

Electronically filed August 28, 2019

Ms. Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426	Mr. John Dadoly Oregon Department of Environmental Quality 700 SE Emigrant Ave – Suite 330 Pendleton, OR 97801
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**Subject:     Wallowa Falls Hydroelectric Project (FERC No. P-308)  
              2019 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 72 hours commencing at 8:08 AM on June 2 and completing at 7:30 AM on June 5, 2019. Prior to the flush, PacifiCorp notified agency stakeholders<sup>1</sup> via e-mail on May 21, 2019 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 2, 2019, was 73 cfs. Bypassed reach flows remained greater than 62 cfs, and predominantly above 75 cfs, for the duration of the 72 hour flushing event.

For forebay flushing the following general sequence of events occurred:

May 29: PacifiCorp personnel mobilized to the Project forebay and closed and tagged out the penstock intake gate and took the hydroelectric generator offline.

May 29: PacifiCorp's biologist, with the assistance of our contracted biologist conducted a fish salvage of the Project tailrace per the final Fish Salvage plan dated May 2, 2017.

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<sup>1</sup> Oregon Department of Environmental Quality, Oregon Department of Fish and Wildlife, U.S. Fish and Wildlife Service and U.S. Forest Service.

May 30, 2019: PacifiCorp's contract biologist mobilized to site and deployed In-Situ datasondes in the East Fork Wallowa River upstream of the inlet to the Project forebay and downstream of the Project dam at the USGS gage site. Two datasondes were deployed at each the upper and lower monitoring sites to ensure the collection of representative data for the flushing period. Graphs and hourly turbidity data for the period of May 31, 2019 through June 6, 2019 are provided in Attachment 1 to this letter report.

June 2, 2019: Weekly Brothers, Inc., PacifiCorp's contractor, mobilized to the Project forebay and opened the low level outlet gate to 100 percent to allow all inflow, within pipe capacity, to flow through the dam via the pipe.

June 3, 2019: Weekly Brothers, Inc. installed a 20-inch siphon pipe to pass the remainder of the natural inflow to the Project forebay that was greater than the capacity of the low level outlet pipe. The siphon was turned on at 10:15 AM (Attachment 2-Photo 1 and 3).

June 5, 2019: The forebay flush was completed and in-water work for the Wallowa Falls Intake Modification Project began.

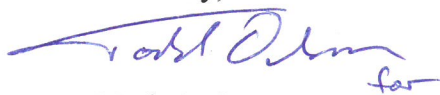
June 7, 2018: In-Situ datasondes were removed from the East Fork Wallowa River upstream and downstream locations.

With the use of both the low level outlet pipe and the temporary siphon pipe, Weekly Brothers, Inc. was able to drain the Project forebay (Attachment 2-Photo 2) which naturally mobilized accumulated sediment into the East Fork Wallowa River below the Project dam.

Throughout the flushing period background turbidity, as measured at the upper monitoring site, averaged 5.65 NTU, while downstream turbidity, as measured at the downstream monitoring site, averaged 13.07 NTU. In-water work for the intake modification project began at the end of the flushing period on June 5, 2019.

This letter report and its attachments are being filed electronically. If you have any questions please contact Briana Weatherly at 503-813-7039 or [Briana.weatherly@pacificorp.com](mailto:Briana.weatherly@pacificorp.com).

Sincerely,



Mark A. Sturtevant  
Managing Director, Renewable Resources

MAS: BW: km

<b>Encl:</b>	Letter – Public
	Attachment 1 – Wallowa Falls 2019 Forebay Flush Turbidity Data - Public
	Attachment 2 – Wallowa Falls 2019 Forebay Flush Photos - Public

<b>eFile:</b>	Kimberly D. Bose, Secretary Via eLibrary at <a href="http://www.ferc.gov">www.ferc.gov</a>	<b>eMail:</b> John Dadoly, ODEQ DADOLY.John@deq.state.or.us
<b>Cc:</b>	Gretchen Sausen, USFWS	<b>Cc:</b> Adrian Cuzick, USDA- FS
<b>Cc:</b>	Elizabeth A. O. Moats, ODFW	

