

Catawba-Wateree Relicensing Project Agreement-in-Principle Lake Norman Perspective

Background

Cowans Ford Dam created the largest manmade body of fresh water in North Carolina when Duke Power dammed the Catawba River in 1963. The total length of the facility is 7,387 feet, including more than a mile of earthen dam. The concrete portion of the dam is 1,279 feet long and 130 feet high. Lake Norman is an "inland sea" with 538 miles of shoreline and a surface area of more than 32,475 acres. Named after former Duke Power president Norman Cocks, Lake Norman is nearly as large as the other ten lakes on the Catawba combined.

Full pond elevation at Lake Norman is 760 feet above mean sea level. The water of Lake Norman is used in two ways to provide electricity to the Piedmont Carolinas. It is used to power the generators at Cowans Ford Hydroelectric Station and by Marshall Steam Station and McGuire Nuclear Station to cool the steam that drives the turbines. The lake provides a dependable supply of water to Lincoln County, Mooresville and Charlotte-Mecklenburg, North Carolina and provides 40 percent of the total usable water storage in the eleven-lake system. Lake Norman (along with Lake James) serves as a vital "shock absorber" to the lake system to lessen the impacts of drought and high water events on the other reservoirs.

Duke Power partnered with the state in the establishment of the Lake Norman State Park. In addition, Duke Power has built two bank fishing areas and eight public boating access areas along the shoreline. One site is leased to Mecklenburg County, one site to Iredell County and one site to Lincoln County. The boating facilities at the Duke Power-owned access areas are managed in cooperation with the North Carolina Wildlife Resources Commission.

Stakeholders representing the reservoir and river in hydro relicensing

In addition to federal and state resource agencies, Duke Power and national special interest groups – many representatives of local entities and public citizens around Lake Norman have participated in the 3-year relicensing process. These include:

Mecklenburg County	Catawba Lands Conservancy	North Carolina Wildlife Federation
Centralina Council of Governments	City of Davidson	Catawba County
Iredell County	Lake Norman Marine Commission	Mecklenburg County
Lake Norman Covekeepers	Lincoln County	
Catawba-Wateree Relicensing Coalition	Charlotte-Mecklenburg Utilities	
	Town of Cornelius	

Interests addressed in the Agreement-in-Principle

1. Lake Level Ranges – Lake level ranges (located in the adjacent chart) have been established to protect fish habitat, municipal, industrial and power generation water intakes, recreation access and aesthetics. Ranges are bounded by normal minimum and normal maximum elevations with a normal target elevation in between. For Lake Norman the normal target lake level is seasonal and ranges from 94 feet to 98 feet.
2. Drought Management – As part of the relicensing process, a Low Inflow Protocol has been established to "trigger" water use restrictions by large water users. These water use restrictions apply to hydroelectric generation, public water system withdrawals and flows for recreation and aquatic life.
3. Public Information Systems for Lake and River Information -- Information including reservoir level ranges, water release times, generation schedules and maps to public access areas will be provided as a result of relicensing. River paddlers and anglers will have access to information on releases from dams to paddle and fish. Information posted on signs will be provided in English and/or international symbols with signage in Spanish also available immediately downstream of the dams.

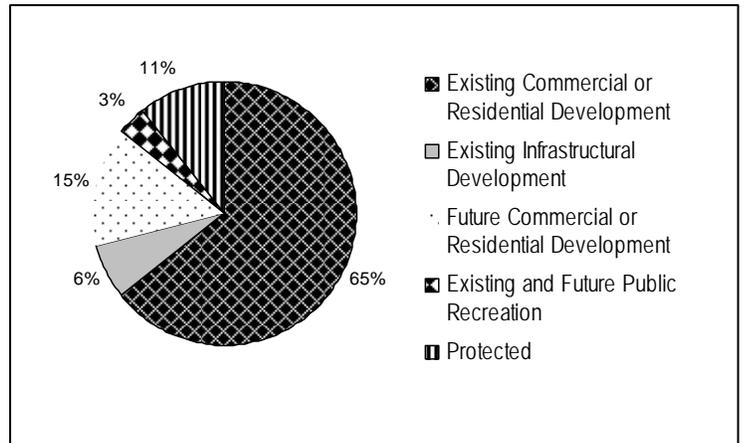
Month	Lake Norman			
	Existing Guide Curve (ft.)	Normal Minimum (ft.)	Normal Target (ft.)	Normal Maximum (ft.)
Jan	96	93	96	100
Feb	94	91	94	100
Mar	92	92.26	95.26	100
Apr	94	93.65	96.65	100
May	96	95	98	100
Jun	98	95	98	100
Jul	98	95	98	100
Aug	98	95	98	100
Sep	98	95	98	100
Oct	97.67	95	98	100
Nov	97.33	93.98	97	100
Dec	97	93	96	100
31-Dec	96	93	96	100

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4. Habitat, Water Quality and Land Conservation Enhancements – Duke Power will contribute \$1 million to the Habitat Enhancement Fund in each state to support, protect and enhance fish and wildlife habitat and contribute \$4 to \$5.5 million to each state dependent on the license term for additional land conservation.

