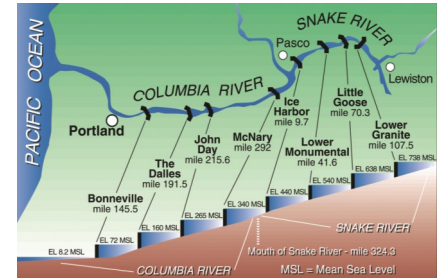




Long-range planning by U.S. Army Corps of Engineers results in lock maintenance success

Every year, the U.S. Army Corps of Engineers' Portland and Walla Walla Districts systematically evaluate the inland navigation infrastructure of the Columbia Snake River System, and target the highest priority projects to repair or to replace. Significant projects, like installation of new lock gates and other large components, can take years to plan and many weeks to execute in the field. Extended lock closures are sometimes necessary to complete these challenging repair and replacement projects, which help maintain the safety, efficiency and reliability of this nationally significant waterway.

In winter 2010-2011, the Corps completed the first extended closure of its kind on our river system. It lasted 15 weeks and included new lock gates at The Dalles, John Day and Lower Monumental dams. These three navigation lock gates are some of the largest in the nation and combined, totalled over 4.0 million pounds of new steel fabrication. The Corps completed a second extended lock closure over 14 weeks in winter 2016-2017. This closure focused on significant major repairs and/or replacements at six of the eight inland locks. In between these extended closures, the system also requires an annual 2-3 week closure every March for routine inspection, maintenance and targeted minor repairs. The next extended closure is anticipated from January 14, 2024 to March 29, 2024 to replace major components at McNary, Lower Monumental, Little Goose, Lower Granite, and John Day dams. Another extended outage is anticipated in 2030 to replace gates at McNary and Bonneville dams.



The Columbia Snake River System is a set of eight dams and each dam has one lock, which must be operational for the river system to function. Advance planning, coordinated scheduling of construction projects, and clear, timely communications efforts with stakeholders have led to a series of successful lock repair and maintenance achievements for the Northwest region, led by the Portland and Walla Walla Districts. Summary of work completed during these closures from the lower Columbia River moving upstream:

Bonneville New lock controls system installed (2017)

The Dalles Downstream miter gate and four tainter valves replaced, pintle bearings replaced (2010); upstream gate replaced, new downstream gate top hinge components (gudgeon arms, downstream gate corrosion protection installed, downstream gate adjustments, lock control and power distribution system upgrades (2017)

John Day Downstream lift gate, friction drums and four tainter valves replaced (2010)

McNary Downstream miter gate crack repairs, gudgeon replacement and tainter valve repairs (2017)

Ice Harbor New downstream gate operating machinery installed (2017)

Lower Monumental Downstream lift gate replaced (2010); new downstream gate mechanical gear installed (2017)

Little Goose Downstream miter gate hinge components replaced (including gudgeon arms), quoin block repairs, replacement of timber fences and installation of safety hand rails on gate leaves (2017)

Lower Granite Upstream gate wire rope and damaged timbers replacement, fill/drain valve hydraulic cylinder replacement (2017)

Columbia and Snake Rivers deliver value to the region and the nation

The Columbia Snake River System is one of the leading trade gateways in the United States. Over 8.6 million tons of cargo are moved by barge on the inland portion of the system, feeding the deep draft lower Columbia River which transported over 51 million tons of cargo in 2020. The Columbia Snake River System is the top wheat export gateway in the nation, second for soy and corn exports, and tops on the West Coast for autos, wood and mineral bulk exports. The inland and deep draft portions of the system work together to provide a vital link between U.S. growers and manufacturers with global customers. The repairs made to our inland locks ensure a reliable barging system that provides significant value to the Northwest and the nation.

