	8.0	7.9	7.9	8.0	7.9	7.9	7.7	7.7	7.6
Daily Min	7.8	7.9	7.9	7.9	7.8	7.8	7.7	7.9	7.7	7.8	7.8	7.6	7.5	7.5	7.5	7.5
Average	7.9	8.0	8.1	8.0	7.9	7.9	7.8	7.8	7.9	7.8	7.9	7.9	7.8	7.6	7.6	7.5

License maximum pH: 9

License minimum pH: 6

Caldron Falls Tailwater pH Summary - July 2021

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

Caldron Falls Tailwater pH Summary - August 2021

Time HHMMSS	08/01/21	08/02/21	08/03/21	08/04/21	08/05/21	08/06/21	08/07/21	08/08/21	08/09/21	08/10/21	08/11/21	08/12/21	08/13/21	08/14/21	08/15/21	08/16/21
0	7.6	7.7	7.7	7.7	7.6	7.7	7.6	7.5	7.8	7.7	7.7	7.8	8.1	7.9	7.7	7.6
10000	7.6	7.7	7.7	7.6	7.6	7.6	7.5	7.8	7.7	7.7	7.7	8.0	7.9	7.9	7.7	7.6
20000	7.7	7.7	7.6	7.6	7.6	7.6	7.5	7.5	7.8	7.7	7.8	7.8	7.9	7.9	7.7	7.7
30000	7.7	7.7	7.6	7.6	7.6	7.6	7.6	7.6	7.8	7.7	7.8	7.9	7.9	7.9	7.7	7.7
40000	7.7	7.7	7.6	7.6	7.6	7.6	7.6	7.6	7.8	7.7	7.8	7.9	7.9	7.9	7.7	7.7
50000	7.7	7.8	7.6	7.6	7.6	7.6	7.6	7.6	7.8	7.7	7.8	7.9	7.9	7.9	7.7	7.7
60000	7.7	7.8	7.6	7.6	7.6	7.6	7.6	7.6	7.8	7.7	7.8	8.0	7.9	7.9	7.7	7.7
70000	7.8	7.8	7.6	7.6	7.7	7.6	7.6	7.7	7.7	7.7	7.8	8.0	7.9	7.9	7.7	7.7
80000	7.8	7.8	7.6	7.6	7.7	7.7	7.7	7.8	7.7	7.8	7.9	8.0	7.9	7.9	7.7	7.7
90000	7.8	7.9	7.6	7.6	7.7	7.7	7.6	7.8	7.8	7.8	7.9	8.0	8.0	7.8	7.7	7.7
100000	7.9	7.9	7.6	7.6	7.7	7.8	7.6	7.8	7.8	7.7	8.0	8.0	8.0	7.8	7.7	7.7
110000	7.8	8.0	7.6	7.6	7.7	7.8	7.6	7.9	7.8	7.7	8.0	8.0	7.9	7.8	7.7	7.7
120000	7.8	7.9	7.7	7.6	7.8	7.7	7.6	7.9	7.8	7.8	8.0	8.0	8.0	7.8	7.7	7.8
130000	7.7	7.9	7.7	7.6	7.8	7.7	7.6	8.0	7.7	7.8	8.1	8.1	8.1	7.8	7.8	7.8
140000	7.6	7.8	7.7	7.6	7.8	7.7	7.6	8.0	7.8	7.8	8.1	8.2	8.2	7.9	7.9	7.8
150000	7.6	7.8	7.7	7.7	7.8	7.7	7.6	8.0	7.8	7.8	8.3	8.2	8.3	7.9	7.9	7.8
160000	7.6	7.8	7.7	7.7	7.8	7.7	7.6	8.0	7.8	7.8	8.3	8.3	8.3	8.0	7.9	7.8
170000	7.6	7.8	7.7	7.6	7.8	7.7	7.6	8.0	7.7	7.9	8.2	8.4	8.3	7.9	8.0	7.7
180000	7.7	7.8	7.7	7.7	7.8	7.7	7.6	8.0	7.7	7.9	8.1	8.4	8.3	7.9	7.9	7.7
190000	7.6	7.7	7.7	7.6	7.7	7.6	7.6	7.9	7.7	7.8	8.1	8.4	8.3	7.8	7.9	7.7
200000	7.7	7.7	7.7	7.6	7.7	7.6	7.6	7.9	7.7	7.7	8.1	8.3	8.2	7.7	7.8	7.7
210000	7.7	7.7	7.6	7.6	7.6	7.6	7.5	7.8	7.7	7.7	8.0	8.3	8.0	7.7	7.7	7.7
220000	7.7	7.7	7.6	7.6	7.6	7.6	7.5	7.8	7.7	7.7	7.9	8.2	7.9	7.7	7.7	7.7
230000	7.7	7.7	7.7	7.6	7.6	7.6	7.5	7.8	7.7	7.8	7.9	8.2	7.9	7.7	7.7	7.6
Daily Max	7.9	8.0	7.7	7.7	7.8	7.8	7.7	8.0	7.8	7.9	8.3	8.4	8.3	8.0	8.0	7.8
Daily Min	7.6	7.7	7.6	7.6	7.6	7.6	7.5	7.5	7.7	7.7	7.7	7.9	7.7	7.7	7.6	
Average	7.7	7.8	7.6	7.6	7.7	7.7	7.6	7.6	7.8	7.7	7.8	7.9	8.1	8.0	7.8	7.7

License maximum pH: 9

License minimum pH: 6

Caldron Falls Tailwater pH Summary - August 2021

Time HHMMSS	08/17/21	08/18/21	08/19/21	08/20/21	08/21/21	08/22/21	08/23/21	08/24/21	08/25/21	08/26/21	08/27/21	08/28/21	08/29/21	08/30/21	08/31/21
0	7.6	7.7	7.7	7.7	7.7	7.8	7.8	7.7	7.6	7.6	7.5	7.6	7.6	8.1	7.9
10000	7.6	7.7	7.7	7.7	7.7	7.8	7.8	7.7	7.7	7.6	7.5	7.6	7.6	8.1	7.8
20000	7.7	7.7	7.7	7.7	7.7	7.7	7.8	7.7	7.7	7.6	7.5	7.7	7.6	8.0	7.8
30000	7.7	7.7	7.7	7.7	7.8	7.7	7.8	7.7	7.7	7.6	7.5	7.7	7.7	8.0	7.8
40000	7.7	7.7	7.7	7.7	7.8	7.8	7.8	7.7	7.8	7.6	7.5	7.8	7.8	8.0	7.8
50000	7.7	7.7	7.7	7.7	7.8	7.8	7.8	7.7	7.8	7.6	7.6	7.8	7.8	8.0	7.8
60000	7.7	7.8	7.7	7.7	7.8	7.8	7.8	7.7	7.8	7.6	7.7	7.8	7.7	8.0	7.8
70000	7.7	7.8	7.8	7.7	7.8	7.8	7.8	7.7	7.8	7.7	7.6	7.8	7.7	8.0	7.8
80000	7.7	7.8	7.8	7.7	7.8	7.8	7.8	7.8	7.7	7.7	7.6	7.8	7.6	8.0	7.8
90000	7.8	7.8	7.8	7.7	7.8	7.8	7.8	7.8	7.7	7.7	7.7	7.8	7.7	8.0	7.8
100000	7.8	7.8	7.8	7.8	7.9	7.8	7.8	7.8	7.7	7.7	7.7	7.8	7.8	8.0	7.8
110000	7.8	7.8	7.8	7.8	7.9	7.7	7.8	7.8	7.7	7.6	7.7	7.8	8.1	8.1	7.8
120000	7.9	7.8	7.8	7.8	7.9	7.7	7.9	7.8	7.7	7.6	7.6	7.7	8.3	8.2	7.7
130000	7.8	7.8	7.8	7.7	8.0	7.7	7.9	7.7	7.7	7.6	7.5	7.7	8.3	8.2	7.7
140000	7.9	7.8	7.8	7.7	8.1	7.8	7.9	7.7	7.7	7.6	7.5	7.8	8.4	8.2	7.7
150000	7.9	7.9	7.8	7.8	8.1	7.8	7.9	7.7	7.7	7.7	7.6	7.8	8.4	8.2	7.7
160000	7.9	7.8	7.7	7.8	8.1	7.8	8.0	7.6	7.8	7.7	7.6	7.8	8.4	8.2	7.7
170000	7.9	7.8	7.7	7.8	8.2	7.8	7.9	7.6	7.7	7.6	7.6	7.9	8.4	8.2	7.7
180000	7.8	7.7	7.8	7.8	8.2	7.8	7.9	7.6	7.7	7.6	7.6	7.9	8.4	8.2	7.7
190000	7.8	7.7	7.8	7.7	8.2	7.7	7.9	7.7	7.6	7.6	7.6	7.8	8.4	8.2	7.6
200000	7.7	7.7	7.7	7.7	8.0	7.7	7.8	7.7	7.6	7.6	7.6	7.8	8.3	8.1	7.6
210000	7.7	7.7	7.7	7.7	7.9	7.7	7.8	7.6	7.6	7.6	7.6	7.7	8.3	8.0	7.6
220000	7.7	7.7	7.7	7.7	7.9	7.7	7.7	7.6	7.6	7.6	7.6	7.7	8.2	8.0	7.6
230000	7.7	7.7	7.7	7.7	7.9	7.8	7.7	7.6	7.6	7.6	7.6	7.6	8.2	7.9	7.6
Daily Max	7.9	7.9	7.8	7.8	8.2	7.8	8.0	7.8	7.8	7.7	7.7	7.9	8.4	8.2	7.9
Daily Min	7.6	7.7	7.7	7.7	7.7	7.7	7.7	7.6	7.6	7.6	7.5	7.6	7.6	7.9	7.6
Average	7.8	7.8	7.7	7.7	7.9	7.8	7.8	7.7	7.7	7.6	7.6	7.8	8.0	8.1	7.7

Caldron Falls Tailwater pH Summary - September 2021

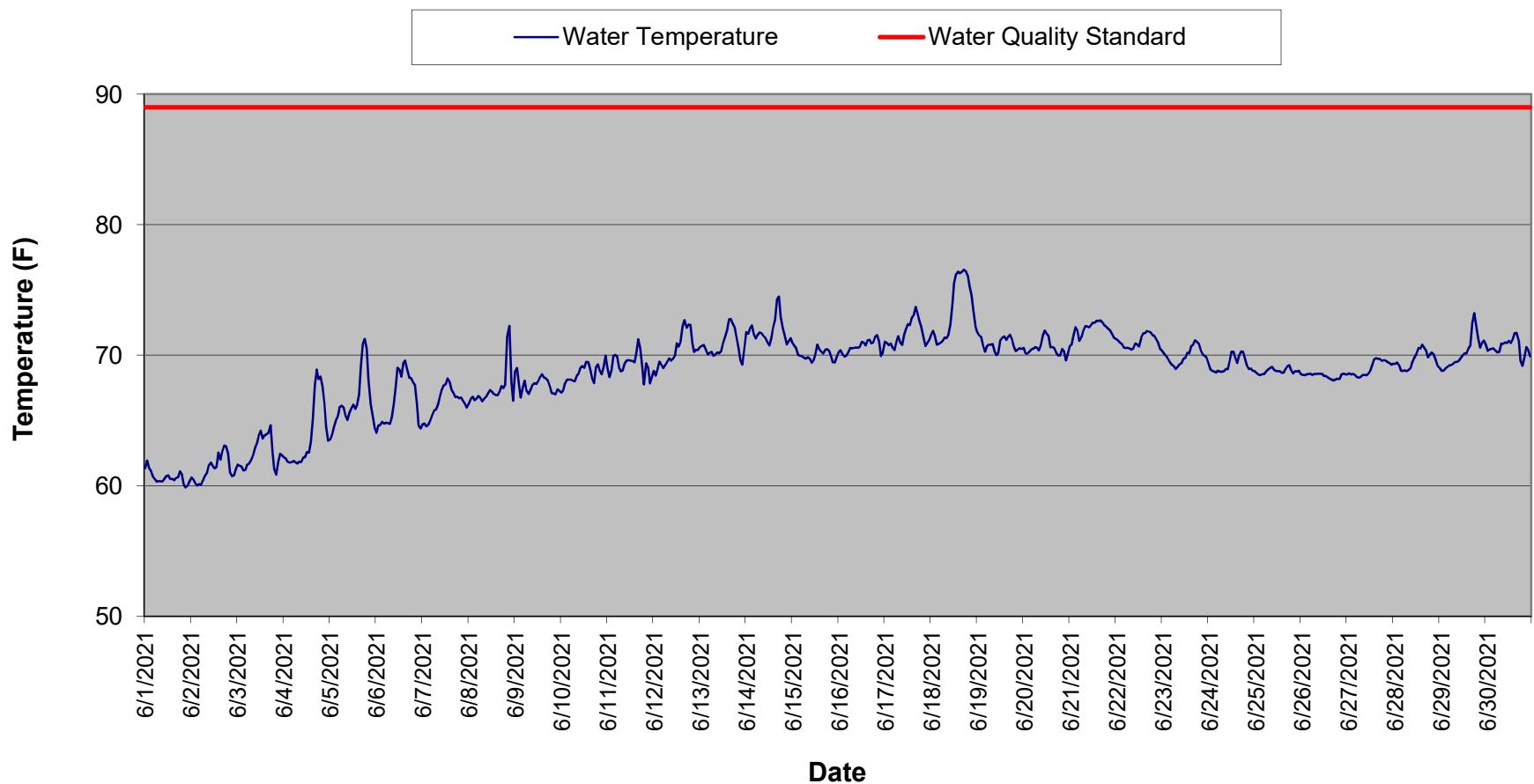
Time HHMMSS	09/01/21	09/02/21	09/03/21	09/04/21	09/05/21	09/06/21	09/07/21	09/08/21	09/09/21	09/10/21	09/11/21	09/12/21	09/13/21	09/14/21	09/15/21	09/16/21
0	7.7	7.8	7.7	7.6	8.2	8.2	7.9	8.3	8.2	8.0	7.9	8.0	7.9	7.9	8.3	8.1
10000	7.8	7.8	7.7	7.6	8.2	8.2	7.9	8.3	8.2	8.0	7.9	7.9	7.9	8.0	8.3	8.1
20000	7.8	7.8	7.7	7.6	8.2	8.1	7.9	8.3	8.2	8.0	7.8	7.9	7.9	8.0	8.2	8.1
30000	7.9	7.8	7.6	7.6	8.2	8.1	7.8	8.3	8.2	8.0	7.8	7.9	7.8	7.9	8.2	8.1
40000	7.9	7.9	7.7	7.6	8.2	8.1	7.8	8.3	8.2	8.0	7.8	7.9	7.8	7.9	8.2	8.1
50000	7.9	7.9	7.7	7.6	8.2	8.1	7.8	8.3	8.2	8.0	7.9	7.9	7.8	7.9	8.2	8.0
60000	7.9	7.9	7.6	7.5	8.1	8.1	7.8	8.2	8.2	8.0	7.9	7.9	7.8	7.9	8.2	8.0
70000	7.9	8.0	7.6	7.5	8.1	8.1	7.9	8.2	8.2	8.0	7.9	7.9	7.8	8.0	8.2	8.0
80000	7.9	8.0	7.6	7.6	8.1	8.0	7.8	8.2	8.2	8.0	8.0	7.9	7.8	8.1	8.2	8.1
90000	7.9	8.0	7.6	7.6	8.1	8.1	7.9	8.2	8.2	8.0	8.0	7.9	7.8	8.2	8.2	8.1
100000	8.0	8.0	7.6	7.6	8.1	8.1	7.7	8.3	8.2	8.0	8.1	7.9	7.8	8.3	8.2	8.1
110000	8.0	8.0	7.6	7.7	8.2	8.1	7.8	8.3	8.1	8.0	8.1	7.9	7.8	8.3	8.2	8.1
120000	8.0	8.0	7.6	7.7	8.2	8.1	7.9	8.3	8.2	8.0	8.2	7.9	7.8	8.3	8.3	8.1
130000	7.9	8.0	7.6	7.8	8.2	8.1	8.1	8.3	8.2	8.0	8.1	7.9	7.8	8.3	8.3	8.1
140000	7.9	8.0	7.7	8.0	8.2	8.1	8.2	8.3	8.1	8.0	8.3	7.9	7.8	8.3	8.3	8.1
150000	7.9	8.0	7.7	8.1	8.2	8.1	8.2	8.3	8.2	8.0	8.3	7.9	7.8	8.3	8.3	8.1
160000	7.9	8.0	7.7	8.2	8.2	8.1	8.3	8.3	8.1	8.0	8.4	7.9	7.8	8.3	8.3	8.1
170000	7.9	7.9	7.8	8.3	8.2	8.1	8.3	8.3	8.1	8.0	8.4	8.0	7.8	8.3	8.3	8.1
180000	7.8	7.9	7.9	8.2	8.2	8.1	8.3	8.3	8.1	8.0	8.3	8.0	7.8	8.3	8.2	8.2
190000	7.8	7.8	7.9	8.2	8.2	8.1	8.3	8.3	8.0	8.0	8.3	7.9	7.8	8.3	8.2	8.2
200000	7.8	7.8	7.9	8.2	8.2	8.0	8.2	8.3	8.0	8.0	8.1	7.9	7.8	8.3	8.2	8.2
210000	7.8	7.7	7.8	8.1	8.2	7.9	8.3	8.2	8.0	7.9	8.0	7.9	7.8	8.3	8.1	8.2
220000	7.8	7.7	7.7	8.1	8.2	7.9	8.3	8.2	8.0	7.9	7.9	7.9	7.9	8.3	8.1	8.2
230000	7.8	7.7	7.7	8.1	8.2	7.9	8.3	8.2	8.0	7.9	8.0	7.9	7.9	8.3	8.1	8.1
Daily Max	8.0	8.0	7.9	8.3	8.2	8.2	8.3	8.3	8.2	8.0	8.4	8.0	7.9	8.3	8.3	8.2
Daily Min	7.7	7.7	7.6	7.5	8.1	7.9	7.7	8.2	8.0	7.9	7.8	7.9	7.8	7.9	8.1	8.0
Average	7.9	7.9	7.7	7.8	8.2	8.1	8.0	8.3	8.1	8.0	8.0	7.9	7.8	8.2	8.2	8.1

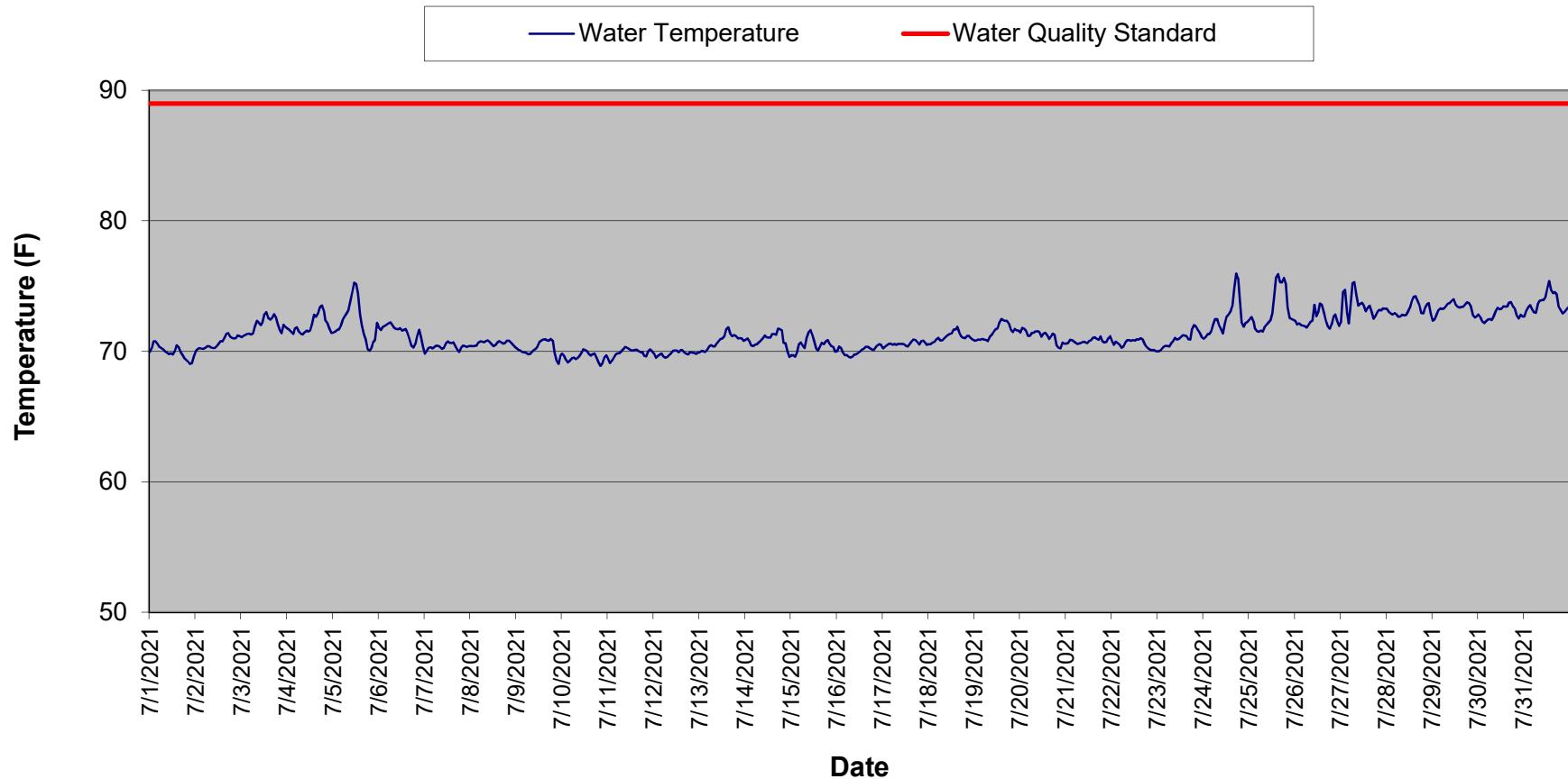
License maximum pH: 9

License minimum pH: 6

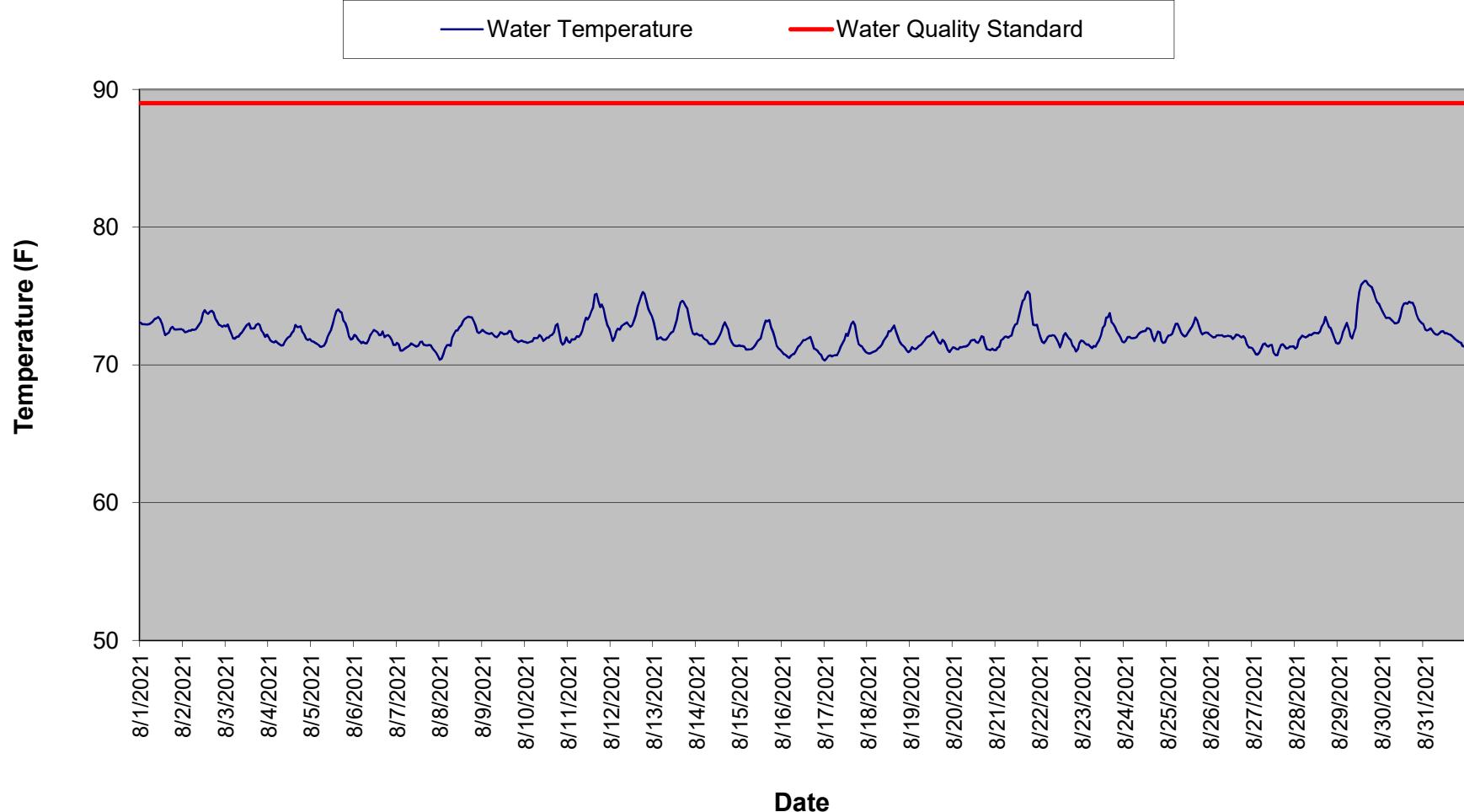
Caldron Falls Tailwater pH Summary - September 2021

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

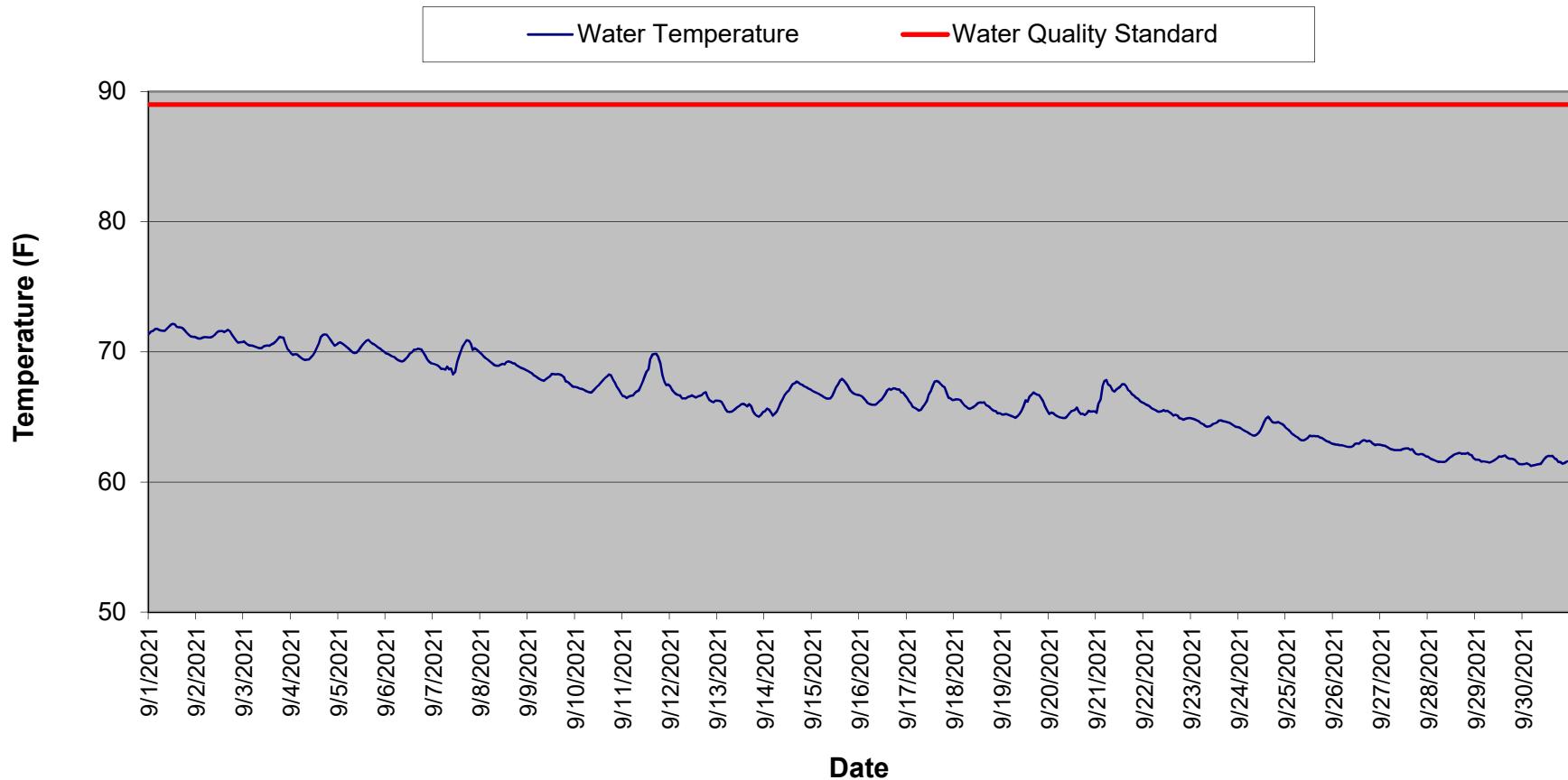
Caldron Falls Tailwater Water Temperature - June 2021

Caldron Falls Tailwater Water Temperature - July 2021

Caldron Falls Tailwater Water Temperature - August 2021



Caldron Falls Tailwater Water Temperature - September 2021



Caldron Falls Tailwater Temperature Summary - June 2021

Time HHMMSS	06/01/21	06/02/21	06/03/21	06/04/21	06/05/21	06/06/21	06/07/21	06/08/21	06/09/21	06/10/21	06/11/21	06/12/21	06/13/21	06/14/21	06/15/21	06/16/21
0	61.4	60.6	61.6	62.2	63.5	64.1	64.7	66.3	68.8	67.1	69.0	68.8	70.6	71.8	70.9	70.2
10000	61.9	60.5	61.5	62.1	64.0	64.6	64.8	66.7	69.0	67.3	68.3	68.5	70.7	71.7	70.7	70.4
20000	61.4	60.2	61.5	61.8	64.5	64.7	64.6	66.8	67.7	67.8	68.9	68.9	70.8	72.1	70.5	70.1
30000	61.1	60.0	61.2	61.8	65.0	64.9	64.7	66.6	66.8	68.1	70.0	69.5	70.5	72.3	70.0	69.9
40000	60.7	60.1	61.2	61.8	65.4	64.8	65.0	66.7	67.5	68.1	70.0	69.3	70.1	71.6	70.0	70.0
50000	60.5	60.1	61.6	61.9	66.0	64.8	65.4	66.9	68.1	68.1	69.9	69.0	70.2	71.3	69.9	70.3
60000	60.3	60.5	61.7	61.8	66.2	64.8	65.8	66.7	67.3	68.0	69.1	69.2	70.2	71.6	69.8	70.6
70000	60.4	60.8	62.0	61.7	66.0	64.7	65.9	66.5	67.0	68.0	68.8	69.5	70.0	71.8	69.7	70.5
80000	60.3	61.0	62.4	61.9	65.4	65.3	66.2	66.7	67.4	68.4	68.9	69.8	70.1	71.7	69.9	70.6
90000	60.3	61.6	62.9	61.8	65.0	66.3	66.9	66.8	67.7	68.6	69.4	69.6	70.2	71.5	69.7	70.6
100000	60.5	61.8	63.3	62.2	65.6	67.6	67.4	67.1	67.9	69.1	69.6	69.7	70.2	71.3	69.4	70.6
110000	60.8	61.5	63.9	62.2	65.9	69.1	67.7	67.4	67.8	69.2	69.6	70.0	70.3	71.0	69.6	70.7
120000	60.8	61.4	64.2	62.6	66.2	68.9	67.8	67.2	68.0	69.0	69.6	70.9	70.9	70.8	70.1	71.0
130000	60.5	61.4	63.6	62.6	65.9	68.4	68.2	67.0	68.3	69.5	69.6	70.7	71.4	71.3	70.8	71.0
140000	60.5	62.5	63.9	63.4	66.2	69.4	68.0	67.0	68.6	69.5	69.5	71.1	71.9	72.2	70.5	70.8
150000	60.4	62.0	64.0	65.2	67.0	69.6	67.4	67.0	68.3	68.9	70.2	72.2	72.8	72.7	70.3	71.2
160000	60.6	62.6	64.0	67.7	69.1	69.0	67.1	67.2	68.2	68.2	71.2	72.7	72.8	74.3	70.1	71.2
170000	60.7	63.1	64.6	68.9	70.9	68.3	66.8	67.6	68.0	67.9	70.5	72.1	72.4	74.5	70.4	70.9
180000	61.1	63.0	62.5	68.2	71.2	68.2	66.8	67.5	67.6	69.1	69.2	72.4	72.1	73.0	70.5	71.0
190000	60.9	62.5	61.2	68.4	70.5	67.9	66.7	67.8	67.1	69.3	67.8	72.3	71.4	72.1	70.3	71.4
200000	60.1	61.1	60.9	67.6	68.1	67.7	66.8	71.4	67.1	68.8	69.4	70.9	70.6	71.5	69.9	71.5
210000	59.9	60.7	61.8	66.4	66.3	66.3	66.5	72.2	67.0	68.5	69.1	70.3	69.7	70.8	69.5	71.1
220000	60.0	60.8	62.5	64.5	65.4	64.6	66.3	68.0	67.4	69.1	67.9	70.4	69.3	71.1	69.4	69.9
230000	60.3	61.3	62.3	63.5	64.5	64.4	66.0	66.5	67.3	70.0	68.3	70.4	71.3	69.9	70.2	
Daily Max	61.9	63.1	64.6	68.9	71.2	69.6	68.2	72.2	69.0	70.0	71.2	72.7	72.8	74.5	70.9	71.5
Daily Min	59.9	60.0	60.9	61.7	63.5	64.1	64.6	66.3	66.8	67.1	67.8	68.5	69.3	70.8	69.4	69.9
Average	60.7	61.3	62.5	63.8	66.4	66.6	66.4	67.4	67.7	68.6	69.3	70.3	70.8	71.9	70.1	70.6

Monthly average: 68.3

License Maximum: 89 F

Caldron Falls Tailwater Temperature Summary - June 2021

Time HHMMSS	06/17/21	06/18/21	06/19/21	06/20/21	06/21/21	06/22/21	06/23/21	06/24/21	06/25/21	06/26/21	06/27/21	06/28/21	06/29/21	06/30/21
0	71.1	71.6	71.8	70.6	70.7	71.3	70.3	69.4	68.8	68.6	68.5	69.3	69.0	70.8
10000	70.9	71.9	71.5	70.2	70.8	71.2	70.1	68.9	68.7	68.5	68.6	69.4	68.8	70.3
20000	70.8	71.5	71.4	70.1	71.6	71.0	70.0	68.8	68.5	68.5	68.5	69.5	68.8	70.4
30000	70.9	70.8	70.7	70.3	72.1	70.9	69.7	68.8	68.5	68.6	68.6	69.2	69.0	70.5
40000	70.6	70.9	70.3	70.4	71.9	70.6	69.5	68.7	68.5	68.6	68.5	68.8	69.1	70.5
50000	70.4	71.0	70.7	70.5	71.1	70.6	69.3	68.8	68.6	68.6	68.3	68.8	69.2	70.4
60000	71.0	71.1	70.8	70.6	71.4	70.6	69.2	68.7	68.8	68.5	68.3	68.9	69.3	70.2
70000	71.5	71.4	70.8	70.6	71.9	70.5	69.0	68.7	68.9	68.6	68.3	68.8	69.3	70.3
80000	71.0	71.3	70.9	70.4	72.2	70.4	69.1	68.8	69.0	68.6	68.5	68.9	69.5	70.9
90000	70.8	71.6	70.3	70.7	72.2	70.5	69.3	68.9	69.1	68.6	68.5	69.0	69.5	70.9
100000	71.6	72.4	70.0	71.5	72.2	70.9	69.4	68.9	68.9	68.6	68.5	69.5	69.6	71.0
110000	72.1	73.9	70.2	71.9	72.3	70.8	69.7	69.6	68.8	68.6	68.6	69.8	69.8	70.9
120000	72.4	75.5	71.2	71.7	72.5	70.7	69.8	70.3	68.8	68.4	68.8	70.1	70.0	71.1
130000	72.3	76.2	71.4	71.5	72.5	71.3	70.2	70.3	68.8	68.4	69.2	70.6	70.2	70.9
140000	72.9	76.4	71.4	70.6	72.7	71.7	70.2	69.8	68.7	68.3	69.7	70.5	70.2	71.2
150000	73.1	76.3	71.2	70.6	72.6	71.7	70.7	69.4	68.7	68.2	69.8	70.8	70.5	71.7
160000	73.7	76.4	71.4	70.5	72.7	71.9	70.8	70.0	69.0	68.1	69.7	70.6	70.7	71.7
170000	73.2	76.6	71.6	70.2	72.5	71.8	71.2	70.3	69.2	68.1	69.7	70.4	72.5	71.1
180000	72.7	76.4	71.2	70.0	72.3	71.8	71.0	70.3	69.2	68.1	69.6	69.9	73.2	69.6
190000	72.2	76.1	70.7	70.0	72.2	71.6	70.9	69.7	68.9	68.2	69.6	70.0	72.4	69.2
200000	71.3	75.3	70.3	70.5	72.0	71.5	70.4	69.2	68.6	68.2	69.6	70.2	71.3	69.8
210000	70.7	74.6	70.4	70.3	71.9	71.2	70.0	68.9	68.8	68.5	69.5	70.1	70.6	70.6
220000	71.0	73.3	70.5	69.6	71.6	71.0	70.0	69.0	68.8	68.6	69.4	69.7	71.0	70.4
230000	71.2	72.3	70.5	70.2	71.3	70.5	69.8	68.8	68.8	68.6	69.3	69.2	71.1	69.9
Daily Max	73.7	76.6	71.8	71.9	72.7	71.9	71.2	70.3	69.2	68.6	69.8	70.8	73.2	71.7
Daily Min	70.4	70.8	70.0	69.6	70.7	70.4	69.0	68.7	68.5	68.1	68.3	68.8	68.8	69.2
Average	71.6	73.5	70.9	70.6	72.0	71.1	70.0	69.3	68.8	68.4	69.0	69.7	70.2	70.6

Caldron Falls Tailwater Temperature Summary - July 2021

Time HHMMSS	07/01/21	07/02/21	07/03/21	07/04/21	07/05/21	07/06/21	07/07/21	07/08/21	07/09/21	07/10/21	07/11/21	07/12/21	07/13/21	07/14/21	07/15/21	07/16/21
0	70.0	70.0	71.1	71.8	71.4	71.8	69.8	70.4	70.2	69.8	69.4	69.8	69.9	70.9	69.7	70.0
10000	70.3	70.2	71.2	71.6	71.5	71.6	70.1	70.4	70.1	69.7	69.1	69.5	70.0	71.0	69.7	70.4
20000	70.7	70.2	71.3	71.5	71.6	71.9	70.3	70.4	70.1	69.3	69.3	69.6	70.0	70.7	69.6	70.2
30000	70.8	70.2	71.3	71.3	71.7	71.9	70.3	70.4	69.9	69.1	69.5	69.7	70.0	70.5	69.9	69.9
40000	70.6	70.2	71.3	71.8	72.0	72.0	70.2	70.7	69.9	69.3	69.8	69.8	70.1	70.4	70.5	69.7
50000	70.3	70.3	71.3	71.8	72.4	72.1	70.3	70.7	69.9	69.5	69.8	69.6	70.4	70.5	70.7	69.7
60000	70.3	70.4	71.4	71.5	72.7	72.2	70.4	70.7	69.8	69.5	69.9	69.5	70.5	70.6	70.4	69.6
70000	70.1	70.4	71.9	71.4	72.9	72.0	70.4	70.7	69.8	69.4	70.0	69.6	70.4	70.7	70.3	69.5
80000	70.0	70.3	72.3	71.3	73.2	71.8	70.3	70.8	69.9	69.5	70.2	69.7	70.4	70.8	71.0	69.6
90000	69.9	70.3	72.2	71.5	73.9	71.7	70.2	70.8	70.1	69.6	70.3	69.9	70.6	71.0	71.5	69.8
100000	69.8	70.3	72.0	71.6	74.6	71.7	70.3	70.7	70.2	69.9	70.3	70.0	70.8	71.2	71.6	69.8
110000	69.8	70.4	72.2	71.5	75.3	71.8	70.6	70.5	70.4	70.2	70.2	70.1	70.9	71.1	71.2	69.9
120000	69.7	70.6	72.8	71.6	75.1	71.6	70.8	70.4	70.7	70.1	70.1	70.1	71.0	71.1	70.8	70.0
130000	70.0	70.8	73.0	72.1	74.4	71.6	70.6	70.5	70.8	70.0	70.1	69.9	71.2	71.1	70.2	70.1
140000	70.5	70.8	72.5	72.8	72.9	71.7	70.6	70.7	70.9	69.8	70.1	70.1	71.7	71.3	70.1	70.2
150000	70.3	71.0	72.4	72.6	72.0	71.4	70.7	70.8	70.9	69.7	70.1	70.1	71.8	71.3	70.4	70.4
160000	69.9	71.4	72.6	72.9	71.3	70.9	70.4	70.7	70.8	69.8	70.0	69.9	71.3	71.3	70.6	70.4
170000	69.7	71.4	72.8	73.4	70.9	70.4	70.1	70.6	70.8	69.8	69.9	69.8	71.2	71.7	70.5	70.3
180000	69.5	71.1	72.6	73.5	70.2	70.3	69.9	70.6	70.9	69.5	70.0	69.8	71.3	71.7	70.8	70.2
190000	69.4	71.0	72.0	73.1	70.0	70.6	70.3	70.8	70.8	69.2	69.6	69.9	71.2	71.6	70.9	70.1
200000	69.2	71.0	71.7	72.4	70.3	71.2	70.4	70.8	69.9	68.9	69.6	69.9	71.0	70.7	70.6	70.3
210000	69.0	71.0	71.4	72.2	70.7	71.6	70.4	70.7	69.3	69.1	70.0	69.9	71.0	70.6	70.4	70.4
220000	69.1	71.2	72.0	71.8	70.9	71.1	70.3	70.5	69.0	69.5	70.1	69.8	71.0	70.0	70.3	70.5
230000	69.6	71.2	71.9	71.4	72.2	70.4	70.4	70.4	69.7	69.7	70.0	69.9	70.8	69.6	70.0	70.5
Daily Max	70.8	71.4	73.0	73.5	75.3	72.2	70.8	70.8	70.9	70.2	70.3	70.1	71.8	71.7	71.6	70.5
Daily Min	69.0	70.0	71.1	71.3	70.0	70.3	69.8	70.4	69.0	68.9	69.1	69.5	69.9	69.6	69.6	69.5
Average	69.9	70.6	72.0	72.0	72.2	71.5	70.3	70.6	70.2	69.6	69.9	69.8	70.8	70.9	70.5	70.1

Monthly average: 71.4

License Maximum Monthly Average: 89 F

Caldron Falls Tailwater Temperature Summary - July 2021

Time HHMMSS	07/17/21	07/18/21	07/19/21	07/20/21	07/21/21	07/22/21	07/23/21	07/24/21	07/25/21	07/26/21	07/27/21	07/28/21	07/29/21	07/30/21	07/31/21
0	70.2	70.5	70.8	71.4	70.6	70.8	70.0	71.0	72.3	72.4	72.0	73.3	72.9	72.7	72.7
10000	70.3	70.5	70.8	71.8	70.6	70.5	70.0	71.1	72.4	72.3	72.3	73.3	72.3	72.8	72.7
20000	70.5	70.7	70.9	71.7	70.9	70.7	70.2	71.3	72.6	72.0	74.5	73.0	72.5	72.6	73.1
30000	70.6	70.7	70.9	71.5	70.9	70.6	70.3	71.3	72.3	72.1	74.7	72.9	72.8	72.3	73.4
40000	70.6	70.9	70.9	71.2	70.8	70.5	70.4	71.5	71.7	72.0	73.0	72.8	73.1	72.2	73.5
50000	70.5	71.0	70.9	71.2	70.7	70.3	70.4	72.1	71.6	72.0	72.1	72.9	73.3	72.3	73.2
60000	70.6	70.8	70.9	71.4	70.6	70.4	70.4	72.5	71.5	71.9	73.5	72.8	73.2	72.4	73.0
70000	70.5	70.8	70.8	71.4	70.6	70.7	70.6	72.5	71.6	71.8	75.2	72.7	73.3	72.5	72.9
80000	70.6	71.0	71.1	71.5	70.7	70.9	70.8	72.0	71.5	72.0	75.3	72.7	73.5	72.4	73.6
90000	70.6	71.1	71.3	71.5	70.7	70.9	71.0	71.7	71.9	72.3	74.3	72.8	73.6	72.7	73.9
100000	70.6	71.2	71.5	71.5	70.7	70.8	70.9	71.4	72.1	72.4	73.5	72.8	73.7	73.1	73.9
110000	70.5	71.3	71.7	71.1	70.6	70.9	70.9	72.1	72.2	73.6	73.6	72.8	73.9	73.3	73.9
120000	70.4	71.4	71.8	71.3	70.8	70.8	71.1	72.7	72.4	72.7	73.7	73.0	74.0	73.2	74.1
130000	70.4	71.7	72.2	71.4	70.8	70.9	71.2	72.8	72.9	73.0	73.4	73.3	73.6	73.3	74.8
140000	70.5	71.7	72.5	71.2	71.0	70.9	71.2	73.0	74.3	73.7	73.1	73.9	73.4	73.5	75.4
150000	70.8	71.9	72.4	70.9	71.1	71.0	71.2	73.0	75.7	73.5	73.3	74.2	73.4	73.4	74.7
160000	70.9	71.4	72.3	71.1	71.0	70.9	70.9	73.5	75.9	73.0	73.5	74.2	73.4	73.4	74.5
170000	70.9	71.1	72.3	71.3	70.9	70.6	70.9	74.8	75.3	72.4	73.0	73.9	73.4	73.7	74.5
180000	70.7	71.0	72.1	71.2	71.1	70.4	71.7	76.0	75.3	71.9	72.5	73.5	73.6	73.8	74.4
190000	70.5	71.0	71.7	70.4	70.8	70.2	72.0	75.6	75.6	71.7	72.7	72.9	73.8	73.5	73.4
200000	70.8	71.2	71.5	70.3	70.7	70.1	71.9	73.8	75.2	72.1	73.0	72.9	73.7	73.3	73.2
210000	70.8	71.2	71.7	70.2	70.7	70.1	71.6	72.2	73.4	72.7	73.2	73.3	73.4	72.7	72.9
220000	70.7	71.0	71.6	70.7	71.0	70.1	71.4	71.9	72.6	72.8	73.1	73.6	72.8	72.5	73.0
230000	70.5	70.9	71.6	70.6	71.2	70.0	71.1	72.2	72.5	72.3	73.3	73.7	72.6	72.8	73.2
Daily Max	70.9	71.9	72.5	71.8	71.2	71.0	72.0	76.0	75.9	73.7	75.3	74.2	74.0	73.8	75.4
Daily Min	70.2	70.5	70.8	70.2	70.6	70.0	70.0	71.0	71.5	71.7	72.0	72.7	72.3	72.2	72.7
Average	70.6	71.1	71.5	71.2	70.8	70.6	70.9	72.6	73.1	72.4	73.4	73.2	73.3	72.9	73.7

Caldron Falls Tailwater Temperature Summary - August 2021

Time HHMMSS	08/01/21	08/02/21	08/03/21	08/04/21	08/05/21	08/06/21	08/07/21	08/08/21	08/09/21	08/10/21	08/11/21	08/12/21	08/13/21	08/14/21	08/15/21	08/16/21	
0	73.1	72.5	72.8	72.0	71.7	72.2	71.6	70.4	72.5	71.7	71.7	72.2	73.1	72.3	71.4	70.9	
10000	72.9	72.4	72.9	71.8	71.7	72.1	71.5	70.4	72.4	71.6	71.6	71.8	72.5	72.2	71.4	70.8	
20000	73.0	72.4	72.6	71.7	71.6	71.9	71.0	70.8	72.3	71.6	71.9	72.0	71.9	72.1	71.4	70.7	
30000	72.9	72.5	72.3	71.6	71.5	71.7	71.0	71.2	72.3	71.7	71.8	72.4	71.9	72.2	71.3	70.6	
40000	72.9	72.5	71.9	71.7	71.4	71.6	71.1	71.4	72.3	71.7	71.9	72.6	72.0	71.9	71.1	70.5	
50000	73.0	72.6	71.9	71.6	71.3	71.7	71.2	71.5	72.3	72.0	72.1	72.6	71.9	71.8	71.1	70.7	
60000	73.0	72.5	72.0	71.5	71.3	71.6	71.3	71.4	72.2	71.9	72.0	72.8	71.8	71.8	71.1	70.8	
70000	73.2	72.6	72.0	71.4	71.4	71.6	71.4	72.0	72.1	71.9	72.2	72.9	71.8	71.6	71.1	70.8	
80000	73.3	72.7	72.2	71.4	71.6	71.8	71.6	72.3	72.0	72.2	72.5	73.0	72.0	71.5	71.3	71.0	
90000	73.4	72.9	72.4	71.7	72.1	72.1	71.5	72.5	72.2	72.0	73.0	73.1	72.2	71.5	71.4	71.3	
100000	73.5	73.1	72.6	71.9	72.3	72.3	71.4	72.5	72.4	71.8	73.4	72.9	72.4	71.5	71.7	71.4	
110000	73.3	73.8	72.8	72.0	72.5	72.5	71.3	72.8	72.3	71.8	73.3	72.8	72.4	71.7	71.8	71.6	
120000	73.0	74.0	72.9	72.1	73.0	72.5	71.4	72.9	72.2	72.0	73.5	72.9	72.8	71.9	71.9	71.8	
130000	72.5	73.8	73.0	72.3	73.5	72.4	71.7	73.2	72.3	72.0	73.9	73.2	73.3	72.1	72.4	71.8	
140000	72.2	73.7	72.6	72.5	73.9	72.2	71.7	73.3	72.3	72.1	74.2	73.6	74.0	72.4	72.9	71.9	
150000	72.2	73.8	72.7	72.9	74.0	72.2	71.5	73.4	72.5	72.2	75.1	74.3	74.5	72.9	73.2	72.0	
160000	72.3	73.9	72.7	72.7	73.9	72.4	71.4	73.5	72.4	72.4	75.2	74.6	74.7	73.1	73.2	72.0	
170000	72.7	73.8	72.9	72.8	73.8	72.0	71.4	73.5	72.0	72.9	74.6	75.0	74.6	72.8	73.2	71.6	
180000	72.8	73.4	73.0	72.8	73.2	72.1	71.4	73.4	71.8	73.0	74.2	75.3	74.3	72.5	72.7	71.2	
190000	72.6	73.2	72.9	72.4	73.0	72.2	71.4	73.2	71.8	72.3	74.4	75.1	74.1	71.9	72.4	71.1	
200000	72.6	72.9	72.5	72.2	72.7	72.0	71.2	72.9	71.7	71.7	74.1	74.6	73.4	71.6	71.9	71.0	
210000	72.6	72.9	72.3	71.9	72.1	71.8	71.0	72.4	71.7	71.5	73.4	74.1	72.7	71.4	71.4	70.8	
220000	72.6	72.8	72.0	71.8	71.8	71.4	70.9	72.3	71.8	71.6	72.9	73.8	72.3	71.4	71.2	70.7	
230000	72.6	72.9	72.2	71.9	71.9	71.5	70.6	72.4	71.7	72.0	72.7	73.5	72.2	71.4	71.1	70.4	
Daily Max	73.5	74.0	73.0	72.9	74.0	72.5	71.7	73.5	72.5	73.0	75.2	75.3	74.7	73.1	73.2	72.0	
Daily Min	72.2	72.4	71.9	71.4	71.3	71.4	70.6	70.4	71.7	71.5	71.6	71.8	71.8	71.4	71.1	70.4	
Average	72.8	73.1	72.5	72.0	72.4	72.0	71.3	72.3	72.3	72.1	72.0	73.1	73.4	72.9	72.0	71.8	71.2

Monthly average: 72.3

License Maximum Monthly Average: 89 F

Caldron Falls Tailwater Temperature Summary - August 2021

Time HHMMSS	08/17/21	08/18/21	08/19/21	08/20/21	08/21/21	08/22/21	08/23/21	08/24/21	08/25/21	08/26/21	08/27/21	08/28/21	08/29/21	08/30/21	08/31/21
0	70.3	70.9	71.0	71.3	71.1	72.5	71.8	71.6	71.9	72.2	71.2	71.2	71.5	74.2	73.0
10000	70.4	70.8	71.3	71.2	71.2	72.0	71.7	71.8	72.1	72.1	71.0	71.3	71.6	73.9	72.6
20000	70.6	70.9	71.2	71.2	71.3	71.7	71.6	72.0	72.2	72.0	70.8	71.8	72.0	73.6	72.5
30000	70.7	70.9	71.2	71.1	71.8	71.6	71.5	72.0	72.3	72.0	70.7	71.9	72.4	73.4	72.6
40000	70.6	71.0	71.2	71.3	71.9	71.8	71.5	71.9	72.7	72.1	70.9	72.1	72.7	73.4	72.6
50000	70.7	71.1	71.4	71.3	72.0	72.0	71.3	71.9	73.0	72.2	71.2	72.0	73.1	73.4	72.5
60000	70.7	71.2	71.5	71.3	72.1	72.1	71.2	72.0	73.0	72.1	71.5	72.0	72.6	73.3	72.3
70000	70.7	71.3	71.6	71.3	72.0	72.1	71.4	72.0	72.7	72.2	71.6	72.1	72.1	73.2	72.2
80000	71.0	71.5	71.8	71.4	72.1	72.2	71.3	72.2	72.4	72.1	71.4	72.2	71.9	73.0	72.2
90000	71.3	71.7	72.0	71.5	72.1	72.1	71.6	72.3	72.2	72.1	71.3	72.2	72.3	73.0	72.3
100000	71.6	71.9	72.1	71.7	72.7	71.9	71.8	72.4	72.1	72.1	71.4	72.3	72.7	73.1	72.4
110000	71.8	72.1	72.1	71.8	72.9	71.7	72.1	72.4	72.1	72.1	71.4	72.3	74.3	73.5	72.4
120000	72.3	72.4	72.2	71.8	73.0	71.3	72.7	72.5	72.3	72.1	70.9	72.3	75.3	74.2	72.3
130000	72.1	72.4	72.4	71.7	73.5	71.6	72.9	72.7	72.6	71.9	70.7	72.3	75.8	74.4	72.3
140000	72.6	72.7	72.2	71.6	74.1	72.1	73.4	72.7	72.7	72.0	70.7	72.4	76.0	74.5	72.2
150000	73.0	72.9	71.9	71.8	74.7	72.3	73.5	72.5	73.0	72.2	71.1	72.8	76.1	74.4	72.2
160000	73.1	72.4	71.6	72.1	74.8	72.1	73.8	72.0	73.4	72.2	71.5	73.0	76.1	74.6	72.1
170000	72.9	72.0	71.5	72.0	75.2	71.9	73.1	71.7	73.2	72.1	71.5	73.5	75.9	74.5	72.0
180000	72.1	71.7	71.8	71.5	75.3	71.8	73.0	72.1	72.8	72.0	71.4	73.1	75.7	74.5	71.8
190000	71.5	71.5	71.7	71.1	75.1	71.4	72.7	72.4	72.4	72.1	71.2	72.8	75.6	74.2	71.8
200000	71.4	71.4	71.5	71.1	73.9	71.3	72.4	72.3	72.2	71.9	71.2	72.7	75.3	73.7	71.7
210000	71.3	71.3	71.1	71.1	72.9	71.0	72.2	71.8	72.3	71.5	71.3	72.3	74.9	73.3	71.6
220000	71.1	71.0	70.9	71.2	72.9	71.2	72.0	71.6	72.4	71.3	71.3	71.9	74.5	73.2	71.4
230000	70.9	70.9	71.1	71.1	72.9	71.6	71.7	71.6	72.3	71.3	71.4	71.6	74.4	73.1	71.3
Daily Max	73.1	72.9	72.4	72.1	75.3	72.5	73.8	72.7	73.4	72.2	71.6	73.5	76.1	74.6	73.0
Daily Min	70.3	70.8	70.9	71.1	71.1	71.0	71.2	71.6	71.9	71.3	70.7	71.2	71.5	73.0	71.3
Average	71.5	71.6	71.6	71.4	73.0	71.8	72.2	72.1	72.5	72.0	71.2	72.3	74.0	73.7	72.2

Caldron Falls Tailwater Temperature Summary - September 2021

Time HHMMSS	09/01/21	09/02/21	09/03/21	09/04/21	09/05/21	09/06/21	09/07/21	09/08/21	09/09/21	09/10/21	09/11/21	09/12/21	09/13/21	09/14/21	09/15/21	09/16/21
0	71.4	71.1	70.8	69.9	70.7	69.9	69.1	69.9	68.5	67.3	66.6	67.4	66.3	65.5	67.0	66.7
10000	71.6	71.0	70.7	69.8	70.7	69.9	69.0	69.7	68.4	67.3	66.6	67.1	66.2	65.6	66.9	66.6
20000	71.6	71.0	70.6	69.8	70.6	69.8	69.0	69.6	68.3	67.2	66.5	66.9	66.1	65.6	66.9	66.5
30000	71.8	71.1	70.5	69.8	70.5	69.7	68.8	69.5	68.2	67.2	66.6	66.8	65.9	65.4	66.8	66.3
40000	71.8	71.1	70.5	69.7	70.4	69.6	68.7	69.4	68.1	67.1	66.6	66.7	65.6	65.1	66.7	66.1
50000	71.7	71.1	70.5	69.5	70.3	69.5	68.7	69.2	68.0	67.0	66.7	66.7	65.4	65.3	66.6	66.0
60000	71.6	71.1	70.4	69.4	70.1	69.4	68.6	69.1	67.9	66.9	66.8	66.4	65.4	65.4	66.5	65.9
70000	71.6	71.1	70.3	69.4	70.0	69.3	68.9	69.0	67.8	66.9	67.0	66.4	65.4	65.7	66.4	65.9
80000	71.6	71.1	70.3	69.4	69.9	69.2	68.6	68.9	67.8	66.9	67.0	66.4	65.5	66.1	66.4	65.9
90000	71.8	71.3	70.3	69.4	69.9	69.3	68.7	68.9	67.9	67.0	67.3	66.5	65.6	66.4	66.4	66.1
100000	71.9	71.5	70.4	69.6	70.1	69.5	68.3	69.0	68.0	67.2	67.7	66.6	65.8	66.7	66.6	66.2
110000	72.1	71.6	70.5	69.7	70.3	69.6	68.5	69.1	68.1	67.4	68.1	66.7	65.9	66.9	66.9	66.3
120000	72.2	71.6	70.5	70.0	70.5	69.9	69.2	69.0	68.3	67.5	68.5	66.6	66.0	67.0	67.3	66.5
130000	72.1	71.6	70.5	70.3	70.7	70.0	69.7	69.2	68.3	67.7	68.6	66.5	66.0	67.3	67.5	66.8
140000	71.9	71.5	70.6	70.7	70.9	70.2	70.1	69.3	68.3	67.8	69.5	66.6	65.9	67.5	67.8	67.0
150000	71.9	71.6	70.6	71.1	70.9	70.2	70.5	69.2	68.3	68.0	69.8	66.6	65.8	67.6	67.9	67.2
160000	71.9	71.7	70.8	71.3	70.8	70.2	70.7	69.1	68.3	68.1	69.9	66.7	66.0	67.7	67.8	67.1
170000	71.8	71.6	70.9	71.3	70.6	70.2	70.9	69.1	68.2	68.3	69.8	66.8	65.8	67.7	67.6	67.2
180000	71.7	71.3	71.1	71.3	70.6	70.2	70.9	69.0	68.1	68.2	69.6	66.9	65.4	67.5	67.4	67.2
190000	71.5	71.1	71.1	71.1	70.5	69.9	70.6	68.9	67.7	67.9	69.1	66.5	65.2	67.5	67.1	67.1
200000	71.3	70.9	71.1	70.9	70.4	69.7	70.1	68.8	67.7	67.6	68.2	66.3	65.1	67.4	66.9	67.1
210000	71.2	70.7	70.6	70.7	70.3	69.4	70.3	68.7	67.6	67.3	67.7	66.2	65.0	67.3	66.8	66.9
220000	71.2	70.7	70.3	70.5	70.1	69.2	70.2	68.7	67.4	67.1	67.4	66.1	65.2	67.2	66.7	66.9
230000	71.1	70.7	70.1	70.6	70.0	69.1	70.0	68.6	67.3	66.8	67.5	66.3	65.4	67.1	66.7	66.7
Daily Max	72.2	71.7	71.1	71.3	70.9	70.2	70.9	69.9	68.5	68.3	69.9	67.4	66.3	67.7	67.9	67.2
Daily Min	71.1	70.7	70.1	69.4	69.9	69.1	68.3	68.6	67.3	66.8	66.5	66.1	65.0	65.1	66.4	65.9
Average	71.7	71.2	70.6	70.2	70.4	69.7	69.5	69.1	68.0	67.4	67.9	66.6	65.7	66.6	67.0	66.6

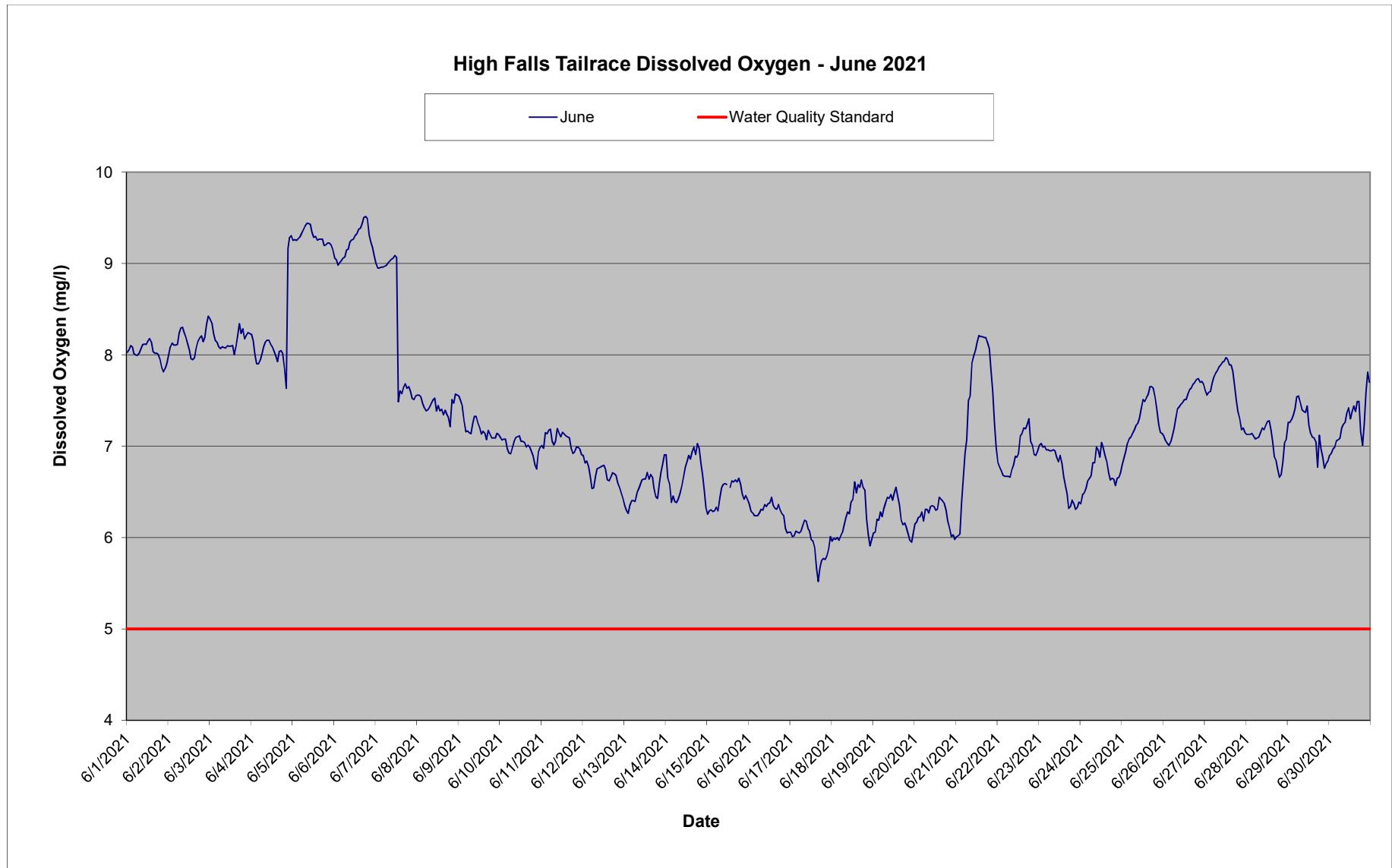
Monthly average: 66.6

License Maximum Monthly Average: 89 F

Caldron Falls Tailwater Temperature Summary - September 2021

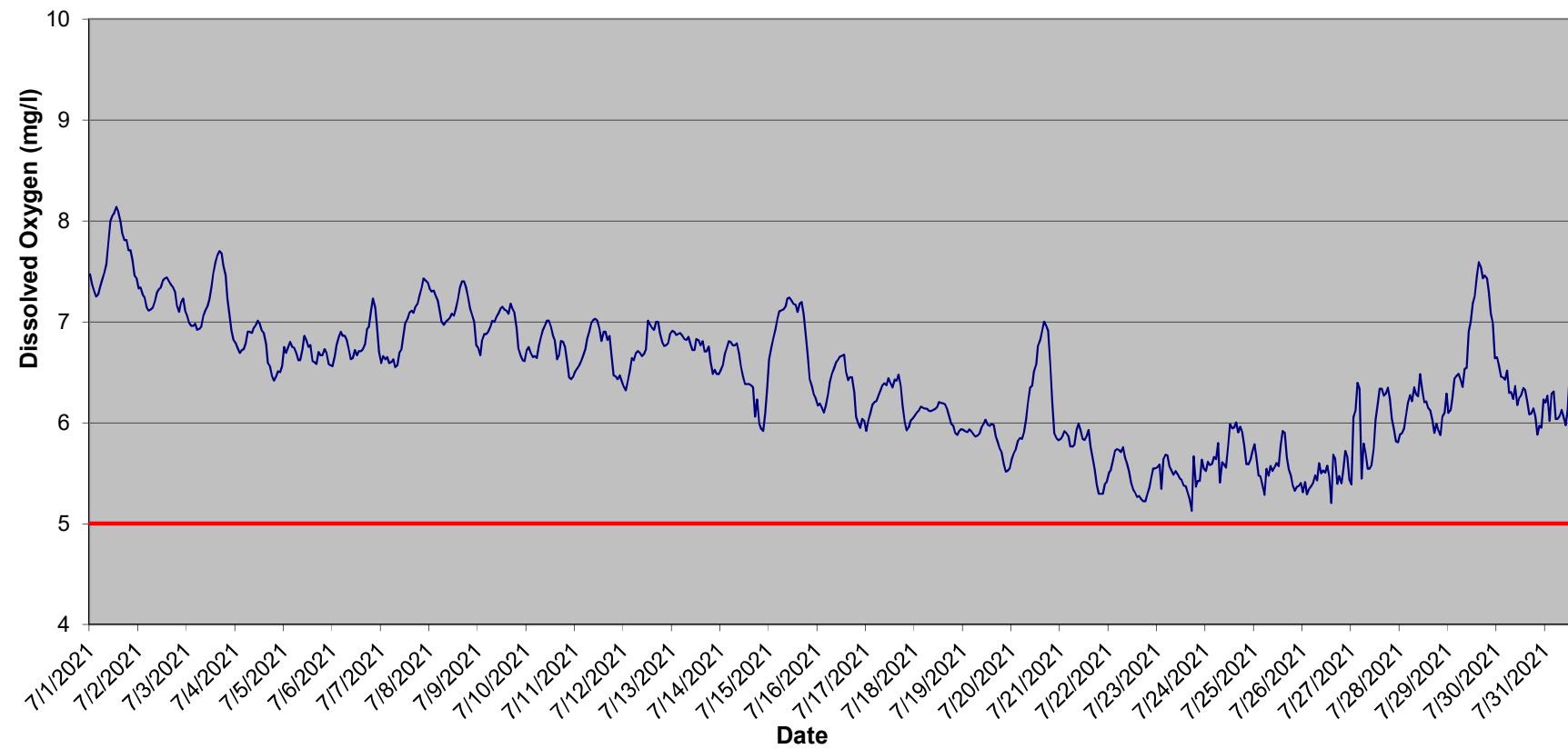
Time HHMMSS	09/17/21	09/18/21	09/19/21	09/20/21	09/21/21	09/22/21	09/23/21	09/24/21	09/25/21	09/26/21	09/27/21	09/28/21	09/29/21	09/30/21
0	66.5	66.3	65.2	65.2	65.3	66.1	64.9	64.2	64.2	62.9	62.9	61.9	61.7	61.4
10000	66.2	66.4	65.2	65.3	66.0	66.0	64.8	64.1	64.0	62.9	62.8	61.8	61.7	61.4
20000	66.0	66.3	65.2	65.3	66.3	65.9	64.8	64.0	63.9	62.9	62.8	61.8	61.7	61.5
30000	65.8	66.3	65.2	65.2	67.4	65.8	64.7	63.9	63.7	62.8	62.7	61.7	61.6	61.4
40000	65.7	66.1	65.1	65.1	67.8	65.7	64.6	63.9	63.6	62.8	62.6	61.6	61.6	61.2
50000	65.6	65.9	65.1	65.0	67.8	65.6	64.5	63.8	63.5	62.8	62.6	61.6	61.6	61.3
60000	65.5	65.8	65.0	65.0	67.5	65.5	64.4	63.7	63.4	62.7	62.5	61.6	61.5	61.3
70000	65.6	65.7	64.9	64.9	67.4	65.4	64.3	63.6	63.3	62.7	62.5	61.5	61.5	61.3
80000	65.8	65.6	65.1	64.9	67.1	65.4	64.2	63.6	63.2	62.7	62.4	61.5	61.6	61.4
90000	66.0	65.7	65.2	65.0	66.9	65.4	64.3	63.6	63.2	62.7	62.4	61.6	61.6	61.4
100000	66.2	65.8	65.5	65.2	67.1	65.5	64.3	63.8	63.3	62.8	62.5	61.7	61.7	61.6
110000	66.7	65.9	65.8	65.4	67.2	65.4	64.5	63.9	63.4	62.9	62.5	61.9	61.8	61.8
120000	67.0	66.1	66.3	65.5	67.3	65.5	64.5	64.3	63.6	63.0	62.6	62.0	62.0	61.9
130000	67.4	66.1	66.2	65.5	67.5	65.4	64.6	64.6	63.5	63.0	62.6	62.1	61.9	62.0
140000	67.7	66.1	66.5	65.7	67.5	65.2	64.7	64.9	63.6	63.1	62.6	62.2	62.0	62.0
150000	67.8	66.1	66.7	65.4	67.4	65.1	64.7	65.0	63.5	63.2	62.5	62.2	62.0	62.0
160000	67.7	65.9	66.9	65.2	67.1	65.2	64.7	64.8	63.5	63.2	62.5	62.2	61.9	61.8
170000	67.5	65.8	66.8	65.3	67.0	65.1	64.7	64.6	63.4	63.1	62.3	62.2	61.8	61.7
180000	67.4	65.7	66.7	65.1	66.8	64.9	64.6	64.6	63.4	63.2	62.2	62.2	61.8	61.5
190000	67.3	65.6	66.7	65.2	66.6	64.9	64.6	64.6	63.3	63.1	62.1	62.2	61.8	61.5
200000	66.9	65.5	66.5	65.5	66.5	64.8	64.5	64.6	63.2	63.0	62.2	62.2	61.7	61.4
210000	66.5	65.4	66.2	65.4	66.4	64.9	64.4	64.5	63.1	62.8	62.1	62.1	61.5	61.5
220000	66.4	65.3	65.8	65.4	66.2	64.9	64.3	64.5	63.1	62.9	62.1	62.1	61.4	61.6
230000	66.3	65.3	65.5	65.4	66.1	64.9	64.2	64.4	63.0	62.9	62.0	61.8	61.4	61.6
Daily Max	67.8	66.4	66.9	65.7	67.8	66.1	64.9	65.0	64.2	63.2	62.9	62.2	62.0	62.0
Daily Min	65.5	65.3	64.9	64.9	65.3	64.8	64.2	63.6	63.0	62.7	62.0	61.5	61.4	61.2
Average	66.6	65.9	65.8	65.3	66.9	65.4	64.5	64.2	63.5	62.9	62.5	61.9	61.7	61.6

High Falls Hydroelectric Project (FERC No. 2595)



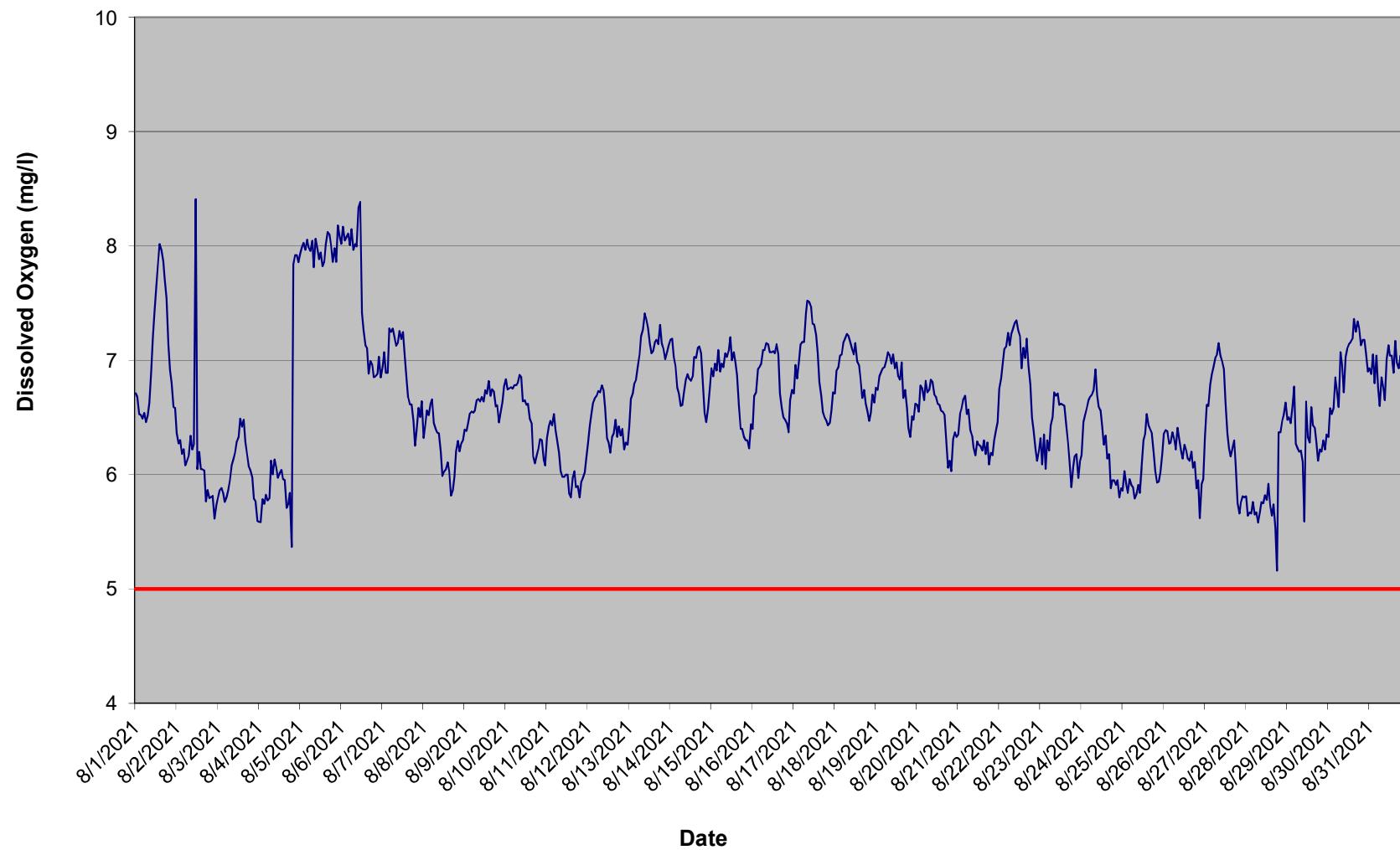
High Falls Tailrace Dissolved Oxygen - July 2021

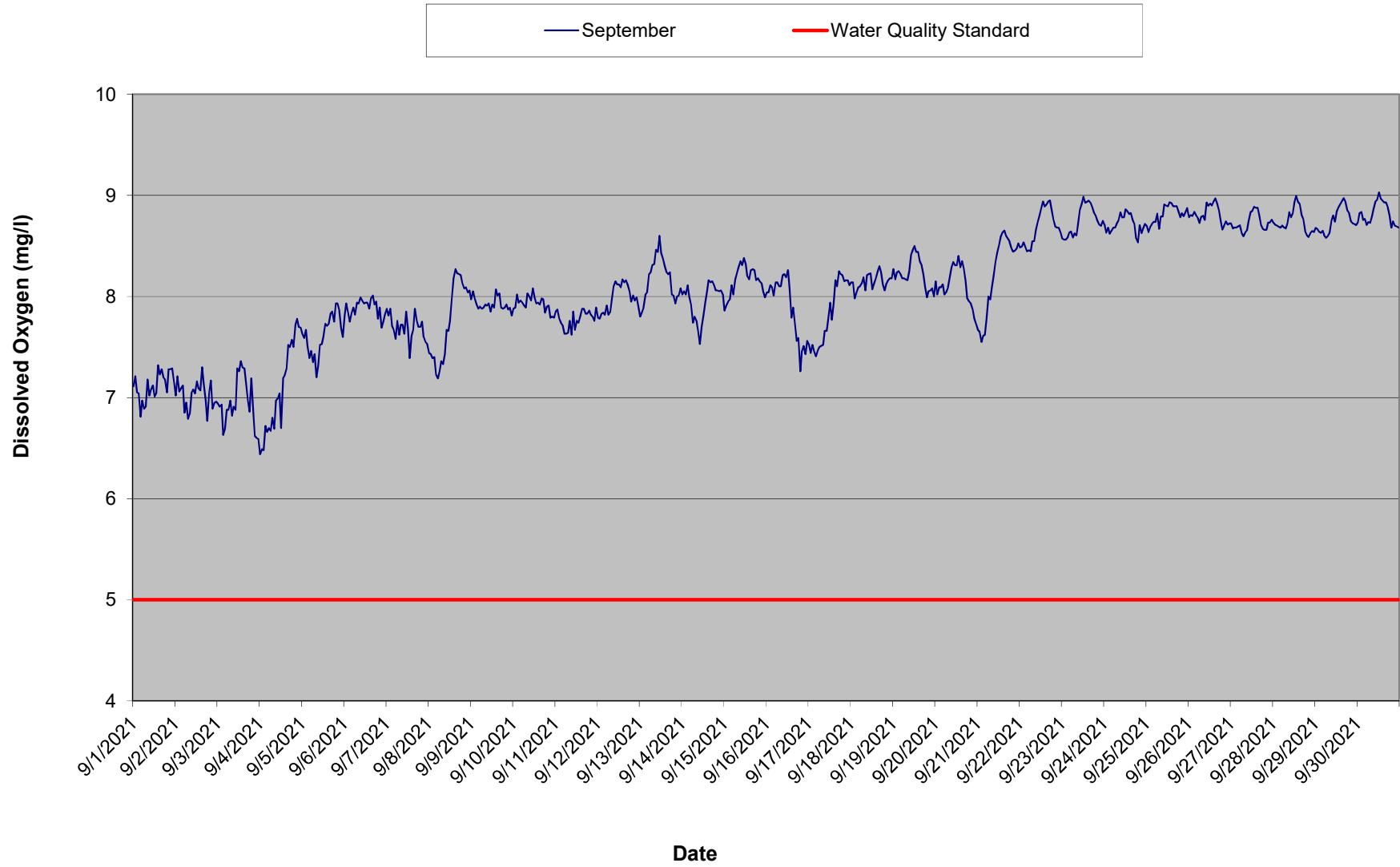
July Water Quality Standard



High Falls Tailrace Dissolved Oxygen - August 2021

— August — Water Quality Standard



High Falls Tailrace Dissolved Oxygen - September 2021

High Falls Tailrace Dissolved Oxygen Summary - June 2021

Time HHMMSS	06/01/21	06/02/21	06/03/21	06/04/21	06/05/21	06/06/21	06/07/21	06/08/21	06/09/21	06/10/21	06/11/21	06/12/21	06/13/21	06/14/21	06/15/21	06/16/21
0	8.0	8.0	8.4	8.2	9.3	9.1	9.0	7.6	7.5	7.1	7.0	6.9	6.3	6.9	6.3	6.4
10000	8.1	8.1	8.3	8.2	9.3	9.0	9.0	7.6	7.5	7.1	7.0	6.8	6.3	6.6	6.3	6.3
20000	8.1	8.1	8.2	8.0	9.3	9.0	9.0	7.5	7.4	7.1	7.1	6.8	6.3	6.6	6.3	6.3
30000	8.1	8.1	8.2	7.9	9.3	9.0	9.0	7.5	7.3	7.1	7.1	6.8	6.4	6.4	6.3	6.2
40000	8.0	8.1	8.1	7.9	9.3	9.0	9.0	7.4	7.2	7.0	7.2	6.7	6.4	6.5	6.3	6.2
50000	8.0	8.1	8.1	7.9	9.3	9.1	9.0	7.4	7.2	6.9	7.2	6.5	6.4	6.4	6.3	6.2
60000	8.0	8.2	8.1	8.0	9.4	9.1	9.0	7.4	7.1	6.9	7.1	6.5	6.4	6.4	6.3	6.3
70000	8.0	8.3	8.1	8.1	9.4	9.1	9.0	7.4	7.1	7.0	7.0	6.7	6.5	6.4	6.4	6.3
80000	8.1	8.3	8.1	8.1	9.4	9.2	9.0	7.5	7.2	7.1	7.1	6.8	6.5	6.5	6.5	6.3
90000	8.1	8.2	8.1	8.2	9.4	9.2	9.0	7.5	7.3	7.1	7.2	6.8	6.6	6.6	6.6	6.4
100000	8.1	8.2	8.1	8.2	9.4	9.3	9.1	7.5	7.3	7.1	7.1	6.8	6.6	6.7	6.6	6.3
110000	8.1	8.1	8.1	8.1	9.3	9.3	9.1	7.4	7.3	7.1	7.1	6.8	6.6	6.8	6.6	6.4
120000	8.1	8.1	8.1	8.1	9.3	9.3	9.1	7.4	7.2	7.1	7.2	6.8	6.6	6.8	6.8	6.4
130000	8.2	8.0	8.1	8.0	9.3	9.3	7.5	7.4	7.1	7.1	7.1	6.7	6.7	6.9	6.6	6.4
140000	8.1	7.9	8.0	8.0	9.3	9.4	7.6	7.4	7.2	7.0	7.1	6.6	6.6	6.9	6.6	6.4
150000	8.0	8.0	8.1	7.9	9.3	9.4	7.6	7.3	7.1	7.0	7.1	6.6	6.7	6.9	6.6	6.3
160000	8.0	8.1	8.2	8.0	9.3	9.4	7.6	7.4	7.1	7.0	7.1	6.7	6.7	7.0	6.6	6.3
170000	8.0	8.1	8.3	8.0	9.3	9.5	7.7	7.4	7.2	7.0	7.0	6.7	6.5	6.9	6.6	6.4
180000	8.0	8.2	8.2	8.0	9.2	9.5	7.6	7.3	7.1	6.9	6.9	6.7	6.4	7.0	6.7	6.3
190000	8.0	8.2	8.3	7.9	9.2	9.5	7.7	7.2	7.1	6.9	6.9	6.7	6.4	7.0	6.6	6.3
200000	7.9	8.1	8.2	7.6	9.2	9.3	7.6	7.5	7.1	6.8	7.0	6.6	6.6	6.8	6.5	6.2
210000	7.8	8.2	8.2	9.2	9.2	9.2	7.5	7.5	7.1	6.7	7.0	6.5	6.7	6.7	6.4	6.1
220000	7.9	8.3	8.2	9.3	9.2	9.2	7.5	7.6	7.1	6.9	7.0	6.5	6.8	6.5	6.5	6.1
230000	7.9	8.4	8.2	9.3	9.2	9.1	7.6	7.6	7.1	7.0	6.9	6.4	6.9	6.3	6.4	6.1
Daily Max	8.2	8.4	8.4	9.3	9.4	9.5	9.1	7.6	7.5	7.1	7.2	6.9	6.9	7.0	6.7	6.4
Daily Min	7.8	7.9	8.0	7.6	9.2	9.0	7.5	7.2	7.1	6.7	6.9	6.4	6.3	6.3	6.3	6.1
Average	8.0	8.1	8.2	8.2	9.3	9.2	8.4	7.4	7.2	7.0	7.1	6.7	6.5	6.7	6.5	6.3

License Minimum DO: 5.0 mg/l

[REDACTED] Missing data due to equipment maintenance

High Falls Tailrace Dissolved Oxygen Summary - June 2021

Time HHMMSS	06/17/21	06/18/21	06/19/21	06/20/21	06/21/21	06/22/21	06/23/21	06/24/21	06/25/21	06/26/21	06/27/21	06/28/21	06/29/21	06/30/21
0	6.1	6.0	6.1	6.2	6.0	6.8	7.0	6.4	6.8	7.1	7.6	7.1	7.3	6.9
10000	6.0	6.0	6.1	6.2	6.0	6.8	7.0	6.5	6.9	7.1	7.6	7.1	7.3	6.9
20000	6.0	6.0	6.2	6.2	6.0	6.7	7.0	6.5	6.9	7.0	7.6	7.1	7.3	7.0
30000	6.1	6.0	6.2	6.2	6.4	6.7	7.0	6.5	7.0	7.0	7.6	7.1	7.3	7.0
40000	6.1	6.0	6.3	6.3	6.7	6.7	7.0	6.6	7.1	7.1	7.7	7.1	7.4	7.1
50000	6.1	6.0	6.2	6.2	6.9	6.7	7.0	6.7	7.1	7.1	7.8	7.1	7.5	7.1
60000	6.1	6.1	6.3	6.3	7.1	6.7	7.0	6.7	7.1	7.2	7.8	7.1	7.6	7.1
70000	6.1	6.1	6.4	6.3	7.5	6.7	7.0	6.8	7.2	7.3	7.8	7.1	7.5	7.2
80000	6.2	6.2	6.4	6.3	7.6	6.7	7.0	6.8	7.2	7.4	7.9	7.2	7.4	7.2
90000	6.2	6.3	6.4	6.3	7.9	6.8	7.0	7.0	7.3	7.4	7.9	7.2	7.4	7.3
100000	6.1	6.3	6.5	6.4	8.0	6.9	6.9	7.0	7.3	7.5	7.9	7.2	7.4	7.4
110000	6.1	6.4	6.4	6.3	8.1	6.9	6.8	6.9	7.4	7.5	7.9	7.2	7.4	7.4
120000	6.0	6.4	6.5	6.3	8.1	6.9	6.9	7.0	7.5	7.5	8.0	7.3	7.2	7.3
130000	6.0	6.6	6.6	6.3	8.2	7.1	6.8	7.0	7.5	7.5	8.0	7.3	7.1	7.4
140000	5.9	6.5	6.5	6.4	8.2	7.1	6.7	6.9	7.5	7.6	7.9	7.2	7.1	7.4
150000	5.7	6.6	6.4	6.4	8.2	7.2	6.6	6.8	7.6	7.6	7.9	7.1	7.1	7.4
160000	5.5	6.6	6.2	6.4	8.2	7.2	6.5	6.7	7.7	7.6	7.8	6.9	7.1	7.5
170000	5.7	6.6	6.1	6.4	8.2	7.2	6.3	6.6	7.7	7.7	7.7	6.8	6.8	7.5
180000	5.8	6.6	6.2	6.3	8.1	7.3	6.3	6.7	7.6	7.7	7.5	6.7	7.1	7.2
190000	5.8	6.5	6.1	6.2	8.1	7.1	6.4	6.6	7.5	7.7	7.4	6.7	7.0	7.0
200000	5.8	6.2	6.0	6.1	7.8	7.0	6.4	6.6	7.4	7.7	7.3	6.7	6.9	7.3
210000	5.8	6.0	6.0	6.0	7.6	6.9	6.3	6.7	7.2	7.7	7.2	6.8	6.8	7.6
220000	5.9	5.9	6.0	6.0	7.3	6.9	6.3	6.7	7.2	7.7	7.2	7.0	6.8	7.8
230000	6.0	6.0	6.1	6.0	7.0	7.0	6.4	6.7	7.1	7.7	7.2	7.1	6.8	7.7
Daily Max	6.2	6.6	6.6	6.4	8.2	7.3	7.0	7.0	7.7	7.7	8.0	7.3	7.6	7.8
Daily Min	5.5	5.9	6.0	6.0	6.0	6.7	6.3	6.4	6.8	7.0	7.2	6.7	6.8	6.9
Average	5.9	6.2	6.2	6.2	7.5	6.9	6.7	6.7	7.3	7.4	7.7	7.1	7.2	7.3

High Falls Tailrace Dissolved Oxygen Summary - July 2021

Time HHMMSS	07/01/21	07/02/21	07/03/21	07/04/21	07/05/21	07/06/21	07/07/21	07/08/21	07/09/21	07/10/21	07/11/21	07/12/21	07/13/21	07/14/21	07/15/21	07/16/21
0	7.5	7.3	7.1	6.8	6.8	6.6	6.6	7.3	6.7	6.7	6.5	6.4	6.9	6.5	6.6	6.2
10000	7.4	7.3	7.0	6.7	6.7	6.7	6.7	7.3	6.7	6.8	6.5	6.3	6.9	6.6	6.7	6.2
20000	7.3	7.3	7.0	6.7	6.8	6.8	6.6	7.3	6.8	6.7	6.6	6.4	6.9	6.7	6.8	6.2
30000	7.3	7.2	7.0	6.7	6.8	6.9	6.7	7.3	6.9	6.7	6.6	6.5	6.9	6.7	6.9	6.1
40000	7.3	7.1	7.0	6.7	6.8	6.9	6.6	7.2	6.9	6.7	6.7	6.6	6.9	6.8	7.0	6.2
50000	7.4	7.1	6.9	6.8	6.7	6.9	6.6	7.1	6.9	6.6	6.7	6.6	6.9	6.8	7.1	6.3
60000	7.4	7.1	6.9	6.9	6.7	6.9	6.6	7.0	7.0	6.8	6.8	6.7	6.8	6.8	7.1	6.4
70000	7.5	7.1	7.0	6.9	6.6	6.8	6.6	7.0	7.0	6.9	6.9	6.7	6.8	6.8	7.1	6.5
80000	7.6	7.2	7.1	6.9	6.6	6.7	6.6	7.0	7.0	6.9	7.0	6.7	6.9	6.8	7.2	6.5
90000	7.8	7.3	7.1	6.9	6.7	6.6	6.7	7.0	7.1	7.0	7.0	6.7	6.8	6.7	7.2	6.6
100000	8.0	7.3	7.2	7.0	6.9	6.6	6.7	7.0	7.1	7.0	7.0	6.7	6.7	6.6	7.2	6.6
110000	8.1	7.3	7.2	7.0	6.8	6.7	6.9	7.1	7.1	7.0	7.0	6.7	6.7	6.5	7.2	6.7
120000	8.1	7.4	7.3	7.0	6.8	6.7	7.0	7.1	7.2	7.0	6.9	7.0	6.8	6.4	7.2	6.7
130000	8.1	7.4	7.5	6.9	6.8	6.7	7.0	7.1	7.1	6.9	6.8	7.0	6.8	6.4	7.2	6.7
140000	8.1	7.4	7.6	6.9	6.6	6.7	7.1	7.2	7.1	6.8	6.9	6.9	6.8	6.4	7.1	6.5
150000	8.0	7.4	7.7	6.8	6.6	6.7	7.1	7.3	7.1	6.6	6.9	6.9	6.8	6.4	7.2	6.4
160000	7.9	7.4	7.7	6.6	6.6	6.8	7.1	7.4	7.2	6.7	6.8	7.0	6.7	6.4	7.2	6.5
170000	7.8	7.3	7.7	6.6	6.7	6.9	7.2	7.4	7.1	6.8	6.9	7.0	6.7	6.1	7.1	6.5
180000	7.8	7.3	7.6	6.5	6.7	7.0	7.2	7.3	7.1	6.8	6.7	6.9	6.8	6.2	6.9	6.3
190000	7.7	7.2	7.5	6.4	6.7	7.1	7.3	7.3	6.9	6.8	6.5	6.8	6.6	6.0	6.7	6.1
200000	7.7	7.1	7.2	6.5	6.7	7.2	7.3	7.1	6.7	6.6	6.5	6.8	6.5	5.9	6.4	6.0
210000	7.6	7.2	7.1	6.5	6.7	7.1	7.4	7.1	6.7	6.5	6.4	6.8	6.5	5.9	6.4	5.9
220000	7.5	7.2	6.9	6.5	6.6	7.0	7.4	7.0	6.6	6.4	6.5	6.8	6.5	6.1	6.3	6.0
230000	7.4	7.1	6.8	6.6	6.6	6.7	7.4	6.8	6.6	6.5	6.4	6.9	6.5	6.4	6.2	6.0
Daily Max	8.1	7.4	7.7	7.0	6.9	7.2	7.4	7.4	7.2	7.0	7.0	7.0	6.9	6.8	7.2	6.7
Daily Min	7.3	7.1	6.8	6.4	6.6	6.6	6.6	6.8	6.6	6.4	6.4	6.3	6.5	5.9	6.2	5.9
Average	7.7	7.3	7.2	6.7	6.7	6.8	6.9	7.2	6.9	6.7	6.7	6.7	6.7	6.4	6.9	6.3

