

Kate Taylor

From: Scott Hopkins
Sent: Tuesday, September 27, 2022 9:53 AM
To: 'Ashley Rawhouser'; 'bgoedde@cityofchelan.us'; 'Breean Zimmerman'; 'Carl Merkle'; 'Marcie Clement'; 'David Bowen'; 'Emily Johnson'; 'Graham Simon'; 'Hugh Anthony'; 'Justin Yeager'; 'Kari Grover Wier'; 'Mark Peterschmidt'; 'Jeff Osborn'; 'Phil Archibald'; 'robin@mansonparks.com'; 'Ryan.Layton@parks.wa.gov'; 'Michelle Smith'; 'Thomas O'Keefe'; 'Bill Towey'; 'Travis Maitland'; 'Charles Von Reis'; 'Mayfield, Mariah - FS'; 'Kevin Wright'; 'Esh, Nathan'; 'randi_riggs@fws.gov'; 'jamesurness@hotmail.com'; 'wfarris@cityofchelan.us'; 'Cole, Adam (RCO)'; 'blod@yakamafish-nsn.gov'; 'bret.nine@colvilletribes.com'; 'NaturalResources@ctuir.org'; 'keith.primm@ecy.wa.gov'; 'Janel Ulrich'; 'Gilbert, Joseph C'; 'colleen.foster@parks.wa.gov'; 'Bell, Josh (PARKS)'; 'Neibauer, Judy'
Cc: Martha Whiteman; Kate Taylor; Todd West; 'Pradeep Mugunthan'
Subject: 2022 Chelan River Temperature Monitoring Data - August Reports
Attachments: 2022 Chelan River Daily Average Temperature Data August Report.pdf; 2022 Chelan River Hourly Temperature Data August Report.pdf

PUBLIC UTILITY DISTRICT NO. 1 of CHELAN COUNTY
P.O. Box 1231, Wenatchee, WA 98807-1231 • 327 N. Wenatchee Ave., Wenatchee, WA 98801
(509) 663-8121 • Toll free 1-888-663-8121 • www.chelanpud.org

To: Department of Ecology
Water Quality Program
Central Regional Office

Chelan River Fishery Forum:
Washington Department of Ecology
Washington Department of Fish and Wildlife
United States Forest Service
National Park Service
United States Fish and Wildlife Service
National Marine Fisheries Service
CCT (Colville)
YN (Yakama)
CTUIR (Umatilla tribe)
United States Geological Survey
Washington State Parks and Recreation Commission
Washington State Recreation and Conservation Office
City of Chelan
Manson Parks and Recreation Department
Lake Chelan Recreation Association
American Whitewater

From: Scott Hopkins, Fisheries Biologist II
Public Utility District No. 1 of Chelan County (Chelan PUD)
scott.hopkins@chelanpud.org
(509)661-4763

Re: Lake Chelan Hydroelectric Project No. 637 (Project)
Appendix D 401 Water Quality Certification Condition V.C.i)
Water Temperature Data Reports: August 2022

Dear Ecology Water Quality Program, Chelan River Fishery Forum, and Other Parties:

Water temperature monitoring data for the August 2022 are provided in the attached files. This information will be posted to the Chelan County PUD external website under “River Flows, Water Temperatures and Total Dissolved Gas” (link below).

<https://www.chelanpud.org/parks-and-recreation/river-flows-and-water-temperatures>

Data during times of maintenance, calibration, or other miscellaneous events have been denoted with “NA” to designate these periods when data was either unavailable or inaccurate. Noteworthy events are explained below.

- There is one hour of data missing from one temperature logger that occurred when swapping data on 17 August.

Please feel free to call or email any questions or comments.



Scott Hopkins
Fisheries Biologist II
Chelan County P.U.D.
P: (509) 661-4763
C: (509) 630-2708

Date	Low Level Outlet Pipe -Auto- (Deg. C)	Top of Reach 1 -Logger- (Deg. C)	End of Reach 1 -Logger- (Deg. C)	End of Reach 3 -Logger- (Deg. C)	Top of R4 Habitat Channel -Logger- (Deg. C)	End of R4 Habitat Channel -Logger- (Deg. C)	Tailrace at Pump Intake -Auto- (Deg. C)	Tailrace at Pump Intake -Logger- (Deg. C)
8/1/2022	22.7	23.1	23.3	23.6	23.6	23.6	24.5	24.3
8/2/2022	24.3	24.6	23.7	23.4	23.4	23.3	24.7	24.6
8/3/2022	24.0	24.2	23.2	23.2	23.1	23.1	24.3	24.2
8/4/2022	23.4	23.6	22.4	22.0	22.2	22.1	23.7	23.6
8/5/2022	22.8	22.8	21.9	21.7	22.2	22.1	23.0	22.9
8/6/2022	22.4	22.5	22.4	22.4	22.5	22.5	22.7	22.6
8/7/2022	21.6	21.8	22.1	22.3	22.2	22.3	22.2	22.1
8/8/2022	21.3	21.5	22.2	22.5	22.4	22.5	22.4	22.2
8/9/2022	21.0	21.2	21.2	21.4	21.9	21.8	22.5	22.4
8/10/2022	22.5	22.7	22.6	22.8	23.0	23.0	23.3	23.2
8/11/2022	23.7	23.9	23.7	23.7	23.7	23.7	24.0	23.9
8/12/2022	23.3	23.4	23.7	23.9	23.9	23.9	24.0	23.9
8/13/2022	22.9	23.1	22.5	22.6	23.3	23.2	23.9	23.7
8/14/2022	23.4	23.6	23.0	22.8	23.1	23.1	23.5	23.5
8/15/2022	23.0	23.2	23.3	23.5	23.5	23.6	23.7	23.6
8/16/2022	21.7	21.8	22.5	22.9	22.9	22.9	23.1	22.9
8/17/2022	22.0	22.3	22.6	22.7	23.3	23.2	23.7	23.5
8/18/2022	22.3	22.5	22.6	22.7	23.5	23.5	23.9	23.8
8/19/2022	22.5	22.8	22.3	22.3	23.0	23.0	24.1	24.0
8/20/2022	23.8	24.0	23.8	23.7	24.1	24.2	24.4	24.3
8/21/2022	23.0	23.1	23.7	24.0	24.1	24.2	24.5	24.3
8/22/2022	22.5	22.7	22.9	23.1	23.7	23.7	24.1	24.0
8/23/2022	22.5	22.7	22.5	22.6	23.3	23.3	23.8	23.6
8/24/2022	23.7	23.8	23.4	23.2	23.8	23.8	24.2	24.1
8/25/2022	24.3	24.5	24.1	24.1	24.6	24.6	24.6	24.5
8/26/2022	23.6	23.7	23.5	23.6	23.6	23.7	24.3	24.1
8/27/2022	23.6	23.6	22.2	21.7	21.8	21.7	23.8	23.6
8/28/2022	23.1	23.1	22.3	21.9	21.9	21.9	23.2	23.0
8/29/2022	23.2	23.2	22.8	22.5	22.5	22.6	23.3	23.2
8/30/2022	22.7	22.7	22.6	22.6	22.4	22.5	23.2	23.0
8/31/2022	22.4	22.5	22.4	22.4	22.8	22.8	23.0	22.9

Date	Hour	Low Level Outlet Pipe -Auto- (Deg. C)	Top of Reach 1 -Logger- (Deg. C)	End of Reach 1 -Logger- (Deg. C)	End of Reach 3 -Logger- (Deg. C)	Top of R4 Habitat Channel -Logger- (Deg. C)	End of R4 Habitat Channel -Logger- (Deg. C)	Tailrace at Pump Intake -Auto- (Deg. C)	Tailrace at Pump Intake -Logger- (Deg. C)
8/1/2022	1	22.4	23.1	23.4	23.5	23.5	23.5	24.7	24.3
8/1/2022	2	22.2	22.5	23.4	23.5	23.5	23.4	24.6	24.3
8/1/2022	3	22.3	23.1	23.4	23.4	23.4	23.3	24.6	24.2
8/1/2022	4	22.7	22.9	23.3	23.3	23.3	23.3	24.5	24.5
8/1/2022	5	23.2	23.9	23.4	23.3	23.3	23.3	24.5	24.5
8/1/2022	6	23.4	23.7	23.4	23.3	23.3	23.2	24.5	24.5
8/1/2022	7	22.8	22.9	23.6	23.3	23.3	23.3	24.3	24.4
8/1/2022	8	22.3	22.7	23.7	23.4	23.4	23.3	24.2	24.1
8/1/2022	9	22.0	22.4	23.8	23.6	23.5	23.5	24.1	23.8
8/1/2022	10	21.9	22.2	24.2	23.9	23.8	23.8	24.0	23.9
8/1/2022	11	21.8	22.2	24.2	24.0	24.0	23.9	24.0	23.7
8/1/2022	12	21.8	22.1	24.1	24.5	24.4	24.5	23.9	23.8
8/1/2022	13	21.8	22.1	23.8	24.6	24.6	24.7	23.9	23.8
8/1/2022	14	21.8	22.4	23.9	24.6	24.6	24.8	24.1	23.8
8/1/2022	15	21.7	22.1	24.0	24.4	24.4	24.7	24.2	24.0
8/1/2022	16	21.8	22.2	23.6	24.2	24.2	24.3	24.3	24.0
8/1/2022	17	22.1	22.8	23.5	24.2	24.3	24.5	24.5	24.6
8/1/2022	18	22.3	22.9	23.4	24.1	24.1	24.3	24.7	24.7
8/1/2022	19	22.9	23.5	23.0	23.8	23.8	23.9	24.8	24.8
8/1/2022	20	23.7	24.5	22.5	23.4	23.4	23.4	24.9	24.8
8/1/2022	21	23.9	24.3	22.1	23.1	23.1	23.1	25.1	24.9
8/1/2022	22	24.0	24.2	21.7	22.7	22.8	22.7	25.1	24.8
8/1/2022	23	24.4	24.6	21.5	22.3	22.4	22.3	25.0	24.8
8/1/2022	24	24.5	24.6	21.6	22.0	22.0	22.0	24.9	24.8
8/2/2022	1	24.5	24.7	21.6	21.7	21.7	21.7	24.9	24.7
8/2/2022	2	24.5	24.6	21.8	21.5	21.5	21.5	24.9	24.7
8/2/2022	3	24.5	24.6	22.0	21.5	21.5	21.3	24.8	24.6
8/2/2022	4	24.4	24.5	22.1	21.5	21.5	21.3	24.7	24.6
8/2/2022	5	24.4	24.5	22.1	21.5	21.5	21.3	24.7	24.5
8/2/2022	6	24.3	24.4	22.1	21.6	21.6	21.4	24.6	24.5
8/2/2022	7	24.3	24.4	22.1	21.7	21.7	21.5	24.6	24.5
8/2/2022	8	24.2	24.5	22.4	21.9	21.8	21.7	24.6	24.4
8/2/2022	9	24.2	24.5	22.8	22.2	22.0	22.0	24.5	24.4
8/2/2022	10	24.2	24.5	23.7	22.3	22.2	22.4	24.5	24.5
8/2/2022	11	24.3	24.6	24.6	23.0	22.8	22.8	24.6	24.5
8/2/2022	12	24.3	24.6	25.2	23.8	23.6	23.7	24.7	24.6
8/2/2022	13	24.4	24.8	25.9	24.4	24.2	24.3	24.8	24.7
8/2/2022	14	24.5	24.8	26.3	25.0	24.9	24.9	24.9	24.8
8/2/2022	15	24.6	25.0	26.5	25.5	25.4	25.4	24.9	24.8
8/2/2022	16	24.6	24.9	26.5	25.7	25.7	25.7	25.0	24.8
8/2/2022	17	24.4	24.6	26.1	25.8	25.9	25.8	25.0	24.8
8/2/2022	18	24.2	24.3	25.4	25.9	25.9	25.8	24.9	24.7
8/2/2022	19	24.2	24.3	24.6	25.5	25.6	25.5	24.9	24.6
8/2/2022	20	24.2	24.3	23.7	25.1	25.1	25.0	24.8	24.6
8/2/2022	21	24.3	24.5	23.1	24.5	24.6	24.5	24.7	24.6

