

FY17 Columbia-Snake River Navigation Lock Extended Outage

Progress Update to Navigation Stakeholders

Information presented during conference call with stakeholders on March 2, 2017

Thank you for your continued support and interest in the 2016-2017 Columbia-Snake River System extended navigation lock outage. For those who may be new to this topic, here's a bit of background:

The U.S. Army Corps of Engineers is conducting an extended navigation lock maintenance outage December 12, 2016, through March 20, 2017. The 14-week-long closure affects all Corps navigation locks on the Columbia and Snake rivers, during which time critical, non-routine repairs and maintenance, plus routine maintenance and scheduled improvements will occur.

The project information below was originally provided during a navigation-stakeholder teleconference on March 2, 2017. Please, note that these teleconference updates will occur weekly throughout the duration of the extended lock outage. For those who were unable to attend the February 23 teleconference, here are the latest work-progress updates:

All locks – All locks were taken out of service on December 12, and numerous in-lock work activities are being accomplished during this time. Overall, progress continues on-track, although the unusually extreme winter conditions this year are having some effect on individual contract work schedules and on in-house work. To maximize maintenance opportunities, all sites are continuously assessing their schedule, progress and resource availability with the intention of completing critical lock-maintenance activities within the extended-outage schedule.

Bonneville Lock and Dam –Bonneville completed their navigation lock controls upgrade and reopened the navigation lock to river users on February 9, 2017, as scheduled.

The Dalles Lock and Dam – The lock has several major work projects happening during the outage -- replacement of the upstream gate; and for the downstream gate, replacement of the gudgeon, performing adjustments, installing cathodic protection, and upgrading the lock controls and power distribution system. On-site work during the past week -- For the upstream gate, the seals are on the gate. The gate-lifting machinery hoists are completely installed. Wire ropes between the hoists and the gate are connected and tensioned. The gate is undergoing functional, in-the-dry testing, moving the gate up and down at the slowest rates. On the downstream gate, both leaves diagonals are fully tensioned and both quoin and miter blocks adjusted. The operator arms are reinstalled and the gate has been mitered (closed), which required a few additional adjustments. Work is underway to replace and adjust the bottom miter gate seals. The electrical subcontractor continues wrapping up the remaining loose ends on the controls and power distribution equipment upgrade. Moving forward -- The contractor will wrap up the few remaining loose ends and turn the lock over to the Corps next week for in the dry functional testing and commissioning. The following week the lock will be watered up and in the wet functional testing and commissioning will be completed. At this time, since both the upstream and downstream gates have been moved and any issues were quickly resolved, the risk of impacts to the March 20 lock reopening is greatly reduced. However, the schedule remains very tight, and a major issue during commissioning could impact its reopening date.

John Day Lock and Dam – John Day's routine maintenance activities include cleaning and inspecting equipment, painting, cleaning staff gauges, changing gear box fluids, repairing upstream and downstream guide-walls, safety inspections, and other preventative maintenance actions. The lock is still de-watered as workers inspect the downstream gate, bearing shoes and guide wheels, and grease the wire ropes and associated machinery. Tainter valves, conduits and the overall lock are also being inspected. Work is on schedule.

McNary Lock and Dam –Walla Walla District plans to complete several repairs to the downstream miter gate, including repairs to the gudgeons (top hinge of each gate leaf), replacing the bottom seal assemblies and deteriorated timber fenders on each gate leaf, and replacing bumpers on the navigation lock walls adjacent to the downstream gate. Installation of the vertical timber bumpers on the NavLock concrete walls behind the gate leaves was completed on February 23. The bottom seal replacement was completed on both gate leaves on March 1. Post-construction surveys were also completed on March 1. Post-construction clean-up, contractor equipment removal, and final inspection of the D/S Gate Repairs are scheduled for today (Thursday March 2). McNary’s in-house maintenance crew is wrapping up scheduled maintenance activities and repair work on tainter valves #1 and #3. Overall, work is on schedule.

Ice Harbor Lock and Dam – Critical components of the NavLock machinery and control systems require replacement during the extended closure. The contractor has completed pre-operational commissioning and static testing of the drive systems. The contractor is completing the initial hoist cable tensioning, load balancing of counter weights, and gear alignment. The contractor is scheduled to start operational commissioning and dynamic testing of the new hoist equipment and controls by March 4. The contractor is working seven days per week, 12 hours per day. A night shift continues this week to allow sub-contractors to complete painting requirements in both towers. In-house crews have completed weld repair work on the downstream gate, and scaffolding has been removed. They are focusing on tainter valve preventive maintenance and painting. Overall, work is also on schedule.

