North Carolina Environmental Management Commission -
Water Allocation Committee
Meeting Summary

512 N. Salisbury Street
Ground Floor Hearing Room, Archdale Building
Raleigh, NC

9:00-10:00 a.m.
Wednesday, January 12, 2011

Water Allocation Committee (WAC):
Commissioner Mayor Darryl D. Moss, Chair
Commissioner Stephen Smith, EMC Chair
Commissioner Frank Crawley, EMC Counsel
Commissioner Donnie Brewer
Commissioner William L. Hall, Jr.
Commissioner David H. Moreau
Commissioner Jeffrey Morse
Commissioner Dickson Phillips, III
Commissioner Forrest R. Westall, Sr.

Item I. Preliminary Matters

1. Committee Chairman, **Commissioner Mayor Darryl D. Moss**, called the meeting to order. Pursuant to Executive Order Number One, the committee chairman called upon committee members to evaluate the matters to come before the committee and to identify any known conflict of interest or the appearance of a conflict of interest.

2. Minutes and Agenda
The Committee approved the minutes of the November meeting as a true and accurate summary of the proceedings. The agenda for the January meeting included two information items: An overview of Neuse River Basin Water Resources Plan and an update on all ongoing interbasin transfer (IBT) processes.

Item II. Information Items

1. Neuse River Basin Water Resources Plan

Discussion: Don Rayno of the Division of Water Resources (DWR) gave a presentation on the final Neuse River Basin Water Resources Plan and the hydrologic modeling on which it is based. The Neuse River Basin Hydrologic Model characterizes variations in surface water conditions. It does not address ground water. During the presentation of graphs illustrating the modeling results, Mr. Stephen Smith noted a disparity between the plots of historic data and computed data. This particular discrepancy was the result of the managers of Falls Lake modifying normal operations during the 2007 drought. Flow augmentation releases from the reservoir were reduced in an effort to preserve water in the reservoir and extend the ability to supplement river flows below the dam if conditions continued to deteriorate. The plan is an evaluation of the effects of water withdrawals and use in the future on water availability in the basin. The question was asked, with that level of disparity are we relying on a tool that may give us unreliable predictions? The plan currently looks

at current conditions in the model and then looks into 20 and 40 years in the future. It is a planning tool to identify water resource issues early enough to provide time to plan for sustainable solutions and wise public investments. A drought management protocol has not been finalized for Falls Lake. When drought conditions resurface, the model will be a useful tool to evaluate potential response actions. In the future, the division will incorporate water shortage response plans prepared by local water systems into the river basin plans. Mr. Donnie Brewer stated that according to the model there appeared to be less flow than what is desired during the summer. He posed the question: Does the model do what we want it to do? The answer was yes. By modeling the normal operating protocols for the reservoir and comparing them to the range of flow conditions that have been seen in the last 70 years, the model provides a wealth of information to guide adaption to changing conditions in the basin. While the hydrologic model is designed to characterize only water quantity variation, the information it provides may be useful to evaluate water quality characteristics that are related to flow conditions. The division's hydrologic model was developed using OASIS software from HydroLogics. Data used in the model and the plan come from Local Water Supply Plans and other registered water withdrawals.

Agricultural users are required to report their water usage to the department if they use one million gallons of water or more per day. Recent legislation established a voluntary water use survey of agricultural water use by facilities using 10,000 gallons of water per day or more. Survey responses are submitted to the Agricultural Statistics Division of the Department of Agriculture and Consumer Services. The survey results are summarized by county and hydrologic unit code. The agricultural water use survey data will allow the division to improve the characterization of agriculture water use in the hydrologic models. The difference between wastewater return flows and how much water was withdrawn is calculated during model development and assumed to continue at the same proportion in future water use scenarios. How will irrigation uses be considered? In the hydrologic model agricultural water use is estimated based on estimated crop production and precipitation shortages for each drainage area in the geographic scope of the model. Are we modeling consumptive use? Yes, by estimating the difference between withdrawals and return flows and agricultural irrigation. Are future agricultural demands being developed? They are not at this time. This is an area where work needs to be done.

2. Update on Interbasin Transfers

Discussion: Steve Reed of the Division of Water Resources provided a brief status update on each of the three systems that are currently involved in the process of applying for an interbasin transfer certificate. These systems include the Kerr Lake Regional Water System, Neuse Regional WASA and Brunswick County. The Division of Water Resources will serve as the lead agency and anticipates receiving a draft environmental impact statement, or DEIS, in February for the Kerr Lake Regional Water System. The division anticipates receiving a DEIS for Brunswick County later in 2011. The Neuse Regional WASA submitted their revised scoping document to the State Clearinghouse in February. The DEIS for Neuse WASA is scheduled to be completed later in 2011.

Adjournment

There being no further business, **Chairman Mayor Darryl D. Moss,** dismissed the assembly at 10:06 a.m.