Date	Hour	Low Level Outlet Pipe -Auto- (Deg. C)	Top of Reach 1 -Logger- (Deg. C)	End of Reach 1 -Logger- (Deg. C)	End of Reach 3 -Logger- (Deg. C)	Top of R4 Habitat Channel -Logger- (Deg. C)	End of R4 Habitat Channel -Logger- (Deg. C)	Tailrace at Pump Intake -Auto- (Deg. C)	Tailrace at Pump Intake -Logger- (Deg. C)
8/2/2022	22	24.3	24.5	22.8	24.0	24.0	24.0	24.7	24.5
8/2/2022	23	24.3	24.4	22.4	23.4	23.5	23.5	24.6	24.5
8/2/2022	24	24.3	24.4	22.3	22.9	23.0	23.0	24.4	24.4
8/3/2022	1	24.2	24.3	22.2	22.5	22.6	22.5	24.4	24.4
8/3/2022	2	24.2	24.3	22.0	22.2	22.2	22.2	24.3	24.3
8/3/2022	3	24.1	24.2	21.9	21.9	22.0	21.9	24.3	24.2
8/3/2022	4	24.0	24.1	21.7	21.7	21.8	21.7	24.2	24.2
8/3/2022	5	24.0	24.1	21.7	21.6	21.6	21.5	24.2	24.1
8/3/2022	6	23.9	24.0	21.7	21.4	21.4	21.3	24.2	24.1
8/3/2022	7	23.9	24.0	21.6	21.3	21.3	21.2	24.1	24.0
8/3/2022	8	23.8	24.0	21.9	21.5	21.3	21.3	24.1	24.0
8/3/2022	9	23.8	24.0	22.3	21.7	21.5	21.5	24.1	24.0
8/3/2022	10	23.8	24.0	22.9	21.9	21.7	21.9	24.1	24.0
8/3/2022	11	23.8	24.1	23.7	22.2	22.0	22.2	24.0	24.0
8/3/2022	12	23.8	24.1	24.5	22.7	22.5	22.7	24.0	24.1
8/3/2022	13	23.8	24.2	25.3	23.5	23.3	23.4	24.1	24.1
8/3/2022	14	23.9	24.2	25.9	24.3	24.1	24.2	24.3	24.2
8/3/2022	15	24.0	24.3	26.2	25.0	24.8	24.9	24.3	24.3
8/3/2022	16	24.1	24.4	26.1	25.4	25.4	25.4	24.4	24.3
8/3/2022	17	24.1	24.4	25.7	25.7	25.8	25.7	24.4	24.4
8/3/2022	18	24.1	24.4	25.1	25.8	25.8	25.8	24.5	24.4
8/3/2022	19	24.1	24.3	24.3	25.5	25.6	25.5	24.5	24.3
8/3/2022	20	24.1	24.2	23.5	25.0	25.0	25.0	24.4	24.3
8/3/2022	21	24.1	24.2	22.8	24.4	24.5	24.5	24.4	24.3
8/3/2022	22	24.1	24.1	22.0	23.6	23.7	23.8	24.3	24.2
8/3/2022	23	24.0	24.1	21.6	22.8	22.9	23.0	24.2	24.1
8/3/2022	24	24.0	24.0	21.2	22.1	22.2	22.2	24.2	24.1
8/4/2022	1	23.9	23.9	21.1	21.5	21.6	21.5	24.1	24.0
8/4/2022	2	23.8	23.9	20.9	21.0	21.1	21.0	24.1	23.9
8/4/2022	3	23.8	23.8	21.1	20.7	20.7	20.6	24.0	23.8
8/4/2022	4	23.7	23.7	21.1	20.6	20.6	20.4	23.8	23.7
8/4/2022	5	23.6	23.6	21.2	20.5	20.5	20.3	23.8	23.7
8/4/2022	6	23.5	23.6	21.2	20.6	20.5	20.3	23.8	23.6
8/4/2022	7	23.5	23.5	21.2	20.6	20.6	20.3	23.7	23.5
8/4/2022	8	23.4	23.6	21.4	20.8	20.7	20.5	23.6	23.5
8/4/2022	9	23.4	23.6	21.8	21.0	21.2	20.7	23.6	23.5
8/4/2022	10	23.4	23.5	22.3	21.1	22.1	22.0	23.6	23.4
8/4/2022	11	23.3	23.5	23.0	21.3	22.2	22.2	23.6	23.5
8/4/2022	12	23.3	23.5	23.7	21.7	22.5	22.5	23.7	23.5
8/4/2022	13	23.3	23.6	24.3	22.5	23.0	22.9	23.7	23.5
8/4/2022	14	23.4	23.6	24.7	23.2	23.4	23.3	23.7	23.5
8/4/2022	15	23.4	23.6	24.8	23.9	23.8	23.8	23.7	23.6
8/4/2022	16	23.4	23.6	24.7	24.1	23.9	24.0	23.7	23.6
8/4/2022	17	23.4	23.6	24.3	24.1	23.9	24.0	23.7	23.6
8/4/2022	18	23.4	23.6	23.8	24.0	23.8	23.8	23.7	23.6

Date	Hour	Low Level Outlet Pipe -Auto- (Deg. C)	Top of Reach 1 -Logger- (Deg. C)	End of Reach 1 -Logger- (Deg. C)	End of Reach 3 -Logger- (Deg. C)	Top of R4 Habitat Channel -Logger- (Deg. C)	End of R4 Habitat Channel -Logger- (Deg. C)	Tailrace at Pump Intake -Auto- (Deg. C)	Tailrace at Pump Intake -Logger- (Deg. C)
8/4/2022	19	23.4	23.5	23.2	23.7	23.6	23.5	23.7	23.5
8/4/2022	20	23.4	23.4	22.4	23.3	23.4	23.2	23.6	23.5
8/4/2022	21	23.3	23.4	21.8	22.9	23.2	23.0	23.5	23.4
8/4/2022	22	23.3	23.3	21.4	22.5	22.9	22.7	23.4	23.4
8/4/2022	23	23.2	23.2	21.1	22.0	22.6	22.5	23.4	23.3
8/4/2022	24	23.1	23.1	20.8	21.5	22.3	22.1	23.3	23.2
8/5/2022	1	23.0	23.0	20.6	21.1	22.0	21.8	23.2	23.1
8/5/2022	2	23.0	23.0	20.5	20.7	21.8	21.6	23.1	23.1
8/5/2022	3	22.9	22.9	20.5	20.4	21.6	21.3	23.1	23.0
8/5/2022	4	22.9	22.8	20.4	20.2	21.4	21.2	23.0	22.9
8/5/2022	5	22.8	22.7	20.3	20.0	21.3	21.0	22.8	22.8
8/5/2022	6	22.7	22.7	20.2	20.0	21.2	20.9	22.9	22.8
8/5/2022	7	22.7	22.7	20.2	19.9	21.2	20.9	22.7	22.8
8/5/2022	8	22.6	22.7	20.4	20.0	21.1	20.9	22.8	22.7
8/5/2022	9	22.6	22.7	20.8	20.2	21.3	21.1	22.8	22.7
8/5/2022	10	22.6	22.7	21.5	20.3	21.4	21.2	22.8	22.7
8/5/2022	11	22.6	22.7	22.4	20.6	21.6	21.5	22.8	22.7
8/5/2022	12	22.6	22.7	23.2	21.0	21.8	21.7	22.8	22.7
8/5/2022	13	22.6	22.8	23.5	21.8	22.3	22.1	22.9	22.7
8/5/2022	14	22.6	22.8	23.6	22.4	22.6	22.5	22.9	22.8
8/5/2022	15	22.7	22.9	24.1	23.2	23.1	23.2	22.9	22.8
8/5/2022	16	22.7	22.9	24.2	23.4	23.3	23.4	23.0	22.9
8/5/2022	17	22.8	22.9	24.2	23.6	23.4	23.5	23.0	23.0
8/5/2022	18	22.8	23.0	23.9	23.9	23.4	23.6	23.0	23.0
8/5/2022	19	22.9	23.0	23.3	23.8	23.4	23.4	23.1	23.0
8/5/2022	20	22.9	22.9	22.6	23.6	23.3	23.3	23.1	23.0
8/5/2022	21	22.8	22.9	22.0	23.3	23.1	23.2	23.1	23.0
8/5/2022	22	22.8	22.8	21.6	22.9	23.0	22.9	23.1	22.9
8/5/2022	23	22.8	22.8	21.3	22.4	22.7	22.6	23.0	22.9
8/5/2022	24	22.8	22.8	21.2	21.9	22.4	22.3	23.0	22.9
8/6/2022	1	22.7	22.8	21.0	21.5	22.2	22.0	22.9	22.9
8/6/2022	2	22.7	22.7	20.9	21.2	22.0	21.8	22.9	22.8
8/6/2022	3	22.7	22.7	20.8	20.9	21.8	21.6	22.9	22.8
8/6/2022	4	22.6	22.6	20.7	20.7	21.7	21.4	22.8	22.7
8/6/2022	5	22.6	22.6	20.6	20.6	21.6	21.3	22.8	22.7
8/6/2022	6	22.6	22.5	20.5	20.5	21.5	21.2	22.7	22.6
8/6/2022	7	22.5	22.5	20.4	20.3	21.4	21.1	22.7	22.6
8/6/2022	8	22.4	22.5	20.6	20.4	21.4	21.1	22.6	22.5
8/6/2022	9	22.3	22.4	21.1	20.5	21.4	21.2	22.6	22.3
8/6/2022	10	22.2	22.4	21.8	20.6	21.4	21.4	22.5	22.3
8/6/2022	11	22.2	22.3	22.7	21.0	21.6	21.6	22.4	22.3
8/6/2022	12	22.1	22.3	23.6	21.6	22.0	21.9	22.4	22.3
8/6/2022	13	22.0	22.3	24.4	22.4	22.5	22.5	22.5	22.4
8/6/2022	14	22.1	22.3	25.0	23.3	22.9	23.1	22.5	22.5
8/6/2022	15	22.3	22.5	25.2	24.1	23.4	23.6	22.6	22.6

