

Electronically filed August 21, 2020

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)
 2020 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 10:00 AM on June 15 and completing at 10:00 AM on June 18, 2020. Prior to the flush, PacifiCorp notified agency stakeholders¹ via e-mail on June 11, 2020 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 15, 2020, was 36.6 cfs. Bypassed reach flows remained greater than 35 cfs for the duration of the 72 hour flushing event.

For forebay flushing the following general sequence of events occurred:

June 13, 2020: 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. A graph and hourly turbidity data recorded at the lower monitoring site for the period of June 13, 2020 through June 29, 2020 are provided in Attachment 1 to this letter report.

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

The upper datasonde (background) malfunctioned for unknown reasons and the data recorded is clearly not accurate. The background turbidity was way in excess of downstream turbidity throughout the monitoring period even before the flushing started. There was no rain event or spike in flows to explain this and it has to be assumed that these are not accurate readings and they are therefore not being reported.

June 15, 2020

- PacifiCorp personnel mobilized to the Project forebay, shut down the generating unit 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 wye.

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 (Figure 1).

- PacifiCorp's contract biologist conducted a fish salvage of the Project tailrace per the final Fish Salvage plan dated May 2, 2017.
- 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.



Figure 1: penstock wye with knife gate valves

June 18, 2020

- 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 20, 2020

- 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 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 1: Photos).

Throughout the flushing period hourly turbidity was recorded at the downstream monitoring site (see Attachment 2: 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 Digitally signed by Mark Sturtevant
Date: 2020.08.20 10:16:42 -07'00'

Mark A. Sturtevant
Vice President, Renewable Resources

MAS: BW: km

Encl:	Letter – Public
	Attachment 1 – Wallowa Falls 2020 Forebay Flush Photos - Public
	Attachment 2 – Wallowa Falls 2020 Forebay Flush Turbidity Data - Public

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

Attachment 1 – Wallowa Falls Forebay Flush Turbidity Data

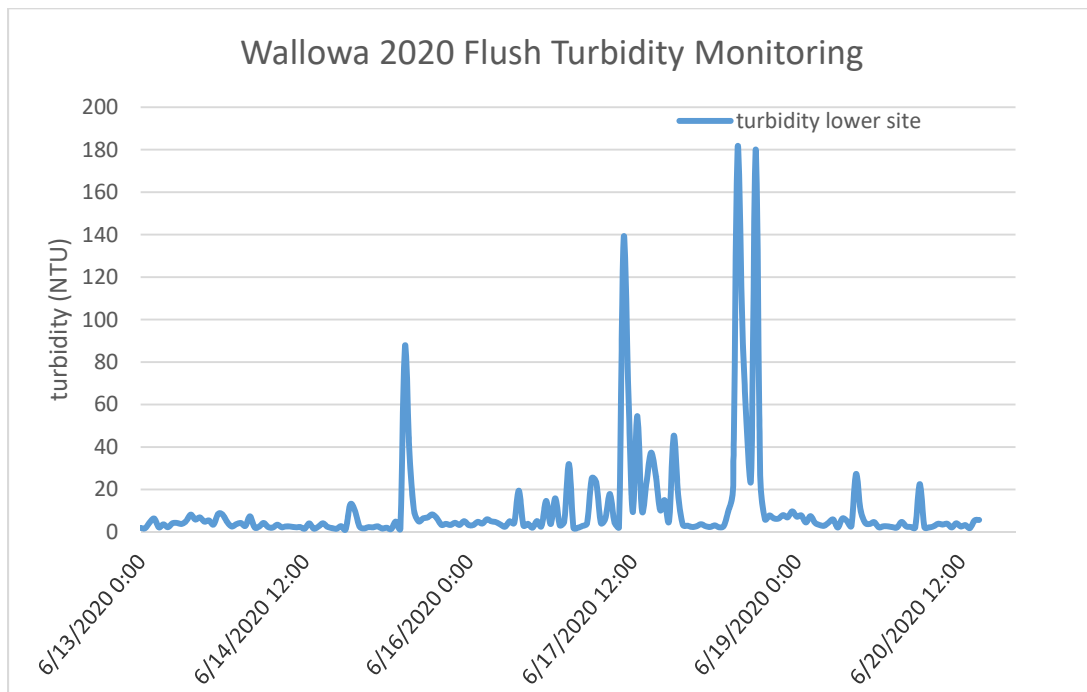


Table 1 – Wallowa Falls 2020 Forebay Flush: Turbidity Data in East Fork Wallowa River

