



US Army Corps
of Engineers
Wilmington District

Philpott Lake, VA (O&M)

FY 2022 Planned Actions:

- Operation and maintenance of dam and hydropower facility for flood risk management
- Operation and maintenance of recreation facilities
- Operation of the facilities for environmental stewardship



CONGRESSIONAL DISTRICT: VA 5, 9

DATE: 01 APRIL 2022

1. **AUTHORIZATION:** Flood Control Act of 1944 (PL 78-534).
2. **LOCATION AND DESCRIPTION:** The project is located on the Smith River, Virginia, 44.3 miles above its junction with Dan River, and 35 miles upstream from the Virginia-North Carolina state line in Franklin and Henry Counties. The authorized project includes for a concrete gravity dam 892 feet long and with a maximum height of 220 feet. 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. The powerhouse has a total installed capacity of 14,000 kilowatts.
3. **FY 2021 FUNDING ALLOCATION:** \$12,212,300.
4. **FY 2022 PRESIDENT'S BUDGET:** \$4,833,000. Final Bill: \$4,833,000. Funds are being used for commonly performed O&M work. Funds are being used for specific work activities including Dam Instrumentation and Survey (\$35,000), and Emergency Action Plan re-write (\$4,500). Infrastructure Investment and Jobs Act funds in the amount of \$24,400,000 are being used for installation of Dam ASR anchors and gauges (\$3,300,000), design of vertical anchors (\$400,000), award of a construction contract to repair damages from the landslide (\$20,000,000), and development of a cultural resources plan (\$700,000).
5. **FY2022 WORK PLAN:** TBD.
6. **FY2023 PRESIDENT'S BUDGET:** \$4,480,000. Funds will be used for normal operation and maintenance of the project. Infrastructure Investment and Jobs Act funds in the amount \$550,000

PROJECT INFORMATION – Philpott Lake, VA (O&M) – Continued

will be used for replacing hydraulic fluid piping (\$200,000), repairing the concrete of the south drain gallery stairwell entrance (\$100,000) and project office renovations (\$250,000). Funds in the amount of \$1,475,000 could be used as follows:

CCR - Construction of New Restrooms at Philpott Park	\$300,000
Operation for Recreation - Operation of Camping, Multipurpose and Scenic Viewing Areas	\$192,000
Assessment Recommendations	\$110,000
Maintenance of Park Pavement Salthouse Br. Park	\$200,000
Forest Management	\$25,000
Operation for Recreation - Operation of Camping, Multipurpose and Scenic Viewing Areas	\$98,000
Maintenance of Park Pavement Horseshoe Point Park	\$200,000
Operation for Recreation - Operation of Camping, Multipurpose and Scenic Viewing Areas	\$200,000
Dam Safety - Perform additional modeling	\$150,000
Total	\$1,475,000

7. **OTHER INFORMATION:** In November of 2012, the dam’s rating on the Dam Safety Action Classification System (DSAC) was reclassified from a DSAC IV (dams are inadequate with low risk such that the combination of life, economic, or environmental consequences with a probability of failure is low and the dam may not meet all essential USACE engineering guidelines) to a DSAC III (dams that have issues where the dam is significantly inadequate or the combination of life, economic, or environmental consequences with probability of failure is moderate to high).

Backlog maintenance has been a serious issue for a considerable amount of time due to previous funding shortfalls. Many of the recreation facilities need to be repaired/upgraded to ensure public safety and to meet the current regulations especially in regards to the Americans with Disabilities Act (ADA). Much of the support equipment used on a routine basis is reaching the end of its life cycle which is requiring a considerable amount of attention. The funding of these activities would help reduce operation and maintenance costs in the future as well making recreation areas a safer and more enjoyable environment for the visiting public.

In FY2018 \$18,500,000 of non-Federal funding was provided by the Southeastern Power Administration for upgrading the turbines and rewinding the generators. The design work was completed in 2019 and the construction contract was awarded in the spring of 2021. The equipment installation is scheduled to be completed in June 2024, but contract completion may be delayed

PROJECT INFORMATION – Philpott Lake, VA (O&M) – Continued

due to the repair of the damages from the landslide. The landslide is discussed in the following paragraph.

The project had a substantial landslide downstream of the Philpott Dam that occurred on May 24, 2020. The powerhouse was highly damaged and remains off-line, the switchgear building was destroyed, and the transformer yard is also non-operational. Substantial cleanup has occurred, and bank stabilization was attempted with hydroseed application in July 2020, but generally unsuccessful. On-site monitoring continues as the design team develops courses of action for permanent hillside stabilization and remediation.

The Henry County Public Service Authority (HCPSA) requested a water supply storage reallocation from Philpott Lake sufficient to provide a 4 MGD increase in water withdrawals through the HCPSA intake downstream of the Dam. The requested storage allocation would provide 2 MGD to satisfy near-term water supply demand and 2 MGD to satisfy long-term demand. The reallocation study is underway. Refer to the “Philpott Lake, VA - Water Supply Reallocation Study” fact sheet for more information.