



**US Army Corps
of Engineers**
Baltimore District

RUN 06
06 2017

Notice of Availability

Draft Finding of No Significant Impact and Environmental Assessment Curwensville Lake Water Supply Releases to West Branch Susquehanna and Lower Susquehanna Rivers, Pennsylvania

ALL INTERESTED PARTIES: In accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, the U.S. Army Corps of Engineers, Baltimore District (USACE), has prepared a draft Environmental Assessment (EA) for a proposed revision to the plan of operation for the water supply storage under contract to the Susquehanna River Basin Commission (SRBC) at Curwensville Lake in Clearfield County, Pennsylvania (Enclosure). USACE operates Curwensville Lake as a multiple-purpose project. One component of USACE's operation of Curwensville Lake is infrequent water supply releases to compensate for downstream consumptive uses during dry years when river discharges (flow) reach Q7-10 low flow thresholds on the Susquehanna River stream flow gage at Harrisburg. Q7-10 flow is the 7 day average low flow expected to occur at a 1 in 10 year frequency and has a 10 percent chance of occurring in a year.

SRBC has requested that USACE evaluate a modification to the water supply release operation plan for SRBC-owned storage from Curwensville Lake. SRBC has proposed alternative plan H95, which is founded on making water supply releases when river discharges are below a monthly trigger flow that is exceeded 95 percent of the time at the Harrisburg stream gage. Modified water supply releases could occur during the months of July through November when low flow events in the Susquehanna River typically occur. The water supply releases would be made through existing gates, and no physical construction would occur. Alternative plan H95 is consistent with both the critical low flow recommendations of The Nature Conservancy (TNC) for main stem rivers and the passby flow/conservation release values for low flow protection in large rivers in SRBC's Low-Flow Protection Policy. The new low flow triggers would also be consistent with recommendations in SRBC's 2008 Consumptive Use Mitigation Plan.

Under the current operational plan, in approximately eight percent of future years the lake could have drawdowns of one to three feet, and these could occur during the May through September recreation season. Under the proposed H95 alternative, approximately 14 percent of future years could have drawdowns of one to three feet; which could occur during the recreation season. In comparing the current operational plan with the H95 alternative, there could be a six percentage point increase in the chance of future years when Curwensville Lake could be drawn down by one to three feet and a two percentage point increase in the chance of future years of drawdowns greater than one foot occurring during the recreation season, specifically July through September. Drawdowns of greater than three feet could occur in approximately seven percent of future years under the current operational plan, but increase by one percentage point to approximately eight percent of future years under the proposed H95 alternative. The seasonality, duration in days, and depth of drawdowns during the increased future drawdown years would be about the same as during drawdown years under current management practices.

Consequences of the increased chance of lake drawdown for alternative H95 would produce effects ranging from negligible to minor. No adverse in-lake water quality effects would be produced. During most drawdown events, minor and temporary adverse impacts to lake submerged aquatic vegetation (SAV) may occur, but there would be no difference in long-term impact as SAV would recolonize the following spring. During severe drought events, there may be moderate impacts to SAV because

prolonged exposure may reduce SAV bed size and SAV would be expected to take several years to recover. During the increased future drawdown years, there would be minor temporary adverse effects on in-lake wetlands via stress on wetland plant species, and accompanying reduced wetland water quality improvement functions via soil drying. During event years, there would be minor adverse effects to fish from loss of established shallow water habitat. No effects to terrestrial vegetation, wildlife, or rare species at the lake would occur. During the additional drawdown events that would occur during the recreation season, there would be reduced opportunities for lake swimming and boating. No physical impacts to recreational facilities would occur.

Water supply releases during low flow conditions would improve habitat for aquatic life downstream in the West Branch Susquehanna and lower Susquehanna Rivers during low flow periods. These water supply releases would reduce detrimental impacts to instream habitat, floodplain soil and stream substrate wetness, and water temperature and dissolved oxygen from consumptive uses during dry periods. The proposed water supply releases would benefit a wide range of downstream plant, invertebrate, fish, and wildlife species, particularly drought sensitive aquatic life and aquatic life inhabiting riffle habitats. Three Pennsylvania state-rare species would likely benefit: brook mussel, green floater mussel, and hellbender. Support for ecosystem flow needs in about 186 miles of the West Branch Susquehanna River and about 51 miles of the lower Susquehanna River would be produced. While the proposed Curwensville Lake water supply releases would help downstream flow conditions by partially offsetting consumptive uses, they would not maintain flows during a prolonged low flow event.

An EA has been prepared for the actions relating to the proposed implementation of the requested plan. Potential impacts were assessed to the natural and human environment. The plan would provide low flow augmentation to offset consumptive use in the Susquehanna River Basin and support TNC ecosystem flow recommendations while minimizing effects of environmental conditions and recreational opportunities in Curwensville Lake. USACE has determined that the proposed action complies with all applicable laws and regulations. No permits would be needed for the proposed action.

The Corps requests comments regarding the proposed action within thirty (30) days of the date of this notice, Individuals wishing to obtain a copy of, or wanting more information about, the draft EA, may write to the U.S. Army Corps of Engineers, Baltimore District, ATTN: CENAB-PLP, 10 S Howard Street, Baltimore, Maryland 21201 or by electronic mail to cenab-cc@usace.army.mil or by telephone at (410) 962-4900. The draft EA is available at the USACE website: <https://go.usa.gov/xNP8e>. The documents will be available in the following public libraries for review: Curwensville, Clearfield, Renovo, Lock Haven, Jersey Shore, Williamsport, Montoursville, Milton, Lewisburg, Northumberland, Sunbury, and Harrisburg Downtown.



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