

FY17 Columbia-Snake River Navigation Lock Extended Outage

Progress Update to Navigation Stakeholders

Information presented during conference call with stakeholders on February 23, 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 February 23, 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 ensuring critical lock-maintenance activities are accomplished 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, concrete that had to be removed to allow the new gate to be installed is now completely poured back. The gate lifting machinery hoists are in-place and electrical connections are underway. On the downstream gate, the gudgeon connections are now installed and the north gate leaf diagonals are tensioned. The electrical subcontractor continues installing the new controls, the new power system and machinery connections. Moving forward -- On the upstream gate, machinery electrical connections will be completed, and wire ropes will be connected to the gate and tensioned. Gate seals will be installed, and instrumentation will be connected to equipment in the lock and powered up. On the downstream gate, diagonal tensioning of the south miter gate will be completed, then miter and quoin block adjustments will begin. Now that the gates can be moved, the cathodic protection installation will be completed. The electrical work will continue with controls and power distribution equipment installation. Electrical testing and check out on the completed areas will also continue. As reported during the past several updates, the weather this winter has been extremely bad, with continued storm after storm. Our contractor and construction management team have done a tremendous job of continued progress despite the poor weather conditions. The weather forecast has improved, and our team has a path forward to complete the remaining work and reopen the lock on March 20, as planned. However, the schedule is very tight in our remaining construction and commissioning activities schedule, so any weather, construction or commissioning issue could impact our reopening date. Bottom line: We continue to do everything possible to safely complete our work within the outage window. We want to emphasize, we have not made a decision to make any changes to the overall schedule. We will continue to keep you informed of this dynamic situation via these teleconferences.

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 floating bulkhead is positioned at the lower end of the lock and the lock was de-watered last week. We are currently inspecting the downstream gate, bearing shoes, guide wheels and greasing 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. Also during the outage, McNary staff plan to complete repairs to one fill tainter valve and one drain tainter valve using in-house labor. Gudgeon repairs were completed on the north gate leaf on February 13 and on the south gate leaf on February 17. All related jacking and shoring equipment has been removed from both gate leaves. Installation of the new horizontal timber fenders on both leaves is complete. Installation of the vertical timber bumpers on the NavLock concrete walls behind the gate leaves is in progress and scheduled to be completed on February 23. The bottom gate seal replacement is in progress and scheduled to be complete on February 28. Post-construction surveys are scheduled to be completed February 23 through February 27. The contractor continues to work a 6-day work week to remain on schedule. McNary’s in-house maintenance crew continues scheduled maintenance activities and repair work on tainter valves Number 1 and Number 3. Overall, work at McNary 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 is completing the installation of the new electrical and controls equipment; and cleaning and greasing of the hoist cables. Pre-operational commissioning and static testing of the drive systems started February 22. Initial hoist cable tensioning and balancing of counter weights will begin during the week of February 27. The contractor is working seven days per week, 12 hours per day. A night shift was added this week to allow sub-contractors to complete painting requirements in both towers. In-house crews are performing weld repair work on the downstream gate. It is being done concurrently with the contract work occurring in the machinery towers. This 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. The installation of all new mechanical, electrical, and controls equipment is complete. Alignment of the new pinion gears was completed on February 22. Load balancing of the hoist cables was completed on February 19. Pre-operational testing and commissioning of the new hoist equipment and controls were completed February 19 (testing without moving the gate). Operational testing and commissioning of the new hoist equipment and controls started February 20 and are scheduled to be completed March 4 (testing with movement of the gate). Trial lock cycles will begin on March 5. The contractor will also complete grouting of equipment bases and painting during the next two weeks. In-house staff is continuing work on the upstream gate and a tainter valve. Overall, work is on schedule.

Little Goose Lock and Dam – Work at Little Goose includes replacement of the north gudgeon arm and linkage, and replacement of the pintle assemblies for both gate leafs. 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. At this time, 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, timber fender supports, as well as the replacement of the pintle heel

assemblies. The south gate is scheduled to be moved back in place on March 3, and the north gate during the following week. After the gate leaves have been set back in place, the contractor will start the commissioning process, which involves checking the alignment, diagonal tensioning, and operational testing of the gates. The contractor had some difficulty in removing the existing pin in the operating cylinder and replacement of the jacking system of the south gate. That, and extreme winter weather conditions, affected the contractor's schedule by approximately two weeks. As a result, the painting of the lower 25 feet of the gates was removed from the contract to help gain back those schedule days. The painting scope of work was not critical, and will be rescheduled to be accomplished during a later, routine maintenance outage. The contractor continues to work two, 12-hour shifts, six days a week, to complete the remaining contract work. Weld repairs on the new stiffener plates and a crack repair on the south gate continue to be time intensive, leaving zero flexibility in the schedule. In-house work continues on the NavLock drain sluice gate repairs, tainter valve repairs and bascule bridge machinery room. Overall, work is still on schedule.

Lower Granite Lock and Dam – Work has been completed on replacement of the upstream gate wire ropes on the south side. Crews also completed replacement of damaged timber bumpers on the downstream miter gate and are currently working on installation of new fill/drain valve hydraulic cylinders. 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.

ON-SITE MEDIA EVENTS: In order to ensure our stakeholders and the public remain informed about our progress, we conducted media days in both districts. Portland District's media day at The Dalles lock took place January 31, as the new upstream gate was placed by crane into its permanent position. Walla Walla District conducted its media day on February 2 at Ice Harbor's lock to see the new lock gate machinery being lifted by crane into the gate towers. Thank you to all who were able to attend these events.

We will continue to provide regular updates on work in progress. Our next teleconference update is scheduled for March 2 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

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(509) 527-7020
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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



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