

## MEMORANDUM FOR THE RECORD

**TITLE** - 20CGR05 MFR Downstream Fish Passage Operation**PROJECT** - Cougar Dam**RESPONSE DATE** - 31 December 2020**Description of the problem**

The goal of this operation to provide downstream passage for juvenile salmon at Cougar Dam. This special operation was implemented on 03 December 2020, the goal is to implement this operation for about one month (minimum of two weeks). Exact outflows are uncertain and will depend on inflows and hydrologic conditions. Table 1 (below) shows some potential operations for different discharge levels. This table is presented as a concept only; the actual operations will be developed by regulators and managed on a real-time basis, especially during times of high flows. The actual discharge rates are subject to the reservoir level, minimum gate openings, and turbine operating range. The RO may be operated throughout the day (24 hours, no turbine operations) if it is more optimal for equipment and operations (and staff).

Table 1. Hypothetical operations for juvenile RO fish passage.

Mean 24hr Discharge	NIGHT		DAY	
	RO Flow	Powerhouse Flow	RO Flow	Powerhouse Flow
500	500	0	0	500
1000	1000	0	0	1000
1500	1500	0	500	1000
2000	1500	500	1000	1000
2500	1500	1000	1500	1000
3000	2000	1000	2000	1000

**Type of outage**

Flow will be passed through the Regulating Outlets (ROs) from December 3, 2020 through December 31, 2020, between the hours of 17:00 – 07:00 hours.

**Impact on facility operation**

No generation will occur if only the RO is utilized to pass flow except for station service.

**Dates of impacts/repairs/operation**

December 3-31, 2020

**Length of time for impacts/repairs**

28 days

## **Expected impacts on fish**

The purpose is to provide safer passage for juvenile salmonids.

## **Comments from agencies**

-----Original Message-----

From: Hudson, Michael <michael\_hudson@fws.gov>  
Sent: Wednesday, January 13, 2021 9:51 AM  
To: Walker, Christopher E CIV USARMY USACE (USA)  
<Christopher.E.Walker@usace.army.mil>  
Subject: [Non-DoD Source] Re: [EXTERNAL] WFPOM: 20CGR05 MFR Downstream Fish Passage Operation

Chris,

I know this is late, but wanted to provide for the record. Thanks.

The USFWS concurs with the proposed special operation to prioritize the operation of the RO at Cougar Dam through 31 January, 2018. Any incidental take of bull trout should be within the bounds of the Incidental Take Statement (USFWS 2008).

That being said, I will take this opportunity to express a couple of concerns. Adult bull trout are likely back in the reservoir post-spawning, and any of those looking to move further downstream will find a readily available route through the RO. We are not certain of the fate of these individuals, but suspect there may be some individual level impacts that otherwise may not have been incurred had those adult fish remained in the reservoir. In addition, we recommend monitoring TDG levels (if not already being done) because they will likely be elevated due to use of the RO, and may impact multiple life stages of aquatic species below the dam. If measures can be taken to avoid exceedances, that would be desirable.

Michael Hudson  
Fish Biologist/Region 1 Climate Change Coordinator  
USFWS-Columbia River Fish and Wildlife Conservation Office  
1211 SE Cardinal Ct - Ste 100  
Vancouver, WA 98683-9658  
360-604-2575

-----Original Message-----

From: Kelly Reis <Kelly.E.Reis@state.or.us>  
Sent: Wednesday, December 23, 2020 3:44 PM  
To: Walker, Christopher E CIV USARMY USACE (USA)  
<Christopher.E.Walker@usace.army.mil>  
Cc: Anne Mullan (anne.mullan@noaa.gov) <anne.mullan@noaa.gov>;  
Spear, Daniel J (BPA) - PGB-5 <djspear@bpa.gov>; Jeffrey Ziller  
<Jeffrey.S.Ziller@state.or.us>; Jeremy D Romer  
<Jeremy.D.Romer@state.or.us>; 'Kelly Reis' (kelly.e.reis@state.or.us)  
<kelly.e.reis@state.or.us>; Lawrence Schwabe  
(Lawrence.schwabe@grandronde.org) <Lawrence.schwabe@grandronde.org>;  
Eppard, Matthew B CIV CENWP CENWD (USA)  
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Subject: [Non-DoD Source] RE: WFPOM: 20CGR05 MFR Downstream Fish Passage Operation

Chris -

Thank-you for sharing the 20CGR05 MFR Downstream Fish Passage Operation on December 12, 2020. Based on the information provided in the MFR, it appears this operation began implementation on Dec. 3, 2020.

As we have stated in comments on previous notifications of this operation, ODFW continues to request monitoring be conducted as part of implementation of this operation to confirm benefits for spring Chinook, as well as potential impacts to bull trout.

This operation has the potential to pass large number of bull trout downstream. Based on information from ODFW's bull trout research team, they have been able to get their monitoring equipment up and running again below Cougar Dam following the September fires. Due to the nature of the PIT antennas below the RO, it is possible passing tagged fish may not be detected. Non-detection of tagged fish may result more frequently under high flow conditions, or if fish pass the detector while not oriented perpendicular to the wire, such as might occur if fish are moribund or dead. As such, while a detection provides some useful data, non-detection does not rule out passing of tagged bull trout.

Previous versions of this operation notice (for example, the 2019-2020 Cougar SOR) included a reference to possible elevated TDGs as a result of the operation. TDGs are not referenced in this MFR. ODFW encourages the Corps to continue to monitor TDGs as part of this operation.

I understood you to mention at the December 16, 2020 WFPOM meeting that this notification isn't actually required since it is referenced in the fish operations appendix of the current Willamette Fish Operations Plan. I was unaware of that and I appreciate the reminder for this operation.

Best wishes for the holiday.

Kelly

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Kelly Reis (she/her/hers)

Willamette Fish & Wildlife Policy & Program Manager

Oregon Department of Fish & Wildlife

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Please email or call with questions or concerns.

Thank you,

Chris Walker

NWP Operations Division Fishery Section  
503.808.4316  
[Christopher.E.Walker@usace.army.mil](mailto:Christopher.E.Walker@usace.army.mil)