

From: [Hopkins, Scott](#)
To: [Ashley Rawhouser](#); [Bill Towey](#); [Bitterman, Deborah](#); [Bob Rose](#); [Breean Zimmerman](#); [Buehn, Scott](#); [Campbell, Rob](#); [Carl Merkle](#); [Clement, Marcie](#); [David Bowen](#); [Emily Johnson](#); [Graham Simon](#); [Hays, Steve](#); [Hugh Anthony](#); [Jim Pacheco](#); [Justin Yeager](#); [Kari Grover Wier](#); [M. Cooney](#); [Mark Peterschmidt](#); [Nick Elwell](#); [Nona Snell](#); [Osborn, Jeff](#); [Paul Willard](#); [Phil Archibald](#); [Richard Uhlhorn](#); [Smith, Michelle](#); [Sokolowski, Rosana](#); [Steve Lewis](#); [Thomas O'Keefe](#); [Tom Ernsberger](#); [Travis Maitland](#); [Underwood, Alene](#); [Von Reis, Charles](#); [Willard, Catherine](#)
Cc: [West, Todd](#)
Subject: Chelan River Temperature Monitoring Data - 2017 4th Quarter Report
Date: Monday, January 29, 2018 11:57:41 AM
Attachments: [2017 Chelan River Daily Average Temperature Data 4th Quarterly Report.pdf](#)
[2017 Chelan River Temperature Hourly Data 4th Quarterly 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)
Lake Chelan Sportsman Association
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: 4th Quarter

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

Water temperature monitoring data for the fourth quarter 2017 are provided in the attached files. This information will be posted to the Lake Chelan Implementation web page under resource documents.

Data from individual temperature loggers have not been downloaded due to inclement weather. This data, when collected, will be included in the Annual Temperature and Flow Report. It should also be noted that on October 13th of 2017 during the 12:00 hour a scheduled calibration of the automated "Tailrace at Pump Intake" temperature probe was conducted. No temperature was recorded during the calibration and all subsequent temperature readings have been tracking slightly above historic trends. Another calibration has been scheduled for this probe.

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

Scott Hopkins
Fisheries Biologist
Chelan County PUD
509-661-4763 (office)
509-630-2708 (cell)
Scott.Hopkins@chelanpud.org

Chelan River 2017 Daily Average Temperature Data Report - 4th Quarter

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 Reach 4 -Logger- (Deg. C)	End of Reach 4 -Logger- (Deg. C)	Tailrace at Pump Intake -Auto- (Deg. C)	Tailrace at Pump Intake -Logger- (Deg. C)
10/1/2017	17.5	17.5	16.7	16.3	16.4	16.2	17.6	17.5
10/2/2017	17.3	17.2	16.4	16.0	16.0	15.9	17.3	17.3
10/3/2017	17.0	16.9	16.2	15.8	15.8	15.8	17.1	17.0
10/4/2017	16.9	16.8	16.0	15.6	15.6	15.4	16.9	16.9
10/5/2017	16.8	16.7	15.9	15.5	15.5	15.5	16.8	16.8
10/6/2017	16.6	16.5	15.4	15.1	15.2	15.1	16.6	16.5
10/7/2017	15.9	15.8	15.2	14.8	14.8	14.8	15.9	15.8
10/8/2017	15.6	15.5	15.0	14.7	14.7	14.6	15.6	15.6
10/9/2017	15.6	15.5	14.8	14.4	14.4	14.3	15.6	15.6
10/10/2017	15.6	15.6	14.7	14.4	14.4	14.1	15.7	15.7
10/11/2017	15.2	15.1	14.0	13.5	13.6	13.2	15.2	15.2
10/12/2017	14.8	14.7	13.5	13.0	13.5	13.0	14.9	14.9
10/13/2017	14.7	14.6	13.8	13.5	14.1	13.8	14.9	14.8
10/14/2017	14.5	14.4	13.3	12.9	14.3	14.1	15.1	14.6
10/15/2017	14.4	14.3	13.6	13.2	14.2	14.1	14.9	14.5
10/16/2017	14.6	14.5	13.9	13.5	14.4	14.4	15.1	14.7
10/17/2017	14.6	14.6	14.1	13.8	14.5	14.5	15.2	14.7
10/18/2017	14.5	14.4	13.8	13.4	14.3	14.2	15.1	14.5
10/19/2017	14.4	14.4	14.1	13.9	14.4	14.4	15.0	14.5
10/20/2017	14.3	14.3	13.8	13.6	14.2	14.2	14.9	14.4
10/21/2017	14.0	13.9	12.8	12.5	13.7	13.6	14.5	14.0
10/22/2017	13.7	13.7	13.2	12.9	13.6	13.5	14.3	13.8
10/23/2017	13.8	13.8	13.5	13.2	13.8	13.7	14.4	13.9
10/24/2017	13.9	13.8	13.3	13.0	13.7	13.7	14.4	13.9
10/25/2017	13.7	13.8	12.7	12.4	13.6	13.4	14.3	13.8
10/26/2017	13.7						14.3	
10/27/2017	13.7						14.4	
10/28/2017	13.8						14.4	
10/29/2017	13.6						14.3	
10/30/2017	13.4						14.0	
10/31/2017	13.1						13.6	
11/1/2017	12.8						13.4	
11/2/2017	12.7						13.3	
11/3/2017	12.4						12.9	
11/4/2017	11.7						12.1	
11/5/2017	11.0						11.5	
11/6/2017	10.6						11.0	
11/7/2017	10.3						10.8	
11/8/2017	10.4						10.9	
11/9/2017	10.6						11.1	
11/10/2017	10.6						11.2	
11/11/2017	10.4						10.9	
11/12/2017	10.3						10.9	
11/13/2017	10.4						11.1	
11/14/2017	10.3						10.9	
11/15/2017	10.3						10.9	
11/16/2017	10.3						10.8	

11/17/2017	10.1						10.7	
11/18/2017	10.0						10.6	
11/19/2017	9.8						10.4	
11/20/2017	9.8						10.3	
11/21/2017	9.6						10.1	
11/22/2017	9.6						10.2	
11/23/2017	9.8						10.4	
11/24/2017	9.7						10.4	
11/25/2017	9.6						10.2	
11/26/2017	9.6						10.2	
11/27/2017	9.5						10.1	
11/28/2017	9.3						9.9	
11/29/2017	9.0						9.5	
11/30/2017	9.0						9.6	
12/1/2017	8.8						9.3	
12/2/2017	8.7						9.2	
12/3/2017	8.5						9.1	
12/4/2017	8.3						8.8	
12/5/2017	8.0						8.5	
12/6/2017	7.8						8.4	
12/7/2017	7.8						8.3	
12/8/2017	7.8						8.3	
12/9/2017	7.6						8.1	
12/10/2017	7.5						8.1	
12/11/2017	7.4						8.0	
12/12/2017	7.2						7.7	
12/13/2017	7.3						7.8	
12/14/2017	7.2						7.8	
12/15/2017	7.3						7.9	
12/16/2017	7.3						7.9	
12/17/2017	7.3						7.9	
12/18/2017	7.1						7.7	
12/19/2017	7.0						7.5	
12/20/2017	6.8						7.4	
12/21/2017	6.4						6.9	
12/22/2017	6.1						6.6	
12/23/2017	5.8						6.2	
12/24/2017	5.3						5.7	
12/25/2017	5.4						5.9	
12/26/2017	5.3						5.8	
12/27/2017	5.2						5.7	
12/28/2017	5.1						5.6	
12/29/2017	5.0						5.5	
12/30/2017	5.0						5.5	
12/31/2017	4.9						5.4	