



US Army Corps  
of Engineers  
Wilmington District

## Philpott Lake Water Storage Reallocation Study

- **Henry County Public Service Authority (HCPSA) seeks water storage reallocation from Philpott Lake**
- **Final report scheduled to be approved by the USACE Director of Civil Works in the summer of 2023.**
- **New water supply agreement would need to be approved by the Assistant Secretary of the Army (Civil Works). Anticipate agreement signing in Fall 2023.**



---

CONGRESSIONAL DISTRICT: VA 5, 9

DATE: 10 MARCH 2023

1. **PROJECT NAME AND STATE:** Philpott Lake, Virginia, Water Storage Reallocation Study
2. **LOCATION AND DESCRIPTION:** Philpott Dam is located on the Smith River, crossing the border between Henry and Franklin Counties in Virginia. The authorized project provides for a concrete gravity dam 920 feet long with a maximum height of 220 feet above the streambed, with a lake that stretches 15 miles upstream of the dam on the Smith River extending into portions of Henry, Patrick and Franklin Counties. Philpott Lake is operated as a unit of a coordinated reservoir system for flood risk management in the Roanoke River basin, generation of hydroelectric power, regulation of river flow and public recreation. Water supply and environmental stewardship are additional purposes. The powerhouse has a total installed capacity of 14,000 kilowatts. There are currently no water storage allocations from Philpott Lake.
3. **ISSUE AND OTHER INFORMATION:** The Henry County Public Service Authority (HCPSA) provides potable water to residential, commercial, and industrial users in Henry County and nearby residential areas of Patrick and Pittsylvania Counties. Treated water for delivery to customers is produced at the Authority's Upper Smith River Water Filtration Plant (WFP), also referred to as the Philpott Water Filtration Plant (WFP). HCPSA does not currently have a water storage allocation from Philpott Lake. HCPSA requested a water storage reallocation equivalent to an additional 4 million gallons per day (MGD) release from the dam to satisfy future demand.

PROJECT INFORMATION - Philpott Lake, VA – Water Supply Reallocation Study – Continued

The raw water treated at the WFP is withdrawn from the Smith River in accordance with the provisions of a 401 Certification (Number 82-0957) issued by the Virginia State Water Control Board in 1983. The WFP intake is in the Smith River approximately 3 river miles downstream of Philpott Dam and immediately upstream of the confluence of Town Creek with the Smith River. The WFP withdrawal permitted by the State is currently 6.0 MGD. This 401 Certification does not restrict the withdrawal rate if the daily total does not exceed 4.0 MGD. It does require a reduction in the withdrawal rate and the total daily withdrawal if the Smith River flows fall below 59 cubic feet per second at the USGS Bassett Gage located approximately 6 miles downstream of the Philpott Reservoir dam. The Smith River flow requirements incorporated into the Water Control Plan and Reservoir Regulation Manual for Philpott Lake were established by the U.S. Environmental Protection Agency. These requirements include maintenance of minimum river flows at Stanleytown, Fieldale and Martinsville, VA, which were established to provide sufficient flows to support water withdrawals, wastewater discharges, and other uses in these downstream communities.

HCPSA requested a water storage reallocation at Philpott Lake. USACE's recommended plan is a reallocation in the amount equivalent to an additional 4 MGD release from Philpott Lake to satisfy future demand.

4. **CURRENT STATUS:** USACE has completed the reallocation study to evaluate proposed changes by HCPSA in water storage. Only minimal impacts to hydropower were identified. All other authorized purposes of the project were unaffected. HCPSA meets both criteria (service population and per capita income) for reduced pricing under Section 350 of WRDA 2020 according to the Implementation Guidance (April 25, 2022) and the report recommends approval. If approved this would reduce the price for the cost of storage from \$9.1M to \$3.1M, a reduction in annual payment from \$456,000 to \$137,566 (plus OMRR&R of \$85,000 annually).

The USACE Director of Civil Works approval is expected this summer. The District's final report and draft Finding of No Significant Impacts (FONSI) has been posted the district's website at:

<https://www.saw.usace.army.mil/Locations/District-Lakes-and-Dams/Philpott/Reallocation-Feasibility-Study/>

5. **FEDERAL FUNDING ALLOCATION THRU FY2023:** \$1,005,000.

6. **FY 2024 PRESIDENT'S BUDGET AMOUNT:** \$0