

Electronically filed July 30, 2021

Ms. Kimberly D. Bose, Secretary	Mr. John Dadoly
Federal Energy Regulatory Commission	Oregon Department of Environmental Quality
888 First Street, NE	700 SE Emigrant Ave – Suite 330
Washington, DC 20426	Pendleton, OR 97801

Subject: Wallowa Falls Hydroelectric Project (FERC No. P-308) 2021 Forebay Flushing Report

Dear Addressee:

The Federal Energy Regulatory Commission (Commission) issued a new operating license for the Wallowa Falls Hydroelectric Project (Project) January 5, 2017. Annual flushing of the Project forebay is permitted under Appendix A, Condition 5 of the license. On August 2, 2017 the Commission issued an Order Modifying and Approving the Turbidity Monitoring Plan for Forebay Flushing under Appendix B, Condition 10 of the Project license. This letter report satisfies the annual reporting requirement for forebay flushing.

PacifiCorp flushed the forebay for 66.5 hours commencing at 3:00 PM on June 11 and completing at 9:30 AM on June 14, 2021. Prior to the flush, PacifiCorp notified agency stakeholders¹ via e-mail on May 31, 2021 of the planned flushing event. Agency stakeholders declined the offer of a pre-flush coordination conference call.

The final Turbidity Monitoring Plan for Forebay Flushing, dated June 2, 2017, requires that natural inflow to the Project be greater than or equal to 15 cubic feet per second (cfs) for flushing to occur. The flow in the lower bypassed reach of East Fork Wallowa River, as measured at the U.S. Geological Survey (USGS) #13325000, at 8:00 AM June 12, 2021, was 38.2 cfs. Bypassed reach flows remained greater than 34 cfs for the duration of the 66.5-hour flushing event.

For forebay flushing the following general sequence of events occurred:

June 10, 2021

PacifiCorp's contract biologist mobilized to site and deployed two In-Situ datasondes in the East Fork Wallowa River at each the upstream and downstream monitoring sites. The upstream site is located upstream of the inlet to the Project forebay and downstream site is located at the USGS gage site.

¹ Oregon Department of Environmental Quality, Oregon Department of Fish and Wildlife, U.S. Fish and Wildlife Service and U.S. Forest Service.

A graph and hourly turbidity data recorded at the upper and lower monitoring sites for the period of June 10, 2021 through June 16, 2021 are provided in Attachment 1 to this letter report.

June 11, 2021

- PacifiCorp personnel mobilized to the Project forebay, shut down the generating unit and initiated penstock head gate closure.
- Personnel waited for the penstock to drain and then closed the penstock isolation valve downstream of the steel wye and opened the bypass valve on the upstream side of the wye².
- Personnel re-opened the penstock head gate and the slide gate on the 16-inch low level outlet pipe to initiate forebay draining and flushing.
- Once the forebay was drained, personnel used trash pumps with a suction hose to mobilize sediment into the water flowing through the center of the forebay and discharging to the bypass reach.

June 14, 2021

- The forebay flush was completed and the low level outlet slide gate, penstock head gate and penstock bypass valve were closed.
- The penstock isolation valve was opened and the penstock head gate was opened to re-water the penstock for generation.
- Generation was resumed.

June 17, 2021

- In-Situ datasondes were removed from the East Fork Wallowa River upstream and downstream locations.
- PacifiCorp's contract biologist conducted a survey of the lower East Fork of the Wallowa River searching for any fish that may have been impacted by flushing activities. No live, dead or injured fish were located.

With the use of both the low level outlet pipe and the penstock with the wye installed in 2019, we were able to drain the Project forebay and successfully mobilize accumulated sediment into the East Fork Wallowa River below the Project dam (see Attachment 2: Photos). Throughout the flushing period

² As described in the 2020 Forebay Flushing Report, the penstock wye with knife gate valves (penstock isolation and bypass valves) was installed during the intake rebuild project of 2019 to allow more water to be bypassed through the dam during annual forebay flushing

Kimberly D. Bose – FERC Wallowa Falls – 2021 Forebay Flushing Report July 30, 2021 Page 3

hourly turbidity was recorded at the upstream and downstream monitoring site (see Attachment 1: Turbidity Data).

