

Minutes
Board of the Department of Natural Resources
Rembert C. Dennis Building, Room 335
1000 Assembly Street
Columbia, SC
October 5, 2011 10:00 am

The regular meeting of the Board of the South Carolina Department of Natural Resources was held at 10:00 a.m., October 5, 2011, in room 335 of the Rembert C. Dennis Building, Columbia, SC. Notice of the date, time and place of the meeting was posted and mailed to the news media. Chairman Caroline Rhodes presided at the meeting. Board members present included Cary Chastain, John Evans, Michael Hutchins, Randy Lowe, Norman Pulliam and Larry Yonce. Director John Frampton and staff members of the Department of Natural Resources were present at the meeting.

- I. **Call to Order**
Chairman Caroline Rhodes called the meeting to order at 10:00 a.m. and welcomed everyone to the meeting.
- II. **Invocation**
Chaplain Eric Skidmore offered the invocation.
- III. **Pledge of Allegiance**
Vice Chairman John Evans led the group in the Pledge of Allegiance.
- IV. **Introduction of Guests**
Don Winslow, Chief of Staff, introduced, Douglas Ford, Research Director, Senate Fish, Game and Forestry Committee; Madison Walker, Governor's Office; James Meadors, Meader, Inc.; and Katie Owen, House Law Enforcement Committee.
- V. **Constituent Comments**
Mr. Winslow noted that there were no requests for constituent comments.
- VI. **Approval of Minutes**
Chairman Rhodes asked if there were any amendments, additions, deletions or corrections to the September 16, 2011, meeting minutes. *Mr. Evans made a motion that the Board approve the minutes of the September 16, 2011, meeting as presented. Mr. Chastain seconded the motion and the motion carried unanimously.*
- VII. **Presentations/Commendations**
Mr. Frampton commended the LE Officers of the Year: PFC Cary T. Robinson of Conway, representing Region 4, the 2011 Statewide Officer of the Year. Other regional recipients include: Region 1-CPL Henry Barnett, Region 2-PFC William Brady Branham, Region 3-SGT Jeffrey D. Derrick, Law Enforcement Education-SGT Karen D. Swink and NASBLA-SGT Ken Simmons. Special thanks were given to Governor Nikki Haley who gave the keynote address at the annual Law Enforcement Officer of the Year Awards Banquet on September 16.

Mr. Frampton commended Wally Jenkins and Amy Dukes for their work with the Governor's Cup Billfishing Series and the awards reception held September 25.

VIII. Advisory Committee Reports

Law Enforcement

Norman Pulliam reported that the Law Enforcement Advisory Committee met September 29 in Charleston. The Advisory Committee received an update on the agency's 100 Day Plan. The Advisory Committee received reports on District 4 activities, legislation and the Deputy Law Enforcement Officer (DLEO) Program.

IX. Items for Board Information

Capital Improvement Projects at Marine Center

Chairman Rhodes asked Mr. Frampton to begin the discussion of the Capital Improvement Projects at the Marine Center. Mr. Frampton stated that the bids have been received and there is an \$87,000 difference on the price of asphalt shingles vs. copper. At this point the Department will either accept one of the bids or rebid the project. If it is rebid it will take an additional 90 days as well as additional architectural costs.

Robert Boyles, Deputy Director for Marine Resources, noted that the monies being used for this Capital Improvement project are the remainder of a one-time appropriation received in 2006-2007 for the Marine Resources Research Institute.

Mr. Boyles gave the Board a brief history of the Eltzroth Administration Building noting that this will be the third roof since it was constructed in 1970.

Mr. James Meadors, with the architectural firm Meader, Inc., reviewed the life span and warranties of several types of roofing available.

Mr. Pulliam made a motion that the Board approve the option that contains the asphalt shingle roof. Mr. Evans seconded the motion. Following a lengthy discussion, Mr. Pulliam called for the question. The motion carried unanimously.

X. Items for Board Action

A. 100 Day Plan

Mr. Hutchins made a motion that the Board accept the 100 Day Plan and Scorecard as distributed. Mr. Pulliam seconded the motion and the motion carried unanimously.

B. Proposed Timber Management Schedule for 2011 through 2015

Tim Ivey, Wildlife and Freshwater Fisheries Division, gave the Board a brief history on land management and reviewed the proposed timber management schedule as included in the meeting package. *Mr. Pulliam made a motion that the Board approve the 2011-2015 Timber Management Schedule as presented. Mr. Hutchins seconded the motion and the motion carried unanimously.*

C. Emergency Waterfowl Regulations to Allow Mobility Impaired Hunts on 2 Category II Waterfowl Areas

Tim Ivey reviewed the emergency regulations as included in the meeting package. *Mr. Hutchins made a motion that the Board approve the Emergency Waterfowl Regulations to allow mobility impaired hunts on category II waterfowl areas as presented. Mr. Evans seconded the motion and the motion carried unanimously.*

D. Savage Bay Heritage Preserve Management Plan

Action on this item was postponed until the next meeting.

XI. Director's Briefing

Mr. Frampton distributed a recent article from the *Charleston Post and Courier* regarding endangered species listing.

Mr. Frampton gave the Board a budget update including some possible federal budget cuts that will affect the agency.

Mr. Frampton distributed DNR's comments on proposed DHEC Surface Water Regulations.

Mr. Frampton informed the Board that he has met with both Wildlife and Freshwater Fisheries staff and Land, Water and Conservation staff to discuss future plans and answer staff questions.

XII. Legislative Report

Derrick Meggie, Director of Legislative Services, gave the Board a briefing on the budget.

XIII. Environmental Programs

Bob Perry, Director of the Office of Environmental Programs, reported DHEC has issued a notice of decision on the Savannah Harbor Expansion Project. DHEC has denied the Clean Water Act Water Quality Certification and expects the Savannah District Corps of Engineers to appeal this decision. Mr. Perry informed the Board that Williamsburg County Council directed the County Administrator to halt the landfill project and has sent notification that the permit application will be withdrawn. Mr. Perry reported that he attended a National Environmental Policy Act Agency Scoping meeting on the Charleston Harbor deepening study. Mr. Perry informed the Board that the Charleston District Corps of Engineers has hired Cardeno Entex to conduct an Environmental Impact Study for the Haile Gold Mine project.

XIV. Deputy Directors' Reports

A. Land, Water and Conservation

No further report.

B. Wildlife and Freshwater Fisheries

Emily Cope distributed and reviewed the opening day public dove field results.

