



US Army Corps  
of Engineers  
Wilmington District

## Philpott Lake, VA (O&M)

### FY 2023 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: 10 MARCH 2023

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 2022 FEDERAL FUNDING ALLOCATION:** \$29,531,000. This includes \$4,882,000 in President's Budget Funding, \$298,000 in FY 2022 Workplan funding and \$24,400,000 in FY 2022 Bipartisan Infrastructure Law funding.
4. **FY 2023 FEDERAL FUNDING ALLOCATION:** \$28,030,000. FY23 Omnibus funds in the amount of \$4,480,000 are being used for normal operation and maintenance of the project. Bipartisan Infrastructure Law funds in the amount \$550,000 are being 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). The project also received \$23,000,000 in FY 2022 DRSAO O&M funding to cover additional needs on the Landslide repairs.
5. **FY2024 PRESIDENT'S BUDGET:** \$4,875,000. Funds will be used for normal operation and maintenance of the project. Additional funds in the amount of \$1,475,000 could be used as follows:

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

Work Description	Amount
Rehabilitation of Goose Point Campground Electrical Systems	\$350,000
Salthouse Branch Septic System Revitalization	\$100,000
Horseshoe Point Septic System Revitalization	\$100,000
Philpott Park Drain Field Upgrade	\$50,000
Rehabilitation of Salthouse Campground Electrical Systems	\$350,000
CCR – Construction of New Restrooms at Philpott Park	\$300,000
CCR - Energy & Water Efficiency Improvements Sanitary Facilities at Tailrace Park	\$75,000
Rehabilitation of Horseshoe Campground Electrical Systems	\$350,000
Total	\$1,475,000

6. **OTHER INFORMATION:**

Water Supply Storage Reallocation: The Henry County Public Service Authority (HCP SA) requested a water supply storage reallocation from Philpott Lake sufficient to provide 4 million gallons per day (MGD) increase in water withdrawals through the HCP SA 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 report has been finalized and is currently under review.

Maintenance Backlog: 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.

DSCA Rating: 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).

Generator and Turbine Rehab: 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 due to the repair of the damages from the landslide. The landslide is further discussed in the following paragraph.

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

Landslide: On May 24, 2020, a substantial landslide occurred downstream of the Philpott Dam. The powerhouse was highly damaged and remains offline, 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 was generally unsuccessful. The design to repair the damage is nearing completion and the construction contract is scheduled for award in September 2023. Full funding has been appropriated to repair the landslide damage as shown below in the following table.

Philpott Landslide Funding Allocations:

Funding Source	Fiscal Year Received	Allocation
FY 2021 Workplan	FY2021	\$7,000,000
FY 2022 Bipartisan Infrastructure Law	FY2022	\$20,000,000
FY 2022 DRSAA	FY2023	\$23,000,000
<b>Total Landslide Allocation Received</b>		<b>\$50,000,000</b>