

**OFFICIAL COORDINATION REQUEST FOR  
NON-ROUTINE OPERATIONS AND MAINTENANCE**

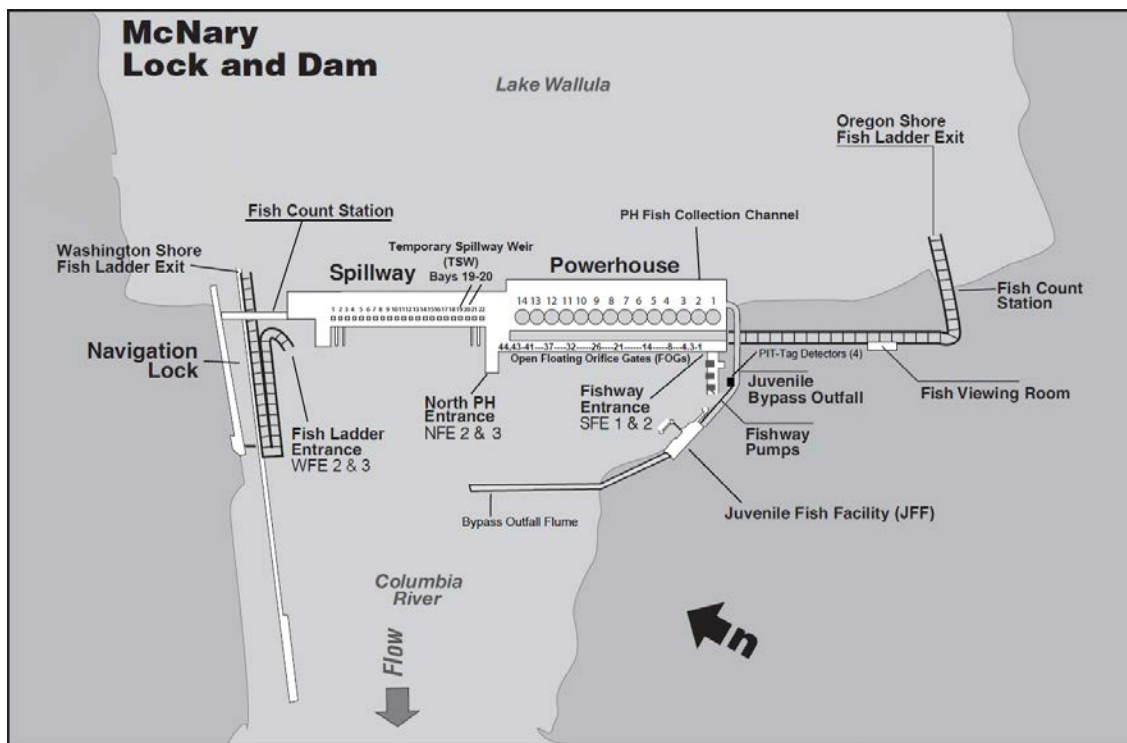
**COORDINATION TITLE-** 16 MCN 014 McNary Fishway WA Shore Winter Outage Extension

**COORDINATION DATE-** 9 August 2016

**PROJECT-** McNary Lock and Dam

**RESPONSE DATE-** 19 August 2016

**Description of the problem-** Spill entrance permanent concrete enclosure project cancelled due to lack of funding (reference MOC 16 MCN 01-McNary Fishway Spill Entrance Permanent Closure-OR and WA Shore). However, another project was underway with the understanding that the enclosure contract would occur. At the Washington shore ladder, lamprey passage improvements are programmed to occur.



**Type of outage required-** Though the enclosure contract is canceled, the ladder outage times were relied upon to install lamprey passage improvements in the Washington ladder. (Washington shore outage would occur 1 December, 2016 to 31 January, 2017. The Oregon shore outage would occur 1 to 28 February, 2017.)

At the Washington shore ladder, the lamprey improvements will take 3 to 4 weeks, at a time when the project will be performing maintenance rebuilds on the tilting weir drives. These concurrent activities will be difficult to complete during the normal 30 day outage period. The project is requesting two full months to perform needed improvements. From previous lamprey improvements performed to the Oregon ladder during the 2009-2010 winter outage, the allotment of time scheduled was 4 January through 28 February. (The Washington shore outage occurred from 9 through 17 December, 2009 in order for the Oregon ladder outage to occur for a

full two months.) Therefore, two months for the Washington ladder is a fair assessment of time needed for the lamprey improvements.

