



US Army Corps
of Engineers
Wilmington District

John H. Kerr Dam and Reservoir VA and NC (O&M)

FY 2020 Planned Actions:

- Operations and maintenance of dam for flood risk management and hydropower facility
- Operations and maintenance of recreation facilities plus environmental stewardship of Federal property
- Construction ongoing at Island Creek Stability Berm



CONGRESSIONAL DISTRICT: NC 1 and VA 5

DATE: 25 March 2019

1. **AUTHORIZATION:** Flood Control Act of 1944 (PL 78-534).
2. **LOCATION AND DESCRIPTION:** The project is located on the Roanoke River, 178.7 river miles above its mouth, in Mecklenburg County, Virginia, and 18 miles upstream of the North Carolina and Virginia line. The dam is located in Mecklenburg County, VA. The reservoir extends upstream on the Roanoke River for 56 miles and on the Dan River for 34 miles. The project consists of a concrete gravity dam with wing and saddle dikes on the right and left banks, with a total length of 22,285 feet. The reservoir is operated as a unit of a coordinated system of reservoirs in the Roanoke River basin for flood risk management, generation of hydroelectric power, regulation of low water flow, and for other purposes. Hydropower installed capacity is 204 megawatts which increased to 268 megawatts in FY 2011.
3. **FEDERAL FUNDING ALLOCATION FOR FY 2018:** \$16,229,000
4. **FY 2019 PRESIDENT'S BUDGET:** \$13,820,000. Funds are being used to continue operations and maintenance requirements for flood risk management, hydropower, recreation and environmental stewardship. An amount of \$2,310,000 was specific work activities for replacement of power plant systems and control centers, plans & specification for the Island creek transformer, development of a cultural resources plan, and resolution of real estate encroachments.
5. **FY 2019 WORK PLAN:** \$0.

PROJECT INFORMATION – John H. Kerr Dam and Reservoir, VA and NC (O&M) – Continued

6. **FY 2020 BUDGET AMOUNT:** \$11,594,000. Funds in the amount of \$11,594,000 will be used for normal operations and maintenance of the project. Additional funds in the amount of \$13,476,000 could be used as follows:

• Repair of right wing dike toe drain	\$ 7,000,000
• Replace piezometer on wing and saddle dikes	\$ 170,000
• Replace aging sewer infrastructure in three campgrounds that support 400 campsites	\$ 500,000
• Repair and pave roads and ramps in recreation areas	\$ 556,000
• Perform shoreline stabilization and land acquisition of highly eroded areas	\$ 3,540,000
• Develop Plans and Specs for North Bend park entrance redesign	\$ 25,000
• Rudds Creek Recreation Area through lift station and pump replacement.	\$ 35,000
• Replace all security lights in parks with energy efficient LED lights.	\$ 100,000
• Purchase and install automated fee machines at multiple fee areas	\$ 50,000
• Funding for labor, contract, and supplies/materials for installation of a new transformer at Island Creek Dam	\$ 1,500,000
Total	\$13,476,000

7. **OTHER INFORMATION:** The amount of backlog maintenance has been a serious issue for a considerable amount of time. The project has two separate toe drain systems issues: the J.H. Kerr right wing dike which requires costly and extensive repairs to improve structural stability of the dam and the Island Creek dam which needs a system installed. The stability berm work at the Island Creek dam is under construction and is scheduled to complete in October 2018. (Details in separate fact sheet). Plans and specifications for the right wing dike toe drain repairs are currently being developed.

In 2016 an operational change of the reservoir was implemented which allows releases from John H. Kerr Dam to more closely mimic natural hydrologic conditions by allowing weekly average releases of up to 35,000 cubic feet per second from the dam depending upon weekly average inflows. These releases move water off the downstream floodplain more quickly to the benefit of almost 92,000 acres of bottom land hardwood forest below the dam. Analysis identified that this operational change could result in minor impacts to hydropower and downstream properties which are mainly agricultural and recreational by allowing greater flood frequencies for less duration of time. However, the analysis concluded that these minor impacts were more than offset by the significant benefit to the downstream ecosystem.