This letter report and its attachments are being filed electronically. If you have any questions please contact Briana Weatherly at 503-819-2281 or Briana.weatherly@pacificorp.com.

Sincerely,

Mark Sturtevant Mark Sturtevant (Jul 29, 2021 10:44 PDT)

Mark A. Sturtevant Vice President, Renewable Resources

MAS: BW: km

Encl:	Letter - Public
	Attachment 1 – Wallowa Falls 2021 Forebay Flush Photos - Public
	Attachment 2 - Wallowa Falls 2021 Forebay Flush Turbidity Data - Public

eFile:	Kimberly D. Bose, Secretary Via eLibrary at <u>www.ferc.gov</u>	eMail: John Dadoly, ODEQ DADOLY.John@deq.state.or.us
Cc:	Gretchen Sausen, USFWS	Cc: Adrian Cuzick, USDA- FS
Cc:	Aaron Maxwell, ODFW	

Attachment 1 – Wallowa Falls Forebay Flush Photos



Photo 1 – Wallowa Falls Forebay – some sediment cutting along edges during draining on June 11, 2021



Photo 2 – Wallowa Falls Forebay: Low forebay June 11, 2021



Photo 3:Wallowa Falls Forebay - June 12, 2021



Pacific Power | Rocky Mountain Power 825 NE Multnomah, Suite 1800 Portland, Oregon 97232

Electronically filed August 3, 2021

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

Subject: Wallowa Falls Hydroelectric Project (FERC No. P-308) 2021 Forebay Flushing Report – Attachment 2 REVISION

Dear Ms. Bose:

Upon receipt of the Commission's July 30, 2021 email acknowledging the 2021 Forebay Flushing Report (Report) filing for the Wallowa Falls Hydroelectric Project we discovered an error that the "upstream" and "downstream" turbidity plot lines were mislabeled in the graph legend in Attachment 2 of the Report.

We apologize for any inconvenience associated with this clerical mistake and have enclosed the correct Attachment 2 of the 2021 Forebay Flushing Report for your review.

This letter and its attachment are being filed electronically. If you have any questions, please contact Briana Weatherly at 503-819-2281 or Briana.weatherly@pacificorp.com.

Sincerely,

urtevant Mark Sturtevant (Aug 2, 2021 12:12 PDT)

Mark A. Sturtevant Vice President, Renewable Resources

MAS: BW: km

Kimberly D. Bose – FERC Wallowa Falls – 2021 Forebay Flushing Report (REVISION) August 3, 2021 Page 2

Encl:	Attachment 2 – Wallowa Falls 2021 Forebay Flush Turbidity Data (REVISED)
	- Public

