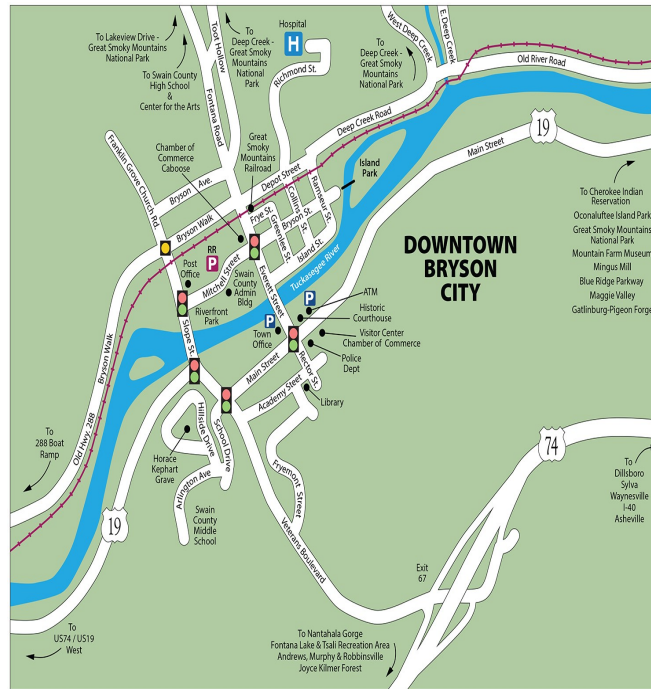


The construction of Fontana Dam led to the flooding of most of North Carolina Highway 288, which connected Deals Gap and Bryson City. The National Park Service, after gaining possession of Fontana's north shore tracts, reached an agreement with Swain County to replace the north shore road in the 1940s. By 1972, however, environmental concerns and funding issues had continuously stalled construction, and just 7.2 miles of the road had been completed (just outside of Bryson City). Later in the 1970s, environmental concerns completely halted the road's progress, and locals nicknamed the unfinished 7.2-mile road "The Road to Nowhere". After North Carolina's U.S. Senator Jesse Helms secured funding for the road in 2000, the park service conducted an environmental impact study (released in 2007) and concluded that the road's construction would cause "major, adverse, and long-term impacts to topography, geology, and soils" in the area. In 2007, Swain County accepted a \$52 million cash settlement from the park service, and agreed to drop its demand for a new road along the North Shore. (wikipedia.org/wiki/Fontana_Dam)

For more information, please visit the visitor center at 2 Everett Street.



Fontana Dam

Swain County Chamber of Commerce

greatsmokies.com

800-867-9246

Fontana Dam is a hydroelectric dam located on the Little Tennessee River in Swain and Graham counties, in Western North Carolina. The dam is operated by the Tennessee Valley Authority, which built the dam in the early 1940s to serve the growing electricity demands in the Tennessee Valley at the height of World War II. At 480 feet high, Fontana is the tallest dam in the Eastern United States, and at the time of its construction, it was the fourth tallest dam in the world.

The dam impounds the 10,230-acre Fontana Lake, which spreads across a scenic stretch of the Little Tennessee along the southwestern boundary of the Great Smoky Mountains National Park. The Appalachian Trail crosses the top of the dam. Fontana is named for the now-inundated town of Fontana, a lumber and copper-mining hub once located at the mouth of Eagle Creek. The town's name was derived from the Italian word for "fountain."

The building of Fontana Dam began on January 1, 1942. Its reservoir required the purchase of 68,292 acres of land, 5,125 acres of which were forested and had to be cleared. 1,311 families, 1,047 graves, and over 60 miles of roads had to be relocated. The towns of Fontana, Bushnell, Forney, and Judson were completely inundated. The village of Welch Cove (later renamed Fontana Village) was constructed just south of the dam to house the project's workers, whose numbers had reached 5,000 by 1943 in spite of nationwide manpower shortages. Fontana Village is now a summer resort and still retains some of the original buildings.

The design of the dam was unusual for TVA at the time. It was feared that the 2,818,000 yards of concrete required for the dam would create a structure so massive, that heat released during its setting would be trapped for years, and would eventually cause cracks to form. To aid the release of this heat, engineers divided the dam into contraction joints and outfitted them with grout pipes and cooling coils.

The dam's spillway presented yet another challenge, as engineers were worried that the water's 400 foot drop would eventually cause erosion issues at the dam's foundation. A special spillway was designed that allows water to drain out through two 34-foot diameter spill pipes into a diversion tunnel equipped with a deflection system.

Fontana Dam was completed at a cost of \$70,420,688.48 and the gates closed on November 11, 1944. Two generating units were placed in operation on January 20, 1945, just in time to provide crucial energy for aluminum production in the closing months of World War II. Over 40,000 acres along Fontana Lake's north shore were eventually transferred to the Great Smoky Mountains National Park, and several thousand acres along the south shore were transferred to the U.S. Forest Service.