Attachment 1

# Attachment 1 – Wallowa Falls Forebay Flush Turbidity Data

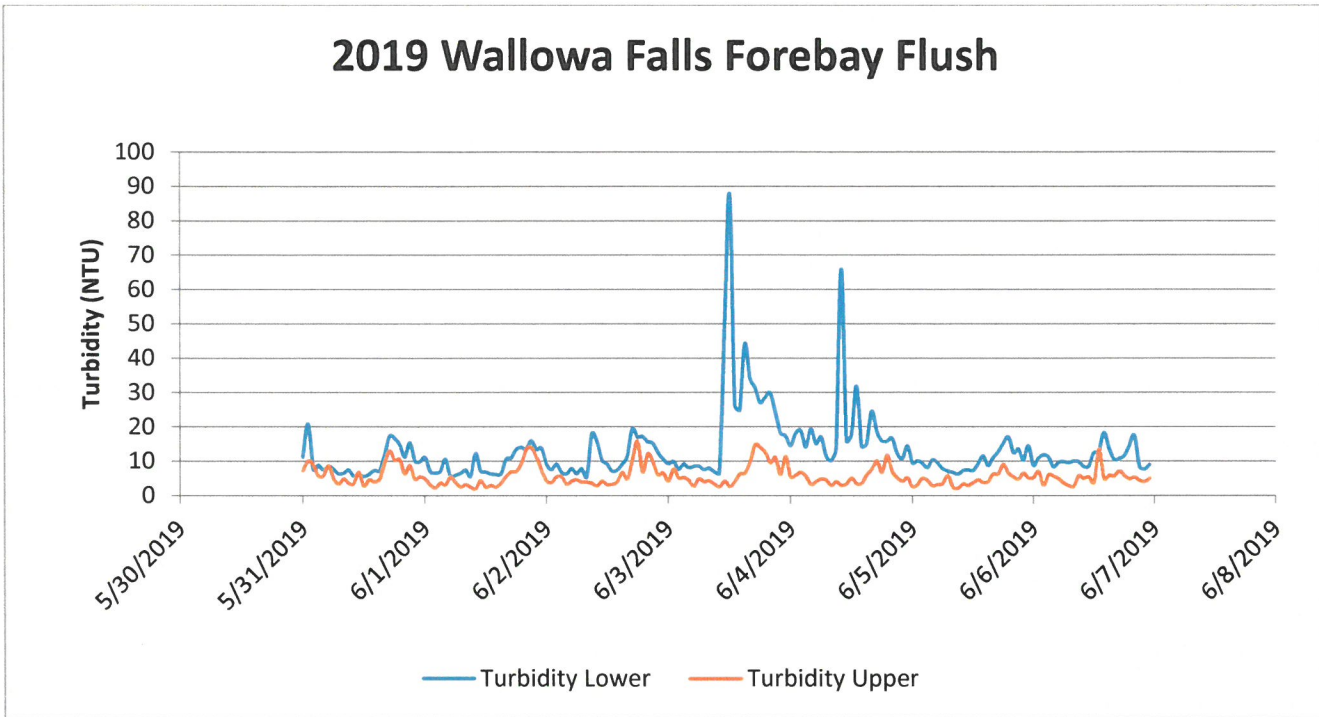


Table 1 – Wallowa Falls 2019 Forebay Flush: Turbidity Data in East Fork Wallowa River

\*The gray shaded portion of the table represents data recorded during the 72 hour active flush period.

