

# Catawba-Wateree Relicensing Project Agreement-in-Principle Lake Hickory Perspective

## 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 of the same name. The lake 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 Power provides five public access areas on the lake in cooperation with the North Carolina Wildlife Resources Commission.

## Stakeholders representing the reservoir and river in hydro relicensing

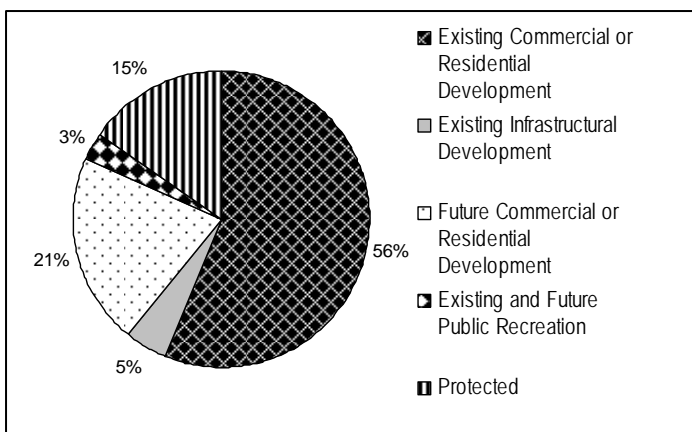
In addition to federal and state resource agencies, Duke Power and national special interest groups – many representatives of local entities and public citizens around Lake Hickory have participated in the 3-year relicensing process. These include:

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

## Interests addressed in the Agreement-in-Principle

- 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 Hickory the normal target lake level is seasonal and ranges from 96 feet to 97 feet.
- 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.
- 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

Month	Lake Hickory			
	Existing Guide Curve (ft.)	Elevation on 1st Day of Month		
		Normal Minimum (ft.)	Normal Target (ft.)	Normal Maximum (ft.)
Jan	97	94	96	100
Feb	97	94	96	100
Mar	97	94	97	100
Apr	97	94	97	100
May	97	94	97	100
Jun	97	94	97	100
Jul	97	94	97	100
Aug	97	94	97	100
Sep	97	94	97	100
Oct	97	94	97	100
Nov	97	94	97	100
Dec	97	94	97	100
31-Dec	97	94	96	100



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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. 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.
5. New and Expanded Public Recreation Facilities/Access – Recreational enhancements planned for Lake Hickory and the river section downstream include:
  - a. Wittenburg Access Area –restrooms, a picnic area and a swimming area. Acquire an additional 15 acres and add it to the site.
  - b. Dusty Ridge Access Area – one mile of trail and restrooms at the site.
  - c. Lovelady Access Area – fishing pier.
  - d. Long Shoals Access Area – canoe/kayak access with gravel parking at this currently undeveloped access area.
  - 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 – public fishing area.
  - g. Oxford Dam Canoe Portage – gravel parking and extend the portage trail from the put-in at the Highway 16 Bridge to Riverbend Park in cooperation with Catawba County.

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 approximately 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.

Oxford Development Recreational Flow Schedule				
Dates (inclusive)	Days / Description	Flow (at or above) (cfs)	Hour Start	Hour End
May 1-Sep 30	Each Saturday and Sunday plus Memorial, Independence and Labor Days	2,600	10:00 am	3:00 pm
Oct 1-Oct 31	First four Saturdays	2,600	10:00 am	3:00 pm
	Ten discretionary hours in blocks of no less than one hour each	2,600		

7. Habitat, Water Quality and Land Conservation Enhancements – Duke Power 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 oxygen to support water quality. Duke Power 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 each state 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-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.