Date	Hour	Low Level Outlet Pipe -Auto- (Deg. C)	Top of Reach 1 -Logger- (Deg. C)	End of Reach 1 -Logger- (Deg. C)	End of Reach 3 -Logger- (Deg. C)	Top of R4 Habitat Channel -Logger- (Deg. C)	End of R4 Habitat Channel -Logger- (Deg. C)	Tailrace at Pump Intake -Auto- (Deg. C)	Tailrace at Pump Intake -Logger- (Deg. C)
8/6/2022	16	22.3	22.5	25.2	24.6	23.7	24.1	22.7	22.7
8/6/2022	17	22.4	22.5	24.9	25.0	23.9	24.3	22.7	22.7
8/6/2022	18	22.4	22.7	24.4	25.1	23.8	24.3	22.7	22.8
8/6/2022	19	22.6	22.7	23.7	24.9	23.7	24.1	22.7	22.8
8/6/2022	20	22.6	22.7	22.9	24.5	23.6	23.9	22.7	22.8
8/6/2022	21	22.6	22.6	22.3	24.1	23.3	23.6	22.8	22.8
8/6/2022	22	22.6	22.6	21.8	23.5	23.1	23.2	22.8	22.7
8/6/2022	23	22.5	22.5	21.5	22.9	22.8	22.9	22.7	22.6
8/6/2022	24	22.4	22.4	21.3	22.4	22.5	22.5	22.6	22.5
8/7/2022	1	22.1	22.1	21.2	21.9	22.2	22.1	22.5	22.3
8/7/2022	2	22.0	22.0	21.0	21.5	21.9	21.8	22.3	22.2
8/7/2022	3	21.8	21.8	20.8	21.2	21.7	21.6	22.2	22.1
8/7/2022	4	21.7	21.7	20.6	21.0	21.5	21.3	22.1	22.0
8/7/2022	5	21.5	21.5	20.4	20.8	21.3	21.2	21.9	21.8
8/7/2022	6	21.4	21.3	20.2	20.6	21.2	21.0	21.9	21.6
8/7/2022	7	21.3	21.2	20.1	20.4	21.0	20.8	21.8	21.6
8/7/2022	8	21.2	21.2	20.3	20.4	20.9	20.8	21.8	21.5
8/7/2022	9	21.1	21.2	20.7	20.5	20.9	20.8	21.7	21.5
8/7/2022	10	21.0	21.1	21.4	20.6	21.0	21.0	21.6	21.4
8/7/2022	11	20.9	21.0	22.2	20.8	21.2	21.2	21.6	21.4
8/7/2022	12	21.0	21.3	23.0	21.4	21.5	21.6	21.6	21.5
8/7/2022	13	21.0	21.3	23.8	22.2	22.0	22.2	21.7	21.7
8/7/2022	14	21.1	21.4	24.4	23.1	22.5	22.7	21.9	21.9
8/7/2022	15	21.5	21.9	24.7	23.8	22.9	23.3	22.1	22.2
8/7/2022	16	21.7	22.0	24.8	24.3	23.3	23.7	22.3	22.4
8/7/2022	17	21.9	22.0	24.6	24.7	23.5	24.0	22.5	22.6
8/7/2022	18	22.0	22.3	24.2	24.9	23.7	24.1	22.7	22.7
8/7/2022	19	22.1	22.4	23.6	24.8	23.6	24.0	22.8	22.8
8/7/2022	20	22.3	22.4	22.8	24.4	23.5	23.8	22.8	22.8
8/7/2022	21	22.3	22.4	22.1	24.0	23.3	23.5	22.8	22.7
8/7/2022	22	22.4	22.4	21.5	23.4	23.1	23.2	22.7	22.8
8/7/2022	23	22.2	22.2	21.2	22.8	22.8	22.9	22.7	22.7
8/7/2022	24	22.1	22.1	21.1	22.2	22.4	22.4	22.6	22.6
8/8/2022	1	21.8	21.9	21.1	21.7	22.2	22.1	22.6	22.5
8/8/2022	2	21.8	21.9	21.0	21.3	21.9	21.8	22.6	22.3
8/8/2022	3	21.9	21.8	20.9	21.1	21.7	21.6	22.5	22.4
8/8/2022	4	21.8	21.9	20.7	21.0	21.7	21.5	22.4	22.3
8/8/2022	5	21.6	21.6	20.4	20.8	21.5	21.3	22.3	22.2
8/8/2022	6	21.6	21.6	20.3	20.7	21.4	21.2	22.2	22.1
8/8/2022	7	21.5	21.6	20.3	20.6	21.3	21.1	22.1	22.0
8/8/2022	8	21.3	21.4	20.5	20.5	21.2	21.1	22.1	21.9
8/8/2022	9	21.3	21.3	20.9	20.7	21.2	21.1	22.1	21.8
8/8/2022	10	21.2	21.3	21.5	20.8	21.3	21.3	22.0	21.8
8/8/2022	11	21.1	21.2	22.4	21.1	21.5	21.5	22.0	21.7
8/8/2022	12	21.0	21.3	23.4	21.6	21.8	21.9	22.0	21.6

Date	Hour	Low Level Outlet Pipe -Auto- (Deg. C)	Top of Reach 1 -Logger- (Deg. C)	End of Reach 1 -Logger- (Deg. C)	End of Reach 3 -Logger- (Deg. C)	Top of R4 Habitat Channel -Logger- (Deg. C)	End of R4 Habitat Channel -Logger- (Deg. C)	Tailrace at Pump Intake -Auto- (Deg. C)	Tailrace at Pump Intake -Logger- (Deg. C)
8/8/2022	13	20.9	21.1	24.2	22.5	22.2	22.3	22.0	21.8
8/8/2022	14	21.0	21.3	24.8	23.4	22.7	23.0	22.1	21.9
8/8/2022	15	21.1	21.4	25.0	24.4	23.2	23.7	22.3	22.0
8/8/2022	16	21.3	21.5	25.0	24.9	23.4	24.0	22.5	22.3
8/8/2022	17	21.2	21.5	24.8	25.1	23.7	24.3	22.5	22.4
8/8/2022	18	21.3	21.6	24.3	25.2	23.6	24.2	22.6	22.6
8/8/2022	19	21.2	21.7	23.5	25.0	23.6	24.1	22.6	22.5
8/8/2022	20	21.2	21.5	22.8	24.7	23.5	23.9	22.7	22.4
8/8/2022	21	21.2	21.4	22.1	24.3	23.3	23.6	22.7	22.6
8/8/2022	22	21.3	21.3	21.5	23.7	23.1	23.4	22.7	22.8
8/8/2022	23	21.1	21.3	21.2	23.0	22.9	23.0	22.6	22.6
8/8/2022	24	21.2	21.6	20.9	22.4	22.5	22.5	22.6	22.4
8/9/2022	1	21.1	21.2	20.8	21.9	22.2	22.2	22.5	22.4
8/9/2022	2	21.0	21.0	20.7	21.5	21.9	21.8	22.4	22.3
8/9/2022	3	20.8	20.8	20.5	21.2	21.8	21.6	22.4	22.3
8/9/2022	4	20.7	20.8	20.5	20.9	21.6	21.4	22.4	22.3
8/9/2022	5	20.7	20.7	20.3	20.8	21.5	21.3	22.4	22.3
8/9/2022	6	20.7	20.7	20.1	20.6	21.4	21.2	22.3	22.2
8/9/2022	7	20.7	20.9	20.1	20.5	21.3	21.2	22.1	22.0
8/9/2022	8	20.9	21.3	20.1	20.4	21.3	21.1	22.4	22.5
8/9/2022	9	21.1	21.4	20.2	20.3	21.4	21.2	22.6	22.5
8/9/2022	10	20.9	20.9	20.4	20.3	21.4	21.2	22.6	22.3
8/9/2022	11	20.9	21.2	20.7	20.4	21.3	21.2	22.5	22.2
8/9/2022	12	20.8	21.3	21.1	20.5	21.3	21.2	22.4	22.0
8/9/2022	13	20.7	21.0	21.4	20.8	21.4	21.3	22.3	22.0
8/9/2022	14	20.7	20.8	22.0	21.2	21.7	21.6	22.2	22.1
8/9/2022	15	20.7	21.1	22.5	21.6	22.0	21.9	22.2	22.1
8/9/2022	16	21.1	21.8	22.8	22.0	22.2	22.1	22.4	22.4
8/9/2022	17	21.1	21.7	22.9	22.3	22.5	22.5	22.7	22.5
8/9/2022	18	21.9	22.2	22.7	22.6	22.6	22.6	22.8	22.8
8/9/2022	19	21.6	21.9	22.3	22.8	22.8	22.8	22.9	22.8
8/9/2022	20	21.4	21.6	21.9	22.8	22.8	22.7	22.8	22.6
8/9/2022	21	21.2	21.7	21.6	22.7	22.6	22.6	22.7	22.6
8/9/2022	22	21.0	21.6	21.4	22.4	22.5	22.5	22.6	22.4
8/9/2022	23	20.8	20.9	21.2	22.1	22.3	22.3	22.5	22.4
8/9/2022	24	20.7	20.7	21.1	21.8	22.2	22.1	22.5	22.4
8/10/2022	1	20.5	20.6	21.0	21.6	22.0	22.0	22.5	22.4
8/10/2022	2	20.4	20.6	20.9	21.5	22.0	21.8	22.4	22.4
8/10/2022	3	20.4	20.6	20.7	21.3	21.9	21.7	22.5	22.4
8/10/2022	4	20.5	20.6	20.5	21.2	21.8	21.7	22.5	22.4
8/10/2022	5	20.5	20.6	20.4	21.1	21.7	21.6	22.5	22.4
8/10/2022	6	20.6	20.7	20.3	20.9	21.6	21.5	22.5	22.3
8/10/2022	7	21.4	22.0	20.3	20.8	21.5	21.4	22.5	22.8
8/10/2022	8	22.7	22.9	20.3	20.7	21.7	21.5	22.9	23.0
8/10/2022	9	22.9	23.1	20.6	20.8	21.8	21.7	23.1	23.0