License Minimum Dissolved Oxygen: 5.0 mg/l

High Falls Tailrace Dissolved Oxygen Summary - July 2021

Time HHMMSS	07/17/21	07/18/21	07/19/21	07/20/21	07/21/21	07/22/21	07/23/21	07/24/21	07/25/21	07/26/21	07/27/21	07/28/21	07/29/21	07/30/21	07/31/21
0	5.9	6.1	5.9	5.6	5.8	5.5	5.6	5.5	5.8	5.3	5.4	5.9	6.1	6.6	6.2
10000	6.0	6.1	5.9	5.7	5.9	5.5	5.6	5.6	5.7	5.4	6.1	5.9	6.1	6.6	6.3
20000	6.1	6.1	5.9	5.7	5.9	5.6	5.3	5.6	5.5	5.3	6.1	5.9	6.2	6.5	6.0
30000	6.2	6.2	5.9	5.8	5.9	5.7	5.6	5.6	5.5	5.3	6.4	6.1	6.4	6.4	6.3
40000	6.2	6.1	5.9	5.8	5.9	5.7	5.7	5.7	5.4	5.4	6.3	6.2	6.5	6.4	6.3
50000	6.2	6.1	5.9	5.8	5.8	5.7	5.7	5.6	5.3	5.4	5.4	6.3	6.5	6.5	6.0
60000	6.3	6.1	5.9	5.9	5.8	5.7	5.6	5.8	5.5	5.5	5.8	6.2	6.4	6.3	6.0
70000	6.3	6.1	5.9	6.0	5.8	5.8	5.5	5.4	5.5	5.4	5.7	6.4	6.4	6.3	6.1
80000	6.4	6.1	5.9	6.2	5.9	5.7	5.5	5.6	5.6	5.6	5.5	6.3	6.5	6.2	6.1
90000	6.4	6.1	6.0	6.3	6.0	5.6	5.5	5.6	5.5	5.5	5.5	6.3	6.5	6.4	6.1
100000	6.4	6.1	6.0	6.4	5.9	5.5	5.5	5.6	5.6	5.5	5.6	6.5	6.9	6.2	6.0
110000	6.4	6.2	6.0	6.5	5.8	5.4	5.5	5.8	5.6	5.5	5.7	6.3	7.0	6.2	6.1
120000	6.4	6.2	6.0	6.6	5.8	5.3	5.4	6.0	5.6	5.6	6.0	6.2	7.2	6.3	6.5
130000	6.3	6.2	6.0	6.8	5.9	5.3	5.4	5.9	5.8	5.5	6.2	6.2	7.3	6.3	6.3
140000	6.4	6.2	6.0	6.8	5.9	5.3	5.4	6.0	5.9	5.2	6.3	6.2	7.5	6.3	6.5
150000	6.4	6.2	6.0	6.9	5.8	5.3	5.3	6.0	5.9	5.7	6.3	6.1	7.6	6.2	6.7
160000	6.5	6.1	5.9	7.0	5.6	5.2	5.2	5.9	5.7	5.6	6.3	6.0	7.5	6.1	6.7
170000	6.4	6.1	5.8	7.0	5.5	5.2	5.1	6.0	5.5	5.4	6.3	5.9	7.4	6.1	6.7
180000	6.2	6.0	5.7	6.9	5.4	5.2	5.7	5.9	5.5	5.5	6.3	6.0	7.5	6.1	6.9
190000	6.0	6.0	5.7	6.6	5.3	5.3	5.4	5.8	5.4	5.4	6.2	5.9	7.4	6.1	6.9
200000	5.9	5.9	5.6	6.2	5.3	5.4	5.4	5.6	5.3	5.5	6.0	5.9	7.3	5.9	6.8
210000	6.0	5.9	5.5	5.9	5.3	5.5	5.4	5.6	5.4	5.7	5.9	6.1	7.1	6.0	6.6
220000	6.0	5.9	5.5	5.8	5.4	5.5	5.6	5.6	5.4	5.7	5.8	6.1	7.0	6.0	6.8
230000	6.0	5.9	5.6	5.8	5.4	5.5	5.5	5.7	5.4	5.4	5.8	6.3	6.6	6.2	6.8
Daily Max	6.5	6.2	6.0	7.0	6.0	5.8	5.7	6.0	5.9	5.7	6.4	6.5	7.6	6.6	6.9
Daily Min	5.9	5.9	5.5	5.6	5.3	5.2	5.1	5.4	5.3	5.2	5.4	5.9	6.1	5.9	6.0
Average	6.2	6.1	5.8	6.3	5.7	5.5	5.5	5.7	5.5	5.5	6.0	6.1	6.9	6.3	6.4

WPS began releasing aeration flow released through a spillway gate on 7/23/21 @ 17:05

Aeration flow provided for remainder of monitoring season except on 8/6/21 from 09:50 to 13:15

High Falls Tailrace Dissolved Oxygen Summary - August 2021

Time HHMMSS	08/01/21	08/02/21	08/03/21	08/04/21	08/05/21	08/06/21	08/07/21	08/08/21	08/09/21	08/10/21	08/11/21	08/12/21	08/13/21	08/14/21	08/15/21	08/16/21
0	6.7	6.4	5.8	5.6	7.9	8.0	6.9	6.3	6.4	6.8	6.3	6.3	6.4	7.2	6.9	6.4
10000	6.7	6.3	5.9	5.6	8.0	8.2	7.1	6.4	6.4	6.7	6.4	6.4	6.7	7.2	6.9	6.7
20000	6.5	6.3	5.9	5.8	8.0	8.0	6.9	6.6	6.5	6.8	6.5	6.6	6.7	7.0	7.0	6.7
30000	6.5	6.2	5.8	5.7	8.0	8.1	6.9	6.5	6.5	6.8	6.4	6.6	6.8	7.0	6.9	6.9
40000	6.5	6.2	5.8	5.8	8.1	8.1	7.3	6.6	6.6	6.8	6.5	6.7	6.8	6.8	7.1	6.9
50000	6.5	6.1	5.8	5.8	8.0	8.0	7.2	6.7	6.5	6.8	6.4	6.7	7.0	6.7	6.9	7.0
60000	6.5	6.1	5.9	5.8	8.0	8.1	7.3	6.4	6.6	6.8	6.3	6.7	7.1	6.6	7.0	7.1
70000	6.5	6.2	6.0	6.1	8.0	8.0	7.2	6.4	6.7	6.8	6.2	6.7	7.2	6.6	6.9	7.1
80000	6.6	6.3	6.1	6.0	7.8	8.0	7.1	6.4	6.7	6.9	6.0	6.8	7.3	6.7	7.1	7.2
90000	6.9	6.2	6.1	6.1	8.1	8.0	7.2	6.4	6.6	6.9	6.0	6.7	7.4	6.8	7.0	7.1
100000	7.2	6.3	6.2	6.1	8.0	8.3	7.3	6.2	6.7	6.6	6.0	6.6	7.4	6.9	7.1	7.1
110000	7.4	8.4	6.3	6.0	7.9	8.4	7.2	6.0	6.6	6.7	6.0	6.3	7.3	6.8	7.2	7.1
120000	7.6	6.0	6.3	6.0	7.9	7.4	7.2	6.0	6.7	6.6	6.0	6.3	7.1	6.8	7.0	7.1
130000	7.9	6.2	6.5	6.0	7.8	7.3	7.0	6.0	6.7	6.6	5.8	6.2	7.1	6.9	7.1	7.1
140000	8.0	6.0	6.4	6.0	7.9	7.1	6.8	6.1	6.8	6.5	5.8	6.3	7.1	7.0	7.0	7.1
150000	8.0	6.0	6.5	6.0	8.0	7.1	6.7	6.0	6.7	6.5	6.0	6.4	7.2	7.0	6.9	7.1
160000	7.9	6.0	6.3	5.7	8.1	6.9	6.6	5.8	6.7	6.2	6.0	6.5	7.2	7.1	6.6	6.7
170000	7.7	5.8	6.2	5.7	8.1	7.0	6.6	5.9	6.7	6.1	5.9	6.3	7.1	7.1	6.4	6.6
180000	7.5	5.9	6.1	5.8	8.0	7.0	6.5	6.0	6.6	6.2	5.9	6.4	7.3	7.1	6.4	6.5
190000	7.1	5.8	6.0	5.4	7.9	6.9	6.3	6.2	6.6	6.2	5.8	6.3	7.2	6.8	6.3	6.5
200000	6.9	5.8	6.0	7.8	8.0	6.9	6.4	6.3	6.5	6.3	5.9	6.4	7.1	6.5	6.3	6.5
210000	6.8	5.8	5.8	7.9	7.9	6.9	6.6	6.2	6.6	6.3	6.0	6.2	7.0	6.5	6.3	6.4
220000	6.6	5.6	5.8	7.9	8.2	7.0	6.5	6.3	6.6	6.1	6.0	6.3	7.1	6.6	6.2	6.7
230000	6.6	5.7	5.6	7.9	8.1	6.9	6.6	6.3	6.8	6.1	6.2	6.3	7.1	6.8	6.4	6.7
Daily Max	8.0	8.4	6.5	7.9	8.2	8.4	7.3	6.7	6.8	6.9	6.5	6.8	7.4	7.2	7.2	7.2
Daily Min	6.5	5.6	5.6	5.4	7.8	6.9	6.3	5.8	6.4	6.1	5.8	6.2	6.4	6.5	6.2	6.4
Average	7.1	6.2	6.0	6.2	8.0	7.6	6.9	6.3	6.6	6.5	6.1	6.5	7.1	6.9	6.8	6.8

License Minimum Dissolved Oxygen: 5.0 mg/l

High Falls Tailrace Dissolved Oxygen Summary - August 2021

Time HHMMSS	08/17/21	08/18/21	08/19/21	08/20/21	08/21/21	08/22/21	08/23/21	08/24/21	08/25/21	08/26/21	08/27/21	08/28/21	08/29/21	08/30/21	08/31/21
0	6.7	6.7	6.8	6.6	6.4	6.8	6.3	6.2	5.9	6.4	6.3	5.8	6.5	6.3	6.9
10000	7.0	6.9	6.7	6.6	6.5	6.8	6.1	6.5	6.0	6.4	6.6	5.6	6.5	6.6	6.9
20000	6.8	6.9	6.9	6.8	6.6	7.0	6.4	6.5	5.9	6.4	6.6	5.7	6.5	6.5	7.1
30000	7.0	7.0	6.9	6.8	6.7	7.1	6.1	6.6	5.8	6.3	6.8	5.7	6.6	6.6	6.8
40000	7.1	7.1	6.9	6.7	6.7	7.1	6.3	6.7	6.0	6.3	6.9	5.8	6.8	6.9	7.0
50000	7.2	7.2	6.9	6.8	6.5	7.2	6.2	6.7	5.9	6.4	6.9	5.7	6.3	6.7	6.8
60000	7.2	7.2	7.0	6.7	6.6	7.1	6.4	6.7	5.9	6.3	7.0	5.7	6.2	6.6	6.6
70000	7.4	7.2	7.1	6.7	6.4	7.2	6.5	6.7	5.8	6.2	7.1	5.6	6.2	7.1	6.9
80000	7.5	7.2	7.0	6.8	6.3	7.3	6.7	6.9	5.8	6.4	7.2	5.7	6.2	7.0	6.8
90000	7.5	7.2	7.0	6.8	6.2	7.3	6.7	6.7	5.9	6.3	7.0	5.8	6.1	6.7	6.7
100000	7.5	7.1	7.1	6.7	6.2	7.4	6.7	6.6	5.8	6.2	7.0	5.8	5.6	7.0	7.0
110000	7.3	7.1	6.9	6.7	6.3	7.3	6.6	6.6	6.1	6.1	6.9	5.8	6.6	7.1	7.1
120000	7.3	7.2	7.0	6.6	6.3	7.2	6.6	6.4	6.3	6.3	6.6	5.8	6.3	7.1	7.0
130000	7.2	7.0	6.9	6.6	6.3	6.9	6.6	6.3	6.4	6.2	6.4	5.9	6.3	7.2	7.0
140000	7.1	7.0	6.8	6.6	6.2	7.1	6.6	6.3	6.5	6.1	6.2	5.7	6.6	7.2	6.9
150000	6.8	6.8	7.0	6.6	6.3	7.0	6.4	6.1	6.4	6.1	6.2	5.6	6.4	7.4	7.2
160000	6.7	6.7	6.7	6.5	6.2	7.2	6.3	6.2	6.4	6.2	6.2	5.7	6.4	7.3	7.0
170000	6.6	6.7	6.7	6.3	6.3	7.0	6.1	5.9	6.4	6.1	6.3	5.5	6.3	7.3	6.9
180000	6.5	6.6	6.6	6.1	6.1	6.8	5.9	6.0	6.2	6.1	6.1	5.2	6.1	7.3	7.0
190000	6.5	6.6	6.4	6.1	6.2	6.5	6.1	6.0	6.0	5.9	5.8	6.4	6.2	7.1	6.9
200000	6.4	6.5	6.3	6.0	6.2	6.4	6.2	5.9	5.9	6.0	5.7	6.4	6.2	7.2	7.1
210000	6.5	6.5	6.5	6.3	6.3	6.2	6.2	6.0	5.9	5.6	5.8	6.5	6.3	7.2	7.2
220000	6.6	6.7	6.5	6.4	6.4	6.1	6.0	5.8	6.0	5.9	5.8	6.5	6.2	7.1	7.2
230000	6.7	6.6	6.6	6.3	6.5	6.2	6.1	5.9	6.2	6.0	5.8	6.6	6.4	6.9	7.1
Daily Max	7.5	7.2	7.1	6.8	6.7	7.4	6.7	6.9	6.5	6.4	7.2	6.6	6.8	7.4	7.2
Daily Min	6.4	6.5	6.3	6.0	6.1	6.1	5.9	5.8	5.8	5.6	5.7	5.2	5.6	6.3	6.6
Average	7.0	6.9	6.8	6.5	6.4	6.9	6.3	6.3	6.1	6.2	6.5	5.8	6.3	7.0	7.0

High Falls Tailrace Dissolved Oxygen Summary - September 2021

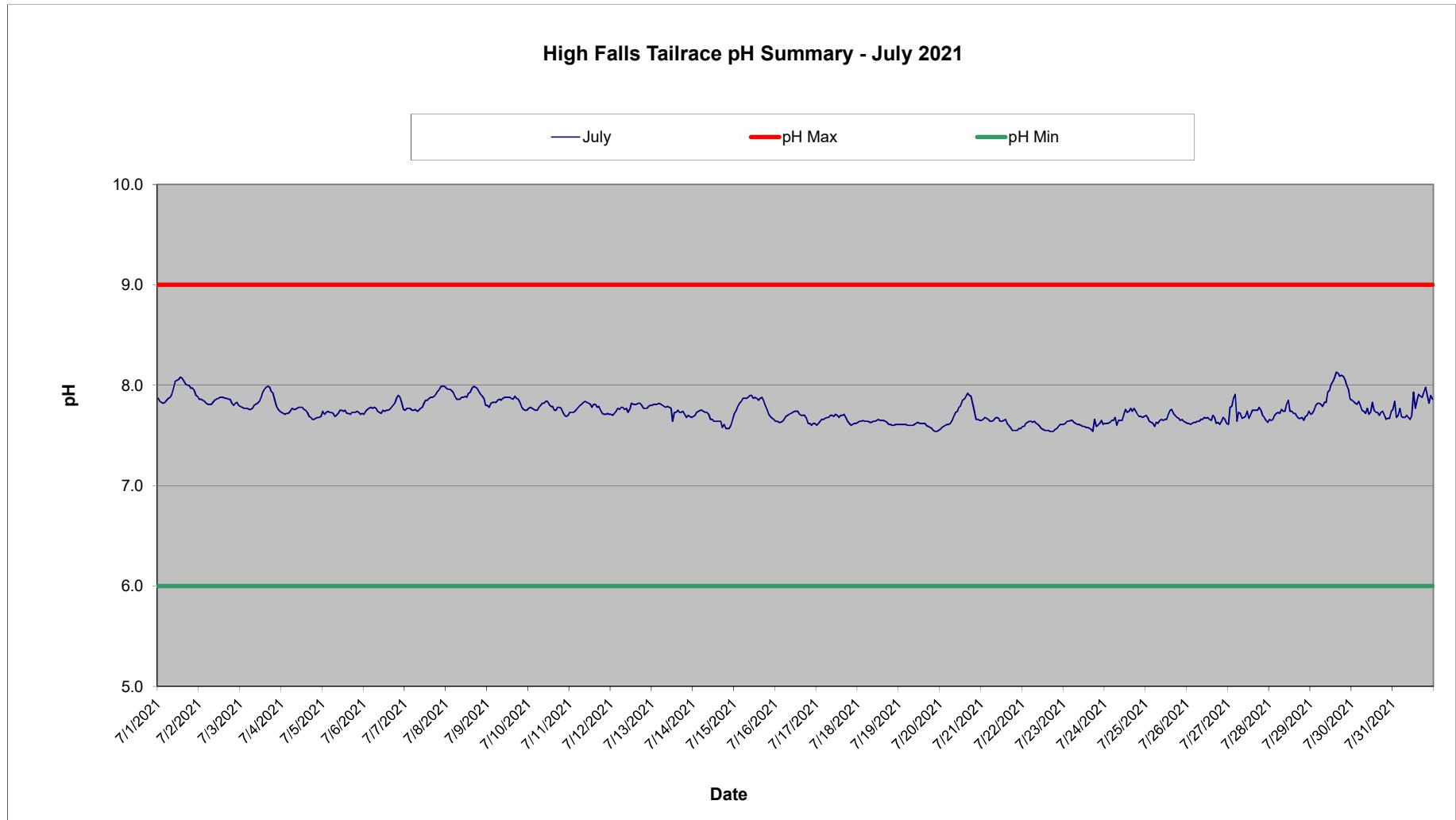
Time HHMMSS	09/01/21	09/02/21	09/03/21	09/04/21	09/05/21	09/06/21	09/07/21	09/08/21	09/09/21	09/10/21	09/11/21	09/12/21	09/13/21	09/14/21	09/15/21	09/16/21
0	7.1	7.0	6.9	6.4	7.6	7.8	7.9	7.4	8.0	7.9	7.9	7.8	7.8	8.0	7.9	8.0
10000	7.2	7.2	6.9	6.5	7.6	7.9	7.8	7.4	8.1	7.9	7.9	7.8	7.8	8.1	7.9	8.0
20000	7.1	7.1	6.9	6.5	7.7	7.8	7.9	7.4	8.0	8.0	7.8	7.8	7.9	8.0	8.0	8.1
30000	7.0	7.1	6.6	6.7	7.5	7.8	7.7	7.4	7.9	7.9	7.7	7.8	8.0	8.1	8.0	8.1
40000	6.8	7.1	6.7	6.7	7.4	7.8	7.7	7.2	7.9	8.0	7.7	7.8	8.0	8.0	8.1	8.0
50000	7.0	6.9	6.9	6.7	7.5	7.9	7.6	7.2	7.9	7.9	7.6	7.9	8.2	7.9	8.0	8.1
60000	6.9	7.0	6.9	6.7	7.4	7.8	7.8	7.3	7.9	7.9	7.6	7.8	8.2	7.7	8.2	8.1
70000	6.9	6.8	7.0	6.8	7.4	7.9	7.6	7.4	7.9	7.9	7.6	7.9	8.3	7.8	8.2	8.1
80000	7.2	6.8	6.8	6.7	7.2	7.9	7.7	7.3	7.9	8.0	7.8	8.0	8.3	7.8	8.3	8.1
90000	7.0	7.1	6.9	7.0	7.3	8.0	7.7	7.4	7.9	8.0	7.6	8.1	8.5	7.7	8.4	8.2
100000	7.1	7.1	6.9	7.0	7.5	8.0	7.6	7.7	7.9	8.0	7.9	8.2	8.4	7.5	8.3	8.2
110000	7.1	7.0	7.3	7.0	7.5	7.9	7.9	7.7	7.9	8.1	7.7	8.1	8.6	7.7	8.4	8.2
120000	7.0	7.2	7.3	6.7	7.6	7.9	7.7	7.8	7.9	8.0	7.8	8.1	8.4	7.8	8.3	8.3
130000	7.0	7.1	7.4	7.2	7.7	7.9	7.4	8.0	7.9	7.9	7.7	8.1	8.4	7.9	8.2	8.1
140000	7.3	7.1	7.3	7.2	7.7	7.9	7.6	8.2	8.1	7.9	7.8	8.2	8.3	8.1	8.2	7.8
150000	7.2	7.3	7.3	7.3	7.7	8.0	7.7	8.3	8.0	7.9	7.9	8.1	8.2	8.2	8.3	7.9
160000	7.3	7.1	7.2	7.5	7.8	8.0	7.9	8.2	8.0	8.0	7.9	8.2	8.2	8.1	8.3	7.7
170000	7.2	7.0	7.0	7.5	7.9	7.9	7.8	8.2	7.9	8.0	7.8	8.1	8.2	8.2	8.3	7.6
180000	7.2	6.8	6.9	7.6	7.8	8.0	7.7	8.2	7.9	7.8	7.8	8.1	8.0	8.1	8.2	7.6
190000	7.1	7.1	7.2	7.5	7.9	7.8	7.7	8.1	7.9	7.9	7.9	8.0	8.0	8.1	8.2	7.3
200000	7.3	7.2	6.9	7.7	7.9	7.9	7.8	8.1	7.9	7.9	7.8	8.0	7.9	8.1	8.2	7.5
210000	7.3	6.9	6.6	7.8	7.9	7.7	7.6	8.1	7.9	7.8	7.8	8.0	8.0	8.1	8.1	7.5
220000	7.3	7.0	6.6	7.7	7.7	7.8	7.6	8.0	7.9	7.8	7.8	8.0	8.0	8.1	8.1	7.4
230000	7.2	7.0	6.6	7.7	7.6	7.8	7.5	8.1	7.8	7.8	7.9	7.9	8.1	8.0	8.0	7.6
Daily Max	7.3	7.3	7.4	7.8	7.9	8.0	7.9	8.3	8.1	8.1	7.9	8.2	8.6	8.2	8.4	8.3
Daily Min	6.8	6.8	6.6	6.4	7.2	7.7	7.4	7.2	7.8	7.8	7.6	7.8	7.8	7.5	7.9	7.3
Average	7.1	7.0	7.0	7.1	7.6	7.9	7.7	7.8	7.8	7.9	7.9	7.8	8.0	8.2	8.2	7.9

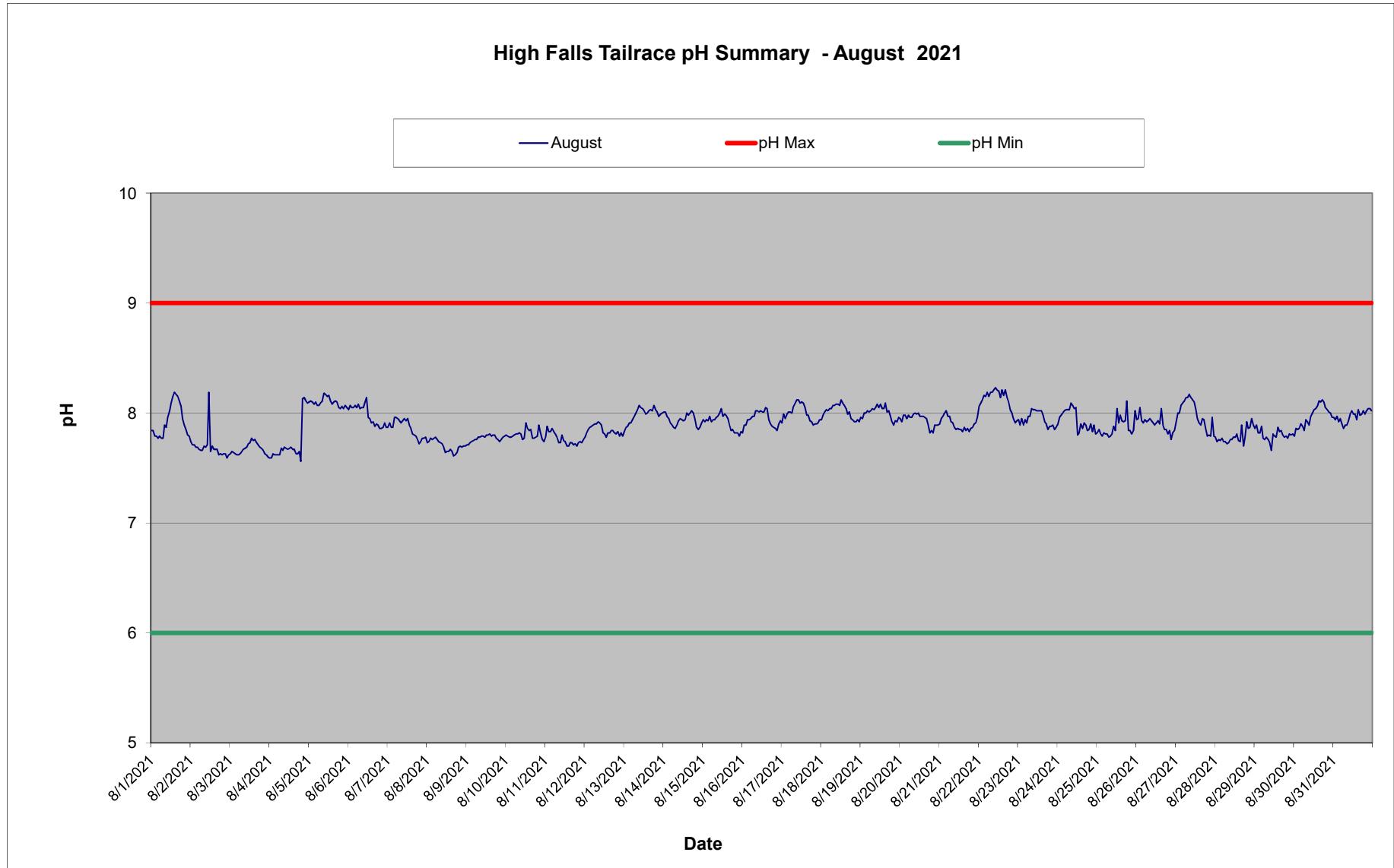
License Minimum Dissolved Oxygen: 5.0 mg/l

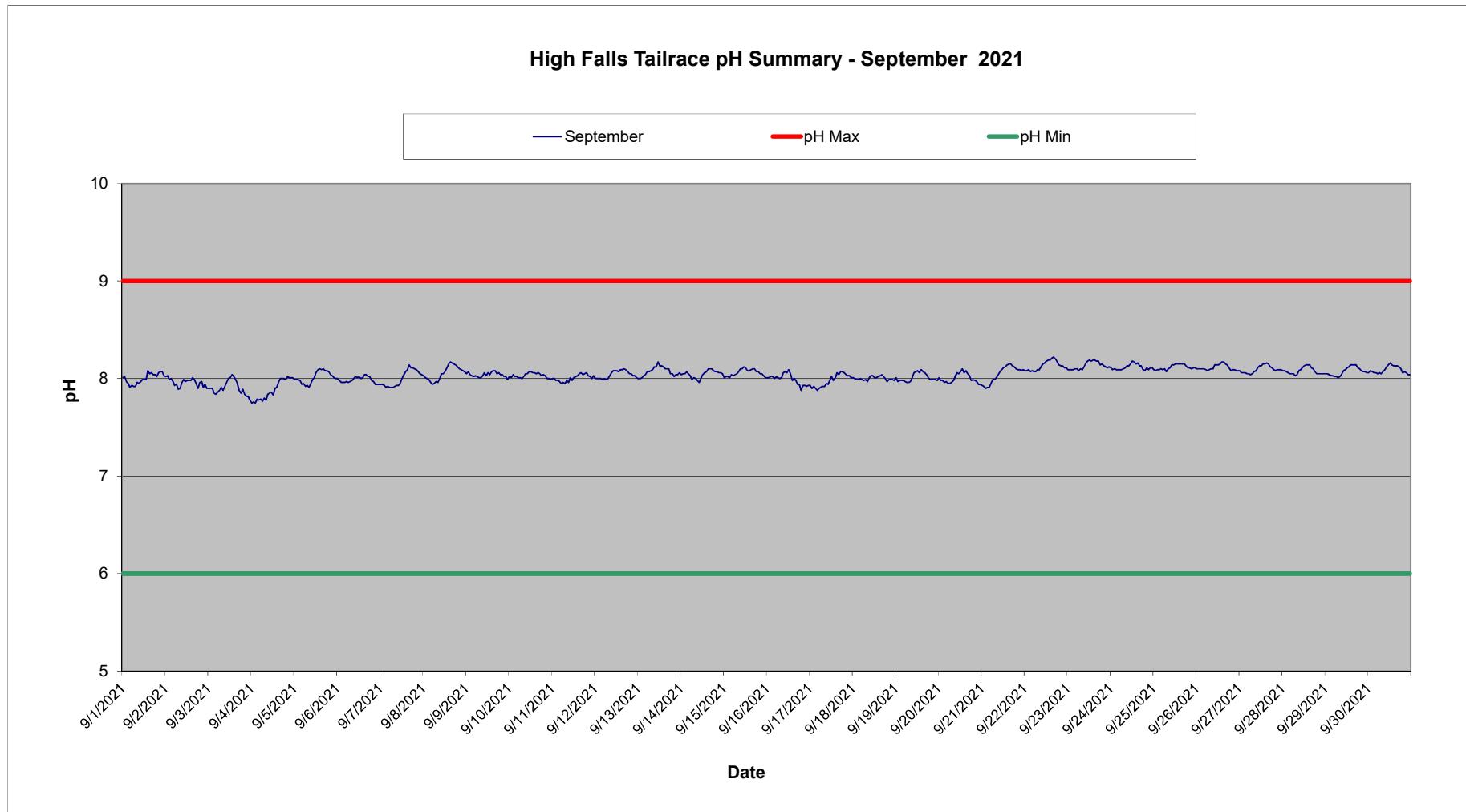
High Falls Tailrace Dissolved Oxygen Summary - September 2021

Time HHMMSS	09/17/21	09/18/21	09/19/21	09/20/21	09/21/21	09/22/21	09/23/21	09/24/21	09/25/21	09/26/21	09/27/21	09/28/21	09/29/21	09/30/21
0	7.5	8.1	8.3	8.2	7.7	8.5	8.6	8.7	8.7	8.8	8.7	8.7	8.7	8.7
10000	7.4	8.1	8.2	8.0	7.7	8.5	8.6	8.6	8.6	8.8	8.7	8.7	8.7	8.8
20000	7.5	8.0	8.2	8.1	7.6	8.5	8.6	8.7	8.7	8.8	8.7	8.7	8.6	8.8
30000	7.5	8.0	8.3	8.1	7.6	8.5	8.6	8.6	8.7	8.8	8.7	8.7	8.6	8.8
40000	7.4	8.1	8.2	8.1	7.6	8.4	8.6	8.7	8.7	8.8	8.7	8.7	8.6	8.8
50000	7.5	8.1	8.2	8.0	7.8	8.5	8.6	8.7	8.7	8.8	8.7	8.7	8.6	8.7
60000	7.5	8.1	8.2	8.0	8.0	8.4	8.6	8.7	8.8	8.7	8.6	8.7	8.6	8.7
70000	7.5	8.2	8.2	8.1	8.0	8.5	8.6	8.7	8.7	8.8	8.6	8.7	8.6	8.7
80000	7.5	8.1	8.2	8.2	8.1	8.5	8.6	8.8	8.8	8.8	8.6	8.7	8.6	8.8
90000	7.7	8.2	8.3	8.3	8.2	8.7	8.7	8.8	8.8	8.8	8.7	8.8	8.8	8.9
100000	7.7	8.2	8.4	8.3	8.3	8.7	8.9	8.8	8.9	8.9	8.7	8.8	8.8	8.9
110000	7.8	8.2	8.5	8.3	8.4	8.8	8.9	8.8	8.9	8.9	8.8	8.8	8.7	9.0
120000	7.9	8.1	8.5	8.3	8.5	8.9	9.0	8.9	8.9	8.9	8.8	8.9	8.8	9.0
130000	7.8	8.1	8.4	8.4	8.6	8.9	8.9	8.8	8.9	8.9	8.9	9.0	8.9	9.0
140000	7.9	8.2	8.4	8.3	8.6	8.9	8.9	8.8	8.9	8.9	8.9	8.9	8.9	8.9
150000	8.2	8.3	8.4	8.4	8.7	8.9	8.9	8.8	8.9	9.0	8.9	8.9	8.9	8.9
160000	8.1	8.3	8.3	8.3	8.6	8.9	8.9	8.8	8.9	8.9	8.8	8.8	9.0	8.9
170000	8.3	8.2	8.2	8.2	8.6	8.9	8.9	8.7	8.9	8.9	8.7	8.8	8.9	8.9
180000	8.2	8.1	8.1	8.0	8.5	8.9	8.8	8.6	8.8	8.8	8.7	8.6	8.9	8.8
190000	8.2	8.1	8.0	8.0	8.5	8.8	8.8	8.5	8.8	8.7	8.7	8.6	8.8	8.7
200000	8.2	8.1	8.1	7.9	8.4	8.7	8.7	8.7	8.8	8.7	8.7	8.6	8.7	8.7
210000	8.2	8.2	8.1	7.9	8.5	8.7	8.7	8.6	8.8	8.7	8.7	8.6	8.7	8.7
220000	8.2	8.2	8.1	7.8	8.5	8.7	8.7	8.7	8.8	8.7	8.7	8.6	8.7	8.7
230000	8.1	8.2	8.0	7.7	8.5	8.6	8.7	8.7	8.9	8.7	8.8	8.6	8.7	8.7
Daily Max	8.3	8.3	8.5	8.4	8.7	8.9	9.0	8.9	8.9	9.0	8.9	9.0	9.0	9.0
Daily Min	7.4	8.0	8.0	7.7	7.6	8.4	8.6	8.5	8.6	8.7	8.6	8.6	8.6	8.7
Average	7.8	8.1	8.2	8.1	8.2	8.7	8.8	8.7	8.8	8.8	8.7	8.7	8.8	8.8

High Falls Tailrace pH Summary - June 2021







High Falls Tailrace pH Summary - June 2021

Time HHMMSS	06/01/21	06/02/21	06/03/21	06/04/21	06/05/21	06/06/21	06/07/21	06/08/21	06/09/21	06/10/21	06/11/21	06/12/21	06/13/21	06/14/21	06/15/21	06/16/21
0	7.6	7.6	7.7	7.7	8.0	8.0	8.1	7.6	7.7	7.6	7.6	7.6	7.5	7.7	7.6	7.5
10000	7.6	7.7	7.7	7.7	8.0	8.0	8.1	7.6	7.6	7.6	7.6	7.6	7.5	7.7	7.6	7.5
20000	7.6	7.7	7.7	7.6	8.0	8.0	8.0	7.6	7.6	7.6	7.6	7.6	7.5	7.6	7.6	7.5
30000	7.6	7.7	7.7	7.6	8.0	8.0	8.0	7.6	7.6	7.6	7.7	7.6	7.5	7.6	7.6	7.4
40000	7.6	7.7	7.7	7.6	8.0	8.0	8.0	7.6	7.6	7.6	7.7	7.6	7.5	7.6	7.6	7.5
50000	7.6	7.7	7.7	7.6	8.0	8.1	8.0	7.6	7.6	7.5	7.7	7.5	7.5	7.6	7.6	7.4
60000	7.6	7.7	7.6	7.7	8.0	8.0	8.1	7.6	7.6	7.5	7.6	7.5	7.5	7.6	7.6	7.5
70000	7.6	7.7	7.6	7.7	8.0	8.1	8.1	7.6	7.6	7.5	7.6	7.6	7.6	7.6	7.6	7.5
80000	7.6	7.7	7.6	7.7	8.0	8.1	8.1	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.5
90000	7.6	7.7	7.6	7.7	8.0	8.1	8.1	7.6	7.6	7.6	7.7	7.6	7.6	7.6	7.6	7.5
100000	7.7	7.7	7.7	7.7	8.0	8.1	8.1	7.6	7.6	7.6	7.6	7.6	7.6	7.7	7.6	7.5
110000	7.6	7.7	7.7	7.7	8.1	8.1	8.1	7.6	7.6	7.6	7.6	7.6	7.6	7.7	7.6	7.5
120000	7.7	7.6	7.7	7.7	8.1	8.1	8.1	7.6	7.6	7.6	7.6	7.6	7.6	7.7		7.5
130000	7.7	7.6	7.7	7.6	8.1	8.1	7.6	7.6	7.5	7.6	7.6	7.6	7.6	7.7	7.6	7.5
140000	7.7	7.6	7.6	7.6	8.1	8.0	7.6	7.6	7.6	7.6	7.5	7.6	7.7	7.6	7.5	
150000	7.6	7.6	7.7	7.6	8.1	8.0	7.6	7.6	7.6	7.6	7.6	7.5	7.6	7.7	7.6	7.5
160000	7.6	7.7	7.7	7.6	8.1	8.0	7.6	7.6	7.5	7.6	7.6	7.6	7.6	7.7	7.6	7.5
170000	7.6	7.7	7.7	7.7	8.1	8.0	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.7	7.5	7.5
180000	7.6	7.7	7.7	7.7	8.1	8.0	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.7	7.5	7.5
190000	7.6	7.7	7.7	7.6	8.0	8.0	7.6	7.5	7.6	7.5	7.6	7.6	7.6	7.7	7.5	7.5
200000	7.6	7.7	7.7	7.6	8.0	8.0	7.6	7.6	7.6	7.5	7.6	7.6	7.6	7.7	7.5	7.5
210000	7.6	7.7	7.7	8.1	8.0	8.0	7.6	7.6	7.6	7.5	7.6	7.6	7.7	7.7	7.5	7.5
220000	7.6	7.7	7.7	8.0	8.0	8.1	7.6	7.7	7.6	7.6	7.6	7.6	7.7	7.6	7.5	7.4
230000	7.6	7.7	7.7	8.0	8.0	8.0	7.6	7.7	7.6	7.6	7.6	7.5	7.7	7.6	7.5	7.4
Daily Max	7.7	7.7	7.7	8.1	8.1	8.1	8.1	7.7	7.7	7.6	7.7	7.6	7.7	7.7	7.6	7.5
Daily Min	7.6	7.6	7.6	7.6	8.0	8.0	7.6	7.5	7.5	7.5	7.6	7.5	7.6	7.5	7.4	
Average	7.6	7.7	7.7	7.7	8.0	8.0	8.0	7.9	7.6	7.6	7.6	7.6	7.6	7.7	7.6	7.5

License maximum pH: 9

License minimum pH: 6

Missing data due to equipment maintenance

High Falls Tailrace pH Summary - June 2021

Time HHMMSS	06/17/21	06/18/21	06/19/21	06/20/21	06/21/21	06/22/21	06/23/21	06/24/21	06/25/21	06/26/21	06/27/21	06/28/21	06/29/21	06/30/21
0	7.4	7.5	7.5	7.5	7.5	7.7	7.7	7.6	7.7	7.8	7.9	7.8	7.8	7.7
10000	7.4	7.5	7.5	7.5	7.5	7.6	7.7	7.6	7.7	7.7	7.9	7.8	7.8	7.7
20000	7.4	7.5	7.5	7.6	7.5	7.6	7.7	7.6	7.7	7.7	7.9	7.8	7.8	7.7
30000	7.5	7.5	7.5	7.6	7.6	7.6	7.7	7.6	7.7	7.7	7.9	7.8	7.8	7.7
40000	7.5	7.5	7.5	7.6	7.7	7.6	7.7	7.7	7.8	7.7	7.9	7.8	7.8	7.8
50000	7.5	7.5	7.5	7.5	7.7	7.6	7.7	7.7	7.8	7.8	7.9	7.8	7.9	7.8
60000	7.5	7.5	7.6	7.6	7.8	7.6	7.7	7.7	7.8	7.8	7.9	7.8	7.9	7.8
70000	7.5	7.5	7.6	7.6	7.9	7.6	7.7	7.7	7.8	7.8	8.0	7.8	7.8	7.8
80000	7.5	7.5	7.6	7.5	7.9	7.7	7.7	7.7	7.8	7.8	8.0	7.8	7.8	7.8
90000	7.5	7.5	7.6	7.6	8.0	7.7	7.7	7.7	7.8	7.8	8.0	7.8	7.8	7.8
100000	7.4	7.5	7.6	7.6	8.1	7.7	7.7	7.7	7.8	7.8	8.0	7.8	7.8	7.8
110000	7.4	7.5	7.6	7.6	8.1	7.7	7.7	7.7	7.8	7.8	8.0	7.8	7.8	7.8
120000	7.4	7.5	7.6	7.6	8.1	7.7	7.7	7.7	7.8	7.9	8.0	7.8	7.8	7.8
130000	7.4	7.6	7.6	7.6	8.1	7.7	7.7	7.7	7.8	7.8	8.0	7.8	7.8	7.8
140000	7.4	7.5	7.6	7.6	8.1	7.7	7.6	7.7	7.8	7.9	8.0	7.8	7.8	7.9
150000	7.4	7.6	7.6	7.6	8.1	7.8	7.6	7.7	7.9	7.9	8.0	7.7	7.8	7.8
160000	7.3	7.6	7.5	7.6	8.1	7.8	7.6	7.7	7.9	7.9	7.9	7.7	7.8	7.9
170000	7.4	7.6	7.5	7.6	8.1	7.8	7.6	7.7	7.9	7.9	7.9	7.7	7.7	7.9
180000	7.4	7.6	7.5	7.6	8.1	7.8	7.6	7.7	7.9	7.9	7.9	7.7	7.8	7.8
190000	7.4	7.6	7.5	7.6	8.1	7.7	7.6	7.7	7.9	7.9	7.8	7.7	7.7	7.8
200000	7.4	7.5	7.5	7.5	8.0	7.7	7.6	7.7	7.8	7.9	7.8	7.7	7.7	7.8
210000	7.4	7.5	7.5	7.5	7.9	7.7	7.6	7.7	7.8	7.9	7.8	7.7	7.7	7.9
220000	7.5	7.5	7.5	7.5	7.8	7.7	7.6	7.7	7.8	7.9	7.8	7.7	7.7	8.0
230000	7.5	7.5	7.5	7.5	7.7	7.7	7.6	7.7	7.8	7.9	7.8	7.8	7.7	7.9
Daily Max	7.5	7.6	7.6	7.6	8.1	7.8	7.7	7.7	7.9	7.9	8.0	7.8	7.9	8.0
Daily Min	7.3	7.5	7.5	7.5	7.5	7.6	7.6	7.6	7.7	7.7	7.8	7.7	7.7	7.7
Average	7.4	7.5	7.5	7.5	7.9	7.7	7.7	7.7	7.8	7.8	7.9	7.7	7.8	7.8

High Falls Tailrace pH Summary - July 2021

Time HHMMSS	07/01/21	07/02/21	07/03/21	07/04/21	07/05/21	07/06/21	07/07/21	07/08/21	07/09/21	07/10/21	07/11/21	07/12/21	07/13/21	07/14/21	07/15/21	07/16/21
0	7.9	7.9	7.8	7.7	7.7	7.8	8.0	7.8	7.8	7.7	7.7	7.8	7.7	7.7	7.6	
10000	7.8	7.9	7.8	7.7	7.7	7.8	8.0	7.8	7.8	7.7	7.7	7.8	7.7	7.8	7.6	
20000	7.8	7.9	7.8	7.7	7.7	7.8	8.0	7.8	7.8	7.7	7.7	7.8	7.7	7.8	7.6	
30000	7.8	7.8	7.8	7.7	7.7	7.8	7.8	8.0	7.8	7.8	7.7	7.7	7.8	7.7	7.6	
40000	7.8	7.8	7.8	7.7	7.7	7.8	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.6	
50000	7.9	7.8	7.8	7.7	7.7	7.8	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.9	7.7	
60000	7.9	7.8	7.8	7.8	7.7	7.8	7.8	7.9	7.9	7.8	7.8	7.8	7.7	7.9	7.7	
70000	7.9	7.8	7.8	7.8	7.7	7.8	7.7	7.9	7.9	7.8	7.8	7.8	7.8	7.7	7.7	
80000	7.9	7.8	7.8	7.8	7.7	7.7	7.8	7.9	7.9	7.8	7.8	7.8	7.8	7.7	7.7	
90000	8.0	7.9	7.8	7.8	7.7	7.7	7.8	7.9	7.9	7.8	7.8	7.8	7.8	7.7	7.7	
100000	8.0	7.9	7.8	7.8	7.8	7.7	7.8	7.9	7.9	7.8	7.8	7.7	7.8	7.7	7.7	
110000	8.1	7.9	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.8	7.8	7.8	7.8	7.7	7.7	
120000	8.1	7.9	7.9	7.8	7.7	7.7	7.9	7.9	7.9	7.8	7.8	7.8	7.6	7.9	7.7	
130000	8.1	7.9	7.9	7.8	7.8	7.8	7.9	7.9	7.9	7.8	7.8	7.8	7.7	7.6	7.7	
140000	8.1	7.9	8.0	7.8	7.7	7.8	7.9	7.9	7.9	7.8	7.8	7.8	7.7	7.6	7.7	
150000	8.0	7.9	8.0	7.7	7.7	7.8	7.9	8.0	7.9	7.8	7.8	7.8	7.8	7.6	7.7	
160000	8.0	7.9	8.0	7.7	7.7	7.8	7.9	8.0	7.9	7.8	7.8	7.8	7.7	7.6	7.7	
170000	8.0	7.9	8.0	7.7	7.7	7.8	7.9	8.0	7.9	7.8	7.8	7.8	7.7	7.6	7.7	
180000	8.0	7.9	7.9	7.7	7.7	7.8	7.9	8.0	7.9	7.8	7.8	7.8	7.7	7.6	7.7	
190000	8.0	7.8	7.9	7.7	7.7	7.9	7.9	7.9	7.8	7.8	7.7	7.8	7.7	7.6	7.6	
200000	8.0	7.8	7.9	7.7	7.7	7.9	8.0	7.9	7.8	7.7	7.7	7.8	7.7	7.6	7.6	
210000	8.0	7.8	7.8	7.7	7.7	7.9	8.0	7.9	7.8	7.7	7.7	7.8	7.7	7.6	7.6	
220000	7.9	7.8	7.8	7.7	7.7	7.8	8.0	7.9	7.8	7.7	7.7	7.8	7.7	7.6	7.6	
230000	7.9	7.8	7.7	7.7	7.7	7.8	8.0	7.8	7.8	7.7	7.7	7.8	7.7	7.7	7.6	
Daily Max	8.1	7.9	8.0	7.8	7.8	7.9	8.0	8.0	7.9	7.8	7.8	7.8	7.8	7.9	7.7	
Daily Min	7.8	7.8	7.7	7.7	7.7	7.7	7.7	7.8	7.8	7.7	7.7	7.7	7.6	7.7	7.6	
Average	7.9	7.8	7.8	7.7	7.7	7.8	8.0	7.8	7.8	7.8	7.7	7.8	7.7	7.8	7.7	

License maximum pH: 9

License minimum pH: 6

High Falls Tailrace pH Summary - July 2021

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

High Falls Tailrace pH Summary - August 2021

Time HHMMSS	08/01/21	08/02/21	08/03/21	08/04/21	08/05/21	08/06/21	08/07/21	08/08/21	08/09/21	08/10/21	08/11/21	08/12/21	08/13/21	08/14/21	08/15/21	08/16/21
0	7.8	7.7	7.6	7.6	8.1	8.0	7.9	7.7	7.7	7.8	7.8	7.8	7.8	8.0	7.9	7.8
10000	7.8	7.7	7.7	7.6	8.1	8.1	7.9	7.7	7.7	7.8	7.9	7.8	7.9	8.0	7.9	7.9
20000	7.8	7.7	7.6	7.6	8.1	8.1	7.9	7.8	7.7	7.8	7.8	7.9	7.9	8.0	7.9	7.9
30000	7.8	7.7	7.6	7.6	8.1	8.1	7.9	7.8	7.7	7.8	7.8	7.9	7.9	8.0	7.9	7.9
40000	7.8	7.7	7.6	7.6	8.1	8.1	8.0	7.8	7.8	7.8	7.9	7.9	7.9	7.9	8.0	7.9
50000	7.8	7.7	7.6	7.6	8.1	8.1	8.0	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	8.0
60000	7.8	7.7	7.6	7.6	8.1	8.1	8.0	7.8	7.8	7.8	7.8	7.9	8.0	7.9	7.9	8.0
70000	7.8	7.7	7.7	7.7	8.1	8.0	7.9	7.7	7.8	7.8	7.8	7.9	8.0	7.9	7.9	8.0
80000	7.9	7.7	7.7	7.7	8.1	8.1	7.9	7.7	7.8	7.8	7.7	7.9	8.0	7.9	8.0	8.0
90000	7.9	7.7	7.7	7.7	8.2	8.1	7.9	7.7	7.8	7.8	7.7	7.9	8.1	7.9	8.0	8.0
100000	8.0	7.7	7.7	7.7	8.2	8.1	8.0	7.7	7.8	7.8	7.8	7.9	8.1	8.0	8.0	8.0
110000	8.0	8.2	7.7	7.7	8.2	8.1	7.9	7.6	7.8	7.8	7.8	7.8	8.0	7.9	8.0	8.0
120000	8.1	7.7	7.7	7.7	8.2	8.0	8.0	7.7	7.8	7.9	7.7	7.8	8.0	7.9	8.0	8.0
130000	8.2	7.7	7.8	7.7	8.1	8.0	7.9	7.7	7.8	7.9	7.7	7.8	8.0	7.9	8.0	8.0
140000	8.2	7.7	7.8	7.7	8.1	7.9	7.9	7.7	7.8	7.8	7.7	7.8	8.0	8.0	8.0	8.1
150000	8.2	7.7	7.8	7.7	8.1	7.9	7.8	7.7	7.8	7.9	7.7	7.8	8.0	8.0	8.0	8.0
160000	8.2	7.7	7.7	7.6	8.1	7.9	7.8	7.6	7.8	7.8	7.7	7.8	8.0	8.0	7.9	7.9
170000	8.1	7.6	7.7	7.6	8.1	7.9	7.8	7.6	7.8	7.8	7.7	7.8	8.0	8.0	7.8	7.9
180000	8.1	7.6	7.7	7.7	8.1	7.9	7.8	7.6	7.8	7.8	7.7	7.8	8.1	8.0	7.9	7.9
190000	8.0	7.6	7.7	7.6	8.0	7.9	7.7	7.7	7.8	7.8	7.7	7.8	8.0	7.9	7.8	7.9
200000	7.9	7.6	7.7	8.1	8.1	7.9	7.7	7.7	7.7	7.9	7.7	7.8	8.0	7.9	7.8	7.9
210000	7.9	7.6	7.6	8.1	8.0	7.9	7.8	7.7	7.8	7.8	7.7	7.8	8.0	7.9	7.8	7.8
220000	7.8	7.6	7.6	8.1	8.1	7.9	7.8	7.7	7.8	7.8	7.7	7.8	8.0	7.9	7.8	7.9
230000	7.8	7.6	7.6	8.1	8.1	7.9	7.8	7.7	7.8	7.7	7.8	7.8	8.0	7.9	7.8	7.9
Daily Max	8.2	8.2	7.8	8.1	8.2	8.1	8.0	7.8	7.8	7.9	7.9	7.9	8.1	8.0	8.0	8.1
Daily Min	7.8	7.6	7.6	7.6	8.0	7.9	7.7	7.6	7.7	7.7	7.7	7.8	7.8	7.9	7.8	7.8
Average	7.9	7.7	7.7	7.7	8.1	8.0	7.9	7.7	7.7	7.8	7.8	7.8	8.0	7.9	7.9	7.9

License maximum pH: 9

License minimum pH: 6

High Falls Tailrace pH Summary - August 2021

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

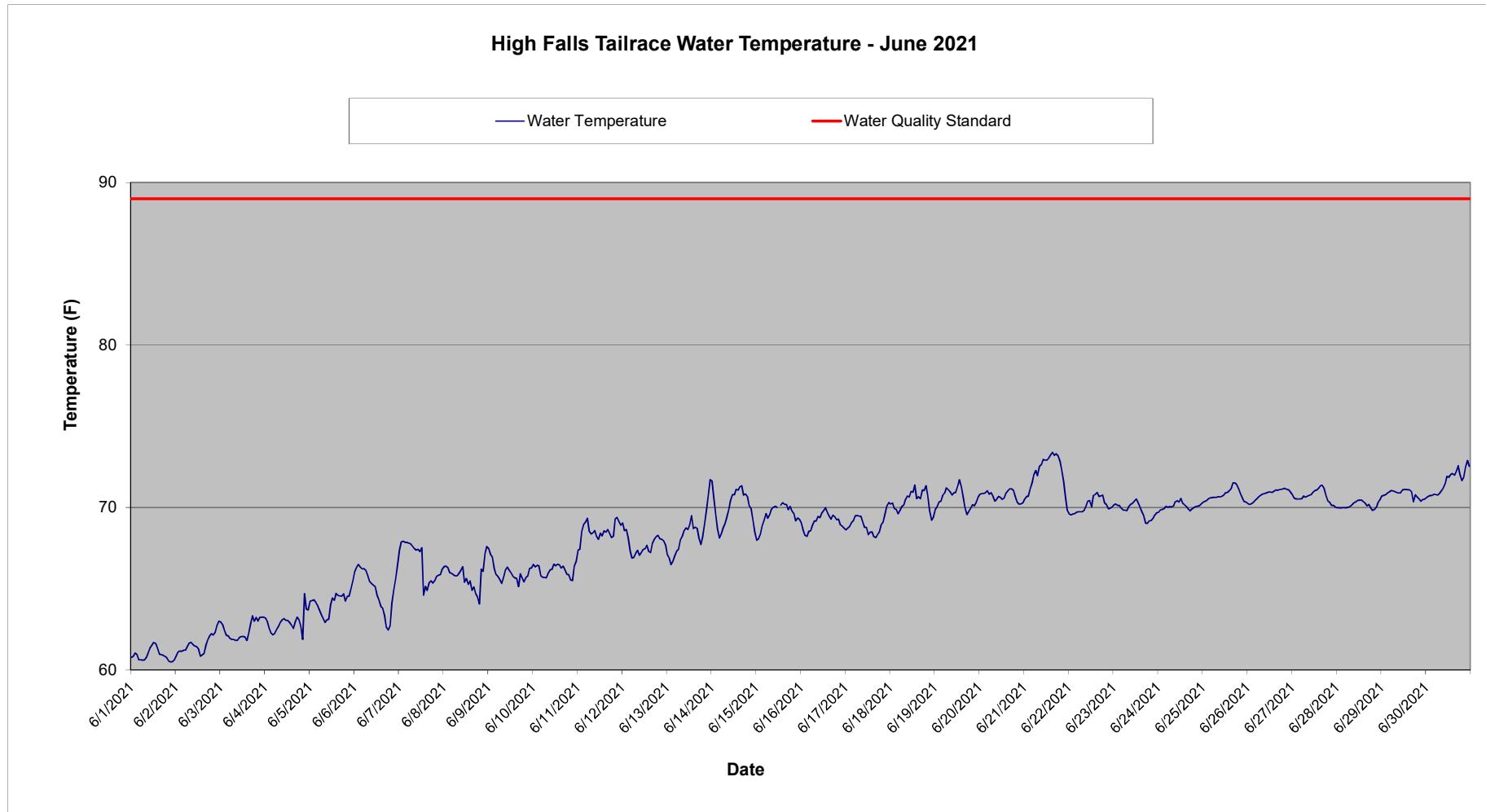
High Falls Tailrace pH Summary - September 2021

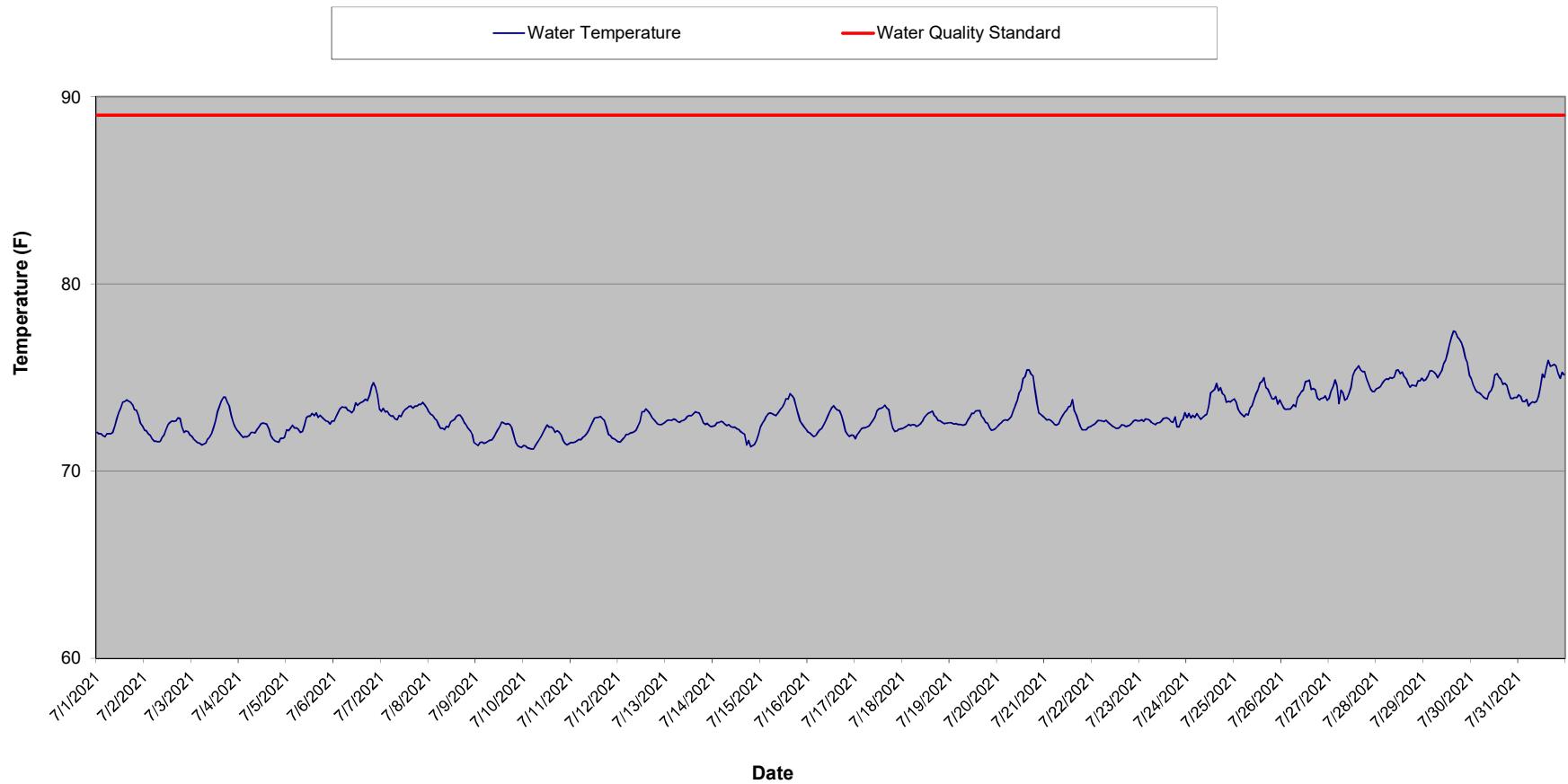
Time HHMMSS	09/01/21	09/02/21	09/03/21	09/04/21	09/05/21	09/06/21	09/07/21	09/08/21	09/09/21	09/10/21	09/11/21	09/12/21	09/13/21	09/14/21	09/15/21	09/16/21
0	8.0	8.0	7.9	7.8	8.0	8.0	7.9	8.0	8.1	8.0	8.0	8.0	8.0	8.0	8.0	8.0
10000	8.0	8.0	7.9	7.8	8.0	8.0	7.9	8.0	8.1	8.0	8.0	8.0	8.0	8.1	8.0	8.0
20000	8.0	8.0	7.9	7.8	8.0	8.0	7.9	8.0	8.0	8.0	8.0	8.0	8.0	8.1	8.0	8.0
30000	8.0	8.0	7.9	7.8	8.0	8.0	7.9	8.0	8.0	8.0	8.0	8.0	8.0	8.1	8.0	8.0
40000	7.9	8.0	7.8	7.8	7.9	8.0	7.9	8.0	8.0	8.0	8.0	8.0	8.0	8.1	8.0	8.0
50000	7.9	7.9	7.9	7.8	8.0	8.0	7.9	7.9	8.0	8.0	8.0	8.0	8.1	8.0	8.0	8.0
60000	7.9	7.9	7.9	7.8	7.9	8.0	7.9	8.0	8.0	8.0	8.0	8.0	8.1	8.0	8.0	8.0
70000	7.9	7.9	7.9	7.8	7.9	8.0	7.9	8.0	8.0	8.0	8.0	8.0	8.1	8.0	8.1	8.0
80000	8.0	7.9	7.9	7.8	7.9	8.0	7.9	8.0	8.0	8.0	8.0	8.0	8.1	8.0	8.1	8.0
90000	8.0	8.0	7.9	7.8	8.0	8.0	7.9	8.0	8.0	8.1	8.0	8.1	8.1	8.0	8.1	8.1
100000	8.0	8.0	8.0	7.9	8.0	8.0	7.9	8.1	8.1	8.1	8.0	8.1	8.1	8.0	8.1	8.1
110000	8.0	8.0	8.0	7.9	8.0	8.0	8.0	8.1	8.0	8.1	8.0	8.1	8.2	8.0	8.1	8.1
120000	8.0	8.0	8.0	7.8	8.1	8.0	8.0	8.1	8.1	8.1	8.0	8.1	8.1	8.0	8.1	8.1
130000	8.0	8.0	8.0	7.9	8.1	8.0	8.0	8.1	8.0	8.1	8.0	8.1	8.1	8.1	8.1	8.1
140000	8.1	8.0	8.0	7.9	8.1	8.0	8.1	8.2	8.1	8.1	8.0	8.1	8.1	8.1	8.1	8.0
150000	8.1	8.0	8.0	8.0	8.1	8.0	8.1	8.2	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.0
160000	8.1	8.0	8.0	8.0	8.1	8.0	8.1	8.2	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.0
170000	8.0	8.0	7.9	8.0	8.1	8.0	8.1	8.2	8.1	8.1	8.0	8.1	8.1	8.1	8.1	7.9
180000	8.0	7.9	7.9	8.0	8.1	8.0	8.1	8.1	8.1	8.0	8.1	8.1	8.1	8.1	8.1	7.9
190000	8.0	8.0	7.9	8.0	8.1	8.0	8.1	8.1	8.0	8.0	8.1	8.1	8.1	8.1	8.1	7.9
200000	8.1	8.0	7.8	8.0	8.0	8.0	8.1	8.1	8.0	8.0	8.0	8.1	8.0	8.1	8.1	7.9
210000	8.1	7.9	7.8	8.0	8.0	7.9	8.1	8.1	8.0	8.0	8.0	8.0	8.0	8.1	8.1	7.9
220000	8.1	7.9	7.8	8.0	8.0	7.9	8.1	8.1	8.0	8.0	8.0	8.0	8.0	8.1	8.0	7.9
230000	8.0	7.9	7.8	8.0	8.0	7.9	8.0	8.1	8.0	8.0	8.0	8.0	8.1	8.1	8.0	7.9
Daily Max	8.1	8.0	8.0	8.0	8.1	8.0	8.1	8.2	8.1	8.1	8.1	8.1	8.2	8.1	8.1	8.1
Daily Min	7.9	7.9	7.8	7.8	7.9	7.9	7.9	7.9	8.0	8.0	8.0	8.0	8.0	8.0	8.0	7.9
Average	8.0	8.0	7.9	7.9	8.0	8.0	8.0	8.0	8.1	8.0	8.0	8.0	8.1	8.0	8.1	8.0

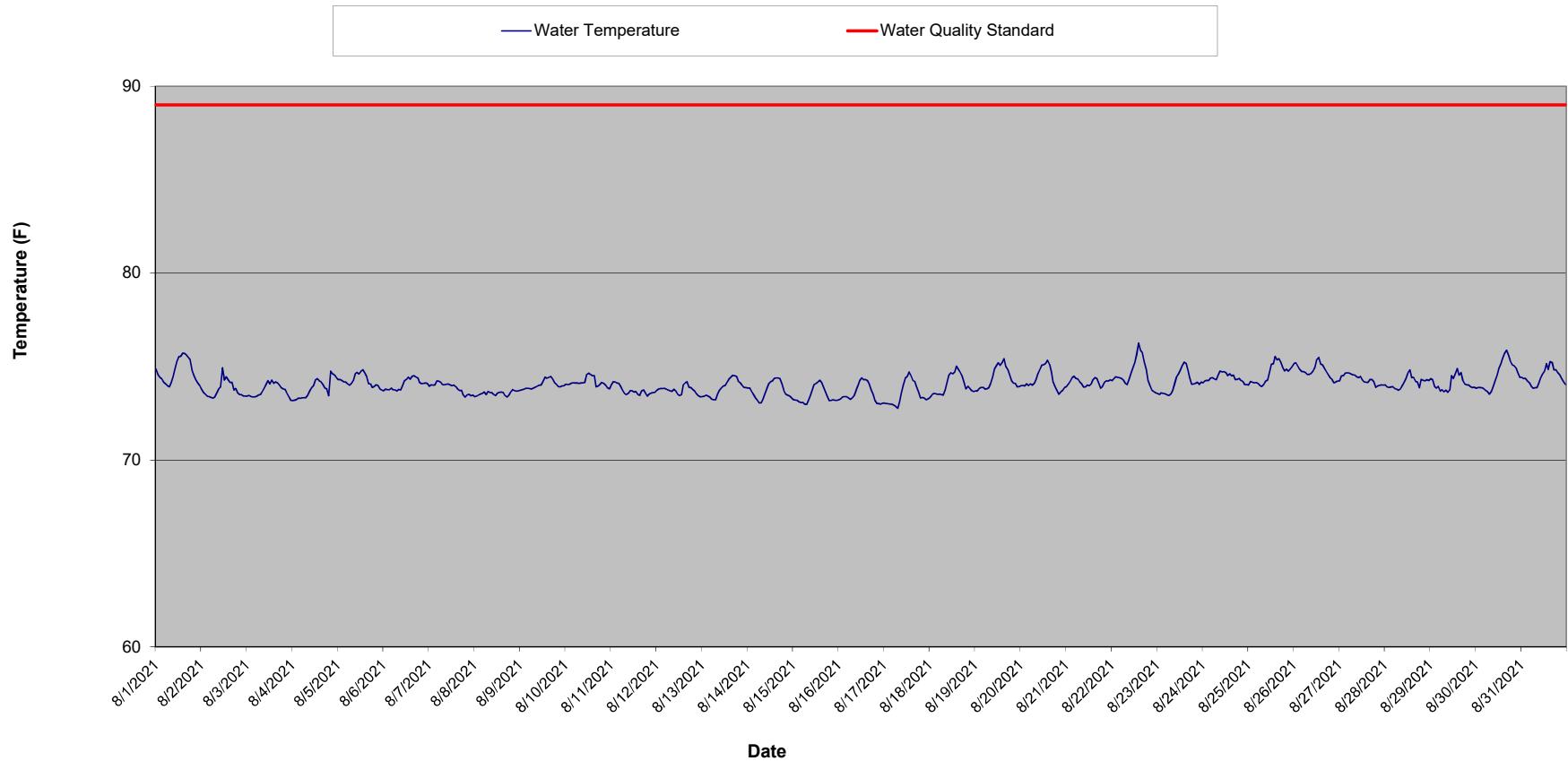
License maximum pH: 9

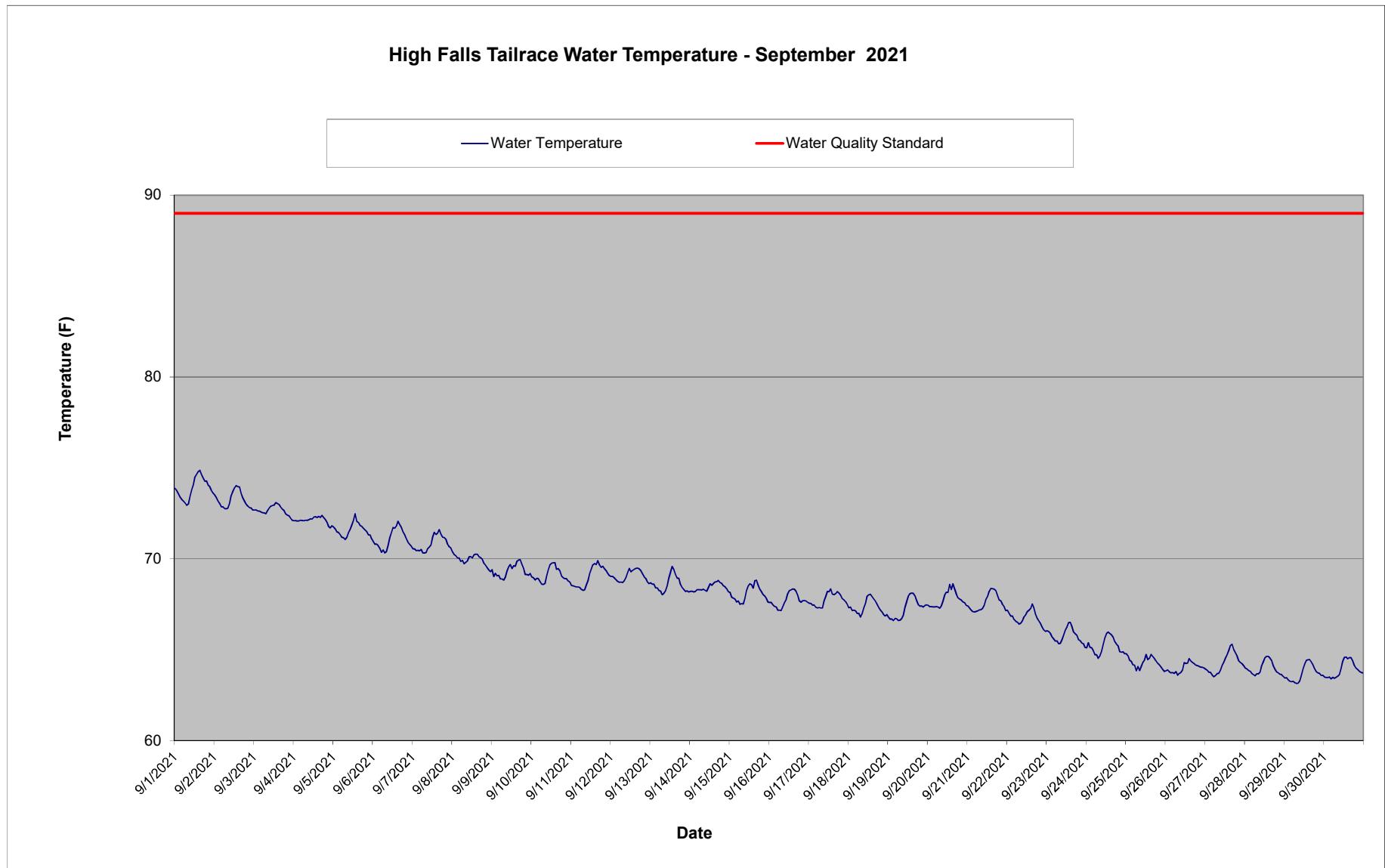
License minimum pH: 6

High Falls Tailrace pH Summary - September 2021



High Falls Tailrace Water Temperature - July 2021

High Falls Tailrace Water Temperature - August 2021



High Falls Tailrace Temperature Summary - June 2021

Time HHMMSS	06/01/21	06/02/21	06/03/21	06/04/21	06/05/21	06/06/21	06/07/21	06/08/21	06/09/21	06/10/21	06/11/21	06/12/21	06/13/21	06/14/21	06/15/21	06/16/21
0	60.8	60.9	62.9	63.2	64.2	66.0	67.4	66.4	67.5	66.5	67.4	69.0	67.1	71.6	68.0	69.1
10000	60.8	61.1	62.8	63.0	64.3	66.3	67.9	66.4	67.1	66.3	67.4	68.6	66.9	70.6	68.1	68.6
20000	61.0	61.2	62.4	62.6	64.3	66.5	67.9	66.3	66.9	66.4	68.5	68.6	66.5	69.5	68.4	68.3
30000	60.9	61.1	62.1	62.3	64.2	66.3	67.9	66.0	66.2	66.4	68.9	68.1	66.7	68.7	68.9	68.2
40000	60.6	61.2	62.1	62.2	64.0	66.2	67.8	66.0	65.9	65.8	69.1	67.3	67.0	68.1	69.2	68.5
50000	60.6	61.2	61.9	62.3	63.7	66.2	67.8	65.9	65.7	65.7	69.3	66.9	67.3	68.4	69.6	68.6
60000	60.6	61.4	61.9	62.5	63.4	66.1	67.8	65.8	65.5	65.7	68.5	66.9	67.4	68.8	69.3	68.9
70000	60.6	61.6	61.9	62.7	63.2	65.8	67.6	65.8	65.3	65.7	68.4	67.2	68.0	69.0	69.6	69.2
80000	60.8	61.7	61.8	62.9	62.9	65.4	67.5	65.9	65.7	66.0	68.4	67.4	68.2	69.4	69.9	69.2
90000	61.1	61.6	61.8	63.1	63.1	65.3	67.4	66.1	66.1	66.2	68.6	67.1	68.6	69.9	70.0	69.4
100000	61.4	61.5	62.0	63.2	63.1	65.2	67.4	66.4	66.3	66.2	68.2	67.2	68.7	70.4	70.1	69.4
110000	61.5	61.4	62.0	63.1	64.0	65.1	67.3	65.4	66.1	66.5	68.0	67.4	68.6	70.8	70.0	69.6
120000	61.7	61.3	62.1	63.0	64.4	64.6	67.5	65.6	66.0	66.4	68.4	67.5	68.9	70.8		69.8
130000	61.6	60.9	62.0	62.9	64.3	64.3	64.6	65.3	65.8	66.5	68.2	67.7	69.5	71.1	70.2	70.0
140000	61.4	60.9	61.8	62.7	64.7	63.9	65.1	65.5	65.7	66.5	68.6	67.3	68.7	71.1	70.3	69.7
150000	61.0	61.0	62.2	62.6	64.6	63.8	64.9	64.9	65.6	66.3	68.5	67.2	68.8	71.3	70.2	69.5
160000	60.9	61.5	62.8	62.9	64.6	63.4	65.4	65.1	65.1	66.4	68.6	67.8	68.7	71.3	70.2	69.3
170000	60.9	61.8	63.3	63.2	64.5	62.6	65.5	64.7	65.9	66.2	68.4	68.0	68.1	70.8	69.9	69.5
180000	60.8	62.1	63.0	63.1	64.7	62.5	65.3	64.5	65.6	65.9	68.1	68.2	67.7	70.8	70.1	69.4
190000	60.8	62.2	63.2	62.7	64.2	62.7	65.5	64.1	65.4	65.9	68.2	68.3	68.2	70.7	69.8	69.2
200000	60.5	62.1	63.0	61.9	64.5	64.1	65.8	66.2	65.7	65.5	69.3	68.1	69.0	70.1	69.6	69.3
210000	60.5	62.3	63.2	64.7	64.5	64.9	65.8	66.1	65.8	65.5	69.4	68.0	69.9	69.9	69.2	68.9
220000	60.5	62.8	63.2	63.7	65.0	65.6	65.9	67.2	66.2	66.4	69.1	68.0	70.7	69.3	69.4	68.8
230000	60.6	63.0	63.3	63.7	65.5	66.5	66.2	67.6	66.3	66.7	68.9	67.7	71.7	68.5	69.3	68.7
Daily Max	61.7	63.0	63.3	64.7	65.5	66.5	67.9	67.6	67.5	66.7	69.4	69.0	71.7	71.6	70.3	70.0
Daily Min	60.5	60.9	61.8	61.9	62.9	62.5	64.6	64.1	65.1	65.5	67.4	66.9	66.5	68.1	68.0	68.2
Average	60.9	61.6	62.5	62.9	64.2	65.0	66.6	65.8	66.0	66.1	68.5	67.7	68.4	70.0	69.5	69.1

Monthly average Temp: 68.0
 License Maximum Temperature: 89 F

[REDACTED] Missing data due to equipment maintenance

High Falls Tailrace Temperature Summary - June 2021

Time HHMMSS	06/17/21	06/18/21	06/19/21	06/20/21	06/21/21	06/22/21	06/23/21	06/24/21	06/25/21	06/26/21	06/27/21	06/28/21	06/29/21	06/30/21
0	68.6	70.2	69.9	70.8	70.5	69.6	70.2	69.7	70.3	70.2	70.8	70.0	70.7	70.6
10000	68.7	70.3	70.0	70.9	70.7	69.5	70.2	69.8	70.4	70.2	70.6	70.0	70.7	70.7
20000	68.8	69.9	70.3	70.9	70.7	69.6	70.1	69.9	70.4	70.2	70.5	70.0	70.8	70.7
30000	69.1	69.9	70.4	70.9	71.1	69.6	70.1	69.9	70.5	70.3	70.5	70.0	70.9	70.7
40000	69.2	69.6	70.8	71.0	71.5	69.7	69.9	70.1	70.6	70.4	70.5	70.0	71.0	70.8
50000	69.5	69.8	70.9	70.8	72.0	69.7	69.8	70.0	70.6	70.6	70.5	70.0	71.0	70.8
60000	69.5	70.1	71.2	70.9	72.3	69.7	69.8	70.0	70.6	70.7	70.7	70.0	71.0	70.8
70000	69.5	70.1	71.1	70.7	72.0	69.7	69.8	70.0	70.6	70.8	70.6	70.1	71.0	70.9
80000	69.5	70.5	71.0	70.4	72.5	69.8	70.1	70.1	70.7	70.8	70.7	70.2	70.9	71.0
90000	69.1	70.7	70.8	70.5	72.6	70.1	70.2	70.4	70.7	70.9	70.8	70.3	70.9	71.2
100000	68.8	70.6	70.9	70.7	73.0	70.4	70.3	70.4	70.7	70.9	70.8	70.3	70.9	71.5
110000	68.8	71.0	70.9	70.6	72.9	70.4	70.4	70.3	70.8	70.9	70.9	70.4	71.1	71.9
120000	68.3	70.9	71.3	70.5	72.9	70.0	70.5	70.6	70.9	70.9	71.0	70.4	71.1	71.9
130000	68.5	71.4	71.7	70.6	73.0	70.7	70.3	70.3	70.9	70.9	71.1	70.5	71.1	72.0
140000	68.5	70.5	71.3	70.9	73.2	70.8	70.0	70.1	71.0	71.0	71.2	70.4	71.1	72.1
150000	68.2	70.7	70.6	71.0	73.4	70.9	69.7	70.1	71.1	71.1	71.3	70.3	71.1	72.0
160000	68.1	70.5	70.0	71.1	73.2	70.7	69.5	69.9	71.5	71.1	71.4	70.1	71.0	72.2
170000	68.3	71.1	69.6	71.1	73.3	70.7	69.0	69.8	71.5	71.1	71.2	70.2	70.4	72.6
180000	68.5	71.0	69.7	71.1	73.2	70.8	69.0	69.9	71.4	71.1	70.7	70.0	70.8	72.0
190000	68.9	71.3	70.0	70.7	72.8	70.3	69.2	70.0	71.1	71.1	70.4	69.8	70.6	71.7
200000	69.1	70.7	70.2	70.3	72.3	70.2	69.2	70.1	70.9	71.2	70.3	69.9	70.5	71.9
210000	69.6	69.8	70.1	70.2	71.6	69.9	69.3	70.1	70.6	71.1	70.1	70.0	70.4	72.5
220000	70.1	69.2	70.3	70.2	70.6	69.9	69.5	70.1	70.4	71.1	70.1	70.3	70.5	72.9
230000	70.3	69.4	70.6	70.3	69.8	70.0	69.7	70.2	70.3	70.9	70.0	70.5	70.5	72.5
Daily Max	70.3	71.4	71.7	71.1	73.4	70.9	70.5	70.6	71.5	71.2	71.4	70.5	71.1	72.9
Daily Min	68.1	69.2	69.6	70.2	69.8	69.5	69.0	69.7	70.3	70.2	70.0	69.8	70.4	70.6
Average	69.0	70.4	70.6	70.7	72.1	70.1	69.8	70.1	70.8	70.8	70.7	70.1	70.8	71.6

High Falls Tailrace Temperature Summary - July 2021

Time HHMMSS	07/01/21	07/02/21	07/03/21	07/04/21	07/05/21	07/06/21	07/07/21	07/08/21	07/09/21	07/10/21	07/11/21	07/12/21	07/13/21	07/14/21	07/15/21	07/16/21
0	72.1	72.2	71.9	72.1	72.2	72.7	73.2	73.2	71.4	71.4	71.5	71.6	72.5	72.4	72.0	72.2
10000	72.0	72.1	71.7	71.9	72.2	72.9	73.3	73.0	71.4	71.3	71.5	71.6	72.6	72.4	72.4	72.1
20000	72.0	72.0	71.6	71.8	72.3	73.1	73.2	73.0	71.5	71.2	71.5	71.7	72.7	72.4	72.6	72.0
30000	71.9	71.9	71.5	71.8	72.4	73.3	73.2	72.8	71.5	71.2	71.6	71.8	72.7	72.6	72.7	71.9
40000	71.8	71.7	71.5	71.8	72.3	73.4	73.0	72.7	71.5	71.2	71.7	71.9	72.7	72.6	72.9	71.8
50000	72.0	71.6	71.4	71.9	72.3	73.4	72.9	72.5	71.5	71.2	71.7	72.0	72.8	72.7	73.1	71.9
60000	72.0	71.6	71.4	72.1	72.2	73.4	72.9	72.3	71.6	71.4	71.8	72.0	72.7	72.6	73.1	72.1
70000	72.0	71.6	71.5	72.1	72.0	73.3	72.8	72.3	71.6	71.5	71.9	72.1	72.6	72.5	73.1	72.2
80000	72.1	71.6	71.7	72.0	72.1	73.2	72.7	72.2	71.7	71.7	72.0	72.1	72.6	72.4	73.0	72.3
90000	72.4	71.8	71.8	72.2	72.4	73.1	73.0	72.4	71.8	71.9	72.2	72.2	72.7	72.5	73.0	72.5
100000	72.8	71.9	72.0	72.3	72.9	73.2	72.9	72.3	72.0	72.1	72.4	72.4	72.7	72.4	73.1	72.7
110000	73.1	72.2	72.3	72.5	72.9	73.6	73.1	72.6	72.2	72.3	72.6	72.6	72.8	72.3	73.3	72.9
120000	73.4	72.5	72.7	72.6	72.9	73.5	73.3	72.7	72.4	72.5	72.8	73.2	72.9	72.3	73.4	73.1
130000	73.7	72.6	73.2	72.5	73.1	73.6	73.4	72.7	72.6	72.3	72.9	73.2	73.0	72.3	73.6	73.4
140000	73.7	72.7	73.5	72.5	72.9	73.7	73.4	72.9	72.6	72.4	72.9	73.2	73.0	72.2	73.9	73.5
150000	73.8	72.7	73.7	72.3	73.1	73.7	73.5	73.0	72.5	72.3	72.9	73.3	73.1	72.1	73.8	73.3
160000	73.7	72.7	73.9	71.9	72.9	73.8	73.4	73.0	72.5	72.1	72.8	73.2	73.2	72.0	74.1	73.3
170000	73.7	72.8	73.9	71.7	73.0	73.8	73.5	72.8	72.5	72.2	72.7	73.1	73.1	72.0	74.0	73.2
180000	73.5	72.8	73.7	71.6	72.9	74.0	73.5	72.6	72.3	72.1	72.3	72.9	73.1	71.4	73.9	73.0
190000	73.3	72.4	73.5	71.6	72.8	74.5	73.6	72.5	71.9	71.9	71.9	72.7	72.9	71.6	73.4	72.6
200000	73.2	72.1	73.0	71.5	72.7	74.7	73.6	72.3	71.5	71.6	71.9	72.6	72.6	71.3	73.1	72.1
210000	73.0	72.1	72.6	71.7	72.6	74.5	73.7	72.1	71.4	71.5	71.7	72.5	72.5	71.3	72.7	72.0
220000	72.6	72.1	72.3	71.7	72.5	74.1	73.5	72.0	71.3	71.4	71.7	72.5	72.6	71.4	72.5	71.8
230000	72.4	71.9	72.2	71.8	72.7	73.3	73.4	71.5	71.3	71.5	71.6	72.5	72.4	71.6	72.4	71.9
Daily Max	73.8	72.8	73.9	72.6	73.1	74.7	73.7	73.2	72.6	72.5	72.9	73.3	73.2	72.7	74.1	73.5
Daily Min	71.8	71.6	71.4	71.5	72.0	72.7	72.7	71.5	71.3	71.2	71.5	71.6	72.4	71.3	72.0	71.8
Average	72.8	72.1	72.4	72.0	72.6	73.6	73.2	72.6	71.9	71.7	72.1	72.4	72.8	72.1	73.1	72.5

Monthly Average Temp: 73.1
 License Maximum Temperature: 89 F

High Falls Tailrace Temperature Summary - July 2021

Time HHMMSS	07/17/21	07/18/21	07/19/21	07/20/21	07/21/21	07/22/21	07/23/21	07/24/21	07/25/21	07/26/21	07/27/21	07/28/21	07/29/21	07/30/21	07/31/21
0	71.9	72.2	72.6	72.3	72.9	72.4	72.7	73.1	73.8	73.8	73.9	74.4	74.8	74.9	74.1
10000	71.7	72.3	72.6	72.4	72.8	72.4	72.7	72.9	73.9	73.6	74.2	74.4	74.9	74.6	74.0
20000	71.9	72.3	72.6	72.5	72.7	72.5	72.7	73.1	73.7	73.4	74.5	74.5	75.1	74.4	73.7
30000	72.1	72.4	72.5	72.6	72.8	72.6	72.7	72.8	73.3	73.3	74.9	74.7	75.3	74.2	73.7
40000	72.2	72.5	72.5	72.7	72.7	72.7	72.8	73.0	73.1	73.3	74.6	74.8	75.4	74.2	73.8
50000	72.3	72.4	72.5	72.7	72.6	72.7	72.8	72.9	73.0	73.3	73.6	74.9	75.3	74.1	73.5
60000	72.3	72.5	72.5	72.7	72.5	72.7	72.7	73.1	72.9	73.4	74.3	74.9	75.2	74.0	73.6
70000	72.4	72.5	72.5	72.8	72.5	72.6	72.6	72.9	73.0	73.5	74.2	75.0	75.0	73.9	73.7
80000	72.4	72.4	72.5	72.9	72.5	72.7	72.5	72.8	73.0	73.4	73.8	75.0	75.2	73.8	73.6
90000	72.6	72.4	72.5	73.2	72.8	72.6	72.5	72.9	73.4	73.9	73.9	75.0	75.4	74.2	73.7
100000	72.7	72.5	72.7	73.5	73.0	72.5	72.6	73.0	73.5	74.1	74.1	75.4	75.7	74.3	74.0
110000	72.9	72.6	72.9	73.8	73.1	72.4	72.6	73.0	73.8	74.2	74.5	75.4	75.9	74.6	74.5
120000	73.2	72.9	73.1	74.2	73.2	72.4	72.7	73.5	74.1	74.3	75.1	75.2	76.3	75.1	75.2
130000	73.3	73.0	73.1	74.3	73.4	72.3	72.8	74.2	74.3	74.8	75.4	75.3	76.7	75.2	75.0
140000	73.3	73.1	73.2	74.9	73.5	72.3	72.8	74.3	74.7	74.9	75.5	75.1	77.2	75.0	75.5
150000	73.4	73.1	73.2	75.0	73.8	72.3	72.8	74.4	74.8	74.4	75.6	74.9	77.5	74.9	75.9
160000	73.5	73.2	73.2	75.4	73.2	72.5	72.8	74.7	75.0	74.4	75.4	74.7	77.4	74.6	75.6
170000	73.4	73.0	72.9	75.4	73.0	72.4	72.6	74.3	74.5	74.3	75.3	74.5	77.2	74.7	75.6
180000	73.3	72.9	72.8	75.2	72.7	72.4	72.6	74.4	74.4	73.9	75.3	74.6	77.0	74.6	75.7
190000	72.7	72.7	72.6	75.1	72.4	72.4	72.9	74.1	74.1	73.8	74.9	74.6	76.8	74.2	75.6
200000	72.3	72.7	72.5	74.3	72.2	72.4	72.4	74.0	73.9	73.9	74.6	74.5	76.5	73.9	75.2
210000	72.1	72.6	72.3	73.6	72.2	72.5	72.4	73.7	73.8	73.9	74.4	74.8	76.1	73.9	75.0
220000	72.1	72.5	72.2	73.1	72.2	72.7	72.7	73.7	74.0	74.0	74.3	74.8	75.8	73.9	75.3
230000	72.2	72.5	72.2	73.0	72.3	72.7	72.8	73.7	73.6	73.8	74.2	75.0	75.1	73.9	75.1
Daily Max	73.5	73.2	73.2	75.4	73.8	72.7	72.9	74.7	75.0	74.9	75.6	75.4	77.5	75.2	75.9
Daily Min	71.7	72.2	72.2	72.3	72.2	72.3	72.4	72.8	72.9	73.3	73.6	74.4	74.8	73.8	73.5
Average	72.6	72.6	72.7	73.7	72.8	72.5	72.7	73.5	73.8	73.9	74.6	74.8	75.9	74.4	74.6

High Falls Tailrace Temperature Summary - August 2021

Time HHMMSS	08/01/21	08/02/21	08/03/21	08/04/21	08/05/21	08/06/21	08/07/21	08/08/21	08/09/21	08/10/21	08/11/21	08/12/21	08/13/21	08/14/21	08/15/21	08/16/21
0	74.9	73.8	73.4	73.2	74.3	73.7	73.9	73.4	73.7	74.1	74.0	73.7	73.4	73.9	73.2	73.2
10000	74.6	73.6	73.5	73.2	74.3	73.8	74.0	73.4	73.8	74.0	74.2	73.8	73.4	73.9	73.2	73.3
20000	74.4	73.5	73.4	73.2	74.2	73.8	74.0	73.5	73.8	74.1	74.2	73.8	73.5	73.7	73.2	73.4
30000	74.3	73.4	73.4	73.3	74.2	73.8	74.0	73.5	73.8	74.1	74.1	73.8	73.4	73.5	73.1	73.4
40000	74.2	73.4	73.4	73.3	74.2	73.8	74.2	73.6	73.8	74.1	74.1	73.8	73.4	73.3	73.1	73.4
50000	74.1	73.4	73.4	73.3	74.1	73.8	74.2	73.6	73.8	74.1	73.9	73.8	73.3	73.2	73.1	73.3
60000	74.0	73.3	73.5	73.3	74.0	73.8	74.2	73.5	73.8	74.1	73.7	73.7	73.2	73.1	73.0	73.2
70000	73.9	73.4	73.5	73.3	74.1	73.7	74.0	73.7	73.9	74.1	73.6	73.7	73.2	73.1	73.0	73.3
80000	74.1	73.6	73.7	73.5	74.2	73.8	74.0	73.6	73.9	74.1	73.5	73.7	73.5	73.3	73.2	73.4
90000	74.5	73.8	73.9	73.7	74.6	73.7	74.1	73.6	74.0	74.1	73.6	73.8	73.7	73.5	73.5	73.7
100000	74.9	73.9	74.1	73.9	74.7	74.0	74.1	73.5	74.0	74.1	73.7	73.7	73.9	73.8	73.8	74.0
110000	75.3	74.9	74.3	74.0	74.6	74.2	74.0	73.4	74.0	74.6	73.7	73.5	74.0	74.1	74.0	74.3
120000	75.5	74.3	74.1	74.3	74.8	74.3	74.0	73.6	74.2	74.6	73.6	73.4	74.0	74.2	74.1	74.4
130000	75.5	74.5	74.3	74.4	74.8	74.4	74.0	73.6	74.4	74.6	73.7	73.5	74.2	74.2	74.2	74.3
140000	75.7	74.3	74.1	74.2	74.7	74.3	73.9	73.6	74.4	74.5	73.5	74.0	74.3	74.4	74.3	74.3
150000	75.7	74.1	74.2	74.2	74.5	74.5	73.8	73.6	74.4	74.5	73.5	74.1	74.4	74.4	74.1	74.3
160000	75.6	74.2	74.1	74.0	74.1	74.5	73.7	73.4	74.5	74.5	73.7	74.2	74.5	74.4	73.9	74.1
170000	75.5	73.7	74.0	73.8	74.1	74.4	73.7	73.4	74.3	74.0	73.7	73.9	74.5	74.4	73.6	73.7
180000	75.4	73.8	73.9	73.8	73.9	74.4	73.5	73.5	74.2	74.0	73.6	73.9	74.5	74.1	73.4	73.5
190000	74.8	73.6	73.8	73.4	73.9	74.1	73.4	73.6	74.1	74.2	73.4	73.8	74.2	73.7	73.2	73.2
200000	74.5	73.5	73.8	74.8	74.0	74.1	73.5	73.8	73.9	74.1	73.5	73.7	74.1	73.5	73.2	73.0
210000	74.3	73.5	73.6	74.6	74.0	74.1	73.5	73.7	73.9	74.0	73.6	73.5	74.0	73.5	73.2	73.0
220000	74.1	73.4	73.4	74.6	73.8	74.1	73.4	73.7	74.0	73.9	73.6	73.4	73.9	73.4	73.2	73.0
230000	74.0	73.4	73.2	74.4	73.7	74.1	73.5	73.7	74.0	73.8	73.6	73.4	73.9	73.3	73.2	73.0
Daily Max	75.7	74.9	74.3	74.8	74.8	74.5	74.2	73.8	74.5	74.6	74.2	74.2	74.5	74.4	74.3	74.4
Daily Min	73.9	73.3	73.2	73.2	73.7	73.7	73.4	73.4	73.7	73.8	73.4	73.4	73.2	73.1	73.0	73.0
Average	74.7	73.8	73.7	73.8	74.2	74.1	73.9	73.6	74.0	74.2	73.7	73.7	73.8	73.7	73.5	73.6

Monthly Average Temp: 74.1
 License Maximum Temperature: 89 F

High Falls Tailrace Temperature Summary - August 2021

Time HHMMSS	08/17/21	08/18/21	08/19/21	08/20/21	08/21/21	08/22/21	08/23/21	08/24/21	08/25/21	08/26/21	08/27/21	08/28/21	08/29/21	08/30/21	08/31/21
0	73.0	73.3	73.7	74.0	73.9	74.2	73.6	74.1	74.0	75.2	74.2	74.0	74.4	73.8	74.4
10000	73.0	73.5	73.7	74.0	74.1	74.3	73.5	74.2	74.2	75.2	74.5	73.9	74.3	73.9	74.4
20000	73.0	73.6	73.8	74.0	74.2	74.5	73.6	74.3	74.2	75.0	74.5	73.9	73.9	73.9	74.4
30000	73.0	73.5	73.9	74.1	74.4	74.4	73.6	74.3	74.1	74.9	74.7	73.9	73.9	73.9	74.2
40000	73.0	73.5	73.9	74.0	74.5	74.4	73.5	74.4	74.1	74.7	74.7	73.9	73.9	73.8	74.1
50000	72.9	73.5	73.8	74.1	74.4	74.4	73.5	74.4	74.1	74.7	74.6	73.8	73.7	73.7	74.0
60000	72.9	73.5	73.8	74.0	74.3	74.3	73.5	74.3	74.0	74.7	74.6	73.8	73.8	73.7	73.8
70000	72.8	73.5	73.9	74.1	74.2	74.1	73.5	74.3	73.9	74.6	74.6	73.7	73.7	73.5	73.9
80000	73.1	73.7	74.1	74.3	74.1	74.0	73.7	74.6	74.0	74.6	74.5	73.8	73.7	73.7	73.9
90000	73.6	74.1	74.4	74.6	73.9	74.3	74.1	74.8	74.2	74.6	74.5	74.0	73.6	73.9	74.1
100000	74.0	74.6	74.9	74.9	73.9	74.7	74.5	74.7	74.3	74.8	74.4	74.2	73.8	74.2	74.4
110000	74.4	74.7	75.0	75.1	74.0	74.9	74.6	74.7	74.7	75.0	74.5	74.4	74.5	74.5	74.6
120000	74.5	74.6	75.2	75.1	74.0	75.2	74.8	74.7	75.1	75.4	74.3	74.7	74.4	74.9	74.7
130000	74.7	74.7	75.1	75.2	74.1	75.7	75.0	74.5	75.1	75.5	74.2	74.8	74.6	75.2	75.2
140000	74.5	75.0	75.2	75.3	74.3	76.3	75.2	74.6	75.5	75.1	74.2	74.4	74.9	75.4	74.9
150000	74.3	74.9	75.4	75.1	74.4	75.9	75.2	74.5	75.4	75.1	74.2	74.4	74.5	75.7	75.3
160000	74.2	74.7	75.0	74.7	74.4	75.7	74.8	74.5	75.4	74.9	74.3	74.2	74.7	75.9	75.2
170000	73.9	74.5	74.9	74.2	74.1	75.2	74.4	74.3	75.2	74.7	74.3	74.2	74.2	75.6	74.8
180000	73.6	74.1	74.5	73.9	73.8	74.8	74.1	74.3	74.9	74.6	74.2	73.9	74.1	75.3	74.8
190000	73.3	73.8	74.3	73.7	73.9	74.3	74.1	74.4	74.8	74.4	73.9	74.3	74.0	75.1	74.7
200000	73.3	73.9	74.1	73.5	74.2	74.0	74.1	74.3	74.9	74.3	74.0	74.3	74.0	75.0	74.6
210000	73.3	73.8	74.1	73.7	74.2	73.7	74.2	74.2	74.8	74.1	74.0	74.2	73.9	74.9	74.4
220000	73.2	73.7	73.9	73.7	74.2	73.7	74.0	74.0	74.9	74.2	74.0	74.3	73.9	74.7	74.2
230000	73.3	73.7	73.9	73.9	74.3	73.6	74.2	74.0	75.0	74.2	74.0	74.3	73.9	74.4	74.1
Daily Max	74.7	75.0	75.4	75.3	74.5	76.3	75.2	74.8	75.5	75.5	74.7	74.8	74.9	75.9	75.3
Daily Min	72.8	73.3	73.7	73.5	73.8	73.6	73.5	74.0	73.9	74.1	73.9	73.7	73.6	73.5	73.8
Average	73.5	74.0	74.4	74.3	74.2	74.6	74.1	74.4	74.6	74.8	74.3	74.1	74.1	74.5	74.5