C. Law Enforcement

Col. Alvin Taylor, Deputy Director for Law Enforcement, reported on Law Enforcement's activities for opening day of dove season. Col. Taylor informed the Board that a tree stand safety PSA was aired last week on the ACC channel during the Clemson football game. Col. Taylor reported on a meeting held with Georgia regarding Boaters Compact. Col. Taylor reported on a meeting he attended with the Lake Murray Homeowners' Association regarding boating accidents, speed and noise.

D. Marine Resources

Mr. Boyles reported that four public meetings have been scheduled for Sheepshead.

E. Outreach and Support Services

Carole Collins, Deputy Director for Outreach and Support Services, reported that there were no findings in the 2010 Single Audit.

XV. Executive Session

At this time, Mr. Hutchins made a motion for the Board to hold an Executive Session to discuss personnel, legal and contractual matters. Mr. Evans seconded the motion and the motion carried unanimously.

XVI. Open Session

Mr. Pulliam made a motion that the Board return to regular session and noted that no actions were taken in Executive Session. Mr. Chastain seconded the motion and the motion carried unanimously.

Mr. Evans made a motion that the Board, sitting both as governing board of the DNR and as Trustee of the South Carolina Heritage Trust, approve the proposal by staff to enter into an agreement with Centex (Pulte Group) to resolve outstanding issues over the DNR's easement over Ben Long Road adjacent to the Lewis Ocean Bay Heritage Preserve. The DNR staff is authorized to seek relocation of the access route to a new location off of International Drive on land currently owned by the DNR, which access way will be constructed by Centex at no cost to the DNR. Upon acceptance by the DNR of the new road, the DNR may take such action as is necessary and appropriate to release its easement rights over Ben Long Road to Centex. The DNR staff is authorized to finalize the details of the settlement. Mr. Pulliam seconded the motion and the motion carried unanimously.

Mr. Pulliam made a motion that the Board, sitting both as governing board of the DNR and as Trustee of the South Carolina Heritage Trust, approve the settlement proposed by staff to conclude the ongoing litigation over Target Road at the Lewis Ocean Bay Heritage Preserve. The DNR staff is authorized to accept no less than \$205,000.00 in exchange for releasing a portion of the DNR easement over lands owned by the defendants in the civil action. The DNR staff is authorized to finalize the details of the settlement. Mr. Chastain seconded the motion and motion carried unanimously.

XVII. Time and Location of the Next Meetings

There will be no meeting in November 2011.

The December Board meeting will be held Thursday, December 8, 2011, with location to be determined.

XVIII. Adjournment

There being no further business to be brought before the DNR Board at this time, the meeting was adjourned.

EXECUTIVE OFFICE

OFFICE OF THE DIRECTOR

John Frampton and Don Winslow attended the Land, Water & Conservation Division staff meeting on October 3 at the Riverbanks Zoo in Columbia. Mr. Frampton and Mr. Winslow attended the Climate Impacts Technical Working Group meeting on October 3. In the afternoon, Mr. Frampton participated in a conference call of the Council to Advance Hunting and the Shooting Sports.

Mr. Frampton and Mr. Winslow participated in the DNR Board Meeting on October 5 in the Board Room in Columbia. On Saturday morning, October 8, Mr. Winslow and Mr. Swaynham met with Representative Davey Hiott and constituent Janice Taylor in Sunset to discuss the use of ATVs on the Jocassee Gorges.

On October 10, Mr. Frampton, Ms. Cope, Mr. Carmichael and Mr. Ivey met with Marcia Lindsay, Audit Manager of the Legislative Audit Committee, who will be conducting a review of DNR forestry management practices that was previously requested by Representatives Billy Witherspoon, Jeff Duncan, Dwight Loftis, Mike Pitts and Marion Frye in April 2007. Mr. Winslow and Mr. Meggie met with Senator Gerald Malloy and other local officials in Bennettsville to discuss Lake Paul Wallace.

Mr. Frampton participated in the American Sportfishing Association Board Meeting during the 2011 Sportfishing Summit in New Orleans, LA, on October 11-14. While in New Orleans, Mr. Frampton participated in a conference call on October 12 of the Marine Protected Area Federal Advisory Council's Land, Sea and Communities Subcommittee that focused on land and sea issues.

Mr. Winslow spoke to a group of biology students at Chapin High School on the afternoon of October 11 about the Department and its programs. Mr. Winslow and Mr. Meggie attended a meeting on October 12 with Representative Davey Hiott for further discussion of ATV use on Jocassee Gorges. On October 13, Mr. Winslow met with Carla Whitlock of Pickens County about plans for Sassafras Mountain.

Mr. Frampton and Ms. Cope attended a meeting on October 17 with representatives of the Charleston County Parks and Recreation Commission in Charleston to discuss the Bulow project.

Mr. Winslow met with Mike Fey of the State Museum on the morning of October 19 to discuss the Junior Duck Stamp and Duck Stamp programs.

Mr. Frampton participated in the National Fish Habitat Action Plan Board meeting on October 19-20 in Albuquerque, NM, returning to Columbia on the evening of October 20. Mr. Winslow and Ms. Cope attended a meeting of shooting range owners at Styx on October 20.

Mr. Frampton and Mr. Rentiers met with Ted Pitts, Deputy Chief of Staff in the Governor's Office on the morning of October 21 to discuss a potential Corps of Engineers Agreement on a Savannah River Study. Later that day, Mr. Frampton and Mr. Perry met with Robert St. Onge, Secretary of the Department of Transportation, to discuss mitigation banking and cooperative activities.

Mr. Frampton represented the Department at the Southeastern Association of Fish and Wildlife Agencies (SEAFWA) Annual Meeting in Nashville, TN, on October 22-25. Mr. Frampton's chaired the Resolutions Committee and attended various committee and business meetings during the annual meeting. Mr. Frampton also participated in the Marine Protected Area Federal Advisory Committee's Land, Sea and Communities Subcommittee conference call on October 24 while at the SEAFWA meeting.

Mr. Frampton traveled back from the SEAFWA meeting on the morning of October 26, and that afternoon Mr. Frampton represented the Department at the Governor's Budget Meeting with Mr. Winslow, Ms. Collins and Mr. Speares in attendance with him. Later that day, Mr. Frampton met with the Board Chair, Caroline Rhodes.

Mr. Winslow met with Jimmy Huggins of the Southeastern Wildlife Expo in Charleston on the morning of October 27 to discuss the Junior Duck Stamp program. On October 28, Mr. Winslow met with Mr. O'Dell, a student at Newberry College, who interviewed him for a class project.

Mr. Frampton met with John Doerr and Jim Martin of PURE Fishing at Donnelley WMA on October 28-29 and inspected several ACE Basin properties.

Mr. Frampton attended the Quail Feeding Meeting hosted by Douglas Ford, Research Director of the Senate Fish, Game and Forestry Committee in Columbia on October 31. Mr. Frampton later participated in a conference call of the Association of Fish and Wildlife Agencies (AFWA) Executive Committee.

