*Draft 2*

**JOHN DAY DAM FISHWAYS’ ANNUAL MAINTENANCE SCHEDULE**

WINTER 2015/2016

## North Fish Ladder, upper -Dewater Dec. 1– Dec. 14, ‘15

* Orifice flow starts at 2100 hrs on Nov.28, keep control weirs closed until 12/1
* PM count station and exit weirs - JDM & E
* Replace existing proximity limit switches with contact/ roller type at CS Crowder and window cleaner - JDE
* Adjust window/ crowder brush for proper operation (leaves large parts of the crowder window dirty!) – JDM & E
* Continue inspecting & repairing the loose brackets at the “third” orifices – JDS
* Seal a couple of expansion joints as needed (Fisheries will monitor) – JDS

## North Entrance -Dewater (per M. Decker) Dec. 3, ’15

* Dewater with pump 7 only (might be a challenge to time it correctly?)
* Entrance AWS sluice gates’ PMs
* Inspect all gratings and fix deficiencies (unlikely) – JD F & E
* AWS pumps inspection & annual maintenance – JDM & E
* Entrance Computer System & sensors PM – JDE

**North AWS Channel - Not dewtered this year**

* Engineering inspection?

**SMF -Dewater Nov. 24, ’15**

* Blue PDS drain pipe leaking joint repair - JDM & E
* **Complete SCADA PLC 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 (any left to do?)
* Clean/Paint separator’s porosity unit – JDS in September 2015 ongoing

## Juvenile Bypass System -Dewater 20 Jan, ’16

* 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 Turbines (AWS) Bulkhead Install Jan. 7, ‘16**

* Inspect sill before and proper seal after bulkhead installation- ROV is unnecessary, but blow the debris of the trashrack before it’s removed.
* Inspect inside penstock – JDM& Engineering

## South Fish Ladder, upper - Dewater Jan 11, ’16 – Feb. 28, ‘16

* Orifice flow on January 8 at 1800 hrs, keep control weirs closed until 1/11 AM.
* PM count station equipment and exit sills (JDM,JDE)
* Fix two leaking expansion joints – two are starting to leak (as of September’15)
* CS Crowder is old/ rusting- needs JD Engineering and Maintenance inspection & plan to rebuild in the future?

## South Entrance, Collection channel - Dewater Jan. 13, ‘16

* **Repair erosion in the CC wall at 90 corner - JD Engineering /Contract**
* 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!) – JDStructural
* Overhaul of old/spare SE1 weir – JD Structural
* PM SE1, NE1/2 entrance weirs–JDM&E
* SE1 wall diffuser demob/ removal – JD Engineerin**g** planning for distant future?
* Inspect diffuser valves/sluice gates - JDM
* Three lowest overflow weirs need to be removed – JD Engineering contract for the next year?
* Demob and remove Wing Gates hardware from Collection Channel MU 9 – Engineering and JDM & S planning for the next year?

**South AWS conduit - Not dewatered in 2016 (?)**

* Inspect conduit and remove accumulated mussel shells if necessary – JD Structural **&** Engineering to determine if shell accumulation impacts the AWS performance (it appears to be working fine ? )

## South fish turbine intake trashrack install and water up End of Feb, ‘16

* Install trashrack– JDS

**JD Tailrace BRZ Avian Lines Grid –** Best maintenance time is March 2016

**Two lines, tower to tower are missing and need to be reinstalled, plus six Navlock and one Spillway – JD Engineering & Structural**

## 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.