High Falls Tailrace Temperature Summary - September 2021

Time HHMMSS	09/01/21	09/02/21	09/03/21	09/04/21	09/05/21	09/06/21	09/07/21	09/08/21	09/09/21	09/10/21	09/11/21	09/12/21	09/13/21	09/14/21	09/15/21	09/16/21
0	73.9	73.5	72.7	72.1	71.7	71.0	70.5	70.4	69.4	69.0	68.5	69.0	68.7	68.2	68.2	67.6
10000	73.8	73.4	72.7	72.1	71.6	70.8	70.5	70.2	69.0	69.0	68.5	69.0	68.6	68.2	67.9	67.6
20000	73.6	73.2	72.6	72.1	71.5	70.8	70.4	70.2	69.2	68.8	68.5	68.9	68.6	68.2	67.8	67.5
30000	73.4	73.0	72.6	72.1	71.4	70.7	70.5	70.0	69.1	68.9	68.4	68.8	68.4	68.2	67.8	67.4
40000	73.3	72.9	72.6	72.1	71.3	70.6	70.4	70.0	69.1	68.9	68.4	68.7	68.4	68.3	67.6	67.3
50000	73.2	72.9	72.5	72.1	71.2	70.3	70.5	69.8	68.9	68.7	68.4	68.7	68.2	68.3	67.7	67.2
60000	73.1	72.8	72.5	72.1	71.2	70.5	70.3	69.9	68.9	68.6	68.3	68.7	68.2	68.3	67.5	67.2
70000	72.9	72.7	72.5	72.1	71.0	70.3	70.3	69.7	68.8	68.6	68.3	68.7	68.0	68.3	67.5	67.2
80000	73.0	72.8	72.6	72.1	71.2	70.4	70.3	69.8	69.0	68.6	68.3	68.8	68.1	68.3	67.5	67.4
90000	73.4	73.1	72.8	72.1	71.4	70.7	70.5	69.9	69.3	69.0	68.6	69.0	68.2	68.2	67.8	67.6
100000	73.8	73.5	72.9	72.2	71.6	71.2	70.6	70.1	69.5	69.4	68.8	69.2	68.5	68.2	68.3	67.8
110000	74.1	73.7	72.9	72.2	71.9	71.4	70.8	70.1	69.7	69.7	69.2	69.5	68.9	68.4	68.5	68.1
120000	74.5	73.9	72.9	72.3	72.1	71.7	71.2	70.1	69.5	69.7	69.4	69.3	69.3	68.6	68.6	68.2
130000	74.6	74.0	73.1	72.3	72.5	71.7	71.4	70.2	69.6	69.8	69.7	69.4	69.6	68.5	68.6	68.3
140000	74.8	74.0	73.0	72.3	72.1	71.8	71.3	70.3	69.6	69.8	69.7	69.4	69.4	68.6	68.4	68.3
150000	74.9	74.0	73.0	72.3	72.0	72.1	71.4	70.2	69.9	69.4	69.7	69.5	69.1	68.7	68.8	68.3
160000	74.6	73.6	72.8	72.3	71.8	71.9	71.6	70.1	69.9	69.5	69.9	69.5	68.9	68.7	68.8	68.2
170000	74.4	73.4	72.7	72.4	71.8	71.7	71.4	70.1	69.9	69.3	69.7	69.4	68.9	68.8	68.6	68.0
180000	74.3	73.2	72.6	72.3	71.7	71.5	71.2	70.0	69.7	69.1	69.5	69.3	68.6	68.7	68.3	67.7
190000	74.3	73.0	72.5	72.2	71.6	71.3	71.2	69.8	69.5	69.0	69.6	69.2	68.4	68.6	68.2	67.6
200000	74.1	72.9	72.4	72.0	71.5	71.1	71.1	69.6	69.1	68.9	69.5	69.0	68.3	68.5	68.0	67.7
210000	74.0	72.8	72.3	71.8	71.3	70.9	70.8	69.5	69.1	68.9	69.3	68.9	68.2	68.5	68.0	67.7
220000	73.8	72.8	72.2	71.7	71.3	70.8	70.7	69.4	69.1	68.8	69.2	68.7	68.2	68.3	67.8	67.7
230000	73.6	72.7	72.1	71.8	71.1	70.7	70.6	69.3	69.2	68.7	69.1	68.6	68.2	68.2	67.6	67.6
Daily Max	74.9	74.0	73.1	72.4	72.5	72.1	71.6	70.4	69.9	69.8	69.9	69.5	69.6	68.8	68.8	68.3
Daily Min	72.9	72.7	72.1	71.7	71.0	70.3	70.3	69.3	68.8	68.6	68.3	68.6	68.0	68.2	67.5	67.2
Average	73.9	73.2	72.7	72.1	71.6	71.1	70.8	69.9	69.3	69.1	69.0	69.1	68.6	68.4	68.1	67.7

Monthly Average Temp: 68.1
 License Maximum Temperature: 89 F

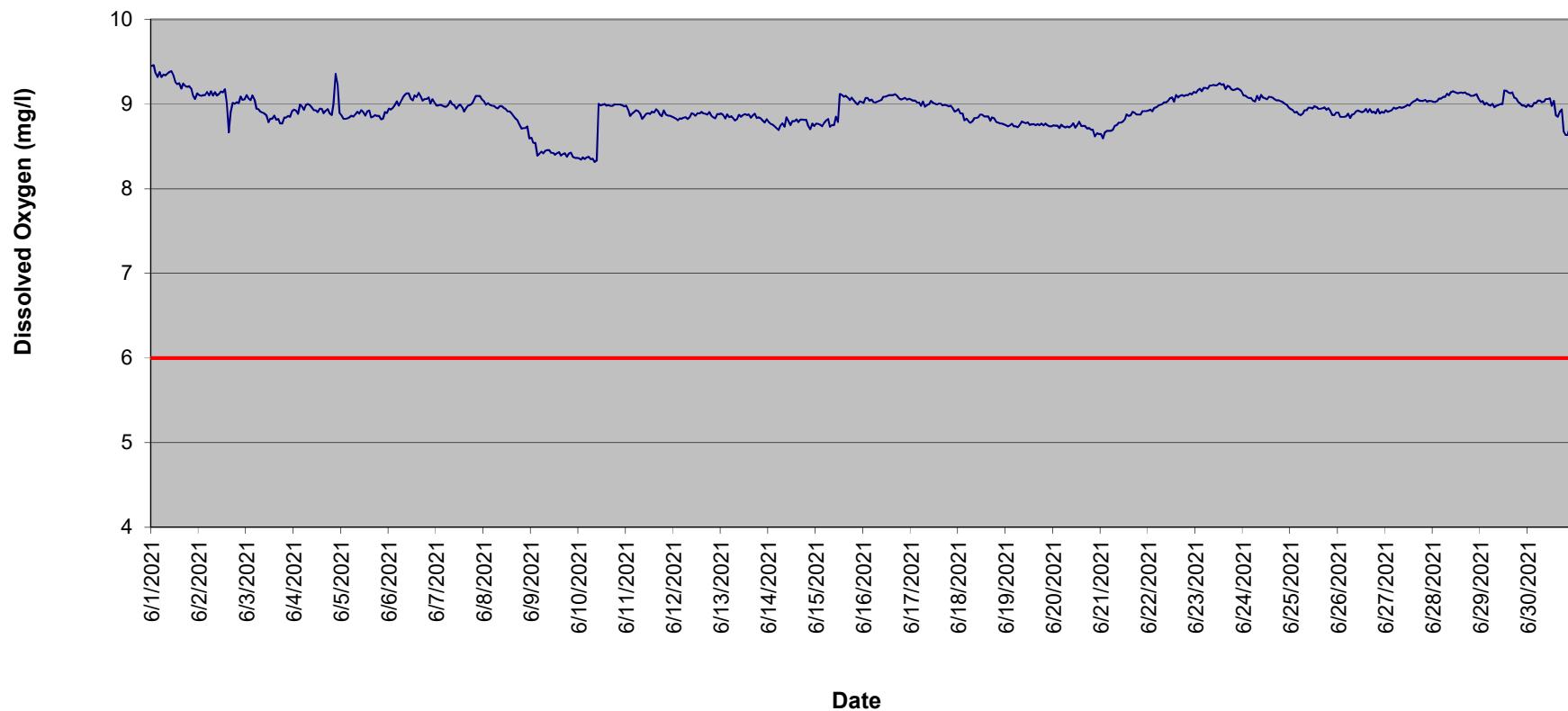
High Falls Tailrace Temperature Summary - September 2021

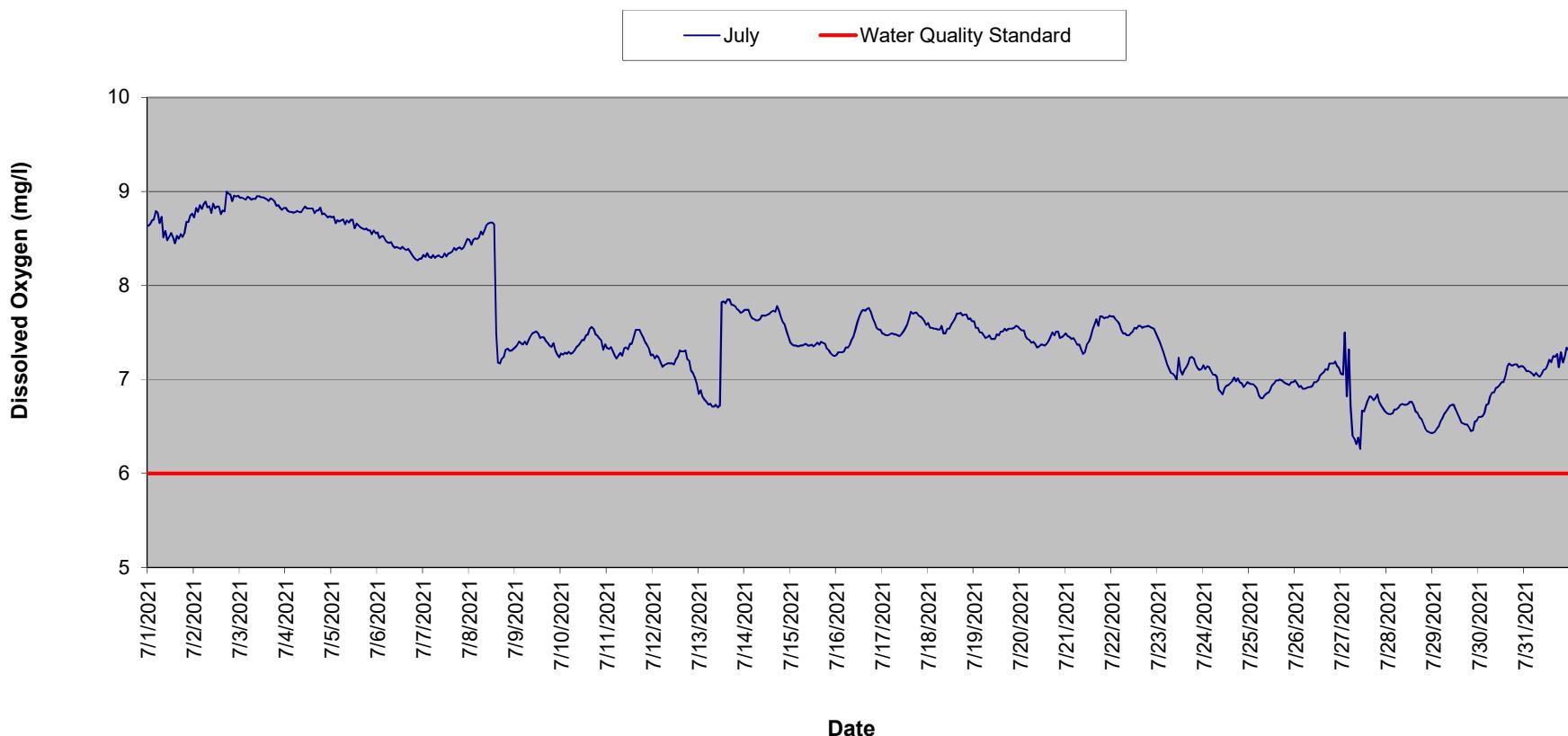
Time HHMMSS	09/17/21	09/18/21	09/19/21	09/20/21	09/21/21	09/22/21	09/23/21	09/24/21	09/25/21	09/26/21	09/27/21	09/28/21	09/29/21	09/30/21
0	67.5	67.3	66.8	67.4	67.4	67.2	66.0	65.1	64.8	63.8	63.9	64.0	63.4	63.5
10000	67.5	67.3	66.7	67.4	67.3	67.0	66.0	65.4	64.7	63.9	63.9	63.9	63.5	63.5
20000	67.4	67.1	66.7	67.4	67.2	66.8	65.9	65.1	64.4	63.8	63.7	63.8	63.3	63.5
30000	67.5	67.2	66.6	67.3	67.1	66.8	65.7	65.1	64.3	63.7	63.7	63.8	63.3	63.5
40000	67.3	67.1	66.7	67.3	67.1	66.7	65.6	64.9	64.2	63.7	63.6	63.7	63.2	63.4
50000	67.3	67.0	66.7	67.4	67.1	66.6	65.5	64.7	64.1	63.7	63.5	63.6	63.3	63.5
60000	67.3	67.0	66.6	67.3	67.1	66.5	65.5	64.7	63.8	63.8	63.6	63.6	63.2	63.4
70000	67.3	66.8	66.6	67.3	67.2	66.4	65.3	64.5	64.1	63.6	63.7	63.7	63.1	63.5
80000	67.3	67.0	66.7	67.4	67.2	66.5	65.3	64.6	63.8	63.7	63.7	63.7	63.2	63.5
90000	67.7	67.3	66.9	67.7	67.3	66.6	65.5	64.9	64.1	63.7	63.9	63.8	63.3	63.6
100000	67.9	67.6	67.3	68.0	67.4	66.8	65.8	65.3	64.3	63.9	64.1	64.1	63.6	64.0
110000	68.2	67.9	67.7	68.2	67.8	66.9	66.1	65.7	64.4	64.3	64.3	64.3	64.0	64.3
120000	68.2	68.0	68.0	68.1	67.9	67.1	66.2	65.9	64.7	64.2	64.5	64.6	64.2	64.6
130000	68.3	68.0	68.1	68.6	68.2	67.2	66.5	66.0	64.4	64.3	64.7	64.6	64.4	64.6
140000	68.0	67.9	68.1	68.3	68.4	67.3	66.5	65.9	64.5	64.5	65.0	64.6	64.4	64.5
150000	68.0	67.8	68.1	68.6	68.4	67.5	66.3	65.8	64.7	64.4	65.2	64.5	64.5	64.6
160000	68.1	67.7	67.9	68.3	68.3	67.3	66.0	65.7	64.6	64.3	65.3	64.4	64.3	64.6
170000	68.2	67.5	67.7	68.1	68.2	67.0	65.9	65.4	64.5	64.2	65.0	64.1	64.2	64.4
180000	68.1	67.3	67.5	67.9	68.0	66.7	65.8	65.3	64.4	64.1	64.8	63.9	63.9	64.1
190000	68.0	67.2	67.4	67.8	67.7	66.6	65.6	65.2	64.2	64.1	64.6	63.8	63.8	64.0
200000	67.8	67.1	67.4	67.7	67.7	66.4	65.5	64.9	64.1	64.1	64.4	63.7	63.7	63.9
210000	67.7	66.9	67.3	67.6	67.5	66.2	65.4	64.9	64.0	64.0	64.3	63.6	63.7	63.8
220000	67.6	66.8	67.4	67.6	67.4	66.1	65.3	64.9	63.9	64.0	64.2	63.6	63.6	63.8
230000	67.5	66.9	67.5	67.4	67.1	66.0	65.1	64.8	63.8	64.0	64.1	63.5	63.6	63.7
Daily Max	68.3	68.0	68.1	68.6	68.4	67.5	66.5	66.0	64.8	64.5	65.3	64.6	64.5	64.6
Daily Min	67.3	66.8	66.6	67.3	67.1	66.0	65.1	64.5	63.8	63.6	63.5	63.5	63.1	63.4
Average	67.7	67.3	67.3	67.8	67.6	66.8	65.8	65.2	64.3	64.0	64.2	64.0	63.7	63.9

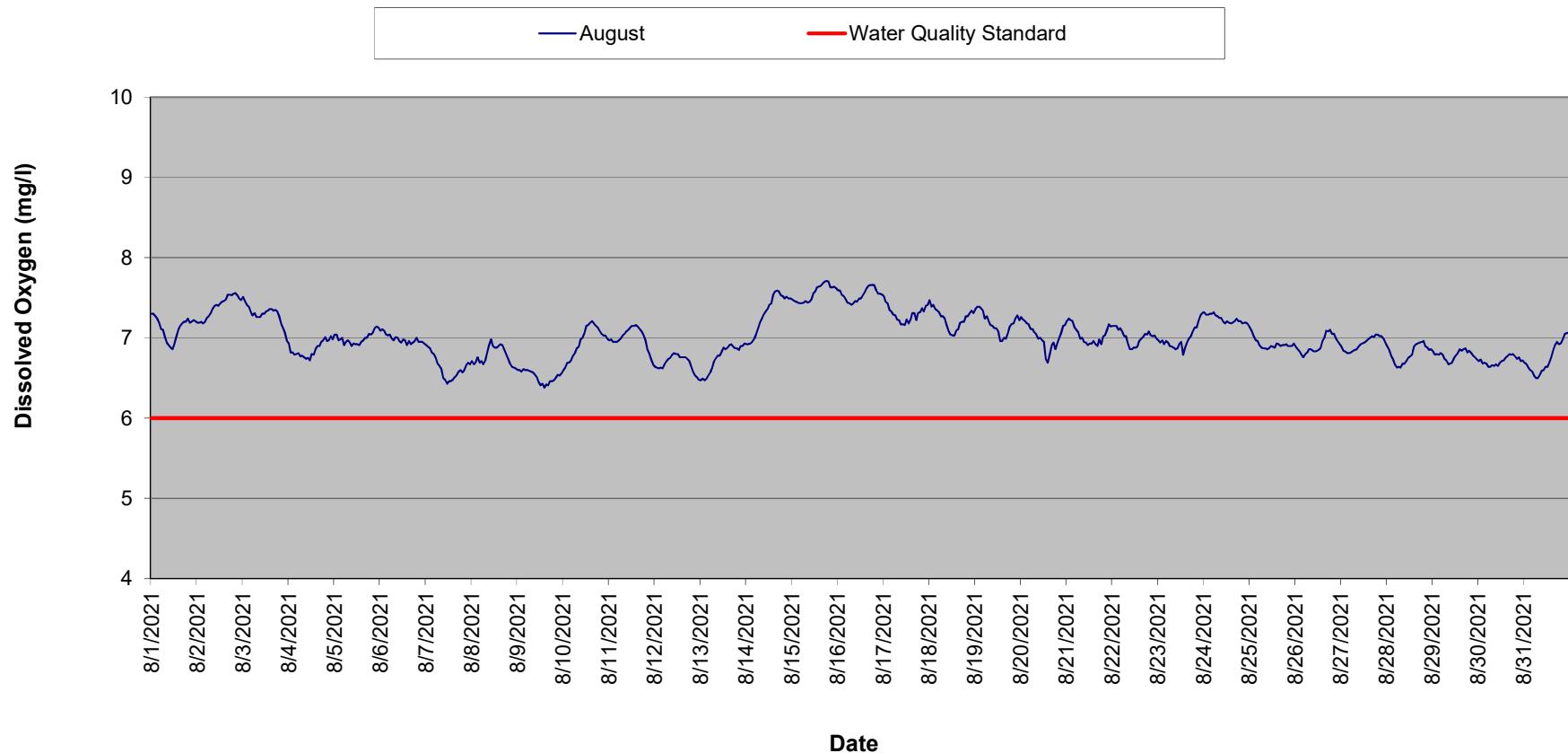
Johnson Falls Hydroelectric Project (FERC No. 2522)

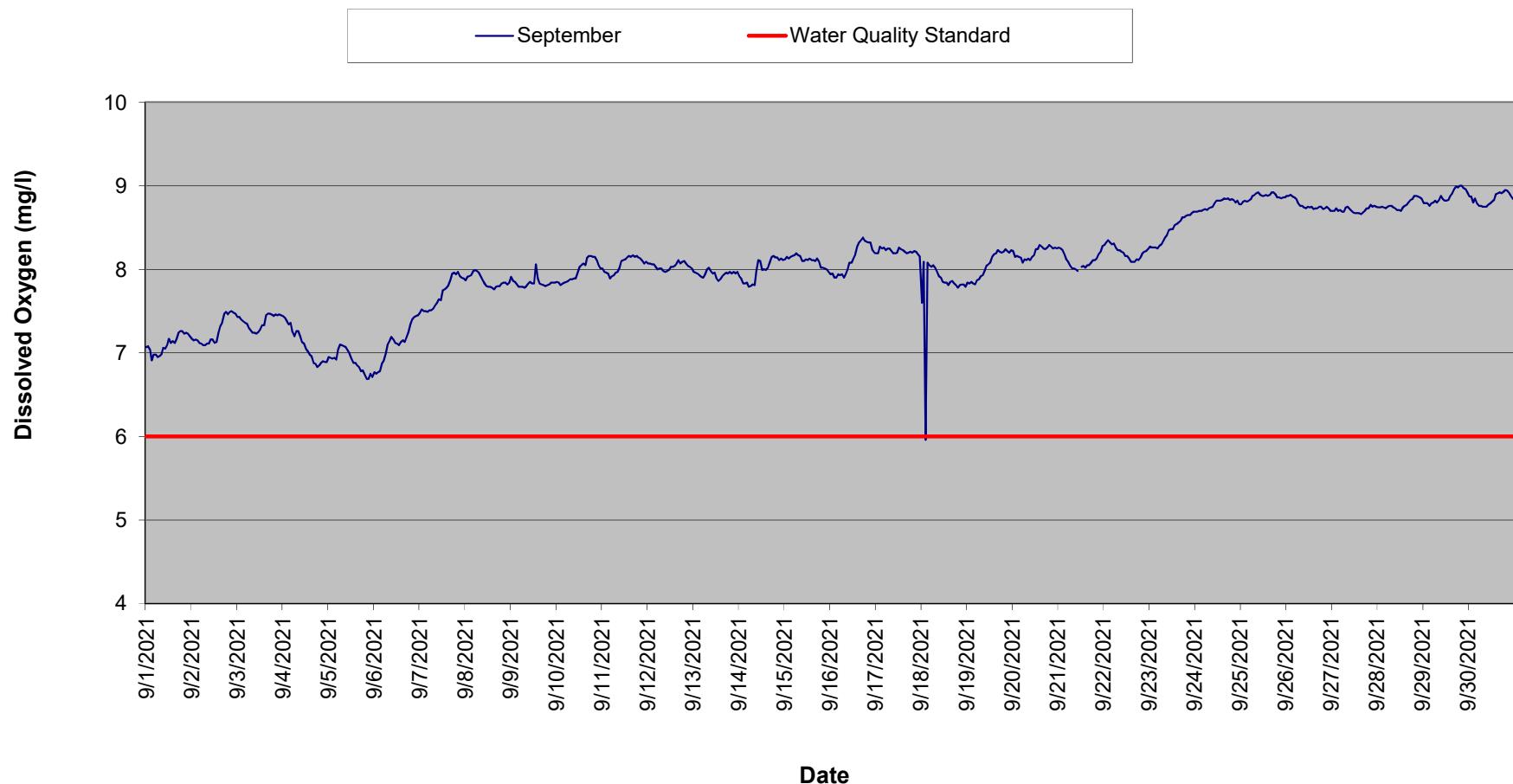
Johnson Falls Tailwater Dissolved Oxygen - June 2021

June Water Quality Standard



Johnson Falls Tailwater Dissolved Oxygen - July 2021

Johnson Falls Tailwater Dissolved Oxygen - August 2021

Johnson Falls Tailwater Dissolved Oxygen - September 2021

Johnson Falls Tailwater Dissolved Oxygen Summary - June 2021

Time HHMMSS	06/01/21	06/02/21	06/03/21	06/04/21	06/05/21	06/06/21	06/07/21	06/08/21	06/09/21	06/10/21	06/11/21	06/12/21	06/13/21	06/14/21	06/15/21	06/16/21
0	9.5	9.1	9.1	8.9	8.9	8.9	9.0	9.0	8.6	8.4	9.0	8.8	8.9	8.8	8.8	9.0
10000	9.5	9.1	9.1	8.9	8.8	8.9	9.0	9.0	8.5	8.3	8.9	8.8	8.9	8.8	8.8	9.1
20000	9.4	9.1	9.0	8.9	8.8	9.0	9.0	9.0	8.5	8.4	8.9	8.8	8.8	8.8	8.8	9.1
30000	9.3	9.1	9.1	9.0	8.8	9.0	9.0	9.0	8.4	8.4	8.9	8.8	8.9	8.7	8.7	9.0
40000	9.4	9.1	9.1	9.0	8.8	9.0	9.0	9.0	8.4	8.4	8.9	8.8	8.8	8.7	8.8	9.1
50000	9.3	9.1	8.9	8.9	8.9	9.0	9.0	9.0	8.4	8.4	8.9	8.8	8.9	8.7	8.8	9.0
60000	9.4	9.2	8.9	9.0	8.9	9.0	9.0	9.0	8.4	8.3	8.9	8.8	8.8	8.7	8.8	9.0
70000	9.3	9.1	8.9	9.0	8.9	9.1	9.0	8.9	8.4	8.4	8.9	8.8	8.8	8.8	8.7	9.0
80000	9.4	9.1	8.9	9.0	8.9	9.1	9.0	9.0	8.5	8.3	8.8	8.8	8.8	8.7	8.8	9.0
90000	9.4	9.1	8.9	9.0	8.9	9.1	9.0	9.0	8.5	8.3	8.9	8.9	8.9	8.8	8.8	9.0
100000	9.4	9.1	8.9	8.9	8.9	9.1	8.9	9.0	8.4	9.0	8.9	8.9	8.9	8.8	8.9	9.1
110000	9.3	9.1	8.8	8.9	8.9	9.1	9.0	8.9	8.4	9.0	8.9	8.9	8.9	8.8	8.8	9.1
120000	9.3	9.1	8.8	8.9	8.9	9.0	9.0	8.9	8.4	9.0	8.9	8.9	8.9	8.8	9.1	9.1
130000	9.2	9.2	8.8	8.9	8.9	9.1	9.0	8.9	8.4	9.0	8.9	8.9	8.9	8.8	9.1	9.1
140000	9.2	9.0	8.9	8.9	8.9	9.1	8.9	8.9	8.4	9.0	8.9	8.9	8.9	8.8	9.1	9.1
150000	9.2	8.7	8.8	8.9	8.8	9.1	9.0	8.9	8.4	9.0	8.9	8.9	8.8	8.8	9.1	9.1
160000	9.2	8.9	8.8	8.9	8.9	9.1	9.0	8.8	8.4	9.0	8.9	8.9	8.9	8.8	9.1	9.1
170000	9.2	9.0	8.8	8.9	8.9	9.0	9.0	8.8	8.4	9.0	8.9	8.9	8.9	8.8	9.0	9.1
180000	9.2	9.0	8.8	8.9	8.9	9.1	9.0	8.8	8.4	9.0	8.9	8.9	8.8	8.8	9.1	9.1
190000	9.2	9.0	8.8	8.9	8.9	9.1	9.0	8.7	8.4	9.0	8.9	8.9	8.8	8.8	9.0	9.1
200000	9.2	9.0	8.8	9.0	8.8	9.1	9.1	8.7	8.4	9.0	8.9	8.8	8.8	8.7	9.0	9.1
210000	9.1	9.1	8.9	9.4	8.8	9.0	9.1	8.7	8.4	9.0	8.9	8.8	8.8	8.7	9.0	9.1
220000	9.1	9.0	8.8	9.2	8.9	9.1	9.1	8.7	8.4	9.0	8.9	8.9	8.8	8.8	9.0	9.1
230000	9.1	9.1	8.9	8.9	8.9	9.0	9.1	8.6	8.4	9.0	8.9	8.9	8.8	8.7	9.0	9.1
Daily Max	9.5	9.2	9.1	9.4	8.9	9.1	9.1	9.0	8.6	9.0	9.0	8.9	8.9	8.8	9.1	9.1
Daily Min	9.1	8.7	8.8	8.9	8.8	8.9	8.9	8.6	8.4	8.3	8.8	8.8	8.8	8.7	8.7	9.0
Average	9.3	9.1	8.9	9.0	8.9	9.0	9.0	8.9	8.4	8.7	8.9	8.9	8.8	8.8	8.9	9.1

License Minimum DO: 6.0 mg/l

Johnson Falls Tailwater Dissolved Oxygen Summary - June 2021

Time HHMMSS	06/17/21	06/18/21	06/19/21	06/20/21	06/21/21	06/22/21	06/23/21	06/24/21	06/25/21	06/26/21	06/27/21	06/28/21	06/29/21	06/30/21
0	9.1	8.9	8.7	8.7	8.6	8.9	9.1	9.1	8.9	8.9	8.9	9.0	9.0	9.0
10000	9.0	8.9	8.7	8.7	8.6	8.9	9.2	9.1	8.9	8.8	8.9	9.0	9.0	9.0
20000	9.0	8.9	8.7	8.7	8.7	8.9	9.2	9.1	8.9	8.8	8.9	9.0	9.0	9.0
30000	9.0	8.8	8.8	8.7	8.7	9.0	9.2	9.1	8.9	8.8	8.9	9.1	9.0	9.0
40000	9.0	8.8	8.7	8.8	8.7	9.0	9.2	9.1	8.9	8.9	9.0	9.1	9.0	9.0
50000	9.0	8.8	8.7	8.7	8.7	9.0	9.2	9.0	8.9	8.9	8.9	9.1	9.0	9.0
60000	9.0	8.8	8.7	8.7	8.7	9.0	9.2	9.0	8.9	8.8	9.0	9.1	9.0	9.0
70000	9.0	8.8	8.8	8.7	8.7	9.0	9.2	9.1	8.9	8.9	9.0	9.1	9.0	9.0
80000	9.0	8.8	8.8	8.7	8.8	9.0	9.2	9.0	8.9	8.9	9.0	9.1	9.0	9.0
90000	9.0	8.8	8.8	8.7	8.8	9.0	9.2	9.1	9.0	8.9	9.0	9.1	9.0	9.1
100000	9.0	8.8	8.8	8.8	8.8	9.0	9.2	9.1	9.0	8.9	9.0	9.2	9.0	9.1
110000	9.0	8.9	8.8	8.7	8.8	9.1	9.2	9.1	8.9	8.9	9.0	9.1	9.0	9.1
120000	9.0	8.9	8.8	8.8	8.8	9.1	9.2	9.1	9.0	8.9	9.0	9.1	9.2	9.0
130000	9.0	8.9	8.8	8.8	8.9	9.0	9.2	9.1	9.0	8.9	9.0	9.1	9.2	9.0
140000	9.0	8.9	8.8	8.7	8.9	9.1	9.2	9.1	8.9	8.9	9.0	9.1	9.1	8.9
150000	9.0	8.9	8.8	8.7	8.9	9.1	9.2	9.1	8.9	8.9	9.0	9.1	9.1	8.8
160000	9.0	8.8	8.8	8.7	8.9	9.1	9.2	9.1	9.0	8.9	9.1	9.1	9.1	8.9
170000	9.0	8.8	8.8	8.7	8.9	9.1	9.2	9.0	9.0	8.9	9.0	9.1	9.1	8.9
180000	9.0	8.8	8.8	8.7	8.9	9.1	9.2	9.0	8.9	8.9	9.0	9.1	9.1	8.7
190000	9.0	8.8	8.8	8.7	8.9	9.1	9.2	9.0	9.0	8.9	9.0	9.1	9.0	8.6
200000	9.0	8.8	8.8	8.7	8.9	9.1	9.2	9.0	8.9	8.9	9.0	9.1	9.0	8.6
210000	9.0	8.8	8.7	8.6	8.9	9.1	9.2	9.0	8.9	8.9	9.0	9.1	9.0	8.7
220000	8.9	8.8	8.7	8.7	8.9	9.1	9.2	9.0	8.9	8.9	9.0	9.1	9.0	8.6
230000	8.9	8.8	8.7	8.6	8.9	9.1	9.2	9.0	8.9	8.9	9.0	9.1	9.0	8.7
Daily Max	9.1	8.9	8.8	8.8	8.9	9.1	9.2	9.1	9.0	8.9	9.1	9.2	9.2	9.1
Daily Min	8.9	8.8	8.7	8.6	8.6	8.9	9.1	9.0	8.9	8.8	8.9	9.0	9.0	8.6
Average	9.0	8.8	8.8	8.7	8.8	9.0	9.2	9.1	8.9	8.9	9.0	9.1	9.0	8.9

Johnson Falls Tailwater Dissolved Oxygen Summary - July 2021

Time HHMMSS	07/01/21	07/02/21	07/03/21	07/04/21	07/05/21	07/06/21	07/07/21	07/08/21	07/09/21	07/10/21	07/11/21	07/12/21	07/13/21	07/14/21	07/15/21	07/16/21
0	8.6	8.7	8.9	8.8	8.7	8.6	8.3	8.5	7.3	7.3	7.3	7.3	6.8	7.7	7.4	7.3
10000	8.7	8.8	8.9	8.8	8.7	8.5	8.3	8.4	7.4	7.3	7.3	7.2	6.9	7.7	7.4	7.3
20000	8.7	8.8	8.9	8.8	8.7	8.5	8.3	8.5	7.4	7.3	7.3	7.3	6.8	7.7	7.4	7.3
30000	8.7	8.9	8.9	8.8	8.7	8.5	8.3	8.5	7.4	7.3	7.3	7.2	6.8	7.7	7.4	7.3
40000	8.8	8.8	8.9	8.8	8.7	8.5	8.3	8.5	7.4	7.3	7.3	7.2	6.8	7.7	7.4	7.3
50000	8.8	8.9	8.9	8.8	8.7	8.5	8.3	8.5	7.4	7.3	7.2	7.1	6.7	7.6	7.4	7.3
60000	8.7	8.9	8.9	8.8	8.7	8.5	8.3	8.6	7.4	7.3	7.3	7.2	6.7	7.6	7.4	7.3
70000	8.7	8.8	8.9	8.8	8.7	8.5	8.3	8.5	7.4	7.3	7.3	7.2	6.7	7.6	7.4	7.4
80000	8.5	8.8	8.9	8.8	8.7	8.4	8.3	8.6	7.5	7.3	7.3	7.2	6.7	7.6	7.4	7.4
90000	8.6	8.8	9.0	8.8	8.7	8.4	8.3	8.6	7.5	7.4	7.3	7.2	6.7	7.7	7.4	7.5
100000	8.5	8.9	9.0	8.8	8.7	8.4	8.3	8.7	7.5	7.4	7.3	7.2	6.7	7.7	7.4	7.5
110000	8.5	8.8	8.9	8.8	8.7	8.4	8.3	8.7	7.5	7.4	7.3	7.2	6.7	7.7	7.4	7.6
120000	8.6	8.8	8.9	8.8	8.6	8.4	8.3	8.7	7.5	7.4	7.4	7.2	7.8	7.7	7.4	7.7
130000	8.5	8.8	8.9	8.8	8.7	8.4	8.3	8.6	7.4	7.5	7.4	7.2	7.8	7.7	7.4	7.7
140000	8.4	8.8	8.9	8.8	8.6	8.4	8.3	7.5	7.4	7.5	7.4	7.3	7.8	7.7	7.4	7.7
150000	8.5	8.8	8.9	8.8	8.6	8.4	8.4	7.2	7.4	7.5	7.5	7.3	7.9	7.7	7.4	7.7
160000	8.5	8.8	8.9	8.8	8.6	8.4	8.4	7.2	7.4	7.6	7.5	7.3	7.9	7.7	7.4	7.8
170000	8.5	9.0	8.9	8.8	8.6	8.4	8.4	7.2	7.4	7.5	7.5	7.3	7.8	7.8	7.4	7.8
180000	8.5	9.0	8.9	8.8	8.6	8.3	8.4	7.2	7.4	7.5	7.5	7.2	7.8	7.7	7.4	7.7
190000	8.6	9.0	8.8	8.8	8.6	8.3	8.4	7.3	7.3	7.5	7.4	7.2	7.8	7.7	7.3	7.7
200000	8.7	8.9	8.9	8.8	8.6	8.3	8.4	7.3	7.4	7.4	7.4	7.1	7.8	7.6	7.3	7.6
210000	8.7	9.0	8.8	8.7	8.5	8.3	8.4	7.3	7.3	7.4	7.4	7.1	7.7	7.6	7.3	7.6
220000	8.7	8.9	8.8	8.7	8.6	8.3	8.5	7.3	7.3	7.3	7.3	7.0	7.7	7.5	7.3	7.5
230000	8.8	9.0	8.8	8.7	8.6	8.3	8.5	7.3	7.2	7.4	7.3	7.0	7.7	7.5	7.3	7.5
Daily Max	8.8	9.0	9.0	8.8	8.7	8.6	8.5	8.7	7.5	7.6	7.5	7.3	7.9	7.8	7.4	7.8
Daily Min	8.4	8.7	8.8	8.7	8.5	8.3	8.3	7.2	7.2	7.3	7.2	7.0	6.7	7.5	7.3	7.3
Average	8.6	8.9	8.9	8.8	8.6	8.4	8.4	8.0	7.4	7.4	7.4	7.2	7.3	7.7	7.4	7.5

License Minimum Dissolved Oxygen: 6.0 mg/l

Johnson Falls Tailwater Dissolved Oxygen Summary - July 2021

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

Johnson Falls Tailwater Dissolved Oxygen Summary - August 2021

Time HHMMSS	08/01/21	08/02/21	08/03/21	08/04/21	08/05/21	08/06/21	08/07/21	08/08/21	08/09/21	08/10/21	08/11/21	08/12/21	08/13/21	08/14/21	08/15/21	08/16/21
0	7.3	7.2	7.5	6.9	7.0	7.1	6.9	6.7	6.6	6.6	7.0	6.6	6.5	6.9	7.5	7.6
10000	7.3	7.2	7.5	6.8	7.0	7.1	6.9	6.7	6.6	6.6	7.0	6.6	6.5	6.9	7.5	7.6
20000	7.3	7.2	7.4	6.8	7.0	7.1	6.9	6.7	6.6	6.7	7.0	6.6	6.5	6.9	7.5	7.5
30000	7.2	7.2	7.4	6.8	7.0	7.0	6.8	6.8	6.6	6.7	7.0	6.6	6.5	7.0	7.4	7.5
40000	7.2	7.2	7.3	6.8	7.0	7.0	6.8	6.7	6.6	6.7	7.0	6.6	6.5	7.0	7.4	7.5
50000	7.1	7.3	7.3	6.8	6.9	7.0	6.8	6.7	6.6	6.8	7.0	6.7	6.6	7.1	7.4	7.4
60000	7.1	7.3	7.3	6.8	7.0	7.0	6.7	6.7	6.6	6.8	7.0	6.7	6.6	7.1	7.4	7.4
70000	7.0	7.3	7.3	6.8	7.0	7.0	6.7	6.7	6.6	6.9	7.0	6.7	6.7	7.2	7.5	7.4
80000	6.9	7.4	7.3	6.8	6.9	7.0	6.6	6.8	6.6	6.9	7.1	6.8	6.8	7.2	7.4	7.4
90000	6.9	7.4	7.3	6.7	6.9	7.0	6.5	6.9	6.5	7.0	7.1	6.8	6.8	7.3	7.5	7.5
100000	6.9	7.4	7.3	6.8	6.9	7.0	6.5	7.0	6.5	7.0	7.1	6.8	6.8	7.3	7.5	7.5
110000	6.9	7.4	7.3	6.7	6.9	6.9	6.4	6.9	6.5	7.1	7.1	6.8	6.8	7.4	7.6	7.5
120000	6.9	7.4	7.3	6.8	6.9	7.0	6.5	6.9	6.4	7.2	7.2	6.8	6.9	7.4	7.6	7.5
130000	7.0	7.5	7.3	6.8	6.9	7.0	6.5	6.9	6.4	7.2	7.2	6.8	6.9	7.4	7.6	7.5
140000	7.1	7.5	7.4	6.9	7.0	6.9	6.5	6.9	6.4	7.2	7.2	6.8	6.9	7.5	7.6	7.6
150000	7.2	7.5	7.4	6.9	7.0	7.0	6.5	6.9	6.4	7.2	7.1	6.8	6.9	7.6	7.7	7.6
160000	7.2	7.5	7.3	6.9	7.0	6.9	6.5	6.9	6.4	7.2	7.1	6.8	6.9	7.6	7.7	7.7
170000	7.2	7.5	7.4	7.0	7.0	6.9	6.6	6.9	6.5	7.2	7.1	6.7	6.9	7.6	7.7	7.7
180000	7.2	7.5	7.3	7.0	7.1	7.0	6.6	6.8	6.5	7.1	7.0	6.7	6.9	7.5	7.7	7.7
190000	7.2	7.6	7.3	7.0	7.0	7.0	6.6	6.7	6.5	7.1	7.0	6.6	6.9	7.5	7.7	7.7
200000	7.2	7.6	7.2	7.0	7.1	7.0	6.6	6.7	6.5	7.1	6.9	6.6	6.9	7.5	7.6	7.6
210000	7.2	7.5	7.1	7.0	7.1	7.0	6.7	6.6	6.5	7.0	6.8	6.5	6.9	7.5	7.6	7.6
220000	7.2	7.5	7.1	7.0	7.1	7.0	6.7	6.6	6.5	7.0	6.7	6.5	6.9	7.5	7.6	7.6
230000	7.2	7.5	7.0	7.0	7.1	6.9	6.7	6.6	6.6	7.0	6.7	6.5	6.9	7.5	7.6	7.5
Daily Max	7.3	7.6	7.5	7.0	7.1	7.1	6.9	7.0	6.6	7.2	7.2	6.8	6.9	7.6	7.7	7.7
Daily Min	6.9	7.2	7.0	6.7	6.9	6.9	6.4	6.6	6.4	6.6	6.7	6.5	6.5	6.9	7.4	7.4
Average	7.1	7.4	7.3	6.9	7.0	7.0	6.6	6.8	6.5	7.0	7.0	6.7	6.8	7.3	7.6	7.5

License Minimum Dissolved Oxygen: 6.0 mg/l

Johnson Falls Tailwater Dissolved Oxygen Summary - August 2021

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

Johnson Falls Tailwater Dissolved Oxygen Summary - September 2021

Time HHMMSS	09/01/21	09/02/21	09/03/21	09/04/21	09/05/21	09/06/21	09/07/21	09/08/21	09/09/21	09/10/21	09/11/21	09/12/21	09/13/21	09/14/21	09/15/21	09/16/21
0	7.1	7.2	7.4	7.4	7.0	6.8	7.5	7.9	7.9	7.9	8.0	8.1	8.0	7.9	8.1	7.9
10000	7.1	7.2	7.4	7.4	6.9	6.8	7.5	7.9	7.9	7.8	8.0	8.1	8.0	7.9	8.2	8.0
20000	7.0	7.2	7.4	7.4	6.9	6.8	7.5	7.9	7.9	7.8	8.0	8.1	8.0	7.8	8.1	7.9
30000	6.9	7.2	7.4	7.3	6.9	6.8	7.5	7.9	7.8	7.8	8.0	8.1	7.9	7.8	8.2	7.9
40000	7.0	7.1	7.4	7.4	6.9	6.9	7.5	8.0	7.8	7.8	7.9	8.0	7.9	7.8	8.2	7.9
50000	7.0	7.1	7.4	7.3	7.0	6.9	7.5	8.0	7.8	7.9	7.9	8.0	7.9	7.8	8.2	7.9
60000	7.0	7.1	7.3	7.2	7.1	7.0	7.5	8.0	7.8	7.9	7.9	8.0	7.9	7.8	8.2	7.9
70000	7.0	7.1	7.3	7.3	7.1	7.1	7.5	8.0	7.8	7.9	8.0	8.0	8.0	7.8	8.2	7.9
80000	7.0	7.1	7.2	7.3	7.1	7.1	7.6	7.9	7.8	7.9	8.0	8.0	8.0	7.8	8.2	7.9
90000	7.1	7.1	7.2	7.2	7.1	7.2	7.6	7.9	7.8	7.9	8.0	8.0	8.0	8.0	8.1	8.0
100000	7.1	7.2	7.2	7.1	7.0	7.2	7.6	7.8	7.9	7.9	8.1	8.0	8.0	8.1	8.1	8.1
110000	7.1	7.2	7.3	7.1	7.0	7.1	7.6	7.8	7.8	8.0	8.1	8.0	8.0	8.1	8.1	8.1
120000	7.2	7.1	7.3	7.1	6.9	7.1	7.8	7.8	7.8	8.0	8.1	8.0	7.9	8.0	8.1	8.1
130000	7.1	7.1	7.3	7.0	6.9	7.1	7.8	7.8	8.1	8.1	8.1	8.0	7.9	8.0	8.1	8.2
140000	7.1	7.2	7.3	7.0	6.9	7.1	7.8	7.8	7.9	8.1	8.2	8.0	7.9	8.0	8.1	8.3
150000	7.1	7.3	7.5	7.0	6.9	7.2	7.8	7.8	8.1	8.2	8.1	7.9	8.0	8.1	8.3	
160000	7.2	7.4	7.5	6.9	6.8	7.1	7.9	7.8	7.8	8.1	8.2	8.1	7.9	8.1	8.1	8.4
170000	7.2	7.5	7.5	6.9	6.8	7.2	8.0	7.8	7.8	8.2	8.2	8.1	8.0	8.2	8.1	8.4
180000	7.3	7.5	7.5	6.8	6.8	7.3	8.0	7.8	7.8	8.2	8.2	8.1	8.0	8.2	8.1	8.3
190000	7.3	7.5	7.4	6.9	6.7	7.3	7.9	7.8	7.8	8.2	8.1	8.1	8.0	8.1	8.0	8.3
200000	7.2	7.5	7.5	6.9	6.7	7.4	8.0	7.8	7.8	8.2	8.1	8.1	8.0	8.1	8.0	8.3
210000	7.2	7.5	7.5	6.9	6.7	7.4	7.9	7.8	7.8	8.1	8.1	8.0	8.0	8.1	8.0	8.3
220000	7.2	7.5	7.5	6.9	6.8	7.4	7.9	7.8	7.8	8.1	8.1	8.0	8.0	8.1	8.0	8.2
230000	7.2	7.5	7.5	6.9	6.7	7.5	7.9	7.8	7.8	8.0	8.1	8.0	8.0	8.1	8.0	8.2
Daily Max	7.3	7.5	7.5	7.4	7.1	7.5	8.0	8.0	8.1	8.2	8.2	8.1	8.0	8.2	8.2	8.4
Daily Min	6.9	7.1	7.2	6.8	6.7	6.8	7.5	7.8	7.8	7.8	8.0	7.9	7.8	8.0	8.0	7.9
Average	7.1	7.3	7.4	7.1	6.9	7.1	7.7	7.9	7.8	8.0	8.1	8.0	7.9	8.0	8.1	8.1

License Minimum Dissolved Oxygen: 6.0 mg/l

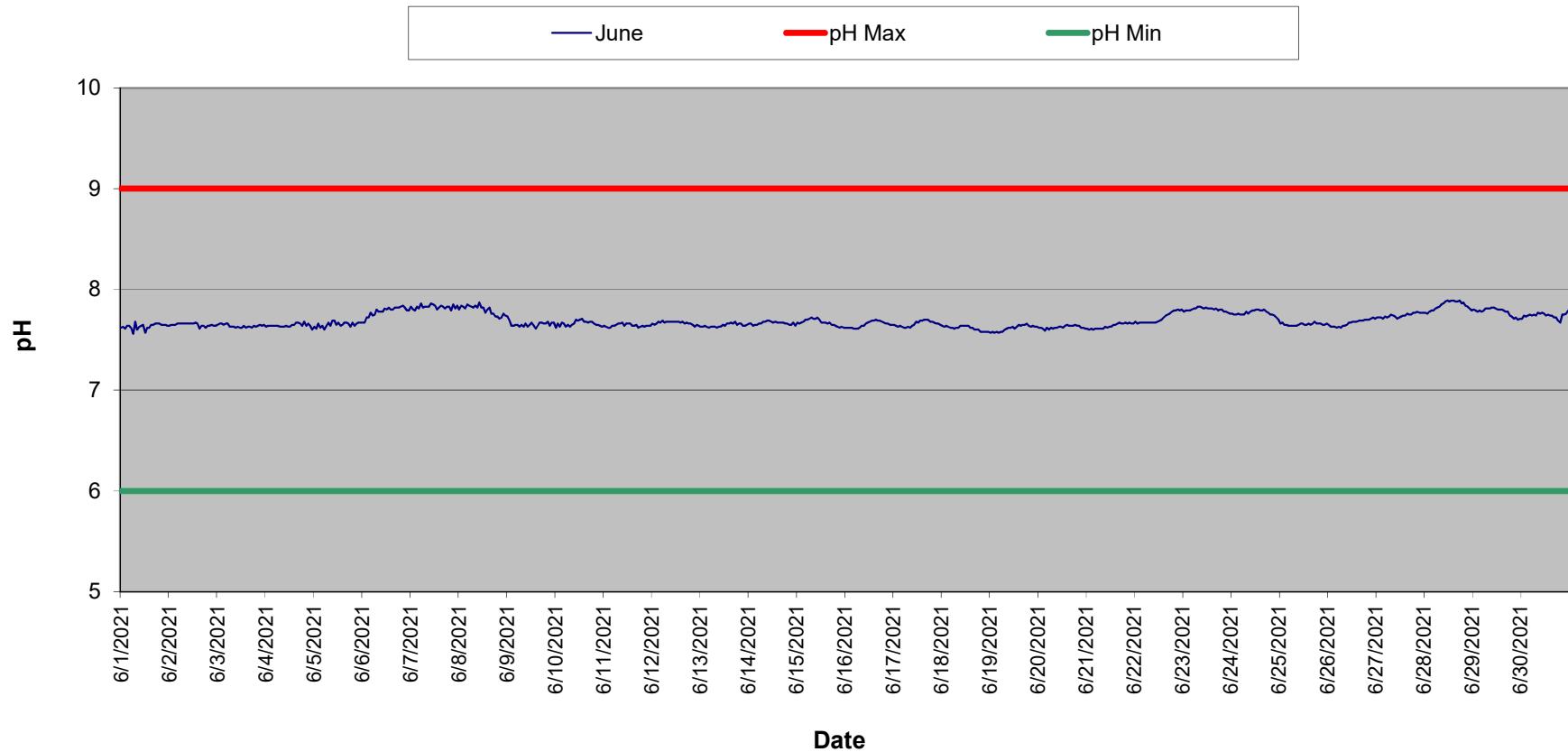
Missing data due to equipment maintenance

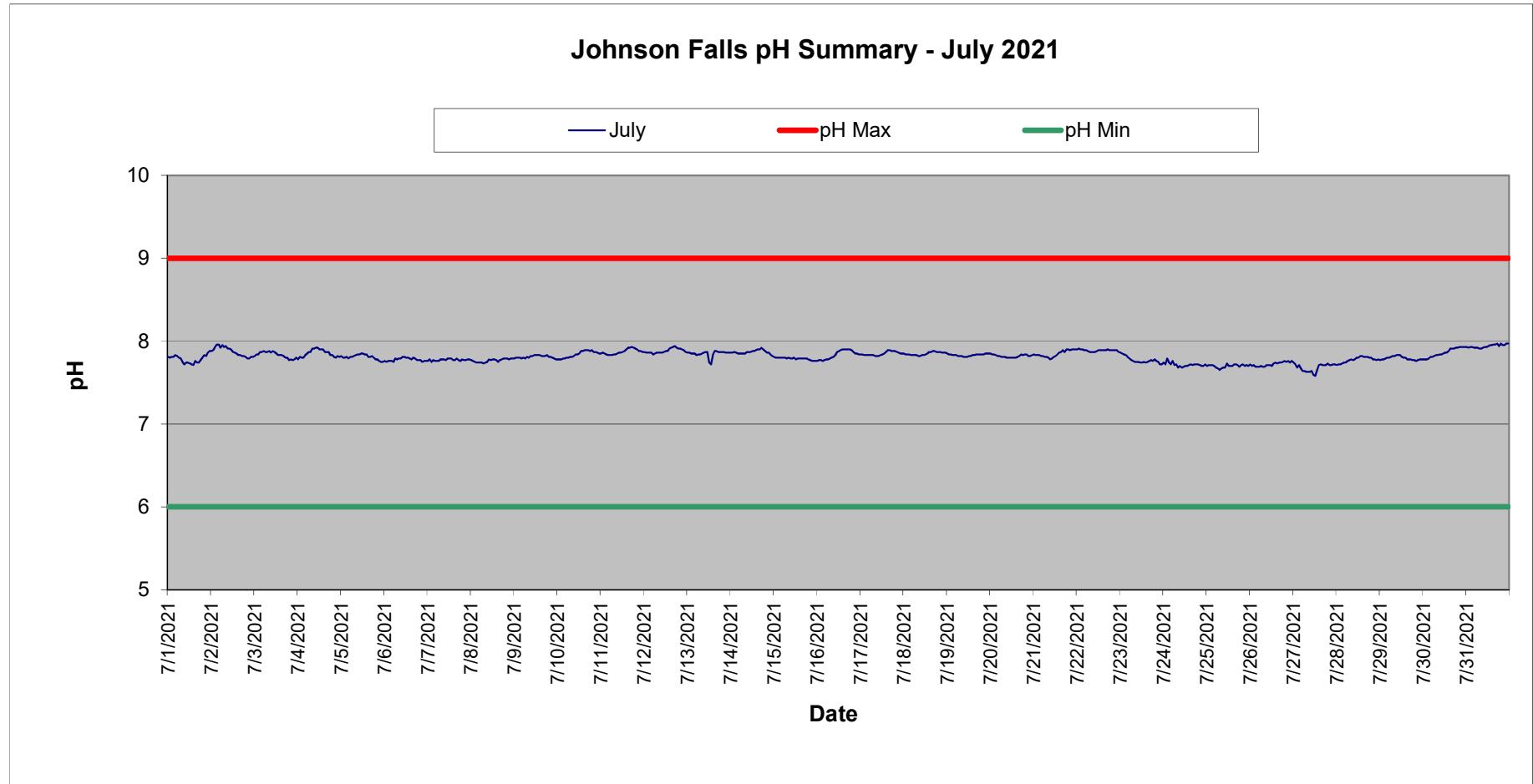
Johnson Falls Tailwater Dissolved Oxygen Summary - September 2021

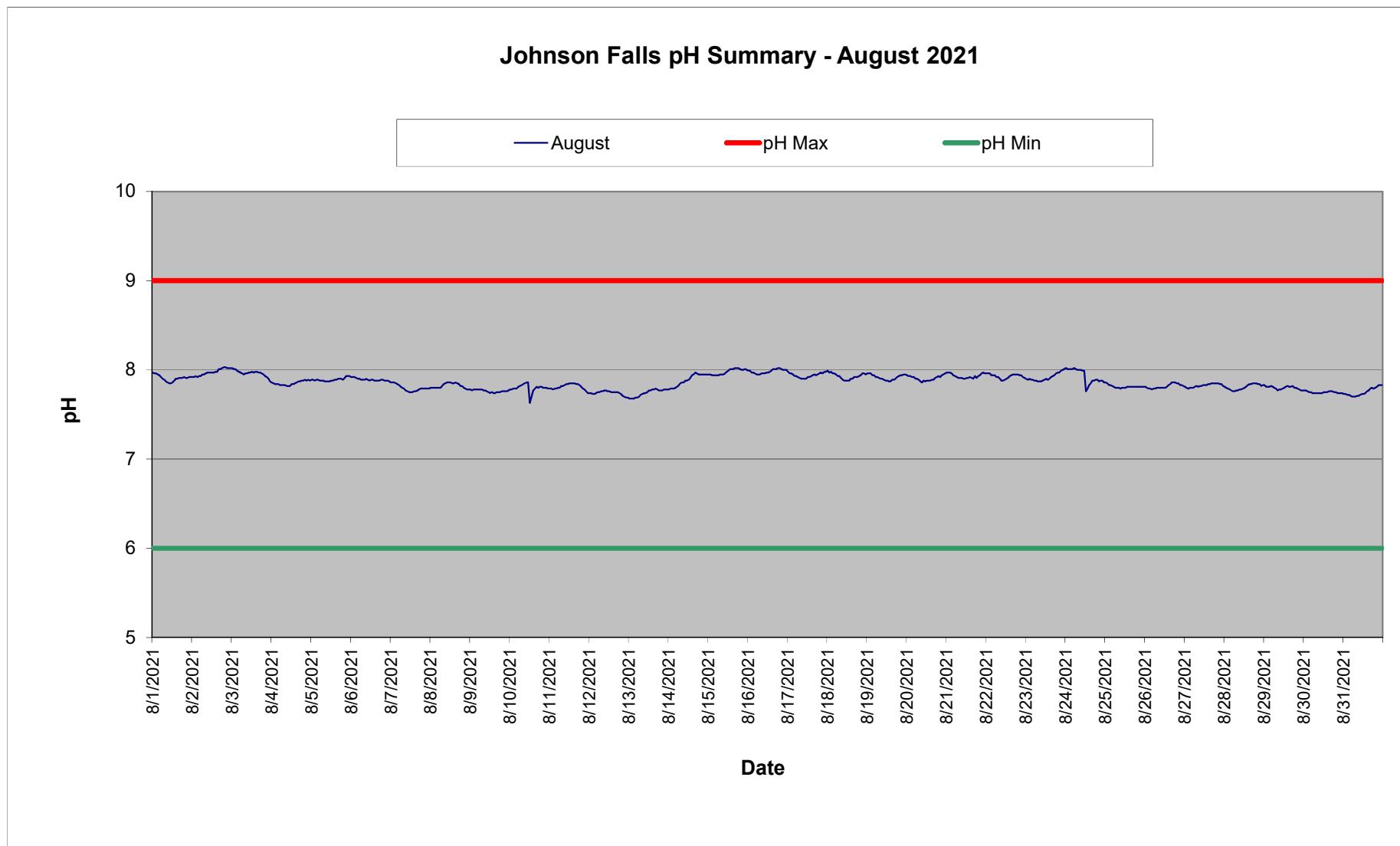
Time HHMMSS	09/17/21	09/18/21	09/19/21	09/20/21	09/21/21	09/22/21	09/23/21	09/24/21	09/25/21	09/26/21	09/27/21	09/28/21	09/29/21	09/30/21	
0	8.2	7.6	7.8	8.2	8.3	8.3	8.3	8.7	8.8	8.9	8.7	8.7	8.8	8.9	
10000	8.2	8.1	7.8	8.2	8.3	8.3	8.3	8.7	8.8	8.9	8.7	8.7	8.8	8.9	
20000	8.3	6.0	7.9	8.2	8.2	8.4	8.3	8.7	8.8	8.9	8.7	8.8	8.8	8.8	
30000	8.3	8.1	7.8	8.2	8.2	8.3	8.3	8.7	8.8	8.9	8.7	8.7	8.8	8.9	
40000	8.3	8.1	7.8	8.1	8.1	8.3	8.3	8.7	8.8	8.9	8.7	8.7	8.8	8.8	
50000	8.2	8.0	7.9	8.1	8.1	8.3	8.3	8.7	8.8	8.8	8.7	8.8	8.8	8.8	
60000	8.3	8.1	7.9	8.1	8.0	8.3	8.3	8.7	8.9	8.8	8.7	8.8	8.8	8.8	
70000	8.3	8.0	7.9	8.1	8.0	8.2	8.3	8.7	8.9	8.8	8.7	8.8	8.8	8.8	
80000	8.2	8.0	7.9	8.1	8.0	8.2	8.4	8.7	8.9	8.8	8.8	8.7	8.8	8.8	
90000	8.2	7.9	8.0	8.1	8.0	8.2	8.4	8.8	8.9	8.7	8.7	8.7	8.9	8.8	
100000	8.2	7.9	8.0	8.2	8.0	8.2	8.5	8.8	8.9	8.7	8.7	8.7	8.8	8.8	
110000	8.2	7.9	8.1	8.2			8.2	8.5	8.8	8.9	8.8	8.7	8.7	8.8	8.8
120000	8.3	7.8	8.1	8.2	8.0	8.2	8.5	8.8	8.9	8.7	8.7	8.7	8.8	8.8	
130000	8.2	7.8	8.2	8.2	8.0	8.1	8.5	8.8	8.9	8.8	8.7	8.7	8.8	8.8	
140000	8.2	7.8	8.2	8.3	8.0	8.1	8.5	8.8	8.9	8.7	8.7	8.8	8.9	8.9	
150000	8.2	7.9	8.2	8.3	8.1	8.1	8.6	8.9	8.9	8.7	8.7	8.8	8.9	8.9	
160000	8.2	7.9	8.2	8.3	8.1	8.1	8.6	8.8	8.9	8.7	8.7	8.8	9.0	8.9	
170000	8.2	7.8	8.2	8.2	8.1	8.1	8.6	8.9	8.9	8.8	8.7	8.8	9.0	8.9	
180000	8.2	7.8	8.2	8.3	8.1	8.1	8.6	8.8	8.9	8.8	8.7	8.8	9.0	8.9	
190000	8.2	7.8	8.2	8.3	8.1	8.1	8.6	8.8	8.9	8.7	8.7	8.9	9.0	9.0	
200000	8.2	7.8	8.2	8.3	8.1	8.2	8.7	8.8	8.9	8.7	8.8	8.9	9.0	8.9	
210000	8.2	7.8	8.2	8.3	8.2	8.2	8.7	8.8	8.9	8.8	8.8	8.9	9.0	8.9	
220000	8.2	7.8	8.2	8.3	8.2	8.2	8.7	8.8	8.9	8.7	8.8	8.9	9.0	8.9	
230000	8.2	7.8	8.2	8.3	8.3	8.2	8.7	8.8	8.9	8.7	8.8	8.8	8.9	8.8	
Daily Max	8.3	8.1	8.2	8.3	8.3	8.4	8.7	8.9	8.9	8.9	8.8	8.9	9.0	9.0	
Daily Min	8.2	6.0	7.8	8.1	8.0	8.1	8.3	8.7	8.8	8.7	8.7	8.7	8.8	8.8	
Average	8.2	7.8	8.0	8.2	8.1	8.2	8.5	8.8	8.9	8.8	8.7	8.8	8.9	8.8	

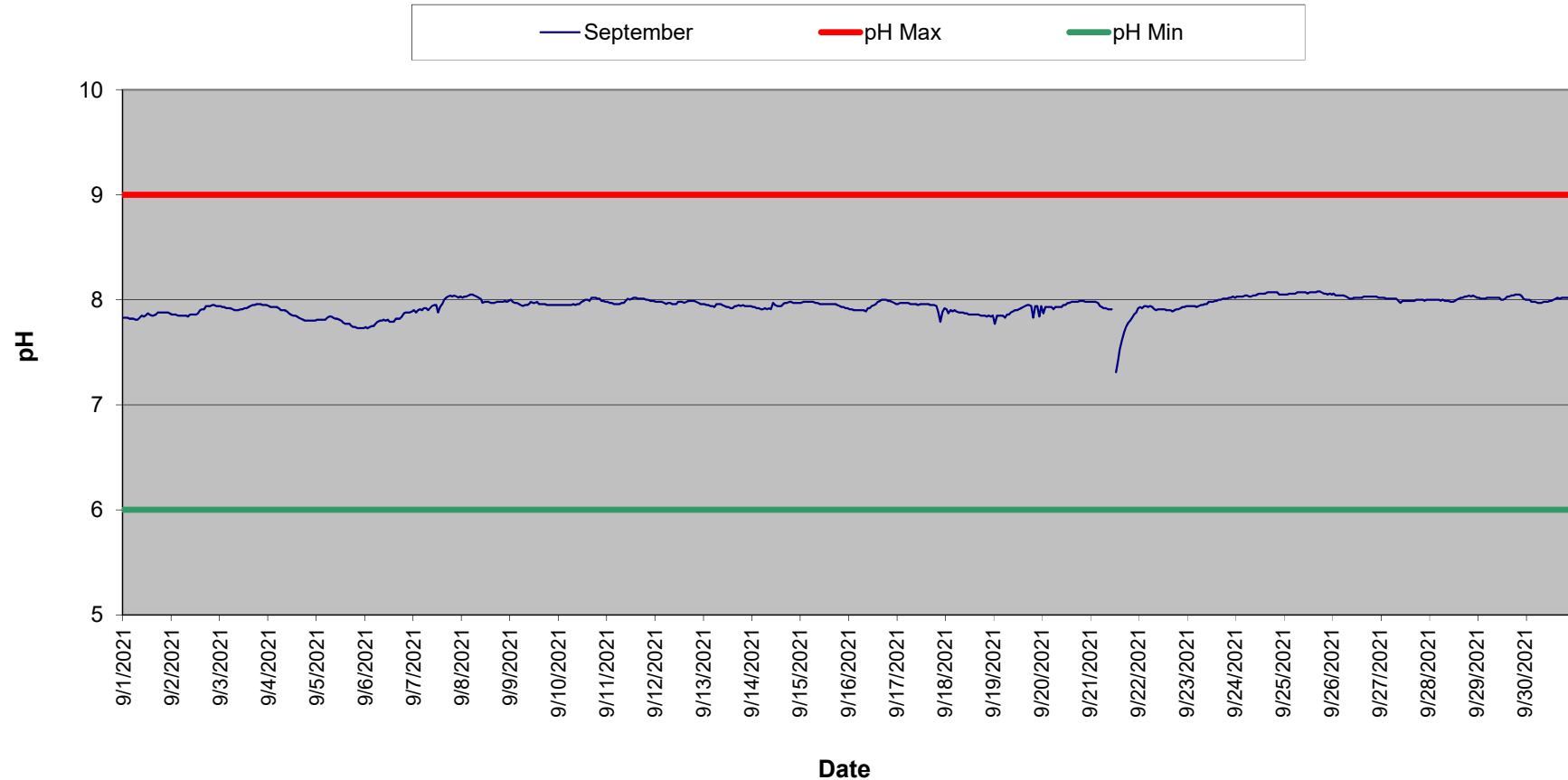
Anomaly - no change in plant operation or release flow that would have caused or contributed to the sudden DO drop.

Missing data due to equipment maintenance

Johnson Falls pH Summary - June 2021





Johnson Falls pH Summary - September 2021

Johnson Falls Tailwater pH Summary - June 2021

Time HHMMSS	06/01/21	06/02/21	06/03/21	06/04/21	06/05/21	06/06/21	06/07/21	06/08/21	06/09/21	06/10/21	06/11/21	06/12/21	06/13/21	06/14/21	06/15/21	06/16/21
0	7.6	7.6	7.7	7.6	7.6	7.7	7.8	7.8	7.7	7.6	7.6	7.7	7.6	7.7	7.7	7.6
10000	7.6	7.7	7.7	7.6	7.6	7.7	7.8	7.8	7.7	7.7	7.6	7.7	7.6	7.7	7.7	7.6
20000	7.6	7.7	7.7	7.6	7.6	7.7	7.8	7.8	7.6	7.6	7.6	7.7	7.6	7.6	7.7	7.6
30000	7.6	7.7	7.7	7.6	7.6	7.7	7.8	7.8	7.6	7.7	7.6	7.7	7.6	7.7	7.7	7.6
40000	7.6	7.7	7.7	7.6	7.6	7.8	7.8	7.9	7.7	7.7	7.6	7.7	7.6	7.7	7.7	7.6
50000	7.6	7.7	7.7	7.6	7.6	7.7	7.9	7.8	7.7	7.6	7.6	7.7	7.6	7.7	7.7	7.6
60000	7.6	7.7	7.6	7.6	7.6	7.8	7.8	7.8	7.6	7.7	7.7	7.7	7.6	7.7	7.7	7.6
70000	7.7	7.7	7.6	7.6	7.7	7.8	7.8	7.8	7.7	7.6	7.7	7.7	7.6	7.7	7.7	7.6
80000	7.6	7.7	7.6	7.6	7.6	7.8	7.8	7.8	7.6	7.7	7.7	7.7	7.6	7.7	7.7	7.6
90000	7.6	7.7	7.6	7.6	7.7	7.8	7.8	7.8	7.7	7.7	7.7	7.7	7.6	7.7	7.7	7.6
100000	7.6	7.7	7.6	7.6	7.7	7.8	7.9	7.9	7.6	7.7	7.6	7.7	7.6	7.7	7.7	7.7
110000	7.7	7.7	7.6	7.6	7.7	7.8	7.9	7.8	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
120000	7.6	7.7	7.6	7.6	7.7	7.8	7.8	7.8	7.7	7.7	7.7	7.7	7.6	7.7	7.7	7.7
130000	7.6	7.7	7.6	7.7	7.6	7.8	7.8	7.8	7.6	7.7	7.7	7.7	7.7	7.7	7.7	7.7
140000	7.6	7.7	7.6	7.7	7.7	7.8	7.8	7.8	7.6	7.7	7.6	7.7	7.7	7.7	7.7	7.7
150000	7.7	7.6	7.6	7.7	7.7	7.8	7.8	7.8	7.6	7.7	7.6	7.7	7.7	7.7	7.7	7.7
160000	7.7	7.6	7.6	7.7	7.7	7.8	7.8	7.8	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
170000	7.7	7.6	7.6	7.7	7.7	7.8	7.8	7.8	7.7	7.7	7.6	7.7	7.7	7.7	7.7	7.7
180000	7.7	7.6	7.6	7.6	7.6	7.8	7.8	7.7	7.7	7.7	7.6	7.7	7.7	7.7	7.7	7.7
190000	7.7	7.6	7.6	7.7	7.7	7.8	7.8	7.7	7.7	7.7	7.6	7.7	7.7	7.7	7.6	7.7
200000	7.7	7.6	7.6	7.6	7.6	7.8	7.8	7.7	7.7	7.7	7.6	7.7	7.7	7.7	7.6	7.7
210000	7.7	7.7	7.7	7.7	7.7	7.8	7.9	7.7	7.6	7.7	7.6	7.6	7.6	7.7	7.6	7.7
220000	7.7	7.6	7.6	7.6	7.7	7.8	7.8	7.8	7.7	7.6	7.6	7.7	7.6	7.7	7.6	7.7
230000	7.6	7.6	7.7	7.6	7.7	7.8	7.8	7.7	7.7	7.6	7.6	7.6	7.7	7.6	7.6	7.7
Daily Max	7.7	7.7	7.7	7.7	7.7	7.8	7.9	7.9	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
Daily Min	7.6	7.6	7.6	7.6	7.6	7.7	7.8	7.7	7.6	7.6	7.6	7.6	7.6	7.6	7.6	7.6
Average	7.6	7.6	7.6	7.6	7.7	7.8	7.8	7.8	7.7	7.7	7.6	7.6	7.6	7.7	7.7	7.7

License maximum pH: 9

License minimum pH: 6

Johnson Falls Tailwater pH Summary - June 2021

Time HHMMSS	06/17/21	06/18/21	06/19/21	06/20/21	06/21/21	06/22/21	06/23/21	06/24/21	06/25/21	06/26/21	06/27/21	06/28/21	06/29/21	06/30/21
0	7.7	7.6	7.6	7.6	7.6	7.7	7.8	7.8	7.7	7.7	7.7	7.8	7.8	7.7
10000	7.6	7.6	7.6	7.6	7.6	7.7	7.8	7.8	7.7	7.6	7.7	7.8	7.8	7.7
20000	7.6	7.6	7.6	7.6	7.6	7.7	7.8	7.8	7.7	7.6	7.7	7.8	7.8	7.7
30000	7.6	7.6	7.6	7.6	7.6	7.7	7.8	7.8	7.7	7.6	7.7	7.8	7.8	7.7
40000	7.6	7.6	7.6	7.6	7.6	7.7	7.8	7.8	7.6	7.6	7.7	7.8	7.8	7.8
50000	7.6	7.6	7.6	7.6	7.6	7.7	7.8	7.8	7.6	7.6	7.7	7.8	7.8	7.7
60000	7.6	7.6	7.6	7.6	7.6	7.7	7.8	7.8	7.6	7.6	7.7	7.8	7.8	7.8
70000	7.6	7.6	7.6	7.6	7.6	7.7	7.8	7.8	7.6	7.6	7.8	7.8	7.8	7.7
80000	7.6	7.6	7.6	7.6	7.6	7.7	7.8	7.8	7.6	7.6	7.7	7.9	7.8	7.8
90000	7.6	7.6	7.6	7.6	7.6	7.7	7.8	7.8	7.7	7.7	7.7	7.9	7.8	7.8
100000	7.7	7.6	7.6	7.6	7.6	7.7	7.8	7.8	7.7	7.7	7.7	7.9	7.8	7.8
110000	7.7	7.6	7.6	7.6	7.6	7.7	7.8	7.8	7.7	7.7	7.7	7.9	7.8	7.8
120000	7.7	7.6	7.6	7.6	7.6	7.7	7.8	7.8	7.7	7.7	7.7	7.9	7.8	7.7
130000	7.7	7.6	7.6	7.6	7.7	7.7	7.8	7.8	7.7	7.7	7.7	7.9	7.8	7.8
140000	7.7	7.6	7.7	7.7	7.7	7.7	7.8	7.8	7.7	7.7	7.7	7.9	7.8	7.7
150000	7.7	7.6	7.6	7.6	7.7	7.7	7.8	7.8	7.7	7.7	7.8	7.9	7.8	7.7
160000	7.7	7.6	7.7	7.6	7.7	7.8	7.8	7.8	7.7	7.7	7.8	7.9	7.8	7.7
170000	7.7	7.6	7.7	7.6	7.7	7.8	7.8	7.8	7.7	7.7	7.8	7.9	7.8	7.7
180000	7.7	7.6	7.7	7.7	7.7	7.8	7.8	7.8	7.7	7.7	7.8	7.9	7.7	7.7
190000	7.7	7.6	7.6	7.6	7.7	7.8	7.8	7.8	7.7	7.7	7.8	7.9	7.7	7.7
200000	7.7	7.6	7.6	7.6	7.7	7.8	7.8	7.8	7.7	7.7	7.8	7.8	7.7	7.8
210000	7.7	7.6	7.6	7.6	7.7	7.8	7.8	7.7	7.7	7.7	7.8	7.8	7.7	7.8
220000	7.7	7.6	7.6	7.6	7.7	7.8	7.8	7.7	7.7	7.7	7.8	7.8	7.7	7.8
230000	7.7	7.6	7.6	7.6	7.7	7.8	7.8	7.7	7.7	7.7	7.8	7.8	7.7	7.8
Daily Max	7.7	7.6	7.7	7.7	7.7	7.8	7.8	7.8	7.7	7.7	7.8	7.9	7.8	7.8
Daily Min	7.6	7.6	7.6	7.6	7.6	7.7	7.8	7.7	7.6	7.6	7.7	7.8	7.7	7.7
Average	7.7	7.6	7.6	7.6	7.6	7.7	7.7	7.8	7.7	7.7	7.7	7.8	7.8	7.7

Johnson Falls Tailwater pH Summary - July 2021

Time HHMMSS	07/01/21	07/02/21	07/03/21	07/04/21	07/05/21	07/06/21	07/07/21	07/08/21	07/09/21	07/10/21	07/11/21	07/12/21	07/13/21	07/14/21	07/15/21	07/16/21
0	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.8	7.8
10000	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.8	7.8
20000	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.8	7.8
30000	7.8	8.0	7.9	7.8	7.8	7.8	7.8	7.7	7.8	7.8	7.8	7.9	7.9	7.9	7.8	7.8
40000	7.8	8.0	7.9	7.8	7.8	7.8	7.8	7.7	7.8	7.8	7.8	7.9	7.9	7.9	7.8	7.8
50000	7.8	7.9	7.9	7.9	7.8	7.8	7.8	7.7	7.8	7.8	7.8	7.8	7.8	7.9	7.8	7.8
60000	7.8	8.0	7.9	7.9	7.8	7.8	7.8	7.7	7.8	7.8	7.8	7.9	7.8	7.9	7.8	7.8
70000	7.8	7.9	7.9	7.9	7.8	7.8	7.8	7.7	7.8	7.8	7.8	7.9	7.8	7.9	7.8	7.8
80000	7.8	7.9	7.9	7.9	7.8	7.8	7.8	7.7	7.8	7.8	7.8	7.9	7.9	7.9	7.8	7.8
90000	7.7	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.8	7.8
100000	7.7	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.8	7.8
110000	7.7	7.9	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.8	7.9
120000	7.7	7.9	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.7	7.9	7.8	7.9
130000	7.7	7.9	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.7	7.9	7.8	7.9
140000	7.7	7.9	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.8	7.9	7.8	7.9
150000	7.8	7.8	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.9
160000	7.7	7.8	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.9
170000	7.7	7.8	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.9
180000	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.9
190000	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.9
200000	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.9
210000	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.9
220000	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.8	7.8	7.9
230000	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.8	7.8	7.8
Daily Max	7.9	8.0	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.9
Daily Min	7.7	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.8	7.8	7.8	7.8	7.7	7.8	7.8	7.8
Average	7.8	7.9	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.8	7.9	7.8	7.8

License maximum pH: 9

License minimum pH: 6

Johnson Falls Tailwater pH Summary - July 2021

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

Johnson Falls Tailwater pH Summary - August 2021

Time HHMMSS	08/01/21	08/02/21	08/03/21	08/04/21	08/05/21	08/06/21	08/07/21	08/08/21	08/09/21	08/10/21	08/11/21	08/12/21	08/13/21	08/14/21	08/15/21	08/16/21
0	8.0	7.9	8.0	7.9	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.7	7.7	7.8	8.0	8.0
10000	8.0	7.9	8.0	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.7	7.7	7.7	7.8	8.0	8.0
20000	8.0	7.9	8.0	7.8	7.9	7.9	7.8	7.8	7.8	7.8	7.7	7.7	7.7	7.8	7.9	8.0
30000	8.0	7.9	8.0	7.8	7.9	7.9	7.8	7.8	7.8	7.8	7.7	7.7	7.7	7.8	7.9	8.0
40000	7.9	7.9	8.0	7.8	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.7	7.7	7.8	7.9	8.0
50000	7.9	7.9	8.0	7.8	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.7	7.7	7.8	7.9	8.0
60000	7.9	8.0	8.0	7.8	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.7	7.7	7.8	7.9	8.0
70000	7.9	8.0	8.0	7.8	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.9	8.0	8.0
80000	7.9	8.0	8.0	7.8	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.9	8.0	8.0
90000	7.9	8.0	8.0	7.8	7.9	7.9	7.8	7.9	7.8	7.9	7.8	7.8	7.7	7.9	8.0	8.0
100000	7.9	8.0	8.0	7.8	7.9	7.9	7.8	7.9	7.8	7.9	7.8	7.8	7.7	7.9	8.0	8.0
110000	7.9	8.0	8.0	7.8	7.9	7.9	7.8	7.9	7.8	7.9	7.8	7.8	7.8	7.9	8.0	8.0
120000	7.9	8.0	8.0	7.8	7.9	7.9	7.8	7.9	7.7	7.6	7.9	7.8	7.8	7.9	8.0	8.0
130000	7.9	8.0	8.0	7.8	7.9	7.9	7.8	7.9	7.8	7.7	7.9	7.8	7.8	7.9	8.0	8.0
140000	7.9	8.0	8.0	7.9	7.9	7.9	7.8	7.9	7.7	7.8	7.9	7.8	7.8	7.9	8.0	8.0
150000	7.9	8.0	8.0	7.9	7.9	7.9	7.8	7.9	7.7	7.8	7.9	7.8	7.8	8.0	8.0	8.0
160000	7.9	8.0	8.0	7.9	7.9	7.9	7.8	7.9	7.8	7.8	7.8	7.8	7.8	8.0	8.0	8.0
170000	7.9	8.0	8.0	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	8.0	8.0	8.0
180000	7.9	8.0	8.0	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.7	7.8	8.0	8.0	8.0
190000	7.9	8.0	8.0	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.7	7.8	8.0	8.0	8.0
200000	7.9	8.0	7.9	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.7	7.8	8.0	8.0	8.0
210000	7.9	8.0	7.9	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.7	7.8	8.0	8.0	8.0
220000	7.9	8.0	7.9	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.7	7.8	8.0	8.0	8.0
230000	7.9	8.0	7.9	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.7	7.7	7.8	8.0	8.0	8.0
Daily Max	8.0	8.0	8.0	7.9	7.9	7.9	7.9	7.9	7.8	7.9	7.9	7.8	7.8	8.0	8.0	8.0
Daily Min	7.9	7.9	7.9	7.8	7.9	7.9	7.8	7.8	7.7	7.6	7.7	7.7	7.7	7.8	7.9	8.0
Average	7.9	8.0	8.0	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.7	7.7	7.9	8.0	8.0

License maximum pH: 9

License minimum pH: 6

Johnson Falls Tailwater pH Summary - August 2021

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

Johnson Falls Tailwater pH Summary - September 2021

Time HHMMSS	09/01/21	09/02/21	09/03/21	09/04/21	09/05/21	09/06/21	09/07/21	09/08/21	09/09/21	09/10/21	09/11/21	09/12/21	09/13/21	09/14/21	09/15/21	09/16/21
0	7.8	7.9	7.9	7.9	7.8	7.7	7.9	8.0	8.0	8.0	8.0	8.0	8.0	7.9	8.0	7.9
10000	7.8	7.9	7.9	7.9	7.8	7.7	7.9	8.0	8.0	8.0	8.0	8.0	8.0	7.9	8.0	7.9
20000	7.8	7.9	7.9	7.9	7.8	7.7	7.9	8.0	8.0	8.0	8.0	8.0	8.0	7.9	8.0	7.9
30000	7.8	7.9	7.9	7.9	7.8	7.8	7.9	8.0	8.0	8.0	8.0	8.0	7.9	7.9	8.0	7.9
40000	7.8	7.9	7.9	7.9	7.8	7.8	7.9	8.1	8.0	8.0	8.0	8.0	7.9	7.9	8.0	7.9
50000	7.8	7.9	7.9	7.9	7.8	7.8	7.9	8.1	8.0	8.0	8.0	8.0	7.9	7.9	8.0	7.9
60000	7.8	7.9	7.9	7.9	7.8	7.8	7.9	8.0	7.9	8.0	8.0	8.0	8.0	7.9	8.0	7.9
70000	7.8	7.9	7.9	7.9	7.8	7.8	7.9	8.0	8.0	8.0	8.0	8.0	8.0	7.9	8.0	7.9
80000	7.8	7.8	7.9	7.9	7.8	7.8	7.9	8.0	8.0	8.0	8.0	8.0	8.0	7.9	8.0	7.9
90000	7.9	7.9	7.9	7.9	7.8	7.8	7.9	8.0	8.0	8.0	8.0	8.0	8.0	7.9	8.0	7.9
100000	7.8	7.9	7.9	7.9	7.8	7.8	8.0	8.0	8.0	8.0	8.0	8.0	7.9	8.0	8.0	7.9
110000	7.9	7.9	7.9	7.9	7.8	7.8	8.0	8.0	8.0	8.0	8.0	8.0	7.9	8.0	8.0	7.9
120000	7.9	7.9	7.9	7.9	7.8	7.8	7.9	8.0	8.0	8.0	8.0	8.0	7.9	7.9	8.0	8.0
130000	7.9	7.9	7.9	7.9	7.8	7.8	7.9	8.0	8.0	8.0	8.0	8.0	7.9	7.9	8.0	8.0
140000	7.9	7.9	7.9	7.8	7.8	7.8	8.0	8.0	8.0	8.0	8.0	8.0	7.9	7.9	8.0	8.0
150000	7.9	7.9	7.9	7.8	7.8	7.8	8.0	8.0	8.0	8.0	8.0	8.0	7.9	8.0	8.0	8.0
160000	7.9	7.9	8.0	7.8	7.8	7.8	8.0	8.0	8.0	8.0	8.0	8.0	7.9	8.0	8.0	8.0
170000	7.9	7.9	8.0	7.8	7.8	7.8	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
180000	7.9	7.9	8.0	7.8	7.7	7.8	8.0	8.0	8.0	8.0	8.0	8.0	7.9	8.0	8.0	8.0
190000	7.9	7.9	8.0	7.8	7.7	7.9	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	7.9	8.0
200000	7.9	8.0	8.0	7.8	7.7	7.9	8.0	8.0	8.0	8.0	8.0	8.0	7.9	8.0	7.9	8.0
210000	7.9	8.0	8.0	7.8	7.7	7.9	8.0	8.0	8.0	8.0	8.0	8.0	7.9	8.0	7.9	8.0
220000	7.9	7.9	8.0	7.8	7.7	7.9	8.0	8.0	8.0	8.0	8.0	8.0	7.9	8.0	7.9	8.0
230000	7.9	7.9	8.0	7.8	7.7	7.9	8.0	8.0	8.0	8.0	8.0	8.0	7.9	8.0	7.9	8.0
Daily Max	7.9	8.0	8.0	7.9	7.8	7.9	8.0	8.1	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Daily Min	7.8	7.8	7.9	7.8	7.7	7.7	7.9	8.0	7.9	8.0	8.0	8.0	7.9	7.9	7.9	7.9
Average	7.8	7.9	7.9	7.9	7.8	7.8	8.0	8.0	8.0	8.0	8.0	8.0	7.9	7.9	8.0	7.9

License maximum pH: 9

License minimum pH: 6

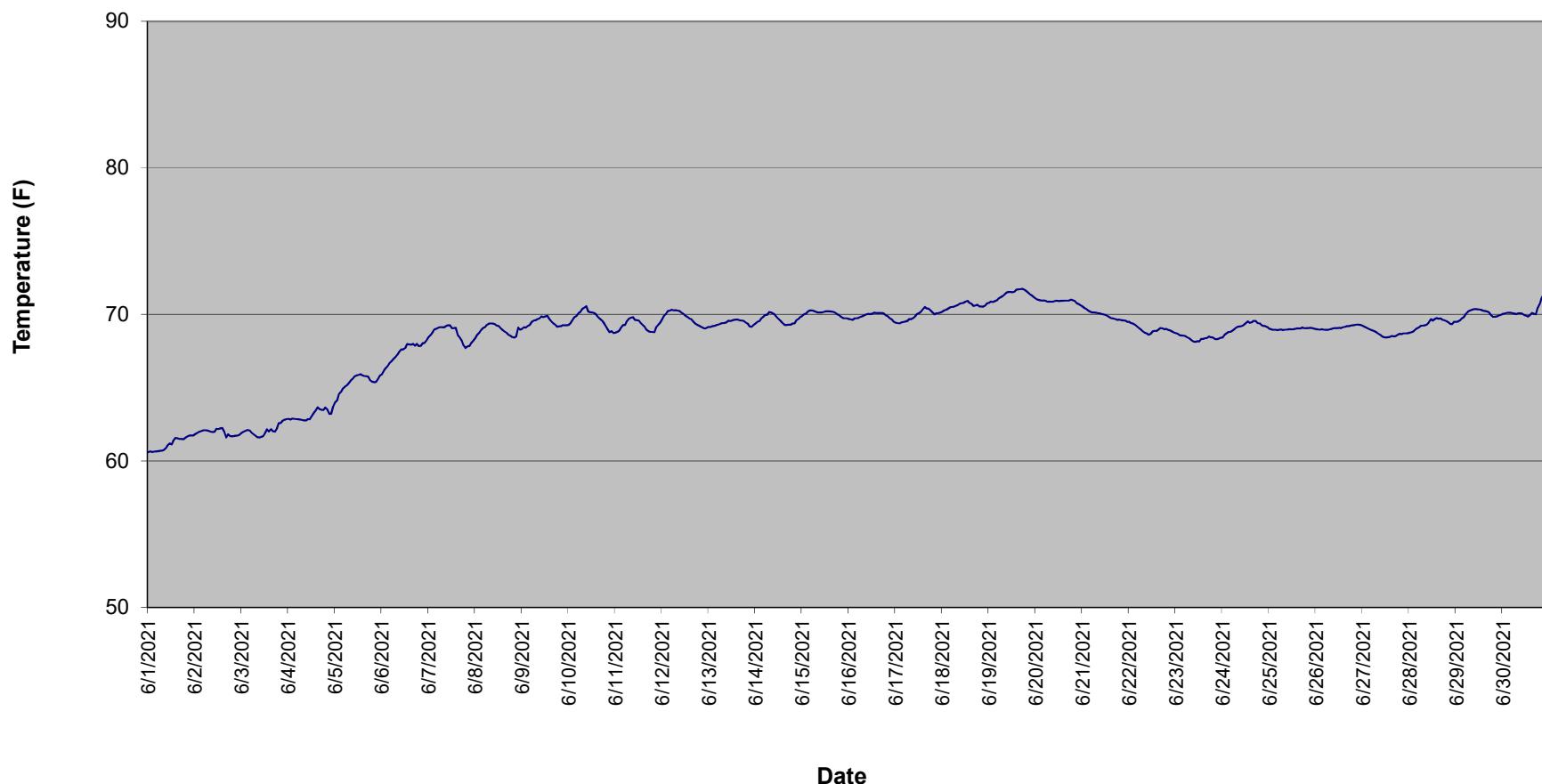
Johnson Falls Tailwater pH Summary - September 2021

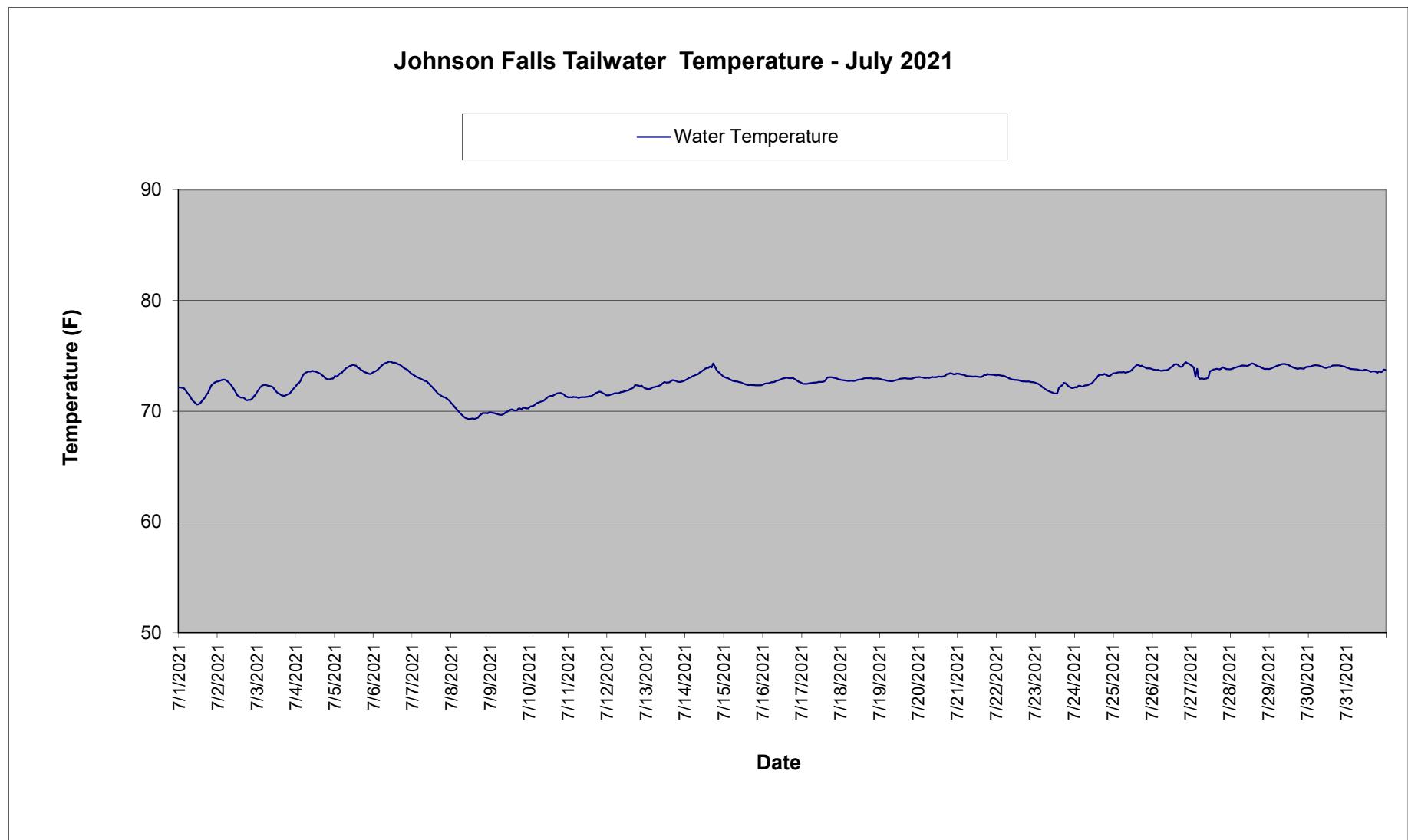
Time HHMMSS	09/17/21	09/18/21	09/19/21	09/20/21	09/21/21	09/22/21	09/23/21	09/24/21	09/25/21	09/26/21	09/27/21	09/28/21	09/29/21	09/30/21
0	8.0	7.9	7.8	7.9	8.0	7.9	7.9	8.0	8.1	8.1	8.0	8.0	8.0	8.0
10000	8.0	7.9	7.9	7.9	8.0	7.9	7.9	8.0	8.1	8.0	8.0	8.0	8.0	8.0
20000	8.0	7.9	7.9	7.9	8.0	7.9	7.9	8.0	8.1	8.0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

[REDACTED] Missing data due to equipment maintenance

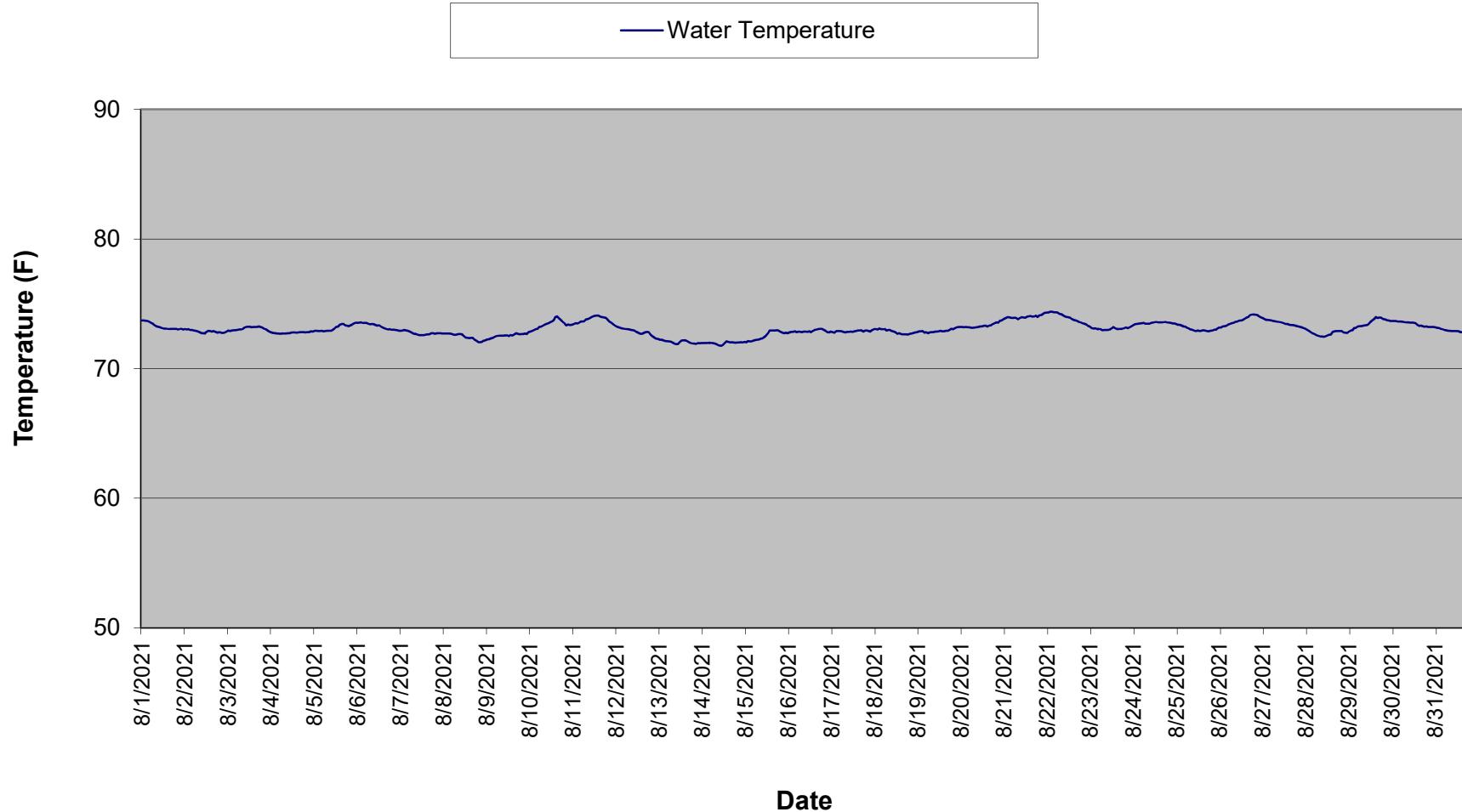
Johnson Falls Tailwater Temperature - June 2021

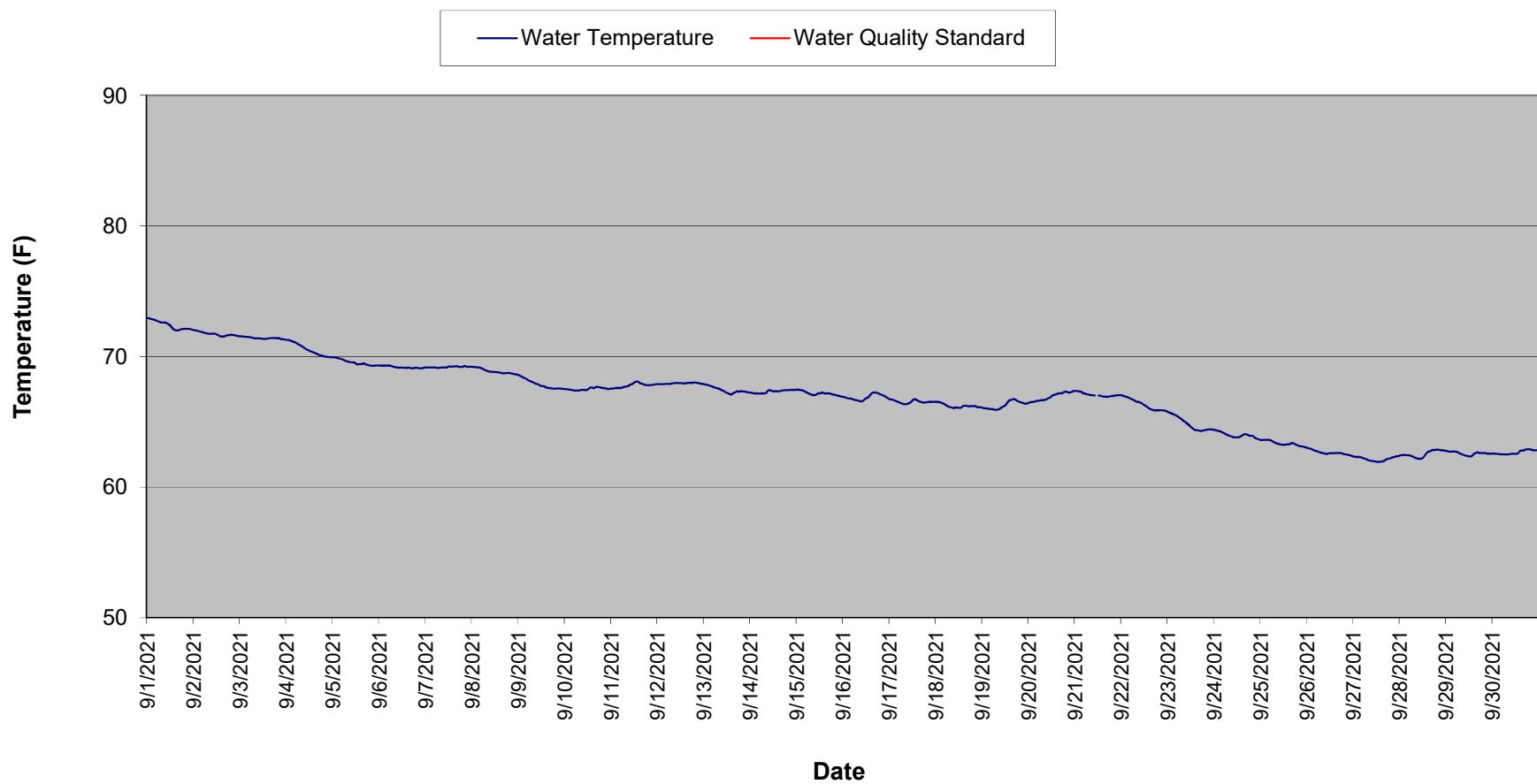
Water Temperature





Johnson Falls Tailwater Temperature - August 2021



Johnson Falls Tailwater Temperature - September 2021

Johnson Falls Tailwater Temperature Summary - June 2021

Time HHMMSS	06/01/21	06/02/21	06/03/21	06/04/21	06/05/21	06/06/21	06/07/21	06/08/21	06/09/21	06/10/21	06/11/21	06/12/21	06/13/21	06/14/21	06/15/21	06/16/21
0	60.6	61.8	61.9	62.9	64.0	65.9	68.4	68.4	69.0	69.3	68.7	69.7	69.1	69.4	69.9	69.7
10000	60.7	61.9	62.0	62.8	64.1	66.2	68.6	68.6	69.1	69.4	68.8	69.9	69.2	69.5	70.0	69.7
20000	60.6	62.0	62.1	62.9	64.6	66.3	68.8	68.7	69.1	69.6	68.9	70.0	69.2	69.5	70.1	69.7
30000	60.6	62.0	62.1	62.9	64.7	66.5	69.0	68.9	69.2	69.8	69.1	70.2	69.2	69.7	70.2	69.6
40000	60.7	62.1	62.1	62.9	64.9	66.7	69.0	69.1	69.3	69.9	69.3	70.3	69.3	69.8	70.3	69.7
50000	60.7	62.1	61.9	62.8	65.1	66.8	69.1	69.1	69.5	70.1	69.3	70.3	69.3	70.0	70.3	69.7
60000	60.7	62.1	61.8	62.8	65.2	66.9	69.1	69.3	69.6	70.2	69.6	70.3	69.4	70.0	70.2	69.8
70000	60.7	62.1	61.7	62.8	65.3	67.1	69.1	69.4	69.6	70.4	69.7	70.3	69.4	70.2	70.2	69.8
80000	60.7	62.0	61.6	62.8	65.5	67.2	69.1	69.4	69.7	70.4	69.8	70.3	69.4	70.1	70.1	69.9
90000	60.9	62.0	61.6	62.8	65.6	67.5	69.2	69.4	69.7	70.6	69.8	70.2	69.5	70.1	70.1	69.9
100000	61.1	62.0	61.6	62.9	65.8	67.6	69.3	69.3	69.9	70.2	69.6	70.1	69.6	70.0	70.1	70.0
110000	61.2	62.2	61.7	62.8	65.8	67.6	69.3	69.2	69.8	70.1	69.6	70.0	69.5	69.8	70.2	70.0
120000	61.1	62.2	61.9	63.1	65.9	67.7	69.1	69.2	69.9	70.1	69.6	69.9	69.6	69.7	70.2	70.0
130000	61.4	62.2	62.2	63.3	65.9	68.0	69.1	69.1	69.9	70.1	69.4	69.8	69.6	69.5	70.2	70.1
140000	61.6	62.2	62.0	63.4	65.9	68.0	69.1	68.9	69.7	70.0	69.3	69.7	69.6	69.4	70.2	70.1
150000	61.5	62.0	62.2	63.7	65.8	67.9	68.6	68.8	69.5	69.8	69.2	69.7	69.6	69.3	70.2	70.1
160000	61.5	61.6	62.0	63.5	65.8	68.0	68.4	68.7	69.4	69.7	69.0	69.5	69.6	69.3	70.2	70.1
170000	61.5	61.8	62.0	63.5	65.7	67.9	68.2	68.6	69.3	69.6	68.8	69.4	69.6	69.3	70.2	70.1
180000	61.5	61.7	62.2	63.5	65.5	68.0	67.9	68.5	69.2	69.4	68.8	69.3	69.5	69.3	70.1	70.1
190000	61.6	61.7	62.6	63.6	65.4	67.8	67.7	68.4	69.2	69.2	68.8	69.2	69.4	69.4	70.0	70.1
200000	61.7	61.7	62.6	63.5	65.4	67.8	67.8	68.4	69.2	69.0	68.8	69.1	69.4	69.4	69.9	69.9
210000	61.7	61.7	62.7	63.2	65.4	68.0	67.8	68.5	69.3	68.8	69.1	69.1	69.2	69.6	69.8	69.9
220000	61.7	61.7	62.8	63.2	65.6	68.1	68.0	69.1	69.3	68.9	69.3	69.0	69.2	69.7	69.7	69.8
230000	61.7	61.8	62.9	63.7	65.8	68.2	68.2	69.0	69.3	68.7	69.4	69.1	69.3	69.8	69.7	69.6
Daily Max	61.7	62.2	62.9	63.7	65.9	68.2	69.3	69.4	69.9	70.6	69.8	70.3	69.6	70.2	70.3	70.1
Daily Min	60.6	61.6	61.6	62.8	64.0	65.9	67.7	68.4	69.0	68.7	68.7	69.0	69.1	69.3	69.7	69.6
Average	61.1	61.9	62.1	63.1	65.4	67.4	68.7	68.9	69.4	69.7	69.2	69.8	69.4	69.6	70.1	69.9

Monthly average: 68.1

No numeric temperature limitation - water temperature must not be "altered above background to such an extent that trout populations are adversely affected".