The Fish Passage Plan (FPP) requires at least one of the two ladders to be fully operational at all times throughout the normal FPP winter maintenance work window of 1 January through 28 February, 2017, as per FPP. McNary project is requesting un-watering of the Washington shore ladder for 30 additional days from 1 through 31 December, 2016. During this time, the Oregon shore ladder will remain watered and fully operational. Fish pump 2 is scheduled to return to service in mid-November, which will improve flow conditions in the ladder. Following water-up of the Washington shore ladder in late-January, 2017 to a fully operational fishway, the Oregon shore ladder will be fully un-watered for the 30 days of the FPP winter maintenance work window of 1 through 28 February, 2017.

**Impact on facility operation-** Instead of ladder outages of staggered one month periods for each WA and OR shore fishway as per the FPP, the Washington ladder will be un-watered for two months. In order to ensure that at least one fishway is open at all times, the WA ladder will be closed one month earlier (DEC 2016 to Jan 2017) followed by the OR shore fishway being closed for the normal FPP winter maintenance work window period (FEB 2017).

**Dates of impacts/repairs-** The lamprey improvements will be completed during the 60 day period of requested early outage of the WA shore ladder during 1 DEC, 2016 through 31 JAN, 2017 when OR Shore ladder is fully functional.

**Length of time for repairs –** 60 consecutive days for the WA shore ladder outage period, total 90 days for both ladders but one of the two ladders will be fully watered and functional while the other ladder is out-of-service.

**Expected impacts on fish passage –** Data below is for the Portland District website: <http://www.nwp.usace.army.mil/Missions/Environment/Fish/Counts/>

Information is also from McNary year end reports.

From 2003 to 2006, fish counts in December at McNary were done by video tape review. Visual fish counting in December at McNary occurred in 2007 and 2012. These are the years used in the data below for Table 1.

Table 1. December Fish Counts by Ladder

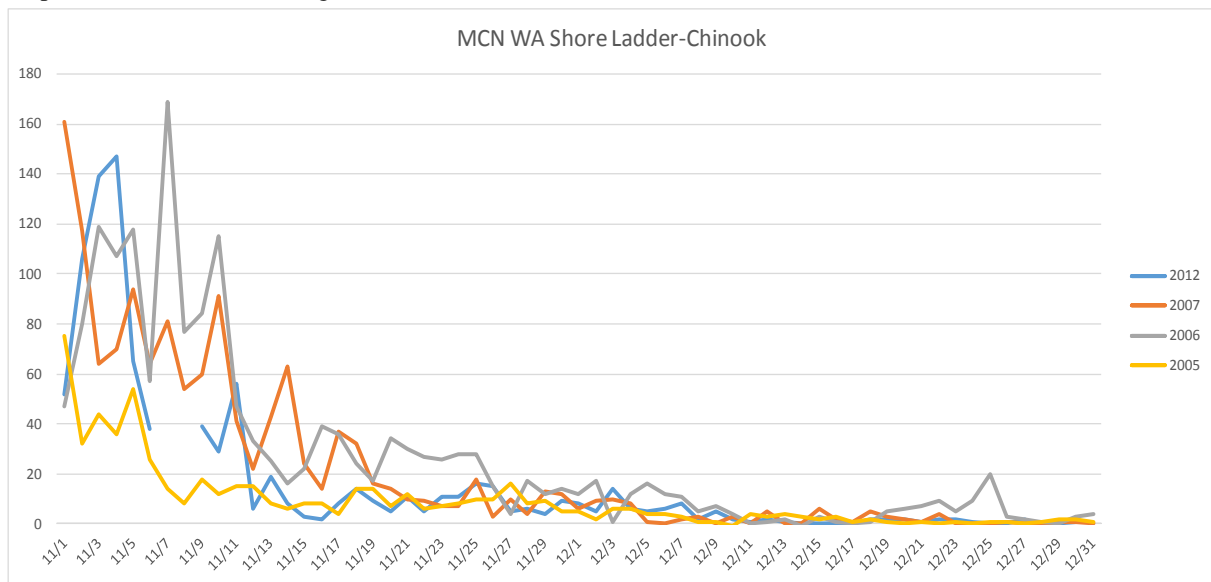
Year	All Chinook		WA % run.	All Steelhead		WA % run.
	OR shore	WA shore		OR shore	WA shore	
2003	27	130	82.8	1398	79	5.3
2004	20	108	84.4	2566	450	14.9
2005	7	64	90.1	586	82	12.3
2006	17	178	91.2	2211	724	24.7
2007	19	73	79.3	1479	307	17.2
2012	8	79	90.8	2216	109	4.7

Over those six years, Chinook passage averaged 105.3 fish per year in December at the Washington ladder. In December, 79.3 to 91.2 percent of Chinook run used the Washington

