

Catawba-Wateree Relicensing Update

Prepared for the

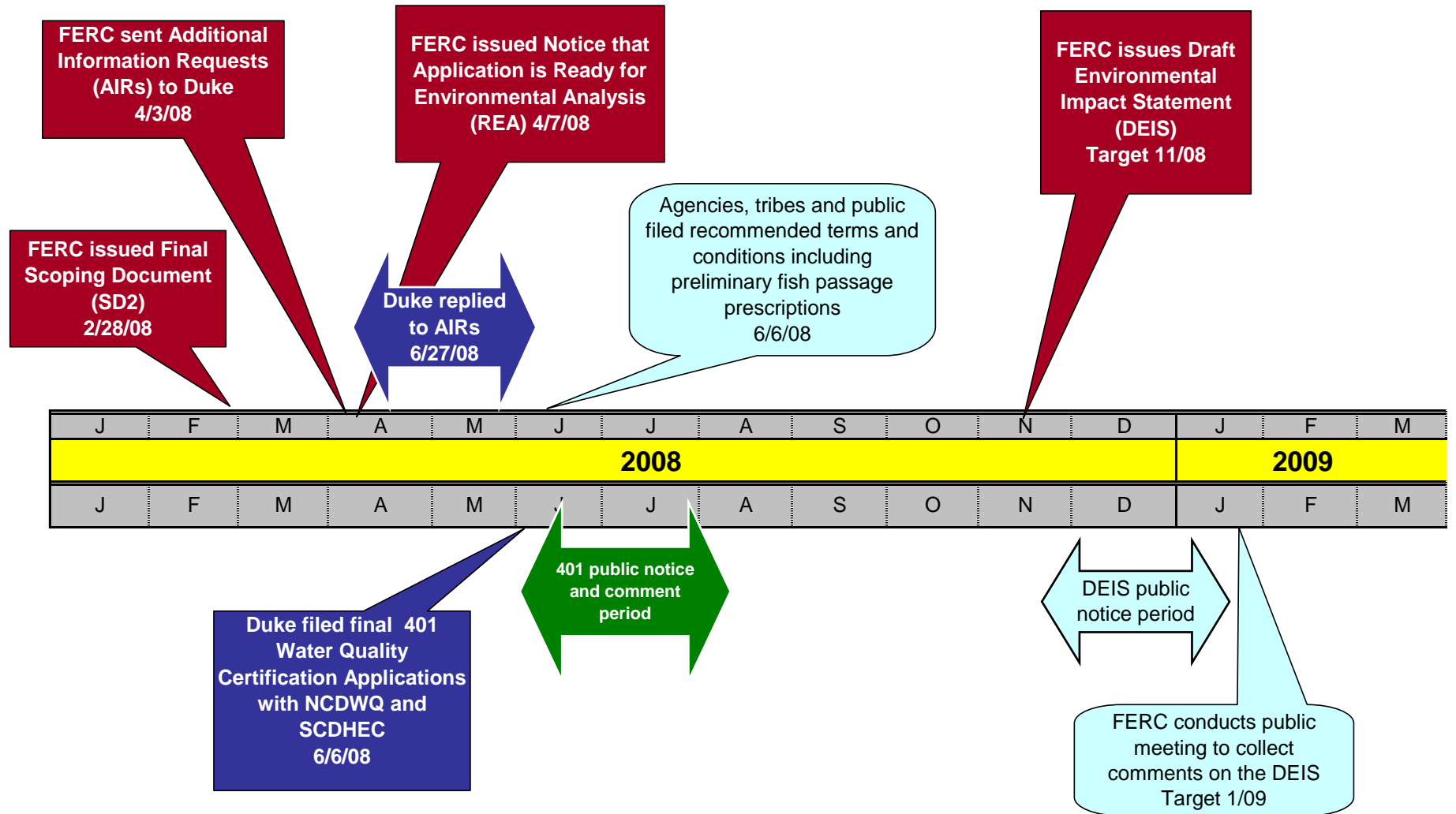
***Catawba-Wateree Bi-State
Advisory Commission***

September 26, 2008

Topics

- Catawba-Wateree Relicensing Process Status
- Catawba-Wateree Comprehensive Relicensing Agreement (CRA) Accomplishments
- Drought Status
- What's Being Done to Manage Water Supply
- Questions?