Date	Hour	Low Level Outlet Pipe -Auto- (Deg. C)	Top of Reach 1 -Logger- (Deg. C)	End of Reach 1 -Logger- (Deg. C)	End of Reach 3 -Logger- (Deg. C)	Top of R4 Habitat Channel -Logger- (Deg. C)	End of R4 Habitat Channel -Logger- (Deg. C)	Tailrace at Pump Intake -Auto- (Deg. C)	Tailrace at Pump Intake -Logger- (Deg. C)
8/10/2022	10	22.6	22.8	21.3	21.1	22.0	21.9	23.2	23.0
8/10/2022	11	22.8	23.0	22.5	21.2	22.2	22.1	23.3	23.0
8/10/2022	12	23.0	23.3	23.9	21.7	22.4	22.4	23.4	23.2
8/10/2022	13	23.0	23.4	24.7	22.3	22.9	22.9	23.5	23.3
8/10/2022	14	23.2	23.6	25.1	23.2	23.4	23.4	23.6	23.4
8/10/2022	15	23.3	23.7	25.7	24.2	23.9	24.1	23.7	23.6
8/10/2022	16	23.4	23.7	25.8	24.9	24.3	24.5	23.8	23.7
8/10/2022	17	23.5	23.8	25.6	25.3	24.5	24.8	23.9	23.7
8/10/2022	18	23.5	23.7	25.1	25.5	24.5	24.8	23.9	23.8
8/10/2022	19	23.5	23.8	24.5	25.5	24.6	24.8	23.9	23.8
8/10/2022	20	23.6	23.8	23.8	25.2	24.4	24.7	23.9	23.9
8/10/2022	21	23.7	23.8	23.2	24.8	24.3	24.4	23.9	23.9
8/10/2022	22	23.7	23.9	22.8	24.3	24.1	24.1	23.9	23.9
8/10/2022	23	23.7	23.8	22.4	23.8	23.9	23.9	23.9	23.8
8/10/2022	24	23.7	23.8	22.2	23.3	23.6	23.6	23.9	23.8
8/11/2022	1	23.6	23.8	21.9	22.8	23.3	23.2	23.9	23.7
8/11/2022	2	23.6	23.8	21.9	22.4	23.1	23.0	23.9	23.6
8/11/2022	3	23.6	23.7	21.8	22.1	22.9	22.7	23.8	23.7
8/11/2022	4	23.6	23.7	21.9	21.9	22.8	22.6	23.8	23.6
8/11/2022	5	23.5	23.7	21.9	21.7	22.7	22.4	23.7	23.5
8/11/2022	6	23.5	23.6	21.8	21.7	22.6	22.3	23.6	23.5
8/11/2022	7	23.5	23.7	21.9	21.7	22.6	22.4	23.7	23.7
8/11/2022	8	23.5	23.7	22.2	21.8	22.7	22.4	23.8	23.6
8/11/2022	9	23.5	23.7	22.6	22.0	22.8	22.6	23.8	23.6
8/11/2022	10	23.4	23.7	23.2	22.2	22.9	22.8	23.8	23.6
8/11/2022	11	23.4	23.7	24.0	22.4	23.1	23.1	23.8	23.6
8/11/2022	12	23.5	23.8	24.9	23.0	23.4	23.4	23.8	23.7
8/11/2022	13	23.5	23.9	25.7	23.8	23.9	24.0	23.9	23.8
8/11/2022	14	23.7	24.1	26.2	24.6	24.2	24.3	24.0	23.9
8/11/2022	15	23.8	24.2	26.5	25.4	24.5	24.7	24.1	24.0
8/11/2022	16	23.9	24.2	26.5	25.9	24.7	25.0	24.1	24.1
8/11/2022	17	23.9	24.2	26.3	26.2	24.8	25.1	24.1	24.1
8/11/2022	18	24.0	24.2	25.7	26.4	24.8	25.2	24.2	24.2
8/11/2022	19	24.0	24.2	25.1	26.3	24.8	25.1	24.2	24.2
8/11/2022	20	24.0	24.2	24.3	25.9	24.7	24.9	24.3	24.2
8/11/2022	21	24.1	24.2	23.7	25.5	24.6	24.8	24.3	24.2
8/11/2022	22	24.1	24.2	23.2	24.9	24.5	24.6	24.4	24.2
8/11/2022	23	24.1	24.2	22.9	24.3	24.3	24.3	24.3	24.1
8/11/2022	24	24.0	24.2	22.7	23.8	24.1	24.0	24.2	24.0
8/12/2022	1	24.0	24.2	22.6	23.4	23.9	23.8	24.2	24.0
8/12/2022	2	24.0	24.1	22.5	23.0	23.7	23.6	24.1	24.0
8/12/2022	3	24.0	24.1	22.4	22.7	23.6	23.4	24.0	23.9
8/12/2022	4	24.0	24.1	22.3	22.5	23.4	23.3	23.9	23.8
8/12/2022	5	23.9	24.0	22.2	22.4	23.3	23.2	23.9	23.8
8/12/2022	6	23.9	24.0	22.1	22.3	23.2	23.0	23.8	23.6

Date	Hour	Low Level Outlet Pipe -Auto- (Deg. C)	Top of Reach 1 -Logger- (Deg. C)	End of Reach 1 -Logger- (Deg. C)	End of Reach 3 -Logger- (Deg. C)	Top of R4 Habitat Channel -Logger- (Deg. C)	End of R4 Habitat Channel -Logger- (Deg. C)	Tailrace at Pump Intake -Auto- (Deg. C)	Tailrace at Pump Intake -Logger- (Deg. C)
8/12/2022	7	23.9	24.0	22.0	22.1	23.3	23.2	24.0	24.0
8/12/2022	8	23.9	24.0	22.3	22.2	23.3	23.2	24.1	24.0
8/12/2022	9	23.8	24.0	22.7	22.3	23.4	23.3	24.1	24.0
8/12/2022	10	23.7	24.0	23.4	22.4	23.4	23.4	24.1	24.0
8/12/2022	11	23.7	24.0	24.2	22.4	23.6	23.6	24.1	24.0
8/12/2022	12	23.7	24.0	25.2	23.0	23.8	23.8	24.1	24.0
8/12/2022	13	23.6	23.9	25.9	24.0	24.1	24.2	24.1	24.1
8/12/2022	14	23.3	23.6	26.4	24.8	24.4	24.6	24.1	24.1
8/12/2022	15	23.0	23.2	26.6	25.6	24.5	24.8	24.1	23.9
8/12/2022	16	22.8	23.1	26.4	26.1	24.5	24.9	24.1	23.9
8/12/2022	17	22.7	23.0	26.0	26.4	24.6	25.1	24.0	23.9
8/12/2022	18	22.6	22.8	25.5	26.5	24.6	25.1	24.0	23.9
8/12/2022	19	22.5	22.7	24.8	26.3	24.5	24.9	23.9	23.8
8/12/2022	20	22.4	22.6	23.9	25.8	24.4	24.7	23.9	23.8
8/12/2022	21	22.3	22.4	23.0	25.3	24.2	24.4	23.8	23.7
8/12/2022	22	22.3	22.4	22.3	24.6	23.9	24.0	23.8	23.6
8/12/2022	23	22.2	22.3	21.9	23.8	23.7	23.7	23.7	23.4
8/12/2022	24	22.1	22.2	21.6	23.1	23.4	23.4	23.7	23.4
8/13/2022	1	22.1	22.2	21.3	22.6	23.2	23.1	23.6	23.4
8/13/2022	2	22.1	22.2	21.2	22.1	23.0	22.9	23.5	23.4
8/13/2022	3	22.1	22.2	21.0	21.7	22.8	22.7	23.5	23.3
8/13/2022	4	22.1	22.2	20.9	21.4	22.6	22.5	23.4	23.3
8/13/2022	5	22.1	22.2	20.8	21.2	22.5	22.3	23.3	23.2
8/13/2022	6	22.1	22.2	20.7	21.0	22.3	22.1	23.3	23.0
8/13/2022	7	22.2	22.5	20.6	20.8	22.2	22.1	23.3	23.3
8/13/2022	8	22.6	22.9	20.7	20.8	22.6	22.3	23.5	23.7
8/13/2022	9	23.0	23.3	21.0	20.9	22.8	22.6	23.8	23.9
8/13/2022	10	23.2	23.4	21.7	21.0	22.8	22.7	24.1	23.9
8/13/2022	11	23.1	23.4	22.5	21.1	22.9	22.8	24.1	23.9
8/13/2022	12	23.2	23.4	23.6	21.4	23.1	23.0	24.1	23.9
8/13/2022	13	23.3	23.5	24.6	22.2	23.4	23.3	24.1	23.9
8/13/2022	14	23.2	23.5	25.3	23.0	23.7	23.6	24.2	23.9
8/13/2022	15	23.2	23.5	25.6	23.8	24.0	23.9	24.2	24.0
8/13/2022	16	23.3	23.6	25.6	24.4	24.2	24.2	24.2	24.0
8/13/2022	17	23.3	23.5	25.3	24.8	24.4	24.4	24.2	24.1
8/13/2022	18	23.3	23.5	24.7	25.0	24.4	24.4	24.2	24.1
8/13/2022	19	23.3	23.5	23.9	24.8	24.3	24.3	24.2	24.0
8/13/2022	20	23.4	23.5	23.1	24.5	24.2	24.1	24.1	24.0
8/13/2022	21	23.5	23.6	22.4	24.2	24.1	24.0	24.1	24.0
8/13/2022	22	23.6	23.7	21.8	23.6	23.9	23.8	24.0	23.9
8/13/2022	23	23.5	23.6	21.4	23.0	23.6	23.5	24.0	23.8
8/13/2022	24	23.4	23.5	21.2	22.3	23.3	23.2	23.9	23.7
8/14/2022	1	23.4	23.6	21.0	21.7	23.1	22.9	23.9	23.6
8/14/2022	2	23.4	23.5	21.0	21.3	22.8	22.6	23.8	23.6
8/14/2022	3	23.4	23.5	20.9	21.0	22.5	22.4	23.7	23.4

Date	Hour	Low Level Outlet Pipe -Auto- (Deg. C)	Top of Reach 1 -Logger- (Deg. C)	End of Reach 1 -Logger- (Deg. C)	End of Reach 3 -Logger- (Deg. C)	Top of R4 Habitat Channel -Logger- (Deg. C)	End of R4 Habitat Channel -Logger- (Deg. C)	Tailrace at Pump Intake -Auto- (Deg. C)	Tailrace at Pump Intake -Logger- (Deg. C)
8/14/2022	4	23.3	23.5	20.8	20.7	22.3	22.2	23.5	23.3
8/14/2022	5	23.4	23.5	20.9	20.6	22.2	22.0	23.4	23.2
8/14/2022	6	23.5	23.5	21.0	20.5	22.1	21.9	23.2	23.0
8/14/2022	7	23.5	23.5	21.0	20.5	22.0	21.8	23.1	22.9
8/14/2022	8	23.5	23.5	21.2	20.6	21.9	21.8	23.0	22.8
8/14/2022	9	23.5	23.6	21.7	20.9	22.1	21.9	22.9	22.7
8/14/2022	10	23.5	23.6	22.4	21.2	22.1	22.1	23.0	22.7
8/14/2022	11	23.4	23.7	23.3	21.5	22.3	22.3	23.2	22.9
8/14/2022	12	23.5	23.7	24.2	21.9	22.5	22.5	23.3	22.8
8/14/2022	13	23.4	23.7	25.2	22.7	22.8	22.9	23.4	23.5
8/14/2022	14	23.4	23.7	25.8	23.6	23.2	23.4	23.6	24.1
8/14/2022	15	23.4	23.7	26.1	24.4	23.6	23.8	23.7	23.9
8/14/2022	16	23.4	23.7	26.1	25.0	23.9	24.2	23.8	23.9
8/14/2022	17	23.4	23.6	25.7	25.4	24.1	24.4	23.9	24.0
8/14/2022	18	23.5	23.6	25.2	25.7	24.1	24.5	23.9	24.0
8/14/2022	19	23.5	23.6	24.5	25.6	24.2	24.4	23.9	24.0
8/14/2022	20	23.5	23.6	23.8	25.3	24.1	24.3	23.8	24.1
8/14/2022	21	23.5	23.6	23.2	24.8	24.1	24.2	23.8	24.1
8/14/2022	22	23.5	23.6	22.7	24.4	23.9	24.0	23.7	24.0
8/14/2022	23	23.5	23.6	22.4	23.8	23.7	23.7	23.6	23.9
8/14/2022	24	23.5	23.6	22.2	23.3	23.5	23.4	23.6	23.7
8/15/2022	1	23.5	23.6	22.1	22.8	23.3	23.2	23.5	23.6
8/15/2022	2	23.5	23.6	21.9	22.5	23.1	23.0	23.4	23.4
8/15/2022	3	23.5	23.6	21.8	22.2	22.9	22.8	23.4	23.3
8/15/2022	4	23.5	23.6	21.7	22.0	22.8	22.7	23.3	23.2
8/15/2022	5	23.5	23.6	21.6	21.8	22.7	22.5	23.1	23.1
8/15/2022	6	23.5	23.6	21.6	21.6	22.5	22.4	23.3	23.0
8/15/2022	7	23.5	23.6	21.6	21.5	22.8	22.5	23.5	23.6
8/15/2022	8	23.5	23.7	21.7	21.6	22.9	22.7	23.6	23.7
8/15/2022	9	23.5	23.7	22.2	21.7	23.0	22.9	23.7	23.7
8/15/2022	10	23.5	23.7	22.9	21.9	23.1	23.0	23.8	23.8
8/15/2022	11	23.5	23.7	23.7	22.2	23.3	23.2	23.9	23.8
8/15/2022	12	23.4	23.6	24.7	22.6	23.4	23.5	23.9	23.8
8/15/2022	13	23.4	23.6	25.4	23.4	23.8	23.8	23.9	23.8
8/15/2022	14	23.3	23.5	26.1	24.2	24.1	24.2	23.9	23.8
8/15/2022	15	23.0	23.2	26.3	25.0	24.3	24.5	23.9	23.8
8/15/2022	16	22.7	22.9	26.3	25.6	24.4	24.7	23.8	23.7
8/15/2022	17	22.5	22.7	26.1	25.9	24.4	24.8	23.8	23.7
8/15/2022	18	22.4	22.6	25.5	26.2	24.3	24.8	23.8	23.6
8/15/2022	19	22.3	22.5	24.6	26.1	24.3	24.7	23.8	23.6
8/15/2022	20	22.2	22.4	23.7	25.7	24.2	24.5	23.8	23.6
8/15/2022	21	22.3	22.5	22.9	25.3	24.2	24.4	23.7	23.7
8/15/2022	22	22.3	22.5	22.3	24.7	24.1	24.1	23.7	23.7
8/15/2022	23	22.3	22.4	21.9	23.9	23.8	23.9	23.7	23.6
8/15/2022	24	22.2	22.3	21.7	23.3	23.5	23.5	23.7	23.6

