



US Army Corps  
of Engineers  
Wilmington District

## Philpott Lake, VA Henry County Water Withdrawal Agreement

- **Henry County Public Service Authority (HCPSA) seeking increased water supply reallocation from Philpott Lake**
- **Reallocation study needed to determine impacts to the authorized project purposes**
- **Non-Federal funding potential option to perform the study**



CONGRESSIONAL DISTRICT: VA 5, VA 9

Date: 23 February 2015

1. **PROJECT NAME AND STATE**: Philpott Lake, Virginia, Proposed Water Withdrawal Agreement in Henry County
2. **LOCATION AND DESCRIPTION**: Philpott Dam is located on the Smith River, crossing the border between Henry and Franklin Counties in Virginia. The lake stretches 15 miles upstream of the dam on the Smith River, extending into portions of Henry, Patrick and Franklin Counties. The authorized project provides for a concrete gravity dam 920 feet long with a maximum height of 220 feet above the streambed. 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.
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).

The raw water treated at the WFP is withdrawn from the Smith River in accordance with the provisions of a 401 Certification (Number 82-0957) issued by the Virginia State Water Control Board in 1983.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 located in the Smith River approximately 3 river miles

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downstream of the Philpott Dam and immediately upstream of the confluence of Town Creek with the Smith River.

The WFP withdrawal is currently permitted for 4.0 millions of gallons per day (MGD). This 401 Certification does not restrict the withdrawal rate as long as 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 20 cubic feet per second (or 13 MGD) at the USGS Philpott Gage (02072000) located approximately 700 feet 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.

HCPA is considering a number of options for increasing the water production and is meeting with the Corps of Engineers regarding a potential water supply storage reallocation at Philpott Lake and/or possible changes to the current water withdrawal procedures. Currently, HCPA's preferred alternative is an immediate additional 2 MGD release from Philpott Lake to satisfy near-term water needs and a subsequent 2 MGD additional release from the lake to satisfy long-term future water needs. This approach is supported by the US Fish and Wildlife Service, Virginia Department of Game and Inland Fisheries, and Virginia Department of Environmental Quality.

4. **CURRENT STANDING**: The Corps of Engineers will continue to work with the HCPA to determine if the options being considered are within policy and implementable. The Corps has recommended that a reallocation study be performed to evaluate proposed changes by HCPA in water supply storage and identify potential impacts to other authorized purposes of this project. Funding options have been discussed, including execution of a memorandum of agreement to accept non-Federal funds to perform this study since Federal project funds are limited.