CATAWBA-WATEREE RELICENSING PROCESS STATUS



NOTE: All dates are estimated based on the typical timeframe associated with the FERC Traditional Licensing Process. Dates are subject to change based on FERC completions.

Catawba-Wateree Relicensing Process Status

Santee Basin Cooperative Fish Passage Accord

- A cooperative agreement to restore diadromous fish (American shad, blueback herring, and American eels) in the Santee River Basin which includes the Catawba-Wateree River Basin
- Parties: United States Fish and Wildlife Service, the South Carolina Department of Natural Resources, the North Carolina Wildlife Resources Commission, South Carolina Electric and Gas and Duke Energy (With participation from the National Marine Fisheries Service, the South Carolina Department of Health and Environmental Control, and Santee Cooper)
- Includes a 10-year Work Plan, passage structures and restoration goals
- Provisions extend for the life of the next Catawba-Wateree and Saluda FERC licenses
- Catawba-Wateree provisions include:
 - Duke contributes \$500,000/yr to fund the Work Plan
 - American shad fry stocking to “jump-start” returning shad populations.
 - Construction of a trap/sort/haul facility at Wateree Dam for American shad and blueback herring by 2018.
 - American eel passage at each of the C-W Project developments in a sequential order as eels progress upstream.
 - Monitoring and research of diadromous fish movement patterns in the basin.
- Consistent with the C-W CRA
- Basis for preliminary and final fish passage prescriptions

Catawba-Wateree Comprehensive Relicensing Agreement (CRA) Accomplishments

Land Preservation

- Duke deposited \$9.32 million into land conservation escrow accounts in 2007
 - The Foothills Conservancy (FHC) and North Carolina Wildlife Resources Commission (NCWRC) used \$3.8 million towards the purchase of the 2800 acre Johns River Gamelands Tract
 - South Carolina used \$5.32 million towards the purchase of approximately 1878 acres near Lake Wateree
- Catawba County has a contract to purchase the 589 ac Mountain Creek Park Tract adjoining Lake Norman.

Public Safety

- Duke, the North Carolina Wildlife Resources Commission and the South Carolina Department of Natural Resources identified any boater / swimmer safety zones around dams
- Duke completed the Fishing Creek trash management system in December 2007
- Duke updated its FERC Public Safety Plans and filed them with the Federal Energy Regulatory Commission in December 2007

