

Draft2
JOHN DAY DAM FISHWAYS' ANNUAL MAINTENANCE SCHEDULE
WINTER 2017/2018

North Fish Ladder, upper –

Dec. 05 -13, '17.

- PM count station and exit weirs - JDM & E
- Upgrade light fixtures and install emergency lights at the Counting Station (if funding allows.)
- **Replace the crowder's bottom rubber seals (longer) to prevent adult lamprey access (5 lamprey mortalities occurred under the crowder in 2017!)**
- Adjust window/ crowder brush down as much as possible to eliminate lamprey strip. **Align the brush to make better window contact (downstream edge)– JDM**

North Entrance – not dewatered this year

- AWS pumps inspection & annual maintenance (lubrication fittings need to be procured and replaced?) – JDM & E
- Entrance Computer System & sensors PM – JDE
- **Reinstall two missing panels on entrance/fixer weir – After multiple attempts of using stronger fasteners in the past they keep breaking loose (?) – JD Engineering and Mechanical Maintenance (crane support by JD Structural.)**

North AWS Channel – not dewatered this year

- Leaking Butterfly Valves (AWS Pumps) repair (\$ 16K) – JDM (done in 2017?)
- Inspection of sluice gates 1-8 – JDM

SMF

Nov. 29, '17 – Feb. 28, '18

(Dewater on Nov.27 in case of the inclement/winter weather forecast)

- **Lift the Switch Gate with mobile crane & replace the bottom seals/ inspect the balloon seals to minimize water leakage and juvenile lamprey access/mortalities.**
- **Complete SCADA PLC updates to have all alarms and functions working properly (critical \$ 50K UFR for As-Builds) – JD Electrical and Engineering**
- Replace charcoal filter if necessary (**not this year**)
- PMs and cleanup including Screen Cleaner – JDM & E
- Seal leaking expansion joints (any left to do?)

Juvenile Bypass System

-Dewater

Jan. 20, '18

- Inspect CC conduit's spalling & structural integrity – JD Eng & Structural
- Inspect all orifices/ hardware – JD Mech
- Search for all metal strips/brackets to assure their structural integrity- JD Fish
- PM tainter gate –JDM & JDE

South Turbine Bulkhead Install

No ROV necessary

Jan. 8, '18

- AWS turbine 1 bearing – no inspection/ nothing this year
- **AWS turbine 2 bearing inspection (\$ 15K UFR) – JDM**
- Inspect inside of penstock? - JDM

South Fish Ladder, upper

- Dewater

Jan 9 – Feb. 28, '18

- Orifice flow on January 5 PM, keep control weirs closed until 1/9, AM.

- PM counting station equipment and exit sills (JDM,JDE)
- Fix 3 leaking expansion joints – JDS (last done in 2015)
- CS Crowder is aging- needs JD Engineering and Maintenance inspection & plan to rebuild in the future?

South Entrance, Collection channel - Dewater Jan. 16, '18

- Inspect all gratings and fix deficiencies if found. A few grating segments on the south end of CC showed some wear and tear from the man lifts used there in 2013; JD Structural inspected/scoped in 2014- JD Structural
- Inspect new SE1 weir; check guides for wear & tear from stainless steel wheels (TD had bad/costly experience with theirs!) – JD Structural
- Overhaul of old/spare SE1 weir and install it – JD Structural
- PM SE1, NE1/2 entrance weirs –JDM&E
- Relocate SE1 tailrace sensor - JDE
- SE1 wall diffuser – test/open in December '17 by JD Fisheries
- Inspect diffuser valves/sluice gates - JDM
- Two lowest overflow weirs need to be removed – JD Engineering/Maintenance?
- Demob and remove Wing Gates hardware from Collection Channel MU 9 (\$ 30K?) – Engineering and JDM & S

South AWS conduit - Jan. 22, '18

- Inspect and remove accumulated mussel shells if necessary – JD Structural & Engineering to determine if shell accumulation impacts the AWS performance?

South fish turbine intake trashrack install and water up Feb. 26, '18

- Install trashrack– JDS

JD Tailrace BRZ Avian Lines Grid – PDT planning a contract to reinstall all missing lines approximately in December-March '18.

Guidelines:

- Adult winter maintenance (outage) season is Dec 1 through Feb 28.
- Juvenile winter maintenance (outage) season is Dec 1 through March 31.
- One adult ladder in regular service at all times when the second one is OOS for winter maintenance. Any overlapping outages (two ladders OOS at the same time) are required to be coordinated in advance with FPOM.