Johnson Falls Tailwater Temperature Summary - June 2021

Time HHMMSS	06/17/21	06/18/21	06/19/21	06/20/21	06/21/21	06/22/21	06/23/21	06/24/21	06/25/21	06/26/21	06/27/21	06/28/21	06/29/21	06/30/21
0	69.5	70.1	70.8	71.2	70.6	69.5	68.8	68.4	69.1	69.0	69.3	68.7	69.5	70.0
10000	69.4	70.2	70.8	71.1	70.5	69.5	68.7	68.4	69.0	69.0	69.2	68.7	69.5	70.1
20000	69.4	70.3	70.9	71.0	70.4	69.4	68.7	68.6	69.0	69.0	69.1	68.8	69.5	70.1
30000	69.4	70.3	70.8	71.0	70.4	69.4	68.6	68.7	68.9	69.0	69.1	68.8	69.6	70.1
40000	69.5	70.4	70.9	70.9	70.3	69.3	68.6	68.8	69.0	69.0	69.0	69.0	69.7	70.1
50000	69.5	70.5	70.9	71.0	70.2	69.2	68.5	68.8	68.9	69.0	68.9	69.1	69.8	70.1
60000	69.5	70.5	71.1	70.9	70.1	69.1	68.5	68.9	68.9	68.9	68.9	69.1	70.0	70.0
70000	69.5	70.5	71.2	70.9	70.1	69.0	68.4	69.0	69.0	68.9	68.9	69.2	70.2	70.0
80000	69.7	70.6	71.3	70.9	70.1	68.9	68.4	69.1	68.9	69.0	68.8	69.2	70.3	70.1
90000	69.7	70.6	71.4	70.9	70.1	68.7	68.2	69.2	69.0	69.0	68.7	69.3	70.3	70.1
100000	69.7	70.7	71.5	70.9	70.1	68.7	68.2	69.2	69.0	69.0	68.6	69.3	70.4	70.1
110000	69.9	70.8	71.5	70.9	70.0	68.6	68.1	69.2	69.0	69.1	68.5	69.4	70.4	70.0
120000	70.0	70.8	71.5	70.9	70.0	68.7	68.2	69.3	69.0	69.1	68.4	69.7	70.4	69.9
130000	70.1	70.9	71.5	70.9	70.0	68.8	68.1	69.4	69.0	69.1	68.4	69.6	70.3	69.9
140000	70.2	70.9	71.5	70.9	69.9	68.9	68.3	69.5	69.0	69.1	68.4	69.7	70.2	69.9
150000	70.4	70.8	71.7	70.9	69.8	68.9	68.3	69.4	69.0	69.1	68.5	69.8	70.2	70.1
160000	70.5	70.7	71.7	70.9	69.7	69.0	68.4	69.5	69.0	69.2	68.5	69.7	70.2	70.0
170000	70.4	70.6	71.7	70.9	69.7	69.1	68.4	69.6	69.0	69.2	68.5	69.7	70.1	70.0
180000	70.4	70.6	71.7	70.9	69.7	69.0	68.5	69.6	69.1	69.2	68.5	69.6	70.0	70.5
190000	70.3	70.7	71.7	71.0	69.6	69.0	68.4	69.4	69.1	69.2	68.6	69.6	69.8	70.7
200000	70.1	70.5	71.6	71.0	69.6	69.0	68.4	69.4	69.1	69.3	68.7	69.5	69.8	71.1
210000	70.0	70.5	71.5	70.9	69.6	68.9	68.3	69.3	69.1	69.3	68.7	69.5	69.9	71.4
220000	70.1	70.5	71.4	70.8	69.6	68.9	68.3	69.2	69.1	69.3	68.7	69.3	69.9	71.8
230000	70.1	70.6	71.3	70.7	69.6	68.8	68.3	69.2	69.1	69.3	68.7	69.3	70.0	72.1
Daily Max	70.5	70.9	71.7	71.2	70.6	69.5	68.8	69.6	69.1	69.3	69.3	69.8	70.4	72.1
Daily Min	69.4	70.1	70.8	70.7	69.6	68.6	68.1	68.4	68.9	68.9	68.4	68.7	69.5	69.9
Average	69.9	70.6	71.3	70.9	70.0	69.0	68.4	69.1	69.0	69.1	68.7	69.3	70.0	70.3

Johnson Falls Tailwater Temperature Summary - July 2021

Time HHMMSS	07/01/21	07/02/21	07/03/21	07/04/21	07/05/21	07/06/21	07/07/21	07/08/21	07/09/21	07/10/21	07/11/21	07/12/21	07/13/21	07/14/21	07/15/21	07/16/21
0	72.2	72.7	71.7	72.3	73.2	73.6	73.3	70.7	69.9	70.4	71.2	71.4	72.0	72.8	73.1	72.4
10000	72.1	72.7	71.9	72.5	73.1	73.6	73.2	70.5	69.9	70.5	71.3	71.4	72.0	72.9	73.0	72.5
20000	72.1	72.8	72.2	72.6	73.2	73.7	73.1	70.3	69.8	70.5	71.3	71.5	72.0	73.0	73.0	72.5
30000	72.1	72.9	72.3	72.8	73.4	73.8	73.1	70.2	69.8	70.6	71.3	71.5	72.1	73.0	72.9	72.5
40000	71.9	72.8	72.4	73.2	73.4	74.0	73.0	70.0	69.7	70.7	71.3	71.6	72.2	73.1	72.8	72.6
50000	71.7	72.8	72.4	73.4	73.6	74.1	72.9	69.8	69.7	70.8	71.3	71.6	72.2	73.2	72.8	72.6
60000	71.5	72.7	72.3	73.5	73.7	74.3	72.9	69.7	69.7	70.8	71.2	71.6	72.2	73.3	72.7	72.6
70000	71.3	72.6	72.3	73.5	73.9	74.3	72.8	69.6	69.7	70.9	71.2	71.6	72.3	73.3	72.7	72.7
80000	71.0	72.4	72.3	73.6	74.0	74.4	72.7	69.4	69.8	70.9	71.3	71.7	72.3	73.4	72.7	72.8
90000	70.9	72.2	72.2	73.6	74.1	74.4	72.6	69.4	69.9	71.0	71.3	71.7	72.4	73.5	72.6	72.8
100000	70.7	71.9	72.1	73.6	74.1	74.5	72.5	69.3	70.0	71.1	71.3	71.8	72.5	73.6	72.6	72.8
110000	70.6	71.7	71.9	73.6	74.2	74.4	72.3	69.3	70.0	71.3	71.3	71.8	72.6	73.7	72.5	72.9
120000	70.6	71.4	71.8	73.6	74.1	74.4	72.2	69.3	70.1	71.3	71.3	71.9	72.6	73.8	72.5	73.0
130000	70.7	71.3	71.6	73.5	74.1	74.4	72.0	69.3	70.2	71.4	71.4	71.9	72.6	73.9	72.4	73.0
140000	70.9	71.2	71.6	73.5	73.9	74.3	71.8	69.3	70.1	71.4	71.4	72.0	72.6	73.9	72.4	73.0
150000	71.1	71.3	71.5	73.4	73.9	74.2	71.7	69.4	70.1	71.5	71.5	72.1	72.7	74.0	72.4	73.0
160000	71.3	71.2	71.4	73.3	73.7	74.2	71.5	69.4	70.1	71.5	71.5	72.1	72.8	74.0	72.4	73.0
170000	71.5	71.0	71.4	73.2	73.7	74.1	71.4	69.6	70.2	71.6	71.7	72.4	72.8	74.3	72.4	73.0
180000	71.7	71.0	71.5	73.0	73.5	73.9	71.4	69.7	70.3	71.6	71.7	72.3	72.7	74.0	72.4	73.0
190000	72.1	71.0	71.5	72.9	73.5	73.9	71.3	69.8	70.1	71.7	71.8	72.3	72.7	73.7	72.3	72.9
200000	72.3	71.0	71.6	72.9	73.5	73.8	71.3	69.8	70.3	71.6	71.7	72.3	72.6	73.6	72.3	72.8
210000	72.5	71.1	71.7	72.9	73.4	73.7	71.1	69.9	70.3	71.5	71.6	72.3	72.6	73.5	72.3	72.7
220000	72.6	71.3	72.0	72.9	73.4	73.5	71.0	69.8	70.3	71.4	71.6	72.2	72.7	73.3	72.3	72.7
230000	72.7	71.5	72.1	73.0	73.5	73.4	70.9	69.9	70.3	71.3	71.5	72.1	72.7	73.2	72.4	72.6
Daily Max	72.7	72.9	72.4	73.6	74.2	74.5	73.3	70.7	70.3	71.7	71.8	72.4	72.8	74.3	73.1	73.0
Daily Min	70.6	71.0	71.4	72.3	73.1	73.4	70.9	69.3	69.7	70.4	71.2	71.4	72.0	72.8	72.3	72.4
Average	71.6	71.9	71.9	73.2	73.7	74.0	72.2	69.7	70.0	71.1	71.4	71.9	72.5	73.5	72.6	72.8

Monthly average: 72.7

No numeric temperature limitation - water temperature must not be "altered above background to such an extent that trout populations are adversely affected".

Johnson Falls Tailwater Temperature Summary - July 2021

Time HHMMSS	07/17/21	07/18/21	07/19/21	07/20/21	07/21/21	07/22/21	07/23/21	07/24/21	07/25/21	07/26/21	07/27/21	07/28/21	07/29/21	07/30/21	07/31/21
0	72.5	72.8	72.9	73.1	73.4	73.2	72.5	72.2	73.4	73.8	74.1	73.8	73.8	74.0	73.9
10000	72.5	72.8	72.9	73.1	73.4	73.3	72.5	72.1	73.5	73.7	73.9	73.8	73.9	74.0	73.8
20000	72.5	72.8	72.8	73.0	73.3	73.2	72.4	72.3	73.5	73.7	73.1	73.9	74.0	74.1	73.8
30000	72.5	72.8	72.8	73.0	73.3	73.2	72.3	72.3	73.5	73.7	73.8	74.0	74.0	74.1	73.8
40000	72.5	72.7	72.8	73.0	73.2	73.2	72.1	72.2	73.5	73.7	73.0	74.0	74.1	74.2	73.8
50000	72.5	72.7	72.7	73.0	73.2	73.1	72.0	72.3	73.5	73.6	72.9	74.0	74.1	74.1	73.8
60000	72.6	72.8	72.7	73.0	73.2	73.1	72.0	72.3	73.5	73.7	73.0	74.1	74.2	74.1	73.8
70000	72.6	72.7	72.7	73.0	73.1	73.0	71.9	72.3	73.5	73.7	72.9	74.1	74.2	74.1	73.7
80000	72.6	72.7	72.7	73.1	73.1	72.9	71.8	72.4	73.5	73.7	72.9	74.1	74.3	74.0	73.7
90000	72.6	72.8	72.8	73.1	73.1	72.9	71.7	72.5	73.6	73.7	73.0	74.1	74.3	74.0	73.7
100000	72.6	72.8	72.8	73.1	73.1	72.8	71.7	72.5	73.6	73.8	73.0	74.1	74.2	73.9	73.7
110000	72.6	72.8	72.8	73.1	73.1	72.8	71.6	72.6	73.7	73.9	73.6	74.1	74.2	73.9	73.7
120000	72.6	72.9	72.9	73.1	73.1	72.8	71.6	72.8	73.9	74.0	73.7	74.2	74.1	74.0	73.7
130000	72.7	72.9	72.9	73.1	73.1	72.8	71.6	73.0	74.0	74.2	73.7	74.3	74.0	74.0	73.6
140000	72.7	73.0	73.0	73.1	73.1	72.8	72.1	73.2	74.2	74.2	73.8	74.3	74.0	74.1	73.6
150000	73.0	73.0	73.0	73.2	73.2	72.7	72.2	73.3	74.2	74.2	73.8	74.2	73.9	74.1	73.6
160000	73.1	73.0	73.0	73.2	73.3	72.7	72.3	73.3	74.1	74.1	73.8	74.1	73.9	74.1	73.6
170000	73.1	73.0	73.0	73.4	73.3	72.7	72.6	73.3	74.1	74.0	73.8	74.0	73.8	74.1	73.6
180000	73.1	73.0	72.9	73.4	73.4	72.7	72.5	73.4	74.0	74.0	73.8	74.0	73.9	74.1	73.5
190000	73.0	73.0	72.9	73.4	73.3	72.7	72.4	73.3	73.9	74.3	74.0	73.9	73.9	74.1	73.6
200000	73.0	72.9	73.0	73.4	73.3	72.7	72.2	73.2	73.9	74.4	73.9	73.9	73.8	74.1	73.6
210000	73.0	73.0	73.0	73.3	73.3	72.6	72.2	73.2	73.9	74.3	73.8	73.8	73.9	74.1	73.6
220000	72.9	73.0	73.1	73.3	73.3	72.6	72.1	73.3	73.9	74.3	73.8	73.8	74.0	74.0	73.7
230000	72.9	72.9	73.1	73.4	73.2	72.6	72.1	73.4	73.8	74.2	73.8	73.8	74.0	73.9	73.7
Daily Max	73.1	73.0	73.1	73.4	73.4	73.3	72.6	73.4	74.2	74.4	74.1	74.3	74.3	74.2	73.9
Daily Min	72.5	72.7	72.7	73.0	73.1	72.6	71.6	72.1	73.4	73.6	72.9	73.8	73.8	73.9	73.5
Average	72.7	72.9	72.9	73.2	73.2	72.9	72.1	72.8	73.8	74.0	73.5	74.0	74.0	74.1	73.7

Johnson Falls Tailwater Temperature Summary - August 2021

Time HHMMSS	08/01/21	08/02/21	08/03/21	08/04/21	08/05/21	08/06/21	08/07/21	08/08/21	08/09/21	08/10/21	08/11/21	08/12/21	08/13/21	08/14/21	08/15/21	08/16/21
0	73.7	73.0	72.9	72.8	72.9	73.5	72.9	72.7	72.3	72.9	73.4	73.2	72.2	72.0	72.0	72.8
10000	73.7	73.0	72.9	72.8	72.9	73.5	72.9	72.7	72.3	72.9	73.5	73.2	72.2	72.0	72.1	72.8
20000	73.7	73.0	72.9	72.7	72.9	73.6	73.0	72.7	72.3	73.0	73.5	73.1	72.2	72.0	72.1	72.8
30000	73.7	73.0	73.0	72.7	72.9	73.5	72.9	72.7	72.4	73.1	73.5	73.1	72.1	72.0	72.1	72.9
40000	73.6	73.0	73.0	72.7	72.9	73.5	72.9	72.7	72.5	73.1	73.6	73.1	72.1	72.0	72.2	72.8
50000	73.5	72.9	73.0	72.7	72.9	73.5	72.9	72.6	72.5	73.2	73.7	73.1	72.1	72.0	72.2	72.9
60000	73.5	72.9	73.0	72.7	72.9	73.5	72.8	72.6	72.5	73.2	73.7	73.0	72.1	72.0	72.2	72.8
70000	73.4	72.9	73.0	72.7	72.9	73.4	72.7	72.6	72.5	73.3	73.8	73.0	72.0	71.9	72.3	72.8
80000	73.3	72.8	73.1	72.7	72.9	73.4	72.7	72.7	72.6	73.4	73.8	73.0	71.9	71.8	72.3	72.9
90000	73.2	72.8	73.1	72.7	72.9	73.4	72.6	72.7	72.6	73.5	73.9	73.0	71.9	71.8	72.3	72.9
100000	73.2	72.7	73.2	72.7	73.0	73.4	72.6	72.7	72.6	73.5	74.0	72.9	71.9	71.8	72.4	72.8
110000	73.1	72.7	73.2	72.8	73.1	73.3	72.6	72.5	72.6	73.6	74.0	72.8	72.0	71.8	72.6	72.9
120000	73.1	72.9	73.2	72.8	73.2	73.3	72.6	72.4	72.5	73.7	74.1	72.8	72.2	72.0	72.7	72.8
130000	73.1	72.9	73.2	72.8	73.2	73.2	72.6	72.4	72.6	73.7	74.1	72.7	72.2	72.1	72.9	72.9
140000	73.1	72.9	73.2	72.8	73.4	73.2	72.6	72.4	72.5	74.0	74.1	72.7	72.2	72.1	72.9	73.0
150000	73.1	72.9	73.2	72.8	73.4	73.1	72.6	72.4	72.6	74.0	74.0	72.8	72.1	72.0	72.9	73.0
160000	73.1	72.9	73.2	72.8	73.4	73.1	72.7	72.4	72.7	73.9	74.0	72.8	72.1	72.1	72.9	73.0
170000	73.1	72.8	73.3	72.8	73.3	73.0	72.7	72.2	72.7	73.7	73.9	72.8	72.0	72.0	73.0	73.1
180000	73.1	72.8	73.2	72.8	73.3	73.0	72.7	72.1	72.6	73.6	73.9	72.8	71.9	72.0	72.9	73.1
190000	73.1	72.8	73.2	72.8	73.3	73.0	72.7	72.1	72.7	73.5	73.8	72.6	71.9	72.0	72.9	73.0
200000	73.0	72.8	73.1	72.8	73.3	73.0	72.7	72.0	72.7	73.3	73.6	72.5	71.9	72.0	72.8	72.9
210000	73.1	72.7	73.0	72.8	73.4	73.0	72.7	72.1	72.7	73.4	73.5	72.4	72.0	72.0	72.7	72.8
220000	73.1	72.8	72.9	72.9	73.5	72.9	72.7	72.1	72.7	73.4	73.4	72.3	72.0	72.0	72.8	72.8
230000	73.0	72.8	72.9	72.8	73.5	72.9	72.7	72.2	72.8	73.4	73.3	72.3	72.0	72.1	72.7	72.9
Daily Max	73.7	73.0	73.3	72.9	73.5	73.6	73.0	72.7	72.8	74.0	74.1	73.2	72.2	72.1	73.0	73.1
Daily Min	73.0	72.7	72.9	72.7	72.9	72.9	72.6	72.0	72.3	72.9	73.3	72.3	71.9	71.8	72.0	72.8
Average	73.3	72.9	73.1	72.8	73.1	73.3	72.7	72.4	72.6	73.4	73.8	72.8	72.0	72.0	72.5	72.9

Monthly average: 73.1

No numeric temperature limitation - water temperature must not be "altered above background to such an extent that trout populations are adversely affected".

Johnson Falls Tailwater Temperature Summary - August 2021

Time HHMMSS	08/17/21	08/18/21	08/19/21	08/20/21	08/21/21	08/22/21	08/23/21	08/24/21	08/25/21	08/26/21	08/27/21	08/28/21	08/29/21	08/30/21	08/31/21
0	72.8	73.1	72.9	73.2	73.9	74.3	73.1	73.4	73.4	73.2	73.8	73.0	72.9	73.7	73.2
10000	72.8	73.0	72.9	73.2	74.0	74.4	73.1	73.4	73.4	73.3	73.8	72.9	73.0	73.7	73.1
20000	72.9	73.1	72.9	73.2	74.0	74.4	73.1	73.5	73.3	73.3	73.8	72.8	73.1	73.7	73.1
30000	72.9	73.0	72.8	73.2	73.9	74.4	73.1	73.5	73.3	73.3	73.7	72.7	73.2	73.7	73.0
40000	72.9	73.0	72.8	73.2	73.9	74.4	73.1	73.5	73.2	73.4	73.7	72.7	73.3	73.6	73.0
50000	72.9	73.1	72.7	73.2	73.9	74.3	73.0	73.5	73.2	73.5	73.7	72.6	73.3	73.6	73.0
60000	72.8	72.9	72.8	73.2	73.9	74.2	73.0	73.5	73.1	73.5	73.7	72.5	73.3	73.6	72.9
70000	72.8	73.0	72.8	73.2	73.8	74.2	73.0	73.5	73.0	73.5	73.6	72.5	73.3	73.6	72.9
80000	72.8	73.0	72.8	73.2	73.9	74.1	73.0	73.5	73.0	73.6	73.6	72.5	73.3	73.6	72.9
90000	72.8	72.9	72.9	73.2	74.0	74.0	73.0	73.5	72.9	73.6	73.6	72.5	73.4	73.6	72.9
100000	72.8	72.8	72.9	73.3	73.9	74.0	73.0	73.6	72.9	73.7	73.5	72.5	73.4	73.5	72.9
110000	72.8	72.8	72.9	73.3	73.9	74.0	73.1	73.6	72.9	73.7	73.5	72.6	73.6	73.5	72.9
120000	72.9	72.7	72.9	73.3	74.0	73.9	73.2	73.6	72.9	73.8	73.5	72.6	73.7	73.5	72.9
130000	72.9	72.7	72.9	73.3	74.0	73.8	73.1	73.6	72.9	73.8	73.4	72.6	73.8	73.4	72.8
140000	72.9	72.7	72.9	73.2	74.1	73.8	73.1	73.6	73.0	73.9	73.4	72.8	74.0	73.3	72.8
150000	72.9	72.6	72.9	73.3	74.0	73.7	73.1	73.6	72.9	74.0	73.4	72.9	73.9	73.3	72.8
160000	73.0	72.7	72.9	73.3	74.0	73.7	73.1	73.6	72.9	74.1	73.4	72.9	73.9	73.3	72.8
170000	72.9	72.7	73.0	73.4	74.1	73.6	73.1	73.6	72.9	74.2	73.3	72.9	73.9	73.2	72.9
180000	72.9	72.6	73.1	73.5	74.0	73.6	73.1	73.6	72.9	74.2	73.3	72.9	73.8	73.3	72.9
190000	72.9	72.7	73.0	73.6	74.1	73.5	73.2	73.5	72.9	74.2	73.3	72.9	73.8	73.2	72.9
200000	72.9	72.7	73.1	73.5	74.1	73.5	73.1	73.5	73.0	74.1	73.2	72.8	73.7	73.2	73.0
210000	72.9	72.8	73.2	73.7	74.2	73.4	73.2	73.5	73.0	74.0	73.2	72.8	73.7	73.2	73.0
220000	73.0	72.8	73.2	73.7	74.3	73.3	73.3	73.5	73.1	74.0	73.1	72.8	73.7	73.2	73.0
230000	73.0	72.8	73.2	73.8	74.3	73.2	73.3	73.4	73.2	73.9	73.1	72.9	73.7	73.2	73.0
Daily Max	73.0	73.1	73.2	73.8	74.3	74.4	73.3	73.6	73.4	74.2	73.8	73.0	74.0	73.7	73.2
Daily Min	72.8	72.6	72.7	73.2	73.8	73.2	73.0	73.4	72.9	73.2	73.1	72.5	72.9	73.2	72.8
Average	72.9	72.8	72.9	73.3	74.0	73.9	73.1	73.5	73.1	73.7	73.5	72.7	73.5	73.4	72.9

Johnson Falls Tailwater Temperature Summary - September 2021

Time HHMMSS	09/01/21	09/02/21	09/03/21	09/04/21	09/05/21	09/06/21	09/07/21	09/08/21	09/09/21	09/10/21	09/11/21	09/12/21	09/13/21	09/14/21	09/15/21	09/16/21
0	73.0	72.0	71.6	71.3	69.9	69.3	69.2	69.2	68.6	67.5	67.6	67.9	67.9	67.2	67.5	66.9
10000	72.9	72.0	71.5	71.3	69.9	69.3	69.2	69.2	68.5	67.5	67.5	67.9	67.8	67.2	67.5	66.9
20000	72.9	72.0	71.5	71.2	69.9	69.3	69.1	69.2	68.4	67.5	67.6	67.9	67.8	67.2	67.4	66.8
30000	72.8	71.9	71.5	71.2	69.9	69.3	69.1	69.2	68.4	67.4	67.6	67.9	67.8	67.2	67.4	66.8
40000	72.8	71.9	71.5	71.1	69.8	69.3	69.2	69.1	68.3	67.4	67.6	67.9	67.7	67.2	67.3	66.8
50000	72.7	71.9	71.5	71.0	69.8	69.3	69.2	69.1	68.2	67.4	67.6	67.9	67.7	67.2	67.3	66.7
60000	72.7	71.8	71.5	70.9	69.7	69.3	69.1	69.0	68.1	67.4	67.6	67.9	67.6	67.2	67.2	66.7
70000	72.6	71.8	71.4	70.9	69.6	69.2	69.1	68.9	68.1	67.4	67.7	67.9	67.6	67.2	67.1	66.6
80000	72.6	71.7	71.4	70.8	69.6	69.2	69.2	68.9	68.0	67.4	67.7	67.9	67.5	67.2	67.1	66.6
90000	72.6	71.7	71.4	70.7	69.6	69.2	69.1	68.8	67.9	67.4	67.8	68.0	67.4	67.4	67.0	66.6
100000	72.6	71.8	71.4	70.6	69.5	69.1	69.1	68.8	67.9	67.4	67.9	68.0	67.4	67.4	67.1	66.6
110000	72.5	71.7	71.4	70.5	69.5	69.2	69.2	68.8	67.8	67.4	67.9	68.0	67.3	67.4	67.2	66.7
120000	72.3	71.7	71.3	70.4	69.4	69.1	69.3	68.8	67.7	67.5	68.0	68.0	67.2	67.3	67.2	66.8
130000	72.1	71.6	71.4	70.4	69.4	69.1	69.2	68.8	67.7	67.6	68.1	67.9	67.1	67.4	67.3	66.9
140000	72.0	71.5	71.4	70.3	69.4	69.1	69.2	68.8	67.7	67.6	68.1	67.9	67.1	67.3	67.2	67.1
150000	72.0	71.5	71.4	70.2	69.4	69.2	69.2	68.7	67.6	67.6	67.9	68.0	67.2	67.4	67.2	67.2
160000	72.0	71.6	71.4	70.2	69.5	69.1	69.3	68.7	67.6	67.7	67.9	68.0	67.3	67.4	67.2	67.3
170000	72.1	71.6	71.4	70.1	69.4	69.1	69.2	68.7	67.6	67.7	67.8	68.0	67.3	67.4	67.2	67.2
180000	72.1	71.6	71.4	70.1	69.4	69.1	69.2	68.7	67.5	67.6	67.8	68.0	67.3	67.4	67.1	67.2
190000	72.1	71.7	71.4	70.0	69.3	69.1	69.2	68.7	67.5	67.6	67.8	68.0	67.4	67.4	67.1	67.1
200000	72.1	71.7	71.4	70.0	69.3	69.1	69.3	68.7	67.6	67.6	67.8	68.0	67.3	67.4	67.0	67.1
210000	72.1	71.6	71.3	70.0	69.3	69.1	69.2	68.7	67.6	67.6	67.8	68.0	67.3	67.4	67.0	67.0
220000	72.1	71.6	71.3	70.0	69.3	69.1	69.2	68.7	67.5	67.5	67.8	67.9	67.3	67.5	67.0	66.9
230000	72.1	71.6	71.3	69.9	69.3	69.1	69.2	68.6	67.5	67.5	67.9	67.9	67.3	67.5	66.9	66.8
Daily Max	73.0	72.0	71.6	71.3	69.9	69.3	69.3	69.2	68.6	67.7	68.1	68.0	67.9	67.5	67.5	67.3
Daily Min	72.0	71.5	71.3	69.9	69.3	69.1	69.1	68.6	67.5	67.4	67.5	67.9	67.1	67.2	66.9	66.6
Average	72.4	71.7	71.4	70.5	69.6	69.2	69.2	68.9	67.9	67.5	67.8	67.9	67.4	67.3	67.2	66.9

Monthly average: 66.9

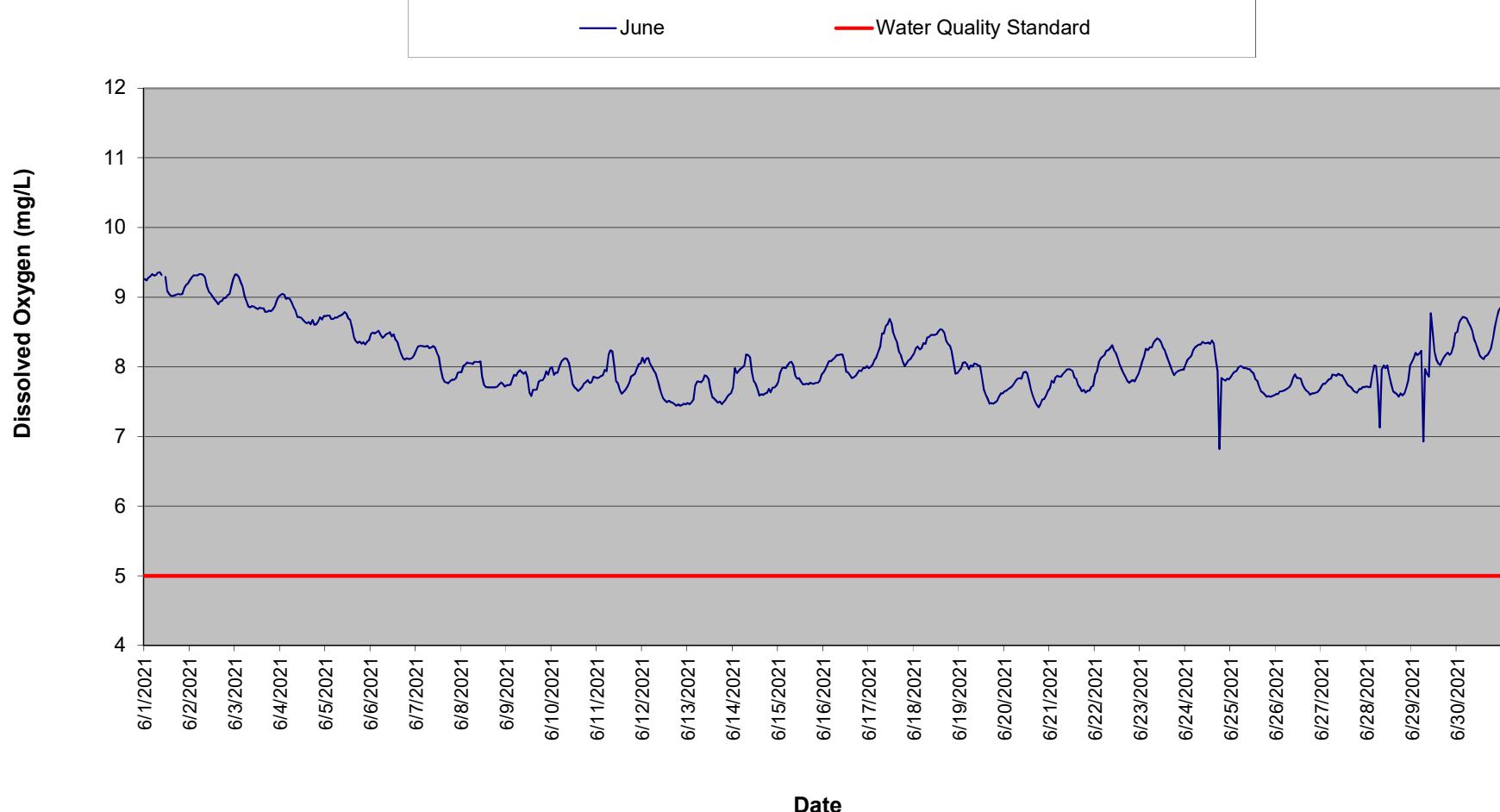
No numeric temperature limitation - water temperature must not be "altered above background to such an extent that trout populations are adversely affected".

Johnson Falls Tailwater Temperature Summary - September 2021

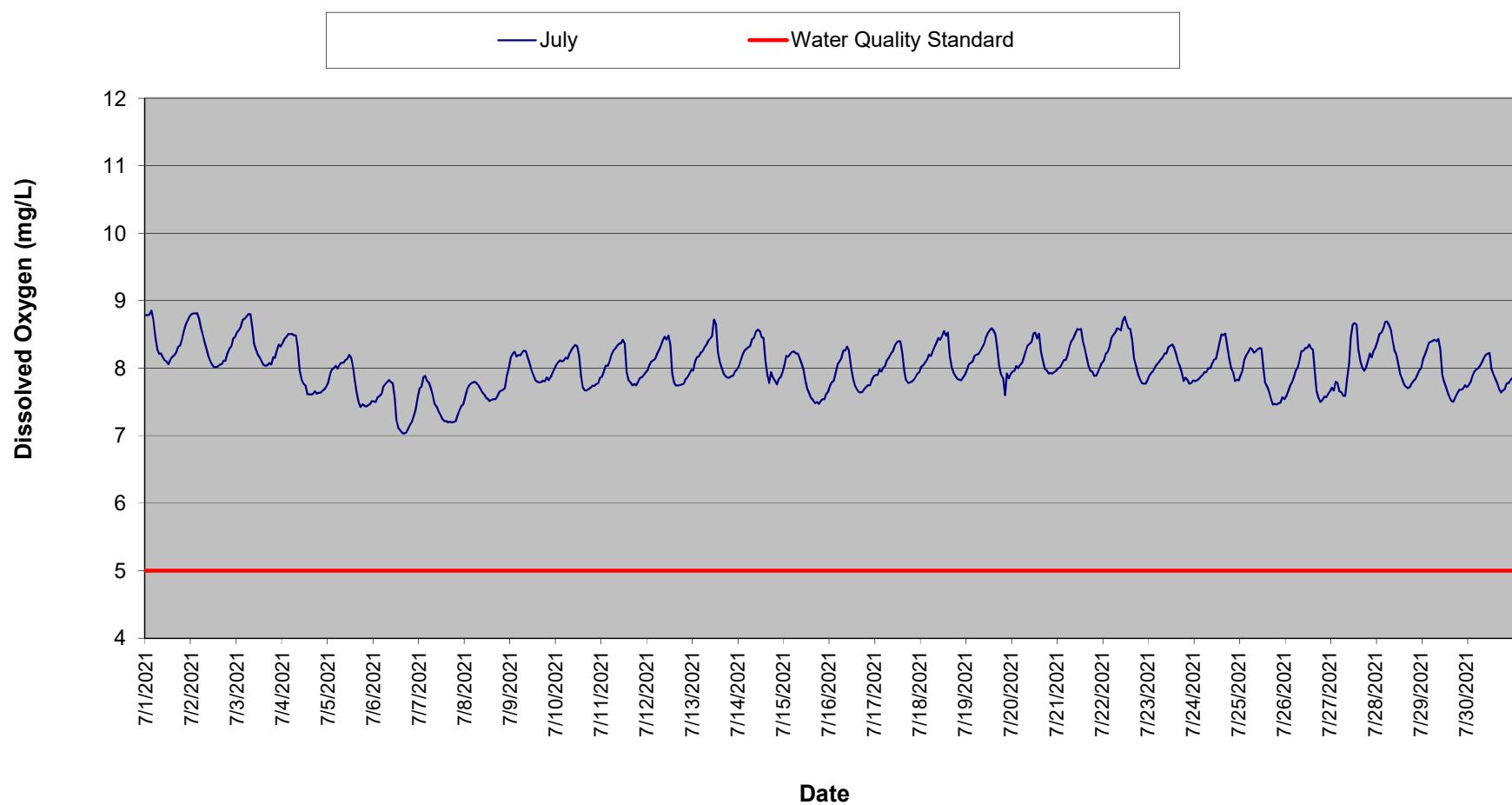
Time HHMMSS	09/17/21	09/18/21	09/19/21	09/20/21	09/21/21	09/22/21	09/23/21	09/24/21	09/25/21	09/26/21	09/27/21	09/28/21	09/29/21	09/30/21
0	66.7	66.5	66.1	66.5	67.4	67.0	65.8	64.4	63.6	63.0	62.4	62.4	62.8	62.6
10000	66.7	66.5	66.1	66.5	67.4	67.0	65.7	64.3	63.6	63.0	62.3	62.5	62.7	62.6
20000	66.7	66.5	66.0	66.5	67.3	66.9	65.6	64.3	63.6	62.9	62.3	62.5	62.7	62.5
30000	66.6	66.4	66.0	66.6	67.3	66.9	65.6	64.3	63.6	62.9	62.3	62.5	62.7	62.5
40000	66.5	66.4	66.0	66.6	67.2	66.8	65.5	64.2	63.6	62.8	62.3	62.5	62.7	62.5
50000	66.5	66.3	66.0	66.6	67.2	66.7	65.4	64.1	63.6	62.8	62.2	62.4	62.7	62.5
60000	66.4	66.2	65.9	66.6	67.1	66.7	65.3	64.0	63.5	62.7	62.2	62.4	62.7	62.5
70000	66.4	66.1	65.9	66.7	67.1	66.6	65.2	64.0	63.4	62.6	62.1	62.3	62.6	62.5
80000	66.3	66.1	65.9	66.7	67.0	66.5	65.1	63.9	63.4	62.6	62.0	62.2	62.5	62.5
90000	66.4	66.1	66.0	66.7	67.0	66.5	65.0	63.9	63.3	62.6	62.0	62.2	62.5	62.5
100000	66.4	66.1	66.1	66.8	67.0	66.5	64.8	63.8	63.3	62.5	62.0	62.2	62.4	62.6
110000	66.5	66.1	66.2	66.9	66.4	64.7	63.8	63.2	62.6	62.0	62.2	62.4	62.6	
120000	66.7	66.1	66.3	67.0	67.0	66.3	64.6	63.8	63.3	62.6	61.9	62.3	62.3	62.5
130000	66.7	66.1	66.5	67.1	67.0	66.2	64.5	63.8	63.3	62.6	61.9	62.5	62.4	62.6
140000	66.7	66.2	66.7	67.1	66.9	66.1	64.4	63.9	63.3	62.6	62.0	62.7	62.5	62.8
150000	66.6	66.2	66.7	67.2	66.9	66.0	64.4	64.0	63.3	62.6	62.0	62.7	62.6	62.8
160000	66.5	66.2	66.8	67.2	66.9	65.9	64.3	64.1	63.4	62.6	62.0	62.8	62.7	62.8
170000	66.5	66.2	66.7	67.2	66.9	65.9	64.3	64.0	63.4	62.6	62.1	62.9	62.6	62.9
180000	66.5	66.2	66.6	67.3	67.0	65.9	64.3	63.9	63.3	62.6	62.2	62.9	62.6	62.9
190000	66.5	66.2	66.5	67.3	67.0	65.9	64.4	63.9	63.2	62.5	62.2	62.9	62.6	62.9
200000	66.5	66.2	66.5	67.3	67.0	65.9	64.4	63.9	63.2	62.5	62.3	62.9	62.6	62.9
210000	66.5	66.1	66.4	67.2	67.0	65.9	64.4	63.8	63.1	62.5	62.3	62.8	62.6	62.8
220000	66.5	66.1	66.4	67.3	67.0	65.9	64.4	63.7	63.1	62.4	62.4	62.8	62.6	62.8
230000	66.5	66.1	66.4	67.4	67.0	65.8	64.4	63.7	63.1	62.4	62.4	62.8	62.6	62.8
Daily Max	66.7	66.5	66.8	67.4	67.4	67.0	65.8	64.4	63.6	63.0	62.4	62.9	62.8	62.9
Daily Min	66.3	66.1	65.9	66.5	66.9	65.8	64.3	63.7	63.1	62.4	61.9	62.2	62.3	62.5
Average	66.5	66.2	66.3	66.9	67.1	66.3	64.8	64.0	63.4	62.6	62.2	62.6	62.6	62.7

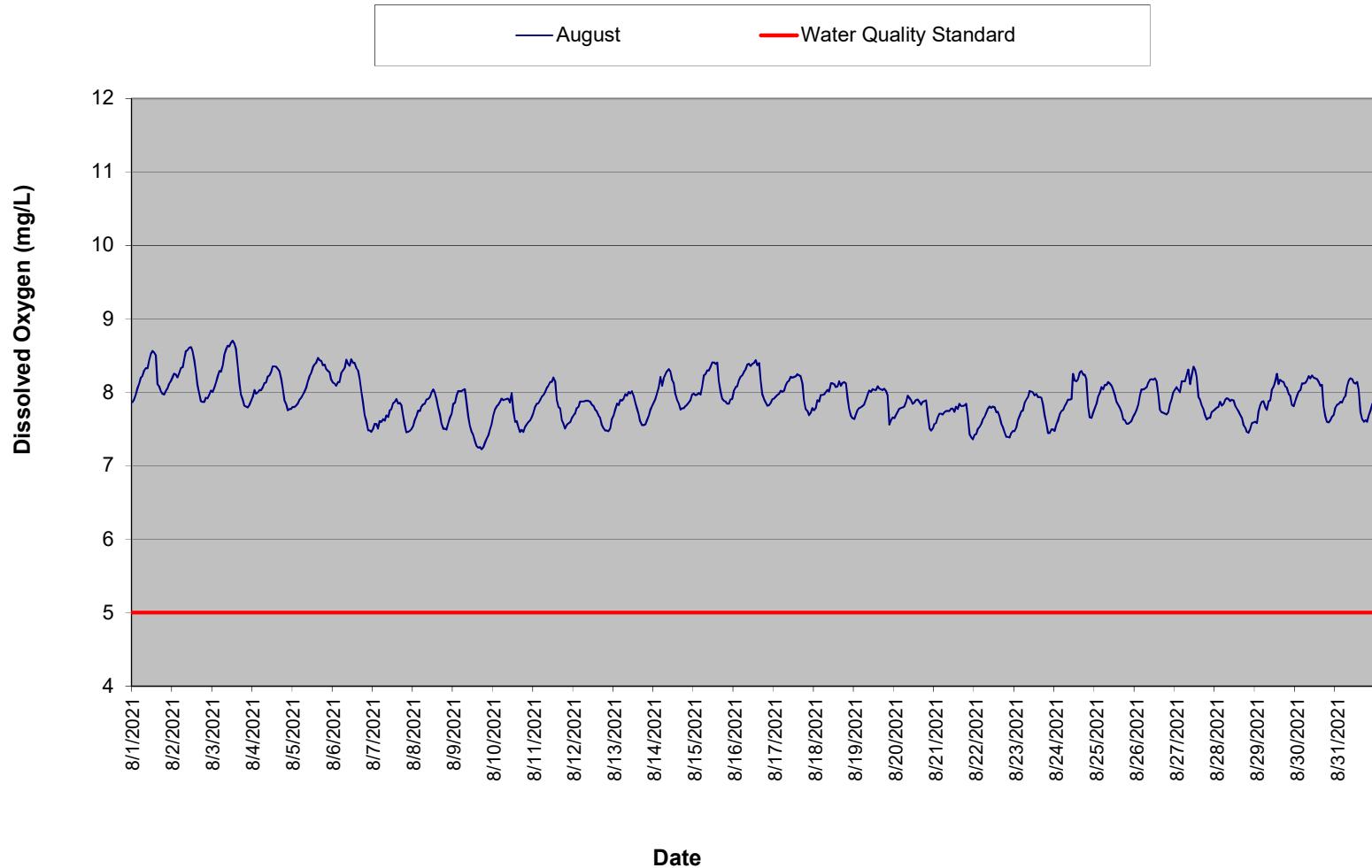
[REDACTED] Missign data due to equipment maintenance

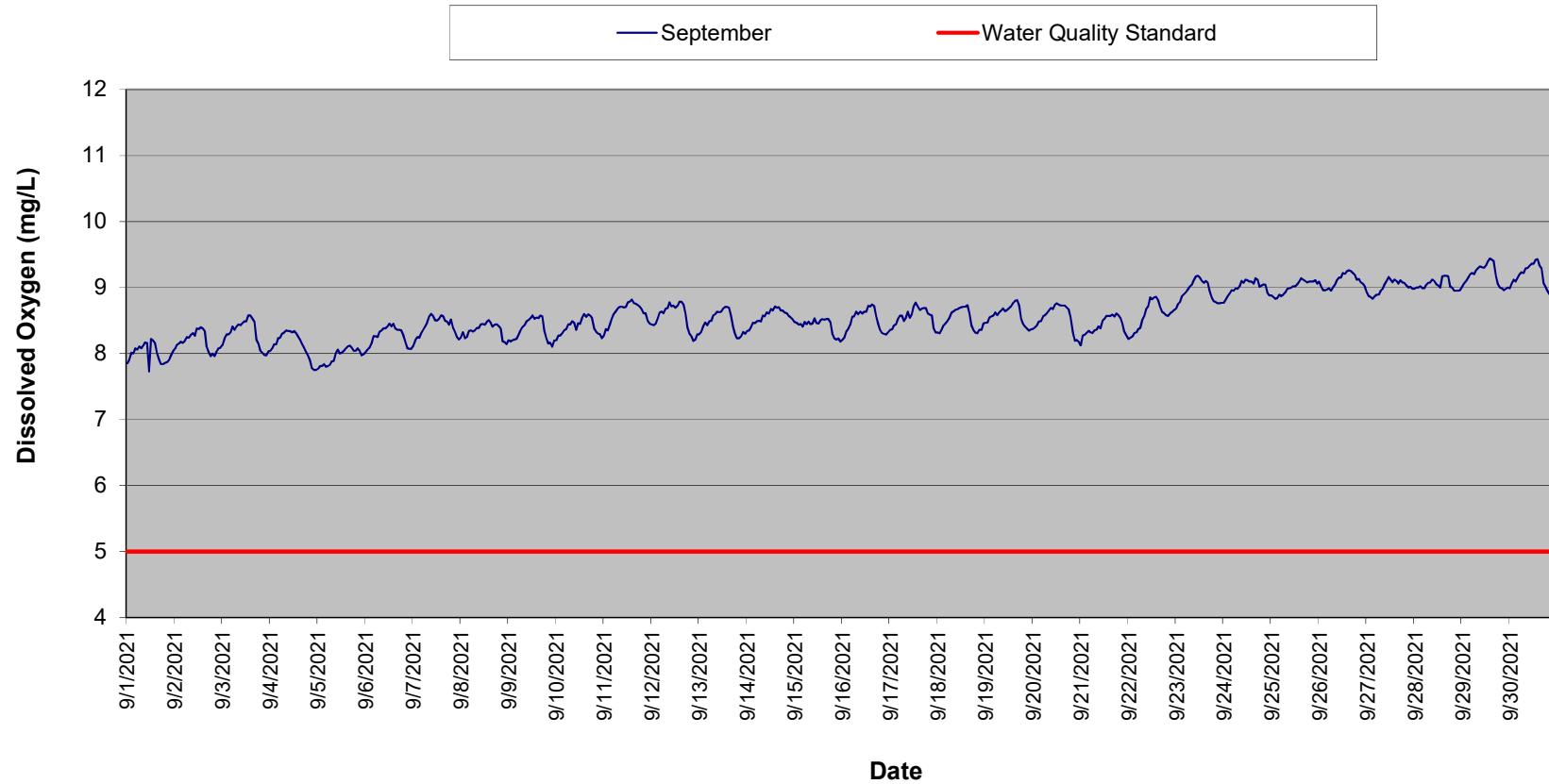
Sandstone Rapids Hydroelectric Project (FERC No. 2546)

Sandstone Rapids Dissolved Oxygen Summary - June 2021

Sandstone Rapids Dissolved Oxygen Summary - July 2021



Sandstone Rapids Dissolved Oxygen Summary - August 2021

Sandstone Rapids Dissolved Oxygen Summary - September 2021

Sandstone Rapids Dissolved Oxygen Summary - June 2021

Time HHMMSS	06/01/21	06/02/21	06/03/21	06/04/21	06/05/21	06/06/21	06/07/21	06/08/21	06/09/21	06/10/21	06/11/21	06/12/21	06/13/21	06/14/21	06/15/21	06/16/21
0	9.3	9.2	9.3	9.0	8.7	8.5	8.2	7.9	7.7	8.0	7.8	8.1	7.5	7.7	7.8	7.9
10000	9.2	9.3	9.3	9.0	8.7	8.5	8.3	8.0	7.7	7.9	7.8	8.1	7.5	8.0	7.9	8.0
20000	9.3	9.3	9.3	9.0	8.7	8.5	8.3	8.0	7.7	7.9	7.9	8.1	7.5	7.9	8.0	8.0
30000	9.3	9.3	9.2	9.0	8.7	8.5	8.3	8.1	7.8	7.9	7.9	8.1	7.5	7.9	8.0	8.1
40000	9.3	9.3	9.2	9.0	8.7	8.5	8.3	8.1	7.9	8.0	8.0	8.0	7.7	8.0	8.0	8.1
50000	9.3	9.3	9.0	9.0	8.7	8.5	8.3	8.1	7.9	8.1	7.9	8.0	7.8	8.0	8.0	8.1
60000	9.3	9.3	8.9	8.9	8.7	8.4	8.3	8.0	7.9	8.1	8.2	7.9	7.8	8.0	8.1	8.1
70000	9.4	9.3	8.9	8.9	8.7	8.4	8.3	8.1	8.0	8.1	8.2	7.9	7.8	8.2	8.1	8.2
80000	9.4	9.3	8.9	8.8	8.7	8.5	8.3	8.1	7.9	8.1	8.2	7.8	7.8	8.2	8.0	8.2
90000	9.3	9.2	8.9	8.7	8.8	8.5	8.3	8.1	7.9	8.1	8.0	7.7	7.9	8.1	7.9	8.2
100000	9.1	8.9	8.7	8.8	8.5	8.3	8.1	7.9	7.9	7.9	7.8	7.6	7.9	7.9	7.8	8.2
110000	9.3	9.1	8.8	8.7	8.8	8.4	8.2	7.9	7.9	7.8	7.8	7.5	7.8	7.8	7.8	8.1
120000	9.1	9.0	8.8	8.7	8.7	8.5	8.1	7.7	7.6	7.7	7.7	7.5	7.7	7.8	7.8	7.9
130000	9.0	9.0	8.9	8.6	8.7	8.4	8.0	7.7	7.6	7.7	7.6	7.5	7.6	7.7	7.8	7.9
140000	9.0	8.9	8.8	8.6	8.6	8.4	7.8	7.7	7.7	7.7	7.6	7.5	7.5	7.6	7.8	7.9
150000	9.0	8.9	8.8	8.6	8.4	8.3	7.8	7.7	7.7	7.7	7.7	7.5	7.5	7.6	7.8	7.8
160000	9.0	8.9	8.8	8.6	8.4	8.2	7.8	7.7	7.7	7.7	7.7	7.5	7.5	7.6	7.8	7.9
170000	9.0	8.9	8.8	8.7	8.3	8.1	7.8	7.7	7.8	7.8	7.8	7.5	7.5	7.6	7.8	7.9
180000	9.0	9.0	8.8	8.6	8.4	8.1	7.8	7.7	7.8	7.8	7.9	7.4	7.5	7.6	7.8	7.9
190000	9.0	9.0	8.8	8.6	8.3	8.1	7.8	7.7	7.8	7.8	7.9	7.5	7.5	7.7	7.8	8.0
200000	9.0	9.0	8.8	8.7	8.4	8.1	7.8	7.7	7.8	7.8	7.9	7.4	7.5	7.6	7.8	7.9
210000	9.1	9.0	8.9	8.7	8.3	8.1	7.8	7.8	7.9	7.8	8.0	7.5	7.6	7.7	7.8	8.0
220000	9.2	9.2	8.9	8.7	8.4	8.1	7.9	7.8	7.9	7.9	8.0	7.5	7.6	7.7	7.8	8.0
230000	9.2	9.3	9.0	8.7	8.4	8.2	7.9	7.7	8.0	7.8	8.0	7.5	7.6	7.7	7.9	8.0
Daily Max	9.4	9.3	9.3	9.0	8.8	8.5	8.3	8.1	8.0	8.1	8.2	8.1	7.9	8.2	8.1	8.2
Daily Min	9.0	8.9	8.8	8.6	8.3	8.1	7.8	7.7	7.6	7.7	7.6	7.4	7.5	7.6	7.8	7.8
Average	9.2	9.1	8.9	8.8	8.6	8.3	8.1	7.9	7.8	7.9	7.9	7.7	7.6	7.8	7.9	8.0

License Minimum Dissolved Oxygen: 5.0 mg/l

[REDACTED] Missing data due to equipment maintenance

Sandstone Rapids Dissolved Oxygen Summary - June 2021

Time HHMMSS	06/17/21	06/18/21	06/19/21	06/20/21	06/21/21	06/22/21	06/23/21	06/24/21	06/25/21	06/26/21	06/27/21	06/28/21	06/29/21	06/30/21
0	8.0	8.2	8.0	7.7	7.7	7.9	8.0	8.0	7.9	7.6	7.7	7.7	8.1	8.5
10000	8.0	8.3	8.0	7.7	7.8	7.9	8.1	8.1	7.9	7.6	7.8	7.7	8.1	8.6
20000	8.0	8.3	8.1	7.7	7.8	8.1	8.2	8.1	7.9	7.7	7.8	7.7	8.2	8.7
30000	8.1	8.3	8.1	7.7	7.9	8.1	8.3	8.2	7.9	7.7	7.8	7.9	8.2	8.7
40000	8.1	8.3	8.0	7.7	7.9	8.2	8.2	8.2	8.0	7.7	7.8	8.0	8.2	8.7
50000	8.2	8.3	8.0	7.8	7.9	8.2	8.3	8.3	8.0	7.7	7.8	8.0	8.2	8.7
60000	8.3	8.3	8.0	7.8	7.9	8.2	8.3	8.3	8.0	7.7	7.9	7.7	6.9	8.6
70000	8.5	8.4	8.0	7.8	7.9	8.2	8.4	8.3	8.0	7.7	7.9	7.1	8.0	8.6
80000	8.5	8.4	8.1	7.8	7.9	8.3	8.4	8.3	8.0	7.8	7.9	8.0	7.9	8.5
90000	8.6	8.5	8.0	7.8	8.0	8.3	8.4	8.4	8.0	7.8	7.9	8.0	7.9	8.4
100000	8.6	8.5	8.0	7.9	8.0	8.2	8.4	8.3	8.0	7.9	7.9	8.0	8.8	8.3
110000	8.7	8.5	8.0	7.9	8.0	8.2	8.4	8.3	7.9	7.8	7.9	8.0	8.5	8.2
120000	8.6	8.5	7.9	7.9	7.9	8.1	8.3	8.4	7.9	7.8	7.8	7.9	8.2	8.2
130000	8.5	8.5	7.7	7.8	7.9	8.0	8.2	8.3	7.8	7.8	7.8	7.8	8.1	8.1
140000	8.4	8.5	7.6	7.7	7.8	8.0	8.2	8.4	7.8	7.8	7.7	7.7	8.0	8.1
150000	8.4	8.5	7.6	7.6	7.7	7.9	8.1	8.3	7.7	7.7	7.7	7.6	8.0	8.2
160000	8.2	8.5	7.5	7.5	7.7	7.9	8.0	8.1	7.7	7.7	7.7	7.6	8.1	8.2
170000	8.2	8.4	7.5	7.5	7.7	7.8	7.9	7.9	7.6	7.6	7.7	7.6	8.1	8.2
180000	8.1	8.3	7.5	7.4	7.7	7.8	7.9	6.8	7.6	7.6	7.6	7.6	8.2	8.3
190000	8.0	8.3	7.5	7.5	7.6	7.8	7.9	7.8	7.6	7.6	7.6	7.6	8.2	8.4
200000	8.1	8.2	7.5	7.5	7.7	7.8	7.9	7.8	7.6	7.6	7.7	7.6	8.2	8.6
210000	8.1	8.0	7.6	7.5	7.7	7.8	8.0	7.8	7.6	7.6	7.7	7.7	8.2	8.7
220000	8.1	7.9	7.6	7.6	7.7	7.9	8.0	7.8	7.6	7.6	7.7	7.8	8.3	8.8
230000	8.2	7.9	7.6	7.7	7.7	7.9	8.0	7.8	7.6	7.7	7.7	8.0	8.5	8.8
Daily Max	8.7	8.5	8.1	7.9	8.0	8.3	8.4	8.4	8.0	7.9	7.9	8.0	8.8	8.8
Daily Min	8.0	7.9	7.5	7.4	7.6	7.8	7.9	6.8	7.6	7.6	7.6	7.1	6.9	8.1
Average	8.3	8.3	7.8	7.7	7.8	8.0	8.1	8.1	7.8	7.7	7.8	7.8	8.1	8.5

Sandstone Rapids Dissolved Oxygen Summary - July 2021

Time HHMMSS	07/01/21	07/02/21	07/03/21	07/04/21	07/05/21	07/06/21	07/07/21	07/08/21	07/09/21	07/10/21	07/11/21	07/12/21	07/13/21	07/14/21	07/15/21	07/16/21
0	8.8	8.8	8.5	8.4	7.8	7.5	7.7	7.6	8.2	8.1	7.9	8.0	8.0	8.0	8.0	7.7
10000	8.8	8.8	8.6	8.4	7.9	7.5	7.7	7.7	8.2	8.1	7.9	8.1	8.1	8.1	8.2	7.8
20000	8.8	8.8	8.6	8.5	8.0	7.6	7.9	7.7	8.2	8.1	8.0	8.1	8.2	8.2	8.2	7.8
30000	8.9	8.8	8.7	8.5	8.0	7.6	7.9	7.8	8.2	8.1	8.0	8.1	8.2	8.3	8.2	7.9
40000	8.7	8.7	8.7	8.5	8.0	7.6	7.8	7.8	8.2	8.1	8.1	8.1	8.2	8.3	8.2	8.1
50000	8.5	8.6	8.8	8.5	8.0	7.7	7.8	7.8	8.2	8.2	8.2	8.2	8.3	8.3	8.3	8.1
60000	8.3	8.5	8.8	8.5	8.1	7.8	7.7	7.8	8.2	8.1	8.3	8.3	8.3	8.3	8.2	8.2
70000	8.2	8.4	8.8	8.5	8.1	7.8	7.6	7.7	8.3	8.2	8.3	8.3	8.4	8.4	8.2	8.3
80000	8.2	8.3	8.6	8.3	8.1	7.8	7.5	7.7	8.3	8.3	8.3	8.4	8.4	8.5	8.2	8.3
90000	8.2	8.2	8.4	8.0	8.1	7.8	7.4	7.6	8.2	8.3	8.4	8.5	8.4	8.5	8.1	8.3
100000	8.1	8.1	8.3	7.8	8.1	7.8	7.4	7.6	8.1	8.3	8.4	8.4	8.5	8.6	8.0	8.3
110000	8.1	8.0	8.2	7.8	8.2	7.6	7.3	7.6	8.0	8.3	8.4	8.5	8.7	8.6	7.8	8.0
120000	8.1	8.0	8.2	7.7	8.2	7.2	7.2	7.5	7.9	8.2	8.4	8.3	8.7	8.5	7.7	7.9
130000	8.1	8.0	8.1	7.6	8.0	7.1	7.2	7.5	7.8	7.9	7.9	7.9	8.2	8.5	7.6	7.8
140000	8.2	8.0	8.0	7.6	7.8	7.1	7.2	7.5	7.8	7.7	7.8	7.8	8.1	8.1	7.6	7.7
150000	8.2	8.1	8.0	7.6	7.6	7.0	7.2	7.5	7.8	7.7	7.8	7.7	8.0	7.9	7.5	7.7
160000	8.2	8.1	8.0	7.6	7.5	7.0	7.2	7.5	7.8	7.7	7.7	7.7	7.9	7.8	7.5	7.6
170000	8.3	8.1	8.1	7.7	7.4	7.1	7.2	7.6	7.8	7.7	7.8	7.8	7.9	7.9	7.5	7.7
180000	8.3	8.1	8.1	7.6	7.5	7.1	7.2	7.6	7.8	7.7	7.7	7.8	7.9	7.9	7.5	7.7
190000	8.4	8.2	8.2	7.6	7.4	7.2	7.2	7.7	7.9	7.7	7.8	7.8	7.9	7.8	7.5	7.7
200000	8.5	8.3	8.2	7.6	7.4	7.2	7.3	7.7	7.8	7.7	7.9	7.8	7.9	7.8	7.5	7.8
210000	8.6	8.3	8.3	7.7	7.5	7.3	7.4	7.7	7.9	7.8	7.9	7.9	7.9	7.8	7.5	7.8
220000	8.7	8.4	8.4	7.7	7.5	7.4	7.4	7.9	7.9	7.8	7.9	7.9	8.0	7.9	7.6	7.8
230000	8.8	8.5	8.3	7.7	7.5	7.6	7.5	8.0	8.0	7.9	7.9	8.0	8.0	7.9	7.7	7.9
Daily Max	8.9	8.8	8.8	8.5	8.2	7.8	7.9	8.0	8.3	8.3	8.4	8.5	8.7	8.6	8.3	8.3
Daily Min	8.1	8.0	8.0	7.6	7.4	7.0	7.2	7.5	7.8	7.7	7.7	7.7	7.9	7.8	7.5	7.6
Average	8.4	8.3	8.4	8.0	7.8	7.4	7.5	7.7	8.0	8.0	8.0	8.1	8.2	8.2	7.8	7.9

License Minimum Dissolved Oxygen: 5.0 mg/l

Sandstone Rapids Dissolved Oxygen Summary - July 2021

Time HHMMSS	07/17/21	07/18/21	07/19/21	07/20/21	07/21/21	07/22/21	07/23/21	07/24/21	07/25/21	07/26/21	07/27/21	07/28/21	07/29/21	07/30/21	07/31/21
0	7.9	8.0	8.0	8.0	8.0	8.1	7.9	7.8	7.9	7.6	7.7	8.4	8.1	7.7	7.8
10000	7.9	8.0	8.1	8.0	8.0	8.2	7.9	7.8	8.0	7.7	7.7	8.5	8.2	7.8	7.9
20000	8.0	8.1	8.1	8.0	8.1	8.2	8.0	7.8	8.1	7.7	7.8	8.5	8.3	7.9	7.9
30000	8.0	8.1	8.1	8.0	8.1	8.3	8.0	7.9	8.2	7.8	7.8	8.6	8.4	8.0	7.9
40000	8.0	8.2	8.2	8.1	8.1	8.4	8.1	7.9	8.2	7.9	7.7	8.7	8.4	8.0	8.0
50000	8.0	8.2	8.2	8.1	8.2	8.5	8.1	7.9	8.3	8.0	7.6	8.7	8.4	8.0	8.1
60000	8.1	8.3	8.2	8.2	8.3	8.5	8.1	7.9	8.3	8.0	7.6	8.6	8.4	8.0	8.1
70000	8.2	8.3	8.3	8.3	8.4	8.6	8.2	8.0	8.2	8.1	7.6	8.6	8.4	8.1	8.1
80000	8.2	0.0	8.3	8.3	8.4	8.6	8.2	8.0	8.3	8.3	7.9	8.4	8.4	8.1	8.2
90000	8.3	8.5	8.4	8.4	8.5	8.6	8.2	8.1	8.3	8.3	8.1	8.3	8.3	8.2	8.2
100000	8.3	8.4	8.5	8.4	8.6	8.7	8.3	8.1	8.3	8.3	8.5	8.2	7.9	8.2	8.3
110000	8.4	8.5	8.5	8.5	8.6	8.8	8.3	8.1	8.3	8.3	8.6	8.0	7.8	8.2	8.3
120000	8.4	8.6	8.6	8.5	8.6	8.7	8.4	8.3	8.0	8.4	8.7	7.9	7.7	8.0	8.4
130000	8.4	8.5	8.6	8.4	8.4	8.6	8.3	8.4	7.8	8.3	8.6	7.8	7.6	7.9	8.4
140000	8.2	8.5	8.6	8.5	8.3	8.6	8.2	8.5	7.7	8.3	8.3	7.8	7.6	7.8	8.4
150000	8.0	8.2	8.5	8.2	8.2	8.4	8.1	8.5	7.7	8.0	8.1	7.7	7.5	7.8	8.5
160000	7.8	8.0	8.3	8.1	8.0	8.1	8.0	8.5	7.5	7.7	8.0	7.7	7.5	7.7	8.4
170000	7.8	7.9	8.1	8.0	8.0	8.0	7.9	8.3	7.5	7.6	8.0	7.7	7.6	7.6	8.2
180000	7.8	7.9	7.9	8.0	8.0	7.9	7.8	8.1	7.5	7.5	8.0	7.8	7.6	7.7	8.0
190000	7.8	7.8	7.9	7.9	7.9	7.8	7.9	8.0	7.5	7.5	8.1	7.8	7.7	7.7	7.9
200000	7.8	7.8	7.6	7.9	7.9	7.8	7.8	7.9	7.5	7.6	8.2	7.8	7.7	7.8	7.9
210000	7.9	7.8	7.9	7.9	8.0	7.8	7.8	7.8	7.5	7.6	8.2	7.9	7.7	7.8	7.9
220000	7.9	7.9	7.9	7.9	8.0	7.8	7.8	7.8	7.6	7.6	8.3	8.0	7.7	7.8	7.9
230000	7.9	7.9	7.9	8.0	8.1	7.8	7.8	7.8	7.5	7.7	8.3	8.0	7.7	7.9	7.8
Daily Max	8.4	8.6	8.6	8.5	8.6	8.8	8.4	8.5	8.3	8.4	8.7	8.7	8.4	8.2	8.5
Daily Min	7.8	0.0	7.6	7.9	7.9	7.8	7.8	7.8	7.5	7.5	7.6	7.7	7.5	7.6	7.8
Average	8.0	7.8	8.2	8.1	8.2	8.3	8.0	8.1	7.9	7.9	8.0	8.1	7.9	7.9	8.1

Sandstone Rapids Dissolved Oxygen Summary - August 2021

Time HHMMSS	08/01/21	08/02/21	08/03/21	08/04/21	08/05/21	08/06/21	08/07/21	08/08/21	08/09/21	08/10/21	08/11/21	08/12/21	08/13/21	08/14/21	08/15/21	08/16/21	
0	7.9	8.2	8.0	7.9	7.8	8.1	7.5	7.5	7.8	7.7	7.7	7.7	7.7	7.7	7.9	8.0	8.0
10000	7.9	8.3	8.1	8.0	7.8	8.1	7.6	7.6	7.9	7.8	7.8	7.7	7.8	7.9	7.9	8.0	8.1
20000	8.0	8.2	8.1	8.0	7.8	8.1	7.6	7.7	8.0	7.8	7.8	7.8	7.8	8.0	8.0	8.0	8.1
30000	8.1	8.2	8.2	8.0	7.8	8.1	7.5	7.7	8.0	7.8	7.9	7.8	7.8	8.1	8.0	8.0	8.2
40000	8.1	8.3	8.3	8.0	7.9	8.1	7.6	7.7	8.0	7.9	7.9	7.9	7.9	8.2	8.0	8.0	8.2
50000	8.2	8.3	8.3	8.0	7.9	8.3	7.6	7.8	8.0	7.9	7.9	7.9	7.9	8.1	8.1	8.1	8.2
60000	8.2	8.3	8.4	8.1	8.0	8.3	7.6	7.8	8.0	7.9	8.0	7.9	7.9	8.2	8.2	8.2	8.3
70000	8.3	8.5	8.5	8.1	8.0	8.3	7.6	7.8	8.0	7.9	8.0	7.9	8.0	8.2	8.2	8.2	8.3
80000	8.3	8.6	8.6	8.1	8.1	8.4	7.7	7.9	7.9	7.9	8.1	7.9	8.0	8.3	8.3	8.4	
90000	8.3	8.6	8.6	8.2	8.1	8.4	7.7	7.9	7.7	7.9	8.1	7.9	8.0	8.3	8.3	8.4	
100000	8.4	8.6	8.6	8.2	8.2	8.4	7.8	7.9	7.6	7.9	8.1	7.9	8.0	8.3	8.3	8.4	
110000	8.5	8.6	8.7	8.3	8.3	8.5	7.8	8.0	7.5	8.0	8.1	7.8	8.0	8.2	8.4	8.4	
120000	8.6	8.6	8.7	8.4	8.3	8.4	7.9	8.0	7.4	7.8	8.2	7.8	7.9	8.1	8.4	8.4	
130000	8.5	8.4	8.7	8.4	8.4	8.4	7.9	8.0	7.3	7.6	8.2	7.8	7.9	8.0	8.4	8.4	
140000	8.5	8.3	8.6	8.4	8.4	8.3	7.9	7.9	7.3	7.6	7.9	7.7	7.8	7.9	8.4	8.4	
150000	8.1	8.1	8.4	8.3	8.5	8.3	7.8	7.8	7.2	7.5	7.8	7.7	7.7	7.8	8.2	8.4	
160000	8.1	8.0	8.1	8.3	8.4	8.2	7.9	7.7	7.3	7.5	7.8	7.7	7.6	7.8	8.0	8.2	
170000	8.0	7.9	8.0	8.2	8.4	8.0	7.8	7.6	7.2	7.5	7.6	7.6	7.6	7.8	7.9	8.0	
180000	8.0	7.9	7.9	8.0	8.4	7.9	7.7	7.5	7.3	7.5	7.6	7.5	7.6	7.8	7.9	7.9	
190000	8.0	7.9	7.8	7.9	8.4	7.7	7.6	7.5	7.3	7.5	7.5	7.5	7.6	7.8	7.9	7.9	
200000	8.0	7.9	7.8	7.8	8.3	7.6	7.5	7.5	7.4	7.6	7.6	7.5	7.6	7.8	7.8	7.8	
210000	8.1	7.9	7.8	7.8	8.3	7.5	7.5	7.6	7.4	7.6	7.6	7.5	7.7	7.9	7.8	7.8	
220000	8.1	8.0	7.8	7.8	8.3	7.5	7.5	7.7	7.5	7.6	7.6	7.5	7.8	7.9	7.9	7.9	
230000	8.2	8.0	7.9	7.8	8.2	7.5	7.5	7.7	7.6	7.7	7.6	7.6	7.8	8.0	7.9	7.9	
Daily Max	8.6	8.6	8.7	8.4	8.5	8.5	7.9	8.0	8.0	8.0	8.2	7.9	8.0	8.3	8.4	8.4	
Daily Min	7.9	7.9	7.8	7.8	7.8	7.5	7.5	7.5	7.2	7.5	7.5	7.5	7.6	7.8	7.8	7.8	
Average	8.2	8.2	8.2	8.1	8.2	8.1	7.7	7.8	7.6	7.7	7.8	7.7	7.8	8.0	8.1	8.2	

License Minimum Dissolved Oxygen: 5.0 mg/l

Sandstone Rapids Dissolved Oxygen Summary - August 2021

Time HHMMSS	08/17/21	08/18/21	08/19/21	08/20/21	08/21/21	08/22/21	08/23/21	08/24/21	08/25/21	08/26/21	08/27/21	08/28/21	08/29/21	08/30/21	08/31/21
0	7.9	7.8	7.6	7.6	7.6	7.4	7.5	7.5	7.8	7.7	8.0	7.8	7.6	7.9	7.8
10000	7.9	7.8	7.7	7.7	7.6	7.4	7.5	7.6	7.8	7.8	8.1	7.8	7.6	8.0	7.8
20000	8.0	7.9	7.8	7.7	7.7	7.5	7.6	7.6	7.9	7.8	8.0	7.8	7.7	8.0	7.8
30000	8.0	7.9	7.8	7.8	7.7	7.5	7.7	7.7	8.0	8.0	8.0	7.9	7.8	8.0	7.9
40000	8.0	8.0	7.8	7.8	7.7	7.6	7.7	7.7	8.1	8.0	8.2	7.8	7.9	8.1	7.9
50000	8.0	8.0	7.8	7.8	7.7	7.6	7.8	7.8	8.0	8.0	8.2	7.8	7.9	8.1	7.9
60000	8.0	8.0	7.8	7.8	7.7	7.7	7.9	7.8	8.1	8.1	8.2	7.9	7.8	8.1	8.0
70000	8.1	8.0	7.9	7.9	7.7	7.7	7.9	7.9	8.1	8.1	8.2	7.9	7.8	8.2	8.1
80000	8.1	8.0	8.0	8.0	7.7	7.8	7.9	7.9	8.1	8.1	8.3	7.9	7.9	8.2	8.2
90000	8.2	8.0	8.0	7.9	7.7	7.8	8.0	7.9	8.1	8.2	8.1	7.9	7.9	8.2	8.2
100000	8.2	8.1	8.0	7.9	7.8	7.8	8.0	7.9	8.1	8.2	8.2	7.9	8.0	8.2	8.2
110000	8.2	8.1	8.0	7.8	7.8	7.8	8.0	8.3	8.0	8.2	8.4	7.9	8.1	8.2	8.1
120000	8.2	8.1	8.0	7.9	7.7	7.8	8.0	8.2	8.0	8.2	8.3	7.8	8.2	8.2	8.1
130000	8.2	8.1	8.0	7.9	7.8	7.7	8.0	8.2	7.9	8.2	8.2	7.8	8.3	8.2	8.1
140000	8.2	8.1	8.1	7.9	7.8	7.7	7.9	8.2	7.8	8.0	7.9	7.7	8.1	8.1	8.0
150000	8.2	8.1	8.1	7.9	7.8	7.7	7.9	8.3	7.8	7.8	7.9	7.7	8.2	8.1	7.7
160000	8.2	8.1	8.0	7.8	7.8	7.6	7.9	8.3	7.7	7.7	7.8	7.7	8.2	8.1	7.6
170000	8.1	8.1	8.0	7.9	7.8	7.5	7.8	8.2	7.6	7.7	7.8	7.6	8.1	7.8	7.6
180000	7.9	8.1	8.1	7.9	7.8	7.5	7.7	8.2	7.6	7.7	7.7	7.5	8.1	7.7	7.6
190000	7.8	8.1	8.0	7.9	7.8	7.4	7.6	8.2	7.6	7.7	7.6	7.5	8.1	7.6	7.6
200000	7.7	7.9	8.0	7.7	7.7	7.4	7.4	7.8	7.6	7.7	7.7	7.5	8.0	7.6	7.7
210000	7.7	7.8	7.6	7.5	7.4	7.4	7.4	7.7	7.6	7.8	7.7	7.5	8.0	7.6	7.8
220000	7.7	7.7	7.6	7.5	7.4	7.4	7.5	7.7	7.6	7.9	7.7	7.6	7.8	7.7	7.8
230000	7.8	7.6	7.7	7.5	7.4	7.5	7.5	7.7	7.7	8.0	7.8	7.6	7.8	7.7	7.9
Daily Max	8.2	8.1	8.1	8.0	7.8	7.8	8.0	8.3	8.1	8.2	8.4	7.9	8.3	8.2	8.2
Daily Min	7.7	7.6	7.6	7.5	7.4	7.4	7.4	7.5	7.6	7.7	7.6	7.5	7.6	7.6	7.6
Average	8.0	8.0	7.9	7.8	7.7	7.6	7.8	7.9	7.9	7.9	8.0	7.7	7.9	8.0	7.9

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Sandstone Rapids Dissolved Oxygen Summary - September 2021

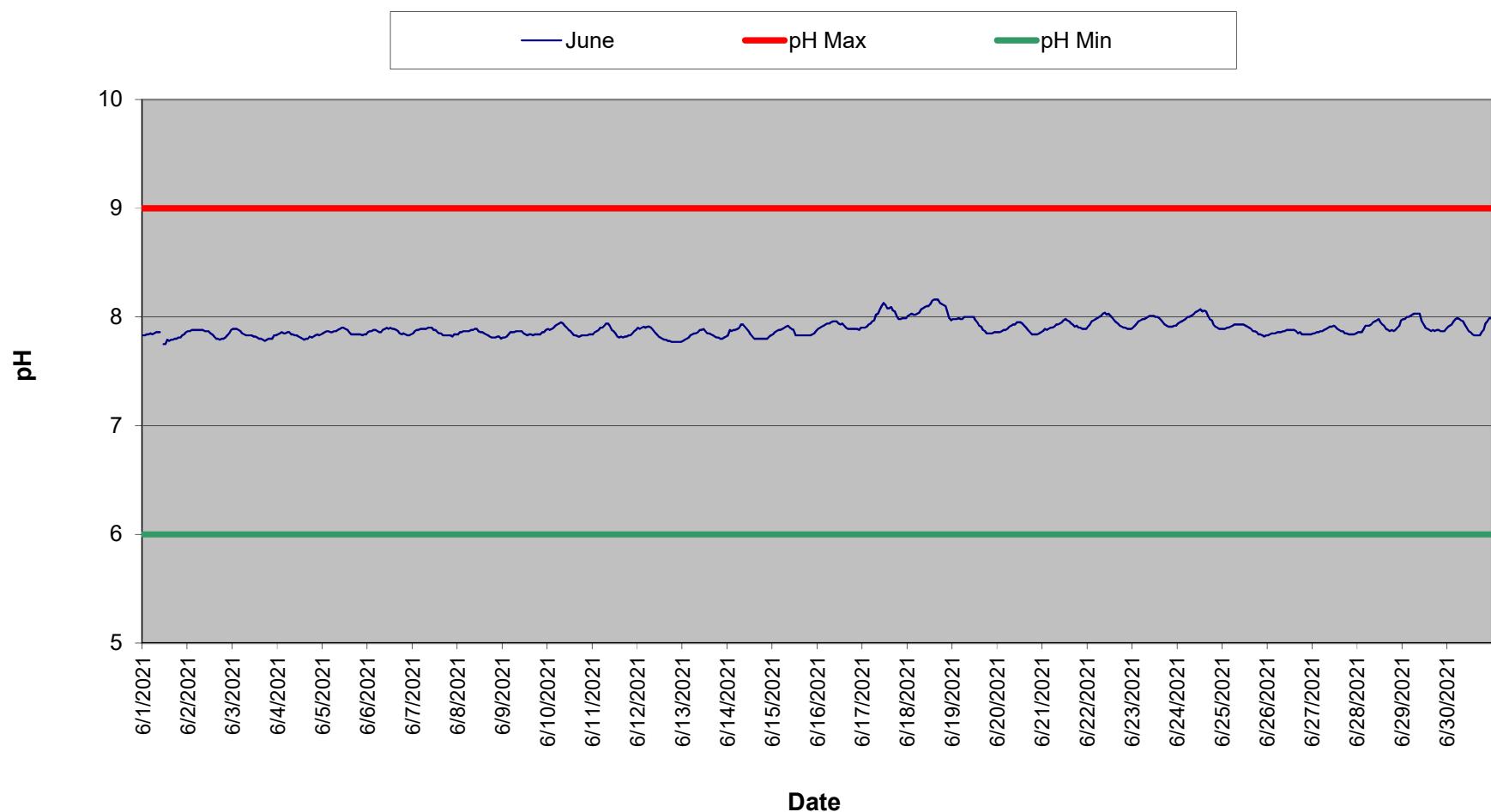
Time HHMMSS	09/01/21	09/02/21	09/03/21	09/04/21	09/05/21	09/06/21	09/07/21	09/08/21	09/09/21	09/10/21	09/11/21	09/12/21	09/13/21	09/14/21	09/15/21	09/16/21
0	7.9	8.1	8.1	8.0	7.8	8.0	8.1	8.2	8.2	8.2	8.3	8.4	8.3	8.3	8.5	8.2
10000	7.9	8.1	8.2	8.1	7.8	8.1	8.2	8.3	8.2	8.3	8.4	8.4	8.3	8.3	8.5	8.2
20000	8.0	8.2	8.3	8.1	7.8	8.1	8.3	8.2	8.2	8.3	8.4	8.5	8.4	8.4	8.4	8.3
30000	8.0	8.2	8.3	8.1	7.8	8.2	8.2	8.3	8.2	8.3	8.4	8.5	8.5	8.5	8.4	8.4
40000	8.1	8.2	8.3	8.2	7.8	8.3	8.3	8.3	8.2	8.4	8.5	8.6	8.4	8.5	8.4	8.4
50000	8.1	8.2	8.4	8.2	7.8	8.3	8.4	8.4	8.3	8.4	8.6	8.6	8.5	8.5	8.5	8.6
60000	8.1	8.3	8.4	8.3	7.8	8.3	8.4	8.3	8.4	8.4	8.6	8.6	8.5	8.5	8.4	8.6
70000	8.1	8.2	8.4	8.3	7.9	8.3	8.5	8.4	8.4	8.4	8.7	8.7	8.6	8.5	8.5	8.6
80000	8.1	8.3	8.4	8.4	7.9	8.4	8.6	8.4	8.4	8.5	8.7	8.7	8.6	8.6	8.4	8.6
90000	8.2	8.3	8.4	8.3	8.0	8.4	8.6	8.4	8.5	8.5	8.7	8.8	8.6	8.6	8.5	8.6
100000	8.2	8.3	8.5	8.3	8.1	8.4	8.6	8.4	8.5	8.4	8.7	8.7	8.6	8.6	8.5	8.6
110000	7.7	8.4	8.5	8.3	8.0	8.4	8.5	8.4	8.5	8.5	8.7	8.7	8.6	8.6	8.5	8.6
120000	8.2	8.4	8.5	8.3	8.0	8.5	8.5	8.4	8.6	8.4	8.8	8.7	8.7	8.7	8.5	8.6
130000	8.2	8.4	8.6	8.3	8.0	8.4	8.5	8.5	8.5	8.5	8.8	8.7	8.7	8.7	8.5	8.7
140000	8.2	8.4	8.6	8.3	8.1	8.5	8.6	8.5	8.5	8.6	8.8	8.8	8.7	8.7	8.5	8.7
150000	8.0	8.3	8.5	8.2	8.1	8.4	8.6	8.5	8.5	8.6	8.8	8.8	8.7	8.7	8.5	8.7
160000	7.9	8.1	8.5	8.2	8.1	8.4	8.5	8.4	8.6	8.6	8.8	8.7	8.6	8.7	8.5	8.7
170000	7.8	8.0	8.2	8.1	8.1	8.4	8.5	8.4	8.6	8.6	8.7	8.6	8.4	8.7	8.5	8.6
180000	7.8	8.0	8.2	8.0	8.0	8.4	8.4	8.4	8.3	8.5	8.7	8.4	8.3	8.7	8.5	8.5
190000	7.9	8.0	8.0	8.0	8.0	8.3	8.5	8.4	8.2	8.4	8.7	8.3	8.2	8.6	8.3	8.4
200000	7.9	8.0	8.0	7.9	8.1	8.2	8.4	8.4	8.2	8.3	8.6	8.3	8.2	8.6	8.2	8.3
210000	7.9	8.0	8.0	7.8	8.0	8.1	8.3	8.2	8.2	8.3	8.6	8.2	8.3	8.6	8.2	8.3
220000	8.0	8.1	8.0	7.8	8.0	8.1	8.3	8.2	8.1	8.3	8.5	8.2	8.3	8.5	8.2	8.3
230000	8.0	8.1	8.0	7.8	8.0	8.1	8.2	8.1	8.2	8.2	8.5	8.3	8.3	8.5	8.2	8.3
Daily Max	8.2	8.4	8.6	8.4	8.1	8.5	8.6	8.5	8.6	8.6	8.8	8.8	8.7	8.7	8.5	8.7
Daily Min	7.7	8.0	8.0	7.8	7.8	8.0	8.1	8.1	8.1	8.2	8.3	8.2	8.2	8.3	8.2	8.2
Average	8.0	8.2	8.3	8.1	8.0	8.3	8.4	8.4	8.4	8.4	8.6	8.6	8.5	8.6	8.4	8.5

