

The Catawba/Wateree River Basin Advisory Commission
Meeting Minutes – September 27, 2013

Commission Members Present: Senator Austin Allran, Jimmy Bagley, Senator Daniel Clodfelter, Senator Creighton Coleman, Barry Gullet, Smitty Hanks, Senator Wes Hayes, Rick Lee, Jeff Lineberger, Tim Mead

1. Call Meeting to Order

- Chairman Lee called the meeting to order at 10:05 am.
- Member introductions were conducted.

2. Approval of Minutes and Other

- The minutes from the April Commission meeting were approved with minor text revision.
- A new motion was carried to add an agenda item about the potential for NC/SC fishing license reciprocity.
- The Chair noted he would also be providing news updates on information related to the basin.
- All presentations from this meeting will be added to the Commission's Website.

3. High-Water Management in the Catawba River - George A. Galleher, Duke Energy Carolinas, LLC

Map of Duke's 33 hydroelectric power stations in NC and SC was shown.

This presentation focused on the Catawba-Wateree River Basin System.

- 225 miles long
- 3 million plus acres of drainage basin
- Ranging in elevation from 1200 feet to 225 feet AMSL
- 11 lakes with total surface acres of about 80,000
- 13 hydro powerhouses

Dam Types:

- Lakes with Ungated Spillways (Overflow Spillways): When the lake reaches full pond and there is more river flow coming into the lake than can be passed through the powerhouse, the lake level rises above the crest of the spillway and flows over the top.
- Lakes with Gated Spillways: When the lake approaches full pond and there is more river flow coming into the lake than can be passed through the powerhouse, spillway gates are opened to pass the extra flow.

Managing floods:

- Use computational forecasts, experience, and attention to detail.

What Duke Energy doesn't do in managing potential flooding events?

- Manage single lakes, but instead manage the whole system and does not add to the total water volume over what would have been present without the dam being constructed.

The reason you can't tell how high the lakes will get before the storm arrives is because you are not sure how much it is going to rain, where it is going to rain, how fast it will rain, how wet the ground is, and how long will it take for the water to reach the river. These would need to be known for the 3,000,000+ acres in

the drainage basin. The high water impacts cannot be realistically estimated until the rain has finished and stream levels are no longer rising.

The reason you can't just draw down the reservoirs to handle the "expected" rainfall is because storms are unpredictable. What would be the downstream effects? What will happen if the "expected" hurricane doesn't bring rains to our area? What happens after if it doesn't rain for the next several weeks or months. Storms are watched and plans are made accordingly. Goals are to minimize impacts upstream, downstream and on the lakes. There is an effort not to overreact and communication is key to operations.

There was a Commission question about flooding on Mt. Island. The answer was that because 60,000 cfs came through Lake Norman that caused spilling at Mt. Island. It can happen, but typically Mt. Island is protected b/c of Lake Norman.

There was a Commission question about needed maintenance on concrete used on spillways? Does it age out? The answer was that FERC regulates these dams and they can handle a max/min flood. But superficial concrete spalling is addressed as needed for example as it is being repaired on the Catawba Dam.

There was a Commission question about Lake Wateree being subject to flooding like Mt. Island? The answer was that Lake Wateree is at the bottom of the system, and if reservoirs above it fill up, they have to spill water. Wateree is watched closely.

There was a Commission question about system benefit from developing a reservoir on Johns River? The answer was that most of the property in the area is protected, and it is too late to build a reservoir there.

4. NC Division of Water Resources (DWR) Organization Overview – Kathy Stecker, NCDENR

This presentation highlighted the structure and activities within the Division of Water Resources (DWR) at the North Carolina Department of Environment and Natural Resources (DENR). The new Division includes the consolidated areas of Drinking Water Resources (DWR) and Drinking Water Quality (DWQ). The merger was effective 8/1/2013 and includes the following sections: Water Planning, Environmental Sciences, Water Permitting, Aquifer Protection & Regional Offices, Laboratory, and Public Water Supply. In the DWR, a review of all rules and policies will be completed by December, 2013. The speaker's entire presentation with additional organizational and staff information will be posted on the Commission's Website.

A general participant asked if requirements and regulations on private and public water companies were the same. David Baize from SC DHEC answered that requirements were equal because both must meet Drinking Water Act Regulations.

It was noted that NC is undergoing a basin by basin study on water for quantity. David Baize noted SC is initiating a similar process. Commission Member asked about the budget request for modeling of water resources in the basin. David Baize stated the SC legislature has allocated \$250,000 for the specific basin effort in Catawba and \$1.5 million for a statewide assessment. It was noted that the Commission had supported the budget request to their respective General Assemblies.

Commission Member asked if numbers on staff from the NC presentation were final, but answer was unknown at this time.

David Baize mentioned (as per the presentation slide about regulation review in NC) there is also a regulation review ongoing in SC as mandated by the Governor and a separate five (5)-year regulation review conducted routinely.