Date	Time	Turbidity Lower	Turbidity Upper (background)
5/31/2019	0:00	11.148	7.214
5/31/2019	1:00	20.787	10.043
5/31/2019	2:00	7.559	8.939
5/31/2019	3:00	8.789	5.754
5/31/2019	4:00	7.401	5.799
5/31/2019	5:00	8.51	8.67
5/31/2019	6:00	7.622	4.859
5/31/2019	7:00	6.242	3.417
5/31/2019	8:00	6.485	4.867
5/31/2019	9:00	7.372	3.544
5/31/2019	10:00	5.611	3.477
5/31/2019	11:00	6.056	6.796
5/31/2019	12:00	5.484	2.753
5/31/2019	13:00	6.138	4.59
5/31/2019	14:00	7.279	4.013
5/31/2019	15:00	7.182	4.808
5/31/2019	16:00	11.8	9.468
5/31/2019	17:00	17.255	12.923
5/31/2019	18:00	16.596	10.316
5/31/2019	19:00	14.752	10.453
5/31/2019	20:00	11.12	6.272
5/31/2019	21:00	15.339	8.741
5/31/2019	22:00	10.058	4.851
5/31/2019	23:00	9.792	5.421
6/1/2019	0:00	11.056	4.89
6/1/2019	1:00	6.973	3.15
6/1/2019	2:00	6.485	2.229
6/1/2019	3:00	7.015	3.686
6/1/2019	4:00	10.531	3.101
6/1/2019	5:00	5.474	5.308
6/1/2019	6:00	5.848	3.844
6/1/2019	7:00	6.401	2.498
6/1/2019	8:00	7.412	3.165
6/1/2019	9:00	5.542	2.419
6/1/2019	10:00	12.174	1.922
6/1/2019	11:00	7.104	4.389
6/1/2019	12:00	6.786	2.442
6/1/2019	13:00	6.175	2.925
6/1/2019	14:00	6.047	2.461
6/1/2019	15:00	6.282	3.671
6/1/2019	16:00	10.545	5.579

Date	Time	Turbidity Lower	Turbidity Upper (background)
6/1/2019	17:00	10.881	6.932
6/1/2019	18:00	13.37	7.048
6/1/2019	19:00	13.953	9.301
6/1/2019	20:00	13.464	13.379
6/1/2019	21:00	15.889	13.925
6/1/2019	22:00	13.337	11.187
6/1/2019	23:00	13.767	7.444
6/2/2019	0:00	9.12	4.288
6/2/2019	1:00	7.481	3.82
6/2/2019	2:00	9.067	5.424
6/2/2019	3:00	6.739	5.446
6/2/2019	4:00	6.266	3.334
6/2/2019	5:00	7.819	4.238
6/2/2019	6:00	6.287	4.585
6/2/2019	7:00	7.733	3.966
6/2/2019	8:00	5.404	3.927
6/2/2019	9:00	17.964	3.569
6/2/2019	10:00	15.626	2.777
6/2/2019	11:00	10.288	4.187
6/2/2019	12:00	9.168	3.147
6/2/2019	13:00	7.075	3.292
6/2/2019	14:00	7.358	4.017
6/2/2019	15:00	9.182	6.705
6/2/2019	16:00	11.363	4.899
6/2/2019	17:00	19.322	10.398
6/2/2019	18:00	17.015	15.832
6/2/2019	19:00	17.152	6.845
6/2/2019	20:00	15.628	12.139
6/2/2019	21:00	15.188	9.846
6/2/2019	22:00	12.504	6.092
6/2/2019	23:00	10.589	6.6
6/3/2019	0:00	9.23	4.228
6/3/2019	1:00	9.83	7.702
6/3/2019	2:00	7.611	5.136
6/3/2019	3:00	9.134	5.257
6/3/2019	4:00	8.033	4.481
6/3/2019	5:00	8.395	2.694
6/3/2019	6:00	8.587	4.897
6/3/2019	7:00	7.486	4.042
6/3/2019	8:00	7.961	4.28
6/3/2019	9:00	6.894	3.393
6/3/2019	10:00	6.43	2.553
6/3/2019	11:00	48.246	4.201
6/3/2019	12:00	87.609	2.606

