

FY17 Columbia-Snake River Navigation Lock Extended Outage

Progress Update to Navigation Stakeholders

Information presented during conference call with stakeholders on December 29, 2016

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 December 29, 2016. 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 December 29 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. 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. They have cut the upstream gate into three pieces, with two removed by December 28, and the final piece was removed the morning of December 29, which is right on schedule. On the downstream gate, both leafs are supported at the top and jacks installed at the bottom miter end. The contractor continues pulling old controls equipment/wiring and connecting the new. As work progresses, concrete demolition will be conducted at both gates to allow for installation of the upstream gate and access to the downstream gate gudgeon arms. On the upstream gate, the machinery will be removed, then installation of the new trunnion anchors will begin. On the downstream gate, the gudgeon arms will be disconnected from the gate leaves to allow installation of the new gudgeon arms. In parallel with that effort, cathodic protection installation will begin. Electrical work will continue 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 is preparing 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 scheduled to be completed by the end of this week and they will commence work on-site January 4, 2017. The pre-construction meeting with the contractor was conducted December 28. 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 and will be drilled out by the McNary maintenance crew during this outage. All government-furnished material required for the bottom seal replacement and timber fender replacement has been delivered to McNary Dam. The government team started transferring material to the contractor yesterday December 28. McNary's in-house maintenance crew continues scheduled maintenance activities. 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. Work continues on jacking and separation of the sheave, cable un-tensioning, and electrical demolition in both towers. The contractor will be transitioning this week to work 7 days per week, 12 hours per day, primarily to conduct critical welding work in the lock gate tower. In-house crews continue to prepare for weld repair work on the downstream gate to be done concurrently with the contractor's work on the machinery towers. A separate contractor is completing installation of extensive scaffolding to be used by Ice Harbor staff for the in-house 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 working 12 hours per day, six days per week. During the critical weld repairs for the friction sheaves, the contractor will be working two 12-hour shifts, effective December 28. Demolition of existing electrical equipment in the hoist machinery rooms has been completed. Demolition and removal of the existing hydraulic power units, gearboxes and brakes have been completed in both hoist machinery rooms. Final testing of the new control panels with the new hoist motors and brakes was completed on December 22. Installation of friction sheave work platforms has been completed in the South Tower machinery room and the North Tower is scheduled for completion on December 29. Weld repairs on the friction sheaves is scheduled to begin December 29. Plans for the next week include the continuation of friction sheave weld repairs, the installation of the new control panels, and the demolition of existing electrical and control equipment in the downstream gate operator's stand. New control panels are scheduled to be delivered on-site January 3. In-house staff is continuing work on the upstream gate and tainter valves. 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. The contractor continues removal of the existing timbers on the gates, and cleaning debris in the lock area adjacent to the gate. Preparations for supporting, jacking and shoring of the gate are continuing, and the gates are currently scheduled for movement during January 5-7. Structural steel repairs, pintle heel assembly replacements, and painting of the gate are scheduled to occur mid-January through February. In-house staff are performing essential preventative maintenance. Work is on schedule.

Lower Granite Lock and Dam – Lower Granite has completed dewatering and is replacing 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.

We will continue to keep stakeholders informed with regular updates. Our next teleconference update is scheduled for January 5 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
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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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