

C-W DROUGHT MANAGEMENT ADVISORY GROUP

ANNUAL MEETING

Tuesday, May 07, 2009

MEETING SUMMARY

Member Organizations Present:

Abitibi-Bowater
Chester Metropolitan District
City of Belmont
City of Camden
City of Gastonia
City of Hickory
City of Lenoir
City of Morganton
City of Mount Holly
City of Newton
City of Rock Hill
City of Statesville
Duke Energy Carolinas, LLC
International Paper
Lugoff-Elgin Water Authority
NCDENR
NCDWR
SCDHEC
Town of Granite Falls
Town of Longview
Town of Mooresville
USGS

Other Organizations Present:

HDR
Kearns & West, Inc.
McKim and Creed
Town of Fort Mill
Western Piedmont COG

Introductions, Agenda Review, and Announcements

1. Ed Bruce opened the meeting with introductions and reviewed the agenda.

Low Inflow Protocol (LIP) Triggers, Duke Operations, and Meteorological Update

2. Bruce provided a LIP trigger update. The drought triggers indicate the area is in an LIP Stage 1 drought. The drought monitor for the foothills was in a D1 (moderate drought) at the time of the meeting with the rest of the basin in D0 (abnormally dry). The streamflow's actual six-month ratio is 71.7 percent supporting Stage 1 conditions. Bruce anticipates that the six-month average actual vs. historical streamflow will likely make progress and continue toward a Stage 0 reading. Groundwater continues to move positively in an upswing experienced since the fall of 2008. Storage is above the Target storage level for this time of year.

Meteorology and System Operations Update

3. George Galleher provided an update on area meteorology conditions and on Duke's hydro operations. Galleher noted that area is still experiencing a deficit from normal rainfall levels for the Jan-Apr timeframe. Earlier in the week, the system received some rain equating to a system average just about one inch leaving a year-to-date deficit of two inches. The May forecast suggests 10 to 30 percent chance of below average precipitation for the area. NOAA's May-Jul forecast suggests an equal chance for normal, average, or below average precipitation for the area. NOAA also expects soil moisture to be lower than normal at the end of Jun but higher than normal at the end of Aug. The tropical storm season is expected to be similar to last year with named storms more likely to follow a Western Caribbean/Gulf of Mexico route, leading to less activity on the East Coast. Duke continues its work at the Bridgewater Development spillway at Lake James. Lake James will be managed to a target elevation range of 94 to 95 feet during construction. Drought conditions have improved, and recreation flows will now be released.
4. Kearns asked Galleher why the construction is occurring at the Bridgewater Development. Galleher explained that the FERC is requiring Duke to increase dam stability to meet higher earthquake requirements. Duke is building a new powerhouse at the Bridgewater Development because the Linville Dam construction will require removal of the current powerhouse.
5. Castles asked why two feet of the Bridgewater Development Catawba Dam spillway have been removed. Galleher explained that Duke is repairing the concrete at the top of the spillway.

LIP Evaluation Committee Update

6. Kearns provided an update on the Committee's work. Kearns announced that FERC issued its Catawba-Wateree Project Draft Environmental Impact Statement (DEIS) which also gives FERC's suggestions about what might be in the license. The LIP will become part of Duke's license, and the DEIS suggests that FERC may require Duke to add members to the CW-DMAG. Bruce noted that FERC has no jurisdiction over anyone but the licensee and therefore other entities could not be required to join the CW-DMAG. Bruce added this would only mean that Duke would be required to invite other entities to join the CW-DMAG. Bruce noted that the LIP has certain recommendations (e.g., water use restrictions) for CW-DMAG members, but those actions cannot be requirements in the license. Kearns reminded the Group that written DEIS comments are due to the FERC on May 8th.
7. Kearns reminded the Group that the LIP Evaluation Committee is working to generate 1) a lessons learned document from the recent drought and 2) recommendations on an operating protocol for

DMAG, for example, how does the CW-DMAG make decisions? Kearns reviewed LIP Evaluation Committee's approach, goals for LIP changes, how the CW-DMAG has been in managing the two drought actions: (1) Project flow reductions 2) customer water use restrictions) and he provided the results of those two to date.

8. Kearns turned the meeting over to HDR to provide more information into the specific work in which the Committee has engaged. Kevin Mosteller explained that HDR has worked with the Committee for about six to nine months looking at the LIP triggers specifically, how they worked and what changes may or may not be advisable. Mosteller said that Mike Benchich would share a presentation outlining the work and findings of the Committee's look at the LIP triggers. Kearns invited the CW-DMAG to ask questions and provide feedback to the Committee.
9. Benchich reviewed the LIP Trigger Evaluation presentation with the CW-DMAG.
10. Kearns noted that there was a general perception that going into the drought could have moved more quickly and moving to a four-month rolling streamflow trigger average (instead of six-months) would have achieved that goal.
11. Turner said one conclusion the Committee reached regarding groundwater was that there was not enough data available for the period of record, and therefore the Committee was considering using the groundwater trigger in an advisory capacity.

12. Robinson noted that the four-month rolling streamflow average seemed to help the area anticipate the drought and get ahead of it as much as possible. Robinson asked if the Committee has looked at a scenario where the four-month rolling average is used going in to the drought and the six-month rolling average is used during the drought to reduce volatility. Benchich said that reducing volatility was a consideration during the discussion of all scenarios. Given the current set of triggers, there are already built-in mechanisms that dampen the volatility.
13. Bruce noted that the reason the storage remained high throughout the drought was because the LIP allowed Duke to build and maintain storage.
14. Bruce asked why the four-month rolling average didn't change the overall drought monitor by more than a month or two in 2007. Benchich said it was because the descent into the stages was not due to the drought monitor or streamflow, it was due to the rapid decrease in storage. The Storage Index (SI) was getting lower and the drop in Stage designations matched the SI at that time.
15. Kearns reviewed the Committee's next steps with the CW-DMAG.
16. Rayno reviewed a new piece of NC legislation that requires communities that have to do a water supply plans to include specific measures in their water shortage response plans to address actions when triggers are met. For example, if a trigger is met, communities will need to indicate in writing "when x trigger is met, our system will do y." Rayno said that the NCDWR will approve all plans, and those plans in the Catawba-Wateree basin must be consistent with the LIP. The deadline to have these elements of communities' water shortage plans is July 1.
17. Cross asked if municipalities that have submitted a plan, but have not received approval, will be required to resubmit those plans. Rayno said that plans would be assumed to be approved unless specifically disapproved.

Conclusion

18. The next CW-DMAG call/meeting will be held in early June. The time and location are TBD.
19. Bruce adjourned the meeting.