EXECUTIVE OFFICE

OFFICE OF THE DIRECTOR

On November 1, John Frampton met with Don Winslow, the Deputy Directors, Breck Carmichael, Terri McGee and Derrick Meggie in his office at which time he announced that he would be retiring from the agency as Director. Mr. Frampton later that day sent out a memorandum to all DNR staff announcing his retirement and expressing his appreciation for staff and their dedication and hard work during his 8 ½ year tenure as Director and throughout his career with the agency.

Later on November 1, Mr. Frampton participated in a conference call of the US Fish and Wildlife Service Committee planning the 75th Anniversary of the Pittman-Roberson Act. That afternoon, Mr. Winslow met with Suzi DuRant, Executive Director of the SC Marina Association, in Charleston to discuss the Boating Infrastructure Grant.

On November 2, Mr. Winslow attended the Migratory Waterfowl Committee meeting in the Board Room in Columbia.

Mr. Winslow and Mr. Meggie participated in a meeting on November 3 with Andrew Wyatt of the US Reptile Keeper Association to discuss proposed legislation on exotic animals. On Saturday, November 5, Mr. Winslow represented DNR at the Conservation of the Riverstone Property event at the Congaree National Park.

Mr. Frampton participated in the Atlantic States Marine Fisheries Commission's Annual Meeting in Boston, MA, on November 7-9. Before the meeting began, on November 7, Mr. Frampton and Caroline Rhodes, DNR Board Chairman, met with Jim Healey, President of the Yawkey Foundation, to discuss the Yawkey Center and its activities and needs.

Mr. Winslow represented DNR at the Southeast Regional Partnership for Planning and Sustainability (SERPPAS) Principals' Meeting in Atlanta, GA, on November 8-9. Mr. Winslow participated in a conference call on November 16 with officials of York County to discuss the boat ramp project on Highway 211. On November 17, Mr. Winslow participated in a retirement luncheon for Philip Wolfe, DNR Grants Manager; he also participated that evening in a SC Wildlife Federation dinner meeting at Millaree.

Mr. Frampton attended the Marine Protected Area Federal Advisory Council meeting on November 14 in New Orleans, LA. On the evening of November 14, Mr. Frampton traveled from New Orleans to Washington, D.C., so he could participate on November 15 in the Wildlife and Hunting Heritage Conservation Council meeting. Mr. Frampton traveled back to New Orleans on the evening of November 15 to participate in the rest of the Marine Protected Area Federal Advisory Council meeting through November 17. There were several important issues discussed at both of the meetings going on at the same time that needed his participation.

Mr. Frampton attended several meetings with staff on November 18 on various issues. He and Mr. Rentiers also met with Karen Floyd and Angel Cox of her office to discuss water issues in the State.

Mr. Frampton participated in a conference call of the North American Waterfowl Management Plan Committee on November 21. On November 22, Mr. Frampton met with Marine Resources Division staff in Charleston to present Employee of the Year awards and participate in the Marine Resources Division's annual Thanksgiving luncheon.

Mr. Winslow attended the SC Conservation Bank Board meeting in Columbia on November 29. He also spoke at the SC Marina Association Conference on November 30 in Charleston.

Marine Resources Division

Office of the Deputy Director

On October 5th Mr. Boyles travelled to Columbia to attend the DNR Board meeting. On October 11th and 15th Mr. Boyles took part sheephead public meetings in Beaufort and Charleston. On October 25th and 26th Mr. Boyles participated in the SAFMC Information & Education Advisory Panel meeting that was held in North Charleston. On October 27th Mr. Boyles hosted the SC Governor's Cup Billfishing Series Advisory Board meeting at the Marine Center.

Marine Resources Research Institute (MRR):

Publications and Outreach

- "Mapping Critical Habitats in the ACE Basin NERR Watershed". Presented at the National Estuarine Research Reserve System Annual Meeting, October 23-28, 2011, Ponte Vedra Beach, FL.
- The following manuscript was accepted by Marine Biology: Arendt MD, Segars AL, Byrd JI, Boynton J, Schwenter J, Whitaker JD, and Parker L. Migration, distribution, and dive behavior of adult male loggerhead sea turtles (*Caretta caretta*) following dispersal from a major breeding aggregation in the North Western Atlantic.
- The following manuscript was accepted by Marine Biology: Arendt MD, Segars AL, Byrd JI, Boynton J, Whitaker JD, Parker L, Owens DW, Blanvillain G, Quattro JM and MA Roberts. Seasonal distribution patterns of juvenile loggerhead sea turtles (*Caretta caretta*) following capture from a shipping channel in the Northwest Atlantic Ocean.
- The following manuscript was submitted to Marine Biology: Pajuelo M, Bjorndal KA, Reich KJ, Arendt MD, Bolten AB. Foraging habitat use and movement patterns of male loggerhead turtles (*Caretta caretta*) as revealed by stable isotopes and satellite telemetry.
- The following manuscript was submitted to Herpetologica: Alderson JE, Blanvillain G, Arendt MD, Owens DW. Injury healing and post-capture corticosterone levels in the loggerhead sea turtle (*Caretta caretta*).
- Al Segars provided a presentation ("Human impacts on coastal wildlife") to the Friends of Hunting Island that included an update on the turtle trawl survey data through 2011.
- Dr. Greenfield submitted the following abstracts for Ocean Sciences (2012): Greenfield, D.I., Bergquist, D., Brock, L.M., Felber, J., Keppler, C.K., and Ragland, J.
- Linking phytoplankton assemblage variability and nutrient loading with land use: A 3-year study of the Ashepoo-Combahee-Edisto (ACE) Basin, South Carolina, USA
- Doll, C. and D.I. Greenfield. Determining factors that influence molecular quantification of the harmful raphidophyte *Heterosigma akashiwo* using a sandwich hybridization assay
- Greenfield, D.I., Bergquist, D., Brock, L.M., Felber, J., Keppler, C.K., and Ragland, J.
- Abstract for 2011 Tidal Creek Conference: Linking phytoplankton assemblage variability, nutrient loading, and microbial indicators with land use: A 3-year study of the Ashepoo-Combahee-Edisto (ACE) Basin, South Carolina, USA
- The Reef Fish Program continued donating sampled and processed fish to the Low Country food bank this month.
- Marcel Reichert, Joey Ballenger and Tracey Smart attended the Snapper Grouper Advisory Panel of the South Atlantic Fisheries Management Council meeting in Charleston, SC on October 5-6, 2011. Marcel Reichert gave a presentation to the Snapper Grouper Advisory Panel. The title of the presentation was: "Fishery-Independent Monitoring of snapper/grouper species off the SE U.S. -An update on new efforts." In addition, several members of the advisory panel came to SCDNR to see the facility and talk with MARMAP personnel and the R/V Palmetto boat crew.
- Marcel Reichert, Joey Ballenger and Tracey Smart attended the first day of the SEDAR 25 Review workshop in Charleston, SC on October 11.
- David Wyanski attended the SEDAR Steering Committee Meeting on October 13 in Charleston, SC.
- Laurie DiJoy, Julia Byrd, Michelle Pate, Eric Hiltz, Paulette Mikell, Marcel Reichert, and Mel Bell, assisted with the annual Leadership South Carolina Natural Resources Field Exercise on Seabrook Island, SC on October 13. Marcel gave a presentation on salt marsh ecology and Mel provided an overview of marine fisheries management in South Carolina.