Date	Hour	Low Level Outlet Pipe -Auto- (Deg. C)	Top of Reach 1 -Logger- (Deg. C)	End of Reach 1 -Logger- (Deg. C)	End of Reach 3 -Logger- (Deg. C)	Top of R4 Habitat Channel -Logger- (Deg. C)	End of R4 Habitat Channel -Logger- (Deg. C)	Tailrace at Pump Intake -Auto- (Deg. C)	Tailrace at Pump Intake -Logger- (Deg. C)
8/16/2022	1	22.1	22.1	21.5	22.7	23.3	23.2	23.7	23.5
8/16/2022	2	22.0	22.1	21.4	22.2	23.2	23.0	23.6	23.5
8/16/2022	3	21.9	22.0	21.3	21.9	23.0	22.8	23.6	23.5
8/16/2022	4	21.8	21.9	21.2	21.7	22.8	22.7	23.6	23.4
8/16/2022	5	21.8	21.8	21.0	21.5	22.7	22.5	23.5	23.3
8/16/2022	6	21.8	21.8	20.9	21.3	22.6	22.4	23.4	23.2
8/16/2022	7	21.7	21.7	20.8	21.2	22.4	22.3	23.2	22.7
8/16/2022	8	21.7	21.7	20.9	21.2	22.1	21.9	22.7	22.4
8/16/2022	9	21.6	21.7	21.2	21.3	22.0	21.9	22.5	22.3
8/16/2022	10	21.6	21.7	21.8	21.3	22.0	22.0	22.5	22.2
8/16/2022	11	21.5	21.7	22.6	21.6	22.0	22.1	22.5	22.1
8/16/2022	12	21.5	21.7	23.5	21.9	22.1	22.2	22.4	22.0
8/16/2022	13	21.5	21.7	24.3	22.6	22.3	22.5	22.4	22.0
8/16/2022	14	21.5	21.7	24.9	23.4	22.5	22.8	22.4	22.0
8/16/2022	15	21.5	21.7	25.3	24.2	22.7	23.1	22.3	22.0
8/16/2022	16	21.5	21.7	25.3	24.8	22.9	23.4	22.3	22.2
8/16/2022	17	21.5	21.6	25.0	25.1	23.1	23.6	22.5	22.4
8/16/2022	18	21.5	21.7	24.5	25.4	23.3	23.8	22.8	22.6
8/16/2022	19	21.4	21.6	23.6	25.3	23.4	23.8	23.1	22.8
8/16/2022	20	21.5	21.7	22.8	24.9	23.6	23.8	23.3	23.4
8/16/2022	21	21.8	22.2	22.2	24.5	23.9	23.9	23.6	23.9
8/16/2022	22	21.9	22.1	21.7	23.9	23.9	24.0	24.0	23.9
8/16/2022	23	21.9	21.9	21.3	23.2	23.7	23.6	24.0	23.8
8/16/2022	24	21.7	21.7	21.1	22.6	23.4	23.3	23.9	23.8
8/17/2022	1	21.6	21.7	21.1	22.1	23.2	23.1	23.8	23.7
8/17/2022	2	21.6	21.7	21.0	21.7	23.0	22.9	23.8	23.6
8/17/2022	3	21.6	21.6	20.9	21.4	22.8	22.7	23.7	23.6
8/17/2022	4	21.5	21.6	20.7	21.2	22.7	22.5	23.6	23.5
8/17/2022	5	21.5	21.6	20.5	21.1	22.6	22.4	23.6	23.4
8/17/2022	6	21.5	21.5	20.4	20.9	22.4	22.3	23.5	23.3
8/17/2022	7	21.6	21.7	20.3	20.7	22.1	22.0	23.0	23.1
8/17/2022	8	21.8	22.2	20.5	20.7	22.3	22.1	23.2	23.3
8/17/2022	9	21.8	22.0	21.0	20.9	22.3	22.2	23.3	23.1
8/17/2022	10	21.8	22.0	21.7	21.0	22.4	22.3	23.3	23.1
8/17/2022	11	21.9	22.5	22.6	21.2	22.4	22.4	23.4	23.0
8/17/2022	12	22.0	22.3	23.6	21.7	22.8	22.8	23.4	23.2
8/17/2022	13	22.2	22.4	24.5	22.4	23.2	23.1	23.5	23.3
8/17/2022	14	22.1	22.6	25.1	23.3	23.4	23.5	23.6	23.3
8/17/2022	15	22.2	22.7	25.5	24.1	23.9	NA	23.8	23.7
8/17/2022	16	22.3	22.8	25.6	24.7	24.1	24.4	23.9	23.7
8/17/2022	17	22.5	22.8	25.3	25.1	24.3	24.5	23.9	23.9
8/17/2022	18	22.6	22.9	24.8	25.4	24.3	24.6	23.9	24.0
8/17/2022	19	22.4	22.9	24.1	25.3	24.3	24.6	24.0	23.9
8/17/2022	20	22.5	22.9	23.5	25.0	24.3	24.5	24.0	23.9
8/17/2022	21	22.5	22.7	22.9	24.7	24.3	24.4	24.0	24.0

Date	Hour	Low Level Outlet Pipe -Auto- (Deg. C)	Top of Reach 1 -Logger- (Deg. C)	End of Reach 1 -Logger- (Deg. C)	End of Reach 3 -Logger- (Deg. C)	Top of R4 Habitat Channel -Logger- (Deg. C)	End of R4 Habitat Channel -Logger- (Deg. C)	Tailrace at Pump Intake -Auto- (Deg. C)	Tailrace at Pump Intake -Logger- (Deg. C)
8/17/2022	22	22.5	23.0	22.5	24.2	24.0	24.1	24.1	23.9
8/17/2022	23	22.4	22.5	22.1	23.6	23.8	23.9	24.0	23.9
8/17/2022	24	22.3	22.3	21.9	23.1	23.6	23.6	23.9	23.8
8/18/2022	1	22.1	22.2	21.7	22.6	23.4	23.4	23.9	23.8
8/18/2022	2	22.1	22.2	21.6	22.2	23.3	23.2	23.8	23.7
8/18/2022	3	22.1	22.2	21.4	22.0	23.1	23.0	23.8	23.7
8/18/2022	4	22.1	22.2	21.3	21.7	23.0	22.9	23.7	23.6
8/18/2022	5	22.1	22.2	21.2	21.6	22.9	22.8	23.6	23.6
8/18/2022	6	22.1	22.2	21.2	21.4	22.8	22.7	23.6	23.5
8/18/2022	7	22.6	23.1	21.2	21.3	22.9	22.7	23.6	24.0
8/18/2022	8	23.6	23.8	21.4	21.3	23.1	22.9	24.1	24.1
8/18/2022	9	23.2	23.4	21.6	21.3	23.0	23.0	24.2	23.9
8/18/2022	10	22.4	22.6	22.0	21.4	23.0	22.9	24.0	23.7
8/18/2022	11	22.3	22.5	22.6	21.6	22.9	22.8	23.9	23.7
8/18/2022	12	22.1	22.4	23.8	22.1	23.2	23.2	23.8	23.4
8/18/2022	13	22.0	22.3	24.5	22.6	23.1	23.3	23.7	23.6
8/18/2022	14	22.0	22.4	25.0	23.3	23.2	23.4	23.8	23.5
8/18/2022	15	22.2	22.5	25.0	24.0	23.8	23.9	23.8	23.8
8/18/2022	16	22.1	22.5	24.6	24.5	24.5	24.4	23.9	23.8
8/18/2022	17	22.2	22.5	24.1	24.8	24.8	24.9	23.9	23.9
8/18/2022	18	22.2	22.5	23.7	24.8	24.8	25.0	23.9	24.0
8/18/2022	19	22.2	22.7	23.2	24.5	24.6	24.8	24.0	23.9
8/18/2022	20	22.3	22.4	22.8	24.2	24.2	24.4	24.0	24.1
8/18/2022	21	22.1	22.6	22.4	23.8	23.9	24.0	24.1	24.0
8/18/2022	22	22.1	22.7	22.1	23.4	23.4	23.6	24.0	24.0
8/18/2022	23	22.1	22.2	21.9	23.0	23.1	23.2	24.0	24.0
8/18/2022	24	21.9	21.9	21.8	22.6	22.7	22.8	24.0	23.9
8/19/2022	1	21.7	21.8	21.7	22.3	22.3	22.4	24.0	23.9
8/19/2022	2	21.7	21.7	21.5	22.0	22.1	22.2	23.9	23.9
8/19/2022	3	21.7	21.7	21.3	21.8	21.9	21.9	23.9	23.8
8/19/2022	4	21.6	21.7	21.2	21.6	21.7	21.8	23.9	23.8
8/19/2022	5	21.6	21.7	21.2	21.5	21.6	21.7	23.9	23.8
8/19/2022	6	21.6	21.7	21.1	21.4	21.5	21.5	23.9	23.7
8/19/2022	7	21.7	22.2	21.1	21.3	21.4	21.4	23.6	23.7
8/19/2022	8	22.5	23.1	21.2	21.3	21.3	21.4	24.0	24.2
8/19/2022	9	22.5	22.8	21.4	21.3	23.0	23.0	24.2	24.0
8/19/2022	10	22.1	22.8	21.8	21.6	22.9	23.0	24.1	23.7
8/19/2022	11	22.0	22.3	22.9	21.9	23.2	23.2	24.0	23.7
8/19/2022	12	22.0	22.3	23.5	21.9	23.1	23.0	23.9	23.7
8/19/2022	13	21.9	22.5	23.9	22.4	23.3	23.3	23.9	23.5
8/19/2022	14	22.1	22.8	24.0	23.0	23.6	23.5	24.0	23.8
8/19/2022	15	22.2	22.8	23.5	23.4	23.8	23.7	24.1	23.9
8/19/2022	16	22.4	23.1	23.0	23.7	23.9	23.9	24.2	24.1
8/19/2022	17	23.2	23.7	22.7	23.8	24.0	24.0	24.3	24.2
8/19/2022	18	23.2	23.7	22.6	23.6	24.1	24.1	24.3	24.4

