

FY17 Columbia-Snake River Navigation Lock Extended Outage

Progress Update to Navigation Stakeholders

Information presented during conference call with stakeholders on Nov. 3, 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 will conduct an extended navigation lock maintenance outage Dec. 12, 2016, through March 20, 2017. The 14-week-long closure will affect all Corps navigation locks on the Columbia and Snake rivers, with critical, major repairs, routine maintenance and improvements scheduled to occur.

The project information below was originally provided during a navigation-stakeholder teleconference on Nov. 3, 2016. For those who were unable to attend the teleconference, here's the latest work-progress update:

All locks – Overall, progress continues on-schedule for the 14-week extended navigation lock outage in winter 2016/2017. To maximize this maintenance opportunity at all of our locks, additional work items may be added within the 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). The navigation lock will be dewatered during the extended lock outage, but only to accomplish other repairs. This modernized equipment will improve automated functions and make the controls safer and easier to use for navigation lock operators, thereby increasing reliability. Our in-house crews continue installing the new hardware, parallel to the existing controls systems, to minimize the work needed to be completed during the extended outage. The majority of this work that could be completed prior to the outage is now complete, with only a limited amount of work left that can be done prior to the start of the outage. A draft version of the PLC software that will be used is now complete and being reviewed to ensure functionality. Work is progressing on schedule in anticipation of the start of the extended lock outage. The installation is anticipated to be complete and the lock back in service on Feb 9, 2017.

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, we will replace the gudgeon, perform adjustments, install cathodic protection, and upgrade the lock controls and power distribution system. The power distribution equipment has been tested and received. A new punch list was developed based on findings when it was delivered on-site and those issued are being coordinated with the supply contractor to resolve. This power distribution equipment will be supplied to the construction contractor for installation. The fabrication shop has completed welding assembly of the new upstream gate and is preparing it for painting. On-site, the contractor, continues installing controls and power distribution equipment in parallel with the existing hardware. This new equipment was powered up for testing during the one-day lock outage on Oct. 14. Work to setup the crane that will be used to lift the upstream gate also continues. Looking forward: once the upstream gate is painted, we will install instrumentation and prepare it for shipping. It will then be transported upriver by barge in early December for staging at the worksite before the lock outage starts. Another short outage is scheduled for Dec. 8 to unload the gate -- commercial shippers have been notified. We will continue to do everything we can to minimize river-user impacts and keep stakeholders informed as early as possible.

John Day/Willow Creek – 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 dam-safety inspections. The John Day Dam will not be dewatered lower than the chamber floor.

McNary Lock and Dam – Walla Walla District plans to complete several repairs to the downstream miter gate. This work includes the gudgeons (top hinge of each gate leaf), consisting of line-boring the existing gudgeon pin bores and replacement of gudgeon pins, to ensure equal loading on each gudgeon assembly. The bottom seal assemblies on each miter gate leaf will be replaced. And, we will replace deteriorated timber fenders on each miter gate leaf and bumpers on the navigation lock walls adjacent to the downstream miter gate. The contract for this work was awarded to Marine Industrial Construction, LLC from Wilsonville, Oregon, in September. New gudgeon pins and bottom seals were previously procured by the government to ensure critical long-lead-time items were on hand prior to the start of the extended outage. A pre-work meeting was held with the contractor on Oct. 27. Their pre-construction submittals are progressing well. Also during the outage, McNary staff plan to complete repairs to one fill tainter valve and one drain tainter valve using in-house labor.

Ice Harbor Lock and Dam – Critical components of the NavLock machinery and control systems require replacement during the extended closure. The construction contract for the Ice Harbor downstream gate machinery replacement was awarded in January to Knight Construction. The contractor mobilized in early August to start pre-outage work requirements, then as planned, demobilized in mid-September to move their crews to Lower Monumental's lock. Pre-outage work at Ice Harbor includes installation of electrical conduit, wiring, fiber optics, overhead cranes corbel structural reinforcement, and roof handrail systems. Ring gear and pinion gear inspections were completed in late-September. Mechanical and electrical shop inspections are coming up for long-lead items in fabrication: late-November – new sheave shaft and factory testing of control panels. The contractor will return to Ice Harbor in mid-November to complete pre-outage work items.

Lower Monumental Lock and Dam – A new downstream lock gate was installed at Lower Monumental during the FY11 extended outage. The second phase of this installation is the replacement of the machinery and control systems that operate the gate. A contract was awarded in January to Knight Construction & Supply, Inc. On-site construction began on Sept.19. Pre-outage work includes installing new cable and conduit for power and controls infrastructure; fabrication and testing new control cabinets; installing new overhead maintenance cranes, work platforms and ladders in the hoist machinery rooms, and installing new tower roof handrails. On-site work is on schedule. The procurement of critical long-lead-time items such as the new pinion gears and shafts, sheave bearings, overhead maintenance cranes, motors, brakes, and control panels is on schedule. Factory testing of the new control panels occurred Oct. 13, with no issues. Shop testing of new motors is scheduled for mid-November.

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 gate leafs. Structural repairs will include resurfacing the quoin and miter, replacement of timber fenders, painting of the lower 20 feet of each gate leaf, and installation of safety hand rails on the top of each gate leaf. Repairs are critical to ensure reliable gate operation. The construction contract for the Little Goose downstream gate structural repairs was awarded in May to Dix Corporation. The contractor is slated to mobilize on-site in late-November, and all preconstruction preparations are being accomplished on schedule.

Lower Granite Lock and Dam – Although Lower Granite does not have large-contract repairs planned, Corps maintenance personnel will conduct annual routine lock maintenance and repairs during the scheduled outage. Currently, Lower Granite has planned some non-routine work which includes replacing the upstream gate wire ropes, replacing damaged timber bumpers on the downstream miter gate and installing new fill/drain valve hydraulic cylinders.

This extended lock outage plan is a coordinated effort between the Corps' Portland and Walla Walla districts. 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 Dec. 1 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
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Sincerely,

Sheryl Carrubba
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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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