- October 14, Marcel Reichert gave a presentation to the Gray's Reef National Marine Sanctuary Advisory Panel in Brunswick, GA. He presented an overview of MARMAP/SEAMAP reef fish sampling with emphasis on the sampling done at Grays Reef over the years.
- October 26, Joey Ballenger attended a meeting at the Hollings Marine Laboratory (HML) in Charleston, SC between partner institutions discussing the future of climate change research at HML and within partner institutions.

Progress Report and Activities

Coastal Finfish: SEAMAP and MARMAP: The SEAMAP coastal survey completed the first, second, and third leg of the fall sampling season. Legs 14 and 15 of the MARMAP/SEAMAP Reef fish Survey were shortened due to inclement weather. During these cruises new reef habitat was surveyed and some hook and line collections were made. Leg 16 took place between October 17 and 21 and we sampled reef fishes at Gray's Reef National Sanctuary as part of our routine sampling efforts. This was probably the last leg of a very successful 2011 reef fish sampling season.

Environmental Research: A draft scope of work and budget to sample Piping Plover habitat over 5 years in Captain Sam's inlet was submitted. Staff met with representatives from Seabrook Island and their consultants, as well as Federal agency representatives, to discuss the monitoring requirements for any modification of Captain Sam's Inlet. The consultants offered to provide an alternative monitoring plan than that proposed by the USFWS for consideration by the agencies. Staff completed the benthic taxonomy for the OHH project and all the data sets have been included in the HML tidal creek database as part of that grant.

The SCECAP benthic samples are being sorted and an hourly is being hired to assist with the sorting. Processing of the Bay Point Borrow area (Port Royal/Hilton Head) benthic samples are about 50% complete. The SCECAP 2007/2008 technical report is being formatted by the Columbia graphics section with help from ERS staff. Work on SERTC is focused on processing SEAMAP fish samples into the collection. Staff also updated the SERTC webpage with new materials related to the fish and crustaceans collected by SEAMAP (<http://www.dnr.sc.gov/marine/sertc/gallery%20intro.htm>).

The project involving a comprehensive assessment of habitats, biological resources, and human uses in the coastal zone of South Carolina, which was funded by the SC Energy Office, is now completed and all of the GIS data layers are available on the SCDNR web site. This effort was completed as part of the South Carolina Regulatory Task Force.

Section staff completed a three day crustacean monitoring cruises to collect fisheries independent data. An abstract for a poster was accepted for the Sea Grant tidal creek summit being held in Charleston on December 5 and 6th.

Dr. Charles Martin was on campus to interview for the ERS Section Managers position. Staff attended the SAFMC Coral Advisory Panel as the SCDNR representative. Recommendations regarding increasing areas of the Coral Habitats of Particular Concern (HAPC) and Marine Protected Areas (MPA) based on new surveys recently completed in the area.

Algal Ecology: Routine Monitoring and Fish Kill Responses (private contract & CDC project) – Follow-up sampling and analyses for the cyanobacteria bloom in Kiawah Island pond K109 is winding down, as this bloom is showing signs of senescence. This bloom event will be used for genomic/environmental analyses. Fish kill response activity appears to be declining as the season progresses: no fish kills responded to during October were related to algal blooms.

Assessing Phytoplankton Responses to Nutrient Levels in SC Estuaries (EPA project) – Staff have completed half of the autumn bioassay experiments and sampling: the Ashley River and at the Baruch Field Laboratory. Staff are preparing to conduct in-house TKN analyses. Staff are also coordinating water sample retrieval with DHEC for the November SCECAP sampling for water quality analyses. A graduate student (through the College of Charleston) has been identified who will work on this project for her thesis.

Development of Novel Molecular Assays (SCSG project) – Staff harvested additional red drum eggs, both in the viable (floating) and non-viable (sinking) fraction to archive samples in preparation for the culmination of the project (February), as the project start date does not align with spawning season.

Other –Dr. Greenfield hired a USC Research Specialist, and this individual began employment on Monday, October 17th.

Dr. Greenfield worked on the HAB and climate HML discussion groups and contributed to the pollution group discussion points, and is serving as the SCDNR representative for the HAB discussion group.

Dr. Greenfield received a Dean's Award from USC for outstanding research and scholarship.

Sustainable Mariculture/Crustacean Monitoring:

Sustainable Mariculture: Staff completed an experiment evaluating density effects on the growth rate of native white shrimp in culture for use as bait shrimp. Staff stocked our new experiment on the growth of white shrimp in clear water versus biofloc water systems for the culture of bait shrimp. Two Charleston chefs and a representative of the SC Aquarium visited the Waddell Center to learn about the potential indoor culture of food shrimp. Post larvae for use in a back-to-back production trial and a study of in-culture enumeration methods were picked up from the hatchery and are now in the nursery tank.

ACE Basin National Estuarine Research Reserve: Staff submitted a poster abstract for the upcoming Southeast Tidal Creek Summit to be held in Charleston in December. Developing an environmental monitoring plan for the proposed oyster cage culture project to be situated in Fish Creek within the ACE Basin NERR. Updating the Scott Creek land cover map, which has to be submitted next year to the NERRS Habitat Mapping and Change Technical Committee for review.

Crustacean Monitoring: Trawl samples were about average for this time of year for white shrimp and blue crab. Blue crab pot samples have been dominated by catches of mature female crab in above average numbers, enhanced by timely rainfall and seasonal cooling. Staff participated in the Atlantic States Marine Fisheries Commission (ASMFC) Horseshoe Crab ad hoc Biomedical Workgroup to produce best management guidelines for handling of animals through the capture, bleeding, and release. This activity is expected to continue increasing as demand for *Limulus* amoebocyte lysate (LAL) rises. A staff member was a guest on a SCDNR radio program discussing shrimping, shellfish, and fall fishing.