Date	Hour	Low Level Outlet Pipe -Auto- (Deg. C)	Top of Reach 1 -Logger- (Deg. C)	End of Reach 1 -Logger- (Deg. C)	End of Reach 3 -Logger- (Deg. C)	Top of R4 Habitat Channel -Logger- (Deg. C)	End of R4 Habitat Channel -Logger- (Deg. C)	Tailrace at Pump Intake -Auto- (Deg. C)	Tailrace at Pump Intake -Logger- (Deg. C)
8/19/2022	19	23.4	23.6	22.6	23.3	24.1	24.1	24.4	24.4
8/19/2022	20	23.7	23.7	22.7	23.0	24.0	23.9	24.5	24.5
8/19/2022	21	23.7	23.7	22.7	22.7	23.9	23.8	24.5	24.4
8/19/2022	22	23.8	23.9	22.6	22.6	23.8	23.7	24.6	24.4
8/19/2022	23	23.8	23.8	22.6	22.5	23.7	23.6	24.5	24.3
8/19/2022	24	23.6	23.9	22.6	22.5	23.7	23.6	24.5	24.3
8/20/2022	1	23.5	23.8	22.6	22.4	23.7	23.6	24.4	24.3
8/20/2022	2	23.4	23.7	22.5	22.4	23.6	23.5	24.4	24.3
8/20/2022	3	23.4	23.7	22.5	22.4	23.5	23.4	24.3	24.2
8/20/2022	4	23.3	23.6	22.5	22.4	23.5	23.4	24.3	24.1
8/20/2022	5	23.3	23.7	22.5	22.3	23.4	23.3	24.3	24.1
8/20/2022	6	23.3	23.7	22.4	22.3	23.4	23.3	24.3	24.0
8/20/2022	7	24.0	24.2	22.3	22.3	23.6	23.4	24.3	24.4
8/20/2022	8	24.2	24.4	22.4	22.3	23.7	23.6	24.3	24.4
8/20/2022	9	24.3	24.4	22.6	22.3	23.7	23.6	24.3	24.4
8/20/2022	10	24.2	24.3	22.8	22.4	23.7	23.7	24.4	24.4
8/20/2022	11	24.1	24.3	23.4	22.6	23.8	23.7	24.4	24.4
8/20/2022	12	24.1	24.3	24.4	23.0	24.0	24.0	24.4	24.3
8/20/2022	13	23.8	24.0	25.1	23.2	24.1	24.1	24.5	24.3
8/20/2022	14	23.9	24.2	25.7	23.8	24.2	24.3	24.5	24.3
8/20/2022	15	23.7	24.0	26.3	24.5	24.5	24.6	24.5	24.3
8/20/2022	16	23.8	24.0	26.5	25.0	24.7	24.8	24.5	24.4
8/20/2022	17	23.9	24.0	26.3	25.5	24.8	25.0	24.5	24.5
8/20/2022	18	23.8	24.1	25.8	25.9	24.9	25.2	24.5	24.4
8/20/2022	19	23.9	24.1	25.1	26.1	24.8	25.2	24.5	24.4
8/20/2022	20	23.9	24.1	24.4	25.9	24.9	25.1	24.5	24.5
8/20/2022	21	24.0	24.2	23.8	25.6	24.8	25.1	24.5	24.5
8/20/2022	22	23.9	24.1	23.4	25.1	24.7	24.8	24.6	24.4
8/20/2022	23	23.9	24.0	23.1	24.5	24.4	24.5	24.5	24.2
8/20/2022	24	23.9	24.1	23.0	24.0	24.3	24.3	24.5	24.2
8/21/2022	1	23.9	24.0	22.9	23.6	24.1	24.1	24.4	24.0
8/21/2022	2	23.8	23.9	22.8	23.3	24.0	23.9	24.3	24.2
8/21/2022	3	23.7	23.8	22.7	23.1	23.9	23.8	24.3	24.1
8/21/2022	4	23.7	23.8	22.7	22.9	23.8	23.7	24.2	24.1
8/21/2022	5	23.7	23.7	22.6	22.7	23.7	23.5	24.2	24.0
8/21/2022	6	23.6	23.7	22.5	22.6	23.5	23.4	24.1	23.9
8/21/2022	7	23.6	23.7	22.4	22.5	23.4	23.4	24.1	23.9
8/21/2022	8	23.6	23.7	22.5	22.5	23.4	23.3	24.1	23.8
8/21/2022	9	23.5	23.7	22.8	22.7	23.4	23.3	24.2	23.7
8/21/2022	10	23.4	23.5	23.4	22.7	23.5	23.5	24.2	23.8
8/21/2022	11	23.1	23.2	24.1	22.9	23.6	23.6	24.3	24.0
8/21/2022	12	22.8	22.9	25.0	23.2	23.8	23.9	24.4	24.6
8/21/2022	13	22.6	22.8	25.8	23.8	24.0	24.1	24.6	24.6
8/21/2022	14	22.5	22.8	26.3	24.6	24.3	24.5	24.7	24.3
8/21/2022	15	22.5	22.7	26.5	25.4	24.7	24.9	24.8	24.7

Date	Hour	Low Level Outlet Pipe -Auto- (Deg. C)	Top of Reach 1 -Logger- (Deg. C)	End of Reach 1 -Logger- (Deg. C)	End of Reach 3 -Logger- (Deg. C)	Top of R4 Habitat Channel -Logger- (Deg. C)	End of R4 Habitat Channel -Logger- (Deg. C)	Tailrace at Pump Intake -Auto- (Deg. C)	Tailrace at Pump Intake -Logger- (Deg. C)
8/21/2022	16	22.4	22.7	26.4	25.9	24.9	25.3	24.8	24.7
8/21/2022	17	22.4	22.6	25.8	26.2	24.9	25.4	24.8	24.8
8/21/2022	18	22.4	22.6	25.1	26.4	24.9	25.4	24.8	24.8
8/21/2022	19	22.4	22.6	24.4	26.3	24.9	25.3	24.8	24.9
8/21/2022	20	22.4	22.5	23.6	25.8	24.8	25.1	24.7	24.8
8/21/2022	21	22.4	22.4	22.9	25.2	24.7	24.9	24.7	24.7
8/21/2022	22	22.3	22.4	22.4	24.6	24.5	24.6	24.7	24.5
8/21/2022	23	22.3	22.3	22.0	24.0	24.3	24.3	24.7	24.3
8/21/2022	24	22.3	22.3	21.8	23.3	24.1	24.0	24.5	24.2
8/22/2022	1	22.3	22.3	21.6	22.8	23.8	23.7	24.4	24.2
8/22/2022	2	22.2	22.3	21.5	22.4	23.6	23.5	24.3	24.1
8/22/2022	3	22.2	22.3	21.4	22.1	23.4	23.3	24.1	24.0
8/22/2022	4	22.2	22.3	21.4	21.8	23.2	23.1	24.0	23.9
8/22/2022	5	22.2	22.3	21.4	21.6	23.1	23.0	23.9	23.8
8/22/2022	6	22.2	22.3	21.4	21.5	23.0	22.8	23.7	23.8
8/22/2022	7	22.2	22.3	21.4	21.5	22.6	22.4	23.3	23.4
8/22/2022	8	22.2	22.4	21.4	21.5	22.8	22.7	23.4	23.6
8/22/2022	9	22.3	22.5	21.7	21.6	22.9	22.8	23.6	23.7
8/22/2022	10	22.4	22.6	22.1	21.7	23.0	22.9	23.8	23.7
8/22/2022	11	22.5	22.8	23.0	22.0	23.3	23.2	23.9	23.8
8/22/2022	12	22.6	22.9	23.9	22.3	23.3	23.4	24.0	23.9
8/22/2022	13	22.7	23.1	24.5	22.8	23.6	23.7	24.2	24.0
8/22/2022	14	22.9	23.3	25.2	23.5	24.1	24.1	24.3	24.1
8/22/2022	15	22.8	23.2	25.6	24.3	24.3	24.5	24.4	24.2
8/22/2022	16	22.7	23.0	25.7	24.7	24.4	24.6	24.4	24.1
8/22/2022	17	22.7	22.9	25.4	25.1	24.5	24.7	24.4	24.1
8/22/2022	18	22.6	22.9	24.9	25.3	24.5	24.8	24.4	24.2
8/22/2022	19	22.7	23.0	24.1	25.4	24.6	24.8	24.4	24.3
8/22/2022	20	22.8	23.0	23.3	25.0	24.5	24.6	24.4	24.3
8/22/2022	21	22.8	23.0	22.6	24.6	24.4	24.4	24.4	24.3
8/22/2022	22	22.9	23.2	22.1	24.1	24.2	24.2	24.4	24.3
8/22/2022	23	23.0	23.1	21.8	23.4	24.0	24.0	24.4	24.2
8/22/2022	24	22.9	23.0	21.7	22.9	23.8	23.7	24.3	24.1
8/23/2022	1	22.8	22.9	21.7	22.4	23.5	23.4	24.3	24.1
8/23/2022	2	22.7	22.7	21.6	22.0	23.3	23.2	24.2	24.1
8/23/2022	3	22.6	22.7	21.6	21.7	23.2	23.1	24.1	24.0
8/23/2022	4	22.6	22.6	21.5	21.6	23.1	22.9	24.0	23.9
8/23/2022	5	22.5	22.6	21.3	21.5	22.9	22.8	24.0	23.8
8/23/2022	6	22.5	22.5	21.2	21.4	22.8	22.7	24.0	23.7
8/23/2022	7	22.5	22.5	21.2	21.3	22.7	22.6	23.8	23.3
8/23/2022	8	22.4	22.5	21.2	21.3	22.6	22.5	23.6	23.2
8/23/2022	9	22.4	22.5	21.4	21.3	22.6	22.5	23.5	23.3
8/23/2022	10	22.4	22.5	22.0	21.4	22.6	22.6	23.5	23.3
8/23/2022	11	22.4	22.5	22.4	21.5	22.8	22.7	23.5	23.4
8/23/2022	12	22.4	22.6	23.7	22.0	23.0	23.0	23.6	23.5

