

Catawba-Wateree Drought Management
Advisory Group Meeting Summary
Friday, June 16, 2006
Charlotte-Mecklenburg Utilities
Lee S. Dukes Water Treatment Plant

The Catawba-Wateree Drought Management Advisory Group (CWD MAG) met for the first time on Friday, June 16, 2006 under voluntary status for all members. The following are a list of the attendees:

George Galleher (Duke Energy)	Rick Hildebran (Town of Valdese, NC)
Mary Kathryn Green (Duke Energy)	Larry Turner (SCDHEC)
Don Rayno (NCDWR)	Scott Holland (Duke Energy)
Tom Fransen (NCDWR)	Bill Stroud (Duke Energy)
Daniel NGandu (NCDWR)	Dale Herendeen (Bowater)
Kevin Greer (City of Hickory, NC)	Shawn Clarke (SCDHEC)
Kevin Mosteller (HDR Engineering)	Shannon Deaton (NCWRC)
Mack Edmiston (City of Lenoir, NC)	Chris Goudreau (NCWRC)
Hope Mizzell (SCDNR)	Don Danford (City of Morganton, NC)
Calvin Thornburg (City of Lincolnton, NC)	Bruce Campbell (USGS)
Nick Stegall (City of Rock Hill, SC)	Melinda Chapman (USGS)
John Baker (International Paper)	Ed Cross (City of Gastonia, NC)
Tom Couch (City of Camden, SC)	Mike Boyd (City of Charlotte, NC)
Mike Bailes (Catawba River WTP)	Maeneen Klein (CMU)
Stephen White (Lancaster County Water and Sewer District)	
Ed Bruce (Duke Energy)	Jeff Lineberger (Duke Energy)
Steve Gilbert (Lincoln County, NC)	

The following is a summary of the topics discussed and action items identified in the meeting:

I. Organizational Issues

- Verification of representation-Ed Bruce (Duke) handed out a sign-up sheet to verify attendance and requested that the organizations represented at the meeting signify who their official members of the CWD MAG would be.
- Review of LIP defined roles and requirements-Ed Bruce reviewed the roles and responsibilities of the CWD MAG from the Low Inflow Protocol (LIP-Attachment C of the C-W Final Agreement Signature Copy dated 06-08-06). The group was reminded that at this time, all activities of the CWD MAG are voluntary, but since the C-W Basin is experiencing a drought, it is best for the basin to implement as much of the LIP as possible.
- Future 2006 meetings/conference calls-The LIP calls for monthly meetings or conference calls when the LIP is initiated. Duke will continue for now with sending an e-mail to the group with updated LIP information at the beginning of each month

and again at mid-month. Duke will decide, as CWD MAG coordinator, when to have another 2006 meeting. If conditions worsen in the basin, a meeting will be necessary.

II. Current Drought Update

Ed Bruce provided an update on the current LIP triggers of storage, inflow and the US Drought Monitor. The Storage Index (SI) on June 14, 2006 was 71.27%, which is 95.03 % of the Target Storage Index (TSI) for this time of year. This would support a Stage 0 Low Inflow Watch. The Streamflow Indicator (six-month average versus historical six-month average) was at 62.3%, which would support a Stage 2 of the LIP. The US Drought Monitor (three-month average) is 1.67, which supports a Stage 1. If these indicators continued until the end of June, then the C-W basin would continue in a Stage 1 of the LIP.

III. Regional Drought Monitor Development and Implementation Discussion

Hope Mizzell, SC State Climatologist within SCDNR provided the CWD MAG with an update on the development and potential implementation of a regional drought monitor for the C-W Basin. The regional drought monitoring tool can be assessed at <http://drought.dnr.sc.gov> . The US Drought Monitor has several pros and cons associated with its use. The advantages are its interpretation is perceived as being simple, it's popular and it's updated weekly. Some of the disadvantages are that it can't regenerate historical values, it depicts broad areas of dryness and it has only been in existence since 1999. Hope Mizzell reviewed several proposed indices included in the regional drought monitor and compared their historical readings to historical storage data.

It was agreed that at least another year of study of the regional drought monitor indicators was needed before possible replacement of the US Drought Monitor could take place. The following working technical sub-committee was appointed to assist in the additional study:

- Tom Fransen (NCDWR)
- Maeneen Klein (CMU)
- USGS Representative (TBD)
- Ed Bruce (Duke)
- Hope Mizzell (SCDNR)

IV. Groundwater Monitoring Network

Melinda Chapman of the USGS provided an overview of the proposed groundwater monitoring network for the C-W Basin. There currently are 3 wells located in the basin that monitor groundwater levels and USGS has proposed that 7 additional well sites be developed to cover the diverse geological and geographical features of the basin. The CW-DMAG and the Catawba-Wataeree Water Management Group (WMG), in accordance with the Relicensing Final Agreement, will work together to revise the plan

for groundwater monitoring by December 31, 2007. A working technical subgroup will be formed with representatives from the following organizations to review this issue:

- NCDWR
- USGS
- Duke Energy
- SCDNR
- WMG

V. Current Water Use Trends and Future Data Reporting Discussion

Maeneen Klein of CMUD provided data and information on current water use by CMU customers. CMU uses a per-account analysis versus a per-capita analysis because of the number of people using water in CMU's service territory that do not live in the service territory. In 2006, the average use has been 8,500 cubic feet/month for residential customers. During this time, the growth in accounts was 3.2% annually. Members of the CW-DMAG were reminded that each year water withdrawal and flow return data will be sent to Duke such that Duke can maintain a database of yearly water use.

VI. Water Use Trending and Comparison Discussion

Ed Bruce lead a brief discussion of how to compare water use from year to year in order to determine how effective water users are in conserving water during droughts. A concept of designating the months of April through September as dry, normal or wet based on water use habits was discussed. Duke will work with the CWD MAG members to further develop this concept.

VII. Conclusion

There was no further business discussion and the meeting concluded. The next e-mail drought update will be issued by Duke on July 3, 2006.