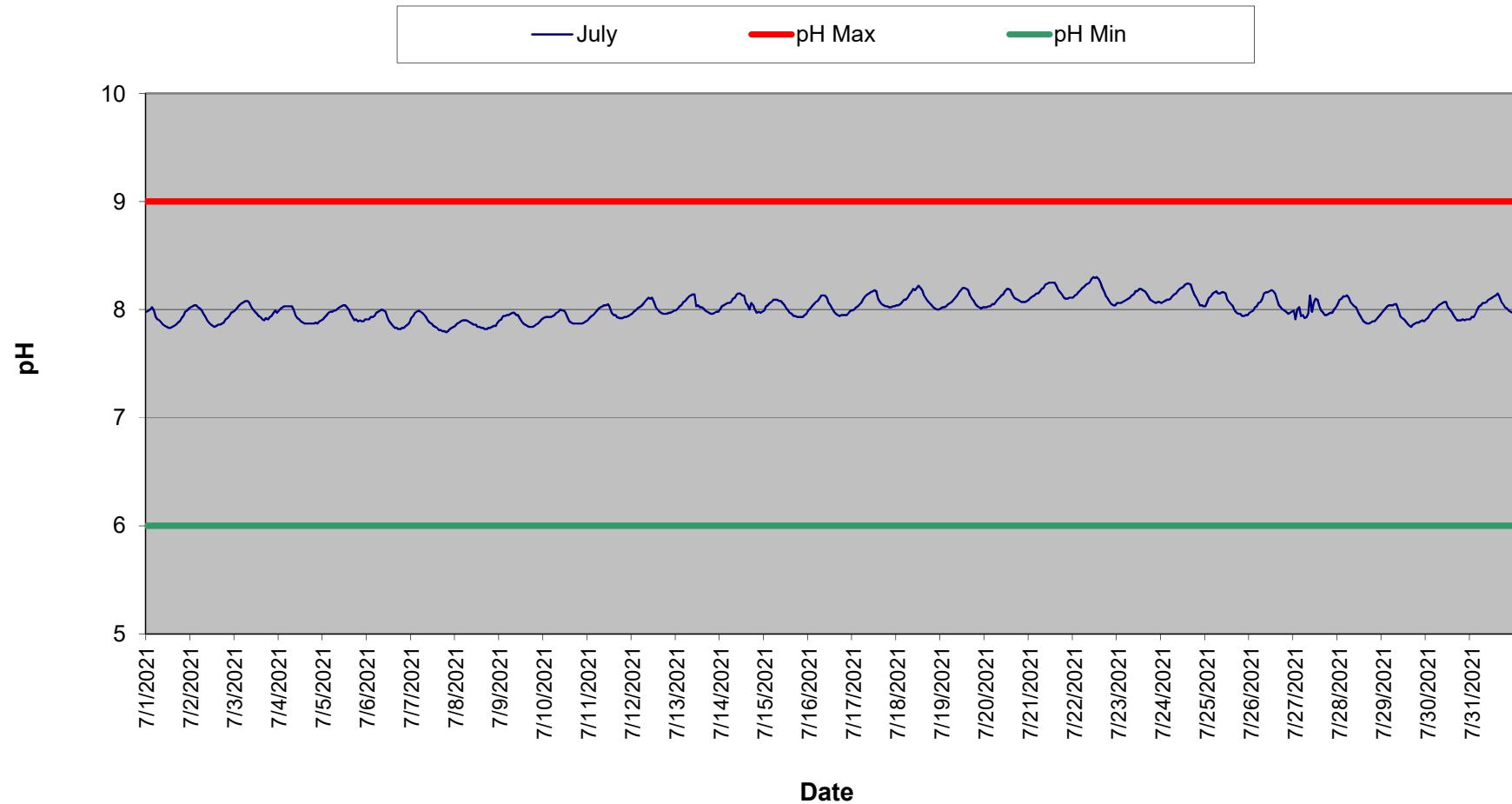
License Minimum Dissolved Oxygen: 5.0 mg/l

Sandstone Rapids Dissolved Oxygen Summary - September 2021

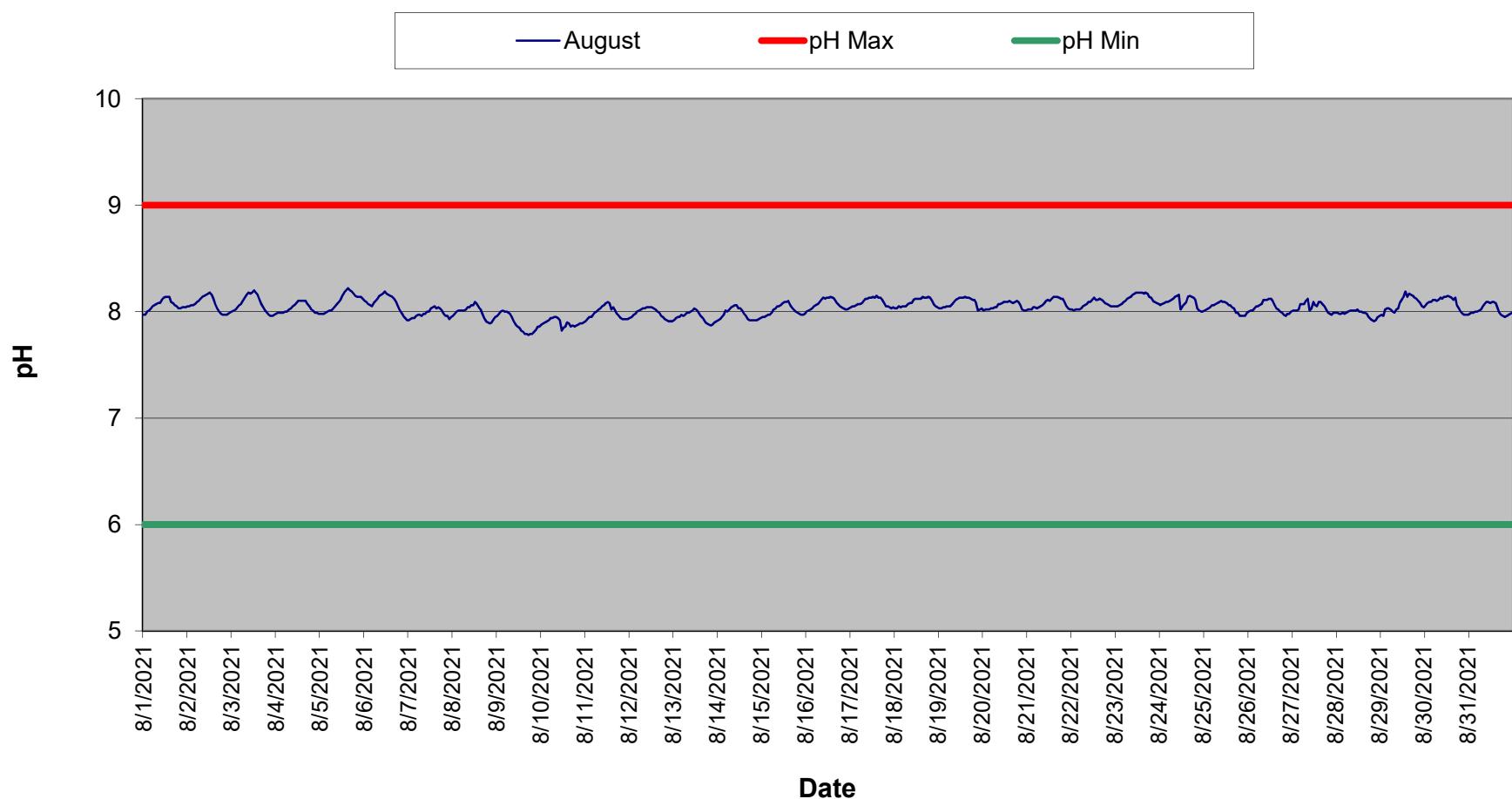
Time HHMMSS	09/17/21	09/18/21	09/19/21	09/20/21	09/21/21	09/22/21	09/23/21	09/24/21	09/25/21	09/26/21	09/27/21	09/28/21	09/29/21	09/30/21
0	8.4	8.3	8.5	8.4	8.1	8.2	8.7	8.8	8.9	9.1	8.9	9.0	9.0	9.0
10000	8.4	8.3	8.5	8.4	8.3	8.2	8.8	8.8	8.9	9.0	8.9	9.0	9.1	9.1
20000	8.4	8.4	8.5	8.4	8.3	8.3	8.8	8.9	8.8	9.0	8.9	9.0	9.1	9.1
30000	8.4	8.4	8.6	8.5	8.3	8.3	8.9	8.9	8.8	9.0	8.8	9.0	9.2	9.1
40000	8.5	8.5	8.6	8.5	8.3	8.3	8.9	9.0	8.9	9.0	8.9	9.0	9.2	9.2
50000	8.6	8.5	8.6	8.6	8.3	8.4	8.9	9.0	8.9	9.0	8.9	9.0	9.2	9.2
60000	8.6	8.5	8.6	8.6	8.3	8.4	9.0	9.0	8.9	9.0	8.9	9.0	9.2	9.2
70000	8.5	8.6	8.6	8.6	8.4	8.5	9.0	9.0	8.9	9.0	9.0	9.1	9.3	9.2
80000	8.5	8.6	8.7	8.7	8.4	8.6	9.0	9.0	9.0	9.0	9.0	9.1	9.3	9.3
90000	8.6	8.7	8.7	8.7	8.4	8.7	9.1	9.1	9.0	9.1	9.1	9.1	9.3	9.3
100000	8.5	8.7	8.6	8.7	8.4	8.7	9.2	9.1	9.0	9.2	9.1	9.1	9.3	9.3
110000	8.6	8.7	8.7	8.7	8.5	8.9	9.2	9.1	9.0	9.2	9.2	9.1	9.3	9.4
120000	8.7	8.7	8.7	8.8	8.5	8.8	9.2	9.1	9.0	9.2	9.1	9.0	9.3	9.4
130000	8.8	8.7	8.7	8.7	8.6	8.9	9.1	9.1	9.1	9.2	9.1	9.0	9.4	9.4
140000	8.7	8.7	8.8	8.7	8.6	8.9	9.1	9.1	9.1	9.3	9.1	9.2	9.4	9.4
150000	8.7	8.7	8.8	8.7	8.6	8.8	9.1	9.1	9.1	9.3	9.1	9.2	9.4	9.3
160000	8.7	8.6	8.8	8.7	8.6	8.7	9.1	9.1	9.1	9.3	9.1	9.2	9.4	9.3
170000	8.7	8.4	8.7	8.7	8.6	8.6	8.9	9.1	9.1	9.2	9.1	9.2	9.2	9.1
180000	8.7	8.4	8.5	8.7	8.6	8.6	8.9	9.0	9.1	9.2	9.1	9.0	9.1	9.0
190000	8.6	8.3	8.4	8.5	8.6	8.6	8.8	9.0	9.1	9.1	9.1	9.0	9.0	9.0
200000	8.6	8.3	8.4	8.3	8.5	8.6	8.8	9.1	9.1	9.1	9.0	9.0	9.0	8.9
210000	8.6	8.4	8.4	8.2	8.5	8.6	8.8	9.0	9.1	9.1	9.0	9.0	9.0	9.0
220000	8.4	8.4	8.3	8.2	8.3	8.6	8.8	8.9	9.1	9.1	9.0	9.0	9.0	9.0
230000	8.3	8.5	8.4	8.2	8.3	8.7	8.8	8.9	9.1	9.0	9.0	9.0	9.0	9.0
Daily Max	8.8	8.7	8.8	8.8	8.6	8.9	9.2	9.1	9.1	9.3	9.2	9.2	9.4	9.4
Daily Min	8.3	8.3	8.3	8.2	8.1	8.2	8.7	8.8	8.8	9.0	8.8	9.0	9.0	8.9
Average	8.6	8.5	8.6	8.5	8.4	8.6	8.9	9.0	9.0	9.1	9.0	9.0	9.2	9.2

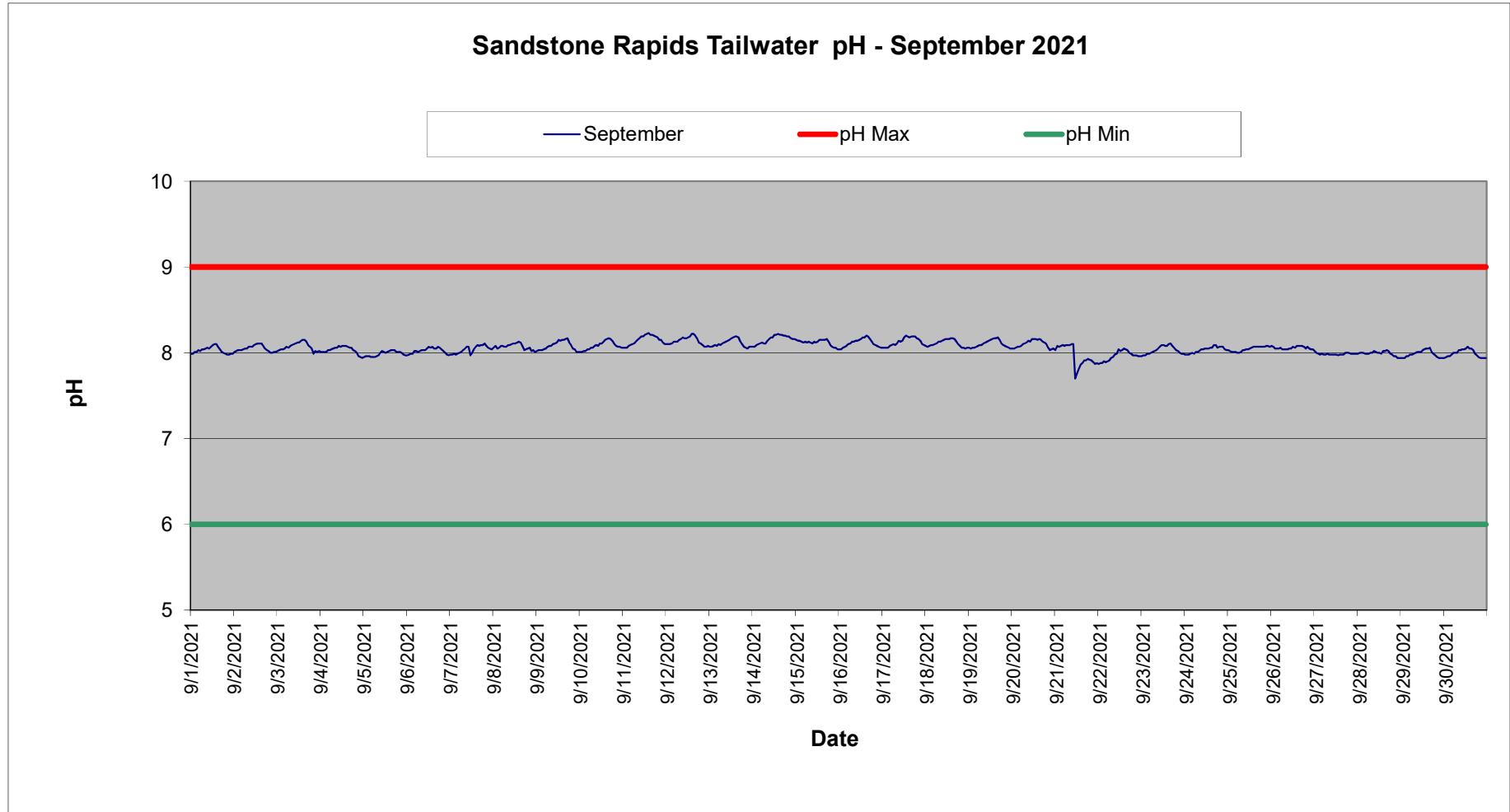
Sandstone Rapids Tailwater pH - June 2021



Sandstone Rapids Tailwater pH- July 2021

Sandstone Rapids Tailwater pH- August 2021





Sandstone Rapids pH Summary - June 2021

Time HHMMSS	06/01/21	06/02/21	06/03/21	06/04/21	06/05/21	06/06/21	06/07/21	06/08/21	06/09/21	06/10/21	06/11/21	06/12/21	06/13/21	06/14/21	06/15/21	06/16/21
0	7.8	7.9	7.9	7.8	7.9	7.9	7.9	7.8	7.8	7.9	7.8	7.9	7.8	7.8	7.8	7.9
10000	7.8	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.9	7.9	7.9	7.8	7.9	7.9	7.9	7.9
20000	7.8	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.9	7.9	7.9	7.8	7.9	7.9	7.9	7.9
30000	7.8	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.9	7.9	7.9	7.8	7.9	7.9	7.9	7.9
40000	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.9	7.9	7.9	7.9
50000	7.8	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.9	7.9	7.9	7.9
60000	7.9	7.9	7.8	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
70000	7.9	7.9	7.8	7.8	7.9	7.9	7.9	7.9	8.0	7.9	7.9	7.9	7.9	7.9	7.9	8.0
80000	7.9	7.9	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	8.0
90000	7.9	7.9	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	8.0
100000	7.9	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.9	7.9	7.9	7.9	8.0
110000	7.8	7.9	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.9	7.9	7.9	7.9	7.9
120000	7.8	7.9	7.8	7.8	7.9	7.9	7.9	7.8	7.9	7.9	7.8	7.9	7.8	7.8	7.8	7.9
130000	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.9	7.8	7.8	7.8	7.9
140000	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.9	7.8	7.8	7.8	7.9
150000	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9
160000	7.8	7.8	7.8	7.8	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9
170000	7.8	7.8	7.8	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9
180000	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9
190000	7.8	7.8	7.8	7.8	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9
200000	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9
210000	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.9
220000	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.8	7.9	7.8	7.8	7.8	7.9	7.9
230000	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.8	7.8	7.8	7.8	7.9	7.9
Daily Max	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	8.0	7.9	7.9	7.9	7.9	7.9	7.9	8.0
Daily Min	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9
Average	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.8	7.8	7.9	7.9	7.8	7.8	7.8	7.9	7.9

License maximum pH: 9

License minimum pH: 6

[REDACTED] Missing data due to equipment maintenance

Sandstone Rapids pH Summary - June 2021

Time HHMMSS	06/17/21	06/18/21	06/19/21	06/20/21	06/21/21	06/22/21	06/23/21	06/24/21	06/25/21	06/26/21	06/27/21	06/28/21	06/29/21	06/30/21
0	7.9	8.0	8.0	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.9	7.9	8.0	7.9
10000	7.9	8.0	8.0	7.9	7.9	7.9	7.9	8.0	7.9	7.8	7.9	7.9	8.0	7.9
20000	7.9	8.0	8.0	7.9	7.9	8.0	7.9	8.0	7.9	7.9	7.9	7.9	8.0	7.9
30000	7.9	8.0	8.0	7.9	7.9	8.0	8.0	8.0	7.9	7.9	7.9	7.9	8.0	8.0
40000	7.9	8.0	8.0	7.9	7.9	8.0	8.0	8.0	7.9	7.9	7.9	7.9	8.0	8.0
50000	8.0	8.0	8.0	7.9	7.9	8.0	8.0	8.0	7.9	7.9	7.9	7.9	8.0	8.0
60000	8.0	8.0	8.0	7.9	7.9	8.0	8.0	8.0	7.9	7.9	7.9	7.9	8.0	8.0
70000	8.0	8.1	8.0	7.9	7.9	8.0	8.0	8.0	7.9	7.9	7.9	7.9	8.0	8.0
80000	8.0	8.1	8.0	7.9	7.9	8.0	8.0	8.0	7.9	7.9	7.9	8.0	8.0	8.0
90000	8.1	8.1	8.0	7.9	7.9	8.0	8.0	8.0	7.9	7.9	7.9	8.0	8.0	7.9
100000	8.1	8.1	8.0	8.0	8.0	8.0	8.0	8.1	7.9	7.9	7.9	8.0	8.0	7.9
110000	8.1	8.1	8.0	8.0	8.0	8.0	8.0	8.1	7.9	7.9	7.9	8.0	7.9	7.9
120000	8.1	8.1	8.0	8.0	8.0	8.0	8.0	8.1	7.9	7.9	7.9	8.0	7.9	7.9
130000	8.1	8.2	8.0	7.9	8.0	8.0	8.0	8.1	7.9	7.9	7.9	7.9	7.9	7.8
140000	8.1	8.2	7.9	7.9	8.0	8.0	8.0	8.1	7.9	7.9	7.9	7.9	7.9	7.8
150000	8.1	8.2	7.9	7.9	7.9	8.0	8.0	8.1	7.9	7.9	7.9	7.9	7.9	7.8
160000	8.1	8.2	7.9	7.9	7.9	7.9	8.0	8.0	7.9	7.9	7.9	7.9	7.9	7.8
170000	8.1	8.1	7.9	7.9	7.9	7.9	7.9	8.0	7.9	7.9	7.9	7.9	7.9	7.8
180000	8.0	8.1	7.9	7.8	7.9	7.9	7.9	8.0	7.9	7.8	7.9	7.9	7.9	7.9
190000	8.0	8.1	7.9	7.8	7.9	7.9	7.9	7.9	7.8	7.8	7.8	7.9	7.9	7.9
200000	8.0	8.1	7.9	7.8	7.9	7.9	7.9	7.9	7.8	7.8	7.8	7.9	7.9	7.9
210000	8.0	8.1	7.9	7.8	7.9	7.9	7.9	7.9	7.8	7.8	7.8	7.9	7.9	8.0
220000	8.0	8.0	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.8	7.8	7.9	7.9	8.0
230000	8.0	8.0	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.8	7.9	8.0	8.0
Daily Max	8.1	8.2	8.0	8.0	8.0	8.0	8.0	8.1	7.9	7.9	7.9	8.0	8.0	8.0
Daily Min	7.9	8.0	7.9	7.8	7.9	7.9	7.9	7.9	7.8	7.8	7.8	7.9	7.9	7.8
Average	8.0	8.1	7.9	7.9	7.9	8.0	8.0	8.0	7.9	7.9	7.9	7.9	7.9	7.9

Sandstone Rapids pH Summary - July 2021

Time HHMMSS	07/01/21	07/02/21	07/03/21	07/04/21	07/05/21	07/06/21	07/07/21	07/08/21	07/09/21	07/10/21	07/11/21	07/12/21	07/13/21	07/14/21	07/15/21	07/16/21
0	8.0	8.0	8.0	8.0	7.9	7.9	7.9	7.9	7.9	7.9	7.9	8.0	8.0	8.0	8.0	8.0
10000	8.0	8.0	8.0	8.0	7.9	7.9	7.9	7.9	7.9	7.9	7.9	8.0	8.0	8.0	8.0	8.0
20000	8.0	8.0	8.0	8.0	8.0	7.9	8.0	7.9	7.9	7.9	7.9	8.0	8.0	8.0	8.0	8.0
30000	8.0	8.0	8.1	8.0	8.0	7.9	8.0	7.9	7.9	7.9	8.0	8.0	8.0	8.1	8.1	8.1
40000	8.0	8.0	8.1	8.0	8.0	7.9	8.0	7.9	8.0	7.9	8.0	8.0	8.1	8.1	8.1	8.1
50000	7.9	8.0	8.1	8.0	8.0	8.0	8.0	7.9	8.0	7.9	8.0	8.0	8.1	8.1	8.1	8.1
60000	7.9	8.0	8.1	8.0	8.0	8.0	8.0	7.9	8.0	8.0	8.0	8.1	8.1	8.1	8.1	8.1
70000	7.9	8.0	8.1	8.0	8.0	8.0	8.0	7.9	8.0	8.0	8.0	8.1	8.1	8.1	8.1	8.1
80000	7.9	7.9	8.1	8.0	8.0	8.0	7.9	7.9	8.0	8.0	8.0	8.1	8.1	8.1	8.1	8.1
90000	7.9	7.9	8.0	8.0	8.0	8.0	7.9	7.9	8.0	8.0	8.0	8.1	8.1	8.1	8.1	8.1
100000	7.9	7.9	8.0	7.9	8.0	8.0	7.9	7.9	8.0	8.0	8.0	8.1	8.1	8.2	8.1	8.1
110000	7.8	7.9	8.0	7.9	8.0	7.9	7.9	7.9	8.0	8.0	8.1	8.1	8.0	8.2	8.0	8.1
120000	7.8	7.9	8.0	7.9	8.0	7.9	7.9	7.8	7.9	8.0	8.0	8.1	8.0	8.1	8.0	8.0
130000	7.8	7.8	7.9	7.9	8.0	7.9	7.8	7.8	7.9	7.9	8.0	8.0	8.0	8.1	8.0	8.0
140000	7.8	7.9	7.9	7.9	8.0	7.9	7.8	7.8	7.9	7.9	8.0	8.0	8.0	8.1	8.0	8.0
150000	7.9	7.9	7.9	7.9	8.0	7.8	7.8	7.8	7.9	7.9	8.0	8.0	8.0	8.0	8.0	8.0
160000	7.9	7.9	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.9	7.9	8.0	8.0	8.0	7.9	8.0
170000	7.9	7.9	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.9	7.9	8.0	8.0	8.1	7.9	7.9
180000	7.9	7.9	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.9	7.9	8.0	8.0	8.0	7.9	8.0
190000	7.9	7.9	7.9	7.9	7.9	7.8	7.8	7.8	7.9	7.9	7.9	8.0	8.0	8.0	7.9	8.0
200000	7.9	7.9	7.9	7.9	7.9	7.8	7.8	7.8	7.9	7.9	7.9	8.0	8.0	8.0	7.9	8.0
210000	8.0	7.9	8.0	7.9	7.9	7.9	7.8	7.9	7.9	7.9	7.9	8.0	8.0	8.0	7.9	8.0
220000	8.0	8.0	8.0	7.9	7.9	7.9	7.8	7.9	7.9	7.9	7.9	8.0	8.0	8.0	8.0	8.0
230000	8.0	8.0	8.0	7.9	7.9	7.9	7.8	7.9	7.9	7.9	8.0	8.0	8.0	8.0	8.0	8.0
Daily Max	8.0	8.0	8.1	8.0	8.0	8.0	8.0	7.9	8.0	8.0	8.1	8.1	8.1	8.2	8.1	8.1
Daily Min	7.8	7.8	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.9	7.9	8.0	8.0	8.0	7.9	7.9
Average	7.9	7.9	8.0	7.9	8.0	7.9	7.9	7.9	7.9	7.9	7.9	8.0	8.0	8.1	8.0	8.0

License maximum pH: 9

License minimum pH: 6

Sandstone Rapids pH Summary - July 2021

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

Sandstone Rapids pH Summary - August 2021

Time HHMMSS	08/01/21	08/02/21	08/03/21	08/04/21	08/05/21	08/06/21	08/07/21	08/08/21	08/09/21	08/10/21	08/11/21	08/12/21	08/13/21	08/14/21	08/15/21	08/16/21
0	7.9	7.8	7.9	7.9	8.0	8.0	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.9	7.8	7.8
10000	7.9	7.9	7.9	7.9	8.0	8.0	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.9	7.8	7.8
20000	7.9	7.9	7.9	8.0	8.0	8.0	8.0	7.9	7.9	8.0	7.9	7.9	7.8	7.9	7.8	7.8
30000	7.9	7.9	7.9	8.0	8.0	8.0	8.0	7.9	7.9	8.0	7.9	7.9	7.8	8.0	7.9	7.8
40000	7.9	7.9	7.9	8.0	8.1	8.0	8.0	7.9	7.9	8.0	7.9	7.9	7.8	8.0	7.8	7.9
50000	7.9	7.9	7.9	8.0	8.1	8.0	8.0	7.9	7.9	8.0	7.9	7.9	7.8	8.0	7.9	7.9
60000	7.9	7.9	8.0	8.0	8.1	8.0	8.0	7.9	7.9	8.0	7.9	7.9	7.8	8.0	7.9	7.9
70000	7.9	7.9	8.0	8.0	8.1	8.0	8.0	7.9	7.9	8.0	8.0	7.9	7.9	8.0	7.9	7.9
80000	7.9	7.9	8.0	8.0	8.1	8.0	8.0	8.0	8.0	8.0	8.0	7.9	7.9	8.0	7.9	7.9
90000	7.9	7.9	8.0	8.0	8.1	8.1	8.0	8.0	8.0	8.0	8.0	7.9	7.9	8.0	7.9	7.9
100000	7.9	7.9	8.0	8.0	8.1	8.1	8.0	8.0	8.0	8.1	8.0	7.9	7.9	8.0	7.9	7.9
110000	7.9	7.9	8.0	8.0	8.1	8.1	8.0	8.0	8.0	8.1	8.0	7.9	8.0	8.0	7.8	7.8
120000	7.8	7.9	8.0	8.0	8.0	8.1	7.9	8.0	8.0	8.0	8.0	7.8	8.0	8.0	7.8	7.8
130000	7.8	7.9	7.9	8.0	8.0	8.0	7.9	8.0	8.0	8.0	8.0	7.8	8.0	8.0	7.8	7.8
140000	7.8	7.9	7.9	7.9	8.0	7.9	7.9	8.0	8.0	8.0	7.9	8.0	7.8	8.0	7.7	7.7
150000	7.8	7.9	7.9	7.9	7.9	7.9	7.9	8.0	8.0	8.0	7.9	8.0	7.9	7.9	7.7	7.7
160000	7.8	7.9	7.9	7.9	7.9	7.9	7.9	8.0	7.9	7.9	7.9	7.8	8.0	7.9	7.7	7.7
170000	7.8	7.9	7.9	7.9	7.9	7.9	7.9	8.0	7.9	7.9	7.9	7.8	8.0	7.9	7.7	7.7
180000	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.9	7.8	7.7	7.7
190000	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.9	7.8	7.7	7.7
200000	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.9	7.8	7.7	7.7
210000	7.8	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.9	7.8	7.8	7.7
220000	7.8	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.9	7.8	7.8	7.7
230000	7.8	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.9	7.8	7.8	7.8
Daily Max	7.9	7.9	8.0	8.0	8.1	8.1	8.0	8.0	8.0	8.1	8.0	7.9	8.0	8.0	7.9	7.9
Daily Min	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.8	7.8	7.7	7.7
Average	7.9	7.9	7.9	8.0	8.0	8.0	7.9	7.9	7.9	8.0	7.9	7.9	7.9	7.9	7.8	7.8

License maximum pH: 9

License minimum pH: 6

Sandstone Rapids pH Summary - August 2021

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

Sandstone Rapids pH Summary - September 2021

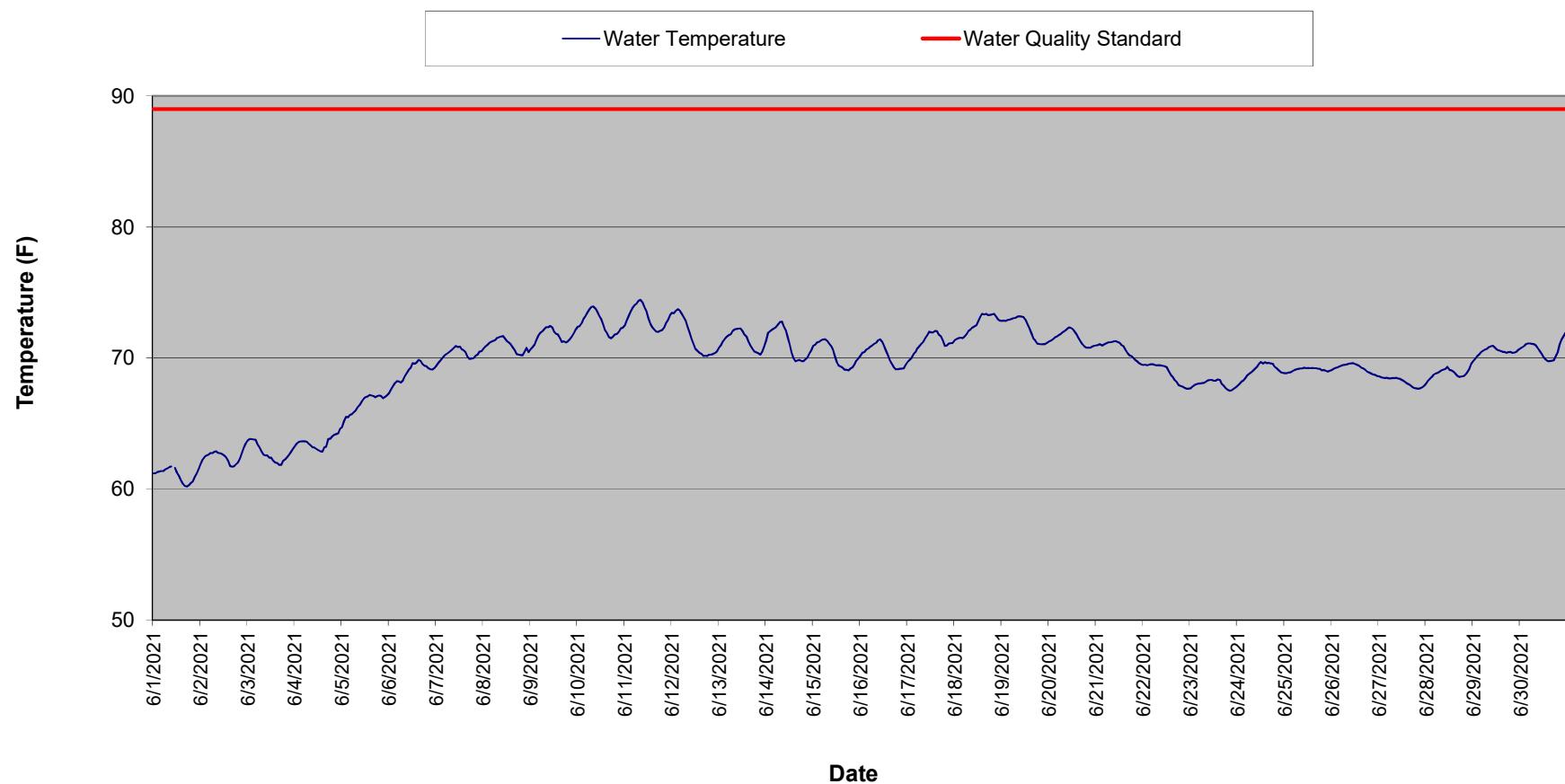
Time HHMMSS	09/01/21	09/02/21	09/03/21	09/04/21	09/05/21	09/06/21	09/07/21	09/08/21	09/09/21	09/10/21	09/11/21	09/12/21	09/13/21	09/14/21	09/15/21	09/16/21
0	8.0	8.0	8.0	8.0	8.0	8.0	8.1	8.0	8.0	8.1	8.1	8.1	8.1	8.1	8.2	8.0
10000	8.0	8.0	8.0	8.0	8.0	8.0	8.1	8.0	8.0	8.1	8.1	8.1	8.1	8.1	8.1	8.0
20000	8.0	8.0	8.0	8.0	8.0	8.0	8.1	8.0	8.0	8.1	8.1	8.1	8.1	8.1	8.1	8.1
30000	8.0	8.0	8.0	8.0	8.0	8.0	8.1	8.0	8.0	8.1	8.1	8.1	8.1	8.1	8.1	8.1
40000	8.0	8.0	8.1	8.0	8.0	8.0	8.1	8.0	8.0	8.1	8.1	8.1	8.1	8.1	8.1	8.1
50000	8.0	8.0	8.1	8.0	8.0	8.0	8.1	8.1	8.0	8.1	8.1	8.1	8.1	8.1	8.1	8.1
60000	8.0	8.1	8.1	8.0	8.0	8.0	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
70000	8.0	8.1	8.1	8.1	8.0	8.0	8.1	8.1	8.1	8.1	8.2	8.1	8.1	8.1	8.1	8.1
80000	8.1	8.1	8.1	8.1	8.0	8.0	8.1	8.1	8.1	8.2	8.2	8.1	8.1	8.1	8.1	8.1
90000	8.1	8.1	8.1	8.1	8.0	8.0	8.1	8.1	8.1	8.2	8.2	8.1	8.2	8.1	8.1	8.1
100000	8.1	8.1	8.1	8.1	8.0	8.0	8.1	8.1	8.1	8.1	8.2	8.2	8.1	8.2	8.1	8.1
110000	8.1	8.1	8.1	8.1	8.0	8.1	8.0	8.1	8.1	8.1	8.2	8.2	8.2	8.2	8.1	8.2
120000	8.1	8.1	8.1	8.1	8.0	8.1	8.0	8.1	8.2	8.1	8.2	8.2	8.2	8.2	8.1	8.2
130000	8.1	8.1	8.1	8.1	8.0	8.1	8.0	8.1	8.1	8.1	8.2	8.2	8.2	8.2	8.2	8.2
140000	8.1	8.1	8.2	8.1	8.0	8.1	8.1	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
150000	8.1	8.1	8.2	8.1	8.0	8.1	8.1	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
160000	8.0	8.1	8.1	8.1	8.0	8.1	8.1	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
170000	8.0	8.1	8.1	8.1	8.0	8.1	8.1	8.0	8.2	8.2	8.2	8.2	8.1	8.2	8.2	8.2
180000	8.0	8.0	8.1	8.0	8.0	8.1	8.1	8.0	8.1	8.1	8.2	8.1	8.1	8.2	8.1	8.1
190000	8.0	8.0	8.1	8.0	8.0	8.0	8.1	8.1	8.1	8.1	8.2	8.1	8.1	8.2	8.1	8.1
200000	8.0	8.0	8.0	8.0	8.0	8.0	8.1	8.1	8.1	8.1	8.2	8.1	8.1	8.2	8.1	8.1
210000	8.0	8.0	8.0	8.0	8.0	8.0	8.1	8.0	8.0	8.1	8.2	8.1	8.1	8.2	8.1	8.1
220000	8.0	8.0	8.0	8.0	8.0	8.0	8.1	8.0	8.0	8.1	8.1	8.1	8.1	8.2	8.1	8.1
230000	8.0	8.0	8.0	7.9	8.0	8.0	8.0	8.0	8.0	8.1	8.1	8.1	8.1	8.2	8.0	8.1
Daily Max	8.1	8.1	8.2	8.1	8.0	8.1	8.1	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
Daily Min	8.0	8.0	8.0	7.9	8.0	8.0	8.0	8.0	8.0	8.1	8.1	8.1	8.1	8.1	8.0	8.0
Average	8.0	8.0	8.1	8.0	8.0	8.0	8.0	8.1	8.1	8.1	8.1	8.1	8.1	8.2	8.1	8.1

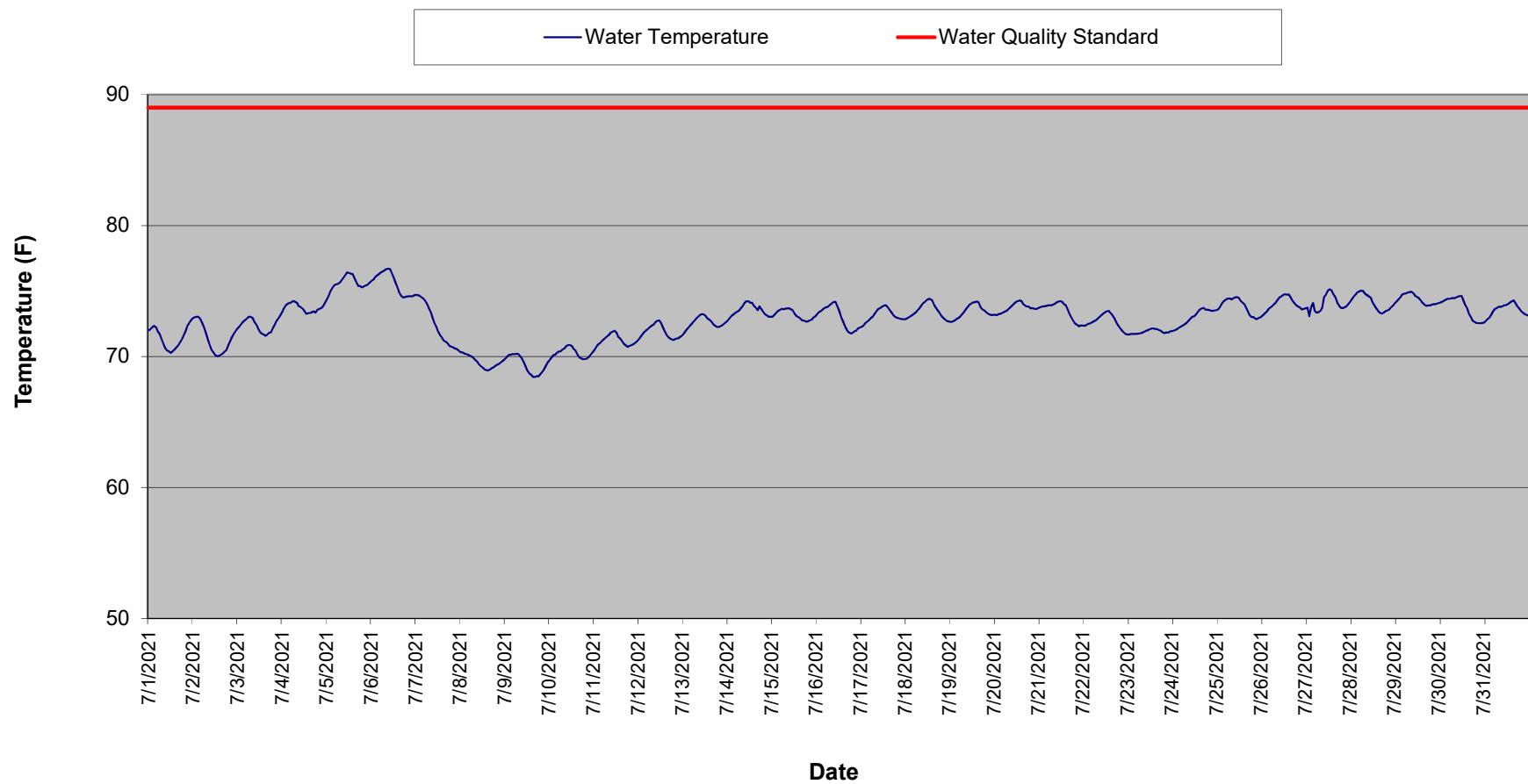
License maximum pH: 9

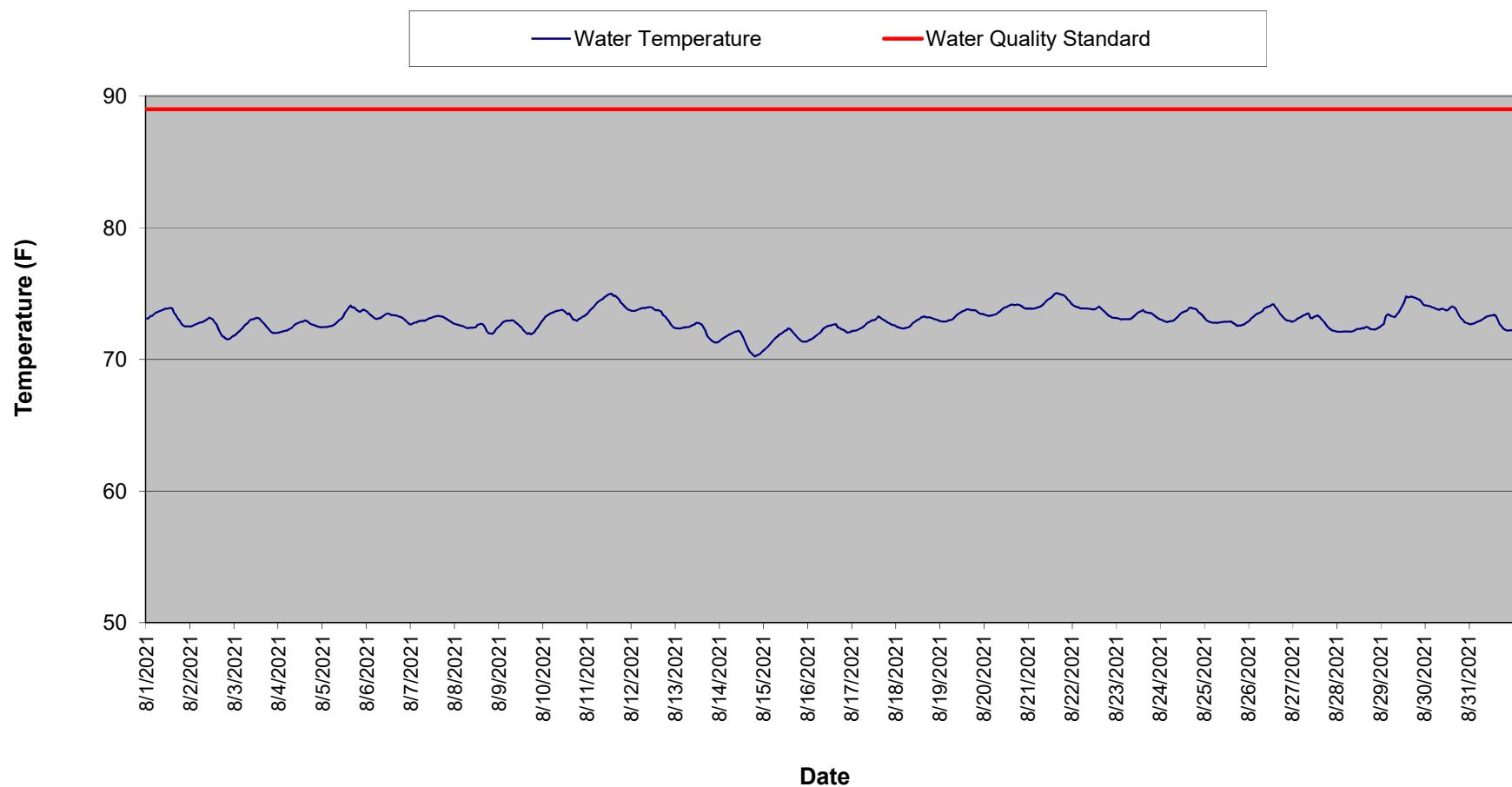
License minimum pH: 6

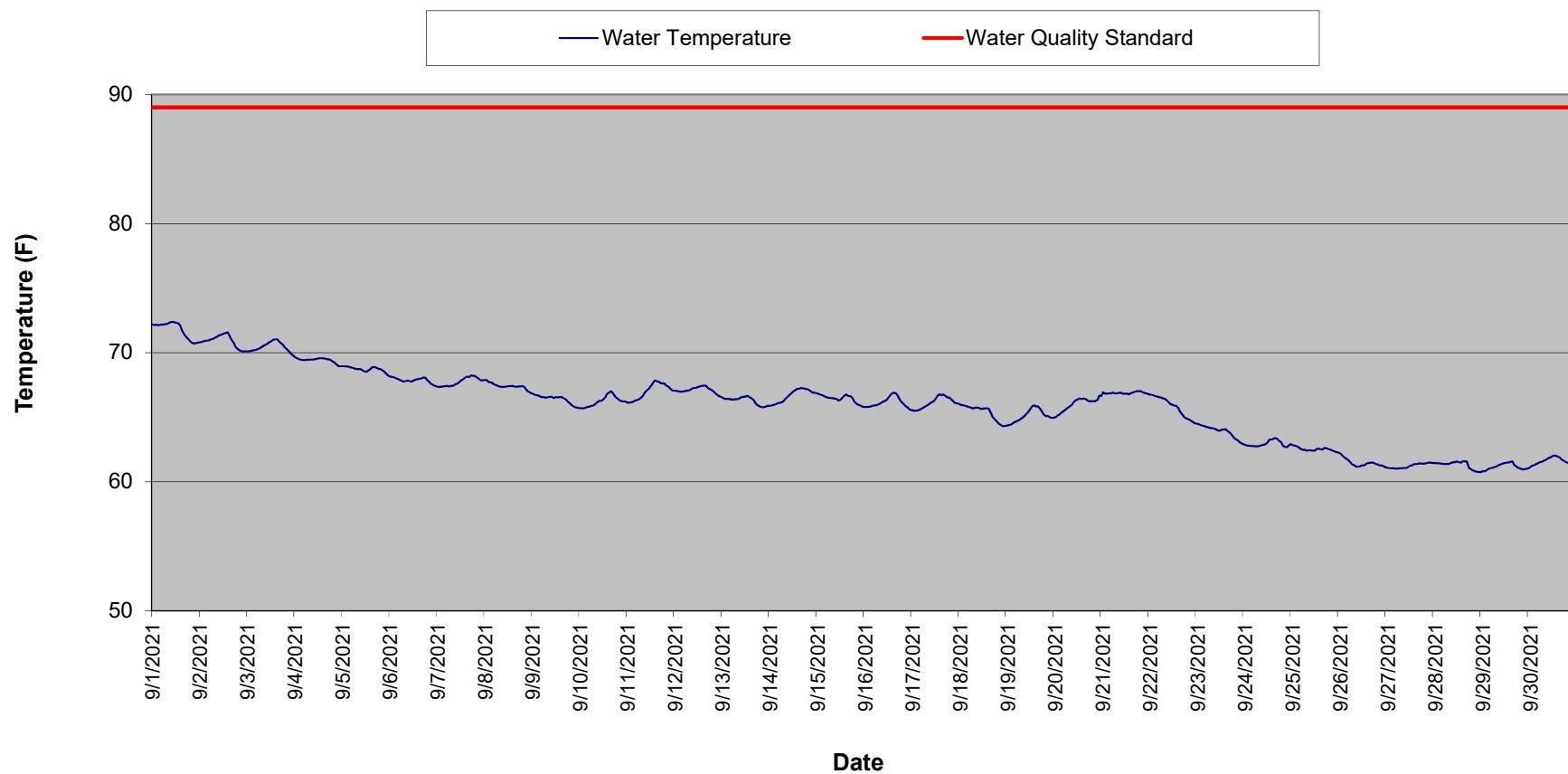
Sandstone Rapids pH Summary - September 2021

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

Sandstone Rapids Tailwater Temperature - June 2021

Sandstone Rapids Tailwater Temperature - July 2021

Sandstone Rapids Tailwater Temperature - August 2021

Sandstone Rapids Tailwater Temperature - September 2021

Sandstone Tailwater Temperature Summary - June 2021

Time HHMMSS	06/01/21	06/02/21	06/03/21	06/04/21	06/05/21	06/06/21	06/07/21	06/08/21	06/09/21	06/10/21	06/11/21	06/12/21	06/13/21	06/14/21	06/15/21	06/16/21
0	61.2	61.9	63.7	63.3	64.7	67.3	69.4	70.7	70.6	72.4	72.5	73.4	70.8	71.3	70.9	70.2
10000	61.2	62.3	63.8	63.5	65.1	67.6	69.6	70.9	70.8	72.4	72.8	73.4	71.0	71.9	71.0	70.4
20000	61.3	62.4	63.8	63.6	65.5	67.9	69.8	71.0	71.0	72.7	73.2	73.6	71.3	72.0	71.2	70.5
30000	61.3	62.6	63.8	63.6	65.5	68.1	70.0	71.1	71.4	73.0	73.5	73.7	71.5	72.2	71.2	70.6
40000	61.4	62.6	63.7	63.7	65.6	68.2	70.1	71.2	71.7	73.2	73.8	73.6	71.6	72.3	71.4	70.7
50000	61.4	62.8	63.4	63.6	65.7	68.2	70.3	71.3	71.9	73.5	74.0	73.4	71.7	72.4	71.4	70.9
60000	61.5	62.7	63.2	63.6	65.9	68.1	70.4	71.4	72.0	73.7	74.1	73.1	71.8	72.5	71.4	71.0
70000	61.6	62.8	62.9	63.5	66.0	68.3	70.5	71.5	72.2	73.9	74.4	72.8	72.1	72.7	71.3	71.1
80000	61.7	62.9	62.6	63.3	66.2	68.6	70.6	71.6	72.4	73.9	74.4	72.4	72.2	72.8	71.1	71.2
90000	61.7	62.8	62.6	63.2	66.4	68.8	70.8	71.6	72.3	73.8	74.3	72.0	72.2	72.4	70.9	71.3
100000	62.7	62.6	63.1	66.6	69.1	70.9	71.7	72.4	73.6	73.9	71.5	72.3	72.1	70.6	71.4	
110000	61.6	62.7	62.4	63.1	66.9	69.3	70.8	71.5	72.3	73.2	73.6	71.1	72.3	71.6	70.1	71.3
120000	61.2	62.5	62.4	63.0	67.0	69.6	70.9	71.3	72.0	72.9	73.1	70.7	72.0	71.0	69.7	71.0
130000	61.0	62.4	62.1	62.9	67.1	69.5	70.7	71.2	71.8	72.5	72.6	70.6	71.8	70.4	69.4	70.6
140000	60.7	62.2	62.0	62.9	67.2	69.7	70.6	71.0	71.8	72.1	72.4	70.4	71.6	70.0	69.3	70.2
150000	60.4	61.8	62.0	63.2	67.1	69.9	70.4	70.8	71.5	71.9	72.2	70.3	71.3	69.7	69.2	69.8
160000	60.2	61.7	61.8	63.2	67.1	69.8	70.1	70.6	71.2	71.6	72.0	70.1	70.9	69.8	69.1	69.5
170000	60.2	61.7	61.8	63.8	67.0	69.5	69.9	70.3	71.3	71.5	72.0	70.2	70.7	69.8	69.1	69.3
180000	60.3	61.9	62.1	63.8	67.1	69.4	70.0	70.2	71.2	71.6	72.1	70.1	70.5	69.8	69.1	69.1
190000	60.4	62.0	62.3	64.0	67.1	69.4	70.0	70.2	71.3	71.8	72.1	70.3	70.4	69.8	69.2	69.1
200000	60.6	62.3	62.4	64.1	67.1	69.2	70.2	70.2	71.4	71.8	72.3	70.3	70.4	69.9	69.3	69.2
210000	60.9	62.8	62.6	64.2	66.9	69.1	70.2	70.5	71.6	72.0	72.6	70.3	70.2	70.0	69.5	69.2
220000	61.2	63.1	62.8	64.2	67.1	69.1	70.5	70.8	71.9	72.3	72.9	70.4	70.5	70.3	69.8	69.2
230000	61.5	63.5	63.0	64.6	67.2	69.2	70.5	70.4	72.2	72.3	73.3	70.5	70.9	70.6	70.0	69.5
Daily Max	61.7	63.5	63.8	64.6	67.2	69.9	70.9	71.7	72.4	73.9	74.4	73.7	72.3	72.8	71.4	71.4
Daily Min	60.2	61.7	61.8	62.9	64.7	67.3	69.4	70.2	70.6	71.5	72.0	70.1	70.2	69.7	69.1	69.1
Average	61.1	62.5	62.7	63.5	66.5	68.9	70.3	71.0	71.7	72.6	73.1	71.6	71.3	71.1	70.2	70.3

Monthly average:
License Maximum:

68.7
89 F

Missing data due to equipment maintenance

Sandstone Tailwater Temperature Summary - June 2021

Time HHMMSS	06/17/21	06/18/21	06/19/21	06/20/21	06/21/21	06/22/21	06/23/21	06/24/21	06/25/21	06/26/21	06/27/21	06/28/21	06/29/21	06/30/21
0	69.7	71.4	72.8	71.2	71.0	69.5	67.7	67.9	68.8	69.1	68.6	68.0	69.7	70.7
10000	69.9	71.4	72.8	71.3	71.0	69.5	67.8	68.0	68.8	69.2	68.5	68.3	69.9	70.8
20000	70.0	71.5	72.8	71.4	71.1	69.4	67.9	68.2	68.9	69.2	68.5	68.4	70.1	70.9
30000	70.3	71.5	72.9	71.6	70.9	69.5	68.0	68.3	68.9	69.3	68.5	68.6	70.3	71.1
40000	70.4	71.5	72.9	71.6	71.0	69.5	68.0	68.5	69.0	69.4	68.5	68.7	70.4	71.1
50000	70.7	71.6	73.0	71.7	71.1	69.5	68.0	68.7	69.1	69.4	68.4	68.8	70.6	71.1
60000	70.9	71.8	73.0	71.8	71.2	69.5	68.1	68.8	69.1	69.5	68.5	68.9	70.6	71.1
70000	71.1	72.1	73.1	72.0	71.2	69.4	68.1	68.9	69.2	69.5	68.5	68.9	70.7	71.1
80000	71.2	72.2	73.2	72.1	71.2	69.4	68.2	69.0	69.2	69.5	68.5	69.1	70.8	70.9
90000	71.5	72.3	73.2	72.2	71.3	69.4	68.3	69.2	69.2	69.6	68.5	69.1	70.9	70.7
100000	71.7	72.4	73.2	72.3	71.3	69.4	68.3	69.3	69.3	69.6	68.4	69.2	70.9	70.5
110000	72.0	72.5	73.1	72.3	71.2	69.4	68.3	69.6	69.2	69.6	68.4	69.3	70.8	70.3
120000	71.9	72.8	72.9	72.2	71.1	69.3	68.3	69.7	69.2	69.5	68.3	69.1	70.7	70.0
130000	71.9	73.1	72.6	72.0	71.0	69.0	68.3	69.6	69.2	69.5	68.2	69.1	70.6	69.9
140000	72.1	73.4	72.3	71.8	70.9	68.7	68.4	69.7	69.2	69.4	68.1	69.0	70.5	69.8
150000	72.0	73.3	71.9	71.6	70.6	68.5	68.3	69.6	69.2	69.3	68.0	68.8	70.5	69.8
160000	71.8	73.4	71.5	71.3	70.4	68.3	68.0	69.6	69.2	69.2	67.9	68.6	70.5	69.8
170000	71.6	73.3	71.3	71.1	70.2	68.2	67.9	69.6	69.2	69.1	67.8	68.6	70.4	69.8
180000	71.3	73.3	71.1	70.9	70.1	67.9	67.7	69.6	69.2	69.0	67.7	68.6	70.4	70.1
190000	70.9	73.3	71.1	70.8	70.0	67.9	67.6	69.3	69.1	68.9	67.7	68.6	70.5	70.4
200000	70.9	73.4	71.0	70.8	69.9	67.8	67.5	69.2	69.1	68.8	67.7	68.7	70.4	71.0
210000	71.1	73.2	71.1	70.8	69.7	67.7	67.5	69.1	69.0	68.7	67.7	68.9	70.4	71.4
220000	71.1	72.9	71.1	70.9	69.6	67.7	67.6	68.9	69.0	68.7	67.8	69.1	70.5	71.7
230000	71.2	72.8	71.1	70.9	69.5	67.7	67.7	68.9	69.0	68.6	67.9	69.5	70.6	71.9
Daily Max	72.1	73.4	73.2	72.3	71.3	69.5	68.4	69.7	69.3	69.6	68.6	69.5	70.9	71.9
Daily Min	69.7	71.4	71.0	70.8	69.5	67.7	67.5	67.9	68.8	68.6	67.7	68.0	69.7	69.8
Average	71.1	72.5	72.3	71.5	70.7	68.8	68.0	69.0	69.1	69.2	68.2	68.8	70.5	70.7

Sandstone Tailwater Temperature Summary - July 2021

Time HHMMSS	07/01/21	07/02/21	07/03/21	07/04/21	07/05/21	07/06/21	07/07/21	07/08/21	07/09/21	07/10/21	07/11/21	07/12/21	07/13/21	07/14/21	07/15/21	07/16/21
0	72.0	72.9	72.1	73.4	74.4	75.7	74.7	70.3	69.8	69.7	70.5	71.3	71.7	72.8	73.0	73.2
10000	72.1	73.0	72.3	73.7	74.6	75.9	74.7	70.3	70.0	69.9	70.7	71.5	71.9	72.9	73.2	73.4
20000	72.2	73.0	72.5	73.9	75.0	76.1	74.6	70.2	70.1	70.1	70.9	71.7	72.1	73.1	73.3	73.5
30000	72.3	73.0	72.7	74.0	75.2	76.2	74.5	70.2	70.1	70.1	71.0	71.9	72.2	73.2	73.5	73.6
40000	72.2	72.8	72.8	74.1	75.4	76.3	74.4	70.1	70.2	70.3	71.2	72.0	72.4	73.3	73.6	73.7
50000	71.9	72.5	72.9	74.2	75.5	76.4	74.2	70.1	70.2	70.4	71.3	72.1	72.6	73.4	73.6	73.8
60000	71.7	72.2	73.0	74.2	75.5	76.5	74.0	70.0	70.2	70.4	71.4	72.2	72.7	73.5	73.6	73.8
70000	71.4	71.8	73.0	74.2	75.7	76.6	73.7	69.9	70.2	70.5	71.6	72.4	72.9	73.7	73.7	74.0
80000	71.0	71.3	72.9	74.1	75.8	76.7	73.4	69.7	70.0	70.6	71.7	72.5	73.0	73.9	73.7	74.1
90000	70.6	70.9	72.6	73.8	76.0	76.7	72.9	69.6	69.9	70.8	71.8	72.6	73.2	74.1	73.7	74.2
100000	70.5	70.5	72.4	73.8	76.2	76.7	72.6	69.4	69.6	70.9	71.9	72.7	73.2	74.2	73.6	74.2
110000	70.4	70.3	72.1	73.7	76.4	76.4	72.2	69.3	69.3	70.9	72.0	72.8	73.2	74.2	73.5	73.8
120000	70.3	70.1	71.9	73.5	76.4	76.0	71.9	69.1	68.9	70.8	71.8	72.6	73.1	74.1	73.3	73.5
130000	70.4	70.0	71.7	73.3	76.3	75.6	71.6	69.0	68.7	70.6	71.5	72.2	72.9	74.1	73.1	73.0
140000	70.5	70.0	71.7	73.3	76.3	75.3	71.5	69.0	68.6	70.4	71.4	71.9	72.8	73.9	73.0	72.7
150000	70.7	70.1	71.6	73.3	75.9	74.9	71.2	68.9	68.5	70.1	71.2	71.6	72.7	73.7	72.9	72.3
160000	70.8	70.2	71.7	73.4	75.6	74.6	71.1	69.0	68.4	69.9	71.0	71.5	72.5	73.5	72.8	72.0
170000	71.1	70.4	71.8	73.4	75.4	74.5	71.0	69.1	68.5	69.9	70.9	71.3	72.4	73.8	72.7	71.8
180000	71.3	70.5	71.9	73.3	75.4	74.5	70.8	69.2	68.5	69.8	70.7	71.3	72.3	73.6	72.7	71.8
190000	71.6	70.9	72.2	73.6	75.3	74.6	70.7	69.3	68.6	69.8	70.8	71.3	72.2	73.4	72.7	71.8
200000	71.9	71.2	72.4	73.6	75.4	74.6	70.7	69.4	68.8	69.8	70.9	71.4	72.3	73.2	72.8	71.9
210000	72.4	71.5	72.7	73.7	75.4	74.6	70.6	69.5	69.0	69.9	70.9	71.4	72.4	73.2	72.8	72.0
220000	72.6	71.7	72.9	73.9	75.5	74.6	70.6	69.6	69.3	70.1	71.0	71.5	72.5	73.0	73.0	72.1
230000	72.8	72.0	73.1	74.1	75.6	74.7	70.4	69.7	69.6	70.3	71.2	71.6	72.6	73.0	73.1	72.2
Daily Max	72.8	73.0	73.1	74.2	76.4	76.7	74.7	70.3	70.2	70.9	72.0	72.8	73.2	74.2	73.7	74.2
Daily Min	70.3	70.0	71.6	73.3	74.4	74.5	70.4	68.9	68.4	69.7	70.5	71.3	71.7	72.8	72.7	71.8
Average	71.4	71.4	72.4	73.7	75.6	75.6	72.4	69.6	69.4	70.3	71.2	71.9	72.6	73.5	73.2	73.0

Monthly average: 72.9
 License Maximum: 89 F

Sandstone Tailwater Temperature Summary - July 2021

Time HHMMSS	07/17/21	07/18/21	07/19/21	07/20/21	07/21/21	07/22/21	07/23/21	07/24/21	07/25/21	07/26/21	07/27/21	07/28/21	07/29/21	07/30/21	07/31/21
0	72.3	72.9	72.6	73.2	73.7	72.3	71.7	72.0	73.6	73.1	73.7	74.4	74.2	74.2	72.7
10000	72.4	73.0	72.7	73.2	73.8	72.4	71.7	72.0	73.8	73.3	73.1	74.6	74.3	74.2	72.9
20000	72.5	73.0	72.7	73.2	73.8	72.5	71.7	72.1	74.0	73.4	73.8	74.7	74.5	74.3	73.0
30000	72.7	73.1	72.8	73.3	73.8	72.5	71.7	72.2	74.2	73.6	74.1	74.9	74.7	74.4	73.2
40000	72.8	73.3	72.9	73.3	73.9	72.6	71.7	72.3	74.3	73.8	73.5	75.0	74.8	74.4	73.4
50000	72.9	73.4	73.0	73.4	73.9	72.7	71.7	72.4	74.4	73.9	73.3	75.0	74.8	74.4	73.6
60000	73.0	73.5	73.2	73.5	73.9	72.8	71.8	72.5	74.4	74.0	73.4	75.0	74.9	74.5	73.7
70000	73.3	73.7	73.4	73.6	73.9	72.9	71.8	72.6	74.4	74.1	73.5	74.8	74.9	74.5	73.8
80000	73.5	73.9	73.6	73.7	74.0	73.0	71.9	72.7	74.4	74.3	73.7	74.7	74.9	74.5	73.8
90000	73.6	74.1	73.8	73.9	74.1	73.2	72.0	72.9	74.5	74.5	74.5	74.6	74.8	74.6	73.8
100000	73.7	74.2	73.9	74.0	74.2	73.3	72.0	73.0	74.5	74.6	74.7	74.5	74.5	74.6	73.9
110000	73.8	74.3	74.1	74.1	74.2	73.4	72.1	73.1	74.5	74.7	75.0	74.2	74.5	74.6	73.9
120000	73.9	74.4	74.1	74.2	74.2	73.4	72.1	73.2	74.3	74.8	75.1	73.9	74.5	74.3	74.0
130000	73.9	74.4	74.2	74.3	74.0	73.5	72.1	73.4	74.1	74.7	75.0	73.7	74.3	73.9	74.1
140000	73.8	74.3	74.2	74.2	73.9	73.3	72.1	73.6	74.0	74.7	74.7	73.5	74.1	73.7	74.2
150000	73.6	73.9	74.1	74.0	73.6	73.2	72.1	73.7	73.7	74.5	74.5	73.3	74.0	73.3	74.3
160000	73.4	73.7	73.8	73.9	73.2	72.9	72.0	73.7	73.4	74.3	74.1	73.3	73.9	73.0	74.1
170000	73.2	73.5	73.6	73.8	73.0	72.7	72.0	73.6	73.1	74.1	73.9	73.3	73.9	72.7	73.8
180000	73.0	73.3	73.5	73.8	72.7	72.4	71.8	73.6	73.0	73.9	73.7	73.4	73.9	72.6	73.7
190000	73.0	73.1	73.4	73.7	72.5	72.2	71.8	73.6	73.0	73.8	73.7	73.5	74.0	72.6	73.5
200000	72.9	73.0	73.3	73.7	72.4	72.0	71.8	73.5	72.9	73.7	73.7	73.6	74.0	72.5	73.4
210000	72.9	72.8	73.2	73.6	72.3	71.9	71.8	73.5	72.9	73.6	73.8	73.7	74.0	72.5	73.2
220000	72.9	72.7	73.2	73.6	72.4	71.7	71.9	73.5	72.9	73.6	74.0	73.9	74.1	72.6	73.2
230000	72.8	72.7	73.2	73.7	72.4	71.7	71.9	73.5	73.0	73.7	74.2	74.1	74.1	72.6	73.1
Daily Max	73.9	74.4	74.2	74.3	74.2	73.5	72.1	73.7	74.5	74.8	75.1	75.0	74.9	74.6	74.3
Daily Min	72.3	72.7	72.6	73.2	72.3	71.7	71.7	72.0	72.9	73.1	73.1	73.3	73.9	72.5	72.7
Average	73.1	73.5	73.4	73.7	73.5	72.7	71.9	73.0	73.8	74.0	74.0	74.1	74.4	73.7	73.6

Sandstone Tailwater Temperature Summary - August 2021

Time HHMMSS	08/01/21	08/02/21	08/03/21	08/04/21	08/05/21	08/06/21	08/07/21	08/08/21	08/09/21	08/10/21	08/11/21	08/12/21	08/13/21	08/14/21	08/15/21	08/16/21
0	73.1	72.5	71.8	72.0	72.5	73.6	72.7	72.7	72.5	73.1	73.5	73.7	72.4	71.4	70.7	71.4
10000	73.1	72.5	72.0	72.1	72.5	73.5	72.8	72.6	72.7	73.2	73.7	73.7	72.3	71.6	70.9	71.5
20000	73.3	72.6	72.1	72.1	72.5	73.4	72.8	72.6	72.8	73.3	73.9	73.7	72.4	71.6	71.0	71.6
30000	73.3	72.7	72.2	72.2	72.5	73.3	72.8	72.6	72.9	73.4	74.0	73.8	72.4	71.7	71.2	71.7
40000	73.4	72.7	72.4	72.2	72.5	73.1	72.9	72.5	72.9	73.5	74.1	73.8	72.4	71.8	71.3	71.8
50000	73.5	72.8	72.5	72.2	72.6	73.1	72.9	72.5	72.9	73.5	74.3	73.9	72.4	71.9	71.5	71.9
60000	73.6	72.8	72.7	72.3	72.6	73.1	73.0	72.4	72.9	73.6	74.4	73.9	72.5	72.0	71.6	72.0
70000	73.7	72.9	72.8	72.4	72.7	73.1	72.9	72.4	73.0	73.7	74.5	73.9	72.5	72.0	71.7	72.1
80000	73.7	73.0	72.9	72.6	72.9	73.2	73.0	72.4	72.9	73.7	74.6	73.9	72.5	72.1	71.9	72.3
90000	73.8	73.0	73.0	72.7	73.0	73.3	73.1	72.4	72.8	73.7	74.7	73.9	72.6	72.1	71.9	72.4
100000	73.8	73.2	73.0	72.7	73.1	73.4	73.1	72.4	72.7	73.8	74.8	74.0	72.7	72.2	72.0	72.5
110000	73.9	73.1	73.1	72.8	73.3	73.5	73.2	72.4	72.6	73.7	74.9	73.9	72.8	72.1	72.2	72.6
120000	73.9	73.0	73.2	72.9	73.6	73.5	73.2	72.6	72.4	73.6	75.0	73.8	72.8	71.8	72.2	72.6
130000	73.9	72.8	73.1	72.9	73.7	73.4	73.3	72.7	72.2	73.4	75.0	73.7	72.7	71.5	72.4	72.6
140000	73.9	72.7	73.0	73.0	74.0	73.4	73.3	72.7	72.1	73.5	74.8	73.8	72.6	71.2	72.3	72.7
150000	73.5	72.3	72.8	72.9	74.1	73.3	73.3	72.7	71.9	73.2	74.9	73.7	72.4	70.9	72.2	72.7
160000	73.3	72.1	72.7	72.8	73.9	73.3	73.3	72.4	72.0	73.0	74.7	73.6	72.2	70.6	72.0	72.4
170000	73.1	71.8	72.5	72.7	73.9	73.3	73.2	72.2	71.9	73.0	74.5	73.4	71.8	70.5	71.9	72.4
180000	72.9	71.7	72.4	72.7	73.8	73.2	73.2	72.0	72.0	72.9	74.3	73.3	71.6	70.3	71.7	72.3
190000	72.7	71.6	72.2	72.6	73.7	73.2	73.1	72.0	72.1	73.1	74.2	73.1	71.5	70.2	71.5	72.2
200000	72.6	71.5	72.1	72.6	73.6	73.1	73.0	71.9	72.3	73.1	74.0	72.9	71.4	70.3	71.4	72.2
210000	72.5	71.5	72.0	72.5	73.7	72.9	72.9	72.0	72.5	73.2	73.9	72.7	71.3	70.4	71.4	72.0
220000	72.5	71.7	72.0	72.5	73.8	72.8	72.8	72.3	72.7	73.3	73.8	72.5	71.3	70.5	71.4	72.1
230000	72.5	71.8	72.0	72.4	73.7	72.7	72.7	72.4	72.9	73.4	73.7	72.4	71.3	70.6	71.3	72.1
Daily Max	73.9	73.2	73.2	73.0	74.1	73.6	73.3	72.7	73.0	73.8	75.0	74.0	72.8	72.2	72.4	72.7
Daily Min	72.5	71.5	71.8	72.0	72.5	72.7	72.7	71.9	71.9	72.9	73.5	72.4	71.3	70.2	70.7	71.4
Average	73.3	72.4	72.5	72.5	73.3	73.2	73.0	72.4	72.5	73.4	74.3	73.5	72.2	71.3	71.6	72.2

Monthly average: 73.0
 License Maximum: 89 F

Sandstone Tailwater Temperature Summary - August 2021

Time HHMMSS	08/17/21	08/18/21	08/19/21	08/20/21	08/21/21	08/22/21	08/23/21	08/24/21	08/25/21	08/26/21	08/27/21	08/28/21	08/29/21	08/30/21	08/31/21
0	72.1	72.5	72.9	73.4	73.9	74.1	73.1	73.0	73.1	73.0	72.9	72.1	72.6	74.1	72.7
10000	72.2	72.4	72.9	73.3	73.9	74.0	73.1	72.9	72.9	73.1	73.0	72.1	72.7	74.0	72.7
20000	72.2	72.4	72.9	73.3	73.8	74.0	73.0	72.9	72.9	73.2	73.1	72.1	73.3	74.0	72.7
30000	72.3	72.4	72.9	73.3	73.9	73.1	72.8	72.8	73.4	73.2	72.1	73.4	74.0	72.8	
40000	72.3	72.4	73.0	73.3	73.9	73.1	72.9	72.8	73.5	73.2	72.1	73.4	73.9	72.9	
50000	72.4	72.4	73.0	73.4	73.9	73.9	73.1	72.9	72.8	73.5	73.3	72.1	73.3	73.9	72.9
60000	72.5	72.4	73.0	73.4	74.0	73.9	73.1	72.9	72.8	73.6	73.4	72.1	73.3	73.8	73.0
70000	72.6	72.5	73.1	73.5	74.1	73.9	73.0	73.0	72.8	73.7	73.5	72.1	73.2	73.8	73.1
80000	72.8	72.6	73.3	73.6	74.2	73.9	73.1	73.1	72.8	73.9	73.5	72.1	73.4	73.8	73.2
90000	72.8	72.8	73.4	73.8	74.4	73.8	73.3	73.3	72.8	74.0	73.2	72.2	73.5	73.9	73.3
100000	72.9	72.9	73.5	73.9	74.5	73.8	73.4	73.4	72.9	74.0	73.1	72.3	73.8	73.8	73.3
110000	73.0	73.0	73.6	74.0	74.6	73.8	73.5	73.5	72.8	74.0	73.2	72.3	74.1	73.7	73.3
120000	73.0	73.0	73.7	74.0	74.7	73.8	73.6	73.6	72.9	74.2	73.3	72.3	74.3	73.8	73.3
130000	73.1	73.2	73.7	74.1	74.8	73.9	73.7	73.7	72.9	74.2	73.3	72.4	74.8	73.9	73.4
140000	73.3	73.2	73.8	74.2	75.0	74.0	73.7	73.7	72.9	74.0	73.2	72.3	74.7	74.0	73.3
150000	73.2	73.3	73.8	74.2	75.0	73.9	73.6	73.9	72.8	73.8	73.1	72.5	74.7	74.0	73.0
160000	73.1	73.2	73.7	74.1	75.0	73.8	73.6	73.9	72.7	73.6	72.9	72.5	74.8	73.8	72.7
170000	73.0	73.2	73.7	74.1	75.0	73.6	73.5	73.9	72.6	73.4	72.7	72.4	74.7	73.6	72.5
180000	72.9	73.2	73.8	74.2	74.9	73.5	73.5	73.9	72.6	73.2	72.5	72.3	74.7	73.3	72.3
190000	72.8	73.2	73.7	74.1	74.9	73.4	73.5	73.8	72.6	73.1	72.4	72.3	74.6	73.1	72.3
200000	72.8	73.1	73.6	74.0	74.7	73.3	73.3	73.6	72.6	73.0	72.3	72.3	74.6	73.0	72.2
210000	72.7	73.0	73.5	73.9	74.5	73.2	73.3	73.5	72.7	72.9	72.2	72.3	74.5	72.8	72.2
220000	72.6	73.0	73.5	73.9	74.4	73.2	73.2	73.4	72.8	72.9	72.2	72.4	74.2	72.8	72.2
230000	72.6	72.9	73.4	73.9	74.2	73.2	73.1	73.2	72.9	72.9	72.1	72.5	74.1	72.7	72.2
Daily Max	73.3	73.3	73.8	74.2	75.0	74.1	73.7	73.9	73.1	74.2	73.5	72.5	74.8	74.1	73.4
Daily Min	72.1	72.4	72.9	73.3	73.8	73.2	73.0	72.8	72.6	72.9	72.1	72.1	72.6	72.7	72.2
Average	72.7	72.8	73.4	73.8	74.4	73.7	73.3	73.4	72.8	73.5	72.9	72.3	73.9	73.6	72.8

Sandstone Tailwater Temperature Summary - September 2021

Time HHMMSS	09/01/21	09/02/21	09/03/21	09/04/21	09/05/21	09/06/21	09/07/21	09/08/21	09/09/21	09/10/21	09/11/21	09/12/21	09/13/21	09/14/21	09/15/21	09/16/21
0	72.2	70.8	70.1	69.6	68.9	68.2	67.4	67.9	66.8	65.7	66.1	67.0	66.5	65.9	66.9	65.8
10000	72.1	70.8	70.1	69.6	68.9	68.1	67.3	67.9	66.8	65.7	66.1	67.0	66.5	65.9	66.8	65.8
20000	72.2	70.9	70.2	69.5	68.9	68.1	67.4	67.7	66.7	65.7	66.1	67.0	66.4	66.0	66.7	65.8
30000	72.1	70.9	70.2	69.5	68.9	68.0	67.4	67.7	66.7	65.7	66.2	67.0	66.4	66.0	66.7	65.8
40000	72.2	70.9	70.2	69.4	68.9	68.0	67.4	67.6	66.6	65.8	66.3	67.0	66.4	66.1	66.6	65.9
50000	72.2	71.0	70.3	69.4	68.8	67.9	67.4	67.5	66.6	65.8	66.3	67.0	66.4	66.1	66.6	65.9
60000	72.2	71.0	70.3	69.4	68.8	67.8	67.4	67.5	66.6	65.9	66.4	67.1	66.4	66.1	66.5	65.9
70000	72.2	71.1	70.4	69.4	68.7	67.8	67.4	67.4	66.5	65.9	66.5	67.1	66.4	66.2	66.5	66.0
80000	72.3	71.2	70.5	69.5	68.7	67.8	67.4	67.4	66.5	66.0	66.6	67.1	66.4	66.4	66.5	66.0
90000	72.4	71.3	70.6	69.5	68.7	67.8	67.5	67.3	66.6	66.2	66.9	67.2	66.5	66.6	66.5	66.2
100000	72.4	71.4	70.7	69.5	68.7	67.8	67.6	67.4	66.6	66.3	67.1	67.3	66.6	66.7	66.4	66.2
110000	72.4	71.4	70.8	69.5	68.5	67.8	67.7	67.4	66.5	66.3	67.2	67.3	66.6	66.8	66.3	66.3
120000	72.3	71.5	70.9	69.6	68.5	67.8	67.8	67.4	66.6	66.4	67.4	67.3	66.6	67.0	66.3	66.4
130000	72.3	71.5	71.0	69.6	68.6	67.9	67.9	67.4	66.5	66.5	67.6	67.4	66.6	67.1	66.5	66.7
140000	72.1	71.6	71.0	69.6	68.7	67.9	68.1	67.4	66.6	66.8	67.9	67.4	66.5	67.2	66.7	66.8
150000	71.7	71.3	71.0	69.6	68.9	68.0	68.2	67.4	66.6	66.9	67.8	67.5	66.5	67.2	66.8	66.9
160000	71.4	71.0	70.9	69.5	68.9	68.0	68.1	67.3	66.5	67.0	67.8	67.4	66.3	67.2	66.6	66.9
170000	71.2	70.8	70.7	69.5	68.9	68.1	68.2	67.4	66.4	66.8	67.6	67.3	66.1	67.2	66.6	66.7
180000	71.1	70.4	70.6	69.4	68.8	68.0	68.2	67.4	66.2	66.6	67.6	67.2	65.9	67.2	66.5	66.4
190000	70.9	70.3	70.4	69.3	68.7	67.9	68.2	67.4	66.1	66.5	67.6	67.1	65.8	67.2	66.2	66.2
200000	70.8	70.2	70.3	69.2	68.6	67.7	68.1	67.4	65.9	66.3	67.5	67.0	65.8	67.1	66.1	66.0
210000	70.7	70.1	70.1	69.1	68.6	67.6	68.0	67.2	65.8	66.2	67.4	66.8	65.8	67.0	66.0	65.9
220000	70.8	70.1	69.9	69.0	68.4	67.5	67.9	67.0	65.8	66.2	67.2	66.7	65.8	66.9	65.9	65.8
230000	70.8	70.1	69.8	68.9	68.2	67.4	67.8	66.9	65.7	66.2	67.1	66.6	65.9	66.9	65.8	65.6
Daily Max	72.4	71.6	71.0	69.6	68.9	68.2	68.2	67.9	66.8	67.0	67.9	67.5	66.6	67.2	66.9	66.9
Daily Min	70.7	70.1	69.8	68.9	68.2	67.4	67.3	66.9	65.7	65.7	66.1	66.6	65.8	65.9	65.8	65.6
Average	71.8	70.9	70.5	69.4	68.7	67.9	67.7	67.4	66.4	66.2	67.0	67.1	66.3	66.7	66.5	66.2

Monthly average: 65.9
 License Maximum: 89 F

Sandstone Tailwater Temperature Summary - September 2021

Time HHMMSS	09/17/21	09/18/21	09/19/21	09/20/21	09/21/21	09/22/21	09/23/21	09/24/21	09/25/21	09/26/21	09/27/21	09/28/21	09/29/21	09/30/21
0	65.5	66.0	64.3	65.0	66.6	66.8	64.5	62.9	62.9	62.3	61.1	61.4	60.8	61.0
10000	65.5	66.0	64.4	65.0	66.9	66.7	64.5	62.8	62.8	62.2	61.1	61.4	60.8	61.1
20000	65.5	65.9	64.4	65.1	66.8	66.7	64.4	62.8	62.8	62.0	61.0	61.4	60.8	61.2
30000	65.5	65.9	64.5	65.2	66.8	66.6	64.3	62.8	62.8	61.9	61.0	61.4	60.9	61.3
40000	65.6	65.8	64.6	65.4	66.9	66.6	64.3	62.8	62.7	61.8	61.0	61.4	61.0	61.4
50000	65.7	65.8	64.7	65.5	66.9	66.6	64.3	62.8	62.5	61.7	61.0	61.4	61.0	61.4
60000	65.7	65.8	64.7	65.6	66.9	66.5	64.2	62.8	62.5	61.5	61.0	61.4	61.1	61.5
70000	65.8	65.7	64.8	65.7	66.8	66.5	64.2	62.7	62.5	61.4	61.0	61.4	61.1	61.6
80000	65.9	65.7	64.9	65.8	66.9	66.4	64.2	62.8	62.4	61.3	61.0	61.4	61.2	61.6
90000	66.0	65.7	65.1	66.0	66.9	66.3	64.1	62.8	62.4	61.2	61.1	61.5	61.3	61.7
100000	66.2	65.7	65.2	66.2	66.9	66.2	64.1	62.9	62.4	61.2	61.1	61.5	61.4	61.8
110000	66.2	65.6	65.4	66.3	66.8	66.0	64.0	62.9	62.4	61.2	61.1	61.5	61.4	61.9
120000	66.4	65.6	65.6	66.4	66.8	66.0	64.0	63.0	62.4	61.3	61.2	61.6	61.4	61.9
130000	66.6	65.7	65.8	66.5	66.8	65.9	64.0	63.2	62.5	61.3	61.3	61.5	61.5	62.0
140000	66.8	65.7	65.9	66.4	66.8	65.9	64.1	63.3	62.6	61.4	61.3	61.5	61.5	62.0
150000	66.7	65.7	65.8	66.5	66.8	65.7	64.1	63.3	62.5	61.4	61.4	61.6	61.5	61.9
160000	66.8	65.4	65.8	66.4	66.9	65.4	63.9	63.4	62.5	61.5	61.4	61.6	61.6	61.9
170000	66.7	65.0	65.7	66.3	67.0	65.2	63.8	63.3	62.6	61.5	61.4	61.5	61.3	61.7
180000	66.5	64.9	65.4	66.2	67.0	65.0	63.6	63.2	62.6	61.5	61.4	61.1	61.2	61.6
190000	66.5	64.7	65.2	66.2	67.0	64.9	63.4	63.1	62.5	61.4	61.4	61.0	61.1	61.5
200000	66.4	64.5	65.1	66.2	67.0	64.8	63.3	62.8	62.5	61.3	61.4	60.9	61.0	61.5
210000	66.2	64.4	65.1	66.2	66.9	64.8	63.2	62.7	62.4	61.3	61.5	60.8	61.0	61.4
220000	66.1	64.3	65.0	66.3	66.9	64.7	63.1	62.7	62.4	61.3	61.5	60.8	61.0	61.4
230000	66.1	64.3	64.9	66.7	66.8	64.6	63.0	62.8	62.3	61.2	61.5	60.8	61.0	61.4
Daily Max	66.8	66.0	65.9	66.7	67.0	66.8	64.5	63.4	62.9	62.3	61.5	61.6	61.6	62.0
Daily Min	65.5	64.3	64.3	65.0	66.6	64.6	63.0	62.7	62.3	61.2	61.0	60.8	60.8	61.0
Average	66.1	65.4	65.1	66.0	66.9	65.9	63.9	62.9	62.5	61.5	61.2	61.3	61.2	61.6

Potato Rapids Hydroelectric Project (FERC No. 2560)

**Potato Rapids Headwater
2021 Profile Data**

Date 6/2/2021
Time 9:30
Weather: Cloudy, light rain.

