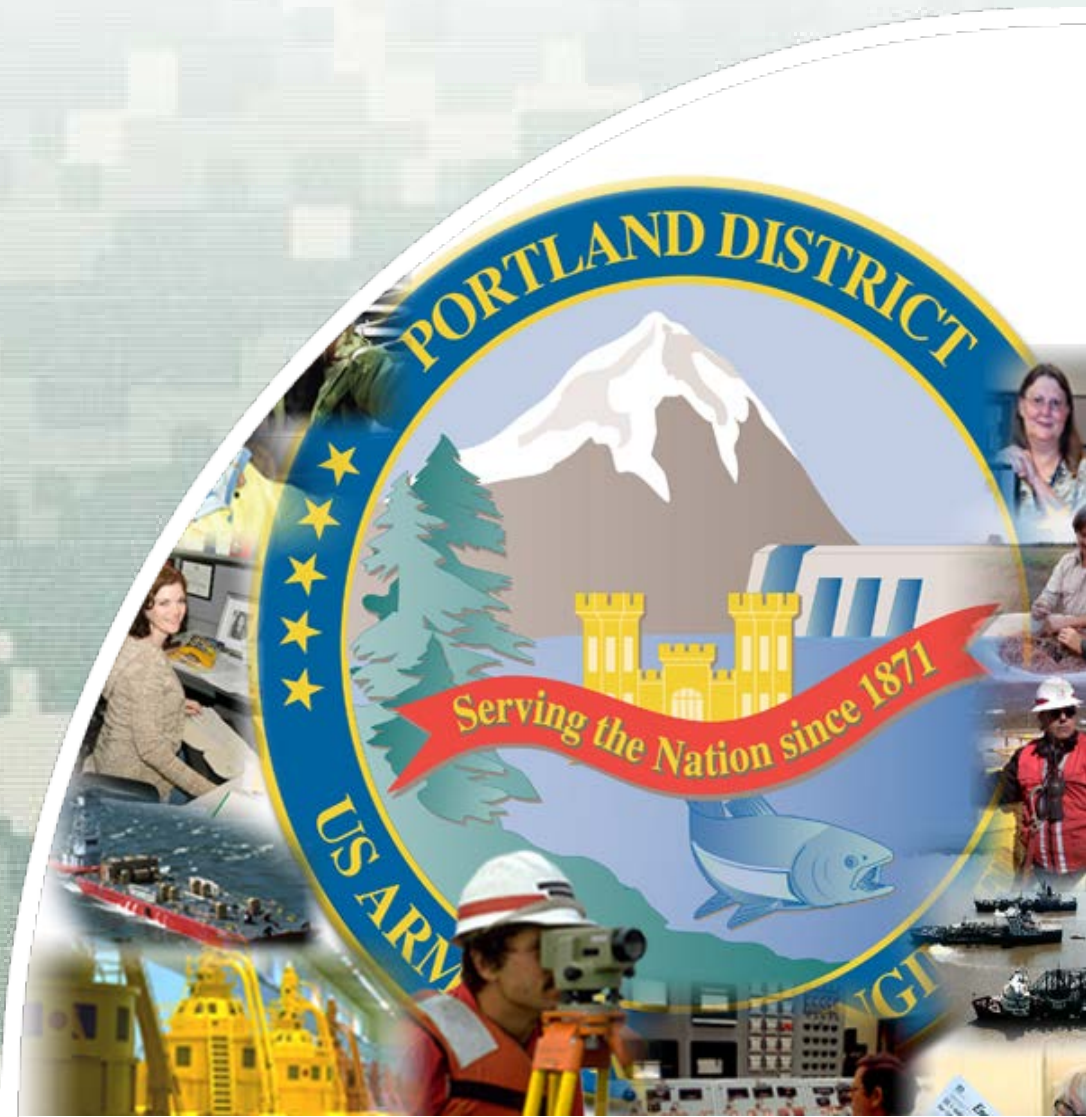


NWP 2015 Navlock Outage Summary

Dwane Watsek
Chief, Operations Division
Portland District
27 May 2015



Bonneville Lock and Dam

- No significant Navlock issues identified
 - ▶ Routine work and PM's completed on major components
- Replacement of D/S dolphin (done outside of IWW period by Small Projects contract)



The Dalles Lock and Dam

- Tuned and adjusted gate #3 drives
- Installed Miter Gate 2 gearbox oil purifier (Gate 1 installation scheduled for 2016)
- Corrected electrical system grounding & lighting issues
- Tainter Valves:
 - ▶ Valve 1,3 and 4 were inspected by ROV
 - ▶ Valve 2 seals replaced
 - ▶ Valve 1 dewatering pump will be pulled in May for rebuild
 - ▶ Valve 4 dewatering pump scheduled for rebuild before 2016 outage



John Day Lock and Dam

- Tainter Valve Keeper Plate issues identified:
 - ▶ TV 2 and 3 temporary repair of pins that have sheared their keepers and backed out; currently installing temporary fix and EC working on design of a permanent solution
- Cavitation repair of Tainter Valves identified:
 - ▶ Anomaly on the backside of the Tainter valves just down from the horizontal seal bar; EC is investigating further
- Other necessary 2017 outage work identified:
 - ▶ DSQ 1 replacement (new switch was purchased in 2012)
 - ▶ Friction sheave and bearing repairs
 - ▶ Replacement of tainter valve operating cylinder
 - ▶ D/S gate wire rope replacement (will be within 1 to 2 yrs of projected lifespan by 2017)