Waddell Mariculture Center: The WMC hosted a tour and oyster roast for the Bluffton Arts and Seafood Festival. More than 80 guests attended a 45 minute tour and oyster roast. The DNR Discovery vessel was in Beaufort County last week. Approximately 260 eighth grade students spent a day on the Colleton River and touring the WMC. Area master naturalist provided additional information during a walk through the Victoria Bluff Marine Reserve. The center also provided 5 additional tours for 25 guests. AI is providing information and an equipment list for Whale Branch Middle School. The school is seeking a grant to fund the setup of a fish production system at the school. The school has tanks and a glass greenhouse. AI rescued a young osprey from a Colleton River Plantation roadway. Volunteers have been working to clean up the center's flower beds. Most of these beds have been planted with native plants.

Maintenance has been doing a lot of cleanup. Some repair work was performed on the shrimp greenhouse heating system.

In Water Sea Turtle Project: Completed the draft 2011 Annual Report and submitted it to co-investigators and the grant technical monitor to review; the report is due to NMFS on 30 November.

Office of Fisheries Management (OFM):

Shellfish:

Commercial Management: Planting verification requests were made for ten culture permits in October. Through calendar year 2011, 40 permit holders have requested planting verification on 73 different permits with 56 completing planting quotas for 2011. A total of 61,780 U.S. bushels of shellfish seed, green oyster shell, clam cover or approved cultch or cultivation have been planted to date. The assessed planting quota for the state's 121 culture permits is 85,552.7 U.S. bushels after taking into consideration permit cancellations, acreage reductions or increases, boundary modifications and approved variances. Shellfish seed may be planted throughout the calendar year, however by S.C. law (§ 50-5-940), cultch must be placed between 01 May and 31 August for credit.

The 2011-12 shellfish season opened October 1. New maps using aerial imagery were made available on the DNR website as well as by the map hotline 953-9854 and visits to the permit office.

Conditional approval was given to Chris Hardin for a culture permit in an unnamed creek off the Stono River. A second shipment of seed clams from Florida being imported under an indigenous importation permit was inspected at Fort Johnson and found to be free of hitchhikers. Experimental permits were issued to growers participating in the Sea Grant-funded triploid study.

Helicopter flights to acquire aerial imagery of oyster resource and related ground-truthing were performed in the Folly River area. Michael Hodges assisted with the ground truthing.

Nancy Hadley attended the semiannual meeting of the SC Shellfish Growers Association Board held at MRRI.

Shell recycling and planting; recreational management: Ben Dyar represented DNR at the grand opening media event that was held for the new recycling bin in the N. Myrtle Beach area. In attendance were State Representative Alan Clemmons and representatives from the Coastal Conservation Association (SC Chapter) and Burroughs & Chapin, the property owners who donated the land for the bin, Two local news stations covered the event and ran segments on the local news.

A new wooden cattle pin style oyster shell recycling bin was built at Garriss Landing to replace a trailer that was taken out of service. The US Fish & Wildlife service, which runs the landing, has been extremely cooperative in allowing oyster shell recycling and a quarantine site to operate at the landing.

In conjunction with Sullivan's Island Elementary science magnet program which focuses on the marine environment the recycling program has set up a small recycling location at the school. This location is strictly for the parents and friends of students to recycle shell. This location allows the students to educate the parents and friends on the importance of recycling shell and is part of the school's partnership with the SCORE program which will also include shell bagging, marsh planting and reef building. Staff negotiated with the SPA to utilize space at the Veterans Terminal as a Charleston area shell quarantine site. This is included in our existing agreement with SPA but will need to be renegotiated when that agreement expires. Trash cans were delivered to Factory Creek Fish Co. on Lady's Island for a volunteer-driven recycling effort. The shell collected at this site will be bagged by elementary school students in the spring.

2000 bushels of shell that was donated by Roddy Beasley at Maggoni's Seafood was moved to the Beaufort quarantine site at Shanklin Road. Not including the donated shell from Maggoni's, 546 bushels of shell were recycled this month. Data collected for the oyster bed assessments that were conducted on SRFAC beds planted in 2008 as part of the annual SRFAC monitoring Assessments is still being processed.

This month 12 new shellfish boundary signs were put out and mapped, completing 2 SSG's and one PSG in Bulls Bay and one SSG in Bohicket Creek.

One of the recycling program dump trailers was stolen from Gilligan's in Goose Creek. On the same morning there was an attempted theft of the oyster shell dump trailer at the Gilligan's on Johns Island. The trailer had a tongue lock, as all of our trailers that are in the field do, and DNR stickers. Gilligan's has been extremely cooperative and helpful. They have video surveillance of the incidences for both locations and have made copies for the police. Since the incidents were in separate jurisdictions, police reports were filed with the Charleston County Sheriff's office and the Goose Creek police.

A final report was submitted to USFWS for cooperative agreement #092309-05 under which they purchased shell for use in oyster restoration.

Grant activities

ARRA (Stimulus) project: Additional marsh grass was planted behind the Daniel Island reefs with the help of a Boy Scout troop.

State Wildlife Grant: Sixty 7th grade students from a Bluffton Middle School bagged shell at the Waddell Mariculture Center in conjunction with the Port Royal Foundation and Beaufort Master Naturalists. Shell was transported from Charleston for this event. Bags will be stored at WMC and used to construct reefs in that area.

Staff conducted classroom lessons on oyster reef biodiversity and filtration for 67 5th grade students at Sullivans Island Elementary School. A classroom lesson on oyster reef biodiversity was given to 60 students at James Island Charter High School. Sixty Mason Prep students studies reef biodiversity while on a field trip to Fort Johnson. 29 students and 4 chaperones from Lake Norman Charter School spent a morning with the SCORE team. They did a lesson on reef biodiversity, filled 150 shell bags and toured the research vessels.

Thirteen AP biology students from Ashley Ridge High School conducted fish sampling on the oyster reefs at Fort Johnson. A group of eleven students and their parents from Mason Prep School conducted fish sampling on Fort Johnson reefs as part of their MasonFest Family Science program.

A volunteer was trained to monitor water quality at Huntington Beach State Park.

National Fish and Wildlife Federation: A Boy Scout troop from Jennie Moore Elementary School was trained to monitor water quality at Garriss Landing.

Southeast Aquatic Resources Partnership-USFWS: The last round of spat collection and deployment in the Bohicket Creek area was completed. Final photos, population samples, and sediment samples were obtained and processed. A final report for this grant was submitted to USFWS.

Southeast Aquatic Resources Partnership-NOAA and Atlantic Coast Fish Habitat Partnership: Staff met with Colleton Middle School to initiate a new partnership which also includes Sea Grant/COSEE. Students will participate in both marsh grass husbandry/restoration and oyster restoration in the ACE Basin.