2008 CRA Accomplishments

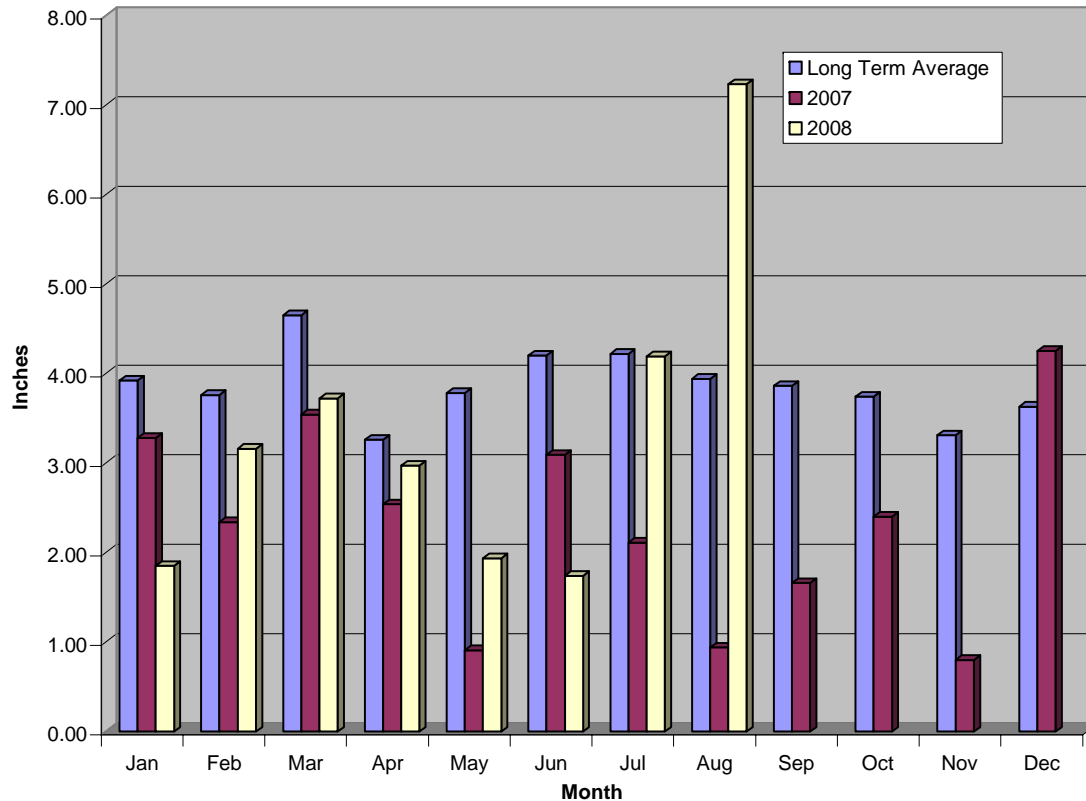
- Duke, Crescent Resources, LLC, and NCDENR developed an agreement providing:
 - New trail easements within conservation easements along the Catawba River and Warrior Fork in Burke County and the Johns River in Caldwell County
 - NCDENR may purchase almost 2,600 acres of lands predominately along the Johns River in Burke County and some parcels along the Johns River and Wilson Creek in Caldwell County
 - Duke Ventures, has acquired the properties from Crescent and will hold for 3-4 years for NCDENR to obtain funds from grants and other sources to purchase the lands.
 - Duke Ventures will reduce the purchase price by \$1,350 per acre, up to a total of \$3.5 million if all tracts are purchased.
- Duke provided \$20,000 to SCDPRT for clearing vegetation at the Dearborn Armory site
- Duke and the North Carolina Wildlife Resources Commission (NCWRC) have negotiated a new maintenance agreement for the Licensee's access areas in North Carolina
- *Duke will install Spanish-language signs at all stations and will install remote warning horns at Bridgewater and Oxford*
- *Duke, NCWRC, and SCDNR shall implement safety zones (extended to December 31, 2008)*
- *Parties will begin reviewing the effectiveness of the Memorandum of Understanding between the Licensee and State, Counties, and Municipalities*

CRA Items Implemented Early

- Kershaw County, S.C. acquired approximately 100 acres on the north side of Singleton Creek at Lake Wateree for a future county park. This enables the county to utilize \$900,000 from Duke Energy to develop facilities at the site.
- Duke implemented upgrades to its public-information web site and phone system (except for Great Falls Bypass flows). These upgrades are not required until one year after issuance of the New License.
- SCDNR purchased the (approximately) 1,540-acre Heritage Tract near Great Falls, SC which includes an agreed-upon conservation easement on approximately 2 miles of riverbank adjoining the Great Falls Long Bypassed Reach.

Drought in 2008 is less Intense Than in 2007

2007 and 2008 Rainfall Amounts



Late August 2008
Rainfall Helped

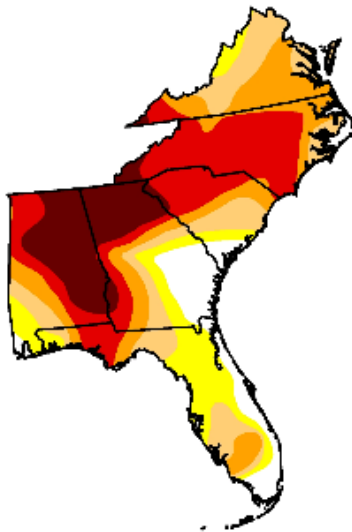
• 2007 was the driest year in Duke's records (11 months in 2007 were drier than average). 2008 is below average YTD.

