

# Lake James Perspective

## Catawba-Wateree Comprehensive Relicensing Agreement (CRA)

### Background

Lake James is named for James B. Duke, one of the founders of Duke Energy.

Built over a seven-year period beginning in 1916, Lake James required the construction of three dams: Linville, Paddy Creek and Catawba. Linville Dam is 160 feet high and 1,325 feet long. Paddy Creek Dam is 165 feet high and 1,610 feet long. Catawba Dam is 150 feet high and 3,155 feet long. The lake straddles the McDowell-Burke county line. Lake James has a surface area of approximately 6,812 acres, with 144 miles of shoreline. Full pond elevation is 1,200 feet above mean sea level.

Lake James provides 25 percent of the total usable storage in the eleven-lake system. Lake James (along with Lake Norman) serves as a vital "shock absorber" to the lake system to lessen the impacts of drought and high water events on other reservoirs.

Duke Energy provides four public boat access areas on the lake and one fishing and canoe access point below the hydroelectric station. Lake James State Park also provides public recreation opportunities. Two boat access points are leased to the State Park and the other two, as well as the tailrace fishing and canoe access point, are provided in cooperation with the North Carolina Wildlife Resources Commission.

### Interests addressed in the CRA

#### 1. Lake Level Ranges – Lake level ranges (locat-

Lake James Elevations (in feet on the 1st of the month)				
Month(s)	Existing Guide Curve	Minimum	Target	Maximum
Jan	96	93	96	100
Feb	94	92	94	100
Mar	92	92	95	100
Apr	94	92	96	100
May	96	95	98	100
Jun – Sep	98	95	98	100
Oct	96	95	98	100
Nov – Dec 31	96	93	96	100

ed 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 James 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

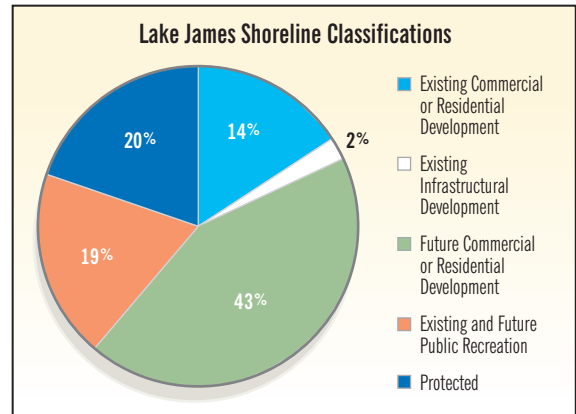
established to "trigger" water use restrictions by large water intake owners. These water use

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 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 shore-

### 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 James signed the CRA. These include:

- American Whitewater
- Area II Soil and Water - Conservation Districts
- Burke County
- Carolina Canoe Club
- Catawba Valley Heritage Alliance
- Catawba-Wateree Relicensing Coalition
- City of Morganton
- Foothills Conservancy
- Lake James Homeowners
- McDowell County
- North Carolina Wildlife Federation
- Table Rock Anglers
- Trout Unlimited
- Western Piedmont Council of Governments

line 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. 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. 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 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-Wateree Basin Water Management Group. Contributors to the voluntary fund will determine the timing and priority of projects.

**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 Lake James on approximately 85 scheduled days per year (see adjacent chart) to provide and promote canoe/kayaking and fishing in the river section downstream of Lake James. This flow release schedule was developed through technical study and working in partnership with paddling and fishing interests.

Bridgewater Development Recreational Flow Schedule				
Dates (inclusive)	Days / Description	Flow (cfs) (at or above)	Start	End
Apr 1 – 30	Last full weekend - Saturday and Sunday	900	10 a.m.	3 p.m.
May 1 – Jul 15	Each Friday, Saturday & Sunday plus Memorial and Independence Days	900	10 a.m.	3 p.m.
Jun 1 – Jul 31	Wednesdays and Thursdays	900	4:30 p.m.	6:30 p.m.
Jul 16 – Aug 31	Each Saturday and Sunday	900	10 a.m.	3 p.m.
Sep 1 – 30	Each Friday, Saturday and Sunday plus Labor Day	900	10 a.m.	3 p.m.
Oct 1 – 31	Each Saturday and Sunday	900	10 a.m.	3 p.m.
	Ten discretionary hours in blocks of no less than one hour each	900		