Education and outreach: We are harvesting Spartina seed for the Seeds to Shoreline program. Students from Mason Prep harvested Spartina seed and will be growing them in a cold frame at their school.

Grant proposals: Two proposals were submitted to USFWS-SARP and one proposal was submitted to NOAA-SARP. Proposals involve collaborations with the Shellfish Research Section, SC Sea Grant/COSEE and Clemson Extension Service to conduct restoration and shoreline assessment in the Ashley River, Kiawah area, Bohicket Creek and South Edisto watershed.

Personnel actions: An MES student was hired as a temporary hourly to assist with outreach and education projects. She will be collating existing lesson plans and assisting with developing a teachers workshop for the Seeds to Shoreline project.

Miscellaneous: Nancy Hadley participated in the **DNR on Your Day** radio program **Wednesday October 5** and answered questions about shellfish harvest and shell recycling. Michael Hodges conducted a field trip with Robert Wiggers to create a video segment about oyster harvesting.

Statistics:

General Activities

- Delinquent letters for late submission of September mandatory logbooks were mailed on October 17 (191 letters) to license holders for September reports not yet received by the October 10th deadline. The affidavit list which includes delinquent offenders for September and prior months will be generated on October 27th (89 offenders) and will be turned over to the Law Enforcement Division.
- Several data requests were completed this month including Snapper/Grouper catch by gear type, Wreckfish, Crab, Herring, and harvest numbers from State and Culture Shellfish Grounds.

Commercial Trip Interview Program

- October sampling efforts provided 21 commercial trips being sampled, with 475 length frequencies with 455 associated age structures being obtained.

State Finfish Survey Summary

- Interview data for September & October will be included in the November report.
- Deep-hole shrimping intercepts and flights began in September and will continue until December 15th.
- Planning continues for the 2012 Grand Strand pier survey to be conducted with the cooperation of CCU. A conference call was held between CCU and SCDNR staff to lay groundwork for 2012.
- Request for summer flounder data was filled for Joey Ballenger of SCDNR.
- Additional activities during the month of August included: working closely with commercial seafood dealers to ensure compliance with reporting, assisting DNR's oyster shell recycling program and freezer program, distributing rules & regulations books and fish rulers to coastal businesses as requested, collecting samples and catch information from shrimp trawler captains reporting catches of tiger shrimp. Tiger shrimp posters were distributed at tackle shops/boat landings asking recreational shrimpers to report catches of this shrimp species.

Finfish:

Artificial Reef Program personnel gave presentations this month to the Lowcountry Scuba Club in Charleston and the Grand Strand Saltwater Anglers Association in Myrtle Beach.

Artificial Reef Management and Development

Sampling has begun on a new study looking at the impact of invasive lionfish on artificial reefs. Initial sampling collected twelve lionfish from two reef sites that will be examined for gut contents analysis.

Marine Resources Division

Office of the Deputy Director

On November 1st Mr. Boyles was in Columbia to attend a DNR Deputy Directors meeting. On November 2nd Mr. Boyles participated in a South Atlantic Fisheries Management Council conference call regarding the Law Enforcement Officer of the Year Award. On November 5th Mr. Boyles held a General Staff meeting to discuss DNR leadership transition. Mr. Boyles was in Boston, MA November 5-11 to attend the Atlantic States Marine Fisheries Commission's 70th Annual Meeting. On November 22nd Mr. Boyles held a General Staff Meeting to recognize the Marine Resources Division Employee of the Year (Betty Burn). Agency head John Frampton was in attendance to say "Thank you" to the Marine Resources Division staff. Following the General Staff Meeting Mr. Boyles hosted the Annual MRD Thanksgiving Luncheon in the Division's Outdoor Classroom. On September 28th Mr. Boyles attended the Hollings Marine Laboratory Executive Board meeting.

Marine Resources Research Institute (MRRD): Program and Grant Development Activities:

The genetics section is finalizing a second contract with the NC Wildlife Resources Commission for continued striped bass genetic evaluation work on rivers flowing from NC to SC.

The National Marine Fisheries Service (NMFS) Office of Protected Resources continues to work on the Supplemental Environmental Assessment (SEA) for our request (submitted to NMFS on 1 September) to amend Section 10 permit #15566 to authorize increased annual capture/processing of Kemp's Ridley sea turtles during 2012-2015. The SEA must be completed by NMFS (to comply with the National Environmental Policy Act, NEPA) prior to posting our request in the Federal Register, which begins the 30-day public comment period. Unfortunately, as of 9 November our request has not been posted in the Federal Register.

Publications and Outreach:

The following poster was presented in November at the Biology of Marine Mammals Conference in Tampa, FL. It incorporated dolphin prey (i.e. fish) data from SCDNR trammel net survey: McFee W.E. & Arnett S.A., Winter Cold Water Anomalies and Bottlenose Dolphin Strandings in South Carolina, USA.

The following papers have been submitted for publication:

Arendt, MD, Schwenter JA, Segars AL, Byrd JJ, Whitaker, JD, and Parker L. Fishery-independent catch for loggerhead sea turtles (*Caretta caretta*) in coastal waters of the Southeast U.S. between 2000 and 2011: Stable to increasing trends forecasted to continue.

Four James Island High School marine science students shadowed Paulette Mikell on Friday, November 18th and 21st.

Joseph Ballenger assisted Robert Wiggers on November 7th with the taping of a short video regarding the importance of determining the age in fish species, and how age data is generally used in the development of management regulations. This effort will create a SCDNR education video for YouTube and to be broadcasted in the Titling and Registration Office as part of an education and outreach program.

Dr. Greenfield and a student attended the 6th Symposium of Harmful Algae in Austin, Texas Nov 14 – 17th. The following poster was presented, highlighting student research: Doll, C. and D.I. Greenfield (2011) Determining factors that influence molecular quantification of the harmful raphidophyte *Heterosigma akashiwo* using a sandwich hybridization assay (SHA). Sixth Symposium on Harmful Algae in the US, Austin, TX. November.

Progress Report and Activities: Estuarine Finfish Research

Striped Bass: Staff completed the analyses of the 2011 South Carolina broodstock with high proportions of stocked fish present as well as a single individual that was originally stocked in the Ashley River (2006) as a phase II fish. Staff are continuing to genotype historic genetic samples for a temporal structure comparison across South Carolina.

Genetic Influences of Overfishing: For the red porgy project, staff are competing the genotyping of samples to evaluate the potential of inshore/offshore genetic structure within these reef fish (initial analyses and marker tests are being completed).

