

## **FY17 Columbia-Snake River Navigation Lock Extended Outage**

Progress Update to Navigation Stakeholders

Information presented during conference call with stakeholders on January 5, 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 5, 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 continue removal of old controls equipment and have started connecting new controls equipment. This effort will continue for the next several weeks. As subsystems of the controls are completed, testing of the automated and manual controls is taking place. Crews are also conducting other routine lock-maintenance work, including gate inspections, and log boom and guidewall bumper replacements. 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. Contractor crews are working 12 hours a day, 6 days a week. The old upstream gate and the operating machinery are removed. Wire sawing of the concrete is completed on the south side, with those blocks to be removed. Drilling for trunnion anchors has begun, which is the first of the new gate hardware to be installed. On the downstream gate, both leaves are supported at the top and jacks installed at the bottom miter end. The north leaf was jacked and the gudgeon pins are removed. Jacking has started on the south leaf. Cathodic protection installation has begun. Looking forward...Work to remove concrete at both gates will continue to allow for installation of the upstream gate and access to the downstream gate gudgeon arms. On the upstream gate, crews will continue installation of the new trunnion anchors. On the downstream gate, they will disconnect the gudgeon arms from the south gate leaf. Once the concrete and gudgeon hardware is removed, gudgeon anchor drilling will begin. In parallel with that effort, cathodic protection installation will continue. Electrical work also continues with controls and power-distribution equipment demolition (old) and installation (new). Work is 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. 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 contractor’s pre-construction submittals are complete and they began mobilization into the work site on January 4. The contractor-furnished timbers for fender and bumper replacement are scheduled to be delivered onsite today. A complete inspection of the downstream miter gate was completed on December 21, to verify the condition of previous repairs and to look for any new areas that may need to be addressed during the outage window. Previous repairs were confirmed to be performing well and require no remedial action. Two new small cracks identified during the inspection were determined to be minor in nature by structural engineers and will be drilled out by the McNary maintenance crew during this outage to prevent further crack growth. All government-furnished material required for the bottom seal replacement and timber fender replacement has been delivered. The government team continues transferring material to the contractor this week. Once mobilization is complete, the contractor will begin surveying activities, and jacking and shoring of the south gate leaf in preparation for the gudgeon repairs over the next week. McNary’s in-house maintenance crew continues scheduled maintenance activities and is mobilizing to start repair work next week on 2 of the drain/fill tainter valves. 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 cribbing and stabilization of the gate and the jacking of counterweights to relieve loads from the lifting cables. The existing ring gear has been removed. Work continues on jacking and separation of the sheave, cable un-tensioning, and electrical demolition in both towers. The contractor transitioned to working 7 days per week, 12 hours per day, primarily to conduct critical welding work in the lock gate tower. In-house crews have started mobilizing equipment for Monday’s start on weld repair work on the downstream gate, to be done concurrently with the contractor’s work on the machinery towers. Installation of extensive scaffolding and wind protection has been completed for use by Ice Harbor staff for this repair work. 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. Installation of friction sheave work platforms has been completed in both tower machinery rooms. Weld repairs on the south tower friction sheave are scheduled to be complete during the weekend. Weld repairs on the north tower friction sheave are scheduled to begin immediately following the completion of the south tower. New control panels were delivered on-site January 4. Plans for the next week also include the installation of the new control panels and associated wiring terminations. 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 will involve replacement of a gudgeon arm and linkage, and replacement of the pintle assembly for both downstream lock gate leaves. 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 6. Once the gate has been moved, work will commence on pintle heel assembly replacement, and structural steel repairs to the supporting areas. The contractor has begun removing the lower sections of the miter and quoin blocks for replacement. Painting of the gate is scheduled to occur mid-January through February. 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 their media day at The Dalles lock, likely to occur during the week of Jan. 15. The exact date will be locked in when the contractor's schedule more clearly indicates when they will install the upstream gate. Walla Walla District is planning a media day at Ice Harbor's lock to observe the new lock gate machinery being lifted by crane into the gate towers. Right now, it looks like that activity will 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 12 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](mailto: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](mailto:cenwp-pa@usace.army.mil)

Walla Walla District Public Affairs Office  
(509) 527-7020  
[cenww-pa@usace.army.mil](mailto: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](mailto:FY17LockOutage@usace.army.mil)



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