**7. New and Expanded Public Recreation**

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

- a. *Black Bear Access Area* – Provide restrooms, additional shade trees, fishing pier design/or bank fishing assistance and a shoreline buffer. McDowell County to lease and partner with commercial business to provide trails, cabins, primitive camping, and picnicking.
- b. *Lake James State Park and Islands Management Zone* – Lease a 300-foot-wide lakebed zone and three islands to the North Carolina Division of Parks and Recreation (NCDPR).
- c. *Linville Canoe/Kayak Access Area* – Convert the boat launch ramps at the existing Linville Access Area to canoe/kayak use. The access will be offered for lease to Burke County to develop and manage additional public recreation facilities such as a picnic area, shade trees and restrooms.

d. *New Linville Access Area* – Provide two boat ramps, paved parking, one courtesy dock, lighting, access road, and vault toilet.

e. *Lake James Loop Trail* – Construct the portion of the Lake James Loop Trail across the dams and provide funding to Burke County to construct additional portions of the planned Lake James Loop Trail not to exceed \$500,000 total cost.

f. *Pocket Park at Dam for Lake James Loop Trail* – Provide approximately ten-acre pocket park near the Linville Dam with parking, picnic facilities, photographic overlooks, and bank fishing opportunities.

g. *North Bend Recreation Land* – Convey approximately 550 acres of property adjacent to the Catawba River at the second

Powerhouse Road Bridge downstream of the Bridgewater Powerhouse to the NCDENR for public recreation and compatible permanent conservation. This property will also include an easement or corridor for approximately 3.5 miles of the Overmountain Victory National Historic Trail.

h. *North Bend Access Area* – Convey approximately ten acres to the NCWRC and provide up to \$225,000 to the NCWRC to develop a trail-ered boat access, bank fishing, and parking area at the second Powerhouse Road Bridge downstream of Bridgewater Powerhouse.

i. *Catawba-Linville River Confluence Recreation Land* – Convey approximately 420 acres of property adjacent to the Catawba River in the vicinity of the confluence of the Catawba River Bypassed Reach and the Bridgewater Regulated River Reach to the NCDENR for public recreation and compatible permanent conservation.

j. *Paddy Creek Recreation Land* – Convey approximately 275 acres of property down-

stream of the Paddy Creek and Linville dams to the NCDENR for public recreation and compatible permanent conservation. This property will also include an easement or corridor for approximately 2.5 miles of the Overmountain Victory National Historic Trail.

k. *Muddy Creek Access Area* – Acquire approximately 1-3 acres of property and develop and manage a canoe/kayak access facility with ten gravel parking spaces.

l. *Morganton Weir Take-out Area* – Provide funding up to \$125,000 to the City of Morganton to develop a trailered boat ramp and approximately ten gravel parking spaces upstream in the immediate vicinity of the Morganton Weir.

m. *Bridgewater Access Area* – Provide restrooms, a ramp for trailered boats, additional parking, and picnic facilities.

n. *Lake James-to-Morganton OVNHT Corridor* – Provide up to \$600,000 to Burke County to develop approximately six miles of the Overmountain Victory National Historic Trail (OVNHT).

o. *Watermill Road Access Area* – Provide up to \$65,000 to the Town of Glen Alpine to modify the existing canoe/kayak access facility to better accommodate trailered boats in addition to canoes and kayaks.

#### **8. Habitat, Water Quality and Land**

**Conservation Enhancements** – Duke Energy will add a new flow valve with aerating capability at

the Catawba Dam at Lake James. At the Linville Dam, Duke Energy will add aerating capabilities in conjunction with replacing the existing powerhouse which will support fish habitat below Lake James. Continuous water releases at these points will also include improvements in dissolved oxygen 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. One hundred-foot-wide conservation easements will also be established on approximately 29 miles of land adjoining the Johns River, Catawba River and Linville River.



#### CONTACT

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