<u>Period</u>	<u>Total Inches</u>	<u>% Long Term Average (LTA)</u>
LTA	46.3	----
2007	27.9	60%
Jan-Aug LTA	31.7	----
Jan-Aug 2007	18.8	59%
Jan-Aug 2008	26.8	84%

Existing Drought Conditions in the Southeast Compared to 2007

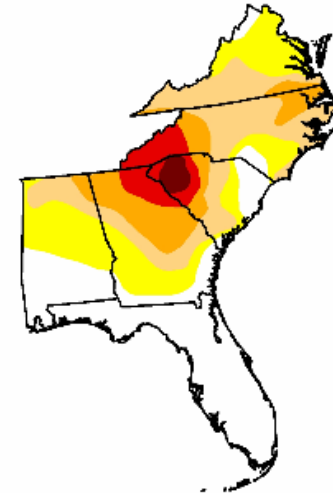
The Duke Energy Carolinas Area is still predominately in an Exceptional or Extreme Drought Condition

September 25, 2007
Valid 7 a.m. EST



U.S. Drought Monitor Southeast

September 2, 2008
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	34.5	65.5	42.6	20.0	7.6	1.5
Last Week (08/26/2008 map)	34.3	65.7	45.3	26.7	10.9	1.5
3 Months Ago (06/10/2008 map)	12.6	87.4	54.6	24.6	8.2	0.0
Start of Calendar Year (01/01/2008 map)	9.6	90.4	74.3	58.5	41.0	22.0
Start of Water Year (10/02/2007 map)	10.1	89.9	77.9	63.8	45.2	24.0
One Year Ago (09/04/2007 map)	6.1	93.9	75.9	54.5	34.7	15.8

Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements

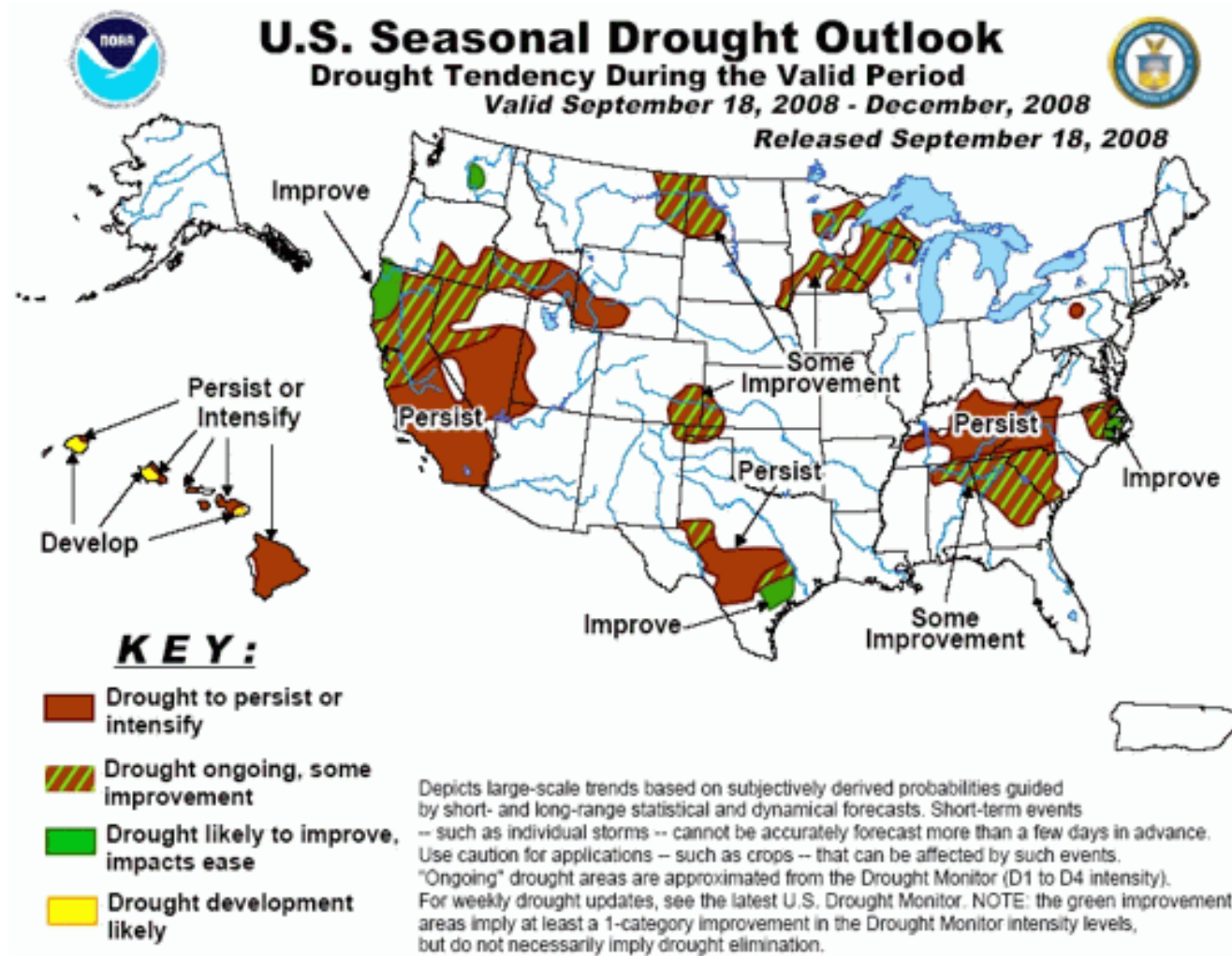
<http://drought.unl.edu/dm>



Released Thursday, September 4, 2008

Author: J. Lawrimore/L. Love-Brotak, NOAA/NESDIS/NCDC

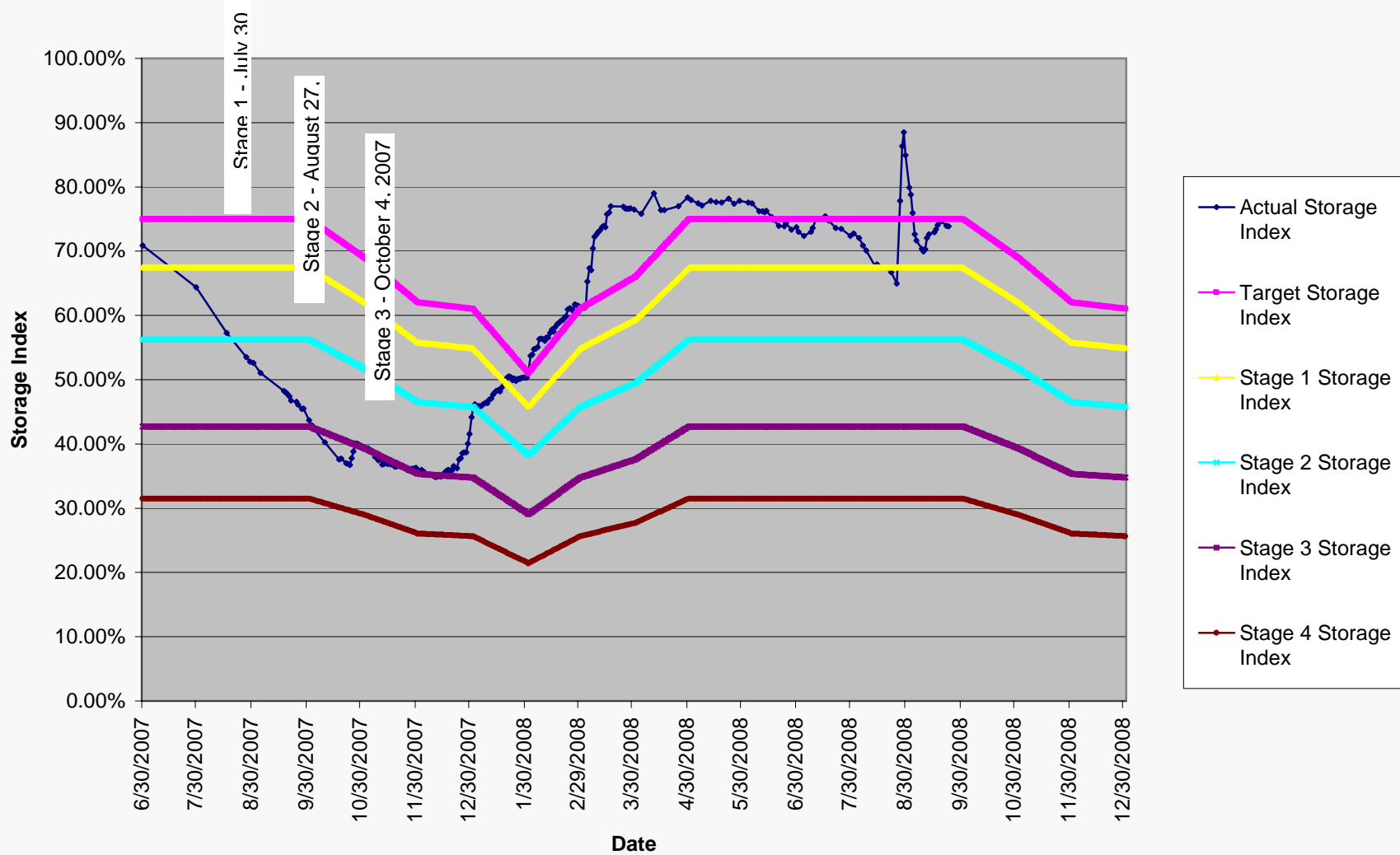
Seasonal Outlook is for Some Improvement



