

# Lake Hickory Perspective

## Catawba-Wateree Comprehensive Relicensing Agreement (CRA)

### Background

Lake Hickory was created in 1927 with the completion of the Oxford Dam. The dam parallels the NC Highway 16 Bridge over the Catawba River between I-40 and Taylorsville. It is 122 feet high, with an overall length of 1,200 feet. The spillway section of the dam is 550 feet long. Lake Hickory was named after the nearby city and covers almost 4,223 acres with 109 miles of shoreline. Full pond elevation is 935 feet above mean sea level. Lake Hickory is a reliable source of water for the nearby cities of Hickory and Longview, North Carolina.

Duke Energy provides five public access areas on the lake in cooperation with the North Carolina Wildlife Resources Commission.

### Interests addressed in the CRA

**1. Lake Level Ranges** – Lake level ranges (located in the adjacent chart) have been established to protect fish habitat, public water system, 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 Hickory the normal target lake level is seasonal and ranges from 96 feet to 97 feet.

Lake Hickory Elevations (in feet on the 1st of the month)				
Month(s)	Existing Guide Curve	Minimum	Target	Maximum
Jan - Feb	97	94	96	100
Mar - Dec	97	94	97	100
Dec 31	97	94	96	100

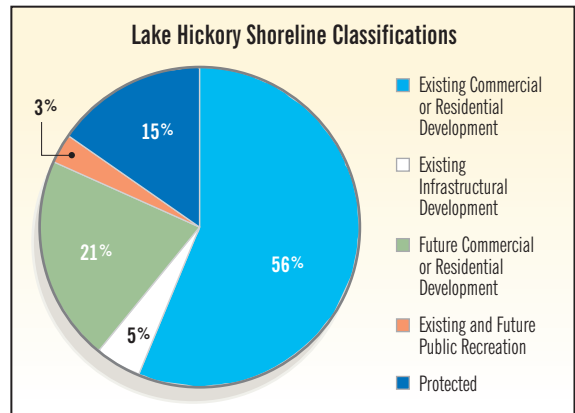
**2. Drought Management** – As part of the relicensing process, a Low Inflow Protocol has been established to "trigger" water use restrictions by large water intake owners. These water use restrictions apply to hydroelectric generation, public water system withdrawals and flows for recreation and aquatic life.

**3. Shoreline Management** – Duke Energy operates a comprehensive shoreline management program on all 11 lakes along the Catawba River. Duke Energy'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. The updated SMP and SMG were implemented 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.

**4. 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.



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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.

### Stakeholders signing the Comprehensive Relicensing Agreement (CRA)

In addition to state resource agencies, Duke Energy and national special interest groups – many representatives of local entities and public citizens around Lake Hickory signed the CRA. These include:

- Alexander County
- Area II Soil and Water -Conservation Districts
- Burke County
- Caldwell County
- Carolina Canoe Club
- Catawba County
- Catawba Valley Heritage Alliance
- Catawba-Wateree Relicensing Coalition
- City of Hickory
- Foothills Conservancy
- North Carolina Wildlife Federation
- R&N Marina
- Western Piedmont Council of Governments

**5. New and Expanded Public Recreation**

**Facilities/Access** – Recreational enhancements planned for Lake Hickory and the river section downstream include:

a. *Wittenburg Access Area* – Add approximately 15 acres to the site and provide restrooms, a picnic area, and additional paved parking and offer to lease site to Alexander County.

b. *Dusty Ridge Access Area* – Provide approximately one mile of trail and restrooms at the site, which is leased to Alexander County.

c. *Lovelady Access Area* – Provide a fishing pier.

d. *Long Shoals Access Area* – Provide a canoe/kayak access with gravel parking.

e. *Oxford Access Area* – Market the site for lease and management to commercial operators for development of a RV campground with bathhouse and dump station, marine pump-out, primitive camping, paved parking, picnic facilities, bank fishing, trails and restrooms.

f. *Oxford Tailrace Fishing Area* – Provide a public fishing area.

g. *Oxford Dam Canoe Portage* – Improve existing gravel parking and extend the portage trail to Riverbend Park.

h. *Lake Hickory Swimming Areas* – Provide two swimming areas at locations to be determined on Lake Hickory.

**6. Flows from Hydro Dams for Recreation** – Interest in paddling and river fishing is growing and as a result of relicensing, water will be released from Oxford Hydro Station on approxi-

Oxford Development Recreational Flow Schedule				
Dates (inclusive)	Days / Description	Flow (cfs) (at or above)	Start	End
May 1 – Sep 30	Each Saturday and Sunday plus Memorial, Independence and Labor Days	2,600	10 a.m.	3 p.m.
Oct 1 – 31	First four Saturdays	2,600	10 a.m.	3 p.m.
	Ten discretionary hours in blocks of no less than one hour each	2,760		

mately 49 scheduled days per year (see adjacent chart) to provide and promote canoe/kayaking and fishing in the river section downstream of Lake Hickory. This flow release schedule was developed through technical study and working in partnership with paddling and fishing interests.

**7. Habitat, Water Quality and Land**

**Conservation Enhancements** – Duke Energy will replace one of the existing hydro units at Oxford Hydro Station with a new aerating runner and will install a new flow valve with aerating capability to provide continuous flows to support fish habitat below Oxford Hydro Station. These water releases will also include improvements in dissolved oxy-

gen to support water quality. Duke Energy will also 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 North Carolina state agencies dependent on the license term for additional land conservation.

**8. 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-Waterree 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 Energy, 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 Energy and other members of the Catawba-Waterree Basin Water Management Group. Contributors to the voluntary fund will determine the timing and priority of projects.



**CONTACT**

For more information and updates and other relicensing news, contact Duke Energy at [www.duke-energy.com](http://www.duke-energy.com).