MEETING SUMMARY

Member Organizations Present

Charlotte Water                      Lincoln County
Chester Metropolitan District       Lugoff-Elgin Water Authority
City of Belmont                     North Carolina Department of Environmental Quality, Division of Water Resources (NCDEQ-DWR)
City of Camden                      North Carolina Wildlife Resources Commission
City of Cherryville                 South Carolina Department of Natural Resources (SCDNR)
City of Gastonia-Two Rivers Utilities
City of Hickory                     US Fish and Wildlife Service
City of Lenoir                      US Geological Survey (USGS)
City of Morganton                   Town of Granite Falls
City of Mount Holly                 Town of Long View
City of Rock Hill                   Town of Valdese
Duke Energy                         HDR Engineering
International Paper                 National Weather Service

Other Organizations Present

HDR Engineering
National Weather Service
York County

Member Organizations Not Present

American & Efird                     National Marine Fisheries Service
Bessemer City                       Resolute Forest Products
Catawba River WTP (Lancaster Water and Sewer District and Union County)
City of Lincolnton                  SCANA Corporation
City of Marion                      Siemens Waterhouse
City of Newton                      South Carolina Department of Health and Environmental Control (SDHEC)
City of Statesville                 Springs Industries
Clariant Corporation
Invista

Introductions, Agenda Review and Announcements

– Ed Bruce, Duke Energy, opened the teleconference meeting at 3:31 PM, welcomed participants and reviewed the agenda for the day.
– Audri Baker, HDR, conducted an attendance roll call by asking for voice confirmation of each member organization’s participation on the call; individual names were not requested or recorded.
Three sets of data slides were provided to the participants prior to the meeting; Mr. Bruce, Lynne Dunn (Duke Energy), and Jonathan Williams (HDR), reviewed the slide information in detail; highlights were as follows.

Low Inflow Protocol (LIP) Update (Mr. Bruce)

- Storage Index (SI)
  - The SI represents the total of all remaining usable water storage in the eleven reservoirs combined, from Lake James down to Lake Wateree, as a percentage of the total usable water storage volume (full pond) in the eleven reservoirs.
  - The current storage has leveled off and it is getting hard to get levels above 75% of full storage due to exceedingly low inflow for this time of year and recent elevated temperatures and evaporation.
  - Current storage has benefited from reduced downstream flow releases due to the Low Inflow Protocol (LIP); however, it is still difficult to retain normal storage volumes.
  - Although the current storage index graph shows storage levels well above the winter Target Storage Index (TSI), a significant increase in the SI will be needed as spring approaches to remain near or above the TSI.

- U.S. Drought Monitor
  - The three-month numeric average for the U.S. Drought Monitor Catawba-Wateree River Basin as of February 1, 2017 is 2.00, which continues to support a Stage 2 Condition.
  - Maps for Nov, Dec, January show continued improvement in drought conditions for the basin; however, the severity is anticipated to show eastward movement again as we move forward into spring.

- Streamflow
  - The streamflow indicator is a measure of the actual six-month rolling average compared to the historical six-month average measured at four USGS gages on tributary streams across the basin.
  - As of February 12, 2017, the ratio was 44.8% which supports a Stage 3 condition. The last six months have been less than half of the long-term seasonal average, and that percentage continues to decline.

- Groundwater
  - Groundwater readings are reported for four USGS gage locations representing the geographical spectrum of the basin.
  - Langtree Regolith Gage – Groundwater at this gage is finally showing a slight upturn, but continues to be well below the long term average.
  - Glen Alpine Gage – Groundwater levels crossed below the long term average in the fall. This gage is also showing a slight upturn but levels are still below the long term average.
  - Near Pleasant Gardens – Groundwater levels at this newer gage remain below the long term average.
  - Lancaster Gage – Groundwater levels at this newer gage remain below the long term average.

Meteorology and Catawba-Wateree Project Operations Data (Ms. Dunn)

- Precipitation
  - The long term average precipitation for the basin from 1999-2016 is 42.5 inches; 2017 basin-wide precipitation to date is approximately 5.20 inches.
  - 2016 was the second driest year for the Duke Energy Rainfall records in the basin; the first was the Drought of Record in 2007.
• As of February 4, 2017, NOAA estimates 6-9 inches of rainfall are needed in the upper basin and at least 3 inches are needed in the lower basin to return to normal condition. NOAA estimates there is approximately 10% chance of getting enough rainfall over the next four months to end the drought.

- Forecast
  • Short term: NOAA predicts very little rain over the next 7 days; followed by above normal precipitation for the 8-14 day outlook. The overall forecast for February is for above normal temperatures and equal chance of above, below, or normal precipitation.
  • Mid-Term: The NOAA February through April forecast indicates above normal temperatures and below normal precipitation.
  • Long term: NOAA predicts above normal temperatures with below normal precipitation through May with drought continuing to persist in the Upper Catawba.

- Soil Moisture Outlook
  • The long term soil moisture outlook shows equal chance of being above or below normal through May.

- Streamflow
  • USGS streamflow readings at are the 10th percentile or below in three of the four gages reported. The fourth gage, South Fork at Lowell, is showing extreme drought.

- Reservoirs
  • Storage levels in Lakes James, Norman, Wylie have increased slightly; Wateree has remained steady. Flow releases from Lake Wateree will increase the evening of February 14th in accordance with the requirements of the New License.

- Summary & Operations
  • The Catawba-Wateree River Basin remains in Stage 1 as of November 1, 2016.
  • Duke Energy system precipitation is below average for February.
  • NOAA is forecasting warmer temperatures with below normal precipitation for the spring.
  • Stream flows are at or below the 10th percentile.
  • Duke Operations has adjusted minimum flows per the LIP.

Residential Water Use Patterns (Mr. Williams)

- The residential water patterns presented are based on data received from members of the Catawba-Wateree Water Management Group through December 2016.
- Overall, residential water use is trending downward but continues be about 12-13% above the long term average.
- Charlotte Water’s residential use was 10% above its long term average; use by all other suppliers was continuing to trend about 13% higher than the long term average.
- Duke Energy’s Wateree Hydro Station generation continues below long term averages due to discretionary retention of water and lower flows under the LIP, through December 2016.
- Mr. Williams reminded CWWMG members to submit their residential water use data by February 28, 2017. Monthly data will continue to be collected while the basin is in the LIP.
- All DMAG members are requested to submit their annual withdrawal and return data for compilation and creation of the annual water use report. The template was emailed in early January and due January 31, 2017; about half the members have submitted data to date.
Closing Comments

The weather is unusually dry and warm for this time of year. Mr. Bruce suggested members may want to consider some type of media release in mid-March or April to update the public if this trend continues.

Mr. Bruce adjourned the meeting at 3:58 P.M.

The next meeting will be Tuesday, March 14, 2017 by conference call.