

## **Adult Fish Passage Facilities – 2020-2021 Winter Maintenance Schedule**

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

### **Walla Walla District**

Winter fishway maintenance period occurs from **1 January to 29 February**. In general, each fishway will be taken out of operation for one month during which the alternate fishway will remain in service. All dates during the maintenance period are tentative and subject to change.

#### **MCNARY DAM<sup>1</sup> - Washington Shore Fishway**

1. **3 January:** Place ladder on orifice flow. Wasco PUD will shut down.
2. **4 January:** Place exit and conduit stoplogs; Wasco PUD shuts down bypass flow; project dewateres the WA fish ladder down to the tailwater level.
3. **4-21 January:** Grating inspection. Complete winter maintenance according to the current Fish Passage Plan, Section 2.4.1.
4. **25 January:** Resume normal operation of the ladder and small hydro/auxiliary water system.

#### **MCNARY DAM<sup>1</sup> - Oregon Shore Fishway**

1. **25 January:** Shut down AWS Fish Pumps then place the ladder on orifice flow.
2. **January 26:** Use ladder crane to install the exit logs and juvenile passage stop logs. Perform physical inspection of ladder to tail water.
3. **26 January to 24 February:** Complete winter maintenance according to the current Fish Passage Plan, Section 2.4.1. Dewater grating and system for inspection. Grating that cannot be dewatered will be camera inspected.
4. **28 February:** Resume normal ladder flow and pump operation.

#### **ICE HARBOR DAM<sup>1</sup> - North Shore Fishway**

1. **30 January:** Shut down the AWS pumps.
2. **1 February - 26 February:** Dewater the fish ladder.
3. Complete winter maintenance according to the Fish Passage Plan, Section 2.4.1.
4. Inspect the collection channel by unwatering and physically inspection.<sup>1</sup>
5. Perform maintenance on the AWS pumps.
6. Perform inspection and maintenance of the diffuser valve #10.
7. Replace damaged/missing staff gauges as logistically feasible.
8. Maintain adult PIT tag system as required. Coordinate with PSMFC.
9. Maintain half-duplex PIT (lamprey) antennas. Coordinate with University of Idaho.
10. **26 February:** Resume normal operation of the AWS pumps.

#### **ICE HARBOR DAM<sup>1</sup> - South Shore Fishway**

1. **1 January:** Shut down the AWS pumps.
2. **4-29 January:** Dewater the fish ladder for maintenance.
3. Complete winter maintenance according to the Fish Passage Plan, Section 2.4.1.

<sup>1</sup> Methods used in the past for inspecting collection channels at all five dams are shown in Table 1.

4. Inspect the collection channel by video inspection with the ROV. <sup>1</sup>
5. Perform maintenance on the AWS pumps.
6. Replace damaged/missing staff gauges as logistically feasible.
7. Maintain adult PIT tag system as required. Coordinate with PSMFC.
8. Maintain half-duplex PIT (lamprey) antennas. Coordinate with University of Idaho.
9. Install Okum in leaking ladder joints.
10. **29 January:** Resume normal operation of the AWS pumps.

### **LOWER MONUMENTAL DAM<sup>1</sup> - North Shore Fishway**

1. **1 January:** Turn off fish pumps.
2. **4-5 January:** Dewater and salvage fish in North fishway. Fishway will remain dewatered just before the south ladder is dewatered in early February.
3. Complete winter maintenance according to the Fish Passage Plan, Section 2.3.2.1.
4. Perform maintenance on the AWS pumps.
5. **1-2 February:** Return fishway to operation.

### **LOWER MONUMENTAL DAM<sup>1</sup> - South Shore Fishway**

1. **5-6 February:** Dewater and salvage fish in South fishway.
2. Complete winter maintenance according to the Fish Passage Plan, Section 2.4.1.
3. **26 February:** Return fishway to operation.

### **LITTLE GOOSE DAM<sup>1</sup>**

1. **1 January:** Shut down the AWS pumps.
2. **4 January – 12 February:** Dewater the fish ladder and adult collection channel for inspection and maintenance in accordance to the Fish Passage Plan, Section 2.4.1.
3. Inspect and replace lost fall-out fence sections.
4. Inspect and replace the adult fish channel grating.
5. Inspect and repair adult fish ladder expansion joint seals.
6. Continue to replace seals on fish channel bulkheads.
7. Coordinate with PSMFC for maintenance to the adult PIT tag system.
8. No later than February **29 February:** Resume normal operation of the AWS pumps.

### **LOWER GRANITE DAM<sup>1</sup>**

1. **1 January:** Shut down the AWS pumps.
2. **4 January – 25 February:** Dewater the fish ladder.
3. Complete winter maintenance according to the Fish Passage Plan, Section 2.4.1.
4. Inspect the collection channel by dewatering.
5. Perform maintenance on the AWS pumps.
6. Inspect the adult fallout fence and repair as needed.
7. Routine maintenance of adult trap.
8. Update/repair ladder PIT tag equipment transferred to PSMFC
9. Inspect fish ladder PIT tag arrays.

<sup>1</sup> Methods used in the past for inspecting collection channels at all five dams are shown in Table 1.

10. Relocate/upgrade/repair fish ladder staff gauges.
11. Spillway 1 PIT tag antenna install.
12. **No later than 28 February:** Resume normal operation of the AWS pumps.

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

	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
<b>MCN WA Shore</b>	Camera/ Inspection	Diver/ Inspection	Camera/ Inspection	Camera/ Inspection	Diver/ Inspection	Dewater	Dewater
<b>MCN OR Shore</b>	Diver/ Inspection	Camera/ Inspection	Camera/ Inspection	Camera/ Inspection	Diver/ Inspection	Dewater / Camera	Dewater / Camera
<b>IHR North Shore</b>	Dewater	ROV	ROV	Dewater	ROV	ROV	Unwateringr
<b>IHR South Shore</b>	Diver	Unwatering	ROV/Video camera	Video from boat	Dewater	Video from boat	Dewater/ROV channel
<b>LMO North Shore</b>	Dewatering	Dewatering	Dewatering	Dewatering	Dewatering	Dewater	Dewater
<b>LMO South Shore</b>	Dewatering	Dewatering	Dewatering	Dewatering	Dewatering	Dewater	Dewater
<b>LGS</b>	Dewatering	Dewatering	Dewatering	Dewatering	Dewatering	Dewater	Dewater
<b>LWG</b>	Dewater	Dewater	Dewater	Dewater	Dewater	Dewater	Dewater

<sup>1</sup> Methods used in the past for inspecting collection channels at all five dams are shown in Table 1.