

**Land, Water & Conservation Division
Advisory Committee Minutes
Dennis Building, Room 335
Columbia, South Carolina
Thursday, April 10, 2008**

Present:	Lynn Youmans, Jr.	Michael McShane
	Lewis Walker	Charles Broadwell
	Dean Moss	Larry Nates
	Oscar Stevens	Patricia C. Hartung
	Dr. Webb Smathers	James McLeod
	Steve Kinard	Marvin Davant

Staff:	Steve de Kozlowski	Hank Stallworth
	Mark Malsick	Brenda Hockensmith
	Lisa Jones	Ann Nolte
	Von Snelgrove	Marc Cribb
	Wes Tyler	Bud Badr
	Roy Newcome	Dorothy Phillips

Call to Order/Welcome: The April 10, 2008, meeting was called to order by Chairman Lynn Youmans at 1:05 p.m. In compliance with the provisions of Section 30-4-80(e) (Freedom of Information Act), notification of this meeting was given to all persons, organizations, local news media, and other news media that requested such notification. Mr. Youmans reported that Mr. Simpson, Dr. Aziz, and Mr. Murray were absent. Interim Deputy Director Steve de Kozlowski said Mr. Murray was recovering from his automobile accident.

Approval of January 24, 2008, Minutes: Motion was made by Mr. Steve Kinard to approve the January 24, 2008, minutes and seconded by Dr. Webb Smathers. All were in favor.

USDA-NRCS Update: Mr. Niles Glasgow, State Conservationist, USDA-Natural Resources Conservation Service, gave a brief overview of his career to the committee. He has worked with the NRCS for 39 years: in Alabama, Colorado, Arizona, Washington, DC, South Carolina, Florida, and now back in South Carolina. He served for over 18 years as State Conservationist in Florida. Mr. Glasgow emphasized his commitment to a working partnership between NRCS and DNR, leveraging skills and dollars.

At the national level, passage of the Farm Bill is important to producers, conservation agencies, and others interested in those concerns. Congress has extended it several times, and these extensions keep the NRCS's budget in limbo as well as adversely affecting producers. Mr. Glasgow expects the final bill to contain similar conservation programs

to those in the 2002 Farm Bill. The major impediment to its passage is that President Bush said it could not contain more than \$10 billion dollars in additional funding to what was in the 2002 Farm Bill. When initially passed, the 2002 Farm Bill contained \$260 billion. Mr. Glasgow discussed the legislative process and the various issues involved in getting the bill passed.

2002 Farm Bill funds have resulted in several accomplishments in South Carolina. They include conservation and cost share efforts of \$7.8 million this year, the most so far for the EQIP Program in this state. Staff obtained additional monies because they were ready to take those funds. Of the \$7.8 million, \$850,000 went to small and limited resource farmers, who have been targeted to insure they are active recipients of the funds. Five million dollars were obligated for the Wetland Reserve Program. Because staff was ready with projects, an additional \$1.5 million was received. The Wildlife Habitat Incentive Program received \$600,000 in contracts to benefit wildlife; additional funds were also received, totaling \$780,000 in contracts. Through the Farm and Ranch Protection Program about \$300,000 is obligated. This program is oversubscribed on the national level.

Mr. Glasgow reviewed the Indian Creek Watershed project, a wildlife incentive program funded in partnership with other agencies. He noted that landowners and the agencies are excited about working together on this project to benefit wildlife.

The NRCS has a contribution agreement with DNR; DNR employees, particularly biologists, work with them to implement Farm Bill programs. He has talked with Marc Cribb and Von Snelgrove about cost sharing support staff to implement those programs. He referenced an upcoming meeting to develop a plan of action for a partnership with DNR.

The Conservation Security Program is working in the Little Pee Dee area in parts of Marlboro, Dillon, Marion and Horry counties totaling 195,000 acres and 614 eligible participants. This program is unique because participants are rewarded for good conservation practices they have already accomplished. Most programs target a resource issue that needs to be addressed. Producers are rewarded for having put conservation practices in place.