Date	Hour	Low Level Outlet Pipe -Auto- (Deg. C)	Top of Reach 1 -Logger- (Deg. C)	End of Reach 1 -Logger- (Deg. C)	End of Reach 3 -Logger- (Deg. C)	Top of R4 Habitat Channel -Logger- (Deg. C)	End of R4 Habitat Channel -Logger- (Deg. C)	Tailrace at Pump Intake -Auto- (Deg. C)	Tailrace at Pump Intake -Logger- (Deg. C)
8/23/2022	13	22.5	22.8	24.4	22.4	23.3	23.2	23.6	23.7
8/23/2022	14	22.5	22.7	24.6	22.9	23.5	23.4	23.6	23.7
8/23/2022	15	22.6	22.8	24.4	23.6	23.7	23.6	23.7	23.7
8/23/2022	16	22.5	22.8	24.7	24.2	24.0	24.2	23.7	23.5
8/23/2022	17	22.6	22.8	24.5	24.3	23.9	24.1	23.7	23.7
8/23/2022	18	22.6	22.9	23.9	24.5	23.9	24.1	23.7	23.7
8/23/2022	19	22.6	22.8	23.3	24.5	23.9	24.0	23.7	23.6
8/23/2022	20	22.6	22.8	22.6	24.1	23.8	23.9	23.7	23.7
8/23/2022	21	22.5	22.7	22.2	23.7	23.7	23.7	23.7	23.5
8/23/2022	22	22.5	22.7	21.9	23.2	23.5	23.5	23.7	23.6
8/23/2022	23	22.5	22.6	21.8	22.8	23.4	23.4	23.7	23.6
8/23/2022	24	22.5	22.6	21.8	22.3	23.2	23.2	23.7	23.6
8/24/2022	1	22.5	22.6	21.7	22.0	23.1	23.0	23.7	23.5
8/24/2022	2	22.4	22.5	21.7	21.8	23.0	22.9	23.6	23.5
8/24/2022	3	22.5	22.5	21.6	21.7	22.9	22.8	23.5	23.4
8/24/2022	4	22.5	22.5	21.5	21.7	22.8	22.7	23.5	23.4
8/24/2022	5	22.5	22.5	21.4	21.6	22.7	22.6	23.4	23.3
8/24/2022	6	22.5	22.5	21.3	21.5	22.6	22.5	23.5	23.2
8/24/2022	7	23.0	23.3	21.2	21.4	22.9	22.6	23.6	23.8
8/24/2022	8	23.7	23.8	21.3	21.4	23.0	22.8	23.8	23.9
8/24/2022	9	23.8	23.9	21.6	21.4	23.0	22.9	24.0	23.9
8/24/2022	10	23.6	23.8	22.2	21.5	23.0	23.0	24.1	23.9
8/24/2022	11	23.8	24.0	23.2	21.7	23.2	23.2	24.1	24.0
8/24/2022	12	23.8	24.1	24.3	22.1	23.3	23.4	24.2	24.0
8/24/2022	13	24.0	24.2	25.2	22.7	23.6	23.7	24.2	24.1
8/24/2022	14	24.0	24.3	25.8	23.5	24.1	24.1	24.3	24.2
8/24/2022	15	24.2	24.5	26.2	24.4	24.5	24.5	24.4	24.3
8/24/2022	16	24.3	24.5	26.3	25.0	24.7	24.9	24.5	24.4
8/24/2022	17	24.3	24.5	26.1	25.6	24.9	25.1	24.5	24.5
8/24/2022	18	24.4	24.6	25.5	25.9	24.9	25.2	24.6	24.6
8/24/2022	19	24.5	24.6	24.9	25.8	25.0	25.2	24.7	24.6
8/24/2022	20	24.5	24.7	24.3	25.6	25.0	25.1	24.8	24.7
8/24/2022	21	24.5	24.6	23.7	25.2	24.8	24.9	24.8	24.7
8/24/2022	22	24.5	24.6	23.4	24.7	24.7	24.7	24.8	24.7
8/24/2022	23	24.5	24.6	23.2	24.1	24.5	24.5	24.8	24.5
8/24/2022	24	24.4	24.5	23.1	23.7	24.3	24.3	24.7	24.5
8/25/2022	1	24.4	24.5	23.1	23.4	24.2	24.1	24.7	24.5
8/25/2022	2	24.4	24.5	22.9	23.1	24.1	23.9	24.7	24.5
8/25/2022	3	24.4	24.4	22.8	22.9	24.0	23.8	24.6	24.4
8/25/2022	4	24.4	24.4	22.7	22.8	23.8	23.7	24.6	24.3
8/25/2022	5	24.3	24.4	22.6	22.6	23.7	23.6	24.6	24.2
8/25/2022	6	24.3	24.4	22.5	22.5	23.6	23.5	24.5	24.1
8/25/2022	7	24.3	24.3	22.4	22.4	23.7	23.6	24.4	24.5
8/25/2022	8	24.3	24.4	22.5	22.4	23.7	23.6	24.3	24.4
8/25/2022	9	24.2	24.4	22.9	22.4	23.3	23.3	24.3	24.4

Date	Hour	Low Level Outlet Pipe -Auto- (Deg. C)	Top of Reach 1 -Logger- (Deg. C)	End of Reach 1 -Logger- (Deg. C)	End of Reach 3 -Logger- (Deg. C)	Top of R4 Habitat Channel -Logger- (Deg. C)	End of R4 Habitat Channel -Logger- (Deg. C)	Tailrace at Pump Intake -Auto- (Deg. C)	Tailrace at Pump Intake -Logger- (Deg. C)
8/25/2022	10	24.2	24.3	23.5	22.6	23.3	23.3	24.3	24.3
8/25/2022	11	24.2	24.4	24.4	22.9	23.0	23.4	24.3	24.4
8/25/2022	12	24.2	24.4	25.3	23.6	23.5	23.5	24.5	24.4
8/25/2022	13	24.3	24.5	25.8	24.5	24.4	24.5	24.6	24.5
8/25/2022	14	24.4	24.7	26.3	25.4	25.3	25.4	24.6	24.5
8/25/2022	15	24.4	24.7	26.5	25.9	25.9	26.0	24.7	24.6
8/25/2022	16	24.4	24.6	26.3	26.1	26.2	26.2	24.7	24.6
8/25/2022	17	24.4	24.5	26.2	26.2	26.3	26.5	24.8	24.7
8/25/2022	18	24.3	24.5	25.8	26.2	26.3	26.4	24.8	24.7
8/25/2022	19	24.3	24.5	25.3	26.0	26.1	26.2	24.9	24.7
8/25/2022	20	24.4	24.5	24.7	25.7	25.8	25.9	24.9	24.7
8/25/2022	21	24.4	24.5	24.1	25.5	25.6	25.6	24.8	24.7
8/25/2022	22	24.3	24.4	23.7	25.0	25.2	25.3	24.8	24.7
8/25/2022	23	24.3	24.4	23.4	24.6	24.7	24.8	24.8	24.6
8/25/2022	24	24.3	24.3	23.2	24.1	24.3	24.4	24.7	24.6
8/26/2022	1	24.2	24.3	23.0	23.7	23.8	23.9	24.7	24.5
8/26/2022	2	24.2	24.2	22.9	23.3	23.4	23.5	24.6	24.5
8/26/2022	3	24.1	24.1	22.8	23.0	23.2	23.2	24.6	24.5
8/26/2022	4	24.0	24.0	22.7	22.8	23.0	23.0	24.5	24.4
8/26/2022	5	23.8	23.8	22.5	22.6	22.8	22.8	24.5	24.4
8/26/2022	6	23.6	23.6	22.4	22.4	22.6	22.6	24.4	24.3
8/26/2022	7	23.5	23.5	22.3	22.3	22.5	22.4	24.3	24.0
8/26/2022	8	23.4	23.4	22.4	22.4	22.4	22.4	24.2	23.9
8/26/2022	9	23.2	23.3	22.7	22.5	22.4	22.5	24.1	23.7
8/26/2022	10	23.1	23.1	23.2	22.7	22.5	22.7	24.0	23.5
8/26/2022	11	23.0	23.1	23.9	22.8	22.7	23.0	23.9	23.5
8/26/2022	12	23.0	23.3	24.8	23.1	23.0	23.3	23.7	23.5
8/26/2022	13	23.0	23.3	25.5	23.7	23.6	23.8	23.7	23.7
8/26/2022	14	22.9	23.2	25.9	24.4	24.3	24.5	23.8	23.7
8/26/2022	15	23.0	23.3	26.0	25.0	25.0	25.0	23.9	23.7
8/26/2022	16	23.0	23.1	25.9	25.4	25.5	25.5	24.1	24.0
8/26/2022	17	23.1	23.4	25.4	25.6	25.7	25.7	24.2	24.1
8/26/2022	18	23.2	23.4	24.7	25.5	25.6	25.6	24.3	24.3
8/26/2022	19	23.7	24.0	23.9	25.3	25.4	25.3	24.4	24.3
8/26/2022	20	24.0	24.1	23.1	24.7	24.8	24.8	24.5	24.4
8/26/2022	21	24.2	24.2	22.4	24.0	24.2	24.2	24.6	24.4
8/26/2022	22	24.2	24.2	22.0	23.4	23.5	23.6	24.5	24.4
8/26/2022	23	24.1	24.1	21.8	22.8	22.9	23.0	24.4	24.1
8/26/2022	24	24.1	24.1	21.7	22.2	22.3	22.4	24.3	24.1
8/27/2022	1	24.1	24.1	21.7	21.8	21.9	21.9	24.2	24.0
8/27/2022	2	24.1	24.1	21.7	21.4	21.5	21.4	24.2	23.9
8/27/2022	3	24.1	24.1	21.5	21.2	21.3	21.2	24.1	23.9
8/27/2022	4	24.0	24.0	21.5	21.1	21.2	21.0	24.0	23.8
8/27/2022	5	24.0	24.0	21.3	21.0	21.1	20.9	24.0	23.7
8/27/2022	6	24.0	23.9	21.3	20.9	21.1	20.9	24.0	23.7

