Adult Fish Passage Facilities – 2019-2020 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[1] - Washington Shore Fishway

1. **5 January:** Place ladder on orifice flow. Wasco PUD will shut down.
2. **6 January:** Place exit and conduit stoplogs; Wasco PUD shuts down bypass flow; project dewaters the WA fish ladder down to the tailwater level.
3. **6-16 January**: Grating inspection by camera. Complete winter maintenance according to the current Fish Passage Plan, Section 2.4.1.
4. **17 January:** Resume normal operation of the ladder and small hydro/auxiliary water system.

MCNARY DAM[1] - Oregon Shore Fishway

1. **20 January:** Shut down AWS Fish Pumps then place the ladder on orifice flow.
2. **January 21:** Use ladder crane to install the exit logs and juvenile passage stop logs. Perform physical inspection of ladder to tail water.
3. **21 January to 26 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 dive inspected.
4. **29 February:** Resume normal ladder flow and pump operation.

ICE HARBOR DAM[1] - North Shore Fishway

1. **25 January:** Shut down the AWS pumps.
2. **27 January - 28 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 video inspection with the ROV. [1]
5. Perform maintenance on the AWS pumps.
6. Work on removing diffuser #10 intake trash rack and installing bulkhead, to enable inspection and maintenance of the diffuser valve.
7. Investigate and repair the problem of NEW-1 telescoping weirs getting stuck in guide slot and not lowering down.
8. Replace damaged/missing staff gauges as logistically feasible.
9. Maintain adult PIT tag system as required. Coordinate with PSMFC.
10. Maintain half-duplex PIT (lamprey) antennas. Coordinate with University of Idaho.
11. **29 February:** Resume normal operation of the AWS pumps.

ICE HARBOR DAM[1] - South Shore Fishway

[1] Methods used in the past for inspecting collection channels at all five dams are shown in Table 1.

1. **1 January:** Shut down the AWS pumps.
2. **6-24 January:** Dewater the fish ladder from for maintenance.
3. Complete winter maintenance according to the Fish Passage Plan, Section 2.4.1.
4. Inspect the collection channel by video inspection with the ROV. [1]
5. Perform maintenance on the AWS pumps.
6. Replace corroded, patched section of diffuser #12 grating with new grating.
7. Replace damaged/missing staff gauges as logistically feasible.
8. Coordinate with Blue Leaf for removal of their accessible camera equipment at the lamprey passage structure at SFE-2.
9. Maintain adult PIT tag system as required. Coordinate with PSMFC.
10. Maintain half-duplex PIT (lamprey) antennas. Coordinate with University of Idaho.
11. Install Okum in leaking ladder joints.
12. **24 January:** Resume normal operation of the AWS pumps.

LOWER MONUMENTAL DAM[1] - North Shore Fishway

1. **1 January:** Turn off fish pumps.
2. **2-3 January**: Dewater and salvage fish in North fishway. Fishway will remain dewatered until contractor completes replacing diffuser grating, scheduled to be done by 4 February.
3. Complete winter maintenance according to the Fish Passage Plan, Section 2.3.2.1.
4. Perform maintenance on the AWS pumps.
5. **4 February:** Return fishway to operation.

LOWER MONUMENTAL DAM[1] - South Shore Fishway

1. **5 February:** Turn off fish pumps.
2. **5-6 February**: Dewater and salvage fish in South fishway.
3. Complete winter maintenance according to the Fish Passage Plan, Section 2.4.1.
4. **29 February:** Return fishway to operation.

LITTLE GOOSE DAM[1]

1. **3 January:** Shut down the AWS pumps.
2. **6 January – 29 February:** Dewater the fish ladder for maintenance.
3. Close fish entrance weirs after fish ladder dewatered.
4. Dewater collection channel for inspection and maintenance (dependent on dewatering/unwatering pump installation)
5. Inspect and replace lost fall-out fence sections (dependent on dewatering/unwatering pump installation).
6. Replace the adult fish Channel Grating (dependent on dewatering/unwatering pump installation).
7. Repair adult fish ladder expansion joint seals.
8. Repair expansion joint seals in adult fish channel (dependent on dewatering/unwatering pump installation).
9. Calibrate adult fishway system.

[1] Methods used in the past for inspecting collection channels at all five dams are shown in Table 1.

11. Continue to replace seals on fish channel bulkheads.
12. Complete winter maintenance according to the Fish Passage Plan, Section 2.4.1.
13. **29 February:** Resume normal operation of the AWS pumps.

LOWER GRANITE DAM[1]

1. **1 January:** Shut down the AWS pumps.
2. **6 January – 15 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. Commission water supply pipe to adult trap (part of phase 1).
9. Inspect fish ladder PIT tag arrays.
10. Relocate/upgrade/repair fish ladder staff gauges.
11. Spillway 1 PIT tag antenna install.
12. **No later than 29 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.

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
MCN WA Shore	Camera/ Inspection	Diver/ Inspection	Camera/ Inspection	Camera/ Inspection	Diver/ Inspection	Dewater	Dewater
MCN OR Shore	Diver/ Inspection	Camera/ Inspection	Camera/ Inspection	Camera/ Inspection	Diver/ Inspection	Dewater / Camera	Dewater / Camera
IHR North Shore	ROV	ROV	Dewatering	ROV	ROV	Dewater	Dewater
IHR South Shore	ROV	ROV	Diver	Dewatering	ROV	ROV	ROV
LMO North Shore	Dewatering	Dewatering	Dewatering	Dewatering	Dewatering	Dewater	Dewater
LMO South Shore	Dewatering	Dewatering	Dewatering	Dewatering	Dewatering	Dewater	Dewater
LGS	Dewatering	Dewatering	Dewatering	Dewatering	Dewatering	Dewater	Dewater
LWG	Dewatering	Dewatering	Dewatering	Dewatering	Dewatering	Dewater	Dewater

[1] Methods used in the past for inspecting collection channels at all five dams are shown in Table 1.