US Army Corps of Engineers

Welcome to the U.S. Army Corps of Engineers, Savannah District

Richard B. Russell Dam & Lake

Did You Know?

Construction of the Russell Project by the Corps' Savannah District was initiated in 1974.

For More Did You Know Facts go **HERE!**

US Army Corps of Engineers ®
Savannah District

October 16, 2008

Introduction to Richard B. Russell Dam and Lake

It is no secret that Lake Russell is one of the finest fishing lakes in the Southeast, offering both cold and warm water fisheries. But did you know that Lake Russell is one of many projects of the U.S. Army Corps of Engineers? To tell its story, let us go back to the beginning.

The Corps carries on a proud heritage that began on June 16, 1775. On that day the Continental Congress established the Army. And Lieutenant General George Washington appointed Colonel Richard Gridley as the Chief of Engineers of the Continental Army. That same day, Gridley began construction of a fortification near Boston to protect American soldiers at the Battle of Bunker Hill which was to take place the next day. This was the first of many fortifications the Corps built during the American Revolutionary War. But in 1783, like most of the Continental Army, the Corps of Engineers were disbanded after the War.

In 1802, President Jefferson recognized a need for a continuous national engineering capability. In response to this, the Congress provided for a Corps of Engineers to be stationed at West Point where the U.S. Military Academy was established for and by the Corps. This constituted the nation's first military academy as well as the first engineering school. It was under the direction of the Corps of Engineers until after the Civil War when in 1866 it was transferred to the War Department. Even though it is no longer responsible for the Military Academy, the Corps' tradition of military and civil works missions continue to this day.

By 1824 the Corps' duties began to expand. In addition to its role in wars and national defense, the Corps was authorized to plan a national transportation system of roads and canals, improve harbors, and clear major rivers as the nation expanded westward. Normally you wouldn't associate outdoor recreation with an organization like the Corps of Engineers.

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- **So how did the Corps get into the outdoor recreation business?**

The conservation movement of the early twentieth century prompted multipurpose planning for the Nation's resources. As a result, in 1909, Congress directed the Corps to consider the potential for hydroelectric power generation in all its navigational projects. In the meantime, the recurring and devastating floods in the Mississippi River Valley and other areas of the United States led to passage of several Flood Control Acts. These acts recognized flood control as a proper activity of the federal government and were responsible for expanding the Corps' civil works responsibilities. By 1936 the

Discovery Links

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- Lake Level Projections
- Lake Level Management
- Savannah River Basin Lakes Comparison Brochure

Savannah District Water Safety Homepage

Corps had been authorized to build levees, dams and reservoirs across the entire Nation for flood control. In 1944 the Corps was authorized to construct multipurpose dams and where there is a dam there is a lake. These dams provided not only flood control, but irrigation, navigation, water supply, hydroelectric power, and eventually recreational areas.

With 80 percent of its lakes located within 50 miles of a major metropolitan area, the Corps has become the leading federal provider of water based recreation in the Nation. The Corps directly operates and maintains more than 2500 recreation areas at 463 projects. Another 1800 sites are leased to other federal agencies, state agencies, local park and recreation authorities, or private interests. Altogether these recreation areas attract approximately 414 million visits each year. It is estimated that one in ten Americans visits a Corps' project at least once a year.

In response to the environmental movement in the 1970s, the Corps has since developed and refined new solutions and approaches to energy conservation, preservation, and enhancement of the environment to minimize possible environmental damage. Today the Corps carries out an active environmental and natural resource management program at its projects, managing thousands of square miles as forest and wildlife habitat, monitoring water quality at its dams, and developing new habitat to replace past environmental losses. In doing so, the Corps serves as custodian to 12 million acres of land and water. Recreation opportunities are therefore managed to promote the responsible use of public lands with a minimum impact on the environment while offering a wide range of opportunities and facilities for outdoor recreation.

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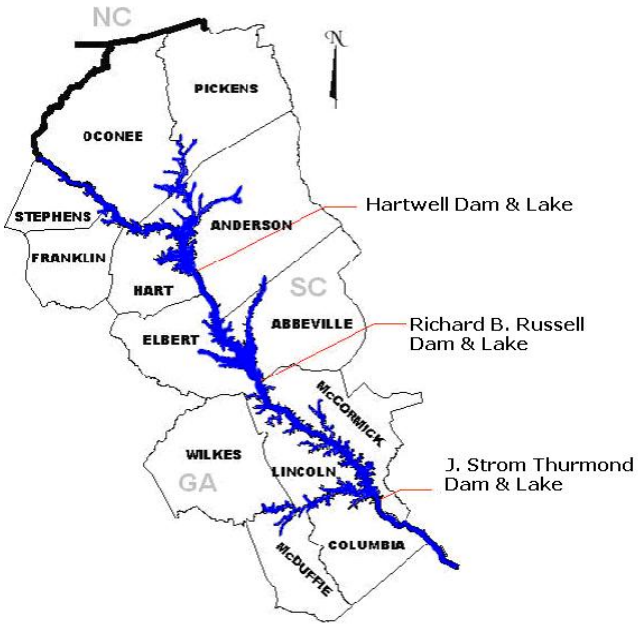
- **So how does Lake Russell fit into this picture?**

Richard B. Russell Dam and Lake is a multipurpose project constructed under the supervision of the Savannah District, U.S. Army Corps of Engineers. It was authorized for construction by the 1966 Flood Control Act as Trotters Shoals Lake. It was later renamed to commemorate the late senator from Georgia, Richard B. Russell.