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

Date	Time	Turbidity Lower Site
6/13/2020	0:00	1.904
6/13/2020	1:00	1.793
6/13/2020	2:00	4.511
6/13/2020	3:00	6.297
6/13/2020	4:00	2.188
6/13/2020	5:00	3.574
6/13/2020	6:00	2.271
6/13/2020	7:00	4.116
6/13/2020	8:00	4.244
6/13/2020	9:00	3.793
6/13/2020	10:00	5.155
6/13/2020	11:00	8.18
6/13/2020	12:00	5.865
6/13/2020	13:00	6.841
6/13/2020	14:00	4.878
6/13/2020	15:00	5.427
6/13/2020	16:00	3.508
6/13/2020	17:00	8.456
6/13/2020	18:00	8.16
6/13/2020	19:00	4.677
6/13/2020	20:00	2.601
6/13/2020	21:00	3.649
6/13/2020	22:00	4.217
6/13/2020	23:00	2.891
6/14/2020	0:00	7.36
6/14/2020	1:00	2.208

Date	Time	Turbidity Lower Site
6/14/2020	2:00	2.526
6/14/2020	3:00	4.229
6/14/2020	4:00	2.312
6/14/2020	5:00	2.071
6/14/2020	6:00	3.417
6/14/2020	7:00	2.226
6/14/2020	8:00	2.647
6/14/2020	9:00	2.526
6/14/2020	10:00	2.203
6/14/2020	11:00	2.352
6/14/2020	12:00	1.556
6/14/2020	13:00	4.032
6/14/2020	14:00	1.581
6/14/2020	15:00	2.502
6/14/2020	16:00	4.078
6/14/2020	17:00	2.441
6/14/2020	18:00	1.838
6/14/2020	19:00	1.515
6/14/2020	20:00	2.733
6/14/2020	21:00	1.266
6/14/2020	22:00	12.878
6/14/2020	23:00	10.288
6/15/2020	0:00	2.712
6/15/2020	1:00	1.646
6/15/2020	2:00	2.281
6/15/2020	3:00	2.171
6/15/2020	4:00	2.666
6/15/2020	5:00	1.626

Date	Time	Turbidity Lower Site
6/15/2020	6:00	2.006
6/15/2020	7:00	1.375
6/15/2020	8:00	4.902
6/15/2020	9:00	1.559
6/15/2020	10:00	87.4
6/15/2020	11:00	37.33
6/15/2020	12:00	9.981
6/15/2020	13:00	5.041
6/15/2020	14:00	6.401
6/15/2020	15:00	6.862
6/15/2020	16:00	8.254
6/15/2020	17:00	6.516
6/15/2020	18:00	3.383
6/15/2020	19:00	3.82
6/15/2020	20:00	3.31
6/15/2020	21:00	4.313
6/15/2020	22:00	3.334
6/15/2020	23:00	5.06
6/16/2020	0:00	3.274
6/16/2020	1:00	3.256
6/16/2020	2:00	4.757
6/16/2020	3:00	3.988
6/16/2020	4:00	5.931
6/16/2020	5:00	4.98
6/16/2020	6:00	4.62
6/16/2020	7:00	3.481
6/16/2020	8:00	2.512
6/16/2020	9:00	5.027