Mr. Glasgow is working to implement the NRCS's reorganization that began last June. The agency is organized by watersheds, across county lines. A supervisory District Conservationist and several counties will work together in a watershed approach to conservation issues. Four district conservationists have been selected: Ann Christie, Catawba Watershed; Diane Leone, Salkehatchie Watershed; Hugh Smith, Saluda Watershed; and Louis Jackson, Wateree Watershed. Five additional conservation district positions are being advertised. This is a positive structural move and will facilitate delivery of services more effectively. Once funds are obligated in contracts, the next challenge is getting the conservation practices installed on the ground. It takes a lot of work, not only by the producer but by staff working with the producer, to make that happen.

NRCS is also undergoing a major audit by an outside accounting firm. Ten states will be closely examined.

Mr. Marvin Davant noted that the State Conservation Bank has protected over 9,000 acres with the assistance of the NRCS.

Presentation of Certificates of Appreciation: Mr. Wes Tyler presented a Certificate of Appreciation to Mr. Roy Newcome for his over 20 years of service as a weather observer. In 1986, Mr. John Purvis and Mr. Tyler established the State Climate Office's rainfall observation network to supplement the National Weather Service's observation network. Mr. Newcome became a volunteer weather observer in January 1987 and has submitted his data every month since then. Mr. Hank Stallworth also commended Mr. Newcome for his untiring service and effort in the Hydrology Section.

Mr. Youmans thanked Mr. Randy Snow for his 13 years of service to the LWC Division's Advisory Committee and that of the Land Resources Division (which was merged with the Water Resources Division in 1997). Mr. Snow brought wise counsel and a strong voice for conservation during his tenure with this body. Mr. Snow thanked Mr. Youmans, Mr. Bill Simpson, and the committee for their work. He suggested that the committee members bring guests to the meetings, noting the important topics addressed such as water disputes, drought, etc.

Drought Update: Mr. Mark Malsick, Severe Weather Climatologist with the State Climate Office, provided an update on the drought. Since January 22, when the State Drought Committee last met, the state has been in severe drought, with the exception of Jasper and Beaufort Counties. For the previous 30 days, the state was 30–50 percent behind normal rainfall for the period. Winter should be a time of recharge and it was not occurring. The US Drought Monitor placed the state in a severe to extreme drought. Lake levels were fairly normal. Lakes Greenwood and Murray were full; Lakes Marion and Moultrie were about one foot below normal. Lake Jocassee was 22 feet below what it should be. The other Savannah River lakes, Hartwell and Thurmond, were from seven to eight feet below normal. River levels were above their drought minimums and rising slowly, but without the needed rainfall, Mr. Malsick said they will become stressed as temperatures rise. The next 30–90 days are projected to remain warmer than normal with below normal precipitation. La Nina's abnormal cooling in the eastern Pacific was beginning to abate, which is good news with respect to getting increased precipitation. However, looking across the coast and the Gulf of Mexico, the average sea surface temperature was starting to rise.

The most recent predictions by Professor Gray at Colorado State were for 15 named storms this year, eight of which will be hurricanes and four will be intense hurricanes. It looks like an active hurricane season is anticipated.

Trends in Ground-Water Levels for Coastal Plain Aquifers: Ms. Brenda Hockensmith, Geologist/Hydrologist in the Charleston Office, reviewed ground-water levels in the five

principle Coastal Plain aquifers: Cape Fear, Middendorf, Black Creek, Floridian, and Tertiary sand. Aquifer potentiometric maps are maps of the potentiometric (water level) surface of an aquifer. Potentiometric data are water-level measurements collected in tightly-cased wells. Data are collected aquifer-wide at roughly five-year intervals from DNR network wells, as well as municipal, industrial, irrigation, and other wells. Potentiometric maps provide data to the public, environmental professionals, and government entities. Long-term water, drought, flood, saltwater-intrusion, and well interference assessments are made from them. They also support water management planning by state agencies and water supply managers.

The ADR/Bi-Monthly Monitoring Network encompasses more than 100 wells in the Coastal Plain and Piedmont. Wells are instrumented with automatic data recorders (ADR) that record hourly measurements or are manually measured bimonthly. Data are published in bi-annual reports are available on the DNR website. The potentiometric surface monitoring network is composed of additional wells that are measured at five-year intervals for potentiometric maps (nearly 500 wells in 2004 for the three major aquifers). Measurements from these wells rely on availability, access (to site and via wellhead), and owner permission in most cases. This network of wells is not consistent between measurements. For every aquifer, the number of wells monitored has decreased as pumping and the potentiometric surface complexity have increased. More than 20 wells of the 160 Black Creek aquifer wells have been lost to abandonment since 1990. Four Middendorf aquifers wells have been lost in Berkeley and Dorchester Counties. More than 20 percent of the 350 Floridian aquifer wells in Beaufort, Jasper, Hampton, and Colleton Counties have been lost to various types of attrition. Most of the 82 Trident area Floridian aquifer wells have been lost since the mid-1980's owing to state required abandonment, land development, and Hurricane Hugo.

