

Lake Tillery water levels



Tillery Hydro Station



New federal license

In 2015, Duke Energy received a new license for the Yadkin-Pee Dee Hydro Project, which includes Lake Tillery and Blewett Falls Lake. This license issued by the Federal Energy Regulatory Commission (FERC) provides enhancements to water quality, recreation, fish and wildlife habitat protection, and land conservation while ensuring Duke Energy's ability to meet customers' needs with clean, affordable and renewable hydropower.

Due to new FERC license requirements, lake levels at Lake Tillery are likely to fluctuate more than in the past.

Requirements for minimum continuous water releases from both Tillery and Blewett Falls are higher than under the previous license. The FERC license also requires new water releases to comply with state water quality standards and to support recreational needs in the connecting Pee Dee River reach.

Changes in lake levels at Lake Tillery

Under the new license, the Federal Energy Regulatory Commission limits Duke Energy to specific lake levels. From March 1 to Dec. 15, Lake Tillery is allowed to fluctuate 2 1/2 feet (measured at Tillery Dam and referenced to local datum of 100 feet as full pond elevation) below full pond on weekdays and 1 1/2 feet on weekends and holidays. Additionally, the lake is limited to a 1 1/2-foot fluctuation from April 15 to May 15 for bass spawning. For the rest of the year, Lake Tillery is allowed to fluctuate as much as 3 feet daily and can be drawn down as much as 5 feet below full pond if needed to meet the demand for electricity or during drought conditions.

Water releases from Tillery Hydro Station

Lake neighbors are most likely to notice a change in lake levels when Tillery Hydro begins generating electricity. Generation is scheduled based on expected inflow from three primary sources: upstream Falls Hydro Station, part of the Yadkin Hydro Project operated by Cube Hydro Carolinas LLC; the Uwharrie River; and rainfall.

Tillery Hydro is a peaking generation facility that Duke Energy typically operates when the demand for electricity is at its highest. In the winter, the peak typically occurs in the morning when everyone wakes up and turns on lights and appliances. In the summer, it's typically in the afternoon when people return home from work and school. Lake residents may also notice a change when Cube Hydro starts operating Falls Hydro Station immediately upstream.

Tillery Hydro operations will be adjusted in 2021-2022 to accommodate construction activities at the Blewett Falls Dam downstream of Lake Tillery and for the installation of fish passage facilities required by the new license. Lake residents may notice less peaking generation as flow releases will be less intense but for a longer duration to accommodate these downstream activities.

Flood management

Rainfall across the river basin is a key driver in lake level management. Lake neighbors may notice the lake level is lower than normal from one to five days before a heavy rainfall event is forecast. This advanced lake drawdown gives station operators more time to open flood gates to avoid water from spilling over the dam.

Additional information

Duke Energy provides updated information on lake levels, scheduled flow releases and other recreation information at duke-energy.com/lakes and on Duke Energy's Lake View mobile app. Updated lake levels are also available by calling 800.829.5253.