Commission Member asked if there is common ground between water quality sampling methods and standards in NC and SC. David Baize indicated there is robust monitoring and assessment program in each state although there are sometimes differing methods. He noted getting on same cycle might not be warranted verses the benefit. It was noted that both states have to satisfy EPA requirements. Kathy Stecker mentioned that the process of regulation review is required before changes can be made to Water Quality Standards' Regulations. This type of planning and legislative review can take years in both states.

Commission Member asked about an aquatic weed problem noted in Lake Wylie and asked if the state gets involved. Kathy Stecker will provide a contact regarding this issue.

Commission Member asked if SC knows what hydrologic model they will be using yet? David Baize responded that there is an RFP out now. An item related to IBTs was discussed briefly.

5. NC IBT Application – Ian McMillian, NCDENR

It is possible to now modify existing IBTs. Union County's Notice of Intent was highlighted with the following information:

- Received NOI August 12, 2013
- Public Meetings October 3rd, 14th and 15th
- The request is for a 28 mgd transfer from the Yadkin River to the Rocky River

It was noted that South Carolina and SC DHEC have opportunity for comment. However, there will be no flow change downstream in SC.

The Catawba/Wateree (Computer Hydro-Electric Operations and Planning Software (CHEOPS) Model upcoming meeting was mentioned.

6. Nutrients Modeling Update - Wade Cantrell, SC DHEC

The focus area is the Lower Catawba Basin from Wylie Dam down to Wateree Dam. A brief history of the nutrient issues in the lower Catawba was provided along with effects expressed in certain South Carolina lakes such as impaired water quality for phosphorus, nitrogen, chlorophyll, pH, and dissolved oxygen, along with increased DO depletion in bottom waters. History of nutrient overload in the lower Catawba was discussed and included a mention of water quality concern since at least 1990s:

- Modeling studies mentioned (Duke Energy, USC, SC DHEC, NCDWQ, et al.)
- SC numeric nutrient criteria (2001)

NPDES permitting history:

- SC DHEC begins limiting phosphorus in permits (2001)
- Settlement agreement SC DHEC, NCDWQ, Charlotte (2002)
- NC NPDES phosphorus load reductions (2006)

SC DHEC TMDL effort history:

- Additional modeling, stakeholder meetings, model review, technical comments (2005-2008)

After 2008, the TMDL development paused due to other projects, system changing/model updates needed, and declining personnel resources.

Graphs were shown illustrating what appears to be a decrease in total phosphorus concentration levels Fishing Creek Reservoir and Lake Wateree. There have been significant reductions in SC and NC loadings. Goal of the current modeling effort is to determine what more is needed, considering all sources, to achieve WQ standards. This will include coordination with a variety of stakeholders.

There was a question as to if the settlement agreement with NC included Charlotte at table in development of TMDLS. Wade Cantrell responds yes, they will be.

There was some discussion as to the Nonpoint Source loadings in Fishing Creek Reservoir and its shallow nature with possibility for re-suspension.

A question was asked as to the timeframe for TMDL completion. Wade Cantrell answered that it is difficult to predict, but the goal is to have the model calibrated in April 2014 and then begin first draft run of the model with that information going out to stakeholders. Then, allocation possibilities have to be completed with stakeholder input. Wade Cantrell suggests that perhaps around 2015 for draft model, allocations, and TMDL to be out on comment.

7. NC and SC Fishing License Reciprocity (Lake Wylie)

There was discussion about Lake Wylie potentially being the only lake in SC/NC that you need two state fishing licenses to allow you to fish. Potential reciprocity was discussed as solution for the situation. There is some concern about lost revenue to some counties. There was a motion for commission to vote on endorsement for the concept of single fishing license requirement for NC or SC. The motion was supported. David Baize is to write first draft letter and send to Chair.

There was mention that possibly there are other lakes in same situation, like Lake Jocasee and Gaston Shoals Reservoir.

8. Update from Catawba Riverkeeper - Sam Perkins, Catawba Riverkeeper

Charlotte area power plants are being mapped.

Coal ash issues were discussed with the following specific item noted:

- SCE&G powerplant on Wateree River (Eastover, SC)
- Groundwater contamination (arsenic)
- CRF filed suit May 2012

There was a settlement in August 2012, agreeing to:

- Remove ash in unlined ponds and move away from the river
- Switch to dry ash handling with lined basins

Solutions noted:

- Clean up site, 'Leave it as you found it,' Place material in lined landfill

SCE&G Precedent:

- Continues to operate on Wateree River, but ended wet handling

There is a document library related to coal ash lawsuits available on the Catawba Riverkeeper's Website. There are public records and information there and problems at Riverbend Steam Station are noted. Site address: <http://www.catawbariverkeeper.org/issues/coal-ash-1/documents-related-to-coal-ash-lawsuits/>

Why be concerned about coal ash?

