COMMANDERS PANEL
PNWA ANNUAL MEETING

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Walla Walla District
9 Oct 2019
AGENDA

• District Overview

• Topics of Interest
  - 2019 Fish efforts summary
  - 2020 March Navigation Lock Maintenance
  - Channel Maintenance
  - Long Term Outage Maintenance Planning

Dispensing Rhodamine dye into a flowering rush test plot in Lake Wallula on the Columbia River where dilution rates were tested with & without a bubble curtain.
• Civil Works Boundary focused on the Snake River Basin
• Covers 107,000 square miles
• Includes parts of 6 States
• Regulatory Boundary is Idaho border
2019 FISH UPDATE

- Adult returns well below 10-year average; poor ocean conditions (BC, WA, OR)

- Fish-related facility improvements
  - Little Goose
    - New Adjustable spillway weir
    - Fish ladder cooling pump
  - Lower Granite juvenile fish passage system

- Apr-Jun Spring spill program
  - 2019 increased volume to reach 120% gas cap
  - 2020 increase volume to reach 125% gas cap

- Evaluating early juvenile fish facilities startup
  - 2019 – Little Goose dam
  - 2020 – Lower Granite and McNary dams
MARCH 2020 MAINTENANCE PLANNING

Start: 6 am, Saturday, 7 March 2020

End: 11:59 pm Sunday, 22 March 2020 (2 weeks)
  • McNary
  • Lower Monumental
  • Lower Granite

End: 11:59 pm Sunday, 5 April 2020 (4 weeks)
  • Ice Harbor
  • Little Goose

The following slides provide a work summary for each lock & dam
MCNARY LOCK & DAM (2 WEEKS)

- Annual navigation lock maintenance
- Inspect tainter valves
- Downstream lateral diffuser condition assessment (Dam Safety)
- Downstream gate crack mapping, 3D survey.
- Gudgeon investigations
  - Selective concrete removal to expose more of the gudgeon
  - Non-destructive testing of exposed gudgeon
  - Fitness for service analysis

McNary’s new tainter valve #1
ICE HARBOR LOCK & DAM (4 WEEKS)

- Annual navigation lock maintenance
- Replace downstream gate sheave shafts in both towers
- Replace downstream gate hoist machinery motors
- Replace service & safety cables on floating guide wall

80,000 lb gate sheave

2017 gate sheave removal
LOWER MONUMENTAL LOCK & DAM (2 WEEKS)

- Annual navigation lock maintenance
- Replace tainter valve #1 lift cylinder
- Upstream gate bubbler system maintenance

2019 lock drain valve repairs
• Annual navigation lock maintenance
• Waterstop repairs to upper gate sill monolith
• Miter gate cathodic protection system checks & repairs
• Fill and drain valve inspection & repairs
• Upstream tainter gate inspections

Installation of new gudgeon arm in 2014
LOWER GRANITE LOCK & DAM (2 WEEKS)

- Annual navigation lock maintenance
- Tainter valves inspection
- Tainter valve unwatering pump maintenance
- Prepare for future miter gate cleaning and inspection
OTHER ITEMS

• Channel Maintenance Planning - pending Columbia River Systems Operation EIS completion in Sept 2020

• Long Term Outage Planning
  • Walla Walla striving to extend the interval to the next extended outage by:
    o Prioritizing replacement/refurbishment of highest identified risks
    o Replace McNary Navlock derrick cranes to reduce schedule risk during outage
    o Coordinating for early McNary gate prefabrication/delivery to mitigate risk
    o Six to eight week outage TBD for McNary gate gudgeon anchor replacement & Ice Harbor sheave replacement before the long term outage
  • Other required work – Lower Monumental & Little Goose upstream gates replacement
  • Walla Walla District Industry Day – 16 Oct 2019 at the Marcus Whitman Conference Center in Walla Walla, 8 am to 4 pm.
QUESTIONS