

Draft 1
**JOHN DAY DAM FISHWAYS' ANNUAL MAINTENANCE SCHEDULE
WINTER 2018/2019**

North Fish Ladder, upper – Dewater Dec. 03, '18

- PM count station and exit weirs - JDM & E
- Update light fixtures and install emergency lights at the Counting Station (if funding allows.)
- Adjust window/crowder brush to get closer in Auto (it gets .2” closer in Manual mode?)

North Entrance, below tailrace - Dewater Dec. 05, '18

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

North AWS Conduit – Dewater Dec. 06, '18

- **Complete dewatering by Queen Pump is necessary for LPS PDT improvement contract.**
- **Install dewatering pump # 7- JDM**
- Leaking Butterfly Valves (AWS Pumps) repair (3 @ \$ 10K) – JDM (already done the last year?)
- Inspect one AWS pump, \$ 10 K only if funding is available (already done?)
- PMs of sluice gates 1-8 – JDM

SMF - Dewater Nov. 29, '18 – March 27, '19

(Dewater on Nov.28 in case of an inclement/winter weather forecast)

- Design a better bottom seal/ boot on the Switch Gate (last winter's work didn't succeed): to minimize water leaks and potential for small fish getting stuck underneath – Engineering and Mechanical
- **Install SCADA PLC parts/ updates to have all alarms and functions working properly – JD Electrical and Engineering**
- PMs and cleanup including Screen Cleaner – JDM & E
- Seal leaking expansion joints inside of the Elevated Chute.

JBS Collection Channel - Dewater Jan. 22, '19

- **First joint downstream of the TG needs redesigned, larger cover plates and recessed concrete to fit them properly within the wall – continuation by JD Eng & Structural**
- 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. 14, '19

- AWS turbine 1 bearing – no inspection is required this year
- **AWS turbine 2 bearing inspection (\$ 15K UFR) – JDM**
- Inspect inside of AWS Turbines' penstock? - JDM

South Fish Ladder, upper - Dewater

Jan 15 – Feb. 28, '19

- PM counting station equipment and exit sills (JDM,JDE)
- Fix leaking expansion joints – JD Structural
- CS Window Cleaner – needs fixed/updated for proper Auto mode (JD Electrical.)
- CS Crowder is aging- needs JD Engineering and Maintenance inspection & plan to rebuild in the future?

South Entrance, Collection channel - Dewater or ROV?

Jan. 17, '19

- **Inspect all gratings and fix deficiencies if found. A few grating segments on the south end of CC showed some wear from the man lifts used there in 2013; JD Structural inspected/scoped in 2014- JD Structural**
- Inspect new SE1 weir; check guides for wear from the 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 (TW) - JDE**
- SE1 wall diffuser – test/open in late November'19 - JD Fisheries assisted by JD Mechanical.
- Inspect diffuser valves/slucce gates on open diffusers only - JDM
- Two lowest overflow weirs need to be removed (Optional) – JD Engineering/Maintenance?
- Demob and remove Wing Gates hardware from Collection Channel MU 9 (Optional at \$ 30K?) – Engineering and JDM & S

South AWS conduit – Dewater or NOT?

Jan. 22, '19

- **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. 25, '19

- Install trashrack– JDS

JD Tailrace BRZ Avian Lines Grid – All lines in place. No winter maintenance necessary.

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.