



Upper Mississippi River -Illinois Waterway System Navigation and Ecosystem Sustainability Program (NESP)

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State(s)

IA,IL,MN,MO,WI

Congressional District(s)

IA-1, IA-2, IA-3, IA-4, IL-13, IL-16, IL-17, IL-18, IL-3, MO-6, WI-3

Status

The Navigation & Ecosystem Sustainability Program (NESP) was authorized in WRDA 2007 (Title VIII), to construct small-scale navigation improvements (mooring cells and switchboats), seven (7) new 1200-foot lock chambers, and ecosystem/habitat restoration. NESP was last included in the President's budget in 2004 for completion of the feasibility study. Funding was appropriated from 2005 to 2010 by Congressional action and was used to conduct preconstruction engineering and design (PED) work on navigation and ecosystem projects. The latest cost estimate and economic analysis were prepared in 2008. NESP has not been included in the President's budget for construction funding due to economic uncertainty as documented in the ASA(CW) July 24, 2008 letter.

NESP is strongly supported by the five states, congressional interests, navigation, and environmental stakeholders. In August 2014, the Governors of Wisconsin, Minnesota, Iowa, Illinois, and Missouri sent a joint letter to the President supporting NESP. In July 2015, 29 members of the House of Representative sent a joint letter to the President supporting NESP. In January 2015, 8 Senators sent a joint letter to the President supporting NESP. The Assistant Secretary of the Army for Civil Works (ASA CW) sent, to congress on April 12 ,2016, a report outlining the cost and schedule to update the economics and cost estimate. The report estimates that it will cost \$6.9 M and take 36 months to complete the effort.

Description

NESP is a long-term program of ecosystem restoration and navigation improvements for the Upper Mississippi River System (UMRS). NESP will improve system capacity and reduce commercial traffic delays through construction of 7 new 1,200-foot locks, mooring cells, and switchboat implementation. Inland navigation is estimated to save \$23.74/ton compared to overland transportation (2012 costs). The estimated annual saving on the UMRS is over \$2 billion (based on 2010 traffic). The long-term traffic is expected to increase due to Panama Canal expansion and changes in world markets. Additionally, NESP will restore the ecosystem by implementing projects for island building, floodplain restoration, water level management, backwater restoration, side channel restoration, wing dam restoration / modification, and island / shoreline protection.

The UMRS supports an extensive navigation system (1,200 miles of 9 foot channel and 37 lock and dam sites), a diverse ecosystem (2.7 million acres), floodplain agriculture, recreation and tourism. In WRDA 1986 (Sec. 1103) and WRDA 2014 (Sec. 4002), the UMRS was declared a "nationally significant ecosystem and a nationally significant commercial navigation system."



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The UMRS transport more than 60 percent of America's corn and soybeans, is home to 25 percent of North America's fish species, and is a globally important flyway for 40 percent of North America's migratory waterfowl and shorebirds. The UMRS ecosystem consists of 2.7 million acres of bottomland forest, islands, backwaters, side channels and wetlands, all of which support more than 300 bird species, 57 mammal species, 45 amphibian and reptile species, 150 fish species, and nearly 50 mussel species. The diversity and abundance of native aquatic plants and animals are being impacted by degradation, loss of habitat and the arrival of several exotic species.

The existing locks and dams were constructed in the 1930's and experience significant delays due to the single 600-foot lock chambers, which require the 1,200 foot tows to "double lock". On the UMRS, there is only one lock chamber at 35 of 37 sites. The new 1,200-foot locks will increase system reliability and would dramatically decrease lockage times. Additionally, the new 1,200 foot will eliminate the single point of failure of having only one lock. If a major lock component breaks, it has the potential to cause a lock closure and stop all inland navigation traffic. The 1,200 foot lock will also eliminate double lockages and provide an additional chamber to ensure navigation traffic can continue to flow even during major repairs.

Each NESP project completed will deliver incremental benefits. For instance, a mooring cell will save between 5 and 15 minutes per lockage, will improve safety, and reduce shoreline erosion because tows will no longer be waiting on the shoreline. If the time savings per lockage is 5 minutes, it is estimated that 'payback' could be nearly \$300,000/year through reduced wait times, and improved lockage times.

NESP will have phased implementation over 25+ years using adaptive management to guide future work.

The economic analysis and cost estimate need to be updated in order to be included in the President's budget. The economic analysis will update the project benefit:cost (B:C) ratio in order to allow the ASA(CW) to recommend the project to OMB and will address the 2008 issues such as including additional sensitivity analysis, and better define the adaptive management processes used to determine the threshold at which increased traffic justifies new locks.

Major Work Item (This Fiscal Year)

FY 2017: Not included in the Presidents FY2017 Budget.

Major Work Item (Next Fiscal Year)

FY2018: Funding would be used to start the required economic update, and restart planning/design and of mooring cells & ecosystem projects implementation.

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