

# **The Catawba-Wateree River Basin Advisory Commission (CWRBAC)**

## **Meeting Notes – October 30th, 2015**

Commission Members Present: Representative Ralph Norman, Representative Jimmy Bales, Senator Robert “Wes” Hayes, Sen. David Curtis, Barry Gullet, Kathy Wilson, Donnie Hicks, Jeff Lineberger, Tim Mead

### **1. Call Meeting to Order**

The meeting was called to order by Chairman Norman.

### **2. Approval of Minutes**

The minutes from the June 30th meeting were approved.

### **3. Drought Update (Low Inflow Protocol Update) – Mark Oakley, Catawba/Wateree Relicensing Project Manager, Duke Energy**

- The Low Inflow Protocol (LIP) monitors three basin-specific drought triggers to determine drought status for the Catawba-Wateree River Basin:
  - Remaining usable water storage in the eleven project reservoirs
  - Four monitored tributary streamflows into the Catawba-Wateree Project
  - The U.S. Drought Monitor (map) specific for the basin
- A summary of LIP Stages, Triggers and Action Summaries was presented and is available on the Commission Website.
- To recover to a less restrictive LIP Stage, all four triggers must support that Stage or lower.
- Summary:
  - The Storage Trigger has recovered to Normal Conditions due to the October rainfall
  - The six-month average Streamflow Trigger is still in Stage 1 condition but should improve over the next two months with continued rainfall
  - The three-month average U.S. Drought Monitor for the Catawba-Wateree is improving and should return to normal by the end of November

Q. What about dams?

A. It is noted that DHEC is working with consultant HDR in relation to the dams. Also Duke noted that coal ash dams are monitored.

#### **4. S.C. Surface Water Availability Assessment, Rob Devlin, Water Quantity Section Manager, SC DHEC**

- SCDNR and SCDHEC have begun the process of developing surface-water quantity models for each of the eight major watershed basins in South Carolina.
- In July 2014, CDM Smith, Inc. was awarded a contract to develop the models for the state.
- The model is called Simplified Water Allocation Model (SWAM).
- Stakeholder meetings are held in each basin at beginning of process and as draft results are completed.

Upcoming meetings:

- Catawba River Basin Initial Meeting – November 4<sup>th</sup>
- Edisto Basin Second Meeting- December 1, 2015 - Sharing draft model outputs and calibration results
- Saluda Basin Second Meeting – December 2, 2015 - Sharing draft model outputs and calibration results

Q. How are stakeholders notified of meetings?

A. Clemson University is coordinating the stakeholder effort. Stakeholders are notified via an in-depth stakeholder list and press releases.

Q. Will models be used in permitting?

A. Right now the goals of model development are to gain an understanding of the surface water availability (amount of water available minus what that is already in use).

Q. Is groundwater included in the assessment?

A. The assessment is for surface water.

Q. Will the model be useful in permitting?

A. The models will provide information on where water is available for use and where water is less available.

Q. Comparison with the model Computer Hydro Electric Operations and Planning Software (CHEOPS)?

A. The SWAM Model will be used by SCDHEC for water quantity permitting and by SCDNR as a long-term planning tool for the State Water Plan. The CHEOPS is used for short-term and long-term reservoir operations.

#### **5. Impacts of the New Catawba/Wateree License on the Catawba/Wateree River Basin - Mark Oakley, Catawba/Wateree Relicensing Project Manager, Duke Energy**

- June 12 - Duke Energy fulfilled FERC Additional Information Request.
- Continued stakeholder outreach and implementation preparations.
- June 18 - Western North Carolina Water Quality Conference.

- July 16 – SC Wildlife Federation Board meeting
- Prepared for New License implementation
- July 30 – Fish passage meeting with SCDNR, USFWS, and NMFS to discuss implementing Duke Energy requirements
- September 10 – Additional fish passage meeting to review diadromous fish recovery efforts
- October - Duke Energy submitted a request

#### Top Impacts on the Catawba-Wateree Basin\*

- Aquatic habitat will be expanded
- Water quality will be improved
- Water supply “safe yield” will be extended
- Drought resiliency will improve
- Recreation access will be increased
- Recreation experience will be improved
- 10,690 acres of land will be preserved (plus \$3M for additional land purchases and another \$3M if New License is for 50 years)
- Endangered species will be protected
- Cultural and archeological resources will be protected
- Relationships will continue to solve problems and yield benefits long after New License implementation is complete
- Includes five settlement agreements, two water quality certifications, one biological opinion, one fish passage prescription, and one New License

#### What to Expect Within the First Year\*

- Day 1: Communications
  - 30 days: Review New License for inconsistencies, clarifications, corrections
  - Effective Immediately: Continue agreement requirements, follow new sturgeon protections
  - End-of-2015: Shad and eel passage compliance plans (Wateree), cultural site funding
  - 60 days: New (or interim) flow releases, reservoir levels, protocols, and species protection plans
  - 180 days: File implementation plans for flow releases and water quality monitoring with the FERC
  - One Year: Begin to disburse funding, sturgeon habitat monitoring, file Recreation Management Plan
  - End-of-2016: All water quality monitors installed, new spawning flows at Wateree
- \*Assumes New License issued by the end of 2015

## 6. Lower Catawba Basin TMDL Update, Wade Cantrell, TMDL Program Manager, SC DHEC

- Background: A nutrient overload with effects expressed in SC lakes as impaired water quality (Phosphorus, Nitrogen, Chlorophyll, pH, Dissolved Oxygen) and increased DO depletion in bottom waters.
- Water quality management concern since at least 1990s.
- Modeling studies conducted by Duke, USC, SCDHEC, NCDWQ, etc.
  - (2001) SC numeric nutrient criteria in lakes
  - (2001) SCDHEC begins limiting Phosphorus in NPDES permits
  - (2002) Settlement agreement between SCDHEC, NCDWQ, Charlotte
  - (2006) NC NPDES Phosphorus load reductions
  - (2005-2008) SCDHEC TMDL effort—Additional modeling, stakeholder meetings, model review, technical comments
- TMDL development previously paused (Other projects, system changing/model updates needed, declining resources).
- Recent efforts utilized data from the 2012 303(d) List of Impaired Waters (2006-2010 data plus legacy sites).
  - Lake Wylie, SC not impaired
  - Fishing Creek Reservoir: P, N, pH, chl-a
  - Great Falls Reservoir: P, N, chl-a
  - Cedar Creek Reservoir: P, N, DO
  - Lake Wateree: P, pH, DO
- 2014 303(d) List of Impaired Waters included data from 2008-2012 plus legacy sites.
- February 2014 - Draft for public comment.
- EPA 319 NPS Grant funds used to contract Systech Water Resources, Inc.
- (June 2012) Extend WARMF model to 2012.
- (April 2014) Model Calibration.
- (2014-2015) Stakeholder review and coordination.
  - Load Scenarios → Allocations → TMDL
- Summing Up:
  - Significant Phosphorus reductions have been implemented by NC and SC facilities
  - WQ improvements in SC lakes have occurred

- Goal of the current modeling effort is to determine what more is needed and considering all sources, to achieve WQ standards
- Coordination with NCDWQ and EPA Region 4 has begun and will expand to include stakeholders prior to drafting the TMDL

#### **7. Addition of Newer Commission Members:**

Welcome Mrs. Kathy Wilson representing a SC Lake Homeowners Association and Mr. Donnie Hick representing The Carolina's Partnership

#### **8. New Chair and Vice-chair:**

- Barry Gullet was elected as new Commission Chair
- Mrs. Kathy Wilson was elected as Vice-chair

**Thank you Representative Norman for your service as Commission Chair!**