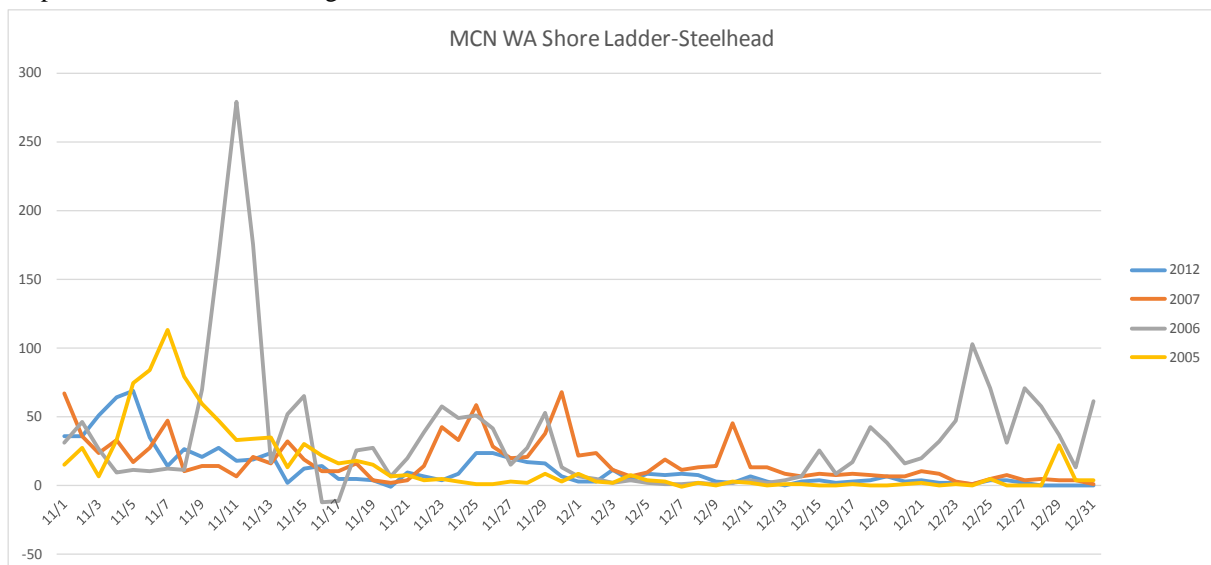
ladder. Steelhead passage averaged 291.8 fish per year in December at the Washington ladder. In December, 4.7 to 24.7 percent of the steelhead run used the Washington ladder.

Chinook and steelhead passage will be delayed somewhat as the fish are searching for the Oregon ladder with the Washington ladder out of service in December. Chinook salmon are the greatest concern as they will be very close to spawning. Graphs 1 and 2 provided by Steve Juhnke (COE Walla Walla District) below, show that a 30 day extended outage in December is preferred over a 60 day extended outage in November and December, which was originally proposed. Though not ideal for fish passage, the lamprey passage improvements for the Washington shore ladder can be completed successfully and with a lesser impact on fish passage if the Washington ladder outage is extended to include December.

Graph 1. Adult Chinook using the WA fish ladder in 2005, 2006, 2007 and 2012.



Graph 2. Adult steelhead using the WA fish ladder in 2005, 2006, 2007 and 2012.



**Comments from agencies-** Comments due by close of business August 19.

**From:** Gary Fredricks - NOAA Federal  
**To:** Setter, Ann L NWW  
**Cc:** Johnson, Bobby NWW  
**Subject:** [EXTERNAL] Re: Revised Coordination 16 MCN 014  
**Date:** Wednesday, August 17, 2016 11:19:10 AM

Ann, I know we covered this in FPOM but I wanted to answer for the record. Thank you to you, Bobby and Denise for revising the MOC. We agree with the one month extension of the WA Shore in-water work period into December for this work and agree that the effect on adult passage should be minimal given the numbers of fish (particularly Chinook) that time of year. Thanks, Gary

On Tue, Aug 9, 2016 at 3:18 PM, Setter, Ann L NWW <[Ann.L.Setter@usace.army.mil](mailto:Ann.L.Setter@usace.army.mil)> wrote:

Folks:

Attached is a revised MOC specific to requesting an extended work window for the WA shore fish ladder at MCN. The previously sent version of this MOC covered a request for an extended work window for both fish ladders at McNary. Please let me know if you have any comments.

Ann Setter

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Gary Fredricks  
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Interior Columbia Basin Office  
NOAA Fisheries, West Coast Region  
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**Final results-** Please email or call with questions or concerns.

Thank you,  
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