The Russell Project is one of three inter-connected dams and lakes located in the Piedmont region of Georgia and South Carolina on the upper Savannah River. The first project, J. Strom Thurmond Dam and Lake was completed in 1954. Hartwell Dam and Lake was the second and was completed in 1962. Richard B. Russell Dam and Lake was the last of the three projects constructed on the Savannah River. Permanent filling of Lake Russell began in October 1983 and it reached full pool in December 1984.



Together the three projects form a scenic chain of lakes 120 miles long on the Georgia/South Carolina state border. To make the most complete use of the Savannah River Basin's water resources, the lakes are managed as a multipurpose integrated system. The three projects share the congressionally authorized purposes of power production, incidental flood control, recreation, additional stream flow regulation, water supply, and fish and wildlife management including the preservation of regional endangered and threatened plant and animal species. Thurmond and Hartwell were authorized with the additional purpose of downstream navigation. Lake Russell is not designed to store enough water to supplement downstream navigation and essentially just passes water from Hartwell Lake through to Thurmond Lake.

Private shoreline use may be permitted on Thurmond and Hartwell Lakes but Federal regulations prohibit private use of public lands surrounding Lake Russell. Because of this Lake Russell offers a quieter recreation experience in a pristine environment. This experience has been described as being similar to fishing on a remote Canadian lake while being surrounded by civilization. The experience goes beyond just fishing – visitors enjoy the beautiful scenery as well as the abundant wildlife.

At Russell Lake, almost all recreation areas are leased to and operated and maintained by either Georgia or South Carolina. The project has two Corps-operated recreation areas. These are the two unique and informative visitor centers at the powerhouse and the Natural Resource Management Center, located 20 miles east of Elberton, Georgia and 8 miles west of Calhoun Falls, South Carolina off US 72. In addition the project has 21 state-operated recreation areas (8 in Georgia and 13 in South Carolina); 1 locally-operated recreation area; and 1 Marina lease. The project also includes about 600 prehistoric and historic sites ranging in age from the end of the last Ice Age to the early 20th century – some of which are now under water, but many of which can be visited. In all, the Richard B. Russell Lake and Dam has more than 1.1 million visitors per year enjoying a wide variety of recreational activities including water sports, hunting, hiking, picnicking, camping, and fishing. With a 300-foot collar of public land around Russell Lake, most development on adjacent private property is not visible on the lake. This coupled with the prohibition against private shoreline

development, has resulted in Russell having a pristine shoreline that provides abundant wildlife habitat.

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Did You Know?

- The Russell Project is located in the Piedmont region of Georgia and South Carolina on the upper Savannah River, 30 miles downstream from Hartwell Dam and 37 miles upstream from J. Strom Thurmond Dam. (Georgia counties – Hart and Elbert Counties; South Carolina counties – Anderson and Abbeville counties).
- The Savannah River begins 7.1 miles above the Hartwell Dam and is approximately 315 miles long. The river ends in the Atlantic Ocean near Savannah, Georgia)
- Richard B. Russell Dam and Lake was authorized for construction by the 1966 Flood Control Act as Trotters Shoals Lake and was later renamed to commemorate a late senator from Georgia, Richard B. Russell.
- The Russell Project was authorized for power production, incidental flood control, recreation, additional stream flow regulation, water supply, and fish and wildlife management.
- The three Corps managed lakes on the Savannah River – Hartwell, Richard B. Russell, and J. Strom Thurmond – are responsible for maintaining water supply and water quality needs of the Savannah River from below Thurmond Dam all the way to Savannah, Georgia and the Atlantic Ocean
- Construction of the Russell Project by the Corps' Savannah District was initiated in 1974.
- Impoundment of the lake began in October 1983. The lake reached its full pool elevation of 475 feet in December 1984.
- The first generator in the power plant went on-line in January 1985.
- The Russell Power plant is a "peaking power plant" – this means that power is not constantly generated. Instead, power is generated at times when electricity is in the greatest demand.
- The power plant contains eight 140,000 horsepower turbines (this is equal to nearly 1000 family cars!). The eight penstocks that carry the water that drives the turbines are 26 feet in diameter.
- The average yearly generation from the Russell Power plant is 465,500,000 million Kilowatt hours.
- The power produced at the Russell power plant is sold through the Southeastern Power Administration to power companies located in Alabama, Georgia, South Carolina, and North Carolina.
- Lake Russell contains 26,650 acres of water and 540 miles of shoreline. And 26,500 acres of public land surrounds the lake.
- The concrete section of the Russell Dam is built of more that 1,100,000 cubic yards of concrete and the earthen embankment contains 3,350,036 cubic yards of dirt.
- The average lake elevation is 475 ft. mean sea level (msl) and the flood pool is set at 480 ft. msl.

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Phone Numbers
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or toll free at
1-800-944-7207

- The depth of the lake behind the dam is approximately 165 feet
- The height of the dam is 210 feet and the earthen embankment is 195 feet high.
- There are three storage zones of the lakes: conservation, flood control, and inactive. Conservation storage refers to the amount of water that can be used to meet the lakes authorized purposes. If a lake exceeds the conservation storage, it is in the flood control zone. Runoff from storms is temporarily stored in this zone and then released after the storm at a non-damaging rate. Below the conservation storage zone is the inactive storage zone. At Corps dams, water cannot be released from this zone through the turbines.
- Lake levels at Hartwell and Thurmond often fluctuate more than at Russell, leading people to believe Russell is always full.
- Since Russell Dam was designed after the other two lakes had satisfied the conservation storage needs on the Savannah River it was designed to operate efficiently by minimizing the drawdown of the lake. Therefore Russell lake levels are always maintained within 5 feet of full pool whereas Hartwell has 35 feet of conservation storage and Thurmond has 18 feet.
- Private shoreline use may be permitted on Thurmond and Hartwell Lakes but is prohibited on lakes built after December 13, 1974 like Lake Russell.

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