5. New and Expanded Public Recreation Facilities/Access – Recreational enhancements planned for Lake Norman include:
 - a. Hunsucker Park – Lease property to the Town of Catawba for picnic facilities, 0.5 miles of trail, a trailered boat access, and paved or gravel parking spaces.
 - b. Lake Norman State Park Management Zone – Lease the Lake Norman State Park lake management zone (300 horizontal feet lakeward from full pond elevation along the shoreline adjoining Lake Norman State Park).
 - c. Mountain Creek Park – Provide a \$1,900/acre discount toward the acquisition of up to 600 acres of property by Catawba County for public recreation and compatible permanent conservation at the mouth of Mountain Creek. Facility development may include a canoe/kayak launch, trails, bank fishing, campgrounds, swimming, and other water-based recreation facilities to be developed and managed by Catawba County.
 - d. Beatty's Ford Access Area – picnic facilities, a fishing pier, swimming area, restrooms, and shade trees.
 - e. Hagers Creek Access Area – market the site to commercial operators for development of a multi-use recreation area including, but not limited to, trails, fishing, picnic areas, boat access, RV camping with bathhouse and dump station, marine pump-out, restrooms and additional paved parking (100 spaces).
 - f. Lake Norman Trails Planning Assistance - technical assistance to facilitate any needed bicycle route crossings.
 - g. Stumpy Creek Access Area – fishing pier, picnic area, walking trail, restrooms and additional paved parking.
 - h. Little Creek Access Area – restrooms, a fishing pier and ten paved parking spaces.
 - i. Lake Cornelius Fishing Pier – provide funding up to \$130,000 to the Town to develop a fishing pier.
 - j. Lake Davidson Park – funding up to \$130,000 to develop a canoe/kayak launch and fishing pier at Lake Davidson Park.
 - k. Island Point Access Area – market this site of approximately 140 acres to commercial businesses for development of a multi-use recreation area including, but not limited to trails, bank and/or pier fishing, picnic facilities, swimming, RV camping with bathhouse and dump station, boating access facilities, restrooms and marine pump-out.
 - l. Cowans Ford Dam Portage and Overlook – a portage, reservoir overlook with park benches and ten-space gravel parking area.

6. Shoreline Management – Duke Power operates a comprehensive shoreline management program on all 11 lakes along the Catawba River. Duke Power's program depends on the Shoreline Management Plan (SMP) and Shoreline Management Guidelines (SMG) to balance private and public access with protecting the environmental, public recreational, cultural and scenic values. As part of the relicensing process, both the SMP and SMG have been updated and these updates will begin to be used in September 2006. The SMG provide rules on what facilities are allowed and how they can be built/constructed/maintained. Overall, the update to the SMP has resulted in more refined shoreline mapping and additional restrictions on construction activity within the project boundary of the reservoir. The SMP is a series of maps with shoreline classifications denoting locations where piers, marinas, excavations and shoreline stabilization within the project boundary either already exist or can take place. Each shoreline classification has a separate set of restrictions and allowed activities.



7. Public Drinking Water Supply and Water Conservation Programs -- Water is vital to life and drives our region's economy and way of life. However, Catawba-Wateree relicensing process studies indicate demands for water will more than double over the next 50 years. A group of approximately 20 water supply experts, including Duke Power, have outlined water management objectives, identified tangible projects to protect our water supply and proposed a voluntary water conservation fund to finance these projects. The money will come from contributions paid by Duke Power and large water users. Contributors to the voluntary fund will determine the timing and priority of projects.

The Agreement in Principle, which reflects almost three years of studies and negotiations by 160+ stakeholders was finalized and distributed to representatives of 80 organizations involved in the relicensing process. In mid-April 2006, stakeholders will be asked to sign the agreement – indicating their level of consensus. Those in agreement with the Agreement in Principle will then, in turn, construct the binding Final Agreement which will be included in the license application to the Federal Energy Regulatory Commission by August 31, 2006.