Date	Time	Turbidity Lower	Turbidity Upper (background)
6/3/2019	13:00	26.287	4.092
6/3/2019	14:00	24.718	6.301
6/3/2019	15:00	44.134	6.552
6/3/2019	16:00	34.155	9.714
6/3/2019	17:00	31.412	14.775
6/3/2019	18:00	27.008	14.001
6/3/2019	19:00	28.46	12.537
6/3/2019	20:00	29.801	9.531
6/3/2019	21:00	24.147	11.082
6/3/2019	22:00	18.243	6.102
6/3/2019	23:00	17.322	11.367
6/4/2019	0:00	14.434	5.439
6/4/2019	1:00	18.052	5.986
6/4/2019	2:00	18.911	6.787
6/4/2019	3:00	14.031	5.638
6/4/2019	4:00	19.307	3.266
6/4/2019	5:00	15.002	4.032
6/4/2019	6:00	16.978	4.816
6/4/2019	7:00	11.473	4.533
6/4/2019	8:00	10.14	2.963
6/4/2019	9:00	13.688	4.008
6/4/2019	10:00	65.813	2.936
6/4/2019	11:00	15.835	3.41
6/4/2019	12:00	17.571	5.069
6/4/2019	13:00	31.831	3.445
6/4/2019	14:00	14.306	3.575
6/4/2019	15:00	15.057	5.991
6/4/2019	16:00	24.458	7.767
6/4/2019	17:00	18.552	10.052
6/4/2019	18:00	15.881	6.752
6/4/2019	19:00	15.778	11.727
6/4/2019	20:00	16.594	7.094
6/4/2019	21:00	12.061	5.143
6/4/2019	22:00	10.73	4.193
6/4/2019	23:00	14.424	5.138
6/5/2019	0:00	9.477	2.576
6/5/2019	1:00	10.051	3.168
6/5/2019	2:00	9.347	5.025
6/5/2019	3:00	8.077	4.314
6/5/2019	4:00	10.349	2.825
6/5/2019	5:00	9.445	3.154
6/5/2019	6:00	7.804	3.462
6/5/2019	7:00	7.12	5.879
6/5/2019	8:00	6.672	2.441



Date	Time	Turbidity Lower	Turbidity Upper (background)
6/5/2019	9:00	6.168	2.159
6/5/2019	10:00	7.204	3.368
6/5/2019	11:00	7.415	2.909
6/5/2019	12:00	7.189	3.737
6/5/2019	13:00	9.127	4.56
6/5/2019	14:00	11.46	3.826
6/5/2019	15:00	8.685	4.031
6/5/2019	16:00	10.916	6.354
6/5/2019	17:00	12.663	6.264
6/5/2019	18:00	14.987	9.075
6/5/2019	19:00	17.007	6.603
6/5/2019	20:00	12.399	5.403
6/5/2019	21:00	13.498	4.768
6/5/2019	22:00	10.229	6.495
6/5/2019	23:00	14.421	5.139
6/6/2019	0:00	8.705	5.209
6/6/2019	1:00	10.855	7.009
6/6/2019	2:00	11.713	2.984
6/6/2019	3:00	11.147	6.04
6/6/2019	4:00	8.274	5.619
6/6/2019	5:00	9.605	4.858
6/6/2019	6:00	9.819	3.627
6/6/2019	7:00	9.494	2.854
6/6/2019	8:00	9.985	2.686
6/6/2019	9:00	9.798	5.786
6/6/2019	10:00	8.45	4.993
6/6/2019	11:00	8.442	5.445
6/6/2019	12:00	12.323	3.782
6/6/2019	13:00	12.697	13.459
6/6/2019	14:00	18.291	4.867
6/6/2019	15:00	13.7	5.853
6/6/2019	16:00	10.468	5.637
6/6/2019	17:00	10.73	7.169
6/6/2019	18:00	11.521	5.784
6/6/2019	19:00	14.359	4.811
6/6/2019	20:00	17.491	5.318
6/6/2019	21:00	8.488	4.44
6/6/2019	22:00	7.603	4.049
6/6/2019	23:00	8.969	5.01

Attachment 2

## Attachment 2 – Wallowa Falls Forebay Flush Photos



Photo 1 – Wallowa Falls Dam: low level outlet pipe and 20-inch siphon pipe



Photo 2 – Wallowa Falls Forebay on June 3, 2019



Photo 3 – 20-inch siphon in Wallowa Falls Forebay