Date 6/16/2021
Time 12:30pm
Weather: Sunny & warm

Date 6/30/2021
Time 11:20am
Weather: Sunny, 78°

Depth (meters)	DO mg/l	Temp °F	pH S.U.
0.5	8.5	66.3	8.1
1.0	8.5	66.3	8.0
1.5	8.5	66.3	8.0
2.0	8.5	66.3	7.9
2.5	8.6	66.4	8.0
3.0	8.5	66.4	8.0
3.5	8.5	66.4	8.0

Hit bottom between 3.5 and 4 meters

Depth (m)	DO mg/l	Temp °F	pH S.U.
0.5	8.6	73.2	8.11
1.0	8.8	74.7	8.19
1.5	8.1	73.2	7.88
2.0	8.1	73.2	7.89
2.5	8.0	73.0	7.89
3.0	8.0	73.0	7.87
3.5	8.0	73.0	7.88

Hit bottom between 3.5 and 4 meters

Depth (m)	DO mg/l	Temp °F	pH S.U.
0.5	8.5	74.6	6.8
1.0	8.5	74.6	8.0
1.5	8.4	74.6	8.1
2.0	8.2	74.3	8.1
2.5	7.9	73.8	8.1
3.0	7.9	73.7	8.1

Hit bottom between 3.0 and 3.5 meters

Date 7/14/2021
Time 10:25am
Weather: Sunny & hot

Date 7/28/2021
Time 10:50am
Weather: Overcast, warm, 77degrees

Date 8/11/2021
Time 9:34
Weather: Cloudy, 77 F and humid. 5-10 mph winds

Depth (m)	DO mg/l	Temp °F	pH S.U.
0.5	7.9	77.0	8.0
1.0	7.8	76.8	8.1
1.5	7.8	76.8	8.2
2.0	7.8	76.7	8.2
2.5	7.9	76.7	8.2

Hit bottom at 2.5

Depth (m)	DO mg/l	Temp °F	pH S.U.
0.5	7.2	77.0	7.9
1.0	7.2	76.8	8.0
1.5	7.2	76.8	8.0
2.0	7.2	76.8	8.0

Hit bottom at 2.0

Depth (m)	DO mg/l	Temp °F	pH S.U.
0.5	7.4	76.8	8.1
1.0	7.3	76.7	8.1
1.5	7.3	76.7	8.1
2.0	7.3	76.7	8.1
2.5	7.4	76.8	8.1

On bottom at 2.5 m

**Potato Rapids Headwater
2021 Profile Data**

Date 8/25/2021
 Time 10:30am
 Weather: Overcast, warm, 75°

Date 9/7/2021
 Time 10:45am
 Weather: Cool & cloudy

Date 9/22/2021
 Time 10:00am
 Weather: Sunny & cool, 54°

Depth (m)	DO mg/l	Temp °F	pH S.U.
0.5	7.2	75.8	8.0
1.0	7.2	75.6	8.1
1.5	7.1	75.5	8.1
2.0	7.1	75.5	8.1
2.5	7.1	75.5	8.1
3.0	7.1	75.5	8.1

Hit bottom at 3.0

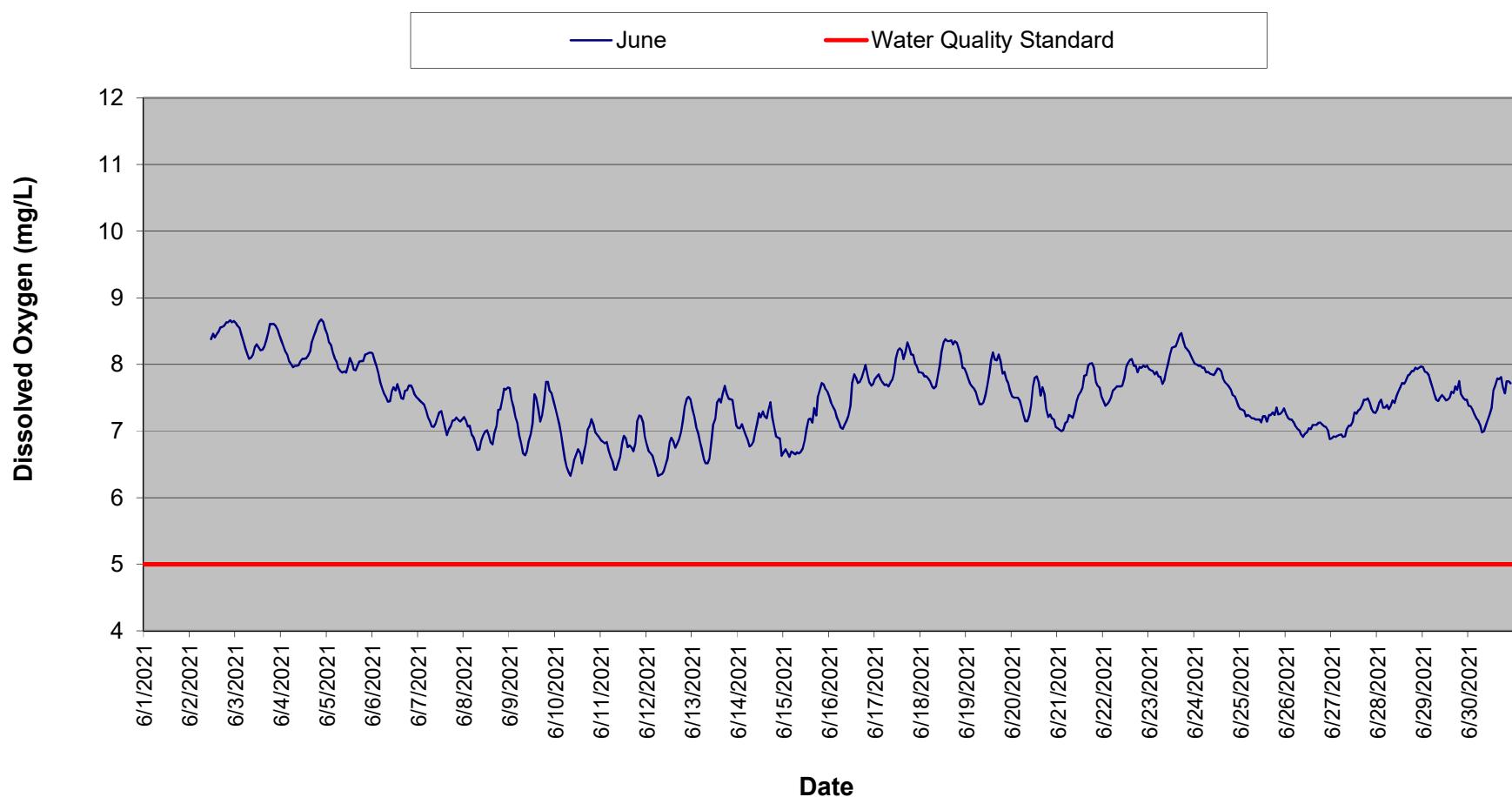
Depth (m)	DO mg/l	Temp °F	pH S.U.
0.5	8.0	67.0	8.6
1.0	7.9	67.1	8.4
1.5	7.9	67.1	8.4
2.0	8.0	67.1	8.4
2.5	8.0	67.2'	8.4
3.0	7.9	67.2	8.4

Hit bottom between 2.5 & 3.0

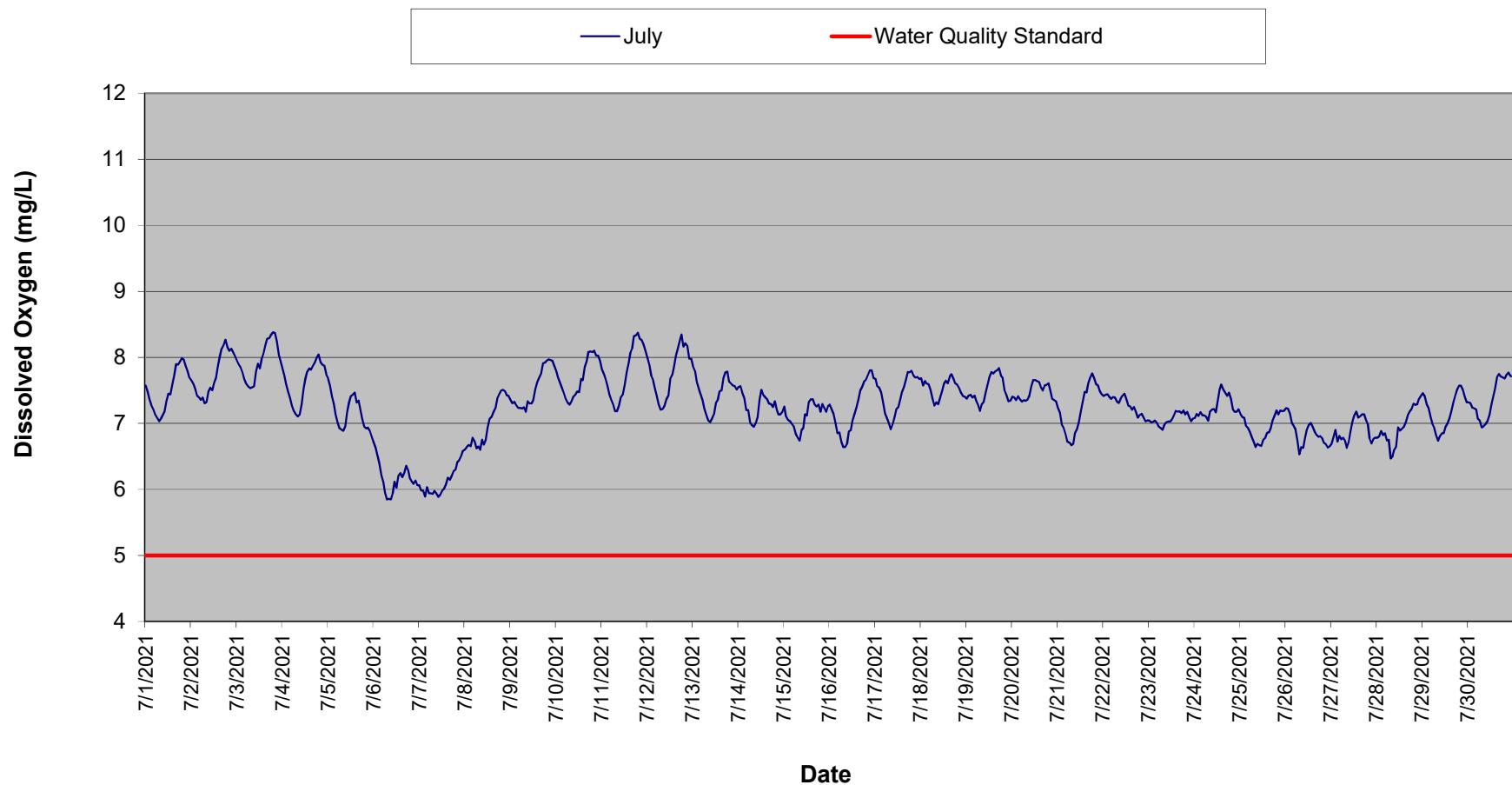
Depth (m)	DO mg/l	Temp °F	pH S.U.
0.5	8.2	66.0	8.2
1.0	8.2	66.1	8.2
1.5	8.2	66.1	8.2
2.0	8.2	66.2	8.3
2.5	8.2	66.2	8.3

Hit bottom between at 2.5

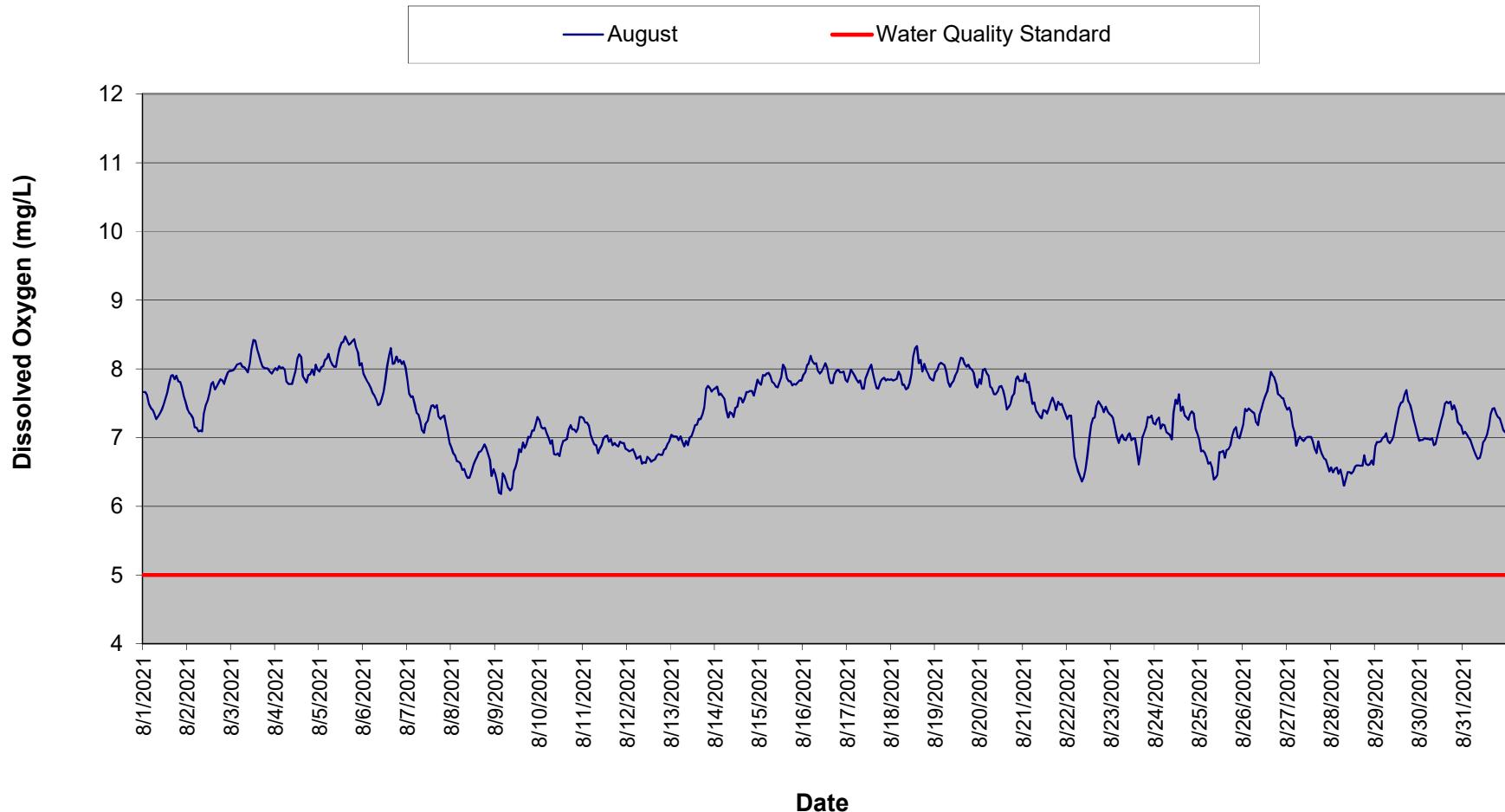
Potato Rapids Tailwater Dissolved Oxygen Summary - June 2021

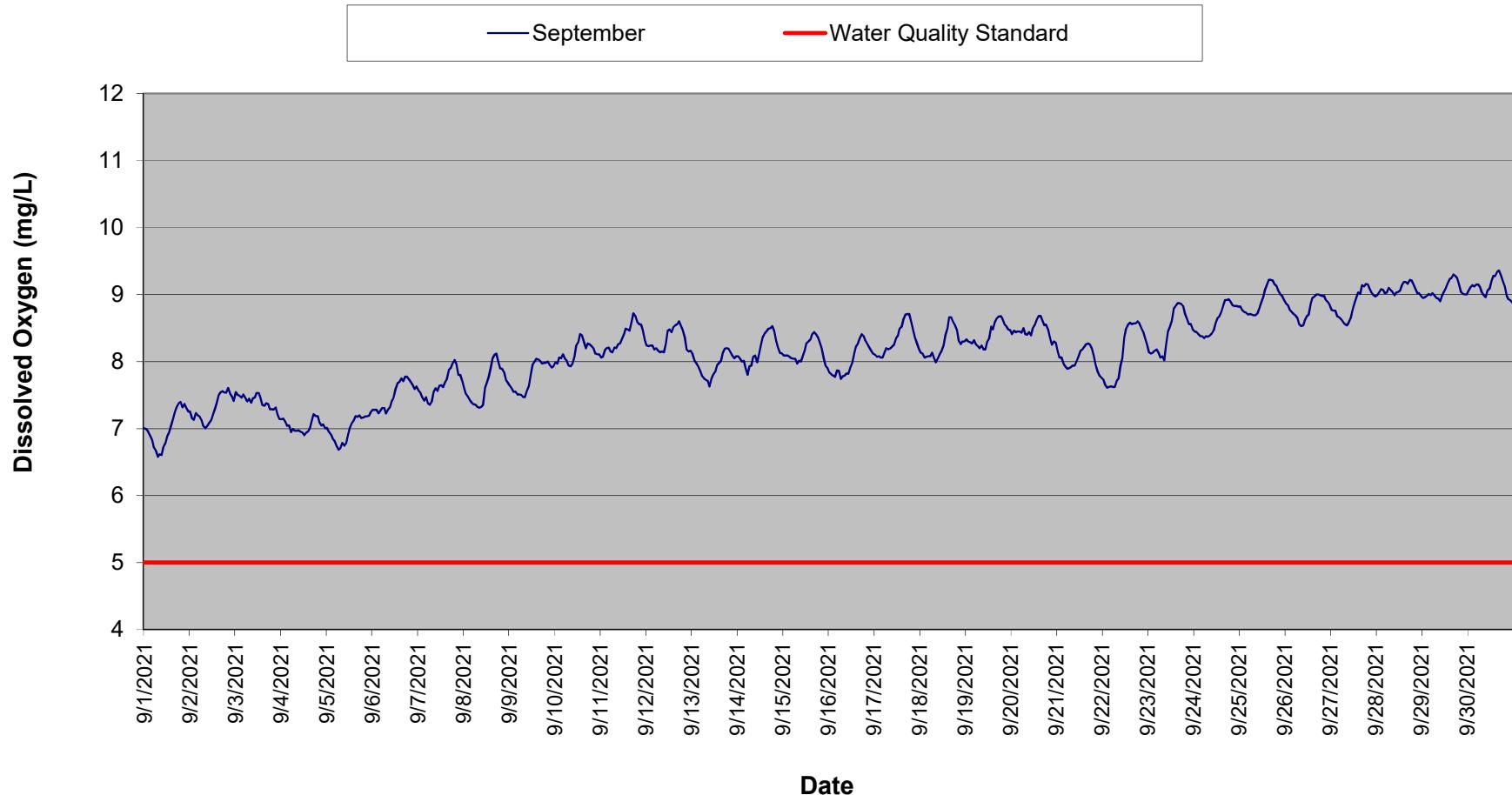


Potato Rapids Tailwater Dissolved Oxygen Summary - July 2021



Potato Rapids Tailwater Dissolved Oxygen Summary - August 2021



Potato Rapids Tailwater Dissolved Oxygen Summary - September 2021

Potato Rapids Tailwater Dissolved Oxygen Summary - June 2021

Time HHMMSS	06/01/21	06/02/21	06/03/21	06/04/21	06/05/21	06/06/21	06/07/21	06/08/21	06/09/21	06/10/21	06/11/21	06/12/21	06/13/21	06/14/21	06/15/21	06/16/21
0 10000	0.0	0.0	8.6	8.4	8.5	8.2	7.5	7.2	7.6	7.3	6.9	6.8	7.3	7.0	6.7	7.5
0 20000	0.0	0.0	8.6	8.3	8.3	8.1	7.4	7.1	7.5	7.2	6.8	6.7	7.2	7.0	6.7	7.4
0 30000	0.0	0.0	8.5	8.2	8.3	8.0	7.4	7.1	7.4	7.1	6.8	6.7	7.1	7.1	6.7	7.4
0 40000	0.0	0.0	8.4	8.1	8.2	7.9	7.4	7.1	7.2	7.0	6.8	6.6	7.0	7.0	6.6	7.3
0 50000	0.0	0.0	8.2	8.0	8.0	7.6	7.2	6.9	6.9	6.6	6.6	6.4	6.7	6.9	6.7	7.1
0 60000	0.0	0.0	8.2	8.0	7.9	7.6	7.1	6.8	6.8	6.5	6.6	6.3	6.6	6.8	6.7	7.1
0 70000	0.0	0.0	8.1	8.0	7.9	7.5	7.1	6.7	6.7	6.4	6.4	6.3	6.5	6.8	6.7	7.0
0 80000	0.0	0.0	8.1	8.0	7.9	7.4	7.1	6.7	6.6	6.3	6.4	6.4	6.5	6.8	6.7	7.1
0 90000	0.0	0.0	8.1	8.0	7.9	7.4	7.1	6.9	6.7	6.4	6.5	6.4	6.6	7.0	6.7	7.2
0 100000	0.0	0.0	8.3	8.0	7.9	7.6	7.2	6.9	6.8	6.6	6.6	6.5	6.9	7.1	6.7	7.2
0 110000	0.0	8.4	8.3	8.1	8.0	7.7	7.3	7.0	7.0	6.7	6.8	6.6	7.1	7.3	6.9	7.4
0 120000	0.0	8.5	8.3	8.1	8.1	7.6	7.3	7.0	7.1	6.7	6.9	6.8	7.2	7.2	7.0	7.7
0 130000	0.0	8.4	8.2	8.1	8.0	7.7	7.2	6.9	7.6	6.7	6.9	6.9	7.4	7.3	7.2	7.9
0 140000	0.0	8.5	8.2	8.1	7.9	7.6	7.0	6.8	7.5	6.5	6.8	6.8	7.5	7.2	7.2	7.8
0 150000	0.0	8.5	8.3	8.2	7.9	7.5	6.9	6.8	7.3	6.7	6.8	6.7	7.4	7.2	7.1	7.7
0 160000	0.0	8.6	8.4	8.3	8.0	7.5	7.0	7.0	7.1	6.8	6.8	6.8	7.6	7.3	7.3	7.7
0 170000	0.0	8.6	8.5	8.4	8.0	7.6	7.1	7.1	7.2	7.0	6.7	6.9	7.7	7.4	7.2	7.8
0 180000	0.0	8.6	8.6	8.5	8.1	7.6	7.2	7.3	7.4	7.1	6.8	7.0	7.6	7.2	7.5	7.9
0 190000	0.0	8.6	8.6	8.6	8.0	7.7	7.2	7.3	7.7	7.2	7.1	7.2	7.5	7.0	7.6	8.0
0 200000	0.0	8.6	8.6	8.6	8.1	7.7	7.2	7.5	7.7	7.1	7.2	7.4	7.5	6.9	7.7	7.8
0 210000	0.0	8.7	8.6	8.7	8.2	7.6	7.2	7.6	7.6	7.0	7.2	7.5	7.5	6.9	7.7	7.7
0 220000	0.0	8.6	8.5	8.6	8.2	7.5	7.1	7.6	7.6	6.9	7.1	7.5	7.3	6.9	7.6	7.7
0 230000	0.0	8.6	8.4	8.5	8.2	7.5	7.2	7.7	7.5	6.9	6.9	7.5	7.1	6.6	7.6	7.7
Daily Max	0.0	8.7	8.6	8.7	8.5	8.2	7.5	7.7	7.7	7.3	7.2	7.5	7.7	7.4	7.7	8.0
Daily Min	0.0	0.0	8.1	8.0	7.9	7.4	6.9	6.7	6.6	6.3	6.4	6.3	6.5	6.6	6.6	7.0
Average	0.0	4.6	8.4	8.2	8.1	7.7	7.2	7.1	7.2	6.8	6.8	6.8	7.1	7.0	7.0	7.5

License Minimum: 5.0 mg/l

Missing data due to equipment malfunction. Monitor was deployed on May 26 and suddenly stopped working on May 30. Prior to the equipment malfunction DO levels ranged between 9.3 mg/l and 9.8 mg/l.

Potato Rapids Tailwater Dissolved Oxygen Summary - June 2021

Time HHMMSS	06/17/21	06/18/21	06/19/21	06/20/21	06/21/21	06/22/21	06/23/21	06/24/21	06/25/21	06/26/21	06/27/21	06/28/21	06/29/21	06/30/21
0	7.8	7.9	7.9	7.5	7.0	7.5	7.9	8.0	7.3	7.3	6.9	7.3	8.0	7.4
10000	7.8	7.9	7.8	7.5	7.0	7.4	7.9	8.0	7.3	7.2	6.9	7.4	7.9	7.4
20000	7.9	7.8	7.7	7.5	7.0	7.4	7.9	8.0	7.3	7.2	6.9	7.5	7.9	7.3
30000	7.8	7.8	7.7	7.5	7.0	7.4	7.9	8.0	7.2	7.2	6.9	7.4	7.8	7.3
40000	7.7	7.8	7.6	7.5	7.1	7.5	7.9	8.0	7.2	7.1	6.9	7.4	7.7	7.2
50000	7.7	7.7	7.6	7.4	7.1	7.6	7.8	8.0	7.2	7.1	7.0	7.4	7.6	7.2
60000	7.7	7.7	7.5	7.2	7.2	7.6	7.8	7.9	7.2	7.0	6.9	7.3	7.6	7.1
70000	7.7	7.6	7.4	7.2	7.2	7.7	7.7	7.9	7.2	7.0	6.9	7.4	7.5	7.0
80000	7.7	7.7	7.4	7.2	7.2	7.7	7.8	7.9	7.2	7.0	7.0	7.5	7.5	7.0
90000	7.8	7.8	7.4	7.2	7.3	7.7	7.9	7.9	7.2	6.9	7.1	7.4	7.5	7.1
100000	7.9	8.0	7.5	7.4	7.5	7.7	8.0	7.8	7.2	7.0	7.1	7.5	7.5	7.2
110000	8.1	8.2	7.7	7.7	7.5	7.8	8.1	7.9	7.1	7.0	7.1	7.6	7.5	7.2
120000	8.2	8.3	7.9	7.8	7.6	8.0	8.3	7.9	7.2	7.0	7.3	7.7	7.5	7.3
130000	8.2	8.4	8.1	7.8	7.7	8.0	8.3	7.9	7.2	7.0	7.3	7.7	7.5	7.6
140000	8.2	8.4	8.2	7.7	7.8	8.1	8.3	7.9	7.1	7.1	7.3	7.7	7.5	7.7
150000	8.1	8.4	8.1	7.5	7.8	8.1	8.3	7.8	7.2	7.1	7.3	7.8	7.6	7.8
160000	8.2	8.4	8.1	7.7	8.0	8.0	8.4	7.7	7.2	7.1	7.4	7.8	7.6	7.8
170000	8.3	8.3	8.2	7.6	8.0	8.0	8.5	7.7	7.3	7.1	7.5	7.9	7.7	7.8
180000	8.3	8.4	8.1	7.3	8.0	7.9	8.4	7.7	7.2	7.1	7.5	7.9	7.6	7.7
190000	8.2	8.3	7.9	7.2	8.0	8.0	8.3	7.6	7.4	7.1	7.5	7.9	7.8	7.6
200000	8.1	8.2	7.9	7.3	7.7	8.0	8.2	7.5	7.3	7.1	7.4	8.0	7.6	7.7
210000	8.0	8.1	7.8	7.2	7.7	8.0	8.2	7.5	7.3	7.1	7.3	7.9	7.5	7.7
220000	8.0	8.0	7.7	7.2	7.7	8.0	8.1	7.5	7.3	7.0	7.3	8.0	7.5	7.7
230000	7.9	7.9	7.6	7.1	7.5	8.0	8.1	7.4	7.3	6.9	7.3	8.0	7.5	7.6
Daily Max	8.3	8.4	8.2	7.8	8.0	8.1	8.5	8.0	7.4	7.3	7.5	8.0	8.0	7.8
Daily Min	7.7	7.6	7.4	7.1	7.0	7.4	7.7	7.4	7.1	6.9	6.9	7.3	7.5	7.0
Average	8.0	8.0	7.8	7.4	7.5	7.8	8.1	7.8	7.2	7.1	7.2	7.6	7.6	7.4

License Mii

Potato Rapids Tailwater Dissolved Oxygen Summary - July 2021

Time HHMMSS	07/01/21	07/02/21	07/03/21	07/04/21	07/05/21	07/06/21	07/07/21	07/08/21	07/09/21	07/10/21	07/11/21	07/12/21	07/13/21	07/14/21	07/15/21	07/16/21
0	7.6	7.7	7.9	7.8	7.7	6.7	6.1	6.6	7.4	7.8	7.8	8.0	7.9	7.6	7.3	7.3
10000	7.5	7.6	7.9	7.7	7.6	6.6	6.0	6.6	7.3	7.7	7.7	7.9	7.8	7.6	7.1	7.2
20000	7.4	7.5	7.8	7.6	7.4	6.5	6.0	6.7	7.3	7.6	7.7	7.7	7.6	7.5	7.1	7.1
30000	7.3	7.4	7.8	7.5	7.3	6.4	5.9	6.7	7.3	7.5	7.6	7.6	7.5	7.4	7.0	7.0
40000	7.2	7.4	7.7	7.4	7.1	6.2	6.0	6.8	7.2	7.5	7.4	7.5	7.4	7.2	7.0	6.9
50000	7.1	7.4	7.6	7.3	7.0	6.1	5.9	6.7	7.2	7.4	7.4	7.4	7.4	7.2	7.0	6.9
60000	7.1	7.4	7.6	7.2	6.9	6.0	5.9	6.6	7.2	7.3	7.3	7.3	7.2	7.0	6.8	6.7
70000	7.0	7.3	7.5	7.1	6.9	5.8	5.9	6.7	7.2	7.3	7.2	7.2	7.1	7.0	6.8	6.6
80000	7.1	7.3	7.5	7.1	6.9	5.9	6.0	6.6	7.2	7.3	7.2	7.2	7.0	7.0	6.7	6.6
90000	7.1	7.5	7.6	7.1	7.0	5.8	5.9	6.8	7.3	7.4	7.3	7.3	7.0	7.0	6.9	6.7
100000	7.2	7.5	7.8	7.3	7.2	5.9	5.9	6.7	7.3	7.4	7.4	7.4	7.1	7.1	6.9	6.9
110000	7.3	7.5	7.9	7.5	7.3	6.1	5.9	6.8	7.3	7.5	7.4	7.4	7.1	7.4	7.1	6.9
120000	7.5	7.6	7.8	7.7	7.4	6.0	6.0	6.9	7.4	7.5	7.6	7.7	7.3	7.5	7.1	7.0
130000	7.4	7.7	8.0	7.8	7.4	6.2	6.0	7.1	7.5	7.7	7.8	7.7	7.4	7.4	7.3	7.1
140000	7.6	7.9	8.1	7.8	7.5	6.2	6.1	7.1	7.6	7.7	7.9	7.9	7.5	7.4	7.4	7.2
150000	7.7	8.0	8.2	7.8	7.3	6.2	6.2	7.2	7.7	7.9	8.1	8.0	7.5	7.4	7.4	7.4
160000	7.9	8.1	8.3	7.9	7.3	6.2	6.1	7.2	7.8	7.9	8.1	8.1	7.7	7.3	7.3	7.5
170000	7.9	8.2	8.3	7.9	7.2	6.4	6.2	7.4	7.9	8.1	8.3	8.3	7.8	7.3	7.3	7.6
180000	7.9	8.3	8.3	8.0	7.1	6.3	6.3	7.4	7.9	8.1	8.3	8.3	7.8	7.2	7.3	7.6
190000	8.0	8.2	8.4	8.0	7.0	6.2	6.3	7.5	7.9	8.1	8.4	8.2	7.6	7.3	7.2	7.7
200000	8.0	8.1	8.4	7.9	6.9	6.1	6.4	7.5	8.0	8.1	8.3	8.2	7.6	7.2	7.3	7.7
210000	7.9	8.1	8.2	7.9	6.9	6.1	6.4	7.5	8.0	8.0	8.3	8.2	7.6	7.1	7.2	7.8
220000	7.8	8.1	8.0	7.9	6.9	6.1	6.5	7.4	7.9	8.0	8.2	8.0	7.6	7.1	7.2	7.8
230000	7.7	8.0	7.9	7.7	6.8	6.1	6.6	7.4	7.9	7.9	8.1	8.0	7.5	7.2	7.3	7.7
Daily Max	8.0	8.3	8.4	8.0	7.7	6.7	6.6	7.5	8.0	8.1	8.4	8.3	7.9	7.6	7.4	7.8
Daily Min	7.0	7.3	7.5	7.1	6.8	5.8	5.9	6.6	7.2	7.3	7.2	7.2	7.0	7.0	6.7	6.6
Average	7.5	7.7	7.9	7.6	7.2	6.2	6.1	7.0	7.5	7.7	7.8	7.8	7.5	7.3	7.1	7.2

License Minimum Dissolved Oxygen: 5.0 mg/l

Potato Rapids Tailwater Dissolved Oxygen Summary - July 2021

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

Potato Rapids Tailwater Dissolved Oxygen Summary - August 2021

Time HHMMSS	08/01/21	08/02/21	08/03/21	08/04/21	08/05/21	08/06/21	08/07/21	08/08/21	08/09/21	08/10/21	08/11/21	08/12/21	08/13/21	08/14/21	08/15/21	08/16/21
0	7.7	7.4	8.0	8.0	8.0	7.9	7.8	6.9	6.5	7.3	7.3	6.8	7.0	7.7	7.8	7.9
10000	7.7	7.4	8.0	8.0	7.9	7.6	6.8	6.4	7.2	7.2	6.8	7.0	7.7	7.8	8.0	
20000	7.6	7.3	8.0	8.0	8.0	7.8	7.6	6.7	6.2	7.1	7.2	6.8	7.0	7.6	7.9	8.1
30000	7.5	7.3	8.1	8.0	8.1	7.8	7.6	6.7	6.2	7.1	7.2	6.8	7.0	7.6	7.9	8.1
40000	7.4	7.2	8.1	8.0	8.2	7.7	7.5	6.7	6.5	7.1	7.0	6.8	7.0	7.6	7.9	8.2
50000	7.4	7.1	8.1	8.0	8.2	7.7	7.4	6.6	6.4	7.0	7.0	6.7	7.0	7.6	7.9	8.1
60000	7.3	7.1	8.0	7.8	8.1	7.6	7.3	6.5	6.4	6.9	6.9	6.7	6.9	7.4	7.9	8.1
70000	7.3	7.1	8.0	7.8	8.1	7.6	7.2	6.5	6.3	7.0	6.9	6.7	6.9	7.3	7.8	8.1
80000	7.3	7.1	8.0	7.8	8.0	7.5	7.1	6.5	6.2	6.8	6.8	6.6	7.0	7.4	7.8	8.0
90000	7.4	7.4	8.0	7.8	8.0	7.5	7.1	6.4	6.3	6.8	6.8	6.6	6.9	7.4	7.7	7.9
100000	7.4	7.5	8.1	7.9	8.2	7.6	7.2	6.4	6.5	6.8	6.9	6.6	7.0	7.3	7.7	8.0
110000	7.5	7.5	8.3	8.0	8.3	7.7	7.2	6.5	6.6	6.7	7.0	6.7	7.0	7.4	7.8	8.0
120000	7.6	7.7	8.4	8.2	8.4	7.8	7.4	6.6	6.7	6.9	7.0	6.7	7.1	7.5	7.9	8.1
130000	7.7	7.8	8.4	8.2	8.4	8.0	7.5	6.7	6.8	7.0	7.0	6.7	7.2	7.6	8.1	8.0
140000	7.8	7.8	8.3	8.2	8.5	8.2	7.5	6.7	6.8	7.0	6.9	6.7	7.2	7.6	8.0	7.9
150000	7.9	7.7	8.2	7.9	8.4	8.3	7.4	6.8	6.9	7.0	7.0	6.7	7.3	7.5	7.9	7.8
160000	7.9	7.7	8.1	7.9	8.4	8.1	7.5	6.8	6.9	7.1	6.9	6.7	7.3	7.6	7.8	7.8
170000	7.9	7.8	8.0	7.8	8.4	8.1	7.3	6.8	6.9	7.2	6.9	6.8	7.3	7.7	7.8	7.9
180000	7.9	7.9	8.0	7.9	8.4	8.2	7.3	6.9	7.0	7.1	6.9	6.8	7.4	7.7	7.8	8.0
190000	7.8	7.8	8.0	7.9	8.4	8.1	7.3	6.9	7.0	7.1	6.9	6.8	7.7	7.7	7.8	8.0
200000	7.8	7.8	8.0	8.0	8.3	8.1	7.3	6.8	7.1	7.1	6.9	6.8	7.8	7.7	7.8	8.0
210000	7.7	7.9	8.0	7.9	8.2	8.1	7.2	6.7	7.1	7.1	6.9	6.8	7.7	7.6	7.8	8.0
220000	7.6	8.0	7.9	8.1	8.1	7.1	6.4	7.2	7.3	6.9	6.9	7.7	7.7	7.8	8.0	
230000	7.5	8.0	8.0	8.0	8.1	8.0	6.9	6.5	7.3	7.3	6.8	7.0	7.7	7.8	7.8	
Daily Max	7.9	8.0	8.4	8.2	8.5	8.3	7.8	6.9	7.3	7.3	7.3	7.0	7.8	7.8	8.1	8.2
Daily Min	7.3	7.1	7.9	7.8	8.0	7.5	6.9	6.4	6.2	6.7	6.8	6.6	6.9	7.3	7.7	7.8
Average	7.6	7.5	8.1	8.0	8.2	7.9	7.3	6.7	6.7	7.0	7.0	6.7	7.2	7.6	7.8	8.0

License Minimum Dissolved Oxygen: 5.0 mg/l

Potato Rapids Tailwater Dissolved Oxygen Summary - August 2021

Time HHMMSS	08/17/21	08/18/21	08/19/21	08/20/21	08/21/21	08/22/21	08/23/21	08/24/21	08/25/21	08/26/21	08/27/21	08/28/21	08/29/21	08/30/21	08/31/21
0	7.8	7.9	8.0	7.9	7.8	7.3	7.3	7.2	7.0	7.2	7.4	6.6	6.9	7.0	7.1
10000	7.9	7.8	8.0	7.8	7.9	7.3	7.3	7.3	6.8	7.4	7.4	6.5	6.9	7.0	7.1
20000	8.0	7.8	8.1	8.0	7.8	7.3	7.2	7.3	6.8	7.4	7.4	6.5	6.9	7.0	7.0
30000	8.0	7.9	8.1	8.0	7.8	7.0	7.0	7.1	6.8	7.4	7.2	6.6	6.9	7.0	7.0
40000	7.9	8.0	8.1	7.9	7.7	6.7	6.9	7.2	6.7	7.4	7.1	6.5	7.0	7.0	7.0
50000	7.9	7.9	8.1	7.9	7.5	6.6	7.0	7.2	6.6	7.4	6.9	6.5	7.0	7.0	6.9
60000	7.8	7.8	8.0	7.7	7.5	6.5	7.0	7.1	6.6	7.4	7.0	6.4	7.1	7.0	6.8
70000	7.8	7.8	7.8	7.7	7.4	6.4	7.0	7.1	6.6	7.2	7.0	6.3	6.9	7.0	6.7
80000	7.7	7.7	7.7	7.6	7.4	6.4	7.0	7.0	6.4	7.2	7.0	6.4	6.9	6.9	6.7
90000	7.7	7.7	7.8	7.6	7.3	6.4	7.0	7.0	6.4	7.3	6.9	6.5	7.0	6.9	6.7
100000	7.9	7.8	7.8	7.7	7.3	6.5	7.1	7.4	6.5	7.4	7.0	6.5	7.0	7.0	6.8
110000	7.9	7.9	7.9	7.7	7.4	6.7	7.0	7.6	6.8	7.5	7.0	6.5	7.2	7.1	6.9
120000	8.0	8.2	8.0	7.8	7.4	7.0	7.0	7.5	6.8	7.6	7.0	6.5	7.3	7.3	7.0
130000	8.1	8.3	8.1	7.7	7.4	7.2	7.0	7.6	6.8	7.7	7.0	6.6	7.4	7.3	7.0
140000	7.9	8.3	8.2	7.6	7.4	7.3	6.8	7.4	6.7	7.8	6.9	6.6	7.5	7.5	7.2
150000	7.8	8.1	8.2	7.4	7.5	7.3	6.6	7.5	6.8	8.0	6.8	6.6	7.5	7.5	7.3
160000	7.7	8.1	8.1	7.4	7.6	7.5	6.8	7.3	6.8	7.9	6.8	6.6	7.6	7.5	7.4
170000	7.7	8.0	8.0	7.5	7.5	7.0	7.3	6.9	7.9	6.9	6.6	7.7	7.5	7.4	
180000	7.8	8.1	8.1	7.6	7.4	7.5	7.1	7.3	7.0	7.8	6.8	6.7	7.5	7.4	7.3
190000	7.9	8.0	8.0	7.6	7.5	7.4	7.2	7.3	7.1	7.6	6.8	6.6	7.5	7.5	7.3
200000	7.9	7.9	8.0	7.9	7.5	7.4	7.3	7.4	7.2	7.6	6.7	6.6	7.4	7.4	7.3
210000	7.8	7.9	7.9	7.9	7.5	7.5	7.3	7.4	7.0	7.6	6.7	6.6	7.3	7.2	7.2
220000	7.9	7.8	7.8	7.8	7.4	7.4	7.3	7.1	7.0	7.6	6.6	6.7	7.2	7.2	7.1
230000	7.8	7.8	7.7	7.8	7.4	7.4	7.2	7.1	7.1	7.5	6.5	6.6	7.1	7.2	7.1
Daily Max	8.1	8.3	8.2	8.0	7.9	7.5	7.3	7.6	7.2	8.0	7.4	6.7	7.7	7.5	7.4
Daily Min	7.7	7.7	7.7	7.4	7.3	6.4	6.6	7.0	6.4	7.2	6.5	6.3	6.9	6.9	6.7
Average	7.9	7.9	8.0	7.7	7.5	7.1	7.1	7.3	6.8	7.5	7.0	6.5	7.2	7.2	7.1

Potato Rapids Tailwater Dissolved Oxygen Summary - September 2021

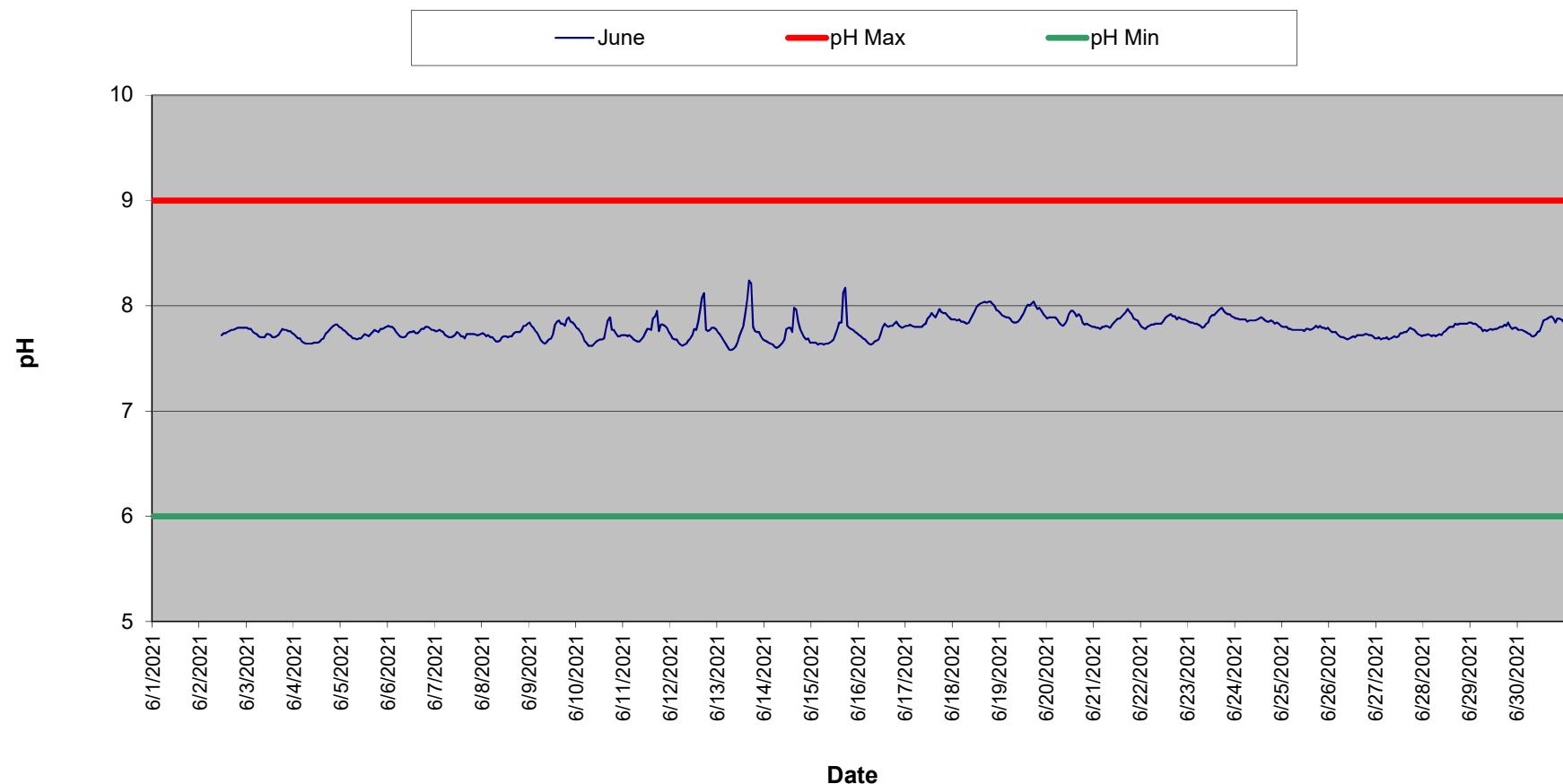
Time HHMMSS	09/01/21	09/02/21	09/03/21	09/04/21	09/05/21	09/06/21	09/07/21	09/08/21	09/09/21	09/10/21	09/11/21	09/12/21	09/13/21	09/14/21	09/15/21	09/16/21
0	7.0	7.3	7.5	7.1	7.0	7.3	7.6	7.6	7.6	8.0	8.1	8.2	8.1	8.1	8.1	7.8
10000	7.0	7.2	7.5	7.2	6.9	7.3	7.5	7.5	7.6	8.0	8.1	8.2	8.0	8.1	8.1	7.8
20000	7.0	7.1	7.5	7.1	6.9	7.3	7.5	7.5	7.6	8.1	8.2	8.2	8.0	8.0	8.1	7.8
30000	6.9	7.2	7.5	7.0	6.8	7.2	7.4	7.4	7.6	8.1	8.2	8.2	7.9	8.0	8.1	7.8
40000	6.8	7.2	7.5	7.0	6.8	7.3	7.5	7.4	7.5	8.1	8.2	8.2	7.9	7.9	8.1	7.9
50000	6.7	7.2	7.5	6.9	6.7	7.3	7.4	7.4	7.5	8.0	8.2	8.2	7.8	7.8	8.0	7.9
60000	6.7	7.1	7.4	7.0	6.7	7.3	7.4	7.4	7.5	8.0	8.1	8.2	7.8	7.9	8.0	7.7
70000	6.6	7.0	7.4	7.0	6.7	7.2	7.4	7.3	7.5	7.9	8.2	8.1	7.7	7.9	8.0	7.8
80000	6.6	7.0	7.4	7.0	6.8	7.3	7.5	7.3	7.5	7.9	8.2	8.2	7.7	8.1	8.0	7.8
90000	6.6	7.0	7.5	7.0	6.7	7.3	7.6	7.3	7.6	8.0	8.3	8.1	7.6	8.1	8.0	7.8
100000	6.7	7.1	7.5	7.0	6.8	7.4	7.6	7.4	7.6	8.1	8.3	8.3	7.7	8.0	8.1	7.8
110000	6.8	7.1	7.5	6.9	6.9	7.5	7.6	7.6	7.8	8.2	8.3	8.5	7.8	8.1	8.2	7.9
120000	6.9	7.2	7.5	6.9	7.0	7.6	7.6	7.7	8.0	8.3	8.4	8.5	7.9	8.3	8.3	8.0
130000	6.9	7.3	7.5	6.9	7.1	7.7	7.6	7.8	8.0	8.4	8.5	8.4	8.0	8.4	8.3	8.1
140000	7.1	7.4	7.4	7.0	7.1	7.7	7.7	7.9	8.0	8.4	8.5	8.5	8.0	8.4	8.3	8.2
150000	7.1	7.5	7.3	7.0	7.2	7.7	7.7	8.1	8.0	8.3	8.5	8.5	8.0	8.5	8.4	8.3
160000	7.2	7.5	7.4	7.1	7.2	7.7	7.9	8.1	8.0	8.2	8.6	8.6	8.1	8.5	8.4	8.4
170000	7.3	7.6	7.4	7.2	7.2	7.8	7.9	8.1	8.0	8.3	8.7	8.6	8.2	8.5	8.4	8.4
180000	7.4	7.5	7.3	7.2	7.2	7.8	8.0	8.0	8.0	8.3	8.7	8.5	8.2	8.5	8.4	8.4
190000	7.4	7.5	7.3	7.2	7.2	7.7	8.0	7.9	8.0	8.2	8.6	8.5	8.2	8.5	8.3	8.3
200000	7.3	7.6	7.3	7.1	7.2	7.7	8.0	7.9	8.0	8.2	8.6	8.4	8.1	8.3	8.2	8.3
210000	7.4	7.5	7.3	7.0	7.2	7.7	7.8	7.8	8.0	8.1	8.6	8.2	8.1	8.2	8.1	8.2
220000	7.3	7.5	7.2	7.1	7.2	7.6	7.8	7.7	7.9	8.1	8.5	8.2	8.1	8.1	7.9	8.2
230000	7.3	7.4	7.1	7.0	7.3	7.6	7.7	7.7	7.9	8.1	8.3	8.2	8.1	8.1	7.9	8.1
Daily Max	7.4	7.6	7.5	7.2	7.3	7.8	8.0	8.1	8.0	8.4	8.7	8.6	8.2	8.5	8.4	8.4
Daily Min	6.6	7.0	7.1	6.9	6.7	7.2	7.4	7.3	7.5	7.9	8.1	8.1	7.6	7.8	7.9	7.7
Average	7.0	7.3	7.4	7.0	7.0	7.5	7.7	7.7	7.8	8.1	8.4	8.3	8.0	8.2	8.1	8.0

License Minimum Dissolved Oxygen: 5.0 mg/l

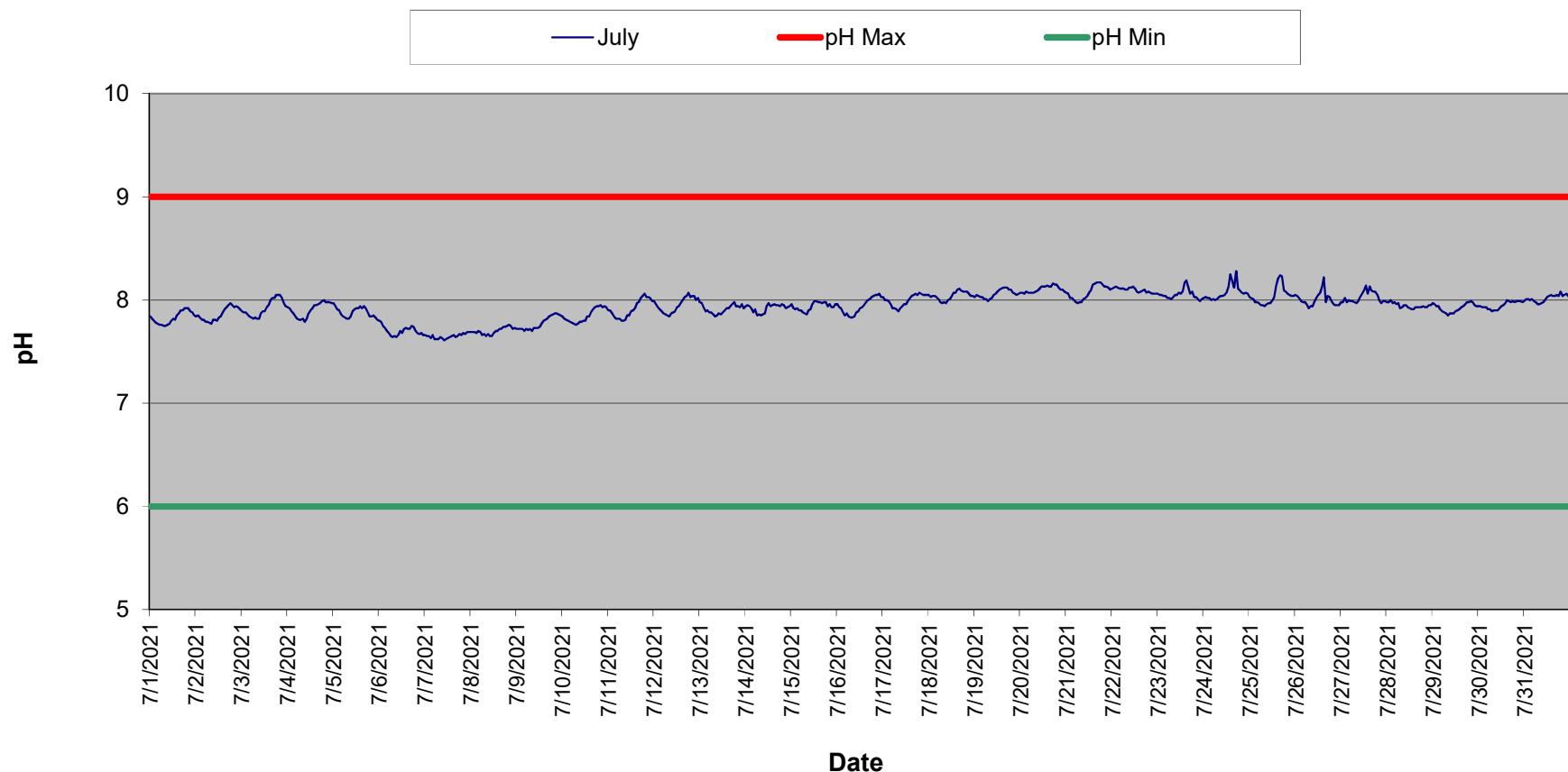
Potato Rapids Tailwater Dissolved Oxygen Summary - September 2021

Time HHMMSS	09/17/21	09/18/21	09/19/21	09/20/21	09/21/21	09/22/21	09/23/21	09/24/21	09/25/21	09/26/21	09/27/21	09/28/21	09/29/21	09/30/21
0	8.1	8.1	8.3	8.4	8.2	7.7	8.1	8.5	8.8	8.9	8.8	9.0	9.0	9.1
10000	8.1	8.1	8.3	8.5	8.1	7.7	8.1	8.4	8.8	8.8	8.8	9.0	9.0	9.1
20000	8.1	8.1	8.3	8.4	8.1	7.6	8.1	8.4	8.7	8.8	8.8	9.1	9.0	9.1
30000	8.1	8.1	8.3	8.5	8.0	7.6	8.2	8.4	8.7	8.7	8.7	9.1	9.0	9.1
40000	8.1	8.1	8.3	8.5	7.9	7.6	8.2	8.4	8.7	8.7	8.7	9.0	9.0	9.2
50000	8.1	8.1	8.3	8.4	7.9	7.6	8.1	8.4	8.7	8.7	8.6	9.0	9.0	9.2
60000	8.2	8.1	8.2	8.5	7.9	7.6	8.1	8.4	8.7	8.7	8.6	9.1	9.0	9.1
70000	8.2	8.1	8.2	8.4	7.9	7.7	8.1	8.4	8.7	8.6	8.6	9.1	9.0	9.0
80000	8.2	8.0	8.2	8.4	7.9	7.8	8.0	8.4	8.7	8.5	8.5	9.0	8.9	9.0
90000	8.2	8.1	8.2	8.4	7.9	7.9	8.2	8.4	8.7	8.5	8.6	9.0	8.9	9.0
100000	8.3	8.1	8.2	8.4	8.0	8.1	8.5	8.5	8.8	8.6	8.7	9.0	9.0	9.1
110000	8.3	8.2	8.3	8.5	8.1	8.4	8.5	8.6	8.9	8.7	8.8	9.0	9.0	9.1
120000	8.4	8.2	8.3	8.6	8.2	8.5	8.6	8.7	9.0	8.7	8.9	9.1	9.1	9.2
130000	8.5	8.4	8.5	8.6	8.2	8.6	8.8	8.7	9.1	8.9	9.0	9.1	9.2	9.3
140000	8.5	8.5	8.5	8.7	8.2	8.6	8.8	8.7	9.2	9.0	9.0	9.2	9.2	9.3
150000	8.6	8.7	8.6	8.7	8.3	8.6	8.9	8.8	9.2	9.0	9.0	9.2	9.3	9.3
160000	8.7	8.7	8.7	8.6	8.3	8.6	8.9	8.9	9.2	9.0	9.1	9.2	9.3	9.4
170000	8.7	8.6	8.7	8.5	8.3	8.6	8.9	8.9	9.2	9.0	9.1	9.2	9.3	9.3
180000	8.7	8.5	8.7	8.6	8.2	8.6	8.8	8.9	9.2	9.0	9.2	9.2	9.2	9.2
190000	8.6	8.5	8.6	8.5	8.1	8.6	8.7	8.9	9.1	9.0	9.2	9.2	9.2	9.1
200000	8.5	8.3	8.6	8.3	8.0	8.5	8.6	8.8	9.1	9.0	9.1	9.1	9.0	9.0
210000	8.4	8.3	8.5	8.3	7.9	8.4	8.6	8.8	9.0	8.9	9.0	9.0	9.0	8.9
220000	8.3	8.3	8.5	8.3	7.8	8.4	8.6	8.8	9.0	8.9	9.0	9.0	9.0	8.9
230000	8.2	8.3	8.5	8.3	7.8	8.3	8.5	8.8	8.9	8.8	9.0	9.0	9.0	8.9
Daily Max	8.7	8.7	8.7	8.7	8.3	8.6	8.9	8.9	9.2	9.0	9.2	9.2	9.3	9.4
Daily Min	8.1	8.0	8.2	8.3	7.8	7.6	8.0	8.4	8.7	8.5	8.5	9.0	8.9	8.9
Average	8.3	8.3	8.4	8.5	8.0	8.1	8.5	8.6	8.9	8.8	8.9	9.1	9.1	9.1

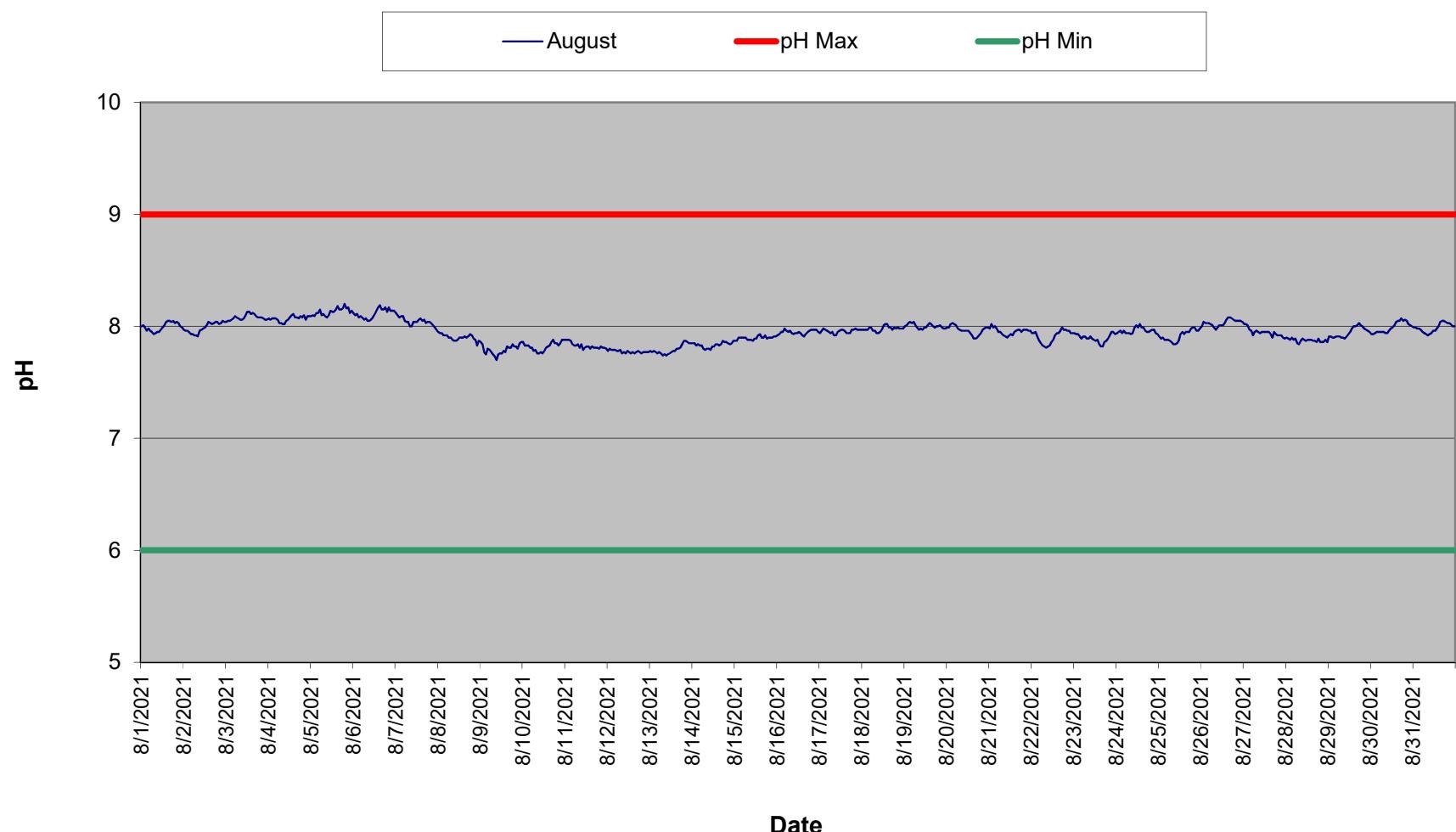
Potato Rapids Tailwater pH Summary - June 2021



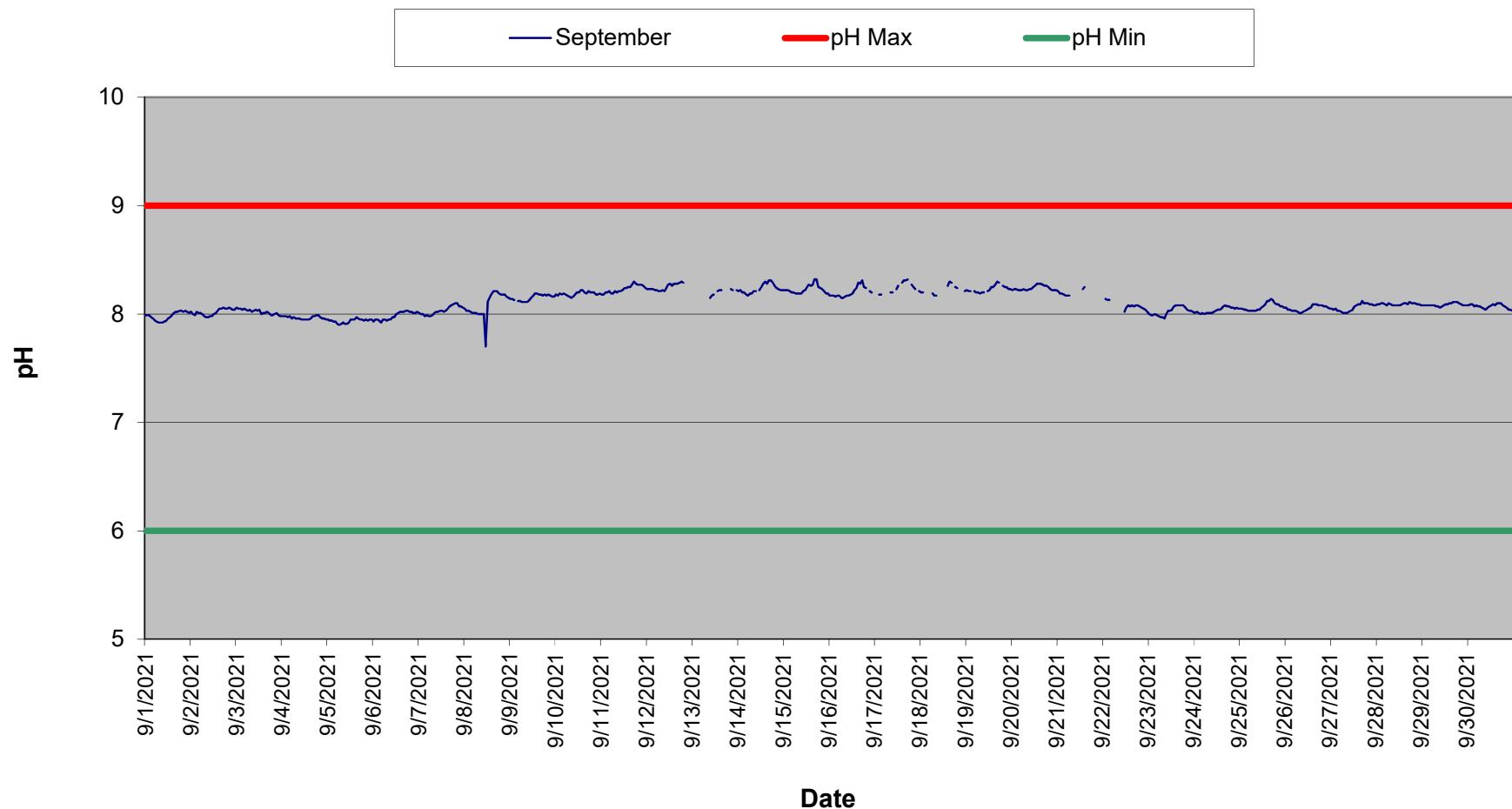
Potato Rapids Tailwater pH Summary - July 2021



Potato Rapids Tailwater pH Summary - August 2021



Potato Rapids Tailwater pH Summary - September 2021



Potato Rapids Tailwater pH Summary - June 2021

Time HHMMSS	06/01/21	06/02/21	06/03/21	06/04/21	06/05/21	06/06/21	06/07/21	06/08/21	06/09/21	06/10/21	06/11/21	06/12/21	06/13/21	06/14/21	06/15/21	06/16/21
0			7.8	7.7	7.8	7.8	7.8	7.7	7.8	7.8	7.7	7.7	7.8	7.7	7.7	7.7
10000			7.8	7.7	7.8	7.8	7.8	7.7	7.8	7.8	7.7	7.7	7.7	7.7	7.7	7.7
20000			7.8	7.7	7.8	7.8	7.8	7.7	7.8	7.8	7.7	7.7	7.7	7.7	7.7	7.7
30000			7.8	7.7	7.7	7.8	7.8	7.7	7.8	7.7	7.7	7.7	7.7	7.6	7.6	7.7
40000			7.7	7.7	7.7	7.8	7.8	7.7	7.7	7.7	7.7	7.7	7.6	7.6	7.6	7.7
50000			7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.6	7.6	7.6	7.6	7.6
60000			7.7	7.6	7.7	7.7	7.7	7.7	7.7	7.6	7.7	7.6	7.6	7.6	7.6	7.6
70000			7.7	7.6	7.7	7.7	7.7	7.7	7.7	7.6	7.7	7.6	7.6	7.6	7.6	7.6
80000			7.7	7.6	7.7	7.7	7.7	7.7	7.6	7.6	7.7	7.6	7.6	7.6	7.6	7.7
90000			7.7	7.6	7.7	7.7	7.7	7.7	7.7	7.6	7.7	7.7	7.6	7.7	7.7	7.7
100000			7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
110000		7.7	7.7	7.7	7.8	7.8	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.8	7.7	7.7
120000		7.7	7.7	7.7	7.7	7.8	7.7	7.7	7.7	7.7	7.8	7.8	7.8	7.8	7.7	7.8
130000		7.7	7.7	7.7	7.7	7.8	7.7	7.7	7.8	7.7	7.8	7.8	7.8	7.8	7.8	7.8
140000		7.8	7.7	7.7	7.7	7.7	7.7	7.7	7.9	7.7	7.8	7.9	7.9	7.8	7.8	7.8
150000		7.8	7.7	7.7	7.7	7.7	7.7	7.7	7.8	7.8	7.9	8.0	8.1	8.0	7.8	7.8
160000		7.8	7.7	7.7	7.8	7.8	7.7	7.7	7.8	7.9	7.9	8.1	8.2	8.0	8.1	7.8
170000		7.8	7.8	7.8	7.8	7.8	7.7	7.8	7.9	7.9	8.0	8.1	8.2	7.9	8.2	7.8
180000		7.8	7.8	7.8	7.8	7.8	7.7	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
190000		7.8	7.8	7.8	7.8	7.8	7.7	7.8	7.9	7.8	7.8	7.8	7.7	7.8	7.9	7.9
200000		7.8	7.8	7.8	7.8	7.8	7.7	7.8	7.9	7.7	7.8	7.8	7.8	7.7	7.8	7.8
210000		7.8	7.8	7.8	7.8	7.8	7.7	7.8	7.9	7.7	7.8	7.8	7.8	7.7	7.8	7.8
220000		7.8	7.8	7.8	7.8	7.8	7.7	7.8	7.8	7.7	7.8	7.8	7.7	7.7	7.8	7.8
230000		7.8	7.7	7.8	7.8	7.8	7.7	7.8	7.8	7.7	7.8	7.8	7.7	7.7	7.7	7.8
Daily Max	0.0	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9	8.0	8.1	8.2	8.0	8.2	7.9
Daily Min	0.0	7.7	7.7	7.6	7.7	7.7	7.7	7.7	7.6	7.6	7.7	7.6	7.6	7.6	7.6	7.6
Average	#DIV/0!	7.8	7.7	7.7	7.7	7.8	7.7	7.7	7.8	7.7	7.7	7.8	7.7	7.7	7.7	7.7

License maximum pH: 9

License minimum pH: 6

Missing data due to equipment malfunction. Monitor was deployed on May 26 and suddenly stopped working on May 30.
 Prior to the equipment malfunction pH levels ranged between 7.8 and 7.9 s.u.

Potato Rapids Tailwater pH Summary - June 2021

Time HHMMSS	06/17/21	06/18/21	06/19/21	06/20/21	06/21/21	06/22/21	06/23/21	06/24/21	06/25/21	06/26/21	06/27/21	06/28/21	06/29/21	06/30/21
0	7.8	7.9	7.9	7.9	7.8	7.8	7.9	7.9	7.8	7.8	7.7	7.7	7.8	7.8
10000	7.8	7.9	7.9	7.9	7.8	7.8	7.8	7.9	7.8	7.8	7.7	7.7	7.8	7.8
20000	7.8	7.9	7.9	7.9	7.8	7.8	7.8	7.9	7.8	7.8	7.7	7.7	7.8	7.8
30000	7.8	7.9	7.9	7.9	7.8	7.8	7.8	7.9	7.8	7.8	7.7	7.7	7.8	7.8
40000	7.8	7.9	7.9	7.9	7.8	7.8	7.8	7.9	7.8	7.7	7.7	7.7	7.8	7.8
50000	7.8	7.9	7.9	7.9	7.8	7.8	7.8	7.9	7.8	7.7	7.7	7.7	7.8	7.7
60000	7.8	7.8	7.9	7.8	7.8	7.8	7.8	7.9	7.8	7.7	7.7	7.7	7.8	7.7
70000	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.8	7.7	7.7	7.7	7.8	7.7
80000	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.8	7.7	7.7	7.7	7.8	7.7
90000	7.8	7.9	7.9	7.8	7.8	7.8	7.8	7.9	7.8	7.7	7.7	7.7	7.8	7.7
100000	7.8	7.9	7.9	7.9	7.8	7.8	7.8	7.9	7.8	7.7	7.7	7.8	7.8	7.8
110000	7.9	8.0	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.7	7.7	7.8	7.8	7.8
120000	7.9	8.0	7.9	8.0	7.9	7.9	7.9	7.9	7.8	7.7	7.7	7.8	7.8	7.8
130000	7.9	8.0	8.0	8.0	7.9	7.9	7.9	7.9	7.8	7.7	7.7	7.8	7.8	7.9
140000	7.9	8.0	8.0	7.9	7.9	7.9	7.9	7.9	7.8	7.7	7.8	7.8	7.8	7.9
150000	7.9	8.0	8.0	7.9	7.9	7.9	8.0	7.9	7.8	7.7	7.8	7.8	7.8	7.9
160000	7.9	8.0	8.0	7.9	7.9	7.9	8.0	7.9	7.8	7.7	7.8	7.8	7.8	7.9
170000	8.0	8.0	8.0	7.9	8.0	7.9	8.0	7.9	7.8	7.7	7.8	7.8	7.8	7.9
180000	7.9	8.0	8.0	7.8	7.9	7.9	8.0	7.9	7.8	7.7	7.8	7.8	7.8	7.9
190000	7.9	8.0	8.0	7.8	7.9	7.9	7.9	7.9	7.8	7.7	7.8	7.8	7.8	7.8
200000	7.9	8.0	8.0	7.8	7.9	7.9	7.9	7.8	7.8	7.7	7.8	7.8	7.8	7.9
210000	7.9	8.0	8.0	7.8	7.9	7.9	7.9	7.8	7.8	7.7	7.7	7.8	7.8	7.9
220000	7.9	8.0	7.9	7.8	7.9	7.9	7.9	7.8	7.8	7.7	7.7	7.8	7.8	7.9
230000	7.9	8.0	7.9	7.8	7.8	7.9	7.9	7.9	7.8	7.8	7.7	7.7	7.8	7.9
Daily Max	8.0	8.0	8.0	8.0	8.0	7.9	8.0	7.9	7.8	7.8	7.8	7.8	7.8	7.9
Daily Min	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.7	7.7	7.7	7.8	7.7
Average	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.7	7.7	7.8	7.8	7.8

Potato Rapids Tailwater pH Summary - July 2021

Time HHMMSS	07/01/21	07/02/21	07/03/21	07/04/21	07/05/21	07/06/21	07/07/21	07/08/21	07/09/21	07/10/21	07/11/21	07/12/21	07/13/21	07/14/21	07/15/21	07/16/21
0	7.8	7.8	7.9	7.9	8.0	7.8	7.7	7.7	7.7	7.8	7.9	8.0	8.0	7.9	8.0	8.0
10000	7.8	7.9	7.9	7.9	7.9	7.8	7.7	7.7	7.7	7.8	7.9	8.0	8.0	8.0	7.9	7.9
20000	7.8	7.8	7.9	7.9	7.9	7.8	7.7	7.7	7.7	7.8	7.9	7.9	7.9	7.9	7.9	7.9
30000	7.8	7.8	7.9	7.9	7.9	7.7	7.6	7.7	7.7	7.8	7.8	7.9	7.9	7.9	7.9	7.9
40000	7.8	7.8	7.8	7.8	7.9	7.7	7.7	7.7	7.7	7.8	7.8	7.9	7.9	7.9	7.9	7.9
50000	7.8	7.8	7.8	7.8	7.8	7.7	7.6	7.7	7.7	7.8	7.8	7.9	7.9	7.9	7.9	7.9
60000	7.8	7.8	7.8	7.8	7.8	7.7	7.6	7.7	7.7	7.8	7.8	7.9	7.9	7.9	7.9	7.8
70000	7.8	7.8	7.8	7.8	7.8	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9	7.9	7.9	7.8
80000	7.8	7.8	7.8	7.8	7.8	7.7	7.6	7.7	7.7	7.8	7.8	7.8	7.8	7.9	7.9	7.8
90000	7.8	7.8	7.8	7.8	7.8	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9	7.9	7.9	7.8
100000	7.8	7.8	7.9	7.8	7.9	7.7	7.6	7.7	7.7	7.8	7.9	7.9	7.9	7.9	7.9	7.9
110000	7.8	7.8	7.9	7.9	7.9	7.7	7.6	7.7	7.7	7.8	7.9	7.9	7.9	7.9	8.0	7.9
120000	7.8	7.8	7.9	7.9	7.9	7.7	7.6	7.7	7.7	7.8	7.9	7.9	7.9	8.0	8.0	7.9
130000	7.8	7.8	7.9	7.9	7.9	7.7	7.6	7.7	7.8	7.8	7.9	7.9	7.9	7.9	8.0	7.9
140000	7.9	7.9	8.0	8.0	7.9	7.7	7.7	7.7	7.8	7.8	7.9	8.0	7.9	8.0	8.0	8.0
150000	7.9	7.9	8.0	8.0	7.9	7.7	7.7	7.7	7.8	7.8	7.9	8.0	8.0	8.0	8.0	8.0
160000	7.9	7.9	8.0	8.0	7.9	7.7	7.6	7.7	7.8	7.9	8.0	8.0	7.9	8.0	8.0	8.0
170000	7.9	8.0	8.0	8.0	7.9	7.8	7.7	7.7	7.8	7.9	8.0	8.0	8.0	8.0	8.0	8.0
180000	7.9	8.0	8.1	8.0	7.9	7.7	7.7	7.7	7.9	7.9	8.0	8.1	8.0	7.9	8.0	8.0
190000	7.9	8.0	8.1	8.0	7.8	7.7	7.7	7.8	7.9	7.9	8.1	8.0	7.9	8.0	7.9	8.0
200000	7.9	7.9	8.1	8.0	7.8	7.7	7.7	7.8	7.9	8.0	8.0	8.0	7.9	8.0	8.0	8.1
210000	7.9	7.9	8.0	8.0	7.9	7.7	7.7	7.8	7.9	7.9	8.0	8.0	7.9	7.9	7.9	8.1
220000	7.9	7.9	8.0	8.0	7.8	7.7	7.7	7.7	7.9	7.9	8.0	8.0	8.0	7.9	7.9	8.1
230000	7.9	7.9	7.9	8.0	7.8	7.7	7.7	7.7	7.9	7.9	8.0	8.0	7.9	7.9	8.0	8.0
Daily Max	7.9	8.0	8.1	8.0	8.0	7.8	7.7	7.8	7.9	8.0	8.1	8.1	8.0	8.0	8.0	8.1
Daily Min	7.8	7.8	7.8	7.8	7.8	7.6	7.6	7.7	7.7	7.8	7.8	7.8	7.9	7.9	7.8	7.8
Average	7.8	7.9	7.9	7.9	7.9	7.9	7.7	7.6	7.7	7.8	7.8	8.0	7.9	7.9	7.9	7.9

License maximum pH: 9

License minimum pH: 6

Potato Rapids Tailwater pH Summary - July 2021

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

Potato Rapids pH Summary - August 2021

Time HHMMSS	08/01/21	08/02/21	08/03/21	08/04/21	08/05/21	08/06/21	08/07/21	08/08/21	08/09/21	08/10/21	08/11/21	08/12/21	08/13/21	08/14/21	08/15/21	08/16/21
0	8.0	8.0	8.0	8.1	8.1	8.1	8.1	8.0	7.9	7.9	7.9	7.8	7.8	7.9	7.9	7.9
10000	8.0	8.0	8.1	8.1	8.1	8.1	7.9	7.8	7.8	7.9	7.8	7.8	7.9	7.9	7.9	7.9
20000	8.0	8.0	8.1	8.1	8.1	8.1	7.9	7.8	7.8	7.9	7.8	7.8	7.8	7.9	7.9	8.0
30000	8.0	8.0	8.1	8.1	8.1	8.1	8.1	7.9	7.8	7.8	7.9	7.8	7.8	7.8	7.9	8.0
40000	8.0	7.9	8.1	8.1	8.1	8.1	8.1	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.9	8.0
50000	8.0	7.9	8.1	8.1	8.2	8.1	8.1	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.9	8.0
60000	8.0	7.9	8.1	8.0	8.1	8.1	8.0	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.9	8.0
70000	7.9	7.9	8.1	8.0	8.1	8.1	8.0	7.9	7.8	7.8	7.8	7.8	7.7	7.8	7.9	8.0
80000	7.9	7.9	8.1	8.0	8.1	8.1	8.0	7.9	7.7	7.8	7.8	7.8	7.8	7.8	7.9	7.9
90000	8.0	8.0	8.1	8.0	8.1	8.1	8.0	7.9	7.7	7.8	7.8	7.8	7.7	7.8	7.9	7.9
100000	8.0	8.0	8.1	8.1	8.1	8.1	8.0	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9
110000	8.0	8.0	8.1	8.1	8.1	8.1	8.0	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9
120000	8.0	8.0	8.1	8.1	8.1	8.1	8.0	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.9	8.0
130000	8.0	8.0	8.1	8.1	8.1	8.1	8.1	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9
140000	8.0	8.0	8.1	8.1	8.2	8.2	8.1	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9
150000	8.1	8.0	8.1	8.1	8.2	8.2	8.1	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9
160000	8.1	8.0	8.1	8.1	8.2	8.2	8.1	7.9	7.8	7.9	7.8	7.8	7.8	7.8	7.9	7.9
170000	8.0	8.0	8.1	8.1	8.2	8.2	8.0	7.9	7.8	7.9	7.8	7.8	7.8	7.9	7.9	8.0
180000	8.1	8.0	8.1	8.1	8.2	8.2	8.0	7.9	7.8	7.9	7.8	7.8	7.8	7.9	7.9	8.0
190000	8.0	8.0	8.1	8.1	8.2	8.1	8.0	7.9	7.8	7.9	7.8	7.8	7.9	7.9	7.9	8.0
200000	8.0	8.0	8.1	8.1	8.2	8.2	8.0	7.9	7.8	7.8	7.8	7.8	7.9	7.9	7.9	8.0
210000	8.0	8.0	8.1	8.1	8.2	8.1	8.0	7.9	7.8	7.9	7.8	7.8	7.9	7.8	7.9	8.0
220000	8.0	8.1	8.1	8.1	8.1	8.1	8.0	7.8	7.9	7.9	7.8	7.8	7.9	7.9	7.9	8.0
230000	8.0	8.0	8.1	8.1	8.1	8.1	8.0	7.9	7.9	7.9	7.8	7.8	7.9	7.9	7.9	8.0
Daily Max	8.1	8.1	8.1	8.1	8.2	8.2	8.1	8.0	7.9	7.9	7.9	7.8	7.9	7.9	7.9	8.0
Daily Min	7.9	7.9	8.0	8.0	8.1	8.1	8.0	7.8	7.7	7.8	7.8	7.8	7.7	7.8	7.9	7.9
Average	8.0	8.0	8.1	8.1	8.1	8.1	8.0	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9

License maximum pH: 9

License minimum pH: 6

Potato Rapids pH Summary - August 2021

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

Potato Rapids Tailwater pH Summary - September 2021

Time HHMMSS	09/01/21	09/02/21	09/03/21	09/04/21	09/05/21	09/06/21	09/07/21	09/08/21	09/09/21	09/10/21	09/11/21	09/12/21	09/13/21	09/14/21	09/15/21	09/16/21
0	8.0	8.0	8.1	8.0	8.0	7.9	8.0	8.1	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2
10000	8.0	8.0	8.1	8.0	7.9	8.0	8.0	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
20000	8.0	8.0	8.1	8.0	7.9	8.0	8.0	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
30000	8.0	8.0	8.0	8.0	7.9	7.9	8.0	8.0		8.2	8.2	8.2	8.2	8.2	8.2	8.2
40000	8.0	8.0	8.1	8.0	7.9	7.9	8.0	8.0	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2
50000	7.9	8.0	8.0	8.0	7.9	8.0	8.0	8.0	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2
60000	7.9	8.0	8.0	8.0	7.9	8.0	8.0	8.0	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2
70000	7.9	8.0	8.0	8.0	7.9	7.9	8.0	8.0	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2
80000	7.9	8.0	8.0	8.0	7.9	8.0	8.0	8.0	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2
90000	7.9	8.0	8.0	8.0	7.9	8.0	8.0	8.0	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2
100000	7.9	8.0	8.0	8.0	7.9	8.0	8.0	8.0	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2
110000	7.9	8.0	8.0	8.0	7.9	8.0	8.0	7.7	8.2	8.2	8.2	8.3	8.2	8.2	8.2	8.2
120000	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.1	8.2	8.2	8.2	8.3	8.3	8.3	8.3	8.2
130000	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.2	8.2	8.2	8.2	8.3	8.2	8.3	8.3	8.2
140000	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.2	8.2	8.2	8.3	8.3	8.2	8.3	8.3	8.2
150000	8.0	8.1	8.0	8.0	8.0	8.0	8.1	8.2	8.2	8.2	8.3	8.3	8.2	8.3	8.3	8.3
160000	8.0	8.1	8.0	8.0	8.0	8.0	8.1	8.2	8.2	8.2	8.3	8.3	8.3	8.3	8.3	8.3
170000	8.0	8.1	8.0	8.0	8.0	8.0	8.1	8.2	8.2	8.2	8.3	8.3	8.3	8.3	8.3	8.3
180000	8.0	8.1	8.0	8.0	8.0	8.0	8.1	8.2	8.2	8.2	8.3	8.3	8.2	8.3	8.3	8.3
190000	8.0	8.1	8.0	8.0	7.9	8.0	8.1	8.2	8.2	8.2	8.3	8.3	8.3	8.3	8.2	8.2
200000	8.0	8.1	8.0	8.0	8.0	8.0	8.1	8.2	8.2	8.2	8.3		8.2	8.2	8.2	
210000	8.0	8.1	8.0	8.0	7.9	8.0	8.1	8.2	8.2	8.2	8.3		8.2	8.2	8.2	8.2
220000	8.0	8.0	8.0	8.0	8.0	8.0	8.1	8.2	8.2	8.2	8.3	8.3		8.2	8.2	8.2
230000	8.0	8.0	8.0	8.0	8.0	8.0	8.1	8.2	8.2	8.2	8.2		8.2	8.2	8.2	
Daily Max	8.0	8.1	8.1	8.0	8.0	8.0	8.1	8.2	8.2	8.2	8.3	8.3	8.2	8.3	8.3	8.3
Daily Min	7.9	8.0	8.0	8.0	7.9	7.9	8.0	7.7	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2
Average	8.0	8.0	8.0	8.0	7.9	8.0	8.0	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2

License maximum pH: 9

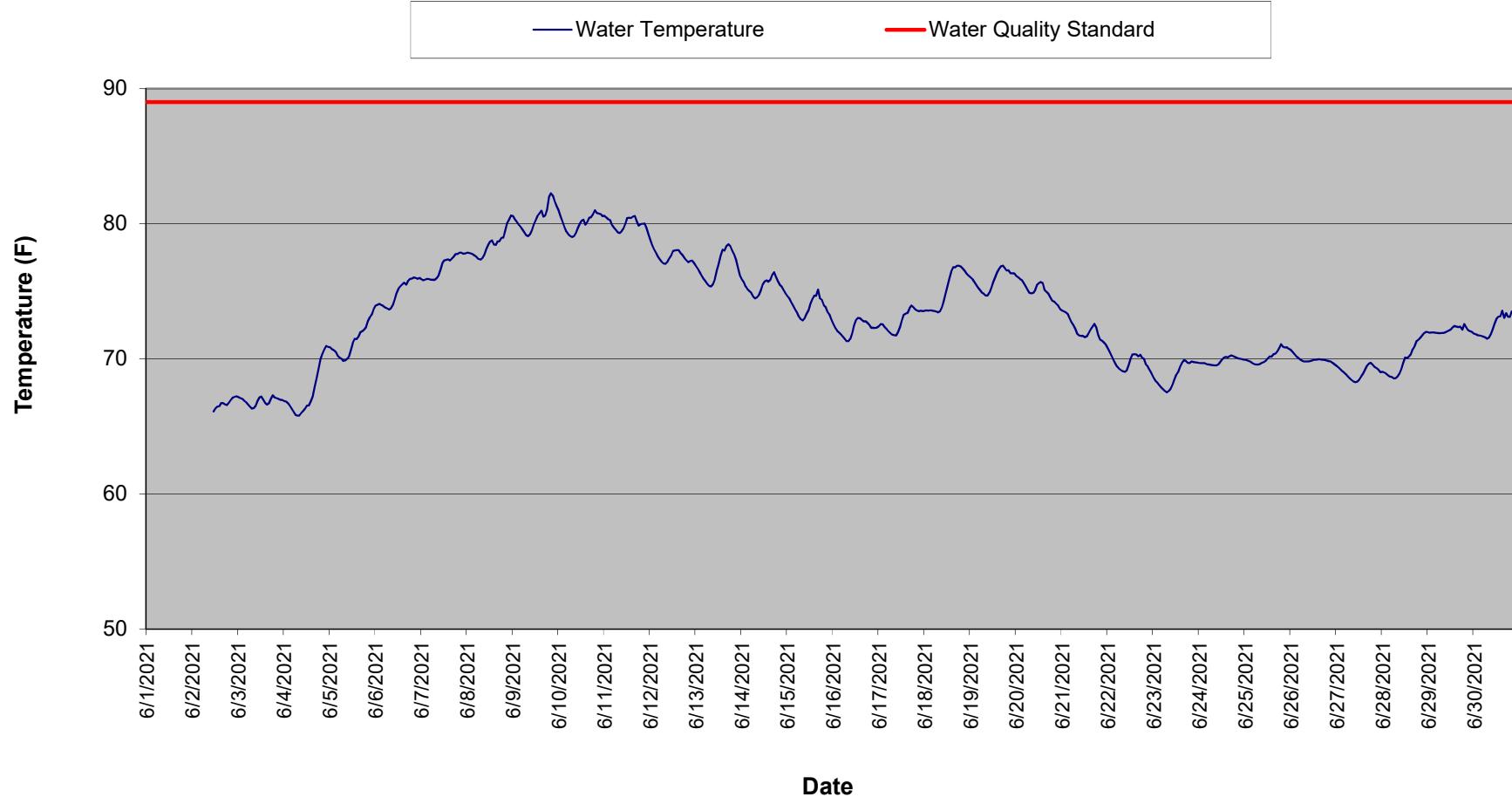
License minimum pH: 6

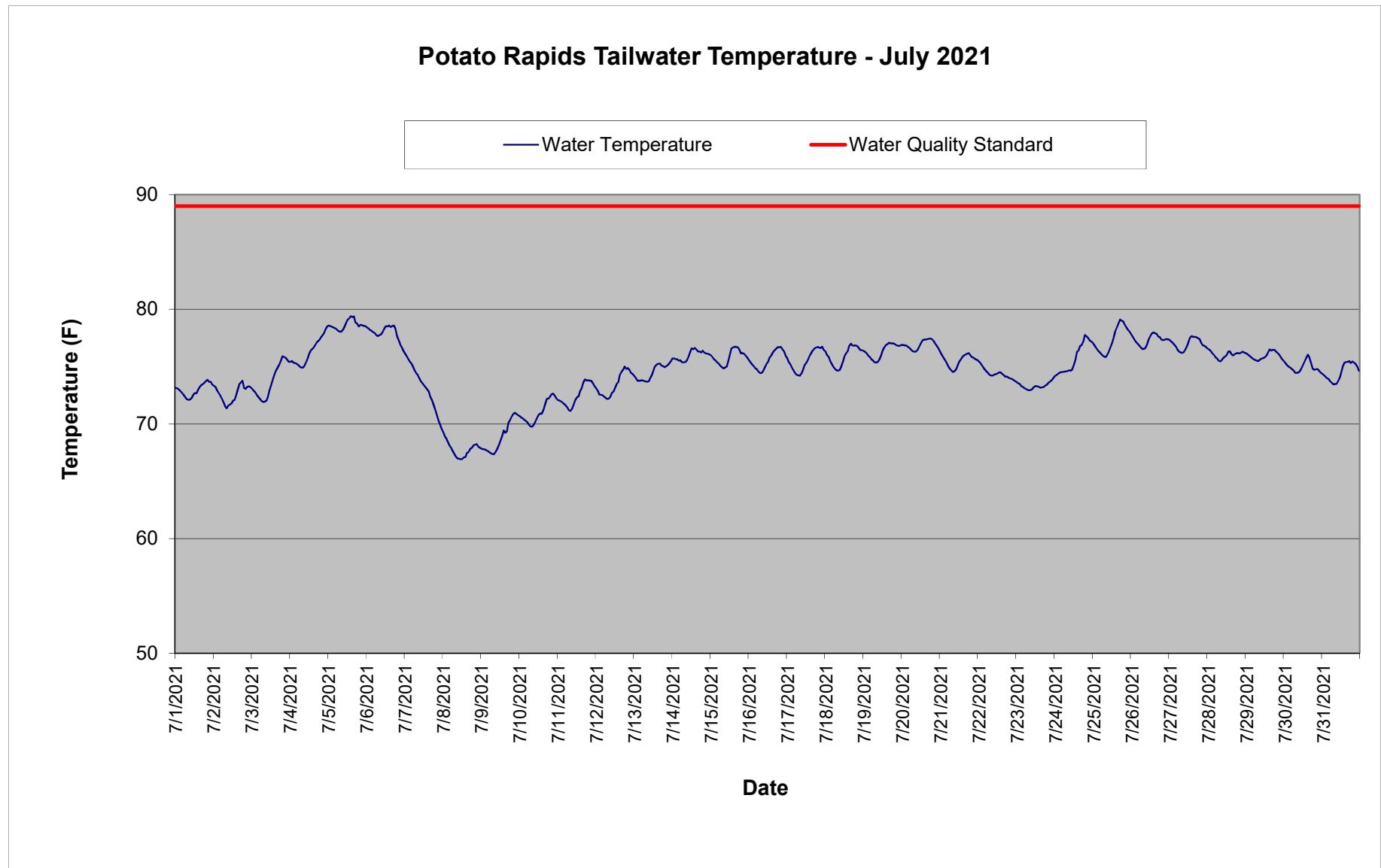
 Missing data due to equipment malfunction

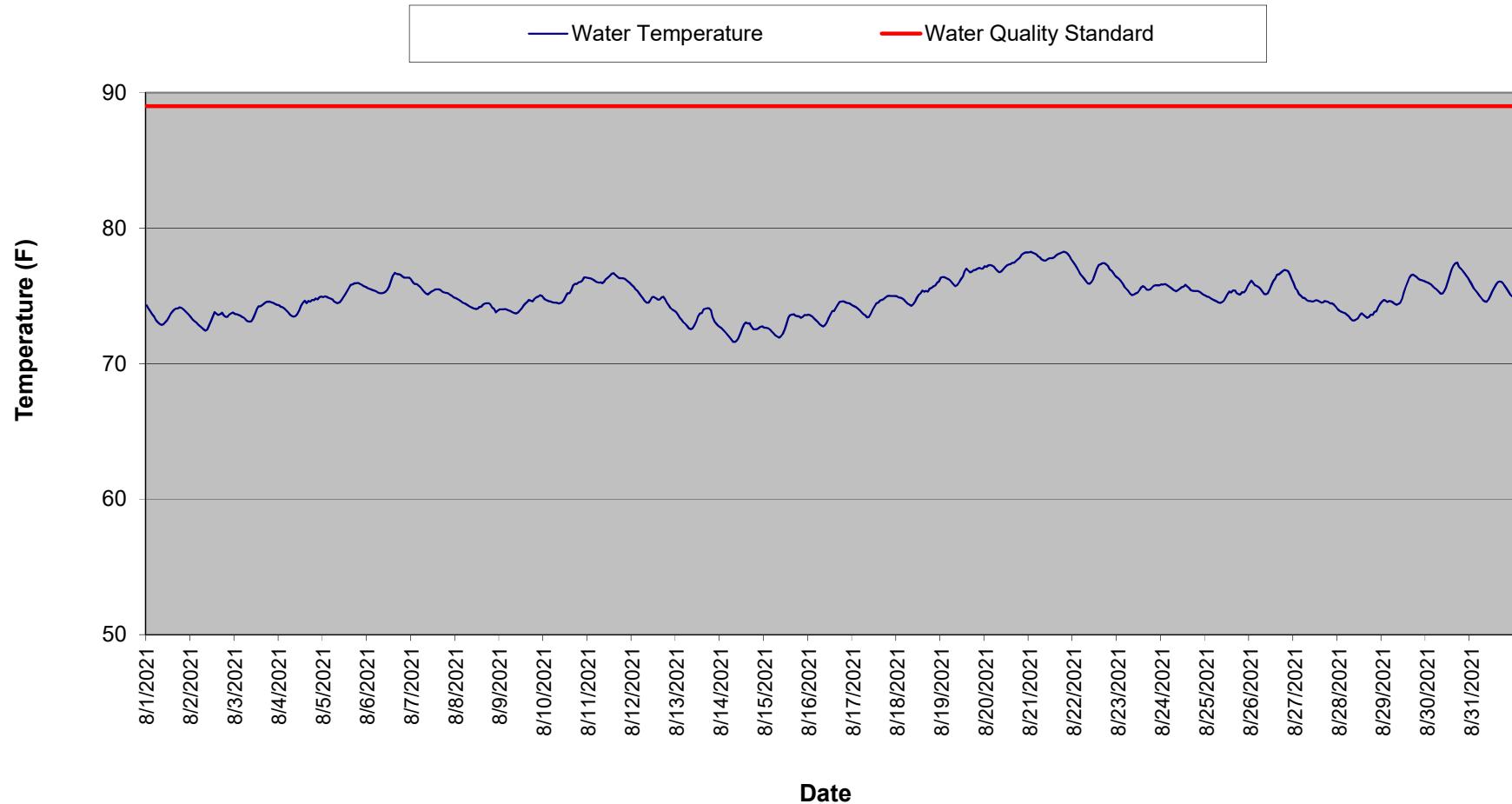
Potato Rapids Tailwater pH Summary - September 2021

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

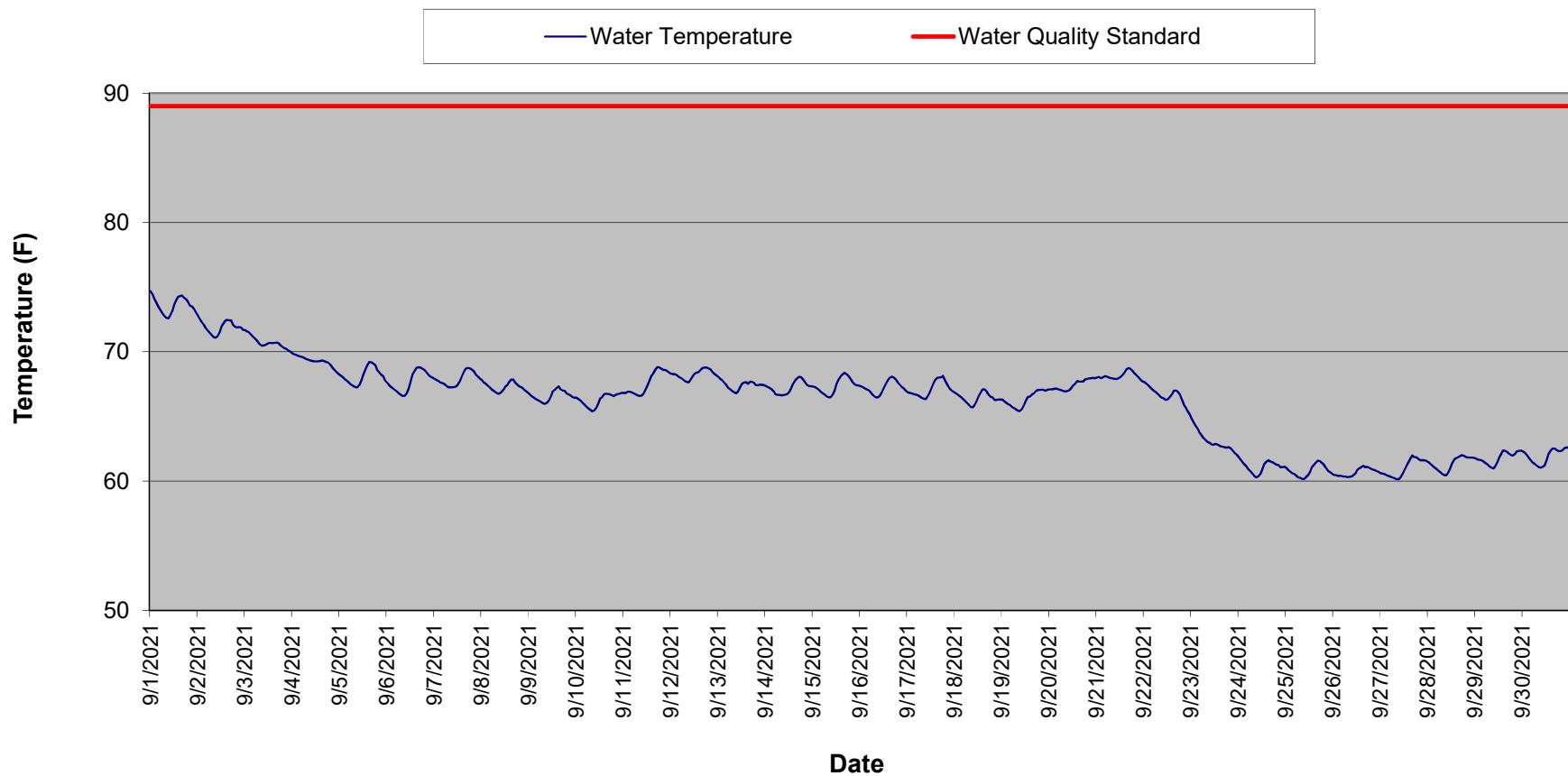
Potato Rapids Tailwater Temperature - June 2021





Potato Rapids Tailwater Temperature - August 2021

Potato Rapids Tailwater Temperature - September 2021



Potato Rapids Tailwater Temperature Summary - June 2021

Time HHMMSS	06/01/21	06/02/21	06/03/21	06/04/21	06/05/21	06/06/21	06/07/21	06/08/21	06/09/21	06/10/21	06/11/21	06/12/21	06/13/21	06/14/21	06/15/21	06/16/21
0			67.2	66.9	70.9	73.9	75.9	77.9	80.6	81.0	80.6	78.8	76.9	75.9	74.7	72.6
10000			67.1	66.8	70.7	74.0	75.8	77.8	80.3	80.6	80.5	78.4	76.7	75.7	74.5	72.3
20000			67.0	66.7	70.6	74.1	75.9	77.8	80.2	80.1	80.3	78.1	76.4	75.4	74.2	72.1
30000			66.9	66.5	70.5	74.0	75.9	77.7	80.0	79.7	80.3	77.8	76.2	75.2	73.9	72.0
40000			66.8	66.3	70.2	73.9	75.9	77.6	79.8	79.4	79.9	77.6	75.9	75.0	73.7	71.8
50000			66.6	66.1	70.1	73.8	75.9	77.5	79.6	79.2	79.7	77.4	75.7	74.9	73.4	71.7
60000			66.4	65.9	70.0	73.7	75.8	77.4	79.4	79.1	79.5	77.2	75.5	74.6	73.1	71.5
70000			66.3	65.8	69.9	73.7	75.9	77.3	79.1	79.0	79.4	77.1	75.4	74.5	72.9	71.3
80000			66.4	65.8	69.9	73.7	76.0	77.5	79.1	79.1	79.3	77.0	75.4	74.6	72.8	71.3
90000			66.5	66.0	70.0	74.0	76.2	77.7	79.2	79.3	79.4	77.2	75.5	74.7	73.0	71.5
100000			66.9	66.2	70.2	74.4	76.6	78.1	79.5	79.7	79.6	77.4	75.9	75.1	73.3	71.9
110000		66.1	67.1	66.3	70.7	74.8	77.1	78.4	80.0	80.0	80.0	77.6	76.5	75.5	73.6	72.5
120000		66.3	67.2	66.5	71.2	75.2	77.3	78.7	80.3	80.2	80.4	78.0	77.0	75.7	74.1	72.9
130000		66.5	67.0	66.5	71.5	75.4	77.3	78.8	80.6	80.3	80.4	78.0	77.6	75.8	74.4	73.0
140000		66.5	66.7	66.8	71.5	75.5	77.4	78.5	80.8	79.9	80.4	78.1	78.1	75.7	74.7	73.0
150000		66.7	66.6	67.2	71.6	75.6	77.3	78.4	81.0	80.2	80.5	78.1	78.0	75.8	74.7	72.9
160000		66.7	66.7	67.9	72.0	75.5	77.4	78.7	80.5	80.4	80.6	77.8	78.4	76.2	75.1	72.8
170000		66.6	67.0	68.6	72.1	75.8	77.6	78.7	80.6	80.5	80.2	77.7	78.5	76.4	74.5	72.8
180000		66.6	67.3	69.3	72.2	75.9	77.8	79.0	81.0	80.7	79.9	77.5	78.3	76.1	74.4	72.7
190000		66.7	67.1	70.0	72.3	75.9	77.8	79.0	82.0	81.0	80.0	77.3	78.0	75.8	74.0	72.5
200000		67.0	67.1	70.4	72.8	76.0	77.9	79.5	82.3	80.8	80.0	77.2	77.7	75.5	73.8	72.3
210000		67.1	67.0	70.7	73.1	76.0	77.9	80.1	82.1	80.8	80.0	77.2	77.3	75.4	73.5	72.3
220000		67.2	67.0	71.0	73.3	75.9	77.8	80.3	81.7	80.7	79.7	77.3	76.7	75.1	73.3	72.3
230000		67.2	66.9	70.9	73.7	76.0	77.8	80.6	81.3	80.6	79.2	77.1	76.2	74.8	72.9	72.3
Daily Max	0.0	67.2	67.3	71.0	73.7	76.0	77.9	80.6	82.3	81.0	80.6	78.8	78.5	76.4	75.1	73.0
Daily Min	0.0	66.1	66.3	65.8	69.9	73.7	75.8	77.3	79.1	79.0	79.2	77.0	75.4	74.5	72.8	71.3
Average	#DIV/0!	66.7	66.9	67.5	71.3	74.9	76.8	78.5	80.4	80.1	80.0	77.6	76.8	75.4	73.9	72.3

Monthly average: 72.2
 License Maximum Temp: 89 F

Missing data due to equipment malfunction. Monitor was deployed on May 26 and suddenly stopped v
 Prior to the equipment malfunction water temperature was 60F

Potato Rapids Tailwater Temperature Summary - June 2021

Time HHMMSS	06/17/21	06/18/21	06/19/21	06/20/21	06/21/21	06/22/21	06/23/21	06/24/21	06/25/21	06/26/21	06/27/21	06/28/21	06/29/21	06/30/21
0	72.4	73.6	76.0	76.1	73.6	70.8	68.6	69.7	69.9	70.7	69.5	69.0	72.0	71.9
10000	72.6	73.6	75.9	76.0	73.5	70.5	68.4	69.7	69.9	70.5	69.4	69.0	71.9	71.8
20000	72.6	73.6	75.7	75.9	73.4	70.2	68.2	69.7	69.8	70.4	69.2	68.9	72.0	71.7
30000	72.4	73.6	75.5	75.8	73.3	69.9	68.1	69.7	69.8	70.2	69.1	68.8	72.0	71.7
40000	72.2	73.6	75.3	75.6	73.0	69.7	67.9	69.6	69.7	70.1	69.0	68.7	71.9	71.7
50000	72.0	73.5	75.1	75.4	72.7	69.4	67.8	69.6	69.6	69.9	68.9	68.6	71.9	71.6
60000	71.9	73.5	74.9	75.1	72.5	69.3	67.6	69.6	69.6	69.9	68.7	68.6	71.9	71.6
70000	71.8	73.4	74.8	74.9	72.2	69.2	67.5	69.5	69.6	69.8	68.6	68.6	71.9	71.5
80000	71.8	73.5	74.7	74.8	71.9	69.1	67.6	69.5	69.6	69.8	68.4	68.7	71.9	71.6
90000	71.7	73.8	74.7	74.9	71.7	69.0	67.8	69.5	69.7	69.8	68.3	68.9	72.0	71.8
100000	72.0	74.2	74.9	75.1	71.7	69.1	68.1	69.6	69.8	69.8	68.3	69.3	72.0	72.2
110000	72.4	74.8	75.3	75.5	71.7	69.5	68.5	69.8	69.9	69.9	68.3	69.7	72.1	72.6
120000	72.9	75.4	75.7	75.6	71.6	70.0	68.8	70.0	70.1	69.9	68.5	70.1	72.2	73.0
130000	73.3	76.0	76.0	75.7	71.7	70.3	69.0	70.1	70.2	69.9	68.7	70.0	72.3	73.1
140000	73.4	76.5	76.4	75.6	71.9	70.3	69.4	70.2	70.2	70.0	68.9	70.2	72.4	73.1
150000	73.4	76.8	76.7	75.1	72.2	70.3	69.7	70.1	70.3	70.0	69.2	70.3	72.4	73.6
160000	73.7	76.8	76.9	74.9	72.4	70.2	69.9	70.2	70.4	70.0	69.5	70.7	72.3	73.0
170000	73.9	76.9	76.9	74.8	72.6	70.3	69.8	70.3	70.6	69.9	69.6	70.9	72.4	73.4
180000	73.8	76.9	76.7	74.6	72.3	70.1	69.7	70.2	70.8	69.9	69.7	71.3	72.2	73.1
190000	73.7	76.8	76.5	74.3	71.8	70.0	69.7	70.1	71.1	69.9	69.6	71.4	72.6	73.1
200000	73.6	76.7	76.5	74.2	71.4	69.6	69.8	70.1	70.9	69.8	69.4	71.6	72.3	73.5
210000	73.5	76.5	76.3	74.1	71.4	69.4	69.8	70.0	70.8	69.8	69.3	71.7	72.1	73.4
220000	73.6	76.3	76.3	73.9	71.2	69.2	69.7	70.0	70.9	69.7	69.2	71.9	72.1	73.3
230000	73.5	76.2	76.3	73.7	71.1	68.9	69.7	70.0	70.7	69.6	69.0	72.0	72.0	73.2
Daily Max	73.9	76.9	76.9	76.1	73.6	70.8	69.9	70.3	71.1	70.7	69.7	72.0	72.6	73.6
Daily Min	71.7	73.4	74.7	73.7	71.1	68.9	67.5	69.5	69.6	69.6	68.3	68.6	71.9	71.5
Average	72.8	75.1	75.8	75.1	72.2	69.8	68.8	69.9	70.2	70.0	69.0	70.0	72.1	72.5

working on May 30.