NOAA forecast for October 2008-December 2008 predict:

“In general the new drought outlook is more pessimistic with regard to the probability of improvement over the southeast mainly due to the recent reduction in Atlantic tropical system activity.”

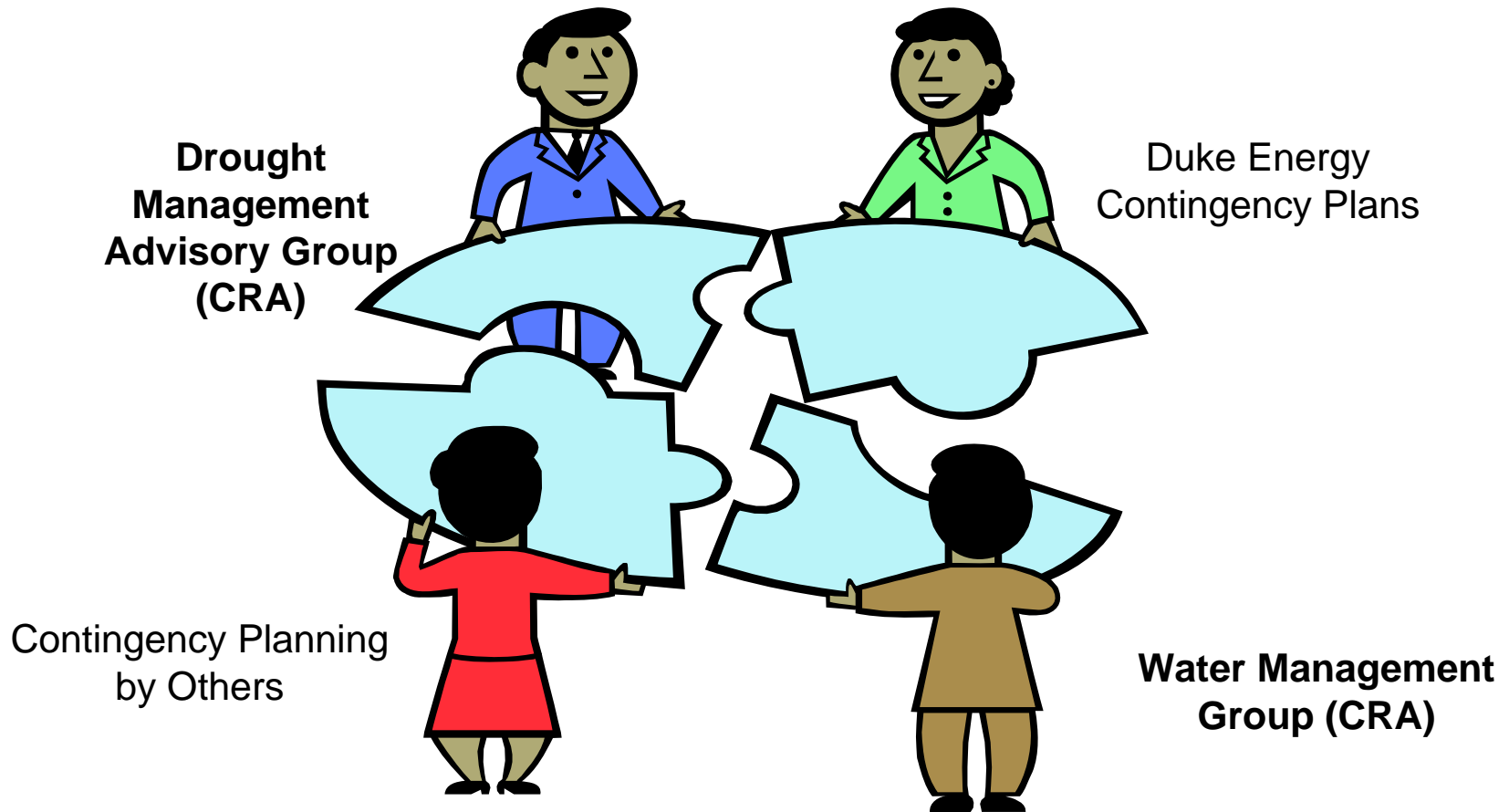
Catawba-Wateree Storage Index



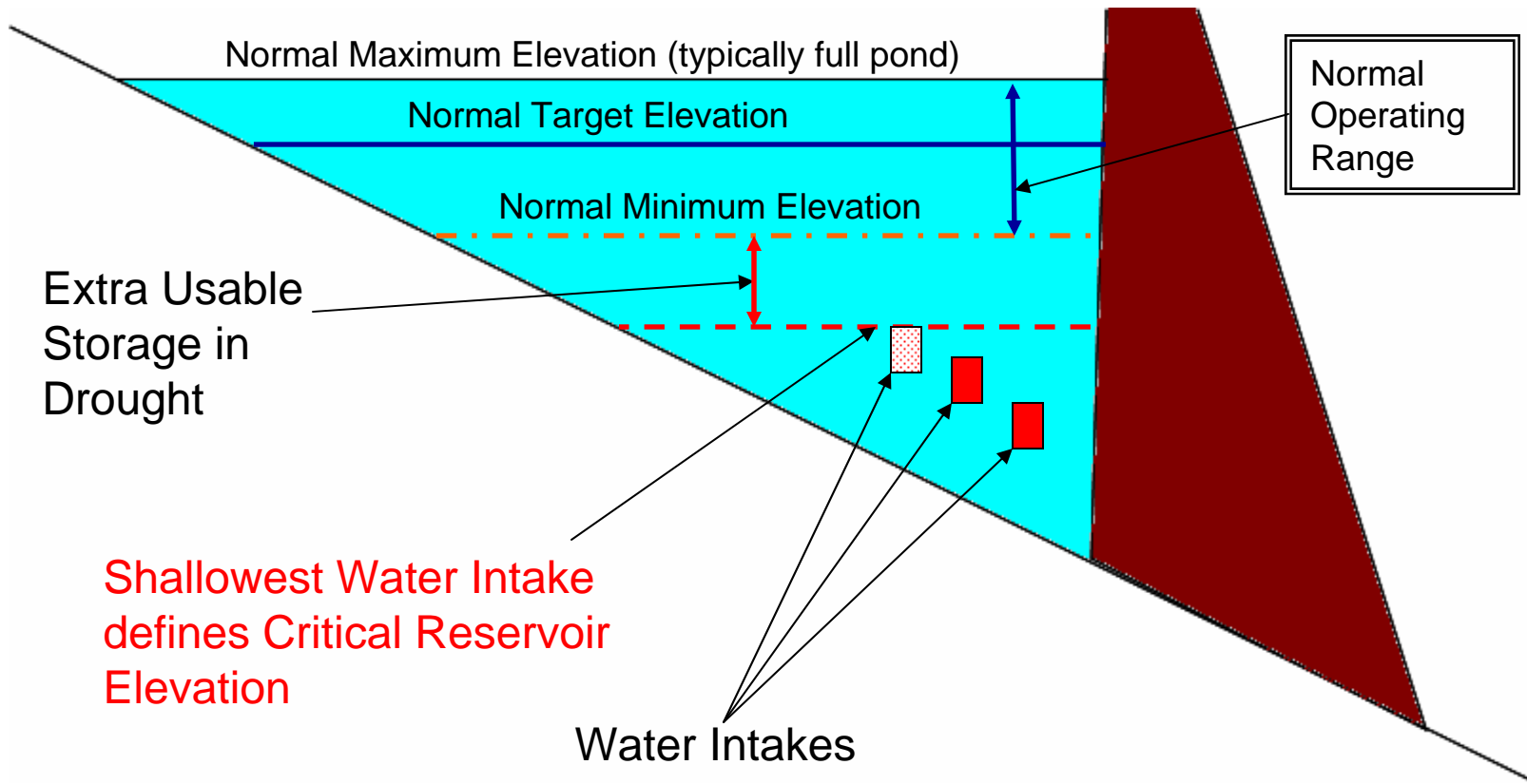
High-water events create run-off that can't be stored for long-term use.

