

FY17 Columbia-Snake River Navigation Lock Extended Outage

Progress Update to Navigation Stakeholders

Information presented during conference call with stakeholders on January 12, 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 January 12, 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 January 5 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-schedule. To maximize maintenance opportunities at all of our locks, all sites are continuously assessing their schedule, progress and resource availability with the intention of adding additional work items to routine lock-maintenance activities within the extended-outage schedule, dependent upon available resources.

Bonneville Lock and Dam – The navigation lock controls will be updated, which includes removing existing navigation lock systems and control interfaces, and installing new programmable logic controllers (PLCs). In-house crews have completed practically all new hardware installation and connections. System commissioning is schedule to begin on January 17, which is a systematic run through of all systems to ensure the new hardware and software is performing as expected. Revisions to both will be made as required. Some of the other work that was scheduled to take place, like climbing inspections of the gates, has been delayed because of the bad weather. Those inspections will be rescheduled as time and weather permits. Work is on schedule.

The Dalles Lock and Dam – The lock will have 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. For the upstream gate, work continues toward removal of the concrete to allow access for the new gate to be installed, with the south side complete and the north side nearing removal. The old trunnions -- where the gate hinges to the lock wall -- have been removed and drilling is underway for the new trunnion installation. On the downstream gate, both leaves are fully supported and the gudgeon pins are removed. Concrete demolition and drilling for the new gudgeon installation has begun. In parallel with the gudgeon work, the cathodic protection system installation has begun. The electrical subcontractor continues pulling old controls and power distribution equipment/wiring and connecting the new. The contractor is working to complete concrete removal for the upstream gate. They will continue installation of the new trunnion anchors and place the new upstream gate into the lock chamber. On the downstream gate, they will continue concrete demolition, remove the old gudgeon hardware and begin installation of the new. In parallel with that effort, cathodic protection installation will continue. The electrical work will continue with controls and power distribution equipment demolition and installation. The winter weather is impacting progress, however, the contractor intentionally put together a team that could accomplish this effort working 12 hours a day, 6 days a week, allowing for extra crews to perform on a second shift and Sundays, as needed. The contractor has

utilized a second shift team, on schedule-critical tasks and will continue to do so, as needed, to maintain schedule. Overall, work continues on schedule.

John Day Lock and Dam – Portland District has no extensive repairs planned for the John Day navigation lock. Maintenance crews will use the time to clean and check equipment, paint, clean staff gauges, change gear box fluids, repair upstream and downstream guidewalls, and conduct extensive preventive-maintenance actions and safety inspections. John Day Dam continues preparations to dewater the NavLock to a level lower than the chamber floor for inspections. Crews are currently repairing welds on the upstream gate. 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. All government-furnished material required for the bottom seal replacement and timber fender replacement has been delivered to McNary Dam. The government team continues transferring material to the contractor this week. Start of work by the contractor was delayed 3 days due to the recent weather and associated road conditions. The contractor started work today and is confident that by extending their work week to 5 or 6 days per week will quickly recover the lost days. Over the next week, the contractor will begin surveying activities, and then jacking and shoring of the south gate leaf in preparation for the gudgeon repairs. McNary's in-house maintenance crew continues scheduled maintenance activities and has completed mobilizing into the lock. Extreme winter weather conditions have delayed the start of repair work on the 2 drain/fill tainter valves. However, work can still be completed within the overall outage schedule. 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 existing ring gear has been removed and moved to the contractor's shop to match drill the new ring gear. The contractor has completed separation of the sheaves and removal of the sheave shafts in both gate towers. Inspection of the existing sheave hubs and shafts revealed gouging that will require machining down to clean metal. This will require fabricating new sleeves and modifying the hubs to maintain proper fit-up with the new shafts. It is currently uncertain if there will be any schedule impacts. We continue to work closely with our prime contractor, and we will do all we can to avoid any impacts to the overall outage schedule. As always, we will keep our stakeholders informed. Work continues on demolition and installation of the new electrical and controls equipment in both towers. The contractor is working 7 days per week, 12 hours per day. In-house crews started weld repair work on the downstream gate on Monday, January 9, to be done concurrently with the contractor's work on the machinery towers. Work is 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 7 days per week, with two 12-hour shifts each day to complete the critical weld repairs on the friction sheaves. Demolition of existing equipment has been completed. Weld repairs on the south-tower friction sheave was completed on January 7. Weld repairs on the north-tower friction sheave is progressing well and is scheduled to be complete on January 15. The contractor continues installing the new control panels and associated wiring terminations, and has started the replacement of the friction sheave bearings in the south-tower machinery room. In-house staff continues work on the upstream gate and a tainter valve. Work is on schedule.

Little Goose Lock and Dam – Work at Little Goose involves replacement of a gudgeon arm and linkage, and replacement of the pintle assembly for both downstream lock gate leafs. Structural repairs will include resurfacing the quoin and miter, replacing timber fenders, painting the lower 20 feet of each gate leaf, and installing safety hand rails on the top of each gate leaf. Preparations for supporting, jacking and shoring of the gate are continuing, and the south shore gate is currently scheduled for movement on January 14. Once the gate has been moved, work will commence on pintle heel assembly replacement, and structural steel repairs to the supporting areas. The contractor is continuing to remove the lower sections of the miter and quoin blocks on each gate leaf. Painting of the gate is scheduled to occur mid-January through February. Movement of the south gate has been delayed a week for reinforcements to the gate rail system, however work is still on schedule for completion prior to the outage requirement. In-house staff continue to perform essential preventative maintenance. Work is on schedule.

Lower Granite Lock and Dam – Lower Granite continues with replacement of the upstream gate wire ropes on the south side, 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 OPPORTUNITIES: In order to ensure our stakeholders and the public are informed about our work and our progress, we are planning a media day in both districts.

Portland District is planning a media day at The Dalles lock as the new upstream gate is placed by crane into its permanent position. We're currently planning to hold the event during the week of Jan. 24, depending on the contractor's schedule. If you're interested in attending, please email us at FY17LockOutage@usace.army.mil with your full name, organization and phone number, and we will provide you with more information as it comes to us.

Walla Walla District is planning a media day at Ice Harbor's lock to see the new lock gate machinery being lifted by crane into the gate towers. Right now, it looks like that activity will also likely occur during the week of Jan. 24. The exact date will be set once the contractor refines the schedule.

We will provide more information on these site-visit opportunities as they are locked in on the schedules. Because of the nature of construction work, we may only have a few-days' notice prior to the targeted activities. Commercial navigation stakeholders will be welcome to join us on those days.

We will continue to provide regular updates on work in progress. Our next teleconference update is scheduled for January 19 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
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Walla Walla District Public Affairs Office
(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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