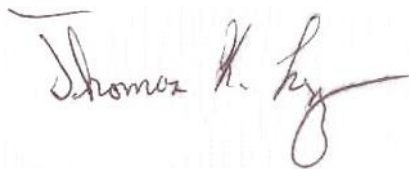


State, Federal and Tribal Fishery Agencies Joint Technical Staff Memorandum

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Idaho Department of Fish and Game
NOAA National Marine Fisheries Service
Washington Department of Fish and Wildlife*

*Colville Tribes
Nez Perce Tribe
Oregon Department of Fish and Wildlife
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TO: Fish Passage Operations and Maintenance Coordination Team



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SUBJECT: Recommendation for Early Juvenile Bypass System Operation in 2020 and 2021

DATE: March 3, 2020

In this memo, the Fish Passage Advisory Committee (FPAC) affirms support for early (March) juvenile bypass system (JBS) operation and juvenile sampling¹ at Columbia River System (CRS) projects in 2020 and updates recommendations for 2021.² The rationale for early sampling is to provide information on juvenile emigration timing, which may be occurring earlier than it did historically due to climate change and/or CRS management of river flows.

For 2020, in addition to the standard early operations at Bonneville (BON) Dam, we are supportive of the early sampling and PIT-tag monitoring scheduled to start on March 1 at McNary (MCN) and Lower Granite (LGR) dams (Table 1). In making this recommendation, we considered needs for data on early migration, project maintenance schedules and funding requirements for juvenile monitoring. FPAC recommends that early sampling in 2021 be conducted at these same two projects, with consideration for additional sampling at John Day Dam if increased Smolt Monitoring Program (SMP) funding can be secured.

We recommend that early season JBS operations follow standard SMP schedules and sample protocols. Early season sampling should consist of a 24-hour sample taken every other day at MCN, and daily at LGR. During early sampling, we recommend that turbine intake screens be installed at all LGR powerhouse units and in a subset of MCN powerhouse units. If this is not possible due to project repair and maintenance constraints, FPAC recommends screening units that are highest on the unit priority list.

We recommend discussions for early start up in 2021 to address the feasibility of increasing the number of projects with earlier startup be initiated soon. We would like to have at least two years of early sampling at each project sampled through 2021. Additional early sampling would improve our understanding of inter annual variation in timing of juvenile emigration.

We welcome the opportunity to discuss and coordinate efforts to further enhance early season operations in 2021 within FPOM and other regional forums as deemed needed.

¹ The FCRPS injunction court order (March 27, 2017) stated that “[i]n light of the importance of the tails of a run for diversity and species adaptation, the Court orders PIT tag monitoring begin on March 1 of each year of the remand period, beginning in 2018.”

² Joint Technical Staff (JTS) Memos dated August 31, 2018, October 10, 2017, and August 2, 2017.

Table 1. Actual and recommended (Rec) juvenile bypass system implementation schedule for early operations.

Project	SMP sampling	2018	2019	2020	2021
		Actual	Actual	Rec.	Rec.
BON ¹	Daily starting ~March 3	X	X	X	X
TDA		NA	NA	NA	NA
JDA	Every-other-day starting March 1	X	X ⁴		X ²
MCN	Every-other-day starting March 1			X ³	X ³
ICH		N/A	NA	NA	NA
LMN	Every-other day starting March 1- Start of transportation, daily after transportation begins		X ⁴		
LGO	Every-other-day starting March 1- Start of transportation, daily after transportation begins	X			
LGR	Daily starting ~March 1			X	X

¹ Juvenile bypass system operation at Bonneville Dam currently starts in early March; no change required for early migration monitoring.

² Early operation of John Day JBS on odd years is desirable (optional) to support Umatilla juvenile lamprey monitoring and Umatilla and John Day basin salmonid migration timing monitoring. Currently SMP funding insufficient to support early monitoring at three locations.

³ Top three priority units at MCN screened by start of early sampling period. Installation/operation of other turbine intake screens in mid-April, per normal operations to limit potential impacts of screens on juvenile lamprey while still providing some level of increased guidance to enhance the quality of data for juvenile salmonids. McNary turbine intake screen installation/operation will be coordinated through FPOM.

⁴ Due to inclement weather, sampling at JDA and LMN in 2019 did not begin until March 14th and March 9th, respectively.