Water level monitoring network goals: The *South Carolina Water Plan* recommends a statewide network of 300 observation wells: 234 wells to monitor confirmed aquifers in the state and at least one ADR aquifer per county (30 percent are currently on the network); 41 water table aquifer wells to monitor flood, drought, and ground-water storage conditions along the state's principal river basin divides (no sites exist at present); and 24 wells to monitor saltwater contamination (three ADR stations installed at Edisto and Hilton Head Islands). The 2004 water level maps and reports should be available on the DNR website by the end of June.

The potentiometric map for the Middendorf aquifer for November 2004 shows flow to the southeast and toward cones of depression formed because of ground-water pumping in the Florence-Hemingway area and around Bishopville, Sumter, Mount Pleasant, and Kiawah Island.

For the Black Creek aquifer in 2004, flow was to the southeast and toward cones of depression formed because of ground-water pumping in the Andrews-Georgetown area and around Florence, Marion, and Sumter. Water levels declined in selected wells as a direct result of the drought (1998 – 2002) or, indirectly, because of increased ground-water pumping in response to the rainfall and surface-water deficit.

The Floridan/Tertiary sand aquifer map for November 2004 shows a flow reversal in Beaufort and Jasper Counties from northeast to southwest caused by the withdrawals centered at Savannah. This situation is worsened by salt-water intrusion at Hilton Head. Cones of depression centered at North Charleston and western Dorchester County have developed.

Mr. de Kozlowski noted that they are working to develop a long-term monitoring system, noting the problem of losing wells is very serious. Wells are capped and abandoned without staff's knowledge. The proposal is to install cluster wells on public property and have a well in each of these aquifers, allowing the data to be maintained for a long period of time. Ms. Hockensmith's work shows an obvious need for a more stable monitoring system.

Mr. Youmans commented that public supply wells should be accessible. Mr. Mike McShane asked staff to examine this issue and return with an action plan. He asked why public wells could not have monitors placed on or with them when they are installed.

Mr. Dean Moss moved that the advisory committee endorse the staff's efforts to complete the monitoring network and that all opportunities for increasing well availability in that network be undertaken, including the requirement or utilization of new well construction to provide adjacent monitoring. The motion was seconded by Mr. Kinard. All were in favor.

Flood Map Modernization Program Update: Ms. Lisa Jones, Flood Mitigation Program Director, reviewed the Map Modernization Program's objectives. They include updating old, out-of-date flood maps to a digital format that is available online. All partners, state, federal, and local, participate in the development of these maps, resulting in a good end product. DNR has partnered for five years with FEMA on this project, receiving \$17.8 million from FEMA, and another \$4.9 million for the fifth year. The next phase is the RIF map maintenance phase. Seventeen counties will have scoping meetings during May and June.

Lee County's LFD (letter of final determination) will be issued in May 2008. Spartanburg County's LFD is delayed due to an appeals resolution. Sumter County received a congressional inquiry and a LOMR (letter of map revision) is under way. Ms. Jones recognized Oconee County since they flew LIDAR and paid for it themselves for the sole purpose of obtaining improved flood maps.

Storm surge analysis begins this year and will take about six months. South Carolina is the first state to undertake this effort with FEMA. North Carolina is next and South Carolina will partner with them so that the state line data matches.

Ms. Jones reviewed highlights of the mapping program: 42 of 46 counties have updated flood maps underway; 23 of 46 counties have new terrain data, eight counties provided terrain data for their studies, and 31 counties are to be mapped with updated terrain data. Active storm analysis will be undertaken for the entire coast which is a significant accomplishment, involving 35 studies scheduled to be effective by 2010. This will be a

partnership between state, federal and local governments, costing \$23 million over five years. Richland County will not be mapped due to a pending lawsuit with Columbia Venture.