Catawba-Wateree Basin remains in Stage 3 due mainly to streamflow and groundwater.

What's being done to manage the water supply?




Low Inflow Protocol Protects Usable Storage




Catawba-Wataree Low Inflow Protocol (LIP) Trigger Status

	Reservoir Storage as a % of Target	% of 6-Month Long Term Avg Streamflow	3-Month Avg of U.S. Drought Monitor	Groundwater Level
Normal	100%	85%	0	
LIP Stage 0	97.5 (down 20.5%) 90%	78%	1	
LIP Stage 1	75%	65%	2	
LIP Stage 2	57%	55%	3	Langtree
LIP Stage 3	56% on 12/12/07 42%	51.6 (up 2.1%) 40%	3.33 4	Linville (down 1)
LIP Stage 4		30% on 1/31/07	4.0 on 12/07/07	Glen Alpine 10/25/07

Here
9/26/08

 = Trigger data point on 9/26/08 (30-day change)

 = Lowest trigger data point reached since LIP implemented in August 2006

What's being done to manage the water supply?

- **Duke Energy Contingency Plans**

- Hydro generation curtailed – Continues except to manage high water events
- Continue asking customers to conserve electricity - Continues
- Curtailed use of lake pumps for irrigation – Currently one day per week
- McGuire piping modifications accelerated – Completed in March 2008
- Prepared for contingency releases from Lake James below 61.0 ft – Assessment complete
- Lake bed mapping – Completed and provided to water suppliers
- 12-month look ahead to ensure customer needs are met - Ongoing

- **Contingency Planning by Others**

- Pumps on floating platforms
- Temporary weirs or portable dams
- Water system interconnects
- Tighter and more consistent water use restrictions

- **Water Management Group**

- Long-term approach to better understand, plan, and manage water supply and demand
- Chartered in 2007; sixteen member organizations; received 501(c)(3) non-profit certification in May 2008
- Implementing a 5-Year Strategic Plan
 - Centralina Council of Governments is compiling regional water system maps that are needed to complete regional water planning work
 - Receive more than \$180,000 in outside funding over the next four years through the United States Geological Survey to complete a project to add ground water monitoring wells.

Questions?