Date	Hour	Low Level Outlet Pipe -Auto- (Deg. C)	Top of Reach 1 -Logger- (Deg. C)	End of Reach 1 -Logger- (Deg. C)	End of Reach 3 -Logger- (Deg. C)	Top of R4 Habitat Channel -Logger- (Deg. C)	End of R4 Habitat Channel -Logger- (Deg. C)	Tailrace at Pump Intake -Auto- (Deg. C)	Tailrace at Pump Intake -Logger- (Deg. C)
8/27/2022	7	23.9	23.9	21.3	20.9	21.0	20.8	24.0	24.0
8/27/2022	8	23.8	23.8	21.4	20.8	20.9	20.7	23.9	23.9
8/27/2022	9	23.7	23.7	21.5	20.7	20.8	20.7	23.8	23.7
8/27/2022	10	23.5	23.5	21.7	20.7	20.8	20.7	23.8	23.5
8/27/2022	11	23.5	23.5	21.8	20.9	20.9	20.8	23.8	23.5
8/27/2022	12	23.4	23.5	22.4	21.3	21.2	21.2	23.8	23.4
8/27/2022	13	23.4	23.5	23.0	21.6	21.5	21.5	23.7	23.5
8/27/2022	14	23.4	23.5	23.8	21.9	21.9	22.1	23.7	23.5
8/27/2022	15	23.4	23.5	24.3	22.4	22.3	22.4	23.7	23.5
8/27/2022	16	23.4	23.5	24.4	22.8	22.8	22.8	23.7	23.6
8/27/2022	17	23.5	23.5	24.2	23.1	23.1	23.0	23.7	23.6
8/27/2022	18	23.4	23.5	23.7	23.3	23.3	23.1	23.7	23.5
8/27/2022	19	23.4	23.4	22.9	23.1	23.3	23.0	23.6	23.5
8/27/2022	20	23.4	23.4	22.3	22.9	23.1	23.0	23.6	23.5
8/27/2022	21	23.3	23.3	21.8	22.6	22.9	22.8	23.5	23.5
8/27/2022	22	23.3	23.3	21.5	22.2	22.5	22.4	23.5	23.4
8/27/2022	23	23.3	23.3	21.2	21.7	22.0	22.0	23.4	23.1
8/27/2022	24	23.3	23.2	21.1	21.3	21.6	21.5	23.4	23.1
8/28/2022	1	23.2	23.2	20.9	20.9	21.2	21.2	23.3	22.9
8/28/2022	2	23.2	23.1	20.8	20.7	20.9	20.8	23.3	23.0
8/28/2022	3	23.1	23.1	20.8	20.5	20.7	20.6	23.2	23.0
8/28/2022	4	23.1	23.1	20.8	20.3	20.5	20.4	23.2	22.9
8/28/2022	5	23.1	23.0	20.7	20.1	20.4	20.2	23.2	22.9
8/28/2022	6	23.1	23.0	20.7	20.1	20.3	20.1	23.1	22.8
8/28/2022	7	23.0	22.9	20.6	20.0	20.2	20.1	23.1	22.7
8/28/2022	8	23.0	23.0	20.7	20.2	20.2	20.0	23.0	22.7
8/28/2022	9	23.0	23.0	21.0	20.3	20.2	20.2	23.0	22.7
8/28/2022	10	23.0	23.1	21.5	20.4	20.4	20.4	23.0	22.6
8/28/2022	11	23.0	23.1	22.3	20.7	20.6	20.8	23.1	22.7
8/28/2022	12	23.1	23.2	23.3	21.1	20.9	21.1	23.2	22.9
8/28/2022	13	23.1	23.2	24.1	21.7	21.6	21.7	23.2	23.3
8/28/2022	14	23.1	23.3	24.7	22.6	22.4	22.5	23.3	23.5
8/28/2022	15	23.1	23.3	25.0	23.3	23.2	23.2	23.4	23.5
8/28/2022	16	23.2	23.3	25.0	23.8	23.9	23.9	23.5	23.5
8/28/2022	17	23.2	23.3	24.8	24.2	24.3	24.3	23.5	23.4
8/28/2022	18	23.2	23.3	24.2	24.4	24.5	24.5	23.5	23.4
8/28/2022	19	23.2	23.2	23.5	24.3	24.3	24.3	23.4	23.3
8/28/2022	20	23.2	23.2	22.9	24.0	24.0	24.0	23.4	23.1
8/28/2022	21	23.2	23.2	22.2	23.6	23.7	23.7	23.3	23.0
8/28/2022	22	23.2	23.2	21.7	23.1	23.2	23.3	23.2	23.0
8/28/2022	23	23.2	23.2	21.5	22.5	22.7	22.8	23.1	22.9
8/28/2022	24	23.2	23.1	21.3	22.0	22.1	22.3	23.0	22.8
8/29/2022	1	23.2	23.2	21.3	21.5	21.6	21.7	23.0	22.8
8/29/2022	2	23.2	23.1	21.2	21.2	21.3	21.3	22.9	22.7
8/29/2022	3	23.2	23.1	21.2	20.9	21.1	21.1	23.0	22.7

Date	Hour	Low Level Outlet Pipe -Auto- (Deg. C)	Top of Reach 1 -Logger- (Deg. C)	End of Reach 1 -Logger- (Deg. C)	End of Reach 3 -Logger- (Deg. C)	Top of R4 Habitat Channel -Logger- (Deg. C)	End of R4 Habitat Channel -Logger- (Deg. C)	Tailrace at Pump Intake -Auto- (Deg. C)	Tailrace at Pump Intake -Logger- (Deg. C)
8/29/2022	4	23.2	23.1	21.1	20.8	21.0	20.9	23.0	22.7
8/29/2022	5	23.2	23.1	21.1	20.7	20.9	20.8	23.0	22.7
8/29/2022	6	23.1	23.1	21.0	20.6	20.8	20.7	23.0	22.7
8/29/2022	7	23.1	23.0	20.9	20.5	20.7	20.6	23.1	23.2
8/29/2022	8	23.1	23.1	21.0	20.7	20.7	20.6	23.2	23.2
8/29/2022	9	23.0	23.1	21.4	20.9	20.7	20.7	23.3	23.1
8/29/2022	10	23.0	23.1	21.9	21.0	20.9	21.0	23.3	23.1
8/29/2022	11	23.0	23.1	22.7	21.2	21.1	21.3	23.4	23.2
8/29/2022	12	23.1	23.2	23.6	21.6	21.4	21.7	23.4	23.2
8/29/2022	13	23.1	23.3	24.5	22.3	22.1	22.3	23.5	23.3
8/29/2022	14	23.2	23.4	25.2	23.1	23.0	23.1	23.5	23.4
8/29/2022	15	23.3	23.5	25.5	23.9	23.8	23.9	23.6	23.4
8/29/2022	16	23.4	23.5	25.6	24.4	24.5	24.5	23.6	23.5
8/29/2022	17	23.4	23.5	25.4	24.9	25.0	25.0	23.6	23.5
8/29/2022	18	23.4	23.5	24.8	25.2	25.2	25.2	23.6	23.5
8/29/2022	19	23.3	23.4	24.1	25.1	25.2	25.2	23.5	23.4
8/29/2022	20	23.2	23.2	23.5	24.8	24.9	25.0	23.5	23.4
8/29/2022	21	23.2	23.2	22.9	24.4	24.5	24.6	23.5	23.4
8/29/2022	22	23.1	23.1	22.5	23.9	24.0	24.2	23.5	23.3
8/29/2022	23	23.0	22.9	22.2	23.3	23.4	23.6	23.4	23.3
8/29/2022	24	22.9	22.9	21.9	22.8	22.9	23.0	23.4	23.2
8/30/2022	1	22.9	22.9	21.7	22.3	22.5	22.6	23.3	23.2
8/30/2022	2	22.9	22.8	21.5	21.9	22.1	22.1	23.3	23.2
8/30/2022	3	22.8	22.7	21.3	21.6	21.8	21.8	23.2	23.1
8/30/2022	4	22.7	22.7	21.2	21.3	21.5	21.5	23.2	23.1
8/30/2022	5	22.6	22.6	21.1	21.1	21.3	21.2	23.1	23.1
8/30/2022	6	22.6	22.5	20.9	20.9	21.1	21.0	23.1	23.0
8/30/2022	7	22.5	22.4	20.8	20.7	20.9	20.9	23.0	22.8
8/30/2022	8	22.5	22.5	20.8	20.8	20.8	20.8	23.0	22.8
8/30/2022	9	22.4	22.5	21.2	21.0	20.9	20.9	23.0	22.7
8/30/2022	10	22.5	22.6	21.8	21.1	21.0	21.1	23.0	22.7
8/30/2022	11	22.5	22.6	22.6	21.3	21.2	21.4	23.0	22.7
8/30/2022	12	22.5	22.7	23.4	21.6	21.5	21.7	22.9	22.7
8/30/2022	13	22.5	22.7	24.1	22.2	22.1	22.2	22.9	22.8
8/30/2022	14	22.5	22.7	24.7	23.1	23.0	23.1	23.0	22.8
8/30/2022	15	22.5	22.8	25.2	23.8	23.7	23.9	22.9	22.9
8/30/2022	16	22.6	22.8	25.2	24.3	23.5	23.9	23.2	23.1
8/30/2022	17	22.6	22.7	25.0	24.8	23.6	24.0	23.3	23.2
8/30/2022	18	22.8	22.9	24.6	25.0	23.7	24.0	23.4	23.2
8/30/2022	19	22.9	23.0	23.9	24.9	23.7	24.0	23.4	23.3
8/30/2022	20	22.8	22.9	23.2	24.7	23.8	24.0	23.5	23.3
8/30/2022	21	22.9	22.8	22.6	24.3	23.7	23.8	23.5	23.3
8/30/2022	22	22.9	23.0	22.3	23.8	23.5	23.6	23.4	23.3
8/30/2022	23	22.9	22.8	22.0	23.3	23.3	23.4	23.4	23.2
8/30/2022	24	22.8	22.9	21.8	22.7	23.1	23.1	23.3	23.2

Date	Hour	Low Level Outlet Pipe -Auto- (Deg. C)	Top of Reach 1 -Logger- (Deg. C)	End of Reach 1 -Logger- (Deg. C)	End of Reach 3 -Logger- (Deg. C)	Top of R4 Habitat Channel -Logger- (Deg. C)	End of R4 Habitat Channel -Logger- (Deg. C)	Tailrace at Pump Intake -Auto- (Deg. C)	Tailrace at Pump Intake -Logger- (Deg. C)
8/31/2022	1	22.8	22.8	21.7	22.3	23.0	22.9	23.3	23.2
8/31/2022	2	22.6	22.6	21.6	22.0	22.8	22.7	23.3	23.1
8/31/2022	3	22.6	22.6	21.5	21.7	22.7	22.6	23.2	23.1
8/31/2022	4	22.5	22.4	21.4	21.5	22.6	22.5	23.2	23.1
8/31/2022	5	22.4	22.3	21.2	21.4	22.5	22.4	23.1	23.1
8/31/2022	6	22.3	22.3	21.1	21.2	22.4	22.3	23.0	22.9
8/31/2022	7	22.3	22.3	21.0	21.1	22.3	22.1	22.9	22.7
8/31/2022	8	22.3	22.3	21.1	21.1	22.2	22.0	22.8	22.7
8/31/2022	9	22.2	22.3	21.4	21.2	22.2	22.1	22.7	22.6
8/31/2022	10	22.2	22.3	21.8	21.3	22.2	22.1	22.7	22.4
8/31/2022	11	22.2	22.3	22.2	21.3	22.1	22.0	22.8	22.4
8/31/2022	12	22.2	22.4	22.9	21.7	22.3	22.3	22.8	22.4
8/31/2022	13	22.3	22.5	23.7	22.2	22.5	22.6	22.8	22.5
8/31/2022	14	22.3	22.4	24.2	22.8	22.8	22.9	22.8	22.7
8/31/2022	15	22.4	22.5	24.1	23.2	22.9	23.0	22.9	22.8
8/31/2022	16	22.5	22.7	24.1	23.8	23.2	23.4	23.0	22.9
8/31/2022	17	22.6	22.7	24.1	24.0	23.4	23.6	23.0	23.0
8/31/2022	18	22.6	22.8	23.8	24.1	23.4	23.6	23.1	23.1
8/31/2022	19	22.5	22.7	23.4	24.0	23.4	23.6	23.1	23.1
8/31/2022	20	22.5	22.6	23.0	23.8	23.3	23.4	23.2	23.1
8/31/2022	21	22.5	22.5	22.6	23.6	23.2	23.4	23.2	23.0
8/31/2022	22	22.5	22.5	22.2	23.3	23.1	23.2	23.1	22.9
8/31/2022	23	22.4	22.4	22.0	23.0	23.0	23.0	23.1	22.9
8/31/2022	24	22.3	22.3	21.8	22.7	22.9	22.9	23.1	22.9