eFile:	Kimberly D. Bose, Secretary
	Via eLibrary at <u>www.ferc.gov</u>

Attachment 2 – Wallowa Falls Forebay Flush Turbidity Data



Date/Time	Downstream Turbidity (NTU)	Upstream Turbidity (NTU)
6/9/2021 22:48	1.449	3.983*
6/9/2021 23:48	2.017	52.128*
6/10/2021 0:48	6.476	62.544*
6/10/2021 1:48	0.762	207.51*
6/10/2021 2:48	1.411	538.07*
6/10/2021 3:48	1.513	341.57*
6/10/2021 4:48	1.443	311.37*
6/10/2021 5:48	1.605	198.51*
6/10/2021 6:48	1.555	328.63*
6/10/2021 7:48	4.455	129.92*
6/10/2021 8:48	1.925	53.89*
6/10/2021 9:48	2.786	180.51*
6/10/2021 10:48	1.247	112.28*
6/10/2021 11:48	1.282	79.749*
6/10/2021 12:48	2.134	50.107*
6/10/2021 13:48	2.23	20.911*
6/10/2021 14:48	0.824	3.309
6/10/2021 15:48	0.681	7.977
6/10/2021 16:48	0.569	1.541
6/10/2021 17:48	1.194	1.978
6/10/2021 18:48	1.09	1.476
6/10/2021 19:48	0.814	6.352
6/10/2021 20:48	1.564	3.383
6/10/2021 21:48	1.79	2.899
6/10/2021 22:48	1.613	15.206*
6/10/2021 23:48	1.372	89.206*
6/11/2021 0:48	1.274	4.955
6/11/2021 1:48	0.984	3.582
6/11/2021 2:48	1.138	6.237
6/11/2021 3:48	1.149	2.837
6/11/2021 4:48	1.679	3.382
6/11/2021 5:48	0.782	4.094
6/11/2021 6:48	0.797	2.503
6/11/2021 7:48	0.674	2.418
6/11/2021 8:48	0.722	3.362

Table 1 – Wallowa Falls 2020 Forebay Flush: Turbidity Data in East Fork Wallowa River *These reading appear to be errors and are not included in the graphed data set. The gray shaded portion of the table represents data recorded during the 66.5 hour active flush period.

	Downstream Turbidity	Upstream Turbidity
Date/Time	(NTU)	(NTU)
6/11/2021 9:48	0.486	1.664
6/11/2021 10:48	0.475	4.912
6/11/2021 11:48	0.602	1.286
6/11/2021 12:48	0.59	2.44
6/11/2021 13:48	0.908	1.333
6/11/2021 14:48	0.47	1.031
6/11/2021 15:48	9.337	1.537
6/11/2021 16:48	21.392	1.703
6/11/2021 17:48	5.263	1.678
6/11/2021 18:48	2.882	0.917
6/11/2021 19:48	4.822	3.104
6/11/2021 20:48	19.476	2.231
6/11/2021 21:48	12.349	2.712
6/11/2021 22:48	93.562	1.589
6/11/2021 23:48	52.049	3.595
6/12/2021 0:48	17.164	2.607
6/12/2021 1:48	9.672	3.63
6/12/2021 2:48	5.091	1.756
6/12/2021 3:48	7.701	1.656
6/12/2021 4:48	6.595	3.655
6/12/2021 5:48	3.039	1.432
6/12/2021 6:48	3.532	1.311
6/12/2021 7:48	4.828	1.629
6/12/2021 8:48	4.07	1.39
6/12/2021 9:48	11.065	9.46
6/12/2021 10:48	7.223	4.843
6/12/2021 11:48	32.621	6.809
6/12/2021 12:48	11.183	3.426
6/12/2021 13:48	5.759	3.302
6/12/2021 14:48	8.085	3.434
6/12/2021 15:48	4.259	3.284
6/12/2021 16:48	12.754	1.847
6/12/2021 17:48	11.693	2.97
6/12/2021 18:48	35.112	2.773
6/12/2021 19:48	9.137	2.618
6/12/2021 20:48	7.89	2.911
6/12/2021 21:48	39.423	1.859
6/12/2021 22:48	59.865	1.209
6/12/2021 23:48	101.26	6.966
6/13/2021 0:48	14.672	3.373
6/13/2021 1:48	74.808	4.838
6/13/2021 2:48	5.89	1.521
6/13/2021 3:48	0	1.018