Robust Redhorse: Staff are completing a manuscript which establishes genetic baseline data for the Savannah and Pee Dee Rivers and parentage foundation for restoration work within the Santee-Cooper system.

Genetic Tool Development: Staff completed the initial data analyses for the red drum telomere aging project, statistical methods to optimize the relationship between telomere length and age are being evaluated. Staff completed the AFLP screening of red drum and cobia samples for sex-specific genetic markers. No perfect diagnostic markers were located for either species, but staff are evaluating sensitivities in several primer combinations for both red drum and cobia. Staff completed the processing of the Atlantic sturgeon samples for the sturgeon telomere aging project and beginning analyses.

Cobia Population Genetics: Staff are processing the 2011 cobia samples; which will be incorporated into the ongoing evaluation of stocking contribution and large-scale population structure. Staff are completing a manuscript on the population genetic characterization of cobia along the southeastern U.S.

Spotted Seatrout Genetic Markers: Staff completed the optimization of a suite of microsatellite markers to characterizing the genetic population structure and genetic influences of cold winter events on spotted seatrout. Evaluation of the marker suite for parentage analysis and genetic evaluation is ongoing.

Weakfish Genetic Identification: Staff completed processing the first set of test samples with the *Cynoscion* species-specific markers for the weakfish verification project, processing of historic samples to verify identifications are beginning.

American Shad: Staff have finished transitioning the markers suite over to the Beckman system and are completing the genotyping of the 2011 broodstock. Staff are completing a manuscript on the genetic characterization of the Edisto River shad population with initial evaluation of stocking contributions.

Red drum stocking: Stocking has been completed for 2011. Approximately 40,000 juvenile red drum, from a unique genetic family, were released at a single location in the Wando River on November 1st. This release was matched to 41,053 red drum from a different genetic family, which was distributed throughout the Wando in October. Mean size of juveniles in the single release location was 69.0 mm TL and closely matched the mean size of 73.0 mm TL from the other release. The effectiveness of the two release strategies (single location releases vs. a broad distribution of fingerlings in the estuary) will be evaluated for both the Wando and earlier Ashley releases by their respective genetic contributions to the 2011 year class. Approximately 7,500 red drum juveniles from this harvest were transferred to a pond at the Waddell Center for overwintering. Additionally, 2 more ponds of red drum were harvested on Nov 2 and 4,500 juveniles with a mean size of 37.0 mm TL were placed in the Waddell hatchery building for weaning onto pelleted food. These fish will be grown out for use in year 2 of the funded shrimp/oyster/red drum polyculture project.

A total of 7 red drum broodstock were captured by long line and transported to flow-through tanks at MRRI for use in 2012-13, while red drum broodstock used for production in 2010-11 were identified for release. Temperature and photoperiod conditioning cycles were resumed for all red drum broodstock tanks.

Evaluation of the data for the final DJ report on the Utilization of Stocked Red Drum Larvae as a Tool to Evaluate Population Recruitment Bottlenecks has been completed for releases of the 2004 through 2009 year classes. Attempts to correlate global and regional weather events with red drum recruitment indices such as CPUE were unsuccessful, however a clear bottleneck in recruitment was identified between 2 days post hatch (dph) larvae and 30 dph juvenile red drum released in the Ashley River. The final report will be completed next week.

Spotted Seatrout: A total of 6 spotted seatrout broodstock were captured by hook and line from the Wando River and transported to flow-through tanks at MRRI, as well. Three separate schedules for photo-thermal conditioning of trout began in the 4 broodstock tanks. The goal is to compare spring, summer, and fall spawning and production of seatrout in 2012.

As preparations began for spotted seatrout cold tolerance experiments, it was determined that there was a problem with the chilling unit in Environmental Control Room 3 requiring outside servicing. Staff of the physical plant coordinated the servicing and the room is back up and running.

Cobia: Data preparation for a SEDAR 28 conference call on Dec 1 is ongoing. Otoliths collected from cobia captured in South Carolina, North Carolina, and Florida in 2011 are currently being processed while collection data is being reviewed and proofed.

The trammel net survey successfully covered all seven regular monthly areas, as well as two additional areas in Port Royal Sound (sampled quarterly). The electrofishing survey has covered three of its monthly areas to date, with the remaining three scheduled for the last week in November. The adult red drum (long-line) survey completed its 2011 surveys of Port Royal Sound, Winyah Bay, Charleston Harbor and St. Helena Sound. The long-lining survey caught 94 adult red drum in November and retained 7 of them to use as broodstock for the stocking program. Two sandbar sharks were also satellite tagged in Winyah Bay. Fish by-catch in the Crustacean

Management trawl survey was quantified in Charleston Harbor. Recreational catches of spot were sampled at Myrtles Beach and in Charleston Harbor in order to gather information on age, growth and maturity (ongoing College of Charleston Masters project).

Environmental Research

SCECAP: Primary efforts for SCECAP have been focused on processing the benthic samples (30% complete), final formatting of the 2007-2008 Technical report and updating the SCECAP webpage (<http://www.dnr.sc.gov/marine/scecap/>). Bree Tomlinson was hired as an hourly to help process various benthic samples. Benthic taxonomy samples from both Folly Beach and Bay Point/Pt Royal are being processed (Bay Point 6 month pre impact samples are complete). Staff participated in a CMS cruise and processed the samples early in the month. A poster is being developed for the Tidal Creek Summit in early December. Staff are editing the final report for the Kiawah Plover project.

Shellfish Research/MIMES

Minorities in Marine and Environmental Sciences (MIMES) Program: The final report for the award from the National Science Foundation (NSF) that supported the MIMES Program for the summers of 2010 and 2011 was submitted this month. This report documented not only the activities of the 16 undergraduate minority students that spent 12 weeks under the guidance of research mentors from across the Fort Johnson Marine Resources Center, but also their activities since completing the program i.e., presentations of findings at national conferences, applications to further fellowship opportunities, pursuit of graduate school education. The proposal for the renewal of this program remains under review with NSF.

The Nature Conservancy-NOAA Oyster Castle Project: Adjustments to the cordgrass (*Spartina alterniflora*) saltmarsh plantings from a TNC volunteer event last month were completed (i.e., additional plantings, relocation of plants, replacement of lost plants) to help ensure that they were consistent with the experimental design.

South Carolina Sea Grant Consortium Triploid Oyster Project: Oysters of the three lines (two diploid lines and a triploid line) were sampled at all of the industry grow-out sites this month. Oyster shell height and survival data were collected from eight randomly selected replicate bags of each line at each site, and photographs and water quality measurements (dissolved oxygen, salinity, and temperature) were also taken.

Resource Monitoring: Continuing from efforts last month, staff conducted further helicopter-based photography to evaluate the effectiveness of this technique for assessing changes in the distribution and spatial extent of commercially-important shellfish grounds.

