

RECORD OF DECISION

UPPER OHIO NAVIGATION STUDY PENNSYLVANIA

The Final Feasibility Report and Integrated Environmental Impact Statement (FR/EIS), dated October 2014 (revised August 2016), for the Upper Ohio Navigation Study, Pennsylvania, addresses inland navigation and ecosystem restoration opportunities on the upper Ohio River in Allegheny and Beaver counties of southwestern Pennsylvania. The final recommendation is contained in the report of the Chief of Engineers, dated September 12, 2016. Based on the report, the review of other Federal, State, local agencies, Tribes, input from the public, and review by my staff, I find that the plan recommended by the Chief of Engineers to be technically feasible, economically justified, in accordance with environmental statutes, and in the public interest.

The Final FR/EIS, incorporated herein by reference, evaluated various structural navigation alternatives to address lock chamber condition and capacity issues at three separate navigation facilities (Emsworth Locks and Dams, Dashields Locks and Dam, and Montgomery Locks and Dam) originally completed between 1922 -1936. The study purpose was to identify the best long-term plan for providing safe, reliable, efficient, and sustainable navigation at these three facilities through the analysis period, 2025-2074. The recommended plan is the National Economic Development plan and includes the following specific features:

- Replacing each of the auxiliary 56' x 360' river chambers at Emsworth, Dashields, and Montgomery Locks and Dams with new 110' x 600' lock chambers;
- Removing one dam gate bay at each of Emsworth Main Channel Dam and at Montgomery Dam;
- Constructing a new Montgomery Dam Pier #1 with new gate and operating equipment, access bridge, and other dam sill, apron, and scour protection modifications;
- Shortening Dashields fixed-crest dam and installing one hydraulically operated gate and appurtenant facilities;
- Constructing new guard walls, middle wall operations buildings, and other dam modifications to accommodate the new locks;
- Providing all necessary measures to maintain navigation through the existing main chambers while supporting demolition and construction activities of the new facilities; and
- Implementing the environmental compensatory mitigation and associated monitoring and adaptive management plan. Monitoring will continue until the mitigation is determined to be successful based on the identified criteria within the monitoring and adaptive management plan. Monitoring is expected to last five years following implementation, with an additional final inspection of the aquatic mitigation at the conclusion of construction.

In accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, the Final FR/EIS is a tiered document from the Ohio River Mainstem Systems Study (ORMSS) Programmatic EIS and its Record of Decision (ROD) signed on July 8, 2011. The ORMSS ROD made five environmental commitments binding upon the Upper Ohio Navigation Study, including: (1) evaluation, and if feasible construction, of native fish passage strategies, (2)

continuance of an Interagency Working Group, (3) mapping of study area riverine habitat, (4) incorporation of sustainability planning in the study area, and (5) development of a National Environmental Restoration (NER) Plan if policy conditions are met. The Upper Ohio Navigation Study pursued all five commitments, but concluded without recommending a NER plan due to lack of a non-federal sponsor commitment. The fish passage strategy study did not identify any feasible separable fish passage projects, but led to inclusion of an “environmentally sustainable design” feature in the recommended plan description. This environmental feature consists of the consideration of engineering design modifications to the new navigation features that could improve native fish passage coincidental with normal lock operations.

In addition to the “no action” plan, ten navigation alternatives were evaluated in the Final FR/EIS consisting of an advanced maintenance alternative and three groups of lock modernization alternatives. One group was comprised of two new 110’ wide lock chambers at each facility both sized either 600’, 800’, or 1200’ in length. The other two groups consisted of one new 110’ wide chamber at each facility (either 600’, 800’, or 1200’ in length) with retention of the existing main chamber in either an advanced maintenance or a reactive maintenance strategy. The recommended plan is the environmentally preferable alternative.

For all alternatives, the potential direct and cumulative effects to the following resources were evaluated and included, but were not necessarily limited to: air quality; aquatic habitat including riparian resources and wetlands; climate change; cultural resources; endangered and threatened species; environmental justice; fish and wildlife including fish passage; floodplains; greenhouse gas emissions; hazardous, toxic and radioactive waste; health and safety; hydrology; invasive species; native mussels; navigation traffic/fleeting areas; recreation; sediment quality; socio-economics; terrestrial resources; transportation and traffic; water quality; and wild and scenic rivers.

All practical means to avoid or minimize adverse environmental effects were analyzed and incorporated into the recommended plan. Best management practices (BMPs) as detailed in the FR/EIS will be implemented to minimize impacts (See Section 4.6.9).

The recommended plan will result in unavoidable impacts to 18.65 acres of mixed old field/shrub-scrub/early succession and pole tree habitat across three individual construction support areas, and to a total of 69 acres of aquatic habitat. To mitigate for these unavoidable impacts, the U.S. Army Corps of Engineers (Corps) will implement the following project features:

- Terrestrial construction support area revegetation with appropriate monitoring and adaptive management; and
- Aquatic habitat improvements in 3.0 acres of the Montgomery embayment with appropriate monitoring and adaptive management.

Pursuant to Section 7 of the Endangered Species Act of 1973, as amended, the Corps determined that the recommended plan will have no effect on federally listed species or their designated critical habitat. Avoidance measures identified in Section 4.6.9.3.5 of the FR/EIS, including additional consultation with U.S. Fish and Wildlife Service, if appropriate, will be implemented to ensure the recommended plan does not affect federally listed species and minimizes the potential to inadvertently impact federally listed species.

Pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended, the Corps determined that three historic lock and dam facilities will be adversely affected by the recommended plan. The Corps and the Pennsylvania State Historic Preservation Officer entered into a memorandum of agreement, dated December 12, 2014. The need for further archaeological study of one of the three construction support areas was identified and will be pursued during pre-construction engineering and design phase under the terms of the

ORMSS Programmatic Agreement, dated June 20, 2009. All terms and conditions resulting from the agreements shall be implemented in order to minimize adverse impacts to historic properties.

Pursuant to the Clean Water Act of 1972, as amended, any discharge of dredged or fill material associated with the recommended plan has been found to be compliant with Section 404(b)(1) Guidelines (40 CFR 230). The Clean Water Act Section 404(b)(1) Guidelines evaluation is found in the FR/EIS Environmental Appendix, "Clean Water Act Section 404(b)(1)". A water quality certification pursuant to Section 401 of the Clean Water Act will be obtained from the Commonwealth of Pennsylvania prior to construction. All conditions of the water quality certification will be implemented in order to minimize adverse impacts to water quality.

Public review of the draft FR/EIS was completed on June 2, 2014. All comments submitted during the public comment period were responded to in the Final FR/EIS. A 54-day waiting period and state and agency review of the Final FR/EIS was completed on August 2, 2016. Comments were received from the Pennsylvania Department of Environmental Protection (PADEP). In response to the PADEP comments, the Final FR/EIS was updated in August 2016 with air quality information and supplemental Clean Air Act compliance calculations. The study's conclusions and the recommended plan remained unchanged.

Technical, environmental, and economic criteria used in the formulation of alternative plans were those specified in the Water Resource Council's 1983 Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies. All applicable laws, executive orders, regulations, and local government plans were considered in evaluation of alternatives. Based on the review of these evaluations, I find that benefits of the recommended plan outweigh the costs and any adverse effects. This Record of Decision completes the National Environmental Policy Act process.

Jan. 18, 2017
Date

Jo-Ellen Darcy
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Assistant Secretary of the Army
(Civil Works)