Draft 2

JOHN DAY DAM FISHWAYS' ANNUAL MAINTENANCE SCHEDULE WINTER 2014/2015

North Fish Ladder, upper -Dewater Dec. 2, '14 – Dec. 16, '14

- Orifice flow starts at 2100 hrs on Nov.29, keep control weirs closed until 12/1
- PM count station and exit weirs JDM & E
- Replace existing limit switches with contact/ roller type at CS crowder and window cleaner; adjust it for proper operation - JDE
- Re-attach CS Upstream and Exit staff gauges correctly JDS
- AWS pumps inspection & annual maintenance JDM & E
- Continue inspecting & repairing the loose brackets at the "third" orifices JDS
- Seal a couple of expansion joints as needed (ongoing) JDS
- Remove and repair Exit Log Boom JDS

North Entrance

- ROV only this year Dec. 3 or 4, '14 • Inspect all gratings and fix deficiencies if found – ROV in house (JDS & JDF)

- None this year

- AWS pumps inspection & annual maintenance JDM & E
- Fixed Entrance Weir- attach its skin plates with proper fasteners JD Mechanical with JD Structural crane support.

North AWS Channel

• Engineering inspection - N/A

SMF

-Dewater Nov. 24, '14

- Blue PDS drain pipe' hissing expansion joint- it is normal/OK per Mr. Roth
- Complete SCADA PLC updates to have all alarms and functions working properly – JD Electrical and Engineering
- Remove Hilton Valve and plate over its hole- JDM
- PMs and cleanup including Screen Cleaner JDM & E
- Seal water leak in the transport flume, first joint downstream of switch gate- JDM
- Paint separator's porosity unit JDS or M?

Juvenile Bypass System

- Repair flume spalling
- Search for all metal strips/brackets to assure their structural integrity.
- Inspect conduit (Engineering)
- PM all SMF equipment and tainter gate (JDM, JDE)

South Turbine Bulkhead Install -ROV inspect Jan.6, '14

- Inspect sill before and proper seal after bulkhead installation -District's ROV
- Inspect inside penstock ? JDM

South Fish Ladder, upper

• Orifice flow on January 5 at 1800 hrs, keep control weirs closed until 1/7 AM.

- Dewater

• PM count station equipment and exit sills (JDM,JDE)

South Entrance, Collection channel Jan. 12, '15 - Dewater

Repair hole/ erosion in the CC wall at 90 corner - JD Engineering / Contractor

-Dewater **Mid Jan, '14?**

Jan 7, '15 – Feb. 28, '15

- Inspect diffuser 5's stove pipe to check for a source of air bubbles JD Structural
- Inspect all gratings and fix deficiencies if found. Some grating segments on the south end of CC showed some wear and tear from the man lifts used there the previous winter; they need to be replaced JD Engineering & Structural
- Replace SE1 weir with new spare (old weir becomes spare) JDS
- PM SE1, NE1/2 entrance weirs –JDM&E
- SE1 wall diffuser JD Engineering planning for 2016 on ?
- Inspect diffuser valves/sluice gates (one left to do) JDM
- Three lowest overflow weirs need to be removed JD Engineering contract for 2016 on?
- Demob and remove Wing Gates hardware from collection channel MU 9 Engineering and JDM & S planning for 2016 on?

South AWS conduit

- Does it need to be dewatered in 2015 ?

• 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 installand water up End of Feb, '14

• Install trashrack-JDS

JD Tailrace BRZ Avian Lines Grid – Best maintenance time is March 2015 One line tower to tower is missing and needs to be reinstalled – JD Engineering & S

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.