Interim Deputy Director's Report: Mr. de Kozlowski said staff are monitoring state budget revenues closely and anticipate a three to five percent budget reduction for FY2009. By downgrading vacant positions, the division will save over \$100,000 next year. The agency is closely evaluating every new position that is filled. Mr. McShane noted that state appropriations reductions will disproportionately affect the LWC and Law Enforcement Divisions.

Mr. de Kozlowski referenced the new geology maps of Aiken County, Jocassee Gorges maps, and other upstate work with Furman University.

With respect to the proposed Surface Water Withdrawal Act, staff worked with DHEC and the bill is dead for this session. The final amendments concerned minimum flows; he hopes the bill will be considered again next year. As Mr. Moss, Mr. McShane, and the other members of the Savannah River Committee work with our neighbors in Georgia, it would be helpful for this state to have a surface water permitting system in place that is comparable to theirs.

April is employee recognition month and meetings will be held at the regional hub offices to recognize staff. The division's LWC's Employee of the Year will be announced at the Columbia meeting.

Mr. Youmans said that with respect to the proposed surface water permitting legislation, the agricultural community is wary of using the 7Q10, noting that educating them on the issue is needed. Mr. de Kozlowski referenced a recent presentation on this issue, using the Edisto River. The 7Q10 flow is compared with 20, 40, or 60 percent of the annual flow and how that compares to the monthly means and the annual means. He said it needs to be done for a variety of rivers.

Update on Negotiations with Georgia: Mr. Dean Moss said some progress had occurred in the Savannah River Committee's negotiations with Georgia. In the three years of their discussions, South Carolina has developed every initiative put on the table. Georgia provided none of them. Regarding the ground-water problem in Hilton Head (salt-water intrusion), the Georgia Geological Survey is working on a ground-water model, with assistance from a technical advisory committee (Drennan Parks sits on that committee as well as DHEC staff). He hopes by late summer the model will be completed to the point where some agreement can occur on defining the problem and the responsible party or parties. Despite the map that shows the cone of depression and the movement of groundwater directly toward downtown Savannah, the Georgia committee members insist they are really not the problem. Mr. Moss hopes agreement can be reached on a ground-water model that provides the implications of various actions that might be taken—such as reducing pumping, recharging, or putting in saltwater barrier wells to stop the movement of saltwater.

With respect to the TMDL, Georgia is ready to take a new water quality standard for the lower Savannah River to its board that is identical to the South Carolina standard. It has taken four to five years to get to this point. EPA has imposed a standard that allows for no new wastewater discharges. If it is implemented, all users below Augusta will have to

reduce their wastewater load from the river. So far the new standard has not been implemented or enforced. Mr. McShane said the TMDL standard denied Georgia the opportunity of deepening the Garden City Terminal. Mr. Moss said that it appears there will be a cut in existing wasteload allocations. Currently, South Carolina has about three percent of that load and Georgia uses about 97 percent. Mr. Moss has recommended that South Carolina not cut any of its permits. He discussed the various scenarios involved in this issue.

The next question is how to divide the water between the two states. South Carolina has proposed a process to help define the allowable net withdrawal /consumptive use of the river under normal flow conditions. Low flow protocols and drought conditions will be considered. Mr. Moss desires a 50/50 split. He noted that that Greenville, Columbia, Charleston, Georgetown, Beaufort-Jasper, and most of the major utilities in this state utilize interbasin transfer as part of their water supply. He said progress had occurred. The committee meets again June 5 in Aiken.

Committee Member Comments: Mr. McLeod suggested that a program is needed to disseminate information to constituents and share information with the public.

Executive Session: Mr. Moss moved that the committee go into executive session for the purpose of discussing appointments with second by Mr. Jim McLeod. All were in favor.

Mr. Youmans moved to return to open session, seconded by Mr. Steve Kinard. All were in favor.

Mr. McLeod moved, with second by Mr. Oscar Stevens, to approve conservation district commissioner re-appointments: Mr. Freddy C. Major, Anderson County; Mr. William S. Simpson, III, Charleston; Mr. J. Kenneth Mullis, Jr., Richland. All were in favor.

There were no new appointments.

Next Meeting Date: July 10, 2008 at 1:00 p.m.

Adjournment: Motion to adjourn was made by Mr. Kinard, seconded by Mr. Moss. The meeting was adjourned at 4:15 p.m.

Dorothy Phillips
Recording Secretary