	Downstream Turbidity	Upstream Turbidity
Date/Time		(NTU)
6/13/2021 4:48	4.113	2.439
6/13/2021 5:48	5.556	1.984
6/13/2021 6:48	24.575	1.536
6/13/2021 7:48	3.643	1.898
6/13/2021 8:48	53.258	1.766
6/13/2021 9:48	4.748	2.243
6/13/2021 10:48	2.71	2.071
6/13/2021 11:48	25.973	2.169
6/13/2021 12:48	2.175	1.714
6/13/2021 13:48	3.429	1.126
6/13/2021 14:48	2.767	1.417
6/13/2021 15:48	2.339	1.599
6/13/2021 16:48	75.941	2.204
6/13/2021 17:48	79.717	2.95
6/13/2021 18:48	71.723	1.688
6/13/2021 19:48	8.966	0.859
6/13/2021 20:48	7.328	2.519
6/13/2021 21:48	123.16	1.597
6/13/2021 22:48	60.937	2.512
6/13/2021 23:48	45.415	4.857
6/14/2021 0:48	13.91	2.152
6/14/2021 1:48	13.99	1.804
6/14/2021 2:48	26.753	4.615
6/14/2021 3:48	5.622	2.204
6/14/2021 4:48	0	4.037
6/14/2021 5:48	52.237	3.859
6/14/2021 6:48	5.596	3.174
6/14/2021 7:48	6.391	1.478
6/14/2021 8:48	6.813	2.093
6/14/2021 9:48	16.575	2.008
6/14/2021 10:48	3.299	2.952
6/14/2021 11:48	3.784	1.758
6/14/2021 12:48	4.316	2.189
6/14/2021 13:48	5.72	2.126
6/14/2021 14:48	6.139	3.895
6/14/2021 15:48	19.354	1.446
6/14/2021 16:48	13.706	1.285
6/14/2021 17:48	11.916	3.249
6/14/2021 18:48	7.86	2.18
6/14/2021 19:48	6.398	1.245
6/14/2021 20:48	4.868	5.104
6/14/2021 21:48	6.979	1.662
6/14/2021 22:48	4.357	3.986

	Downstream Turbidity	Upstream Turbidity
Date/Time	(NTU)	(NTU)
6/14/2021 23:48	29.804	3.573
6/15/2021 0:48	9.342	2.47
6/15/2021 1:48	11.944	2.79
6/15/2021 2:48	17.025	7.6
6/15/2021 3:48	68.229	6.002
6/15/2021 4:48	6.372	3.335
6/15/2021 5:48	8.778	6.789
6/15/2021 6:48	13.34	8.454
6/15/2021 7:48	10.516	4.735
6/15/2021 8:48	13.085	3.311
6/15/2021 9:48	7.984	5.849
6/15/2021 10:48	29.081	5.762
6/15/2021 11:48	5.298	5.616
6/15/2021 12:48	6.827	6.664
6/15/2021 13:48	6.911	4.249
6/15/2021 14:48	7.006	3.712
6/15/2021 15:48	4.802	3.333
6/15/2021 16:48	35.354	4.075
6/15/2021 17:48	5.046	6.926
6/15/2021 18:48	3.842	3.436
6/15/2021 19:48	3.426	3.031
6/15/2021 20:48	6.971	4.232
6/15/2021 21:48	7.718	3.267
6/15/2021 22:48	6.305	2.145
6/15/2021 23:48	67.728	2.18
6/16/2021 0:48	9.607	5.691
6/16/2021 1:48	20.08	2.401
6/16/2021 2:48	2.851	3.486
6/16/2021 3:48	5.86	2.341
6/16/2021 4:48	8.153	2.657
6/16/2021 5:48	4.854	2.019
6/16/2021 6:48	138.68	4.634
6/16/2021 7:48	4.381	2.721
6/16/2021 8:48	3.83	1.833
6/16/2021 9:48	7.403	2.452
6/16/2021 10:48	8.716	3.348
6/16/2021 11:48	4.988	3.566
6/16/2021 12:48	4.593	2.618
6/16/2021 13:48	3.734	2.236
6/16/2021 14:48	5.069	2.769
6/16/2021 15:48	3.664	1.93
6/16/2021 16:48	1.636	1.842
6/16/2021 17:48	2.163	4.07

Date/Time	Downstream Turbidity	Upstream Turbidity (NTU)
6/16/2021 18:48	0.59	1.581