CENWP-OD 16 June 2020

MEMORANDUM FOR THE RECORD

**TITLE** – 20CGR03 MFR Cougar Dam Minimum Flow

**NOTIFICATION DATE** – 17 June 2020

**PROJECT** – Cougar Dam

**RESPONSE DATE** – 01 July 2020

**Description of the problem**

On Monday 15 June 2020, Reservoir Regulation scheduled Cougar Dam to reduce turbine outflow from 470 cfs at 1000 hrs down to 320 cfs at 1300 hrs. At about 1406, a project biologist discovered the issue and immediately notified the Lookout Point Dam Control Room. The dam operator immediately contacted Reservoir Regulation to discuss the issue and promptly proceeded to increase the dam’s outflow (per BiOp ramping rates) to ~427 cfs. According to the Willamette Fish Operations Plan (WFOP), Chapter 4, McKenzie Subbasin Fish Operations Plan, Table MCK-2, the minimum outflow from Cougar Dam during the month of June is 400 cfs.

WFOP excerpt:

|  |  |
| --- | --- |
| ***Table MCK-2. Flow Rates and Ramp Rate Requirements for Cougar Dam* Time Period or Criterion** | **Target** |
| Evacuation of Stored Flood Water (> 1,200 cfs) | |
| Normal | 5,000 cfs |
| Maximum\* | 6,500 cfs |
| Firm Power | 750 cfs |
| High Flow Period | |
| Minimum Flow | 300 cfs |
| Normal Maximum Flow\*  (for evacuation of stored flood water) | 18,000 cfs |
| Rate of Increase per hour | |
| 100-500 cfs | 250 cfs |
| 500-6,500 cfs | 500 cfs |
| Maximum Rate of Increase per hour | 750 cfs |
| Rate of Decrease per hour | |
| Maximum | 20% of flow |
| Low Flow Period (< 1,200 cfs) | |
| Minimum Flow | |
| July 1-May 31 | 300 cfs |
| June 1-30 | 400 cfs |
| Maximum Rate of Change (increase) | 200 cfs/hr |
| Rate of Change (decrease during nighttime) | |
| 30-2,400 cfs | 150 cfs/hr |
| > 2,400 cfs | 0.1 ft/hr |
| Daytime of Decrease | 0.2 ft/hr |
| Maximum Daily Decrease | 1.0 ft/day or 50% |

**Dates of impacts/repairs**

15 June 2020 (1325-1435)

**Length of impacts/repairs**

~1 hour

**Expected impacts on fish**

Impacts likely minimal due to short duration and minimal stage change (~ -2 inches).

**Comments from agencies**

Please email or call with questions or concerns.

Thank you,

Chris Walker

NWP Operations Division Fishery Section

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