Potato Rapids Tailwater Temperature Summary - July 2021

Time HHMMSS	07/01/21	07/02/21	07/03/21	07/04/21	07/05/21	07/06/21	07/07/21	07/08/21	07/09/21	07/10/21	07/11/21	07/12/21	07/13/21	07/14/21	07/15/21	07/16/21
0	73.1	73.3	73.1	75.4	78.6	78.4	76.1	69.3	67.9	70.7	72.1	73.1	74.2	75.7	76.0	75.5
10000	73.1	73.2	72.9	75.5	78.5	78.3	75.9	68.9	67.8	70.6	72.0	72.9	74.0	75.7	75.8	75.4
20000	73.0	73.0	72.7	75.3	78.5	78.2	75.7	68.7	67.8	70.5	72.0	72.6	73.8	75.6	75.7	75.2
30000	72.9	72.7	72.5	75.3	78.4	78.1	75.5	68.4	67.7	70.3	71.8	72.5	73.8	75.6	75.5	75.0
40000	72.7	72.5	72.3	75.3	78.3	78.0	75.3	68.1	67.6	70.3	71.7	72.5	73.8	75.5	75.4	74.8
50000	72.5	72.2	72.2	75.1	78.3	77.9	75.0	67.9	67.5	70.1	71.6	72.4	73.8	75.5	75.3	74.8
60000	72.3	71.9	72.0	75.0	78.1	77.8	74.7	67.6	67.4	69.9	71.4	72.3	73.7	75.4	75.1	74.6
70000	72.2	71.6	71.9	74.9	78.0	77.7	74.4	67.4	67.4	69.8	71.2	72.2	73.7	75.4	75.0	74.4
80000	72.1	71.4	71.9	74.9	78.0	77.7	74.3	67.2	67.4	69.8	71.1	72.2	73.7	75.4	74.8	74.4
90000	72.1	71.6	72.0	75.1	78.2	77.8	74.0	67.0	67.6	70.0	71.3	72.4	73.7	75.5	74.9	74.6
100000	72.3	71.7	72.4	75.4	78.4	78.0	73.7	67.0	67.8	70.3	71.7	72.7	74.0	75.8	75.0	74.9
110000	72.5	71.8	72.9	75.8	78.8	78.3	73.6	66.9	68.2	70.5	72.1	72.8	74.3	76.3	75.5	75.2
120000	72.7	72.0	73.4	76.2	79.1	78.5	73.3	66.9	68.5	70.8	72.3	73.2	74.6	76.6	76.0	75.4
130000	72.7	72.1	73.9	76.4	79.2	78.5	73.2	67.1	68.9	70.9	72.4	73.5	75.0	76.5	76.6	75.8
140000	73.0	72.4	74.3	76.6	79.4	78.6	73.0	67.1	69.4	70.9	72.8	73.7	75.2	76.6	76.7	76.0
150000	73.2	73.0	74.7	76.7	79.3	78.5	72.8	67.5	69.2	71.2	73.2	74.3	75.2	76.5	76.7	76.2
160000	73.4	73.5	74.9	77.0	79.4	78.5	72.4	67.6	69.4	71.7	73.6	74.6	75.3	76.3	76.7	76.4
170000	73.5	73.6	75.2	77.2	78.9	78.6	72.1	67.8	70.1	72.2	73.9	74.7	75.1	76.3	76.7	76.6
180000	73.6	73.8	75.5	77.3	78.7	78.3	71.7	67.9	70.4	72.2	73.8	75.0	75.0	76.2	76.5	76.7
190000	73.7	73.1	75.9	77.5	78.5	77.7	71.2	68.1	70.6	72.4	73.8	74.8	74.9	76.4	76.1	76.7
200000	73.8	73.1	75.8	77.7	78.6	77.3	70.8	68.2	70.9	72.6	73.8	74.9	75.0	76.2	76.2	76.7
210000	73.7	73.2	75.8	77.9	78.6	76.9	70.3	68.2	71.0	72.6	73.8	74.7	75.1	76.1	76.1	76.5
220000	73.7	73.3	75.6	78.2	78.5	76.6	70.0	68.0	70.9	72.5	73.5	74.4	75.3	76.1	75.9	76.3
230000	73.4	73.2	75.4	78.5	78.5	76.4	69.6	67.9	70.8	72.2	73.3	74.4	75.5	76.1	75.8	76.0
Daily Max	73.8	73.8	75.9	78.5	79.4	78.6	76.1	69.3	71.0	72.6	73.9	75.0	75.5	76.6	76.7	76.7
Daily Min	72.1	71.4	71.9	74.9	78.0	76.4	69.6	66.9	67.4	69.8	71.1	72.2	73.7	75.4	74.8	74.4
Average	73.0	72.6	73.7	76.3	78.6	78.0	73.3	67.8	68.8	71.0	72.5	73.4	74.5	76.0	75.8	75.6

Monthly average: 74.8
 License Maximum Temp: 89 F

Potato Rapids Tailwater Temperature Summary - July 2021

Time HHMMSS	07/17/21	07/18/21	07/19/21	07/20/21	07/21/21	07/22/21	07/23/21	07/24/21	07/25/21	07/26/21	07/27/21	07/28/21	07/29/21	07/30/21	07/31/21
0	75.7	76.3	76.4	76.9	76.3	75.5	73.6	74.2	77.0	77.8	77.3	76.6	76.2	75.5	74.4
10000	75.4	76.0	76.3	76.9	76.1	75.4	73.5	74.3	76.9	77.6	77.2	76.5	76.1	75.3	74.3
20000	75.2	75.9	76.1	76.8	75.8	75.2	73.5	74.4	76.7	77.4	77.1	76.4	76.0	75.1	74.1
30000	74.9	75.5	76.0	76.8	75.6	75.0	73.3	74.5	76.4	77.2	76.9	76.2	75.9	75.0	74.0
40000	74.7	75.2	75.8	76.7	75.4	74.8	73.2	74.5	76.3	77.0	76.8	76.0	75.7	74.9	73.9
50000	74.4	75.0	75.6	76.6	75.1	74.6	73.1	74.5	76.1	76.9	76.5	75.8	75.6	74.8	73.7
60000	74.3	74.8	75.5	76.4	74.8	74.5	73.0	74.6	76.0	76.7	76.3	75.7	75.6	74.7	73.6
70000	74.2	74.7	75.4	76.3	74.7	74.3	73.0	74.6	75.9	76.5	76.2	75.5	75.5	74.5	73.5
80000	74.2	74.6	75.4	76.3	74.5	74.2	72.9	74.6	75.8	76.5	76.2	75.5	75.5	74.4	73.5
90000	74.4	74.7	75.4	76.3	74.6	74.2	73.0	74.7	76.0	76.6	76.3	75.6	75.6	74.5	73.5
100000	74.7	75.0	75.6	76.5	74.7	74.3	73.0	74.7	76.3	76.9	76.5	75.8	75.7	74.6	73.7
110000	75.1	75.4	76.0	76.8	75.1	74.4	73.2	74.7	76.7	77.3	76.8	75.9	75.7	74.9	74.1
120000	75.3	75.9	76.4	77.1	75.4	74.4	73.3	75.1	77.1	77.7	77.1	76.0	75.8	75.2	74.5
130000	75.6	76.2	76.7	77.3	75.6	74.5	73.3	75.6	77.5	77.9	77.5	76.3	76.0	75.5	75.0
140000	75.9	76.3	76.9	77.4	75.8	74.5	73.3	76.3	78.1	78.0	77.7	76.3	76.2	75.8	75.4
150000	76.2	76.8	77.0	77.4	76.0	74.4	73.2	76.4	78.4	77.9	77.6	76.1	76.5	76.0	75.4
160000	76.4	77.0	77.1	77.4	76.0	74.2	73.2	76.8	78.7	77.8	77.6	76.0	76.4	75.8	75.4
170000	76.5	76.8	77.0	77.4	76.1	74.1	73.2	76.9	79.1	77.6	77.6	76.1	76.5	75.3	75.5
180000	76.6	76.8	77.0	77.4	76.2	74.1	73.3	77.2	79.0	77.6	77.5	76.2	76.5	74.8	75.3
190000	76.7	76.8	77.0	77.4	76.0	74.0	73.4	77.8	78.9	77.4	77.4	76.2	76.3	74.7	75.4
200000	76.7	76.8	76.9	77.2	75.8	74.0	73.6	77.6	78.7	77.3	77.1	76.1	76.2	74.8	75.3
210000	76.6	76.6	76.8	77.0	75.8	73.9	73.7	77.5	78.5	77.3	76.9	76.2	76.0	74.8	75.2
220000	76.7	76.4	76.8	76.8	75.7	73.8	73.8	77.3	78.2	77.4	76.8	76.3	75.8	74.6	75.0
230000	76.4	76.4	76.8	76.6	75.6	73.8	74.0	77.2	78.1	77.4	76.7	76.2	75.6	74.5	74.6
Daily Max	76.7	77.0	77.1	77.4	76.3	75.5	74.0	77.8	79.1	78.0	77.7	76.6	76.5	76.0	75.5
Daily Min	74.2	74.6	75.4	76.3	74.5	73.8	72.9	74.2	75.8	76.5	76.2	75.5	75.5	74.4	73.5
Average	75.5	75.9	76.3	76.9	75.5	74.4	73.3	75.7	77.3	77.3	77.0	76.1	76.0	75.0	74.5

Potato Rapids Tailwater Temperature Summary - August 2021

Time HHMMSS	08/01/21	08/02/21	08/03/21	08/04/21	08/05/21	08/06/21	08/07/21	08/08/21	08/09/21	08/10/21	08/11/21	08/12/21	08/13/21	08/14/21	08/15/21	08/16/21
0	74.3	73.4	73.7	74.3	74.9	75.6	76.2	74.9	74.0	74.8	76.3	75.8	73.8	72.7	72.7	73.6
10000	74.0	73.3	73.6	74.2	75.0	75.5	76.0	74.8	74.0	74.7	76.3	75.7	73.6	72.6	72.6	73.6
20000	73.9	73.1	73.6	74.2	74.9	75.5	75.9	74.7	74.0	74.7	76.3	75.5	73.4	72.5	72.6	73.5
30000	73.6	73.0	73.5	74.1	74.9	75.4	75.9	74.6	74.0	74.6	76.2	75.3	73.2	72.3	72.5	73.4
40000	73.5	72.9	73.5	73.9	74.8	75.4	75.8	74.5	74.0	74.6	76.1	75.2	73.1	72.1	72.4	73.2
50000	73.2	72.8	73.4	73.8	74.7	75.3	75.6	74.5	73.9	74.5	76.0	75.0	72.9	72.0	72.2	73.1
60000	73.1	72.6	73.2	73.6	74.6	75.2	75.5	74.4	73.9	74.5	76.0	74.8	72.8	71.8	72.1	72.9
70000	72.9	72.5	73.1	73.5	74.5	75.2	75.3	74.3	73.8	74.5	76.0	74.6	72.6	71.6	72.0	72.8
80000	72.9	72.4	73.1	73.5	74.5	75.2	75.2	74.2	73.7	74.4	75.9	74.5	72.5	71.6	71.9	72.7
90000	72.9	72.5	73.1	73.5	74.5	75.2	75.1	74.1	73.7	74.5	76.1	74.5	72.6	71.7	72.0	72.8
100000	73.0	72.8	73.4	73.7	74.7	75.3	75.2	74.1	73.8	74.5	76.2	74.7	72.8	71.9	72.2	73.0
110000	73.2	73.1	73.7	73.9	74.9	75.4	75.3	74.0	73.9	74.7	76.4	74.9	73.1	72.2	72.5	73.3
120000	73.4	73.5	74.0	74.3	75.1	75.7	75.4	74.1	74.1	75.0	76.5	74.9	73.5	72.6	72.9	73.6
130000	73.7	73.8	74.2	74.5	75.4	76.1	75.5	74.2	74.3	75.2	76.6	74.8	73.7	72.9	73.4	73.9
140000	73.8	73.7	74.2	74.6	75.6	76.5	75.5	74.2	74.4	75.2	76.7	74.7	73.7	73.0	73.6	73.9
150000	74.0	73.6	74.3	74.5	75.8	76.7	75.5	74.4	74.6	75.4	76.6	74.7	74.0	73.0	73.6	74.1
160000	74.1	73.7	74.5	74.6	75.9	76.6	75.4	74.4	74.7	75.8	76.4	74.9	74.1	73.0	73.6	74.4
170000	74.1	73.7	74.5	74.6	75.9	76.6	75.3	74.5	74.7	75.9	76.3	75.0	74.1	72.7	73.5	74.5
180000	74.2	73.6	74.6	74.7	75.9	76.6	75.3	74.5	74.6	75.9	76.3	74.8	74.1	72.5	73.5	74.6
190000	74.1	73.5	74.6	74.7	76.0	76.5	75.2	74.4	74.8	76.0	76.3	74.5	73.9	72.5	73.5	74.6
200000	74.0	73.5	74.5	74.8	75.9	76.3	75.2	74.1	74.9	76.0	76.3	74.3	73.4	72.5	73.4	74.5
210000	73.9	73.6	74.5	74.8	75.8	76.4	75.1	74.0	75.0	76.1	76.2	74.1	73.1	72.6	73.5	74.5
220000	73.7	73.7	74.4	74.9	75.7	76.4	75.0	73.8	75.1	76.4	76.1	74.0	72.9	72.7	73.6	74.5
230000	73.6	73.8	74.3	74.9	75.7	76.3	74.9	73.9	75.0	76.4	75.9	73.9	72.8	72.8	73.6	74.4
Daily Max	74.3	73.8	74.6	74.9	76.0	76.7	76.2	74.9	75.1	76.4	76.7	75.8	74.1	73.0	73.6	74.6
Daily Min	72.9	72.4	73.1	73.5	74.5	75.2	74.9	73.8	73.7	74.4	75.9	73.9	72.5	71.6	71.9	72.7
Average	73.6	73.3	73.9	74.2	75.2	75.9	75.4	74.3	74.3	75.2	76.2	74.8	73.3	72.4	72.9	73.7

Monthly average: 75.0
 License Maximum Temp: 89 F

Potato Rapids Tailwater Temperature Summary - August 2021

Time HHMMSS	08/17/21	08/18/21	08/19/21	08/20/21	08/21/21	08/22/21	08/23/21	08/24/21	08/25/21	08/26/21	08/27/21	08/28/21	08/29/21	08/30/21	08/31/21
0	74.3	75.0	76.3	77.2	78.2	77.5	76.3	75.8	75.0	76.0	76.0	74.0	74.6	76.0	76.1
10000	74.2	74.9	76.4	77.2	78.3	77.3	76.3	75.8	74.9	76.1	75.6	73.9	74.7	76.0	75.8
20000	74.2	74.9	76.4	77.3	78.2	77.1	76.1	75.9	74.9	75.9	75.4	73.8	74.7	75.9	75.6
30000	74.1	74.8	76.3	77.3	78.1	76.8	75.9	75.8	74.8	75.8	75.1	73.8	74.6	75.8	75.4
40000	73.9	74.7	76.2	77.2	78.1	76.6	75.7	75.7	74.7	75.7	75.0	73.7	74.6	75.7	75.2
50000	73.8	74.6	76.2	77.2	77.9	76.4	75.5	75.6	74.7	75.6	74.9	73.6	74.6	75.6	75.0
60000	73.7	74.4	76.0	77.0	77.8	76.3	75.4	75.5	74.6	75.5	74.8	73.5	74.5	75.4	74.9
70000	73.6	74.3	75.8	76.8	77.7	76.1	75.2	75.4	74.5	75.3	74.7	73.3	74.4	75.3	74.7
80000	73.4	74.3	75.7	76.8	77.6	75.9	75.1	75.3	74.5	75.1	74.6	73.2	74.3	75.2	74.6
90000	73.5	74.4	75.8	76.8	77.6	75.9	75.1	75.4	74.5	75.1	74.6	73.2	74.4	75.2	74.6
100000	73.7	74.6	76.0	77.0	77.7	76.0	75.2	75.5	74.7	75.2	74.6	73.3	74.5	75.4	74.7
110000	74.0	74.8	76.2	77.1	77.8	76.3	75.2	75.6	74.9	75.5	74.6	73.3	74.8	75.7	75.0
120000	74.2	75.1	76.4	77.3	77.8	76.6	75.4	75.7	75.1	75.8	74.7	73.6	75.3	76.1	75.3
130000	74.5	75.2	76.8	77.3	77.8	77.0	75.6	75.8	75.3	76.1	74.7	73.7	75.7	76.5	75.6
140000	74.5	75.4	77.0	77.3	77.9	77.3	75.7	75.7	75.3	76.3	74.6	73.6	76.0	77.0	75.8
150000	74.7	75.3	76.9	77.4	78.0	77.3	75.6	75.6	75.4	76.6	74.5	73.5	76.3	77.2	76.0
160000	74.7	75.4	76.7	77.5	78.1	77.4	75.5	75.4	75.4	76.6	74.5	73.4	76.5	77.4	76.1
170000	74.8	75.3	76.8	77.6	78.2	77.4	75.4	75.4	75.2	76.7	74.6	73.5	76.6	77.5	76.0
180000	74.9	75.6	76.9	77.7	78.2	77.3	75.5	75.4	75.1	76.8	74.6	73.6	76.5	77.1	75.9
190000	75.0	75.6	76.9	77.8	78.3	77.2	75.6	75.4	75.1	76.9	74.5	73.6	76.4	77.0	75.7
200000	75.0	75.7	77.0	78.1	78.2	77.0	75.8	75.4	75.3	76.9	74.4	73.8	76.3	76.9	75.5
210000	75.0	75.8	77.1	78.1	78.1	76.8	75.8	75.3	75.3	76.8	74.4	73.9	76.2	76.6	75.3
220000	75.0	76.0	77.0	78.2	77.9	76.6	75.8	75.2	75.4	76.6	74.3	74.2	76.1	76.5	75.1
230000	75.0	76.1	77.0	78.2	77.7	76.5	75.8	75.1	75.7	76.2	74.2	74.4	76.1	76.3	74.9
Daily Max	75.0	76.1	77.1	78.2	78.3	77.5	76.3	75.9	75.7	76.9	76.0	74.4	76.6	77.5	76.1
Daily Min	73.4	74.3	75.7	76.8	77.6	75.9	75.1	75.1	74.5	75.1	74.2	73.2	74.3	75.2	74.6
Average	74.3	75.1	76.5	77.4	78.0	76.8	75.6	75.5	75.0	76.1	74.8	73.6	75.4	76.2	75.4

Potato Rapids Tailwater Temperature Summary - September 2021

Time HHMMSS	09/01/21	09/02/21	09/03/21	09/04/21	09/05/21	09/06/21	09/07/21	09/08/21	09/09/21	09/10/21	09/11/21	09/12/21	09/13/21	09/14/21	09/15/21	09/16/21
0	74.7	72.8	71.7	69.9	68.2	67.6	67.9	67.8	66.8	66.5	66.8	68.3	68.1	67.4	67.3	67.3
10000	74.5	72.5	71.6	69.8	68.1	67.4	67.8	67.6	66.6	66.4	66.8	68.3	67.9	67.3	67.3	67.3
20000	74.1	72.3	71.5	69.7	68.0	67.3	67.8	67.5	66.5	66.2	66.9	68.3	67.8	67.2	67.2	67.2
30000	73.8	72.1	71.3	69.7	67.8	67.2	67.6	67.4	66.4	66.1	66.9	68.2	67.6	67.1	67.0	67.1
40000	73.5	71.8	71.2	69.7	67.7	67.0	67.6	67.2	66.3	65.9	66.9	68.1	67.4	66.9	66.9	67.0
50000	73.2	71.7	71.0	69.6	67.6	66.9	67.5	67.1	66.2	65.8	66.8	68.0	67.2	66.7	66.8	66.9
60000	73.0	71.5	70.9	69.5	67.4	66.8	67.4	67.0	66.1	65.6	66.7	67.9	67.1	66.7	66.7	66.7
70000	72.8	71.3	70.7	69.4	67.3	66.7	67.3	66.9	66.0	65.5	66.7	67.7	67.0	66.7	66.6	66.6
80000	72.6	71.1	70.5	69.4	67.3	66.6	67.3	66.8	66.0	65.4	66.6	67.7	66.9	66.6	66.5	66.5
90000	72.6	71.1	70.5	69.3	67.3	66.6	67.2	66.8	66.0	65.5	66.6	67.6	66.8	66.7	66.5	66.5
100000	72.8	71.2	70.5	69.3	67.4	66.8	67.3	66.9	66.2	65.6	66.7	67.8	66.9	66.7	66.7	66.6
110000	73.1	71.5	70.6	69.3	67.8	67.1	67.3	67.1	66.5	66.0	67.1	68.1	67.2	66.7	67.0	66.9
120000	73.6	71.9	70.7	69.3	68.2	67.7	67.5	67.3	66.9	66.3	67.4	68.3	67.5	66.9	67.5	67.2
130000	74.0	72.2	70.7	69.3	68.6	68.3	67.8	67.4	67.1	66.5	67.8	68.4	67.6	67.2	67.9	67.5
140000	74.2	72.4	70.7	69.3	69.0	68.5	68.1	67.7	67.2	66.7	68.1	68.4	67.7	67.6	68.1	67.8
150000	74.3	72.5	70.7	69.3	69.2	68.8	68.5	67.9	67.3	66.8	68.3	68.6	67.5	67.8	68.2	68.0
160000	74.4	72.4	70.7	69.3	69.2	68.8	68.7	67.8	67.1	66.7	68.6	68.7	67.7	67.9	68.4	68.1
170000	74.2	72.4	70.7	69.2	69.1	68.8	68.7	67.6	67.0	66.7	68.8	68.8	67.7	68.1	68.3	68.0
180000	74.1	72.1	70.5	69.2	69.0	68.7	68.7	67.5	67.0	66.6	68.8	68.8	67.6	68.0	68.1	67.8
190000	73.9	71.9	70.4	69.0	68.6	68.6	68.6	67.3	66.8	66.6	68.7	68.7	67.4	67.9	67.9	67.6
200000	73.6	71.9	70.3	68.9	68.4	68.4	68.5	67.3	66.7	66.7	68.6	68.6	67.4	67.6	67.7	67.5
210000	73.5	71.9	70.2	68.7	68.2	68.2	68.2	67.2	66.6	66.7	68.6	68.4	67.5	67.4	67.5	67.3
220000	73.4	71.9	70.1	68.5	68.1	68.1	68.1	67.0	66.5	66.8	68.5	68.3	67.4	67.3	67.4	67.2
230000	73.1	71.7	70.0	68.3	67.8	68.0	67.9	66.9	66.4	66.8	68.4	68.2	67.4	67.3	67.4	67.0
Daily Max	74.7	72.8	71.7	69.9	69.2	68.8	68.7	67.9	67.3	66.8	68.8	68.8	68.1	68.1	68.4	68.1
Daily Min	72.6	71.1	70.0	68.3	67.3	66.6	67.2	66.8	66.0	65.4	66.6	67.6	66.8	66.6	66.5	66.5
Average	73.6	71.9	70.7	69.3	68.1	67.7	67.9	67.3	66.6	66.3	67.6	68.3	67.4	67.2	67.4	67.2

Monthly average: 66.3
 License Maximum Temp: 89 F

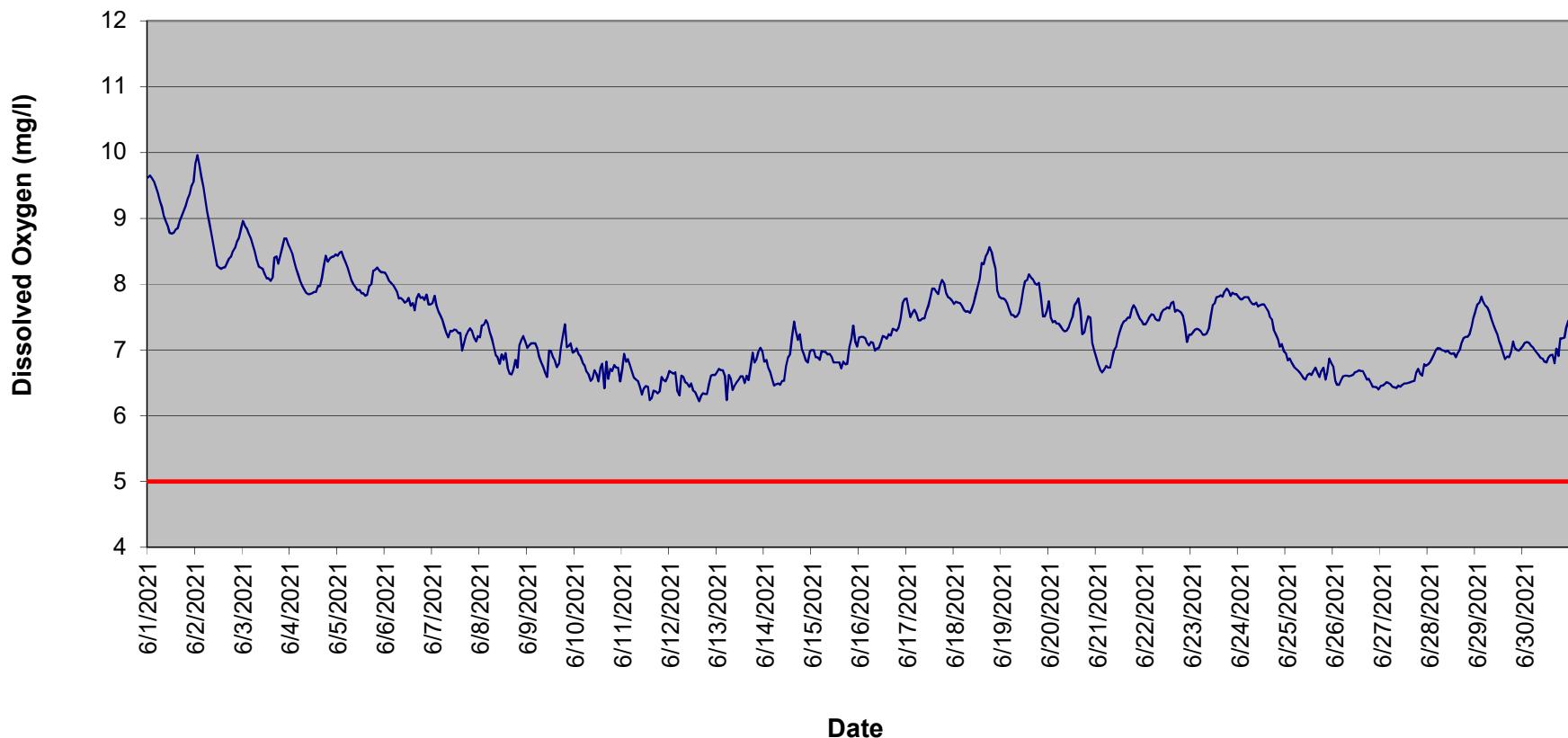
Potato Rapids Tailwater Temperature Summary - September 2021

Time HHMMSS	09/17/21	09/18/21	09/19/21	09/20/21	09/21/21	09/22/21	09/23/21	09/24/21	09/25/21	09/26/21	09/27/21	09/28/21	09/29/21	09/30/21
0	66.9	66.8	66.3	67.1	68.0	67.7	64.8	61.8	61.0	60.5	60.6	61.5	61.8	62.3
10000	66.8	66.7	66.2	67.1	68.1	67.5	64.6	61.6	60.9	60.5	60.6	61.3	61.7	62.2
20000	66.8	66.6	66.1	67.1	67.9	67.4	64.3	61.4	60.7	60.4	60.5	61.2	61.7	62.0
30000	66.7	66.5	66.0	67.1	68.0	67.3	64.1	61.3	60.6	60.4	60.5	61.1	61.6	61.8
40000	66.7	66.4	65.9	67.1	68.1	67.1	63.8	61.1	60.6	60.4	60.4	61.0	61.5	61.6
50000	66.7	66.2	65.7	67.1	68.1	67.0	63.5	60.9	60.4	60.3	60.3	60.8	61.4	61.4
60000	66.6	66.1	65.6	67.0	68.0	66.8	63.3	60.7	60.3	60.3	60.3	60.7	61.3	61.3
70000	66.5	65.9	65.5	67.0	68.0	66.7	63.2	60.5	60.2	60.3	60.2	60.6	61.1	61.2
80000	66.4	65.7	65.4	66.9	67.9	66.6	63.0	60.4	60.2	60.3	60.1	60.5	61.0	61.1
90000	66.3	65.7	65.4	67.0	67.9	66.4	63.0	60.3	60.1	60.3	60.1	60.4	61.0	61.0
100000	66.5	65.9	65.6	67.0	67.9	66.4	62.9	60.4	60.3	60.5	60.3	60.6	61.1	61.1
110000	66.8	66.2	65.9	67.2	68.0	66.3	62.8	60.6	60.4	60.6	60.5	61.0	61.4	61.2
120000	67.2	66.6	66.3	67.4	68.1	66.3	62.9	61.0	60.7	60.7	60.9	61.4	61.8	61.6
130000	67.5	66.8	66.5	67.5	68.2	66.5	62.8	61.3	61.1	61.0	61.2	61.7	62.1	62.1
140000	67.8	67.1	66.5	67.7	68.4	66.7	62.7	61.5	61.2	61.1	61.5	61.8	62.4	62.3
150000	68.0	67.1	66.7	67.7	68.6	67.0	62.7	61.6	61.4	61.2	61.7	61.8	62.3	62.5
160000	68.0	66.9	66.8	67.7	68.8	67.0	62.7	61.5	61.6	61.1	62.0	61.9	62.3	62.5
170000	68.0	66.7	66.9	67.7	68.7	66.9	62.6	61.5	61.6	61.1	61.8	62.0	62.1	62.4
180000	68.1	66.5	67.1	67.9	68.5	66.7	62.6	61.4	61.4	61.0	61.8	62.0	62.0	62.3
190000	67.8	66.5	67.1	67.9	68.4	66.3	62.6	61.3	61.3	60.9	61.7	61.9	62.0	62.3
200000	67.5	66.3	67.1	67.9	68.2	65.9	62.5	61.2	61.1	60.9	61.6	61.8	62.1	62.4
210000	67.2	66.3	67.0	68.0	68.0	65.7	62.3	61.1	60.8	60.8	61.6	61.8	62.3	62.5
220000	67.0	66.3	67.0	68.0	67.8	65.4	62.2	61.1	60.7	60.8	61.6	61.8	62.3	62.6
230000	66.9	66.3	67.1	68.0	67.7	65.2	62.0	61.1	60.6	60.7	61.6	61.8	62.4	62.6
Daily Max	68.1	67.1	67.1	68.0	68.8	67.7	64.8	61.8	61.6	61.2	62.0	62.0	62.4	62.6
Daily Min	66.3	65.7	65.4	66.9	67.7	65.2	62.0	60.3	60.1	60.3	60.1	60.4	61.0	61.0
Average	67.1	66.4	66.3	67.4	68.1	66.6	63.1	61.1	60.8	60.7	61.0	61.3	61.8	61.9

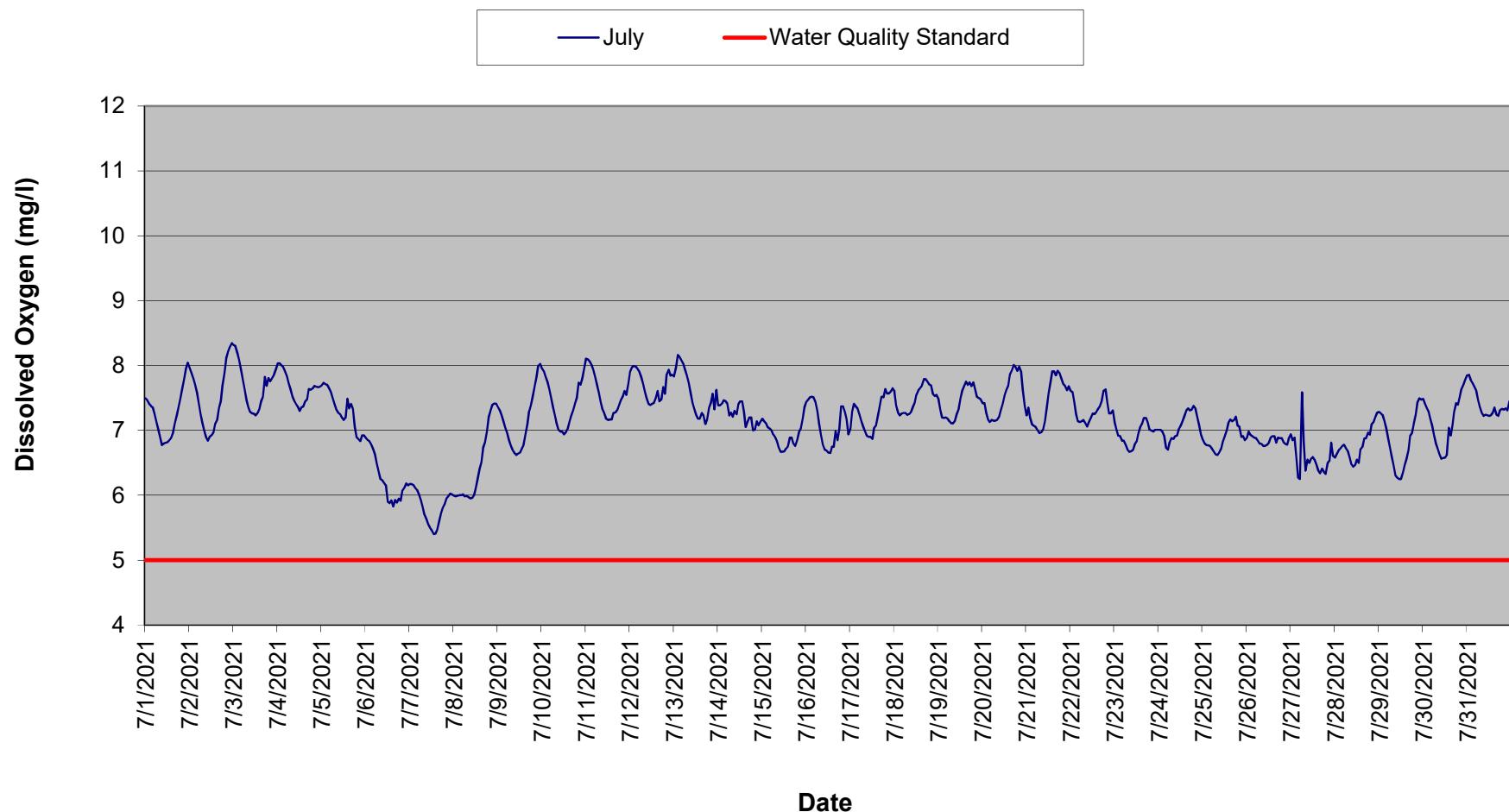
Peshtigo Hydroelectric Project (FERC No. 2581)

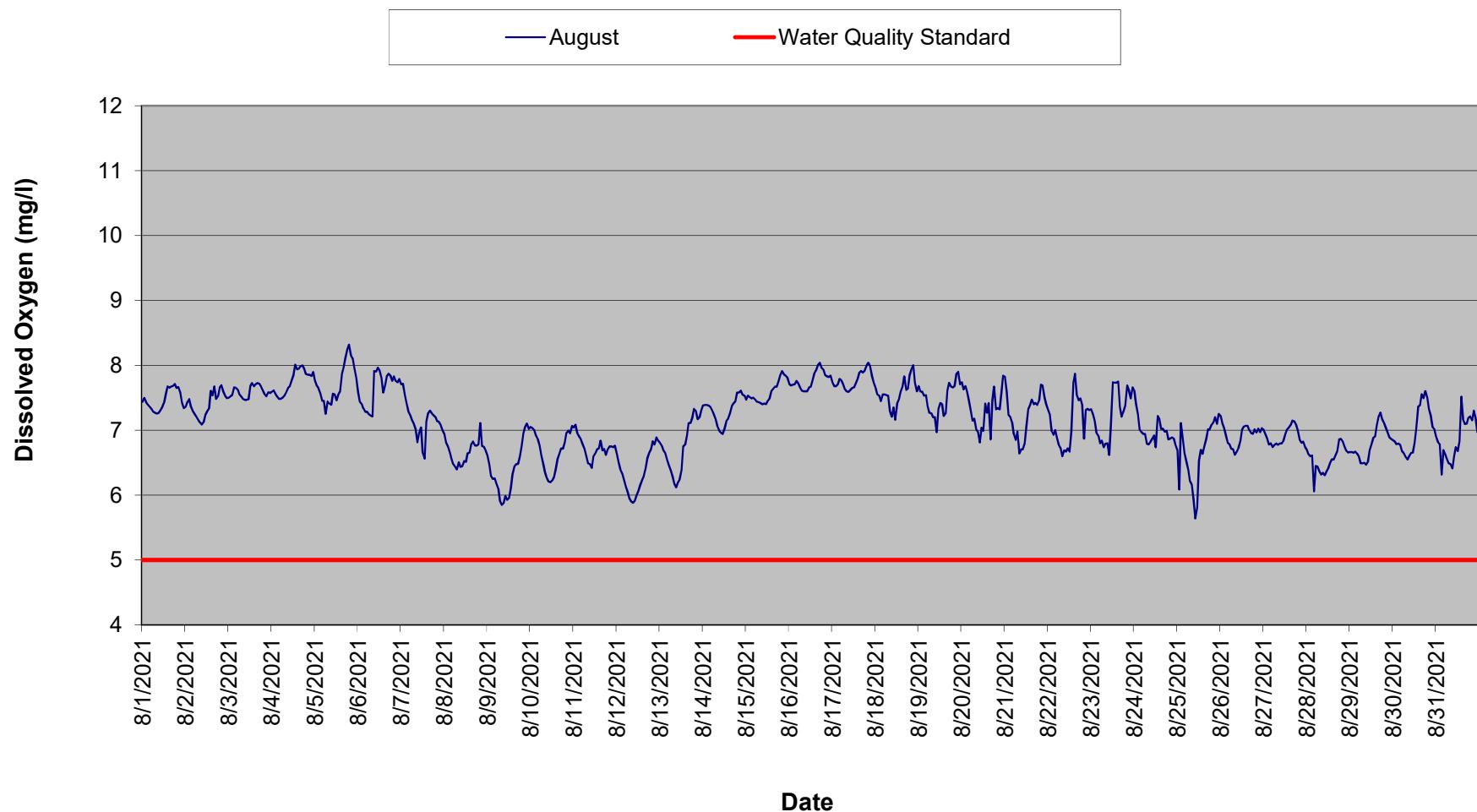
Peshtigo Tailwater Dissolved Oxygen - June 2021

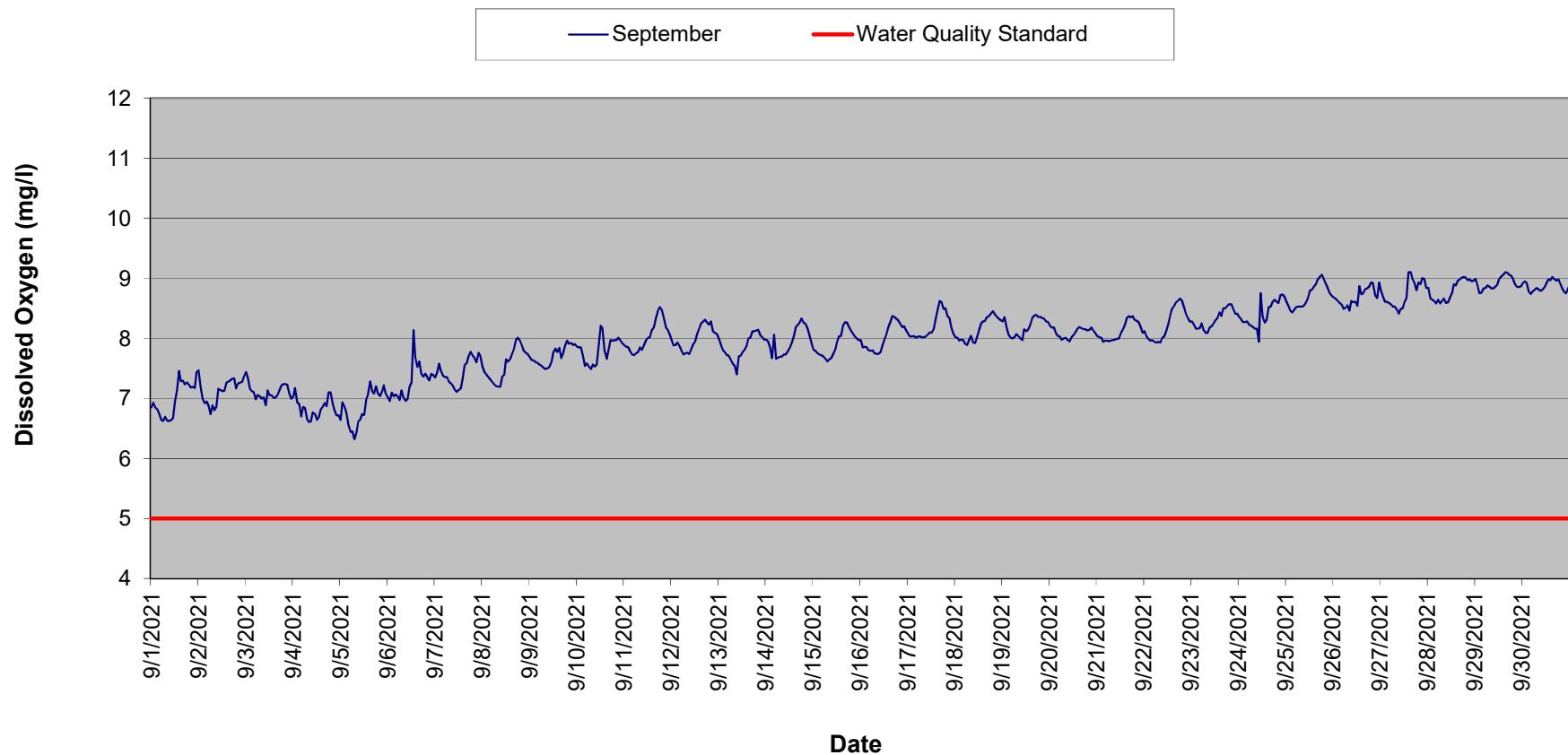
June Water Quality Standard



Peshtigo Tailwater Dissolved Oxygen - July 2021



Peshtigo Tailwater Dissolved Oxygen - August 2021

Peshtigo Tailwater Dissolved Oxygen - September 2021

Peshtigo Tailwater Dissolved Oxygen Summary - June 2021

Time HHMMSS	06/01/21	06/02/21	06/03/21	06/04/21	06/05/21	06/06/21	06/07/21	06/08/21	06/09/21	06/10/21	06/11/21	06/12/21	06/13/21	06/14/21	06/15/21	06/16/21
0	9.6	9.8	9.0	8.5	8.4	8.2	7.7	7.2	7.0	7.0	6.7	6.7	6.7	6.8	7.0	7.2
10000	9.6	10.0	8.9	8.5	8.5	8.1	7.8	7.4	7.1	7.0	6.9	6.7	6.7	6.9	7.0	7.2
20000	9.6	9.8	8.8	8.4	8.5	8.1	7.7	7.4	7.1	6.9	6.8	6.6	6.7	6.7	6.9	7.2
30000	9.6	9.6	8.8	8.2	8.4	8.0	7.6	7.5	7.1	6.9	6.9	6.7	6.7	6.7	6.9	7.2
40000	9.5	9.5	8.7	8.1	8.3	8.0	7.5	7.4	7.1	6.8	6.8	6.4	6.6	6.6	6.9	7.1
50000	9.4	9.3	8.6	8.1	8.3	7.9	7.5	7.3	7.0	6.8	6.7	6.3	6.2	6.5	7.0	7.1
60000	9.3	9.1	8.5	8.0	8.2	7.9	7.4	7.2	6.9	6.7	6.6	6.6	6.6	6.5	7.0	7.1
70000	9.2	8.9	8.4	7.9	8.1	7.8	7.3	7.1	6.8	6.6	6.6	6.6	6.6	6.5	7.0	7.1
80000	9.0	8.8	8.3	7.9	8.0	7.8	7.2	6.9	6.7	6.5	6.5	6.5	6.4	6.5	6.9	7.0
90000	9.0	8.6	8.3	7.9	8.0	7.8	7.3	6.9	6.7	6.6	6.4	6.5	6.5	6.5	6.9	7.0
100000	8.9	8.4	8.2	7.9	7.9	7.7	7.3	6.8	6.6	6.7	6.3	6.4	6.5	6.5	6.9	7.0
110000	8.8	8.3	8.2	7.9	7.9	7.7	7.3	6.9	7.0	6.6	6.4	6.5	6.6	6.8	6.8	7.1
120000	8.8	8.3	8.1	7.9	7.9	7.8	7.3	6.9	7.0	6.5	6.5	6.4	6.6	6.9	6.8	7.2
130000	8.8	8.2	8.1	7.9	7.9	7.7	7.3	7.0	6.9	6.7	6.4	6.4	6.6	6.9	6.8	7.2
140000	8.8	8.3	8.1	8.0	7.8	7.7	7.3	6.7	6.8	6.8	6.2	6.3	6.5	7.2	6.8	7.2
150000	8.8	8.3	8.1	8.0	7.8	7.6	7.0	6.6	6.7	6.4	6.3	6.2	6.6	7.4	6.7	7.2
160000	9.0	8.3	8.4	8.1	8.0	7.8	7.1	6.6	6.8	6.8	6.4	6.3	6.5	7.3	6.8	7.2
170000	9.0	8.4	8.4	8.3	8.0	7.9	7.2	6.7	7.0	6.6	6.4	6.3	6.7	7.2	6.8	7.3
180000	9.1	8.4	8.3	8.4	8.2	7.8	7.3	6.9	7.2	6.7	6.3	6.3	7.0	7.2	6.8	7.3
190000	9.2	8.5	8.4	8.3	8.2	7.8	7.3	6.7	7.4	6.7	6.4	6.3	6.8	7.0	7.0	7.3
200000	9.3	8.6	8.6	8.4	8.3	7.8	7.3	7.1	7.0	6.8	6.6	6.5	6.9	6.9	7.2	7.3
210000	9.4	8.6	8.7	8.4	8.2	7.8	7.2	7.2	7.1	6.7	6.5	6.6	7.0	6.8	7.4	7.5
220000	9.5	8.7	8.7	8.4	8.2	7.7	7.1	7.2	7.1	6.7	6.5	6.6	7.0	6.8	7.1	7.7
230000	9.6	8.8	8.6	8.5	8.2	7.7	7.2	7.1	7.0	6.5	6.6	6.6	7.0	7.0	7.1	7.8
Daily Max	9.6	10.0	9.0	8.5	8.5	8.2	7.8	7.5	7.4	7.0	6.9	6.7	7.0	7.4	7.4	7.8
Daily Min	8.8	8.2	8.1	7.9	7.8	7.6	7.0	6.6	6.6	6.4	6.2	6.2	6.2	6.5	6.7	7.0
Average	9.2	8.8	8.5	8.2	8.1	7.8	7.3	7.0	7.0	6.7	6.5	6.5	6.7	6.8	6.9	7.2

License Minimum DO: 5.0 mg/l

Peshtigo Tailwater Dissolved Oxygen Summary - June 2021

Time HHMMSS	06/17/21	06/18/21	06/19/21	06/20/21	06/21/21	06/22/21	06/23/21	06/24/21	06/25/21	06/26/21	06/27/21	06/28/21	06/29/21	06/30/21
0	7.8	7.7	7.8	7.7	6.9	7.4	7.2	7.8	7.0	6.8	6.5	6.8	7.6	7.1
10000	7.6	7.7	7.8	7.5	6.8	7.4	7.3	7.8	6.8	6.5	6.5	6.8	7.7	7.1
20000	7.5	7.7	7.8	7.4	6.7	7.4	7.3	7.8	6.9	6.5	6.5	6.9	7.7	7.1
30000	7.6	7.7	7.7	7.4	6.7	7.5	7.3	7.8	6.8	6.5	6.5	6.9	7.8	7.1
40000	7.6	7.7	7.6	7.4	6.7	7.5	7.3	7.8	6.8	6.6	6.5	7.0	7.7	7.1
50000	7.6	7.6	7.5	7.4	6.8	7.5	7.3	7.8	6.7	6.6	6.5	7.0	7.7	7.0
60000	7.5	7.6	7.5	7.4	6.7	7.5	7.2	7.7	6.7	6.6	6.4	7.0	7.7	7.0
70000	7.5	7.6	7.5	7.3	6.7	7.5	7.2	7.7	6.7	6.6	6.4	7.0	7.6	7.0
80000	7.5	7.6	7.5	7.3	6.9	7.5	7.3	7.7	6.6	6.6	6.4	7.0	7.5	6.9
90000	7.5	7.6	7.6	7.3	7.0	7.6	7.3	7.7	6.6	6.6	6.5	7.0	7.4	6.9
100000	7.6	7.7	7.7	7.3	7.0	7.6	7.5	7.7	6.6	6.6	6.4	7.0	7.3	6.9
110000	7.7	7.9	7.9	7.4	7.2	7.6	7.7	7.7	6.6	6.7	6.5	7.0	7.2	6.8
120000	7.8	8.0	8.0	7.5	7.3	7.7	7.7	7.7	6.6	6.7	6.5	6.9	7.1	6.8
130000	7.9	8.1	8.1	7.7	7.4	7.6	7.8	7.7	6.6	6.7	6.5	7.0	7.1	6.9
140000	7.9	8.3	8.2	7.7	7.4	7.7	7.8	7.6	6.7	6.7	6.5	6.9	7.0	6.9
150000	7.9	8.3	8.1	7.8	7.5	7.7	7.8	7.6	6.7	6.7	6.5	7.0	6.9	6.9
160000	7.9	8.4	8.1	7.6	7.5	7.6	7.8	7.5	6.7	6.6	6.5	7.0	6.9	6.8
170000	8.0	8.5	8.0	7.2	7.5	7.6	7.9	7.5	6.6	6.6	6.5	7.1	6.9	7.0
180000	8.1	8.6	8.0	7.3	7.6	7.6	7.9	7.3	6.7	6.6	6.7	7.2	7.0	6.9
190000	8.0	8.5	8.0	7.4	7.7	7.6	7.9	7.2	6.7	6.5	6.7	7.2	7.1	7.2
200000	7.9	8.4	7.8	7.5	7.6	7.5	7.8	7.2	6.6	6.4	6.6	7.2	7.0	7.2
210000	7.8	8.2	7.5	7.5	7.5	7.4	7.9	7.1	6.7	6.4	6.6	7.2	7.0	7.2
220000	7.8	7.9	7.5	7.1	7.5	7.1	7.9	7.1	6.9	6.4	6.8	7.4	7.0	7.3
230000	7.8	7.8	7.6	7.0	7.4	7.2	7.9	7.0	6.8	6.4	6.8	7.5	7.0	7.4
Daily Max	8.1	8.6	8.2	7.8	7.7	7.7	7.9	7.8	7.0	6.8	6.8	7.5	7.8	7.4
Daily Min	7.5	7.6	7.5	7.0	6.7	7.1	7.2	7.0	6.6	6.4	6.4	6.8	6.9	6.8
Average	7.7	8.0	7.8	7.4	7.2	7.5	7.6	7.6	6.7	6.6	6.5	7.0	7.3	7.0

Peshtigo Tailwater Dissolved Oxygen Summary - July 2021

Time HHMMSS	07/01/21	07/02/21	07/03/21	07/04/21	07/05/21	07/06/21	07/07/21	07/08/21	07/09/21	07/10/21	07/11/21	07/12/21	07/13/21	07/14/21	07/15/21	07/16/21
0	7.5	8.0	8.3	8.0	7.7	6.9	6.2	6.0	7.4	8.0	8.1	7.9	7.8	7.4	7.2	7.4
10000	7.5	7.9	8.3	8.0	7.7	6.9	6.2	6.0	7.3	7.9	8.1	8.0	8.0	7.4	7.1	7.5
20000	7.4	7.8	8.2	8.0	7.7	6.8	6.2	6.0	7.2	7.8	8.1	8.0	8.2	7.4	7.1	7.5
30000	7.4	7.7	8.1	8.0	7.7	6.8	6.1	6.0	7.1	7.7	8.0	8.0	8.1	7.5	7.1	7.5
40000	7.4	7.6	7.9	7.9	7.7	6.7	6.1	6.0	7.0	7.6	7.9	8.0	8.1	7.5	7.0	7.5
50000	7.3	7.4	7.8	7.8	7.6	6.6	6.0	6.0	7.0	7.5	7.8	7.9	8.0	7.4	7.0	7.4
60000	7.1	7.3	7.6	7.7	7.5	6.5	5.9	6.0	6.9	7.4	7.7	7.8	7.9	7.2	6.9	7.3
70000	7.0	7.1	7.5	7.6	7.4	6.4	5.8	6.0	6.8	7.2	7.6	7.7	7.8	7.3	6.9	7.1
80000	6.9	7.0	7.4	7.5	7.3	6.3	5.7	6.0	6.7	7.1	7.4	7.6	7.7	7.2	6.8	6.9
90000	6.8	6.9	7.3	7.5	7.3	6.2	5.6	6.0	6.7	7.0	7.3	7.5	7.6	7.3	6.7	6.8
100000	6.8	6.8	7.3	7.4	7.3	6.2	5.6	6.0	6.6	7.0	7.3	7.4	7.4	7.3	6.7	6.7
110000	6.8	6.9	7.3	7.4	7.2	6.1	5.5	6.0	6.6	7.0	7.2	7.4	7.3	7.4	6.7	6.7
120000	6.8	6.9	7.2	7.3	7.2	5.9	5.5	6.1	6.7	6.9	7.2	7.4	7.2	7.5	6.7	6.7
130000	6.8	7.0	7.3	7.4	7.2	5.9	5.4	6.3	6.7	7.0	7.2	7.4	7.2	7.5	6.7	6.7
140000	6.9	7.1	7.3	7.4	7.5	5.9	5.4	6.4	6.8	7.0	7.2	7.5	7.2	7.3	6.8	6.8
150000	7.0	7.2	7.4	7.4	7.3	5.8	5.5	6.5	6.9	7.1	7.3	7.6	7.3	7.1	6.9	6.8
160000	7.1	7.3	7.5	7.5	7.4	5.9	5.6	6.7	7.1	7.2	7.3	7.4	7.2	7.1	6.9	7.0
170000	7.2	7.4	7.8	7.6	7.3	5.9	5.7	6.8	7.3	7.3	7.3	7.5	7.1	7.2	6.8	6.9
180000	7.4	7.7	7.7	7.6	7.1	5.9	5.8	7.0	7.4	7.4	7.4	7.7	7.2	7.2	6.8	7.0
190000	7.5	7.9	7.8	7.6	6.9	5.9	5.9	7.2	7.5	7.5	7.5	7.6	7.3	7.0	6.9	7.4
200000	7.6	8.1	7.8	7.7	6.9	6.1	6.0	7.3	7.7	7.7	7.5	7.9	7.4	7.0	7.0	7.4
210000	7.8	8.2	7.8	7.7	6.8	6.1	6.0	7.4	7.8	7.7	7.6	7.9	7.6	7.1	7.0	7.3
220000	8.0	8.3	7.9	7.7	6.9	6.2	6.0	7.4	8.0	7.8	7.5	7.8	7.3	7.1	7.2	7.2
230000	8.0	8.3	7.9	7.7	6.9	6.2	6.0	7.4	8.0	8.0	7.7	7.9	7.6	7.1	7.4	6.9
Daily Max	8.0	8.3	8.3	8.0	7.7	6.9	6.2	7.4	8.0	8.0	8.1	8.0	8.2	7.5	7.4	7.5
Daily Min	6.8	6.8	7.2	7.3	6.8	5.8	5.4	6.0	6.6	6.9	7.2	7.4	7.1	7.0	6.7	6.7
Average	7.2	7.5	7.7	7.6	7.3	6.3	5.8	6.4	7.1	7.4	7.5	7.7	7.6	7.3	6.9	7.1

License Minimum Dissolved Oxygen: 5.0 mg/l

Peshtigo Tailwater Dissolved Oxygen Summary - July 2021

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

Peshtigo Tailwater Dissolved Oxygen Summary - August 2021

Time HHMMSS	08/01/21	08/02/21	08/03/21	08/04/21	08/05/21	08/06/21	08/07/21	08/08/21	08/09/21	08/10/21	08/11/21	08/12/21	08/13/21	08/14/21	08/15/21	08/16/21
0	7.4	7.4	7.5	7.6	7.8	7.6	7.7	6.9	6.6	7.1	7.0	6.6	6.8	7.4	7.5	7.7
10000	7.5	7.4	7.5	7.6	7.7	7.4	7.7	6.8	6.5	7.0	7.1	6.5	6.8	7.4	7.5	7.7
20000	7.4	7.5	7.5	7.6	7.6	7.4	7.5	6.7	6.3	7.0	7.0	6.4	6.7	7.4	7.5	7.7
30000	7.4	7.4	7.7	7.5	7.6	7.3	7.4	6.7	6.2	6.9	6.9	6.3	6.6	7.4	7.5	7.7
40000	7.4	7.3	7.7	7.5	7.5	7.3	7.3	6.6	6.3	6.9	6.9	6.2	6.5	7.4	7.5	7.8
50000	7.3	7.2	7.6	7.5	7.5	7.3	7.2	6.5	6.2	6.8	6.8	6.1	6.5	7.3	7.5	7.7
60000	7.3	7.2	7.5	7.5	7.3	7.2	7.2	6.4	6.1	6.6	6.7	6.1	6.4	7.3	7.4	7.7
70000	7.3	7.2	7.5	7.5	7.4	7.2	7.1	6.4	5.9	6.5	6.6	6.0	6.3	7.2	7.4	7.6
80000	7.3	7.1	7.5	7.6	7.4	7.2	7.0	6.5	5.8	6.4	6.5	5.9	6.2	7.1	7.4	7.6
90000	7.3	7.1	7.5	7.7	7.4	7.9	6.8	6.4	5.9	6.3	6.5	5.9	6.1	7.0	7.4	7.6
100000	7.3	7.1	7.5	7.7	7.6	7.9	7.0	6.4	6.0	6.2	6.4	5.9	6.2	7.0	7.4	7.6
110000	7.4	7.2	7.5	7.8	7.6	8.0	7.0	6.5	5.9	6.2	6.6	6.0	6.2	6.9	7.4	7.7
120000	7.4	7.3	7.7	7.8	7.5	7.9	6.7	6.5	6.0	6.2	6.6	6.1	6.4	7.0	7.5	7.7
130000	7.6	7.3	7.7	8.0	7.6	7.8	6.6	6.6	6.1	6.3	6.7	6.2	6.8	7.1	7.5	7.8
140000	7.7	7.6	7.7	7.9	7.6	7.6	7.1	6.7	6.3	6.4	6.7	6.2	6.8	7.2	7.6	7.9
150000	7.7	7.5	7.7	7.9	7.9	7.7	7.3	6.8	6.4	6.6	6.8	6.3	6.9	7.3	7.6	7.9
160000	7.7	7.7	7.7	8.0	8.0	7.8	7.3	6.8	6.5	6.6	6.7	6.4	7.1	7.4	7.7	8.0
170000	7.7	7.5	7.7	8.0	8.1	7.9	7.3	6.8	6.5	6.7	6.7	6.6	7.1	7.4	7.7	8.0
180000	7.7	7.5	7.7	7.9	8.2	7.8	7.2	6.8	6.6	6.7	6.6	6.7	7.2	7.5	7.8	8.0
190000	7.7	7.7	7.6	7.9	8.3	7.8	7.2	6.8	6.7	6.8	6.7	6.7	7.3	7.6	7.9	7.9
200000	7.7	7.7	7.6	7.9	8.1	7.8	7.1	7.1	7.0	7.0	6.8	6.8	7.3	7.6	7.9	7.9
210000	7.6	7.6	7.5	7.9	8.1	7.8	7.1	6.8	7.1	7.0	6.8	6.8	7.2	7.6	7.9	7.8
220000	7.4	7.5	7.6	7.8	8.0	7.7	7.1	6.7	7.1	7.0	6.7	6.9	7.2	7.6	7.8	7.8
230000	7.3	7.5	7.6	7.9	7.8	7.8	7.0	6.7	7.0	7.1	6.8	6.8	7.3	7.5	7.8	7.8
Daily Max	7.7	7.7	7.7	8.0	8.3	8.0	7.7	7.1	7.1	7.1	6.9	7.3	7.6	7.9	8.0	
Daily Min	7.3	7.1	7.5	7.5	7.3	7.2	6.6	6.4	5.8	6.2	6.4	5.9	6.1	6.9	7.4	7.6
Average	7.5	7.4	7.6	7.7	7.7	7.6	7.2	6.7	6.4	6.7	6.7	6.3	6.7	7.3	7.6	7.8

License Minimum Dissolved Oxygen: 5.0 mg/l

Peshtigo Tailwater Dissolved Oxygen Summary - August 2021

Time HHMMSS	08/17/21	08/18/21	08/19/21	08/20/21	08/21/21	08/22/21	08/23/21	08/24/21	08/25/21	08/26/21	08/27/21	08/28/21	08/29/21	08/30/21	08/31/21
0	7.7	7.7	7.7	7.7	7.8	7.3	7.3	7.6	6.7	7.2	7.0	6.7	6.7	6.8	6.9
10000	7.7	7.6	7.6	7.6	7.6	7.2	7.2	7.4	6.1	7.1	6.9	6.6	6.7	6.8	6.8
20000	7.7	7.5	7.6	7.7	7.2	7.0	7.1	7.2	7.1	7.0	6.9	6.6	6.7	6.8	6.8
30000	7.7	7.5	7.5	7.6	7.2	6.9	7.0	7.0	6.9	6.9	6.8	6.6	6.7	6.8	6.3
40000	7.8	7.6	7.5	7.5	7.1	7.0	6.9	7.0	6.7	6.8	6.8	6.1	6.6	6.8	6.7
50000	7.8	7.6	7.4	7.3	6.9	6.9	6.8	6.9	6.5	6.8	6.7	6.4	6.6	6.7	6.6
60000	7.7	7.5	7.3	7.2	6.9	6.8	6.8	6.9	6.4	6.7	6.8	6.4	6.5	6.6	6.6
70000	7.6	7.5	7.3	7.2	7.0	6.7	6.7	6.8	6.2	6.7	6.8	6.4	6.5	6.6	6.5
80000	7.6	7.3	7.2	7.0	6.6	6.6	6.8	6.8	6.2	6.6	6.8	6.3	6.5	6.5	6.5
90000	7.6	7.2	7.2	7.0	6.7	6.7	6.8	6.8	5.9	6.7	6.8	6.3	6.5	6.6	6.4
100000	7.6	7.4	7.0	6.8	6.7	6.7	6.6	6.9	5.6	6.7	6.8	6.3	6.5	6.6	6.6
110000	7.7	7.2	7.3	7.0	6.8	6.7	7.1	6.9	5.8	6.8	6.8	6.4	6.7	6.7	6.7
120000	7.7	7.4	7.4	7.0	7.1	6.7	7.7	6.7	6.5	7.0	6.9	6.4	6.8	6.8	6.7
130000	7.7	7.5	7.4	7.4	7.3	7.0	7.7	7.2	6.7	7.1	7.0	6.5	6.9	7.0	6.8
140000	7.8	7.6	7.2	7.3	7.4	7.7	7.7	7.2	6.6	7.1	7.0	6.6	6.9	7.4	7.5
150000	7.9	7.7	7.3	7.4	7.5	7.9	7.8	7.0	6.7	7.1	7.1	6.6	7.1	7.4	7.2
160000	7.9	7.8	7.6	6.9	7.4	7.6	7.4	7.0	6.9	7.0	7.1	6.6	7.2	7.6	7.1
170000	7.9	7.6	7.7	7.5	7.4	7.5	7.2	7.0	7.0	7.0	7.1	6.7	7.3	7.5	7.1
180000	7.9	7.6	7.7	7.7	7.4	7.5	7.3	7.0	7.0	6.9	7.1	6.9	7.2	7.6	7.2
190000	8.0	7.9	7.7	7.3	7.5	7.4	7.4	6.9	7.1	7.0	7.0	6.9	7.1	7.5	7.2
200000	8.0	8.0	7.7	7.3	7.7	6.9	7.7	6.9	7.1	7.0	6.9	6.8	7.0	7.3	7.2
210000	8.0	8.0	7.9	7.3	7.7	7.3	7.6	6.9	7.2	7.0	6.8	6.7	7.0	7.2	7.3
220000	7.8	7.7	7.9	7.6	7.5	7.3	7.5	6.9	7.1	7.0	6.8	6.7	6.9	7.0	7.2
230000	7.7	7.6	7.7	7.8	7.4	7.3	7.7	6.8	7.3	7.0	6.7	6.7	6.9	7.0	7.0
Daily Max	8.0	8.0	7.9	7.8	7.8	7.9	7.8	7.6	7.3	7.2	7.1	6.9	7.3	7.6	7.5
Daily Min	7.6	7.2	7.0	6.8	6.6	6.6	6.6	6.7	5.6	6.6	6.7	6.1	6.5	6.5	6.3
Average	7.8	7.6	7.5	7.3	7.2	7.1	7.2	7.0	6.6	6.9	6.9	6.5	6.8	7.0	6.9

Peshtigo Tailwater Dissolved Oxygen Summary - September 2021

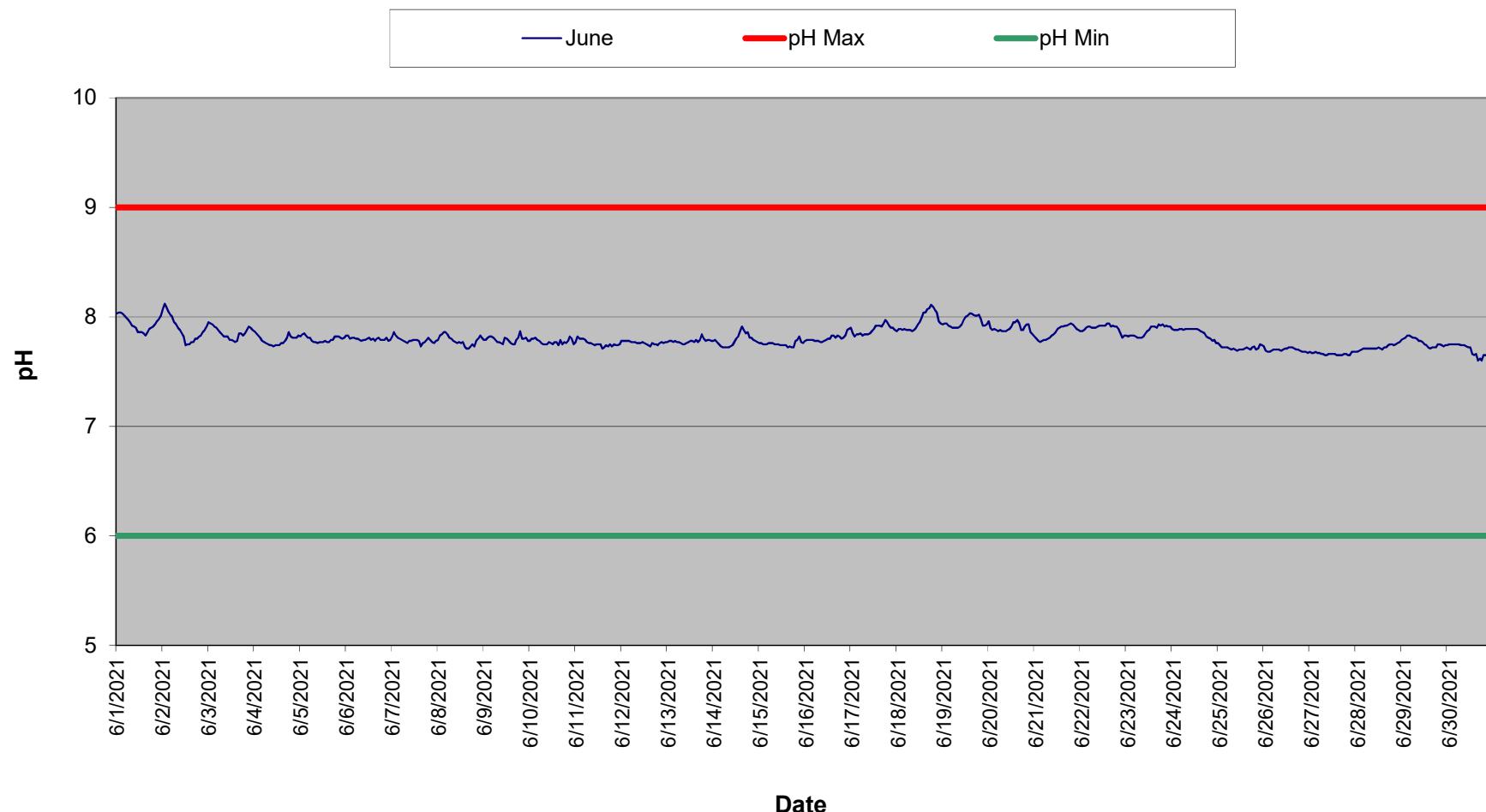
Time HHMMSS	09/01/21	09/02/21	09/03/21	09/04/21	09/05/21	09/06/21	09/07/21	09/08/21	09/09/21	09/10/21	09/11/21	09/12/21	09/13/21	09/14/21	09/15/21	09/16/21
0	6.8	7.5	7.4	7.0	6.6	7.0	7.3	7.5	7.7	7.9	7.9	8.0	8.0	8.0	7.8	8.0
10000	6.9	7.2	7.3	7.2	6.9	7.0	7.4	7.4	7.6	7.9	7.9	7.9	8.0	7.8	7.8	7.9
20000	6.8	7.0	7.2	6.9	6.9	7.1	7.6	7.4	7.6	7.9	7.9	7.9	7.8	7.9	7.8	7.9
30000	6.8	6.9	7.1	6.9	6.8	7.0	7.5	7.4	7.6	7.7	7.8	7.9	7.8	7.7	7.7	7.9
40000	6.7	6.9	7.1	6.7	6.6	7.1	7.4	7.3	7.6	7.5	7.7	7.9	7.7	8.1	7.7	7.8
50000	6.6	6.9	7.0	6.9	6.4	7.0	7.4	7.3	7.6	7.6	7.7	7.8	7.7	7.7	7.7	7.8
60000	6.6	6.7	7.1	6.8	6.5	7.0	7.4	7.2	7.5	7.5	7.8	7.7	7.7	7.7	7.7	7.8
70000	6.7	6.9	7.0	6.7	6.3	7.1	7.3	7.2	7.5	7.5	7.8	7.8	7.6	7.7	7.6	7.8
80000	6.6	6.8	7.0	6.6	6.4	7.0	7.3	7.2	7.5	7.6	7.9	7.8	7.5	7.7	7.7	7.7
90000	6.6	6.9	7.0	6.6	6.6	7.0	7.2	7.2	7.5	7.5	7.8	7.7	7.4	7.7	7.7	7.7
100000	6.6	7.2	6.9	6.8	6.6	7.0	7.1	7.4	7.5	7.6	7.9	7.8	7.7	7.7	7.7	7.8
110000	6.7	7.1	7.1	6.7	6.7	7.2	7.1	7.4	7.6	7.9	8.0	7.9	7.7	7.8	7.8	7.9
120000	6.9	7.1	7.1	6.6	6.7	7.3	7.1	7.7	7.8	8.2	8.0	8.0	7.8	7.9	7.9	8.0
130000	7.1	7.1	7.1	6.7	7.0	8.1	7.2	7.6	7.8	8.2	8.0	8.1	7.8	7.9	8.0	8.1
140000	7.5	7.3	7.0	6.8	7.1	7.7	7.4	7.7	7.8	7.8	8.1	8.2	7.9	8.0	8.0	8.2
150000	7.3	7.3	7.0	6.9	7.3	7.5	7.6	7.7	7.8	7.7	8.2	8.3	8.0	8.2	8.2	8.3
160000	7.3	7.3	7.1	6.9	7.1	7.6	7.6	7.8	7.7	7.8	8.3	8.3	8.0	8.2	8.3	8.4
170000	7.2	7.3	7.1	6.9	7.1	7.4	7.7	8.0	7.8	8.0	8.5	8.3	8.1	8.3	8.3	8.4
180000	7.3	7.3	7.2	7.1	7.2	7.4	7.8	8.0	7.9	8.0	8.5	8.3	8.1	8.3	8.2	8.3
190000	7.2	7.2	7.2	7.1	7.1	7.4	7.7	8.0	8.0	8.0	8.5	8.2	8.1	8.3	8.1	8.3
200000	7.2	7.2	7.2	6.9	7.0	7.4	7.7	7.9	7.9	8.0	8.3	8.3	8.1	8.2	8.1	8.2
210000	7.2	7.3	7.2	6.8	7.1	7.3	7.6	7.8	7.9	8.0	8.2	8.1	8.1	8.2	8.0	8.2
220000	7.2	7.3	7.1	6.7	7.2	7.4	7.8	7.8	7.9	8.0	8.1	8.1	8.0	8.0	8.0	8.2
230000	7.4	7.4	7.0	6.7	7.1	7.4	7.7	7.7	7.9	7.9	8.1	8.1	8.0	7.9	8.0	8.1
Daily Max	7.5	7.5	7.4	7.2	7.3	8.1	7.8	8.0	8.0	8.2	8.5	8.3	8.1	8.3	8.3	8.4
Daily Min	6.6	6.7	6.9	6.6	6.3	7.0	7.1	7.2	7.5	7.5	7.7	7.7	7.4	7.7	7.6	7.7
Average	7.0	7.1	7.1	6.8	6.8	7.3	7.4	7.6	7.6	7.7	7.8	8.0	8.0	7.9	8.0	8.0

License Minimum Dissolved Oxygen: 5.0 mg/l

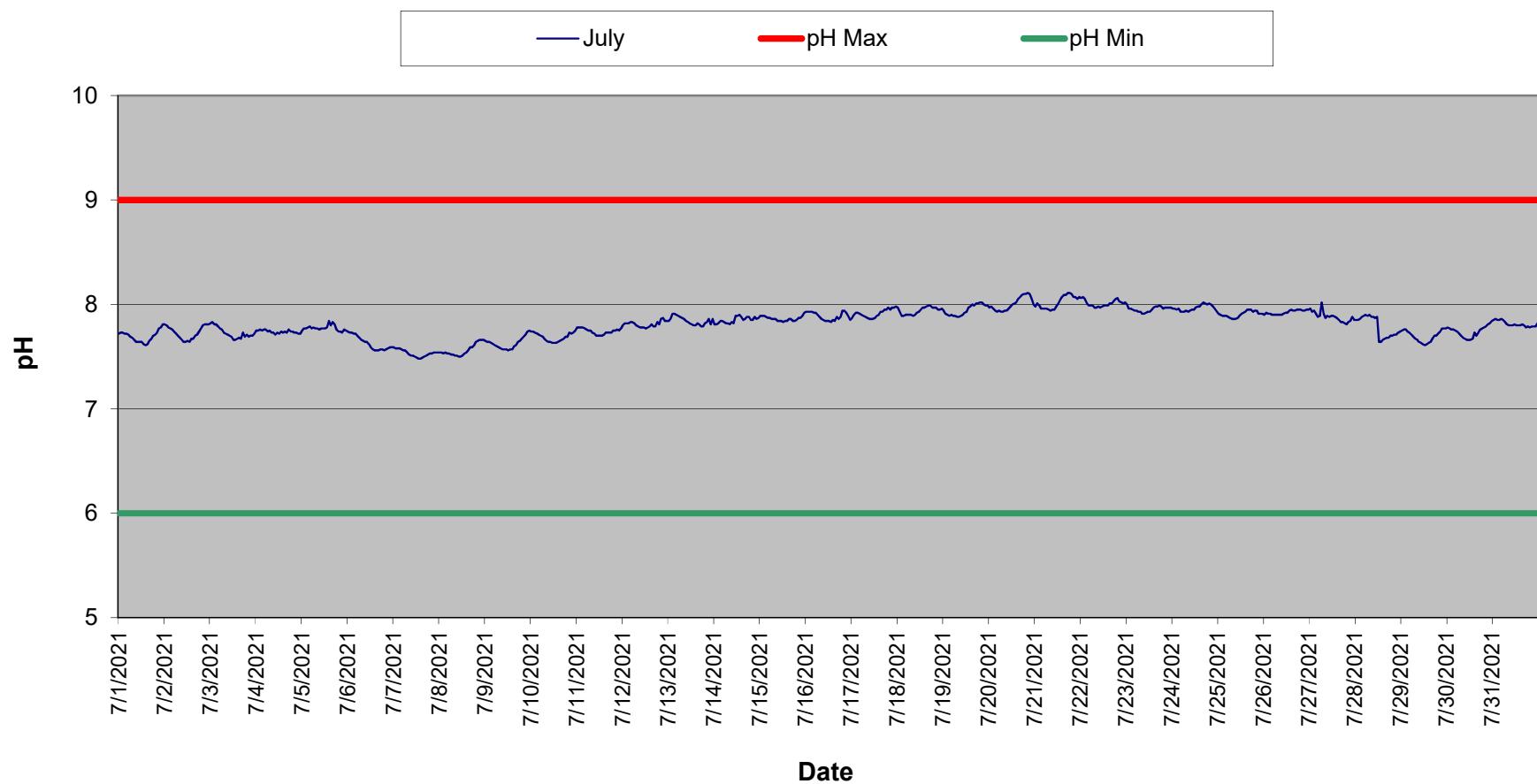
Peshtigo Tailwater Dissolved Oxygen Summary - September 2021

Time HHMMSS	09/17/21	09/18/21	09/19/21	09/20/21	09/21/21	09/22/21	09/23/21	09/24/21	09/25/21	09/26/21	09/27/21	09/28/21	09/29/21	09/30/21
0	8.1	8.0	8.3	8.2	8.0	8.1	8.3	8.4	8.6	8.7	8.8	8.8	9.0	8.9
10000	8.0	8.0	8.4	8.2	8.0	8.0	8.2	8.3	8.5	8.7	8.7	8.7	8.9	9.0
20000	8.0	8.0	8.2	8.2	8.0	8.0	8.2	8.3	8.5	8.6	8.6	8.6	8.8	8.9
30000	8.0	8.0	8.1	8.1	7.9	8.0	8.2	8.3	8.4	8.6	8.6	8.6	8.8	8.8
40000	8.0	8.0	8.0	8.0	8.0	8.0	8.2	8.3	8.5	8.6	8.6	8.6	8.8	8.7
50000	8.0	7.9	8.0	8.0	8.0	7.9	8.3	8.2	8.5	8.5	8.6	8.6	8.8	8.8
60000	8.0	7.9	8.0	8.0	8.0	7.9	8.1	8.2	8.5	8.5	8.5	8.6	8.9	8.8
70000	8.0	8.0	8.1	8.0	8.0	7.9	8.1	8.2	8.5	8.6	8.5	8.6	8.9	8.8
80000	8.0	8.0	8.0	8.0	8.0	7.9	8.1	8.2	8.5	8.5	8.5	8.7	8.8	8.8
90000	8.0	7.9	8.0	8.0	8.0	8.0	8.2	8.2	8.6	8.6	8.4	8.6	8.8	8.8
100000	8.1	7.9	8.0	8.0	8.0	8.0	8.2	7.9	8.6	8.6	8.5	8.6	8.9	8.8
110000	8.1	8.0	8.2	8.0	8.0	8.1	8.3	8.8	8.7	8.6	8.5	8.7	8.9	8.9
120000	8.1	8.1	8.1	8.1	8.1	8.2	8.3	8.4	8.8	8.5	8.6	8.8	9.0	8.9
130000	8.2	8.2	8.2	8.1	8.2	8.4	8.3	8.3	8.8	8.9	8.7	8.9	9.0	9.0
140000	8.3	8.3	8.2	8.2	8.2	8.5	8.4	8.3	8.9	8.7	9.1	8.9	9.1	9.0
150000	8.5	8.3	8.3	8.2	8.3	8.5	8.4	8.5	8.9	8.8	9.1	9.0	9.1	9.0
160000	8.6	8.4	8.4	8.2	8.4	8.6	8.5	8.5	9.0	8.8	9.0	9.0	9.1	9.0
170000	8.6	8.4	8.4	8.2	8.4	8.6	8.5	8.6	9.0	8.8	8.9	9.0	9.1	9.0
180000	8.5	8.4	8.4	8.2	8.4	8.7	8.5	8.6	9.1	8.9	8.8	9.0	9.0	9.0
190000	8.5	8.5	8.4	8.1	8.3	8.6	8.6	8.6	9.0	8.9	8.9	9.0	9.0	8.9
200000	8.4	8.4	8.3	8.1	8.3	8.5	8.6	8.6	8.9	8.9	8.9	9.0	8.9	8.8
210000	8.3	8.4	8.3	8.2	8.3	8.4	8.5	8.7	8.8	8.7	9.0	9.0	8.9	8.8
220000	8.2	8.3	8.3	8.1	8.2	8.3	8.4	8.7	8.8	8.7	9.0	9.0	8.9	8.8
230000	8.1	8.3	8.3	8.1	8.1	8.3	8.4	8.7	8.7	8.9	8.8	9.0	8.9	8.8
Daily Max	8.6	8.5	8.4	8.2	8.4	8.7	8.6	8.8	9.1	8.9	9.1	9.0	9.1	9.0
Daily Min	8.0	7.9	8.0	8.0	7.9	7.9	8.1	7.9	8.4	8.5	8.4	8.6	8.8	8.7
Average	8.2	8.1	8.2	8.1	8.1	8.2	8.3	8.4	8.7	8.7	8.7	8.8	8.9	8.9

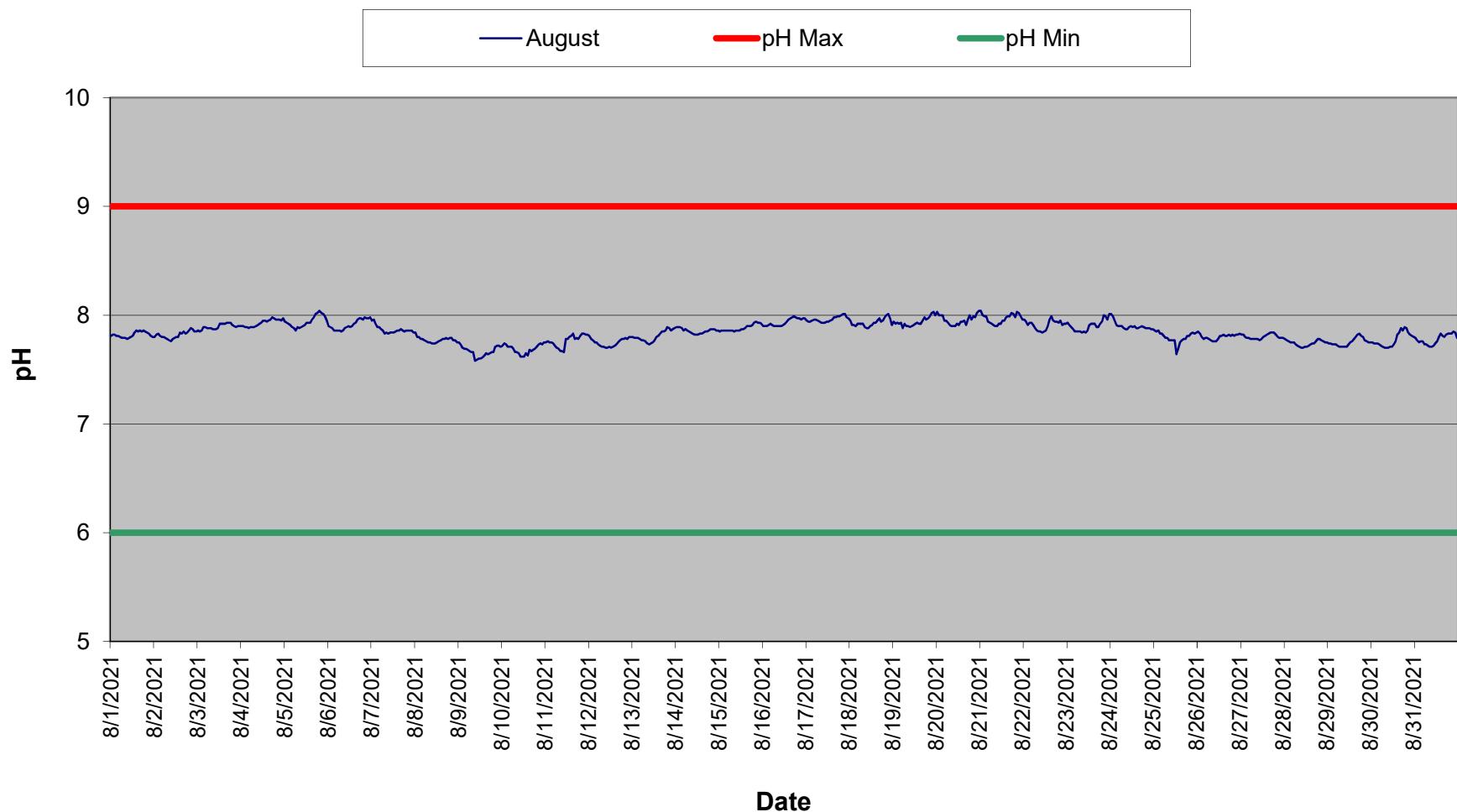
Peshtigo Tailwater pH Summary - June 2021



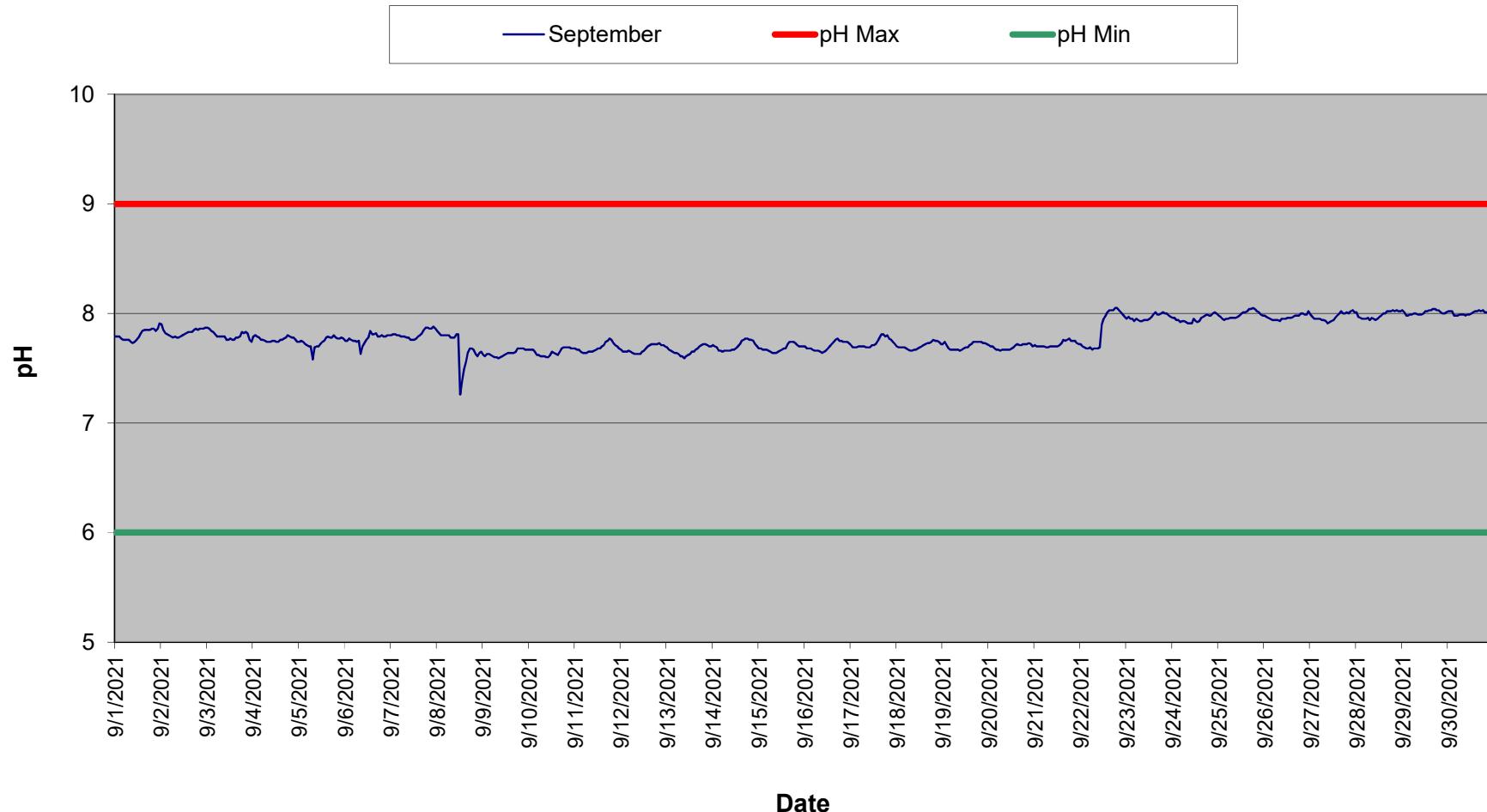
Peshtigo Tailwater pH Summary - July 2021



Peshtigo Tailwater pH Summary - August 2021



Peshtigo Tailwater pH Summary - September 2021



Peshtigo Tailwater pH Summary - June 2021

Time HHMMSS	06/01/21	06/02/21	06/03/21	06/04/21	06/05/21	06/06/21	06/07/21	06/08/21	06/09/21	06/10/21	06/11/21	06/12/21	06/13/21	06/14/21	06/15/21	06/16/21
0	8.0	8.1	8.0	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
10000	8.0	8.1	7.9	7.9	7.8	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
20000	8.0	8.1	7.9	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
30000	8.0	8.1	7.9	7.8	7.8	7.8	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
40000	8.0	8.0	7.9	7.8	7.8	7.8	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.7	7.8	7.8
50000	8.0	8.0	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.8	7.8
60000	8.0	8.0	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.8	7.8
70000	8.0	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.8	7.8
80000	7.9	7.9	7.8	7.7	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.8	7.8
90000	7.9	7.9	7.8	7.7	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.8	7.8
100000	7.9	7.9	7.8	7.7	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.8	7.8	7.7	7.8	7.8
110000	7.9	7.8	7.8	7.7	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.8
120000	7.9	7.7	7.8	7.7	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.8
130000	7.9	7.8	7.8	7.7	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.8
140000	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.8	7.8	7.7	7.7	7.8	7.9	7.7	7.8
150000	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.7	7.8	7.7	7.7	7.7	7.8	7.9	7.7	7.8
160000	7.9	7.8	7.9	7.8	7.8	7.8	7.8	7.7	7.8	7.8	7.7	7.8	7.8	7.9	7.7	7.8
170000	7.9	7.8	7.9	7.8	7.8	7.8	7.8	7.7	7.8	7.8	7.7	7.8	7.8	7.9	7.7	7.8
180000	7.9	7.8	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.7	7.8
190000	7.9	7.8	7.9	7.8	7.8	7.8	7.8	7.7	7.9	7.8	7.7	7.7	7.8	7.8	7.8	7.8
200000	7.9	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
210000	8.0	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.8	7.8	7.8	7.8	7.8
220000	8.0	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.8	7.8	7.8	7.8	7.9
230000	8.0	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.9
Daily Max	8.0	8.1	8.0	7.9	7.9	7.8	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.9	7.8	7.9
Daily Min	7.8	7.7	7.8	7.7	7.8	7.8	7.7	7.7	7.8	7.7	7.7	7.7	7.8	7.7	7.7	7.8
Average	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8