Date	Time	Turbidity Lower Site
6/16/2020	10:00	4.291
6/16/2020	11:00	19.455
6/16/2020	12:00	3.126
6/16/2020	13:00	3.838
6/16/2020	14:00	2.041
6/16/2020	15:00	5.119
6/16/2020	16:00	2.815
6/16/2020	17:00	14.61
6/16/2020	18:00	3.726
6/16/2020	19:00	15.85
6/16/2020	20:00	3.127
6/16/2020	21:00	5.096
6/16/2020	22:00	31.973
6/16/2020	23:00	2.027
6/17/2020	0:00	2.007
6/17/2020	1:00	2.889
6/17/2020	2:00	4.183
6/17/2020	3:00	25.155
6/17/2020	4:00	23.31
6/17/2020	5:00	4.387
6/17/2020	6:00	6.301
6/17/2020	7:00	17.869
6/17/2020	8:00	4.366
6/17/2020	9:00	2.328
6/17/2020	10:00	137.906
6/17/2020	11:00	69.689
6/17/2020	12:00	9.47
6/17/2020	13:00	54.526

Date	Time	Turbidity Lower Site
6/17/2020	14:00	10.41
6/17/2020	15:00	22.888
6/17/2020	16:00	37.276
6/17/2020	17:00	27.623
6/17/2020	18:00	10.474
6/17/2020	19:00	14.943
6/17/2020	20:00	5.499
6/17/2020	21:00	45.284
6/17/2020	22:00	16.917
6/17/2020	23:00	3.411
6/18/2020	0:00	2.986
6/18/2020	1:00	2.367
6/18/2020	2:00	2.686
6/18/2020	3:00	3.659
6/18/2020	4:00	2.712
6/18/2020	5:00	2.372
6/18/2020	6:00	3.105
6/18/2020	7:00	2.201
6/18/2020	8:00	2.903
6/18/2020	9:00	10.127
6/18/2020	10:00	19.412
6/18/2020	11:00	180.079
6/18/2020	12:00	101.428
6/18/2020	13:00	50.241
6/18/2020	14:00	26.143
6/18/2020	15:00	180.095
6/18/2020	16:00	24.84
6/18/2020	17:00	6.06

Date	Time	Turbidity Lower Site
6/18/2020	18:00	7.783
6/18/2020	19:00	6.352
6/18/2020	20:00	6.329
6/18/2020	21:00	7.945
6/18/2020	22:00	6.924
6/18/2020	23:00	9.702
6/18/2020	0:00	7.229
6/19/2020	1:00	7.782
6/19/2020	2:00	4.507
6/19/2020	3:00	7.448
6/19/2020	4:00	4.346
6/19/2020	5:00	3.295
6/19/2020	6:00	2.932
6/19/2020	7:00	4.436
6/19/2020	8:00	5.858
6/19/2020	9:00	2.123
6/19/2020	10:00	6.333
6/19/2020	11:00	5.213
6/19/2020	12:00	2.904
6/19/2020	13:00	27.298
6/19/2020	14:00	10.269
6/19/2020	15:00	4.342
6/19/2020	16:00	3.785
6/19/2020	17:00	4.618
6/19/2020	18:00	2.22
6/19/2020	19:00	2.67
6/19/2020	20:00	2.655
6/19/2020	21:00	2.27

Date	Time	Turbidity Lower Site
6/19/2020	22:00	2.129
6/19/2020	23:00	4.72
6/19/2020	0:00	2.64
6/20/2020	1:00	2.374
6/20/2020	2:00	2.169
6/20/2020	3:00	22.546
6/20/2020	4:00	2.32
6/20/2020	5:00	2.172
6/20/2020	6:00	2.627
6/20/2020	7:00	3.869
6/20/2020	8:00	3.506
6/20/2020	9:00	3.878
6/20/2020	10:00	2.16
6/20/2020	11:00	4.078
6/20/2020	12:00	2.605
6/20/2020	13:00	3.237
6/20/2020	14:00	1.836
6/20/2020	15:00	5.369
6/20/2020	16:00	5.666

Attachment 2 – Wallowa Falls Forebay Flush Photos



Photo 1 – Wallowa Falls Forebay: full pool on June 15, 2020 prior to flush



Photo 2: Wallowa Falls Forebay - drained for flushing on June 15, 2020



Photo 3 –Wallowa Falls Forebay – some sediment cutting along edges during draining on June 15, 2020