Lower Monumental Lock and Dam – Work at Lower Monumental involves the second phase of the downstream gate replacement project, which includes replacing the machinery and control systems that operate the gate. The contractor is currently working seven days per week to remain on schedule. Operational testing (with movement of the gate) and commissioning of the new hoist equipment and controls is in progress and scheduled to be completed March 2. Operational testing for full lockage cycles involving filling and draining the NavLock with the tainter valves and operation of the upstream and downstream gates is scheduled to start on Friday, March 3, and be completed on Sunday, March 5. Painting in the tower machinery rooms is scheduled to start on March 6 and be completed on March 18. Installation of the new roof access platforms is scheduled to start on March 12 and be completed on March 18. In-house staff is continuing work on the upstream gate and a tainter valve. Overall, work is on schedule.

Little Goose Lock and Dam – Lock work includes replacement of the north gudgeon arm and linkage, and replacement of the pintle assemblies for both gate leaves. Structural repairs include resurfacing the quoin and miter blocks, replacement of timber fenders, and installation of a safety hand rail system on the top of each gate leaf. Based on previous delays due to performance, the painting of the lower 25 feet of the gates was removed from the contract in an effort to gain time on the schedule. The painting scope of work was not critical, and will be rescheduled to be accomplished during a later, routine maintenance outage. Both miter gates have been safely jacked and shored, with the gudgeon arms, timber supports, and the quoin and miter blocks removed. Work continues on the structural steel repairs to the skin plates and stiffeners, as well as the replacement of the pintle heel assemblies. The north gate is scheduled to be moved back in place on March 12, and the south gate immediately after. After the gate leaves have been set back in place, the contractor will start the commissioning process which entails checking the alignment, diagonal tensioning, and operational testing of the gates. A laminar tear was discovered on the web of a vertical member flange of the south gate this past weekend, requiring additional testing and weld repairs. Initial reports indicate that necessary repairs may impact the schedule. Staff is working with the contractor to identify impacts and any potential changes to the projected return-to-service date. We will continue to keep you informed of this situation. The contractor was working two, 12-hour shifts, six days a week to complete the remaining contract work, and at the time of this report was planning to be working seven days a week for the remainder of the project.

Lower Granite Lock and Dam – Crews are currently working on installation of new fill/drain valve hydraulic cylinders, annual preventive maintenance tasks. Work is on schedule.

This extended lock outage is a coordinated effort between the Corps' Portland and Walla Walla districts and commercial river users. Our goal is to prioritize and accomplish urgently needed lock repairs along the Columbia and Snake rivers while minimizing the impact lock closures have on river users.

We will continue to provide regular updates on work in progress. Our next teleconference update is scheduled for March 9 at 1 p.m. -- we hope you can join us for this call! Please, reference the attached **FY17LockOutage Stakeholder Teleconference Schedule** for call-in instructions.

For those who cannot attend the teleconference meeting, a written stakeholder update will also be sent the following day via email and posted to the FY17 Extended NavLock Outage webpage <http://www.nww.usace.army.mil/Missions/Navigation/FY17LockOutage.aspx>.

For more information about the extended outage or to sign up for future email updates, visit our website or email FY17LockOutage@usace.army.mil. You are also welcome to call or email our Public Affairs Offices at the numbers and addresses below.

Portland District Public Affairs Office
(503) 808-4510
cenwp-pa@usace.army.mil

Walla Walla District Public Affairs Office
(509) 527-7020
cenww-pa@usace.army.mil

Sincerely,

Sheryl Carrubba
Senior Navigation Program Manager
Northwestern Division, U.S. Army Corps of Engineers

FY17LockOutage

Stakeholder Teleconference Schedule

All dates are Thursdays at 1 p.m. (Pacific)

Monthly – Sept. 8, Oct. 6, Nov. 3

Weekly – Dec. 1, 8, 15, 22, 29

Jan. 5, 12, 19, 26

Feb. 2, 9, 16, 23

Mar. 2, 9, 16

Teleconference Call-in Instructions

Dial: **877-848-7030** Toll-Free

When prompted, enter:

Access Code **4909700#**

Security Code **7020#**

★Written update information presented during teleconference will be distributed via eMail and Web-posted the following day



FY17LockOutage@usace.army.mil



BUILDING STRONG®