License maximum pH: 9

License minimum pH: 6

Peshtigo Tailwater pH Summary - June 2021

Time HHMMSS	06/17/21	06/18/21	06/19/21	06/20/21	06/21/21	06/22/21	06/23/21	06/24/21	06/25/21	06/26/21	06/27/21	06/28/21	06/29/21	06/30/21
0	7.9	7.9	7.9	8.0	7.8	7.9	7.8	7.9	7.8	7.7	7.7	7.7	7.8	7.7
10000	7.9	7.9	7.9	7.9	7.8	7.9	7.8	7.9	7.7	7.7	7.7	7.7	7.8	7.8
20000	7.8	7.9	7.9	7.9	7.8	7.9	7.8	7.9	7.7	7.7	7.7	7.7	7.8	7.8
30000	7.8	7.9	7.9	7.9	7.8	7.9	7.8	7.9	7.7	7.7	7.7	7.7	7.8	7.8
40000	7.8	7.9	7.9	7.9	7.8	7.9	7.8	7.9	7.7	7.7	7.7	7.7	7.8	7.8
50000	7.9	7.9	7.9	7.9	7.8	7.9	7.8	7.9	7.7	7.7	7.7	7.7	7.8	7.8
60000	7.8	7.9	7.9	7.9	7.8	7.9	7.8	7.9	7.7	7.7	7.7	7.7	7.8	7.8
70000	7.8	7.9	7.9	7.9	7.8	7.9	7.8	7.9	7.7	7.7	7.7	7.7	7.8	7.7
80000	7.8	7.9	7.9	7.9	7.8	7.9	7.8	7.9	7.7	7.7	7.7	7.7	7.8	7.7
90000	7.8	7.9	7.9	7.9	7.8	7.9	7.8	7.9	7.7	7.7	7.7	7.7	7.8	7.7
100000	7.9	7.9	7.9	7.9	7.8	7.9	7.9	7.9	7.7	7.7	7.7	7.7	7.8	7.7
110000	7.9	7.9	8.0	7.9	7.9	7.9	7.9	7.9	7.7	7.7	7.7	7.7	7.8	7.7
120000	7.9	8.0	8.0	7.9	7.9	7.9	7.9	7.9	7.7	7.7	7.7	7.7	7.8	7.7
130000	7.9	8.0	8.0	8.0	7.9	7.9	7.9	7.9	7.7	7.7	7.7	7.7	7.7	7.7
140000	7.9	8.0	8.0	8.0	7.9	7.9	7.9	7.9	7.7	7.7	7.7	7.7	7.7	7.7
150000	7.9	8.0	8.0	8.0	7.9	7.9	7.9	7.9	7.7	7.7	7.7	7.7	7.7	7.7
160000	7.9	8.1	8.0	7.9	7.9	7.9	7.9	7.9	7.7	7.7	7.7	7.7	7.7	7.6
170000	7.9	8.1	8.0	7.9	7.9	7.9	7.9	7.9	7.7	7.7	7.7	7.7	7.7	7.6
180000	8.0	8.1	8.0	7.9	7.9	7.9	7.9	7.8	7.7	7.7	7.7	7.8	7.7	7.6
190000	8.0	8.1	8.0	7.9	7.9	7.9	7.9	7.8	7.7	7.7	7.7	7.8	7.8	7.7
200000	7.9	8.1	8.0	7.9	7.9	7.9	7.9	7.8	7.7	7.7	7.7	7.7	7.8	7.7
210000	7.9	8.0	7.9	7.9	7.9	7.9	7.9	7.8	7.7	7.7	7.7	7.8	7.7	7.7
220000	7.9	8.0	7.9	7.9	7.9	7.8	7.9	7.8	7.8	7.7	7.7	7.8	7.7	7.7
230000	7.9	7.9	7.9	7.8	7.9	7.8	7.9	7.8	7.7	7.7	7.7	7.8	7.7	7.7
Daily Max	8.0	8.1	8.0	8.0	7.9	7.9	7.9	7.9	7.8	7.7	7.7	7.8	7.8	7.8
Daily Min	7.8	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.7	7.7	7.7	7.7	7.7	7.6
Average	7.9	8.0	8.0	7.9	7.9	7.9	7.9	7.9	7.7	7.7	7.7	7.8	7.8	7.7

Peshtigo Tailwater pH Summary - July 2021

Time HHMMSS	07/01/21	07/02/21	07/03/21	07/04/21	07/05/21	07/06/21	07/07/21	07/08/21	07/09/21	07/10/21	07/11/21	07/12/21	07/13/21	07/14/21	07/15/21	07/16/21
0	7.7	7.8	7.8	7.8	7.8	7.7	7.6	7.5	7.7	7.7	7.8	7.8	7.8	7.8	7.9	7.9
10000	7.7	7.8	7.8	7.8	7.8	7.7	7.6	7.5	7.6	7.7	7.8	7.8	7.9	7.8	7.9	7.9
20000	7.7	7.8	7.8	7.8	7.8	7.7	7.6	7.5	7.6	7.7	7.8	7.8	7.9	7.8	7.9	7.9
30000	7.7	7.8	7.8	7.8	7.8	7.7	7.6	7.5	7.6	7.7	7.8	7.8	7.9	7.8	7.9	7.9
40000	7.7	7.8	7.8	7.8	7.8	7.7	7.6	7.5	7.6	7.7	7.8	7.8	7.9	7.8	7.9	7.9
50000	7.7	7.7	7.8	7.8	7.8	7.7	7.6	7.5	7.6	7.7	7.8	7.8	7.9	7.8	7.9	7.9
60000	7.7	7.7	7.8	7.7	7.8	7.7	7.6	7.5	7.6	7.7	7.8	7.8	7.9	7.8	7.9	7.9
70000	7.7	7.7	7.7	7.8	7.8	7.7	7.5	7.5	7.6	7.7	7.8	7.8	7.9	7.8	7.9	7.9
80000	7.7	7.7	7.7	7.7	7.8	7.7	7.5	7.5	7.6	7.7	7.7	7.8	7.9	7.8	7.9	7.9
90000	7.6	7.7	7.7	7.7	7.8	7.6	7.5	7.5	7.6	7.6	7.7	7.8	7.8	7.8	7.8	7.9
100000	7.6	7.6	7.7	7.7	7.8	7.6	7.5	7.5	7.6	7.6	7.7	7.8	7.8	7.8	7.8	7.8
110000	7.6	7.6	7.7	7.7	7.8	7.6	7.5	7.5	7.6	7.6	7.7	7.8	7.8	7.9	7.8	7.8
120000	7.6	7.7	7.7	7.7	7.8	7.6	7.5	7.5	7.6	7.6	7.7	7.8	7.8	7.9	7.8	7.8
130000	7.6	7.6	7.7	7.7	7.8	7.6	7.5	7.5	7.6	7.6	7.7	7.8	7.8	7.9	7.8	7.8
140000	7.6	7.7	7.7	7.7	7.8	7.6	7.5	7.5	7.6	7.6	7.7	7.8	7.8	7.9	7.8	7.9
150000	7.6	7.7	7.7	7.7	7.8	7.6	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9	7.8
160000	7.7	7.7	7.7	7.7	7.8	7.6	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.9	7.9
170000	7.7	7.7	7.7	7.8	7.8	7.6	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.9	7.8	7.9
180000	7.7	7.7	7.7	7.7	7.8	7.6	7.5	7.6	7.7	7.7	7.7	7.8	7.8	7.9	7.8	7.9
190000	7.7	7.8	7.7	7.7	7.7	7.6	7.5	7.6	7.7	7.7	7.8	7.8	7.8	7.9	7.9	7.9
200000	7.7	7.8	7.7	7.7	7.7	7.6	7.5	7.6	7.7	7.7	7.8	7.8	7.8	7.9	7.9	7.9
210000	7.8	7.8	7.7	7.7	7.7	7.6	7.5	7.7	7.7	7.7	7.8	7.9	7.9	7.9	7.9	7.9
220000	7.8	7.8	7.7	7.7	7.8	7.6	7.5	7.7	7.7	7.7	7.8	7.8	7.8	7.9	7.9	7.9
230000	7.8	7.8	7.7	7.7	7.8	7.6	7.5	7.7	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9
Daily Max	7.8	7.8	7.8	7.8	7.8	7.7	7.6	7.7	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.9
Daily Min	7.6	7.6	7.7	7.7	7.7	7.6	7.5	7.5	7.6	7.6	7.7	7.8	7.8	7.8	7.8	7.8
Average	7.7	7.7	7.7	7.7	7.8	7.6	7.5	7.7	7.8	7.8	7.7	7.8	7.8	7.8	7.9	7.9

License maximum pH: 9

License minimum pH: 6

Peshtigo Tailwater pH Summary - July 2021

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

Peshtigo Tailwater pH Summary - August 2021

Time HHMMSS	08/01/21	08/02/21	08/03/21	08/04/21	08/05/21	08/06/21	08/07/21	08/08/21	08/09/21	08/10/21	08/11/21	08/12/21	08/13/21	08/14/21	08/15/21	08/16/21
0	7.8	7.8	7.9	7.9	7.9	7.9	8.0	7.8	7.8	7.7	7.8	7.8	7.8	7.9	7.9	7.9
10000	7.8	7.8	7.9	7.9	7.9	7.9	8.0	7.8	7.7	7.7	7.8	7.8	7.8	7.9	7.9	7.9
20000	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.7	7.7	7.8	7.8	7.8	7.9	7.9	7.9
30000	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.7	7.7	7.8	7.8	7.8	7.9	7.9	7.9
40000	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.7	7.7	7.7	7.8	7.8	7.9	7.9	7.9
50000	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.7	7.7	7.7	7.8	7.9	7.9	7.9	7.9
60000	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.7	7.7	7.7	7.8	7.9	7.9	7.9	7.9
70000	7.8	7.8	7.9	7.9	7.9	7.9	7.8	7.8	7.7	7.7	7.7	7.7	7.8	7.9	7.9	7.9
80000	7.8	7.8	7.9	7.9	7.9	7.9	7.8	7.8	7.7	7.7	7.7	7.7	7.7	7.8	7.9	7.9
90000	7.8	7.8	7.9	7.9	7.9	7.9	7.8	7.7	7.6	7.7	7.7	7.7	7.7	7.8	7.9	7.9
100000	7.8	7.8	7.9	7.9	7.9	7.9	7.8	7.7	7.6	7.6	7.7	7.7	7.7	7.8	7.9	7.9
110000	7.8	7.8	7.9	7.9	7.9	7.9	7.8	7.7	7.6	7.6	7.8	7.7	7.8	7.8	7.9	7.9
120000	7.8	7.8	7.9	8.0	7.9	7.9	7.8	7.8	7.6	7.6	7.8	7.7	7.8	7.8	7.9	7.9
130000	7.8	7.8	7.9	8.0	7.9	7.9	7.9	7.8	7.6	7.7	7.8	7.7	7.8	7.8	7.9	7.9
140000	7.9	7.8	7.9	7.9	7.9	7.9	7.9	7.8	7.6	7.6	7.8	7.7	7.8	7.8	7.9	8.0
150000	7.9	7.8	7.9	8.0	8.0	7.9	7.9	7.8	7.7	7.7	7.8	7.7	7.8	7.8	7.9	8.0
160000	7.9	7.9	7.9	8.0	8.0	8.0	7.9	7.8	7.6	7.7	7.8	7.8	7.9	7.9	8.0	8.0
170000	7.9	7.8	7.9	8.0	8.0	8.0	7.9	7.8	7.7	7.7	7.8	7.8	7.9	7.9	7.9	8.0
180000	7.9	7.8	7.9	8.0	8.0	8.0	7.9	7.8	7.7	7.7	7.8	7.8	7.9	7.9	7.9	8.0
190000	7.9	7.9	7.9	8.0	8.0	8.0	7.9	7.8	7.7	7.7	7.8	7.8	7.9	7.9	7.9	8.0
200000	7.8	7.9	7.9	8.0	8.0	8.0	7.9	7.8	7.7	7.7	7.8	7.8	7.9	7.9	7.9	8.0
210000	7.8	7.9	7.9	8.0	8.0	8.0	7.9	7.8	7.7	7.7	7.8	7.8	7.9	7.9	7.9	8.0
220000	7.8	7.9	7.9	8.0	8.0	8.0	7.9	7.8	7.7	7.7	7.8	7.8	7.9	7.9	7.9	8.0
230000	7.8	7.9	7.9	8.0	8.0	8.0	7.8	7.8	7.7	7.8	7.8	7.8	7.9	7.9	7.9	8.0
Daily Max	7.9	7.9	7.9	8.0	8.0	8.0	8.0	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9	8.0
Daily Min	7.8	7.8	7.9	7.9	7.9	7.9	7.8	7.7	7.6	7.6	7.7	7.7	7.8	7.9	7.9	7.9
Average	7.8	7.8	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.7	7.7	7.8	7.8	7.9	7.9	7.9

License maximum pH: 9

License minimum pH: 6

Peshtigo Tailwater pH Summary - August 2021

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

Peshtigo Tailwater pH Summary - September 2021

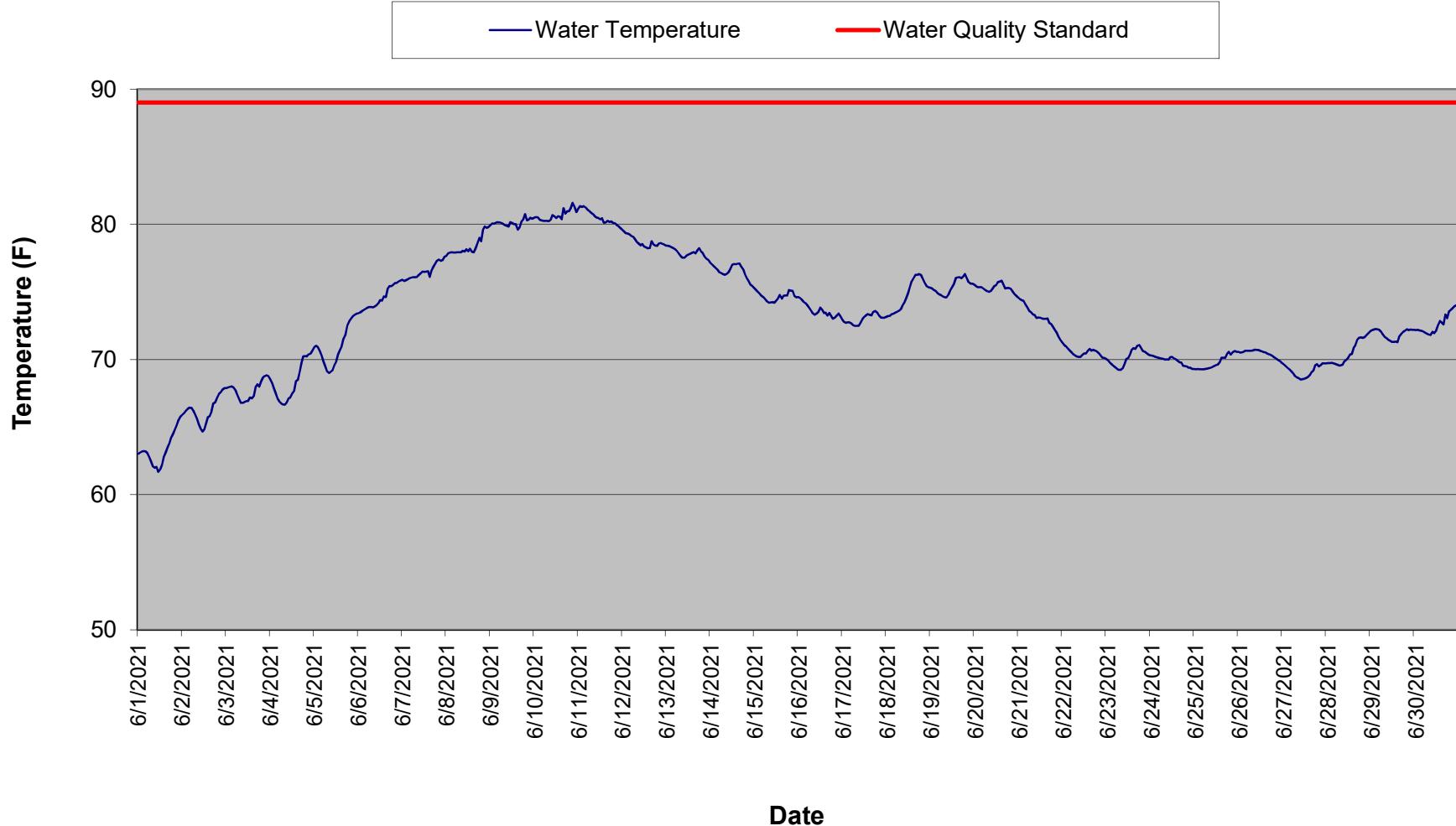
Time HHMMSS	09/01/21	09/02/21	09/03/21	09/04/21	09/05/21	09/06/21	09/07/21	09/08/21	09/09/21	09/10/21	09/11/21	09/12/21	09/13/21	09/14/21	09/15/21	09/16/21
0	7.8	7.9	7.9	7.8	7.7	7.8	7.8	7.6	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
10000	7.8	7.9	7.9	7.8	7.8	7.8	7.8	7.6	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
20000	7.8	7.8	7.8	7.8	7.7	7.8	7.8	7.6	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
30000	7.8	7.8	7.8	7.8	7.7	7.8	7.8	7.6	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
40000	7.8	7.8	7.8	7.8	7.7	7.8	7.8	7.6	7.6	7.6	7.7	7.6	7.7	7.7	7.7	7.7
50000	7.8	7.8	7.8	7.8	7.7	7.8	7.8	7.6	7.6	7.6	7.7	7.6	7.7	7.7	7.7	7.7
60000	7.8	7.8	7.8	7.8	7.7	7.7	7.8	7.6	7.6	7.6	7.6	7.6	7.7	7.7	7.7	7.7
70000	7.8	7.8	7.8	7.7	7.6	7.8	7.8	7.6	7.6	7.7	7.6	7.6	7.7	7.6	7.7	7.7
80000	7.7	7.8	7.8	7.7	7.7	7.6	7.8	7.8	7.6	7.6	7.7	7.6	7.6	7.7	7.6	7.7
90000	7.7	7.8	7.8	7.7	7.7	7.7	7.8	7.8	7.6	7.6	7.7	7.6	7.6	7.7	7.6	7.6
100000	7.7	7.8	7.8	7.8	7.7	7.7	7.8	7.8	7.6	7.6	7.7	7.6	7.6	7.7	7.7	7.7
110000	7.8	7.8	7.8	7.8	7.7	7.8	7.8	7.6	7.6	7.6	7.7	7.7	7.6	7.7	7.7	7.7
120000	7.8	7.8	7.8	7.7	7.7	7.8	7.8	7.3	7.6	7.7	7.7	7.7	7.6	7.7	7.7	7.7
130000	7.8	7.8	7.8	7.7	7.8	7.8	7.8	7.4	7.6	7.6	7.7	7.7	7.7	7.7	7.7	7.7
140000	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.5	7.6	7.6	7.7	7.7	7.7	7.7	7.7	7.7
150000	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.6	7.6	7.6	7.7	7.7	7.7	7.8	7.7	7.7
160000	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.6	7.6	7.7	7.7	7.7	7.7	7.8	7.7	7.8
170000	7.9	7.9	7.8	7.8	7.8	7.8	7.9	7.7	7.7	7.7	7.8	7.7	7.7	7.8	7.7	7.8
180000	7.9	7.9	7.8	7.8	7.8	7.8	7.9	7.7	7.7	7.7	7.8	7.7	7.7	7.8	7.7	7.8
190000	7.9	7.9	7.8	7.8	7.8	7.8	7.9	7.7	7.7	7.7	7.8	7.7	7.7	7.8	7.7	7.8
200000	7.9	7.9	7.8	7.8	7.8	7.8	7.9	7.6	7.7	7.7	7.7	7.7	7.7	7.8	7.7	7.7
210000	7.8	7.9	7.8	7.8	7.8	7.8	7.9	7.6	7.7	7.7	7.7	7.7	7.7	7.8	7.7	7.7
220000	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.9	7.6	7.7	7.7	7.7	7.7	7.7	7.7	7.7
230000	7.9	7.9	7.7	7.7	7.8	7.8	7.8	7.9	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
Daily Max	7.9	7.9	7.9	7.8	7.8	7.8	7.9	7.8	7.7	7.7	7.8	7.7	7.7	7.8	7.7	7.8
Daily Min	7.7	7.8	7.7	7.7	7.6	7.6	7.8	7.3	7.6	7.6	7.6	7.6	7.6	7.7	7.6	7.6
Average	7.8	7.8	7.8	7.8	7.7	7.8	7.8	7.8	7.7	7.6	7.7	7.7	7.7	7.7	7.7	7.7

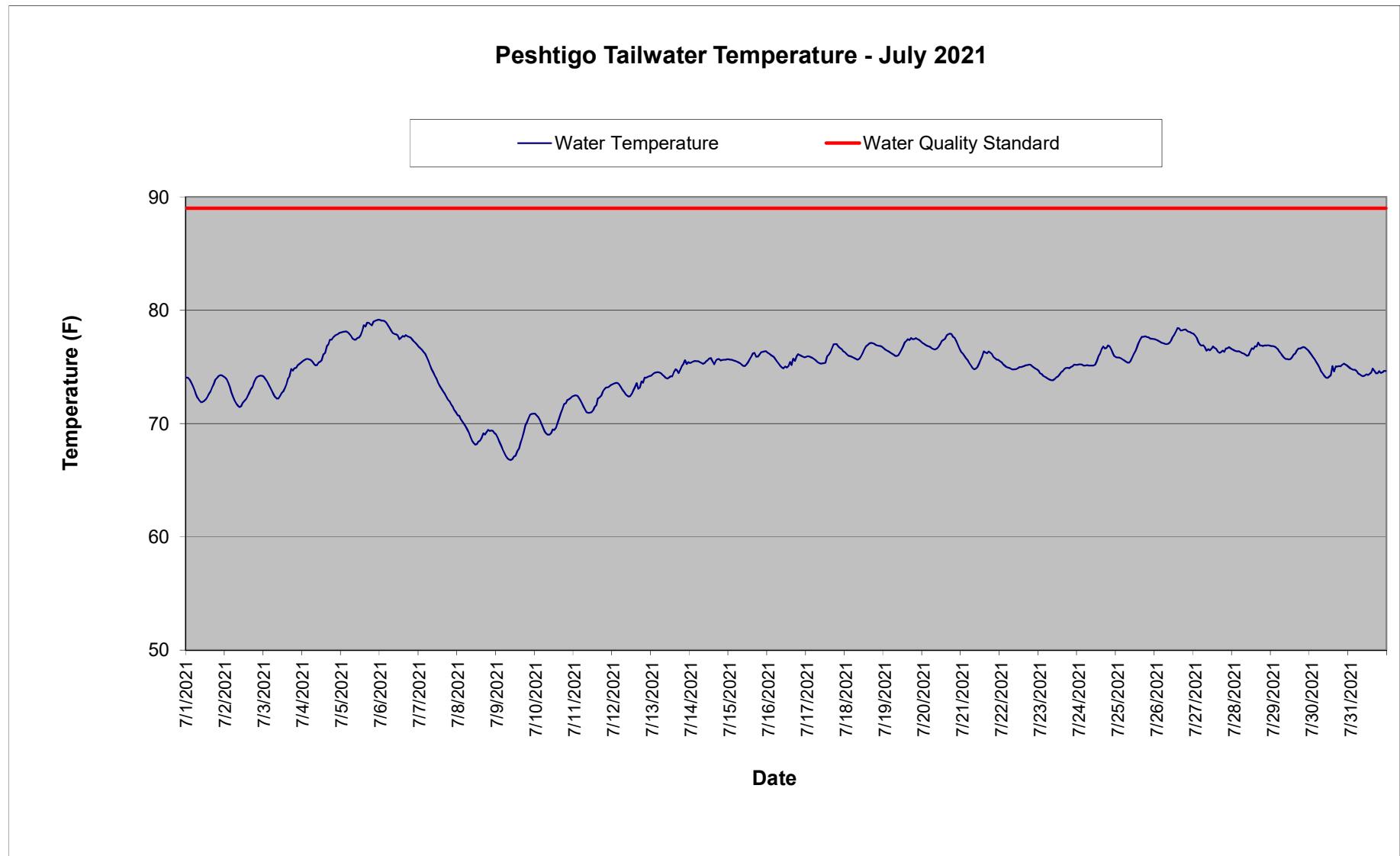
License maximum pH: 9

License minimum pH: 6

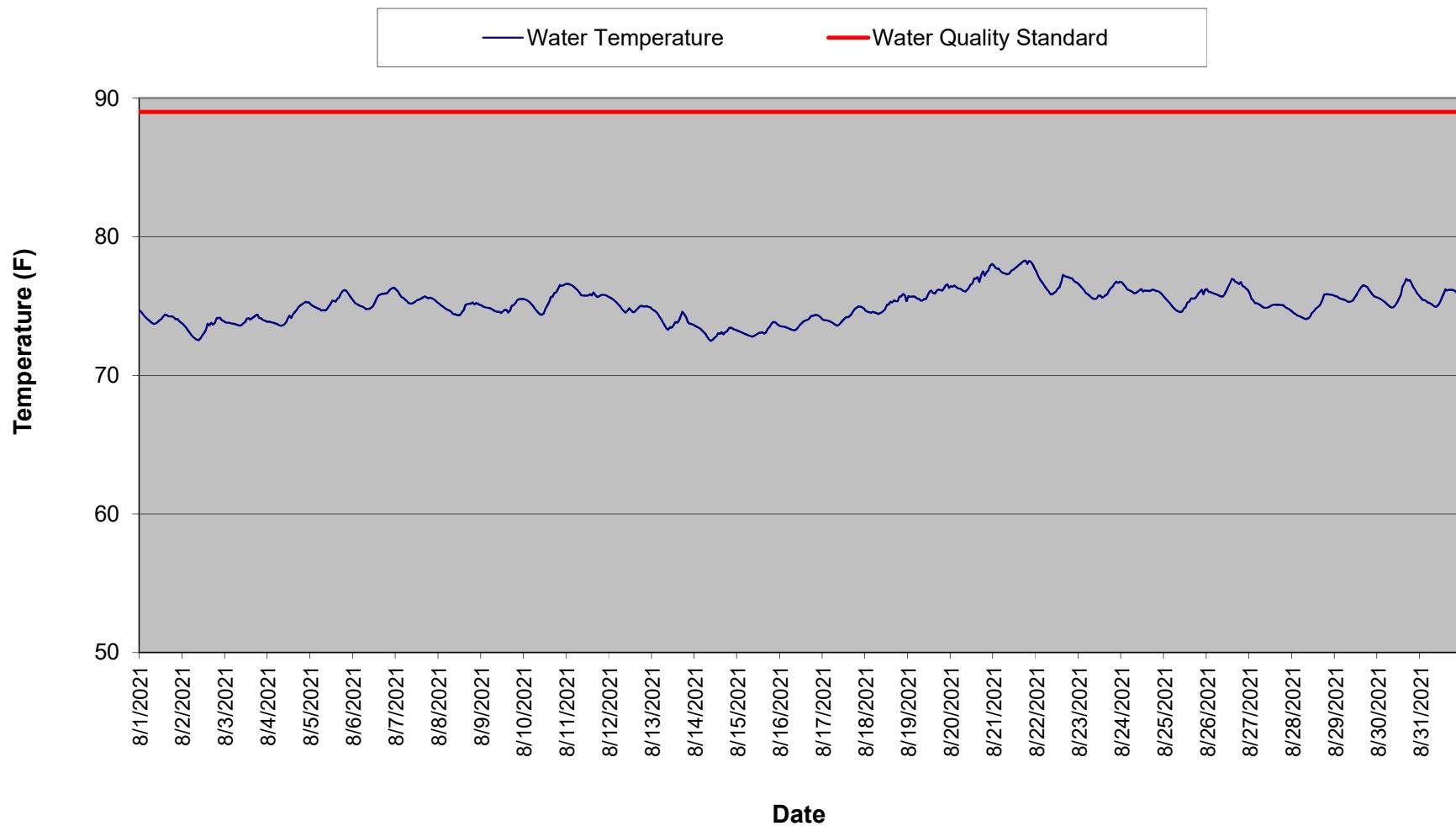
Peshtigo Tailwater pH Summary - September 2021

Peshtigo Tailwater Temperature - June 2021

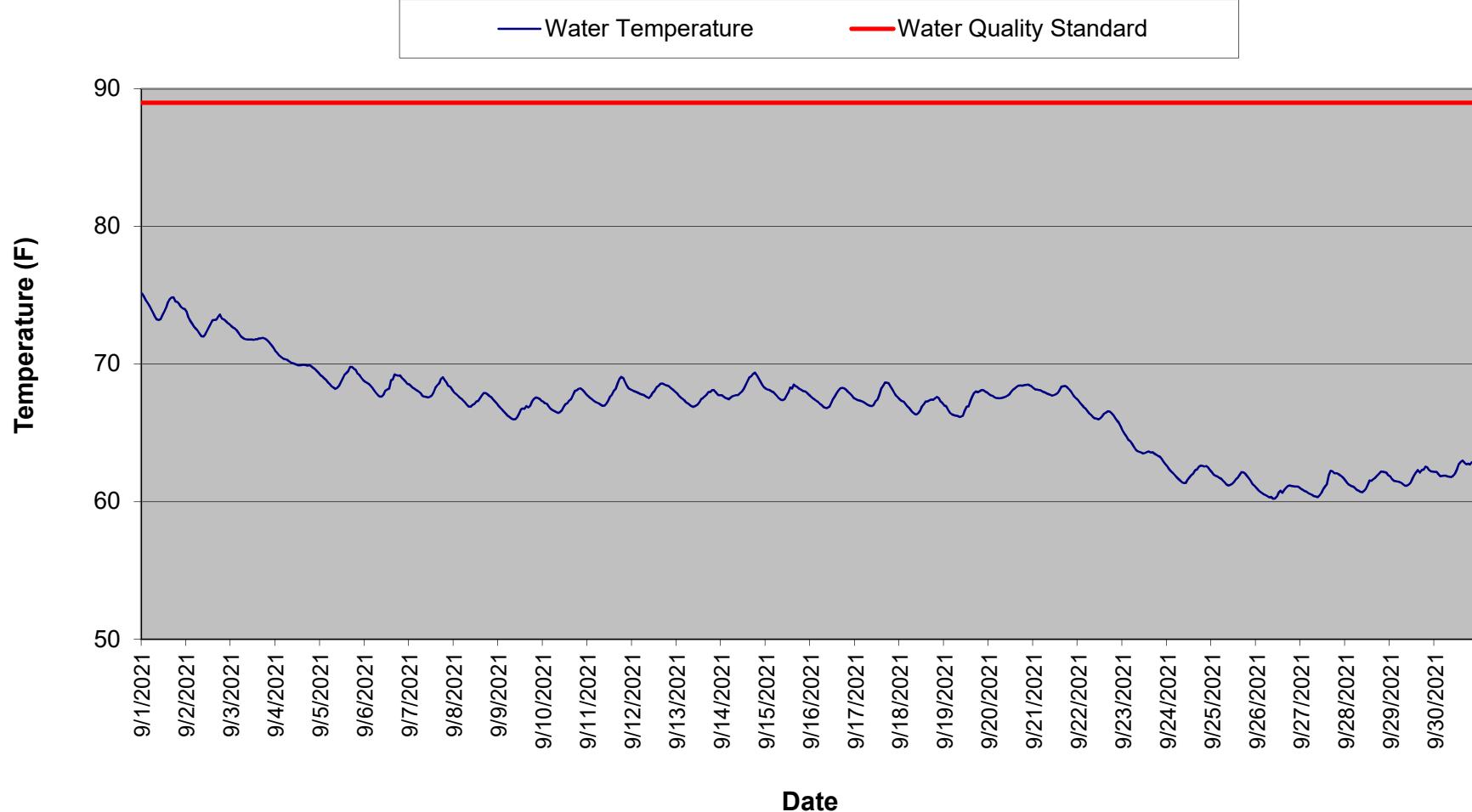




Peshtigo Tailwater Temperature- August 2021



Peshtigo Tailwater Temperature - September 2021



Peshtigo Tailwater Temperature Summary - June 2021

Time HHMMSS	06/01/21	06/02/21	06/03/21	06/04/21	06/05/21	06/06/21	06/07/21	06/08/21	06/09/21	06/10/21	06/11/21	06/12/21	06/13/21	06/14/21	06/15/21	06/16/21
0	63.0	65.9	67.9	68.6	70.9	73.4	75.9	77.7	79.9	80.5	81.2	79.6	78.4	77.2	75.3	74.6
10000	63.1	66.0	67.9	68.2	71.0	73.5	75.8	77.8	80.0	80.5	81.3	79.5	78.4	77.0	75.2	74.5
20000	63.2	66.2	68.0	67.9	70.9	73.6	75.9	77.9	80.0	80.5	81.3	79.3	78.4	76.9	75.0	74.4
30000	63.2	66.3	68.0	67.5	70.6	73.7	75.9	77.9	80.1	80.3	81.3	79.3	78.3	76.8	74.9	74.3
40000	63.2	66.4	67.9	67.1	70.3	73.7	76.0	77.9	80.2	80.3	81.2	79.2	78.2	76.6	74.7	74.2
50000	63.0	66.4	67.7	66.9	69.9	73.8	76.0	77.9	80.1	80.3	81.1	79.1	78.1	76.5	74.6	74.0
60000	62.8	66.2	67.4	66.7	69.5	73.9	76.1	77.9	80.1	80.2	81.0	79.1	78.0	76.4	74.4	73.8
70000	62.4	66.0	67.1	66.7	69.1	73.9	76.1	77.9	80.0	80.2	80.9	78.9	77.8	76.3	74.3	73.6
80000	62.1	65.6	66.8	66.7	69.0	73.9	76.1	77.9	79.9	80.2	80.7	78.7	77.6	76.3	74.2	73.4
90000	62.0	65.2	66.8	66.8	69.1	73.9	76.2	78.0	79.9	80.3	80.6	78.6	77.5	76.3	74.2	73.3
100000	62.0	64.9	66.9	67.1	69.2	74.0	76.4	78.0	79.8	80.7	80.5	78.4	77.5	76.4	74.2	73.4
110000	61.7	64.7	66.9	67.2	69.6	74.2	76.5	78.2	80.2	80.6	80.5	78.5	77.7	76.7	74.2	73.5
120000	61.9	64.8	66.9	67.5	69.9	74.4	76.5	78.0	80.1	80.5	80.4	78.4	77.7	77.0	74.4	73.8
130000	62.2	65.2	67.2	67.7	70.4	74.3	76.5	78.2	80.0	80.6	80.4	78.3	77.8	77.1	74.5	73.7
140000	62.8	65.7	67.1	68.4	70.7	74.7	76.5	78.0	80.0	80.6	80.1	78.2	77.9	77.0	74.8	73.4
150000	63.1	65.8	67.3	68.5	71.0	74.6	76.1	77.9	79.6	80.4	80.1	78.3	77.9	77.1	74.5	73.5
160000	63.5	66.1	68.0	69.0	71.5	75.2	76.6	78.2	79.8	81.2	80.3	78.7	77.9	77.1	74.7	73.2
170000	63.8	66.7	68.2	69.7	71.8	75.4	76.9	78.5	80.2	80.8	80.2	78.5	78.1	76.8	74.7	73.4
180000	64.2	66.8	68.0	70.2	72.5	75.4	77.1	79.0	80.4	81.0	80.2	78.4	78.2	76.6	74.7	73.2
190000	64.5	67.2	68.4	70.2	72.8	75.5	77.3	78.7	80.7	81.0	80.1	78.4	78.0	76.3	75.1	73.0
200000	64.8	67.5	68.7	70.2	73.0	75.6	77.4	79.6	80.3	81.2	80.1	78.6	77.9	76.0	75.1	73.1
210000	65.1	67.6	68.8	70.4	73.2	75.7	77.3	79.8	80.3	81.6	79.9	78.6	77.6	75.8	75.1	73.2
220000	65.5	67.8	68.8	70.4	73.3	75.8	77.4	79.7	80.5	81.3	79.8	78.5	77.4	75.5	74.7	73.4
230000	65.8	67.9	68.8	70.7	73.4	75.8	77.6	79.8	80.4	80.9	79.7	78.5	77.3	75.4	74.6	73.2
Daily Max	65.8	67.9	68.8	70.7	73.4	75.8	77.6	79.8	80.7	81.6	81.3	79.6	78.4	77.2	75.3	74.6
Daily Min	61.7	64.7	66.8	66.7	69.0	73.4	75.8	77.7	79.6	80.2	79.7	78.2	77.3	75.4	74.2	73.0
Average	63.3	66.2	67.7	68.3	70.9	74.5	76.5	78.4	80.1	80.6	80.5	78.7	77.9	76.5	74.7	73.6

Monthly average: 71.9

License Maximum: 89 F

Peshtigo Tailwater Temperature Summary - June 2021

Time HHMMSS	06/17/21	06/18/21	06/19/21	06/20/21	06/21/21	06/22/21	06/23/21	06/24/21	06/25/21	06/26/21	06/27/21	06/28/21	06/29/21	06/30/21
0	73.0	73.1	75.3	75.5	74.6	71.3	70.0	70.3	69.3	70.6	69.7	69.7	72.1	72.2
10000	72.8	73.2	75.3	75.4	74.5	71.1	69.9	70.3	69.3	70.5	69.6	69.7	72.2	72.2
20000	72.7	73.2	75.1	75.3	74.4	71.0	69.8	70.2	69.3	70.5	69.5	69.7	72.2	72.2
30000	72.7	73.3	75.0	75.4	74.3	70.8	69.6	70.2	69.3	70.6	69.4	69.8	72.2	72.2
40000	72.7	73.4	74.9	75.3	74.1	70.7	69.5	70.1	69.3	70.6	69.2	69.7	72.2	72.1
50000	72.7	73.5	74.8	75.2	73.8	70.5	69.4	70.1	69.3	70.6	69.1	69.7	72.2	72.1
60000	72.5	73.5	74.7	75.2	73.6	70.4	69.3	70.1	69.3	70.6	69.0	69.6	72.0	72.0
70000	72.5	73.6	74.7	75.0	73.5	70.3	69.2	70.0	69.3	70.6	68.8	69.6	71.9	71.9
80000	72.5	73.7	74.6	75.0	73.3	70.2	69.2	70.0	69.3	70.7	68.7	69.6	71.7	71.8
90000	72.5	74.0	74.6	75.1	73.3	70.2	69.3	70.0	69.4	70.7	68.6	69.6	71.6	71.8
100000	72.7	74.2	74.8	75.2	73.1	70.2	69.7	70.0	69.4	70.7	68.5	69.9	71.4	72.0
110000	73.0	74.5	75.1	75.4	73.1	70.3	70.0	70.2	69.5	70.7	68.5	70.0	71.4	71.9
120000	73.1	74.9	75.4	75.5	73.1	70.5	70.1	70.2	69.6	70.6	68.6	70.1	71.3	72.1
130000	73.3	75.4	75.6	75.7	73.0	70.4	70.4	70.1	69.6	70.6	68.6	70.4	71.3	72.5
140000	73.4	75.8	76.0	75.8	73.0	70.6	70.7	70.0	69.8	70.5	68.7	70.4	71.3	72.8
150000	73.3	76.1	76.1	75.8	73.0	70.8	70.8	70.1	70.1	70.5	68.8	70.8	71.3	72.7
160000	73.3	76.3	76.1	75.6	73.0	70.6	70.8	69.8	70.1	70.4	69.1	71.1	71.7	72.6
170000	73.5	76.3	76.0	75.2	72.7	70.7	71.0	69.8	70.1	70.4	69.2	71.5	71.9	73.3
180000	73.6	76.3	76.1	75.3	72.6	70.6	71.1	69.5	70.4	70.3	69.6	71.6	72.0	73.0
190000	73.5	76.2	76.3	75.3	72.4	70.6	70.9	69.5	70.6	70.2	69.7	71.6	72.1	73.5
200000	73.3	76.0	76.0	75.2	72.2	70.5	70.6	69.5	70.4	70.1	69.5	71.6	72.2	73.7
210000	73.1	75.7	75.7	75.0	72.0	70.3	70.6	69.4	70.5	70.0	69.6	71.7	72.2	73.8
220000	73.1	75.4	75.6	74.8	71.7	70.1	70.5	69.4	70.6	69.9	69.7	71.8	72.2	73.9
230000	73.1	75.3	75.6	74.7	71.5	70.1	70.4	69.3	70.6	69.9	69.7	71.9	72.2	74.0
Daily Max	73.6	76.3	76.3	75.8	74.6	71.3	71.1	70.3	70.6	70.7	69.7	71.9	72.2	74.0
Daily Min	72.5	73.1	74.6	74.7	71.5	70.1	69.2	69.3	69.3	69.9	68.5	69.6	71.3	71.8
Average	73.0	74.7	75.4	75.3	73.2	70.5	70.1	69.9	69.8	70.5	69.1	70.5	71.9	72.6

Peshtigo Tailwater Temperature Summary - July 2021

Time HHMMSS	07/01/21	07/02/21	07/03/21	07/04/21	07/05/21	07/06/21	07/07/21	07/08/21	07/09/21	07/10/21	07/11/21	07/12/21	07/13/21	07/14/21	07/15/21	07/16/21
0	74.1	74.1	74.1	75.5	78.0	79.1	76.8	70.7	69.0	70.9	72.4	73.5	74.2	75.3	75.7	76.3
10000	74.0	73.9	73.9	75.6	78.1	79.1	76.7	70.7	68.7	70.7	72.5	73.5	74.3	75.4	75.6	76.2
20000	73.9	73.6	73.7	75.7	78.1	79.1	76.5	70.4	68.4	70.6	72.5	73.6	74.5	75.5	75.6	76.1
30000	73.7	73.2	73.4	75.7	78.1	79.0	76.3	70.2	68.0	70.3	72.3	73.6	74.5	75.5	75.6	76.0
40000	73.3	72.7	73.2	75.7	78.1	78.9	76.1	70.0	67.7	70.0	72.1	73.5	74.5	75.5	75.5	75.8
50000	73.0	72.4	72.9	75.6	77.9	78.7	75.9	69.7	67.4	69.6	71.8	73.3	74.5	75.5	75.5	75.7
60000	72.6	72.0	72.6	75.5	77.7	78.4	75.5	69.5	67.1	69.3	71.5	73.0	74.4	75.4	75.4	75.5
70000	72.3	71.8	72.4	75.3	77.5	78.2	75.1	69.2	66.9	69.1	71.2	72.8	74.3	75.4	75.3	75.3
80000	72.0	71.6	72.2	75.1	77.4	78.0	74.8	68.9	66.8	69.0	71.0	72.6	74.2	75.3	75.2	75.1
90000	71.9	71.4	72.2	75.2	77.4	77.9	74.5	68.5	66.8	69.0	70.9	72.5	74.0	75.3	75.1	74.9
100000	71.9	71.5	72.4	75.4	77.6	77.9	74.2	68.3	66.8	69.2	71.0	72.4	74.0	75.5	75.1	74.9
110000	72.0	71.8	72.7	75.5	77.6	77.8	73.9	68.1	67.1	69.5	71.0	72.4	74.0	75.6	75.2	75.0
120000	72.1	72.0	72.8	75.6	77.8	77.4	73.6	68.2	67.2	69.4	71.2	72.6	74.2	75.7	75.4	74.9
130000	72.3	72.2	73.1	76.1	78.2	77.6	73.3	68.4	67.5	69.6	71.5	72.9	74.2	75.8	75.7	75.1
140000	72.6	72.4	73.5	76.2	78.7	77.7	73.1	68.5	67.8	70.0	71.6	73.2	74.5	75.5	75.9	75.4
150000	72.8	72.7	74.0	76.8	78.6	77.7	72.9	68.8	68.3	70.5	72.2	73.6	74.8	75.2	76.2	75.2
160000	73.2	73.0	74.2	77.0	78.9	77.8	72.6	69.1	68.7	70.9	72.3	73.1	74.7	75.5	76.2	75.7
170000	73.5	73.2	74.8	77.4	78.9	77.7	72.4	69.0	69.2	71.3	72.5	73.2	74.4	75.7	75.9	75.5
180000	73.9	73.7	74.7	77.4	78.7	77.6	72.1	69.2	69.8	71.7	72.8	73.7	74.7	75.7	75.9	75.9
190000	74.0	74.0	74.9	77.6	78.7	77.6	72.0	69.4	70.1	71.8	73.0	73.6	75.1	75.6	76.1	76.1
200000	74.2	74.1	74.9	77.7	79.0	77.4	71.7	69.3	70.4	72.1	73.2	74.1	75.3	75.6	76.3	76.0
210000	74.3	74.2	75.1	77.8	79.1	77.2	71.5	69.4	70.8	72.1	73.2	74.1	75.6	75.6	76.3	76.0
220000	74.3	74.2	75.2	77.9	79.1	77.1	71.2	69.3	70.9	72.2	73.3	74.1	75.2	75.6	76.4	75.9
230000	74.2	74.2	75.4	78.0	79.2	76.9	71.0	69.2	70.9	72.4	73.4	74.2	75.4	75.7	76.4	75.8
Daily Max	74.3	74.2	75.4	78.0	79.2	79.1	76.8	70.7	70.9	72.4	73.4	74.2	75.6	75.8	76.4	76.3
Daily Min	71.9	71.4	72.2	75.1	77.4	76.9	71.0	68.1	66.8	69.0	70.9	72.4	74.0	75.2	75.1	74.9
Average	73.2	72.9	73.7	76.3	78.3	78.0	73.9	69.3	68.4	70.5	72.1	73.3	74.6	75.5	75.7	75.6

Monthly average: 74.9
 License Maximum: 89 F

Peshtigo Tailwater Temperature Summary - July 2021

Time HHMMSS	07/17/21	07/18/21	07/19/21	07/20/21	07/21/21	07/22/21	07/23/21	07/24/21	07/25/21	07/26/21	07/27/21	07/28/21	07/29/21	07/30/21	07/31/21
0	75.9	76.3	76.7	77.1	76.3	75.5	74.6	75.2	75.9	77.4	77.9	76.5	76.8	76.3	75.0
10000	75.9	76.1	76.5	77.0	76.2	75.4	74.4	75.2	75.8	77.4	77.7	76.5	76.8	76.0	74.9
20000	75.9	76.0	76.4	76.9	76.0	75.2	74.4	75.2	75.8	77.3	77.6	76.4	76.8	75.9	74.8
30000	75.9	76.0	76.4	76.9	75.8	75.1	74.2	75.2	75.7	77.2	77.2	76.4	76.7	75.7	74.7
40000	75.8	75.9	76.3	76.8	75.6	75.0	74.1	75.1	75.7	77.1	77.0	76.4	76.6	75.4	74.7
50000	75.7	75.8	76.2	76.7	75.3	74.9	74.0	75.1	75.6	77.1	76.9	76.3	76.4	75.2	74.6
60000	75.6	75.8	76.1	76.6	75.1	74.9	73.9	75.2	75.5	77.1	76.9	76.2	76.2	74.9	74.4
70000	75.4	75.7	76.0	76.6	74.9	74.8	73.9	75.1	75.4	77.0	76.7	76.2	76.0	74.6	74.3
80000	75.3	75.6	76.0	76.5	74.8	74.8	73.8	75.1	75.4	77.0	76.4	76.1	75.8	74.4	74.2
90000	75.3	75.7	76.0	76.6	74.8	74.8	73.8	75.1	75.5	77.1	76.6	76.0	75.7	74.2	74.2
100000	75.3	75.9	76.2	76.8	75.0	74.8	73.9	75.1	75.8	77.3	76.4	76.0	75.7	74.0	74.2
110000	75.3	76.2	76.5	77.0	75.3	74.9	74.1	75.2	76.1	77.6	76.6	76.3	75.6	74.0	74.3
120000	75.4	76.6	76.8	77.3	75.6	75.0	74.2	75.5	76.4	77.8	76.8	76.6	75.7	74.1	74.3
130000	75.9	76.8	77.2	77.4	75.9	75.0	74.3	75.9	76.8	78.1	76.7	76.6	75.9	74.3	74.4
140000	76.1	76.9	77.3	77.5	76.4	75.0	74.5	76.2	77.1	78.4	76.6	76.8	76.1	75.1	74.5
150000	76.3	77.1	77.4	77.8	76.3	75.1	74.7	76.6	77.4	78.4	76.3	76.8	76.2	74.6	74.8
160000	76.7	77.1	77.4	77.9	76.2	75.1	74.8	76.8	77.7	78.2	76.2	77.2	76.5	75.1	74.6
170000	77.0	77.1	77.5	77.9	76.4	75.2	74.9	76.6	77.7	78.2	76.3	76.9	76.6	75.0	74.4
180000	77.0	77.0	77.4	77.9	76.3	75.2	74.9	76.7	77.7	78.3	76.4	76.9	76.6	75.1	74.4
190000	77.0	76.9	77.5	77.6	76.1	75.2	74.9	76.9	77.6	78.3	76.3	76.8	76.7	75.1	74.6
200000	76.8	76.9	77.5	77.5	75.9	75.1	75.0	76.8	77.6	78.2	76.6	76.9	76.7	75.2	74.5
210000	76.7	76.9	77.4	77.3	75.8	75.0	75.0	76.5	77.5	78.1	76.6	76.9	76.7	75.3	74.5
220000	76.6	76.8	77.4	76.9	75.6	74.8	75.2	76.2	77.5	78.1	76.7	76.9	76.6	75.2	74.7
230000	76.4	76.8	77.2	76.6	75.6	74.8	75.2	75.9	77.5	78.0	76.6	76.9	76.5	75.1	74.6
Daily Max	77.0	77.1	77.5	77.9	76.4	75.5	75.2	76.9	77.7	78.4	77.9	77.2	76.8	76.3	75.0
Daily Min	75.3	75.6	76.0	76.5	74.8	74.8	73.8	75.1	75.4	77.0	76.2	76.0	75.6	74.0	74.2
Average	76.0	76.4	76.8	77.1	75.7	75.0	74.4	75.8	76.5	77.7	76.8	76.6	76.3	75.0	74.5

Peshtigo Tailwater Temperature Summary - August 2021

Time HHMMSS	08/01/21	08/02/21	08/03/21	08/04/21	08/05/21	08/06/21	08/07/21	08/08/21	08/09/21	08/10/21	08/11/21	08/12/21	08/13/21	08/14/21	08/15/21	08/16/21
0	74.6	73.7	73.8	73.9	75.1	75.4	76.2	75.2	75.0	75.5	76.6	75.6	74.8	73.6	73.2	73.5
10000	74.5	73.6	73.8	73.9	75.0	75.2	76.1	75.1	75.0	75.4	76.6	75.6	74.7	73.5	73.2	73.5
20000	74.4	73.4	73.8	73.8	74.9	75.1	75.8	75.0	74.9	75.4	76.5	75.5	74.6	73.4	73.1	73.5
30000	74.2	73.2	73.8	73.8	74.9	75.1	75.6	74.9	74.9	75.3	76.5	75.4	74.5	73.4	73.1	73.5
40000	74.1	73.1	73.7	73.8	74.8	75.0	75.6	74.8	74.9	75.1	76.4	75.3	74.2	73.2	73.0	73.4
50000	74.0	72.9	73.7	73.7	74.8	75.0	75.5	74.7	74.8	75.0	76.3	75.1	74.0	73.1	72.9	73.4
60000	73.9	72.8	73.7	73.6	74.7	74.9	75.4	74.7	74.8	74.8	76.1	75.0	73.8	73.0	72.9	73.3
70000	73.8	72.6	73.6	73.6	74.7	74.8	75.2	74.6	74.7	74.7	76.0	74.8	73.6	72.8	72.8	73.3
80000	73.7	72.6	73.6	73.6	74.7	74.8	75.2	74.4	74.6	74.5	75.8	74.6	73.4	72.6	72.8	73.3
90000	73.8	72.5	73.6	73.7	74.8	74.8	75.2	74.4	74.6	74.4	75.8	74.5	73.3	72.5	72.8	73.3
100000	73.9	72.7	73.8	73.8	75.0	74.9	75.2	74.4	74.6	74.4	75.8	74.7	73.5	72.6	72.9	73.5
110000	74.0	72.9	73.9	74.1	75.1	75.0	75.4	74.3	74.5	74.5	75.7	74.8	73.4	72.7	73.0	73.6
120000	74.1	73.1	74.1	74.3	75.4	75.3	75.4	74.4	74.6	74.8	75.8	74.7	73.6	72.8	73.1	73.7
130000	74.2	73.3	74.1	74.1	75.4	75.5	75.5	74.6	74.7	75.0	75.9	74.6	73.9	73.0	73.1	73.9
140000	74.4	73.7	74.0	74.4	75.3	75.8	75.6	74.7	74.7	75.3	75.8	74.6	73.8	73.0	73.1	74.0
150000	74.3	73.6	74.1	74.6	75.5	75.8	75.6	75.1	74.5	75.7	76.0	74.7	74.0	73.1	73.0	74.0
160000	74.3	73.8	74.2	74.7	75.6	75.9	75.7	75.1	74.7	75.7	75.8	74.8	74.3	73.0	73.1	74.1
170000	74.2	73.6	74.3	74.9	75.9	75.9	75.6	75.2	75.0	75.9	75.7	75.0	74.6	73.1	73.4	74.2
180000	74.3	73.8	74.4	75.0	76.1	75.9	75.6	75.2	75.1	76.0	75.7	75.0	74.4	73.2	73.5	74.3
190000	74.2	74.1	74.1	75.1	76.2	75.9	75.6	75.3	75.2	76.2	75.8	75.0	74.2	73.4	73.7	74.3
200000	74.1	74.1	74.1	75.2	76.1	76.1	75.6	75.1	75.4	76.5	75.8	75.0	73.8	73.4	73.8	74.4
210000	74.1	74.2	74.0	75.3	75.9	76.3	75.5	75.2	75.5	76.5	75.8	75.0	73.7	73.4	73.8	74.3
220000	73.9	74.0	74.0	75.3	75.7	76.3	75.4	75.2	75.5	76.5	75.8	74.9	73.7	73.3	73.7	74.3
230000	73.8	73.9	73.9	75.3	75.5	76.3	75.3	75.1	75.5	76.6	75.7	74.9	73.7	73.3	73.6	74.2
Daily Max	74.6	74.2	74.4	75.3	76.2	76.3	76.2	75.3	75.5	76.6	76.6	75.6	74.8	73.6	73.8	74.4
Daily Min	73.7	72.5	73.6	73.6	74.7	74.8	75.2	74.3	74.5	74.4	75.7	74.5	73.3	72.5	72.8	73.3
Average	74.1	73.4	73.9	74.3	75.3	75.5	75.5	74.9	74.9	75.4	76.0	75.0	74.0	73.1	73.2	73.8

Monthly average: 75.1

License Maximum: 89F

Peshtigo Tailwater Temperature Summary - August 2021

Time HHMMSS	08/17/21	08/18/21	08/19/21	08/20/21	08/21/21	08/22/21	08/23/21	08/24/21	08/25/21	08/26/21	08/27/21	08/28/21	08/29/21	08/30/21	08/31/21
0	74.0	74.7	75.7	76.4	77.9	77.5	76.6	76.7	75.6	76.2	75.9	74.6	75.7	75.6	75.6
10000	74.0	74.6	75.7	76.4	77.8	77.2	76.4	76.6	75.5	76.0	75.5	74.5	75.7	75.5	75.5
20000	74.0	74.6	75.7	76.5	77.7	76.9	76.3	76.4	75.4	76.0	75.4	74.4	75.6	75.5	75.4
30000	73.9	74.5	75.7	76.4	77.7	76.7	76.1	76.2	75.2	75.9	75.2	74.3	75.5	75.4	75.4
40000	73.9	74.6	75.6	76.3	77.5	76.6	75.9	76.2	75.1	75.9	75.2	74.3	75.5	75.3	75.3
50000	73.8	74.5	75.5	76.3	77.4	76.4	75.9	76.1	74.9	75.9	75.1	74.2	75.5	75.2	75.2
60000	73.7	74.5	75.5	76.2	77.4	76.2	75.7	76.0	74.8	75.8	75.1	74.2	75.4	75.0	75.2
70000	73.6	74.4	75.4	76.1	77.3	76.1	75.6	75.9	74.7	75.7	75.0	74.1	75.3	74.9	75.1
80000	73.6	74.5	75.4	76.1	77.3	75.9	75.5	75.9	74.6	75.7	74.9	74.1	75.3	74.9	75.0
90000	73.6	74.5	75.5	76.2	77.3	75.9	75.5	76.0	74.6	75.7	74.9	74.1	75.3	74.9	75.0
100000	73.8	74.7	75.5	76.3	77.6	76.0	75.5	76.1	74.6	75.9	74.9	74.2	75.4	75.1	75.1
110000	73.9	74.8	75.8	76.5	77.6	76.0	75.7	76.2	74.8	76.1	74.9	74.5	75.6	75.3	75.3
120000	74.1	75.1	76.0	76.6	77.7	76.2	75.7	76.0	74.9	76.4	75.0	74.6	75.8	75.5	75.6
130000	74.2	75.1	76.1	77.0	77.8	76.3	75.6	76.1	75.2	76.7	75.1	74.8	76.0	75.8	75.9
140000	74.2	75.3	75.9	77.0	77.9	76.7	75.7	76.1	75.3	77.0	75.1	74.9	76.2	76.4	76.2
150000	74.3	75.3	75.9	77.1	78.1	77.3	75.8	76.1	75.5	76.9	75.1	75.0	76.4	76.7	76.1
160000	74.4	75.4	76.1	76.7	78.2	77.2	75.9	76.1	75.5	76.8	75.1	75.2	76.5	77.0	76.2
170000	74.6	75.4	76.2	77.3	78.3	77.1	76.2	76.2	75.5	76.7	75.1	75.5	76.4	76.8	76.2
180000	74.8	75.3	76.2	77.5	78.3	77.1	76.3	76.2	75.7	76.6	75.1	75.8	76.4	76.9	76.2
190000	74.9	75.7	76.1	77.2	78.0	77.0	76.4	76.1	75.9	76.7	75.0	75.9	76.2	76.6	76.1
200000	75.0	75.7	76.3	77.5	78.2	77.0	76.6	76.1	76.0	76.5	74.9	75.8	76.0	76.4	76.0
210000	75.0	75.9	76.5	77.5	78.2	76.8	76.8	76.0	76.2	76.4	74.9	75.8	75.9	76.2	75.9
220000	74.9	75.8	76.6	77.9	78.0	76.7	76.7	75.9	75.9	76.3	74.8	75.8	75.7	75.9	75.6
230000	74.8	75.4	76.3	78.0	77.7	76.7	76.8	75.8	76.2	76.1	74.7	75.8	75.6	75.8	75.3
Daily Max	75.0	75.9	76.6	78.0	78.3	77.5	76.8	76.7	76.2	77.0	75.9	75.9	76.5	77.0	76.2
Daily Min	73.6	74.4	75.4	76.1	77.3	75.9	75.5	75.8	74.6	75.7	74.7	74.1	75.3	74.9	75.0
Average	74.2	75.0	75.9	76.8	77.8	76.6	76.0	76.1	75.3	76.2	75.1	74.8	75.8	75.8	75.6

Peshtigo Tailwater Temperature Summary - September 2021

Time HHMMSS	09/01/21	09/02/21	09/03/21	09/04/21	09/05/21	09/06/21	09/07/21	09/08/21	09/09/21	09/10/21	09/11/21	09/12/21	09/13/21	09/14/21	09/15/21	09/16/21
0	75.1	73.8	72.8	70.9	69.2	68.7	68.5	67.9	67.0	67.3	67.7	68.1	67.9	67.7	68.2	67.6
10000	74.9	73.4	72.7	70.8	69.1	68.6	68.4	67.8	66.8	67.2	67.6	68.0	67.7	67.7	68.2	67.5
20000	74.6	73.1	72.6	70.6	69.0	68.6	68.3	67.7	66.7	67.1	67.5	68.0	67.6	67.6	68.1	67.4
30000	74.4	72.9	72.5	70.5	68.9	68.4	68.2	67.6	66.5	66.9	67.4	67.9	67.5	67.5	68.0	67.3
40000	74.2	72.7	72.3	70.4	68.7	68.3	68.1	67.5	66.4	66.8	67.3	67.8	67.4	67.4	67.9	67.2
50000	74.0	72.6	72.1	70.4	68.5	68.1	68.0	67.4	66.2	66.7	67.2	67.8	67.2	67.6	67.8	67.1
60000	73.7	72.4	71.9	70.3	68.4	67.9	67.9	67.2	66.1	66.6	67.1	67.8	67.1	67.7	67.7	67.0
70000	73.4	72.2	71.8	70.2	68.3	67.8	67.7	67.0	66.0	66.5	67.0	67.7	67.0	67.7	67.5	66.9
80000	73.2	72.0	71.8	70.1	68.2	67.6	67.6	66.9	66.0	66.5	67.0	67.6	66.9	67.7	67.4	66.8
90000	73.2	72.0	71.8	70.1	68.3	67.6	67.6	66.9	66.0	66.5	67.0	67.5	66.9	67.8	67.4	66.8
100000	73.3	72.2	71.8	70.0	68.4	67.8	67.6	67.0	66.1	66.6	67.1	67.7	67.0	67.9	67.5	66.9
110000	73.6	72.4	71.8	70.0	68.6	68.1	67.6	67.1	66.4	66.9	67.4	67.9	67.1	68.0	67.7	67.1
120000	73.8	72.7	71.8	69.9	68.9	68.1	67.7	67.3	66.7	67.1	67.6	68.1	67.2	68.2	67.9	67.4
130000	74.1	73.0	71.8	69.9	69.2	68.2	68.0	67.3	66.8	67.2	67.8	68.3	67.5	68.5	68.3	67.7
140000	74.5	73.2	71.8	69.9	69.4	68.8	68.3	67.5	66.7	67.4	68.0	68.4	67.5	68.7	68.2	67.9
150000	74.7	73.2	71.9	69.9	69.5	68.9	68.5	67.7	66.9	67.4	68.2	68.6	67.6	69.0	68.5	68.1
160000	74.8	73.2	71.9	69.9	69.8	69.2	68.6	67.9	66.9	67.7	68.6	68.6	67.8	69.1	68.4	68.2
170000	74.8	73.4	71.9	69.9	69.8	69.2	68.9	67.9	67.0	68.1	68.9	68.5	68.0	69.3	68.3	68.3
180000	74.6	73.6	71.9	69.9	69.7	69.2	69.0	67.8	67.3	68.1	69.1	68.5	68.0	69.4	68.2	68.2
190000	74.5	73.3	71.8	69.8	69.6	69.2	68.8	67.7	67.5	68.2	69.0	68.4	68.1	69.2	68.1	68.1
200000	74.4	73.2	71.6	69.7	69.3	69.0	68.6	67.6	67.6	68.2	68.7	68.4	68.1	69.0	68.0	68.0
210000	74.2	73.1	71.5	69.6	69.2	68.9	68.4	67.4	67.5	68.2	68.4	68.2	68.0	68.7	68.0	67.9
220000	74.0	73.0	71.3	69.5	69.0	68.7	68.3	67.3	67.5	68.0	68.2	68.1	67.8	68.5	67.9	67.7
230000	74.0	72.9	71.1	69.4	68.8	68.6	68.1	67.1	67.3	67.8	68.2	68.0	67.7	68.3	67.8	67.6
Daily Max	75.1	73.8	72.8	70.9	69.8	69.2	69.0	67.9	67.6	68.2	69.1	68.6	68.1	69.4	68.5	68.3
Daily Min	73.2	72.0	71.1	69.4	68.2	67.6	67.6	66.9	66.0	66.5	67.0	67.5	66.9	67.4	67.4	66.8
Average	74.2	72.9	71.9	70.1	69.0	68.5	68.2	67.4	66.7	67.3	67.8	68.1	67.5	68.3	68.0	67.5

Monthly average: 66.8

License Maximum: 89 F

Peshtigo Tailwater Temperature Summary - September 2021

Time HHMMSS	09/17/21	09/18/21	09/19/21	09/20/21	09/21/21	09/22/21	09/23/21	09/24/21	09/25/21	09/26/21	09/27/21	09/28/21	09/29/21	09/30/21
0	67.5	67.4	67.0	67.8	68.3	67.4	65.2	62.6	62.1	61.0	60.9	61.5	61.8	62.2
10000	67.4	67.3	66.9	67.7	68.2	67.2	64.9	62.4	62.0	60.8	60.8	61.3	61.7	62.2
20000	67.4	67.3	66.7	67.7	68.1	67.0	64.8	62.2	61.9	60.7	60.8	61.2	61.5	62.0
30000	67.3	67.1	66.5	67.6	68.1	66.9	64.5	62.1	61.8	60.6	60.7	61.1	61.5	61.9
40000	67.3	66.9	66.4	67.5	68.1	66.8	64.4	61.9	61.7	60.5	60.6	61.1	61.5	61.9
50000	67.2	66.8	66.3	67.5	68.0	66.6	64.2	61.8	61.7	60.5	60.5	61.0	61.4	61.9
60000	67.1	66.6	66.3	67.5	67.9	66.4	64.0	61.7	61.5	60.4	60.5	60.9	61.4	61.9
70000	67.0	66.5	66.2	67.5	67.9	66.3	63.8	61.5	61.4	60.3	60.4	60.8	61.3	61.8
80000	67.0	66.4	66.2	67.6	67.8	66.2	63.7	61.4	61.2	60.3	60.4	60.7	61.2	61.8
90000	67.0	66.3	66.2	67.6	67.8	66.1	63.6	61.4	61.2	60.2	60.3	60.7	61.2	61.8
100000	67.0	66.4	66.2	67.7	67.7	66.0	63.6	61.3	61.2	60.2	60.4	60.8	61.2	61.9
110000	67.3	66.6	66.6	67.8	67.7	66.0	63.5	61.6	61.3	60.4	60.7	61.0	61.4	62.0
120000	67.4	66.9	66.9	68.0	67.8	66.1	63.5	61.8	61.4	60.7	60.9	61.2	61.7	62.3
130000	67.8	67.1	66.9	68.1	67.9	66.2	63.6	61.9	61.6	60.8	61.1	61.5	61.9	62.7
140000	68.2	67.3	67.3	68.2	68.1	66.4	63.7	62.0	61.7	60.6	61.3	61.5	62.1	62.9
150000	68.4	67.3	67.7	68.3	68.4	66.5	63.6	62.3	62.0	60.9	61.9	61.6	62.3	63.0
160000	68.7	67.4	67.9	68.4	68.4	66.6	63.6	62.3	62.2	61.0	62.3	61.7	62.1	62.8
170000	68.6	67.4	68.0	68.4	68.4	66.5	63.5	62.5	62.1	61.1	62.2	61.9	62.3	62.7
180000	68.6	67.4	68.0	68.4	68.3	66.4	63.4	62.6	62.0	61.2	62.1	62.0	62.3	62.8
190000	68.4	67.5	68.0	68.5	68.2	66.3	63.3	62.6	61.9	61.1	62.1	62.2	62.5	62.7
200000	68.1	67.6	68.1	68.5	68.0	66.1	63.3	62.6	61.7	61.1	62.0	62.2	62.5	62.9
210000	67.9	67.5	68.1	68.5	67.8	65.9	63.1	62.6	61.5	61.1	61.9	62.1	62.3	62.8
220000	67.7	67.3	68.0	68.4	67.6	65.7	62.9	62.5	61.3	61.1	61.8	62.1	62.2	62.7
230000	67.6	67.2	67.9	68.4	67.5	65.4	62.7	62.3	61.1	61.0	61.7	61.9	62.2	62.7
Daily Max	68.7	67.6	68.1	68.5	68.4	67.4	65.2	62.6	62.2	61.2	62.3	62.2	62.5	63.0
Daily Min	67.0	66.3	66.2	67.5	67.5	65.4	62.7	61.3	61.1	60.2	60.3	60.7	61.2	61.8
Average	67.7	67.1	67.1	68.0	68.0	66.4	63.8	62.1	61.7	60.7	61.2	61.4	61.8	62.3

Attachment B

Documentation of Agency Consultation

From: [Metcalf, Mark W](#)
To: [Laatsch, Cheryl](#)
Cc: [Bosacki, William K](#); [Grisar, Mike L](#)
Subject: WPS Peshtigo River Hydroelectric Projects - Water quality monitoring report
Date: Tuesday, October 12, 2021 9:46:00 AM
Attachments: [2021-10-12 WDNR Annual WOM report.pdf](#)
[Caldron headwater 2021 profile summary.xlsx](#)
[Caldron Falls Tailwater pH Summary 2021.xlsx](#)
[Caldron Falls Tailwater Temp Summary 2021.xlsx](#)
[Caldron Falls Tailwater DO Summary 2021.xlsx](#)
[High Falls Bridge pH Summary 2021.xlsx](#)
[High Falls Bridge Temp Summary 2021.xlsx](#)
[High Falls Bridge DO Summary 2021.xlsx](#)
[Johnson Falls Tailwater pH Summary 2021.xlsx](#)
[Johnson Falls Tailwater Temp Summary 2021.xlsx](#)
[Johnson Falls Tailwater DO Summary 2021.xlsx](#)
[Sandstone pH Summary 2021.xlsx](#)
[Sandstone Temp Summary 2021.xlsx](#)
[Sandstone DO Summary 2021.xlsx](#)
[Potato Rapids headwater 2021 profile summary.xlsx](#)
[Potato Rapids Tailwater pH Summary 2021.xlsx](#)
[Potato Rapids Tailwater Temp Summary 2021.xlsx](#)
[Potato Rapids Tailwater DO Summary 2021.xlsx](#)
[Peshtigo Tailwater pH Summary 2021.xlsx](#)
[Peshtigo Tailwater Temp Summary 2021.xlsx](#)
[Peshtigo Tailwater DO Summary 2021.xlsx](#)

Good morning Cheryl,

Pursuant to the water quality monitoring plans for the Wisconsin Public Service (WPS) Hydroelectric facilities along the Peshtigo River, WPS is submitting water quality monitoring data collected during the 2021 monitoring season for your review and comment. Water quality monitoring was conducted at the following projects: Caldron Falls (FERC No. 2525), High Falls (FERC No. 2595), Johnson Falls (FERC No. 2522), Sandstone Rapids (FERC No. 2546), Potato Rapids (FERC No. 2560), and Peshtigo River (FERC No. 2581). As identified in the monitoring plans, the monitoring data is provided in the attached excel spreadsheets in both tabular and graphical form.

Please note no deviations from water quality standards were observed at any of the projects during the monitoring season. The enclosed data is also being submitted to the US Fish & Wildlife Service for their review and comment. Please review the enclosed data and provide any comments you may have within 30 days. Should you have any questions or concerns, please do not hesitate to call me at (920) 433-1833.

Thank you,
Mark

Mark Metcalf
Principal Environmental Consultant
920-433-1833 (office)
920-246-2717 (cell)



Wisconsin Public Service Corporation
700 North Adams Street
Green Bay, WI 54301
www.wisconsinpublicservice.com

October 12, 2021

Ms. Cheryl Laatch
Wisconsin Department of Natural Resources
Office of Energy, Water Management Specialist
101 S. Webster St.
Madison, WI 53703

Dear Ms. Laatch:

Re: Peshtigo River Hydroelectric Projects – 2021 Water Quality Monitoring Report

<u>Hydro</u>	<u>FERC Project No.</u>	<u>NATDAM No.</u>	<u>License Article</u>
Caldron Falls	2525	WI00759	409
High Falls	2595	WI00754	406
Johnson Falls	2522	WI00785	407
Sandstone Rapids	2546	WI00760	408
Potato Rapids	2560	WI00757	406
Peshtigo	2581	WI00756	405

Pursuant to the water quality monitoring plans for the Wisconsin Public Service (WPS) Hydroelectric facilities along the Peshtigo River, WPS is submitting water quality monitoring data collected during the 2021 monitoring season for your review and comment.

Monitoring for dissolved oxygen (DO), temperature, and pH was conducted continuously on an hourly basis from June 1 through September 30. The water quality monitoring plan requirements at all facilities except Johnson Falls are as follows:

Ensure flow releases from the project, as measured immediately downstream from the dam and maintain the following standards, except when natural conditions prohibit attainment of the standards:

- (1) Dissolved Oxygen concentrations shall not be less than 5.0 milligrams per liter (mg/L) (minus the precision of the monitoring equipment) for more than 24 hours per year;
- (2) Water temperature shall not exceed 89 degrees Fahrenheit (°F), and;
- (3) The pH shall be within the range of 6.0 to 9.0 standard units (s.u.), with no change greater than 0.5 units outside the natural seasonal maximum and minimum.

Natural conditions include inflows to the project less than the 95 percent exceedances flow.

October 12, 2021

Ms. Cheryl Laatch

Page 2 of 5

At the Johnson Falls Hydroelectric Project, the water quality monitoring plan requirements are as follows:

Ensure flow releases from the project, as measured immediately downstream from the dam and maintain the following standards, except when natural conditions prohibit attainment of the standards:

- (1) DO concentrations shall not be less than 6.0 milligrams per liter (mg/L) at any time or 7.0 mg/L during the spawning season (minus the precision of the monitoring equipment) for more than 24 hours per year;
- (2) Water temperature shall not be altered from natural background to the extent that trout populations are adversely affected, 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.

During the 2021 monitoring season, data was collected using portable water quality monitoring equipment manufactured by YSI, Inc. As described in the water quality monitoring plans for the projects, the instrumentation was cleaned and calibrated according to manufacturer specification every 14 days during the monitoring period. A post deployment calibration of the DO sensor 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 DO has an accuracy of +/- 0.1 mg/l, per the manufacturer. For compliance purposes, DO concentrations more than 0.1 mg/l below the applicable water quality standard are potential deviations. The following is a summary of the results for the 2021 monitoring season:

Caldron Falls Hydroelectric Project

Water quality monitoring at the Caldron Falls Hydroelectric project was conducted at the following locations:

- Upstream monitoring shall consist of bi-monthly DO, temperature, and pH profiles of the Caldron Falls Reservoir. Readings were taken at 0.5 meter intervals just above the dam near the powerhouse intake.
- Monitoring downstream of the Project shall occur approximately 770' downstream of the powerhouse in a location that is unaffected by changes in water elevation due to fluctuations in release flow volumes (NW ¼ of NE ¼, T33N, R18E, Section 10, approximately at 88° 13' 39.9"N, 45° 21' 25.7"W).

Vertical profiles conducted near the powerhouse intake showed that the reservoir exhibited characteristics of stratification from mid-June through the end of August. Profile data from September 7, 2021 indicates the reservoir was no longer stratified.

No deviations from the DO, pH or temperature standards were observed at the downstream monitoring location. The lowest DO concentration observed during the monitoring season was 5.4 mg/l, pH values

October 12, 2021

Ms. Cheryl Laatch

Page 3 of 5

ranged between 7.5 s.u. and 8.4 s.u., and water temperatures were less than 77°F. Please note that historical monitoring data indicated periods of low DO levels typically occur between July 15 and September 1. Therefore, in accordance with the Water Quality Monitoring Plan, on an annual basis WPS releases a minimum flow of 56 CFS out of a sluice gate to mitigate low DO concentrations downstream of the facility during the time period between July 15 and September 1. In 2021 WPS began releasing aeration flow through the sluice gate on July 15 and continued to release 56 cfs through a gate until October 1.

High Falls Hydroelectric Project

Water quality monitoring at the High Falls Hydroelectric project was conducted at the following locations:

- Upstream monitoring occurs on a five-year basis and is conducted with the same equipment utilized for the downstream monitoring of the Caldron Falls project.
- The downstream monitoring equipment shall be located on the High Falls Road Bridge near the middle of the river.

During the monitoring season, there were no deviations no deviations from the DO, pH or temperature water quality standards were observed at the upstream or downstream monitoring locations during the monitoring season. The lowest DO concentration observed during the monitoring season was 5.1 mg/l, pH values ranged between 7.3 s.u. and 8.1 s.u., and water temperatures were less than 78°F.

In response to decreasing DO levels downstream of the Project, WPS began releasing aeration flow through a spillway gate on July 23 and continued to provide aeration flow for the remainder of monitoring season except for a short period on August 6 from 09:50 to 13:15.

Johnson Falls Hydroelectric Project

Water quality monitoring at the Johnson Falls Hydroelectric project was conducted at the following locations:

- At the Johnson Falls Hydroelectric Project, upstream monitoring is conducted with the same equipment as the downstream monitor at High Falls.
- The downstream monitor at Johnson Falls is located in the tailrace, approximately 15 feet downstream of the powerhouse.

No deviations from the DO or pH water quality standards were observed during the monitoring season. The lowest DO concentration observed during the monitoring season was 6.0 mg/l and pH values ranged between 7.3 s.u. and 8.1 s.u.. At the time of the low DO readings, the facility was in run-of-river operation and DO concentrations of 8.1 mg/l were observed before and after the low reading. A review of plant operational data did not show any changes in operation or release flow rates that could have caused or contributed to the low reading.

October 12, 2021

Ms. Cheryl Laatch

Page 4 of 5

A comparison of water temperatures between the upstream monitoring location (High Falls tailrace) and the Johnson Falls tailrace monitoring location shows the tailrace temperatures were equal to or slightly lower than the temperatures observed at the upstream monitoring location. This suggests the water temperature was not altered from the natural background to the extent that trout populations may have been adversely affected.

Sandstone Rapids Hydroelectric Project

Water quality monitoring at the Sandstone Rapids Hydroelectric project was conducted at the following locations:

- The upstream monitoring is conducted with the same equipment as the downstream monitor at Johnson Falls.
- The downstream monitor at Sandstone Rapids is located in the tailrace.

At the Sandstone monitoring location, no deviations from the DO, pH or temperature water quality standards were observed during the monitoring season. All DO readings were above 6.9 mg/l, pH values fluctuated between 7.7 s.u. and 8.2 s.u., and water temperatures did not exceed 77°F.

Potato Rapids Hydroelectric Project

Water quality monitoring at the Potato Rapids Hydroelectric project was conducted at the following locations:

- Upstream monitoring shall consist of bi-monthly DO, temperature, and pH profiles of the Potato Rapids Reservoir. Readings were taken at half (0.5) meter intervals just above the dam near the powerhouse intake.
- The downstream monitor is located in the tailrace below the dam

Profile data collected upstream of the powerhouse did not reveal stratification in the impoundment or potential deviations from the water quality standards. DO levels were above 7.0 mg/l at all depths and times. Downstream of the Potato Rapids powerhouse, no deviations from the DO, pH or temperature water quality standards were observed. All DO readings were above 5.8 mg/l, pH values fluctuated between 7.6 s.u. and 8.3 s.u., and water temperatures did not exceed 83°F.

At the tailrace monitoring location WPS did experience equipment failures that resulted in periods of missing data. A water quality monitor was deployed at the downstream location on May 26 and it suddenly stopped working on May 30. This resulted in a period of missing data from June 1 at 00:00 through June 2 and 12:00. The monitor was shipped to the manufacturer for evaluation and it was determined that a sensor on the sonde had failed which caused the sonde to malfunction and stop recording data. Prior to the equipment malfunction DO concentrations ranged between 9.3 mg/l and 9.8 mg/l, pH levels were between 7.8 and 7.9 s.u., and water temperatures were below 70°F.

Monitoring data collected after the period of missing data indicated DO concentrations were above 8

October 12, 2021

Ms. Cheryl Laatch

Page 5 of 5

mg/l, the water pH was fluctuating between 7.7 s.u. and 7.8 s.u., and water temperatures were less than 70°F. Therefore the monitoring data does not suggest there was a deviation from the applicable water quality standards during the period of missing data.

A second equipment malfunction occurred in September which resulted in intermittent periods of missing pH data between September 9 and September 22. All available pH data during this time period varied between 8.0 s.u. and 8.3 s.u.. No missing data or deviations from the DO and temperature standards were observed data during the time period of the intermittent missing pH data.

Consequently, WPS does not believe there were any deviations from the pH water quality standards.

Peshtigo Hydroelectric Project

Water quality monitoring at the Peshtigo Hydroelectric project was conducted at the following locations:

- The upstream monitoring is conducted with the same equipment as the downstream monitor at Potato Rapids.
- The downstream monitor at Peshtigo Rapids is located in the tailrace.

No deviations from the DO, pH, or temperature water quality standards were observed during the 2021 monitoring season. All DO readings were above 5.4 mg/l, pH values fluctuated between 7.5 s.u. and 8.1 s.u., and water temperatures did not exceed 81°F.

Enclosed for your review are spreadsheets from each of the monitoring locations with the monitoring data for 2021 in tabular and graphical form. 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

Enc. 2021 Water quality monitoring data (20 spreadsheets)

cc: Mr. Mike Grisar
Mr. Bill Bosacki

From: [Gregory, Malcolm K - DNR](#)
To: [Metcalf, Mark W](#)
Cc: [Laatsch, Cheryl - DNR](#)
Subject: FW: WPS Peshtigo River Hydroelectric Projects - Water quality monitoring report
Date: Tuesday, November 2, 2021 8:12:53 AM
Attachments: [image001.png](#)

*** Exercise caution: This is an EXTERNAL email. DO NOT open attachments or click links from unknown senders or in unexpected emails. ***

Good morning Mark,

Upon review, DNR has no major concerns or comments for this water quality data.

Thank you for the submission.

Best,

Malcolm

Malcolm Gregory (he/him)

Environmental Analysis & Review Specialist
Wisconsin Department of Natural Resources
101 S. Webster Street
Madison, WI 53707-7921
malcolm.gregory@wisconsin.gov



From: Metcalf, Mark W <mark.metcalf@wecenergygroup.com>
Sent: Tuesday, October 12, 2021 9:47 AM
To: Laatsch, Cheryl - DNR <Cheryl.Laatsch@wisconsin.gov>
Cc: Bosacki, William K <[william.bosacki@wisconsinpublicservice.com](mailto:wiliam.bosacki@wisconsinpublicservice.com)>; Grisar, Mike L <mike.grisar@wecenergygroup.com>
Subject: WPS Peshtigo River Hydroelectric Projects - Water quality monitoring report

**CAUTION: This email originated from outside the organization.
Do not click links or open attachments unless you recognize the sender and know the content is safe.**

Good morning Cheryl,

Pursuant to the water quality monitoring plans for the Wisconsin Public Service (WPS) Hydroelectric facilities along the Peshtigo River, WPS is submitting water quality monitoring data collected during the 2021 monitoring season for your review and comment. Water quality monitoring was conducted at the following projects: Caldron Falls (FERC No. 2525), High Falls (FERC No. 2595), Johnson Falls

(FERC No. 2522), Sandstone Rapids (FERC No.2546), Potato Rapids (FERC No. 2560), and Peshtigo River (FERC No. 2581). As identified in the monitoring plans, the monitoring data is provided in the attached excel spreadsheets in both tabular and graphical form.

Please note no deviations from water quality standards were observed at any of the projects during the monitoring season. The enclosed data is also being submitted to the US Fish & Wildlife Service for their review and comment. Please review the enclosed data and provide any comments you may have within 30 days. Should you have any questions or concerns, please do not hesitate to call me at (920) 433-1833.

Thank you,
Mark

Mark Metcalf
Principal Environmental Consultant
920-433-1833 (office)
920-246-2717 (cell)

Response to Comments from the Wisconsin Department of Natural Resources

Agency Comment: Upon review, DNR has no major concerns or comments for this water quality data.

Response: Comment noted.

From: [Metcalf, Mark W](#)
To: [Darin Simpkins \(Darin_Simpkins@fws.gov\)](#)
Cc: [Bosacki, William K; Grisar, Mike L](#)
Subject: WPS Peshtigo River Hydroelectric Projects - Water quality monitoring report
Date: Tuesday, October 12, 2021 9:49:00 AM
Attachments: [Caldron headwater 2021 profile summary.xlsx](#)
[Caldron Falls Tailwater pH Summary 2021.xlsx](#)
[Caldron Falls Tailwater Temp Summary 2021.xlsx](#)
[Caldron Falls Tailwater DO Summary 2021.xlsx](#)
[High Falls Bridge pH Summary 2021.xlsx](#)
[High Falls Bridge Temp Summary 2021.xlsx](#)
[High Falls Bridge DO Summary 2021.xlsx](#)
[Johnson Falls Tailwater pH Summary 2021.xlsx](#)
[Johnson Falls Tailwater Temp Summary 2021.xlsx](#)
[Johnson Falls Tailwater DO Summary 2021.xlsx](#)
[Sandstone pH Summary 2021.xlsx](#)
[Sandstone Temp Summary 2021.xlsx](#)
[Sandstone DO Summary 2021.xlsx](#)
[Potato Rapids headwater 2021 profile summary.xlsx](#)
[Potato Rapids Tailwater pH Summary 2021.xlsx](#)
[Potato Rapids Tailwater Temp Summary 2021.xlsx](#)
[Potato Rapids Tailwater DO Summary 2021.xlsx](#)
[Peshtigo Tailwater pH Summary 2021.xlsx](#)
[Peshtigo Tailwater Temp Summary 2021.xlsx](#)
[Peshtigo Tailwater DO Summary 2021.xlsx](#)
[2021-10-12 FWS Annual WQM report.pdf](#)

Good morning Mr. Simpkins,

Pursuant to the water quality monitoring plans for the Wisconsin Public Service (WPS) Hydroelectric facilities along the Peshtigo River, WPS is submitting water quality monitoring data collected during the 2021 monitoring season for your review and comment. Water quality monitoring was conducted at the following projects: Caldron Falls (FERC No. 2525), High Falls (FERC No. 2595), Johnson Falls (FERC No. 2522), Sandstone Rapids (FERC No. 2546), Potato Rapids (FERC No. 2560), and Peshtigo River (FERC No. 2581). As identified in the monitoring plans, the monitoring data is provided in the attached excel spreadsheets in both tabular and graphical form.

Please note no deviations from water quality standards were observed at any of the projects during the monitoring season. The enclosed data is also being submitted to the Wisconsin Department of Natural Resources for their review and comment. Please review the enclosed data and provide any comments you may have within 30 days. Should you have any questions or concerns, please do not hesitate to call me at (920) 433-1833.

Thank you,
Mark

Mark Metcalf
Principal Environmental Consultant
920-433-1833 (office)
920-246-2717 (cell)



Wisconsin Public Service Corporation
700 North Adams Street
Green Bay, WI 54301
www.wisconsinpublicservice.com

October 12, 2021

Mr. Darin Simpkins
U.S. Fish & Wildlife Service
2661 Scott Tower Drive
New Franken, WI 54229

Dear Mr. Simpkins:

Re: Peshtigo River Hydroelectric Projects – 2021 Water Quality Monitoring Report

<u>Hydro</u>	<u>FERC Project No.</u>	<u>NATDAM No.</u>	<u>License Article</u>
Caldron Falls	2525	WI00759	409
High Falls	2595	WI00754	406
Johnson Falls	2522	WI00785	407
Sandstone Rapids	2546	WI00760	408
Potato Rapids	2560	WI00757	406
Peshtigo	2581	WI00756	405

Pursuant to the water quality monitoring plans for the Wisconsin Public Service (WPS) Hydroelectric facilities along the Peshtigo River, WPS is submitting water quality monitoring data collected during the 2021 monitoring season for your review and comment.

Monitoring for dissolved oxygen (DO), temperature, and pH was conducted continuously on an hourly basis from June 1 through September 30. The water quality monitoring plan requirements at all facilities except Johnson Falls are as follows:

Ensure flow releases from the project, as measured immediately downstream from the dam and maintain the following standards, except when natural conditions prohibit attainment of the standards:

- (1) Dissolved Oxygen concentrations shall not be less than 5.0 milligrams per liter (mg/L) (minus the precision of the monitoring equipment) for more than 24 hours per year;
- (2) Water temperature shall not exceed 89 degrees Fahrenheit (°F), and;
- (3) The pH shall be within the range of 6.0 to 9.0 standard units (s.u.), with no change greater than 0.5 units outside the natural seasonal maximum and minimum.

Natural conditions include inflows to the project less than the 95 percent exceedances flow.

October 12, 2021
Mr. Darin Simpkins
Page 2 of 5

At the Johnson Falls Hydroelectric Project, the water quality monitoring plan requirements are as follows:

Ensure flow releases from the project, as measured immediately downstream from the dam and maintain the following standards, except when natural conditions prohibit attainment of the standards:

- (1) DO concentrations shall not be less than 6.0 milligrams per liter (mg/L) at any time or 7.0 mg/L during the spawning season (minus the precision of the monitoring equipment) for more than 24 hours per year;
- (2) Water temperature shall not be altered from natural background to the extent that trout populations are adversely affected, 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.

During the 2021 monitoring season, data was collected using portable water quality monitoring equipment manufactured by YSI, Inc. As described in the water quality monitoring plans for the projects, the instrumentation was cleaned and calibrated according to manufacturer specification every 14 days during the monitoring period. A post deployment calibration of the DO sensor 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 DO has an accuracy of +/- 0.1 mg/l, per the manufacturer. For compliance purposes, DO concentrations more than 0.1 mg/l below the applicable water quality standard are potential deviations. The following is a summary of the results for the 2021 monitoring season:

Caldron Falls Hydroelectric Project

Water quality monitoring at the Caldron Falls Hydroelectric project was conducted at the following locations:

- Upstream monitoring shall consist of bi-monthly DO, temperature, and pH profiles of the Caldron Falls Reservoir. Readings were taken at 0.5 meter intervals just above the dam near the powerhouse intake.
- Monitoring downstream of the Project shall occur approximately 770' downstream of the powerhouse in a location that is unaffected by changes in water elevation due to fluctuations in release flow volumes (NW ¼ of NE ¼, T33N, R18E, Section 10, approximately at 88° 13' 39.9"N, 45° 21' 25.7"W).

Vertical profiles conducted near the powerhouse intake showed that the reservoir exhibited characteristics of stratification from mid-June through the end of August. Profile data from September 7, 2021 indicates the reservoir was no longer stratified.

No deviations from the DO, pH or temperature standards were observed at the downstream monitoring location. The lowest DO concentration observed during the monitoring season was 5.4 mg/l, pH values

October 12, 2021
Mr. Darin Simpkins
Page 3 of 5

ranged between 7.5 s.u. and 8.4 s.u., and water temperatures were less than 77°F. Please note that historical monitoring data indicated periods of low DO levels typically occur between July 15 and September 1. Therefore, in accordance with the Water Quality Monitoring Plan, on an annual basis WPS releases a minimum flow of 56 CFS out of a sluice gate to mitigate low DO concentrations downstream of the facility during the time period between July 15 and September 1. In 2021 WPS began releasing aeration flow through the sluice gate on July 15 and continued to release 56 cfs through a gate until October 1.

High Falls Hydroelectric Project

Water quality monitoring at the High Falls Hydroelectric project was conducted at the following locations:

- Upstream monitoring occurs on a five-year basis and is conducted with the same equipment utilized for the downstream monitoring of the Caldron Falls project.
- The downstream monitoring equipment shall be located on the High Falls Road Bridge near the middle of the river.

During the monitoring season, there were no deviations from the DO, pH or temperature water quality standards were observed at the upstream or downstream monitoring locations during the monitoring season. The lowest DO concentration observed during the monitoring season was 5.1 mg/l, pH values ranged between 7.3 s.u. and 8.1 s.u., and water temperatures were less than 78°F.

In response to decreasing DO levels downstream of the Project, WPS began releasing aeration flow through a spillway gate on July 23 and continued to provide aeration flow for the remainder of monitoring season except for a short period on August 6 from 09:50 to 13:15.

Johnson Falls Hydroelectric Project

Water quality monitoring at the Johnson Falls Hydroelectric project was conducted at the following locations:

- At the Johnson Falls Hydroelectric Project, upstream monitoring is conducted with the same equipment as the downstream monitor at High Falls.
- The downstream monitor at Johnson Falls is located in the tailrace, approximately 15 feet downstream of the powerhouse.

No deviations from the DO or pH water quality standards were observed during the monitoring season. The lowest DO concentration observed during the monitoring season was 6.0 mg/l and pH values ranged between 7.3 s.u. and 8.1 s.u.. At the time of the low DO readings, the facility was in run-of-river operation and DO concentrations of 8.1 mg/l were observed before and after the low reading. A review of plant operational data did not show any changes in operation or release flow rates that could have caused or contributed to the low reading.

October 12, 2021
Mr. Darin Simpkins
Page 4 of 5

A comparison of water temperatures between the upstream monitoring location (High Falls tailrace) and the Johnson Falls tailrace monitoring location shows the tailrace temperatures were equal to or slightly lower than the temperatures observed at the upstream monitoring location. This suggests the water temperature was not altered from the natural background to the extent that trout populations may have been adversely affected.

Sandstone Rapids Hydroelectric Project

Water quality monitoring at the Sandstone Rapids Hydroelectric project was conducted at the following locations:

- The upstream monitoring is conducted with the same equipment as the downstream monitor at Johnson Falls.
- The downstream monitor at Sandstone Rapids is located in the tailrace.

At the Sandstone monitoring location, no deviations from the DO, pH or temperature water quality standards were observed during the monitoring season. All DO readings were above 6.9 mg/l, pH values fluctuated between 7.7 s.u. and 8.2 s.u., and water temperatures did not exceed 77°F.

Potato Rapids Hydroelectric Project

Water quality monitoring at the Potato Rapids Hydroelectric project was conducted at the following locations:

- Upstream monitoring shall consist of bi-monthly DO, temperature, and pH profiles of the Potato Rapids Reservoir. Readings were taken at half (0.5) meter intervals just above the dam near the powerhouse intake.
- The downstream monitor is located in the tailrace below the dam

Profile data collected upstream of the powerhouse did not reveal stratification in the impoundment or potential deviations from the water quality standards. DO levels were above 7.0 mg/l at all depths and times. Downstream of the Potato Rapids powerhouse, no deviations from the DO, pH or temperature water quality standards were observed. All DO readings were above 5.8 mg/l, pH values fluctuated between 7.6 s.u. and 8.3 s.u., and water temperatures did not exceed 83°F.

At the tailrace monitoring location WPS did experience equipment failures that resulted in periods of missing data. A water quality monitor was deployed at the downstream location on May 26 and it suddenly stopped working on May 30. This resulted in a period of missing data from June 1 at 00:00 through June 2 and 12:00. The monitor was shipped to the manufacturer for evaluation and it was determined that a sensor on the sonde had failed which caused the sonde to malfunction and stop recording data. Prior to the equipment malfunction DO concentrations ranged between 9.3 mg/l and 9.8 mg/l, pH levels were between 7.8 and 7.9 s.u., and water temperatures were below 70°F.

Monitoring data collected after the period of missing data indicated DO concentrations were above 8

October 12, 2021

Mr. Darin Simpkins

Page 5 of 5

mg/l, the water pH was fluctuating between 7.7 s.u. and 7.8 s.u., and water temperatures were less than 70°F. Therefore the monitoring data does not suggest there was a deviation from the applicable water quality standards during the period of missing data.

A second equipment malfunction occurred in September which resulted in intermittent periods of missing pH data between September 9 and September 22. All available pH data during this time period varied between 8.0 s.u. and 8.3 s.u.. No missing data or deviations from the DO and temperature standards were observed data during the time period of the intermittent missing pH data.

Consequently, WPS does not believe there were any deviations from the pH water quality standards.

Peshtigo Hydroelectric Project

Water quality monitoring at the Peshtigo Hydroelectric project was conducted at the following locations:

- The upstream monitoring is conducted with the same equipment as the downstream monitor at Potato Rapids.
- The downstream monitor at Peshtigo Rapids is located in the tailrace.

No deviations from the DO, pH, or temperature water quality standards were observed during the 2021 monitoring season. All DO readings were above 5.4 mg/l, pH values fluctuated between 7.5 s.u. and 8.1 s.u., and water temperatures did not exceed 81°F.

Enclosed for your review are spreadsheets from each of the monitoring locations with the monitoring data for 2021 in tabular and graphical form. 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

Enc. 2021 Water quality monitoring data (20 spreadsheets)

cc: Mr. Mike Grisar
Mr. Bill Bosacki

Response to Comments from the United States Fish & Wildlife Service

The US Fish & Wildlife Service did not provide comments on the 2021 water quality monitoring report.

Document Content(s)

20220112 PES Env Out.pdf.....	1
20220112 PES Env Out Attach A.pdf.....	7
20220112 PES Env out Attach B.pdf.....	235