Groundwater contamination, seeps have proved unpredictable, potential for failure, water supply threat, maximum contamination will peak decades from now, and 'other' material buried.

Concentrated Animal Feeding Operations (CAFOs)

Swine and cattle are subject to public record, but poultry are different.

Commission asked if poultry includes turkeys? The Riverkeeper answered he is talking about chickens. SC does not seem to have this poultry issue, but SC nutrients overloading could come from human sludge use. The Riverkeeper stated opposition to CM permit.

PCBs

Coal Ash - When you discharge into a lake, particulates settle and absorb to particles in soil. Arsenic is on top layer so it goes to particulates in the water column. Riverbend and legacy going in drinking water treatment plant sludge.

They are working with Geographic Information System (GIS) and economic impact property tax base.

Riverkeeper stated that Union-Norwood tie-in good, but there is a concern with lake James dropping 50 ft.

Some Riverside residents were not notified of flooding in May. Ideas for resolution of this issue were discussed. Having Duke Energy or the HOA Robocall residents was discussed as a potential viable solution.

There was a Commission note that this might tie back to the presentation on nutrient modeling presented by Wade Cantrell. Commission Member asked about possibility of groundwater model on the sludge and poultry?

Wade Cantrell of DHEC mentioned the new model will look at all sources such as overland sources like land application, but will not address infiltration and reintroduction through groundwater (gw was considered in previous modeling efforts).

The Riverkeeper noted that No Discharge Permits are not accounted for because there is no permit required or written. Mr. Cantrell noted that TMDLs look at large blocks of time (longer time space).

Commission Member asked about recent Tega Cay sanitary sewer overflows (SSOs). Riverkeeper suggested Linda Stevenson is best contact regarding update on the issue. They talked with SC District Attorney and EPA. It was noted that another utility has had SSOs of substantially greater size.

Flood notification at Lake Wylie was discussed and idea for signs was suggested as well as Robocall.

Jeff Lineberger mentioned that EMS (Mecklenburg EMS) does have notification and if Duke Energy pulls a gate, then an auto call goes out. Discussion is ongoing on this issue. There is an 800 phone line with warning messages that are lake specific, Duke's website also has information.

Commission Chair noted GA/SC basin meeting recently in the news. David Baize was in attendance. He mentioned the water related issues that can be present with wet weather and with drought conditions. He then reviewed some items about the Savannah Basin regarding lake levels in the upper part of the basin

and user need in the lower part of the basin. He mentioned Governors from both states being present at the joint GA/SC meeting.

The Commission Chair noted that the Savannah River has recently been mentioned as our most studied river.

9. Election of New Commission Chairman and Vice Chairman

A motion is made and passed for Dr. Arthur Mead to be Chairman. A motion is made and passed for Creighton Coleman to become Vice Chairman.

There is discussion about Commission Member terms needing to be reviewed. Dr. Mead, Chair, will review terms and members.

There is a question about a Yadkin/Pee-Dee Bi-State Advisory Commission being put together. At this time, members are not appointed.

10. Upcoming Meeting Topics

David Baize introduced the new DHEC Watershed Manager, Carol Roberts, and then he provided a list of potential topics to the Commission. The following items were noted in addition to those on the list:

- Information on adequacy of existing fish tissue testing
- Sludge land application
- Water Management Group would like to present on the Water Supply Master Plan at an upcoming meeting.
- Rock Hill mentioned Water Management Group on master plan and other studies too from the group. Commission Chair suggested list to Dave Baize so we can begin planning on that.
- Sedimentation – Are we losing volume in lake chain due to sedimentation? How to reduce sources and how to mitigate once it is there. Mentioning of restrictions on dredging coves.

Other items from David Baize's existing potential topic list:

- Consider Commission representation, term expiration dates and including other advisory members, perhaps from agriculture or industry
- Ensure that updated Commission information is available on the NCDENR-maintained website
- Water quality topics to discuss could include: stormwater permitting requirements, sedimentation, and joint state nonpoint source projects
- Highlights of potential policy changes and their implications for future work in the Catawba
- Thermal discharge impact on the Catawba and water security issues
- Emergency planning and its relationship to interconnections and IBTs
- Mercury and PCB contamination
- Part of the purpose of the Catawba/Wateree Water Management Group is to support the Commission. We may want to identify any needed projects in their 5-year plan.

11. Other

- A picture was taken of the Commission for web posting
- The Lake Wylie River Sweep was mentioned

12. Action Items From Meeting:

- Kathy Stecker will provide a contact regarding aquatic invasive plants
- David Baize to draft letter regarding fish licensing reciprocity
- Chair to check on current members and their term expirations
- All presentations and April approved minutes to the website

Thanks to past Chairman and Vice Chairman for their service!

Meeting Adjourned

Minutes recorded by Carol Roberts, SC DHEC