Adult Fish Passage Facilities – 2015-2016 Winter Maintenance Schedule

**U. S. Army Corps of Engineers**

**Walla Walla District**

**MCNARY DAM1 - Washington Shore Fishway**

1. **Sunday, January 3:** Place ladder on orifice flow. Wasco PUD will already be in bypass mode due to unit runner replacement. .
2. **Monday, January 4:** Place exit stoplogs; Wasco PUD shuts down bypass flow; project dewaters the WA fish ladder down to the tailwater level from **January 4 to January 21** for maintenance. Complete winter maintenance according to the Fish Passage Plan, Section 2.3.2.1. At exit weirs, COE works on Oil Accountability Program.
3. **Tuesday, January 5:** Video camera inspection of diffuser gratings.
4. **January 4 to January 21:** WASCO PUD performs annual maintenance on their small hydro project, bypass and auxiliary water supply system.
5. **January 4 to January 21:** PSMFC maintains adult PIT tag system as required. Fish will coordinate with PSMFC and General Maintenance.
6. **January 4 to January 21:** U. of Idaho maintains half-duplex PIT (lamprey) antennas. Fish will coordinate with U. of Idaho and General Maintenance.
7. Resume normal operation of the ladder and small hydro/auxiliary water system by **Friday, January 22.**

MCNARY DAM1 - Oregon Shore Fishway

1. **Sunday, January 24:** Shut down AWS Fish Pumps 1 and 3 in the early morning and place the ladder on orifice flow.
2. **Monday, January 25:** Use ladder crane to install the exit logs and juvenile passage stop logs. Close the Tainter valve and, install the travelling screen bulkheads.
3. **Monday, January 25:** Perform physical inspection of ladder to tailwater.
4. **Tuesday, January 26 through February 28:** Dive inspection of the ladder diffuser grating and make any necessary repairs to diffuser gratings.
5. **Tuesday, January 26 through February 28:** Perform routine winter maintenance on AWS Fish Pumps 1 and 3; rebuild Fish Pump 2 (rebuild will extend into April).
6. **Tuesday, January 26 through February 28:** Complete winter maintenance according to the Fish Passage Plan, Section 2.3.2.1. At exit weirs, COE works on Oil Accountability Program. Continue rehabilitation of floating entrances.
7. **Tuesday, January 26 through February 28:** Maintain adult PIT tag system as required. Coordinate with PSMFC.
8. Resume normal ladder flow and pump operation by Monday**,** **February 29**.

ICE HARBOR DAM1 - North Shore Fishway

1. Shut down the AWS pumps on the morning of **February 6.**
2. Dewater the fish ladder from **February 8 – February 29.**
3. Complete winter maintenance according to the Fish Passage Plan, Section 2.3.2.1.
4. **Inspect the collection channel by ROV.** 1
5. Perform maintenance on the AWS pumps.
6. Maintain adult PIT tag system as required. Coordinate with PSMFC.
7. Maintain half-duplex PIT (lamprey) antennas. Coordinate with University of Idaho.
8. Resume normal operation of the AWS pumps on February **29.**

ICE HARBOR DAM1 - South Shore Fishway

1. Shut down the AWS pumps on the morning of **January 1**.
2. Dewater the fish ladder from **January 4 – February 5** for maintenance.
3. Complete winter maintenance according to the Fish Passage Plan, Section 2.3.2.1.
4. **Inspect the collection channel and AWS conduit by dewatering and direct observation.** 1
5. Perform maintenance on the AWS pumps.
6. Maintain adult PIT tag system as required. Coordinate with PSMFC.
7. Maintain half-duplex PIT (lamprey) antennas. Coordinate with University of Idaho.
8. Install Okum in leaking ladder joints.
9. .Replace the upper diffuser grating.
10. Resume normal operation of the AWS pumps on **February 5**.

LOWER MONUMENTAL DAM1 - North Shore Fishway

1. Shut down the AWS pumps on the morning of **January 1**.
2. Dewater the fish ladder from **January 4 - February 18** for maintenance.
3. Complete winter maintenance according to the Fish Passage Plan, Section 2.3.2.1.
4. Inspect the collection channel by dewatering.
5. Rebuild fish ladder bulkheads.
6. Perform maintenance on the AWS pumps.
7. Resume normal operation of the AWS pumps on **February 28**.

LOWER MONUMENTAL DAM1 - South Shore Fishway

1. Dewater the fish ladder from **February 18 – February 29** for maintenance. Rehab SSE 1 and SSE 2.
2. Complete some grout replacement in channel.
3. Complete winter maintenance according to the Fish Passage Plan, Section 2.3.2.1.
4. Inspect the collection channel by dewatering.

**LITTLE GOOSE DAM1**

1. Shut down the AWS pumps on the morning of **January 4, 2016**.
2. Dewater the fish ladder from **January 4 through February 19, 2016** for maintenance.
3. Close fish entrance weirs after fish ladder dewatered, **January 4, 2016**.
4. Dewater collection channel from **January 7 – February 18, 2016** for inspection andmaintenance.
5. Replace Lost Fall out Fence section.
6. Replace the adult fish Channel Grating.
7. Repair Ladder Joint seals.
8. Repair North Shore Entrance Slack Cable Switches.
9. Replace Juvenile Fish Baffle Boards
10. Complete winter maintenance according to the Fish Passa**g**e Plan, Section 2.3.2.1.
11. Resume normal operation of the AWS pumps on **February 19, 2016.**

# LOWER GRANITE DAM1

1. Shut down the AWS pumps on the morning of **January 2, 2016**.

2. Dewater the fish ladder from **January 4, 2016 – February 18, 2016.**

3. Complete winter maintenance according to the Fish Passage Plan, Section 2.3.2.1.

4. Inspect the collection channel by dewatering.

5. Perform maintenance on the AWS pumps.

6. Inspect the adult fallout fence and repair as needed.

8. Routine maintenance of adult trap.

9. Resume normal operation of the AWS pumps no later than **February28, 2016**

10. Fish Ladder Control System installation.

11. Permanent Fish Ladder Temperature Improvements.

12. Sound and vibration sensor installation.

13. Replace SSVC viewing window cleaning brush and cylinders.

Table 1. Methods used to inspect adult fishway collection channels during past winter maintenance periods, compared to the upcoming winter period.

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|  | **20010-11** | **2011-12** | **2012-13** | **2013-2014** | **2014-2015** | **2015-2016** |
| **MCN WA Shore** | Diver/  Inspection | Camera /  Inspected | Camera/  Inspection | Diver/  Inspection | Camera/  Inspection | Camera/  Inspection |
| **MCN OR Shore** | Camera/  Inspected | Camera/  Inspection | Diver/  Inspection | Camera/ Inspection | Camera/  Inspection | Camera/  Inspection |
| **IHR North Shore** | ROV | Dewatering | ROV | ROV | Dewatering | ROV |
| **IHR South Shore** | ROV | ROV and diver | ROV | ROV | Diver | Dewatering |
| **LMO North Shore** | Dewatering | Dewatering | Dewatering | Dewatering | Dewatering | Dewatering |
| **LMO South Shore** | Dewatering | Dewatering | Dewatering | Dewatering | Dewatering | Dewatering |
| **LGS** | Dewatering | Dewatering | Dewatering | Dewatering | Dewatering | Dewatering |
| **LWG** | Dewatering | Dewatering | Dewatering | Dewatering | Dewatering | Dewatering |

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