

FY17 Columbia-Snake River Navigation Lock Extended Outage

Progress Update to Navigation Stakeholders

Information presented during conference call with stakeholders on February 16, 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 16, 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 9 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 continues being poured back, which is a multi-stage process. The gate-lifting machinery hoists are in-place. On the downstream gate, the cathodic protection installation is at a holding point, awaiting the gate to be moved to allow access near the wall connection; the new gudgeon anchors were tensioned and connections to the gate leaves have begun. The electrical subcontractor continued installing the new controls and the new power system. Moving forward -- machinery installation on the upstream gate will be completed, and wire ropes will be connected to the gate and adjusted. Gate seals will be installed. On the downstream gate, workers will complete gudgeon connections to the gate leaves and adjust over the pintle (the bottom hinge point). Then, block and diagonal adjustments will be made. Once the gate can be moved from its temporary, supported position, cathodic protection installation will be completed. The electrical work will continue with installation of controls and power distribution equipment. Electrical testing and check out on the completed areas will also continue. As reported during the past several calls, weather has caused major impacts to our construction progress. Additional poor weather occurred this week. We have been able to make progress at a fairly normal production rate, at times, and continue with additional shifts as the weather allows. However, as poor weather continues and the remaining outage window shortens the impacts are harder to overcome. We have not made any decisions to change the lock reopening date and our team continues to work with the contractor to determine the most effective path forward. The situation is very dynamic as the inclement weather and forecasts continue. 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. We moved the floating bulkhead to the lower end of the lock yesterday and have de-watered the lock. We are currently inspect the downstream gate, bearing shoes, 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. Also during the outage, McNary staff plan to complete repairs to one fill tainter valve and one drain tainter valve using in-house labor. The bottom gate seal replacement is in progress. Installation of the new seals are scheduled to be complete on the north leaf by mid next week and complete on the south leaf by February 24. The gudgeon repairs were completed on the north leaf on February 13. Gudgeon pin removal is in progress on the south leaf and is scheduled for completion today. Line-boring for the new pin installation on the South leaf is scheduled to begin tomorrow February 17. Gudgeon repairs on the South leaf are scheduled to be complete by mid next week. 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 complete early next week. 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 north and south tower sheaves, shafts, bearing assemblies, and ring gear have all been flown back into each tower. Completing the equipment alignment and monument survey this week. Work continues on the installation of the new electrical and controls equipment and cleaning/greasing of the hoist cables. The contractor is working seven days per week, 12 hours per day. A night shift will be added for approximately two weeks to complete painting requirements in both towers. Overall, work is still on schedule to be completed during the lock outage. In-house crews are performing weld repair work on the downstream gate. It is being done concurrently with the contractor’s work 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 and continues to regain time lost from the previous winter weather. The installation of all new mechanical, electrical, and controls equipment is complete. Alignment of the new pinion gears is in progress and scheduled to be complete by February 17. Load balancing of the hoist cables is in progress and scheduled for completion February 18. Pre-operational testing (testing without moving the gate) and commissioning of the new hoist equipment and controls are in progress and scheduled to be complete February 23. Operational testing (testing with movement of the gate) and commissioning of the new hoist equipment and controls are scheduled to begin February 24. 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 leaves. Structural repairs include resurfacing

the quoin and miter blocks, replacement of timber fenders, painting of the lower 20 feet of each gate leaf, 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 February 28, and the north gate the following week. After the gate leafs 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. The contractor had some difficulty in removing the existing pin in the operating cylinder and replacement of the jacking system of the south gate, as well as the weather delayed the contractor's schedule approximately two weeks. As a result, the painting of the lower 25 feet of the gates was removed from the contract to ensure the NavLock would be brought back to service on time. 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, and six days a week to complete the remaining contract work. In-house work continues on the NavLock drain sluice gate repairs, tainter valve repairs and bascule bridge machinery room. Overall, work is on schedule.

Lower Granite Lock and Dam – Work continues with replacement of the upstream gate wire ropes on the south side, and is anticipating completion next week. Crews are also working on replacement of damaged timber bumpers on the downstream miter gate and 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 February 23 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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