Southeast Aquatic Resources Partnerships: Crab trap-based reef photographic “footprints” were recorded for Stono River, Dawho River, New Cut and Brittlebank park sites. Analysis of reef footprint photographs continues. A link to the online crab trap survey was posted on SCDNR’s Facebook page to encourage greater use of this facility to collect more information on the distribution of abandoned crab traps in our coastal waters (<http://www.dnr.sc.gov/marine/crabtraps/index.html>).

Crab Trap Project: Three new sites were selected for the construction of demonstration-scale crab trap reefs at Charleston City Park locations next spring pending approval from the City of Charleston. A flyer related to abandoned and unwanted crab traps and educational signs to be posted at reef construction sites are also in development. An interim progress report was also completed.

Gulf and South Atlantic Regional Panel on Invasive Species: Staff at the Marine Resources Research Institute are in collaboration with NOAA staff in Beaufort, North Carolina to develop a coordinated regional database and tissue repository for collections of the Asian tiger shrimp, *Penaeus monodon*. More reports have been received from commercial shrimpers and also the general public (the latter predominantly through the tigershrimp@dnr.sc.gov e-mail address that is referenced on posters distributed across the coastal states in recent weeks). The first tissue samples from South Carolina have been sent to North Carolina but are ultimately destined for the U.S. Geological Survey genetics laboratory in Gainesville, FL as part of an effort to try to determine the source of these non-native crustaceans.

Oyster reef assessments: The survey grade GPS unit, the R8, is operational again and the cell phone/Bluetooth connection it was using before has been replaced with a MiFi unit for connection to the internet. Data collected from last month’s helicopter flights are being processed. 200 feet appears to be the optimal height for helicopter flights. The next flights are scheduled for November 22nd, 23rd, and the 25th over Folly (S206E), and possibly some of Clark Sound (S205). Discussions with OFM for managing updates to the state’s oyster layer and how the changes relate to the permitting process are ongoing. The oyster acreages reported for each commercial shellfish permit map will be based on our recently completed oyster layer starting in January 2012. Work is

underway for the transition from the 1980s acreages to the current numbers. Simplified versions of the wall maps displaying an overview of the state's managed oyster areas will be available online in late November / early December.

Genetics and Genomics

Genetics/Genomics- Most of the effort this reporting period was focused on analyzing data from the Oceans and Human Health Initiative supported oyster studies.

We have also received the sequencing data on striped bass from our partners at North Carolina State University supported by a Sea Grant grant. The data contains 140 million sequences and comprises 20 Gigabytes of data. We are in the process of working with North Carolina State University and the College of Charleston to develop a collaborative way to share and analyze this data.

Coastal Finfish Section

MARMAP: Staff are preparing for an external review of the fishery independent sampling efforts in the region. The review will include the monitoring efforts of MARMAP and the South East Fishery Independent Survey (SEFIS) that is coordinated by the South East Fisheries Science Center (SEFSC).

MARMAP/SEAMAP: successfully completed the 2011 Reef Fish survey. The program completed 53 sea days on the R/V Palmetto, and 9 sea days on the R/V Lady Lisa. While at sea, a total of 884 collections (gear deployments) were completed. The annual cruise report detailing the results of the 2011 sampling efforts is expected to be completed by the end of the year.

SEAMAP: successfully completed the 2011 fall cruise for the Coastal Survey. During 24 days at sea, 112 stations were sampled.

The Coastal Finfish section was able to purchase some much-needed equipment for the age/growth and the histology laboratories. The equipment will significantly increase the processing capacity and enhance sample consistency and quality. The histological equipment is being installed and Kevin Kolmos will coordinate training sessions for this new equipment for other users of the histology facility.

Marcel Reichert participated in the South Atlantic Fishery Management Council's (SAFMC) Scientific and Statistical Committee (SSC) meeting on November 8-10. Joseph Ballenger and Tracey Smart attended as observers. The SSC reviewed and approved the SEDAR 25 black sea bass and tilefish stock assessments, worked on further developing the ABC control rule, and discussed various Fisheries Management Plan amendments.

Waddell Mariculture Center

The Waddell provided 5 general tours for 18 guests. The center hosted 28 guests from Germany who were on a Lowcountry environmental tour sponsored by SC Parks Recreation and Tourism. Beaufort Leadership brought their 2011 class of 30 business leaders to the center for a Power Point Presentation and tour. The center hosted its third Taste of Waddell event. There were 300 guests this year. Siglers Seafood and Rotisserie prepared the food and volunteers steamed oysters. Tours were offered at the center and lasted from 3:00pm till 7:00pm.

The seawater pump station had some minor maintenance problems on Saturday. Al and Matthew came in early Sunday morning to make repairs. Maintenance would like to shut down the seawater system for a couple of days to perform annual maintenance.

The center is designing a seawater over-flow system for the head box. We are waiting to receive the last price for a 15" PVC pipefitting and flange. We have been told this is an odd pipe size and fittings are difficult to locate.

Algal Ecology Lab

Routine Monitoring and Fish Kill Responses (private contract & CDC project) – No fish kills were reported during November. Staff completed the follow-up of a cyanobacteria bloom in K109. The environmental analyses are complete, and final toxin analyses are pending. Additional genomic analyses are ongoing for population assessments through Dr. Greenfield's USC-based funding. Staff completed entry of all historic fish kills associated with a harmful algal bloom to HABISS, the CDC's centralized database.

Assessing Phytoplankton Responses to Nutrient Levels in SC Estuaries (EPA project) – Staff will have completed all of the autumn field sampling and experimentation by the end of the month. Staff successfully performed a comparison of two analytical techniques in-house to detect total nitrogen in water samples. Staff are also coordinating water sample retrieval with DHEC for the November sampling for water quality analyses. A graduate student (College of Charleston) has been identified who will work on this project for her thesis; she is hoping to focus efforts on our field experimentation.

Mariculture, ACE, & Crustacean Section

Sustainable Mariculture Ongoing experiments: Prototype commercial grow-out trial of Pacific white shrimp to develop an economically competitive food production system; Comparative bait shrimp growth rate trial of native Atlantic white shrimp grown in clear-water versus biofloc water systems; Nursery cultivation of Pacific white shrimp for stocking final prototype commercial grow-out trial commencing in early December. Modifying replicate tank systems in preparation for a population enumeration study of shrimp grown in biofloc-based systems. Planning for a workshop on commercial bait shrimp production scheduled for late January 2012.

ACE Basin National Estuarine Research Reserve: Preparing a poster, "National Estuarine Research Reserve System (NERRS) Sentinel Site Program for Understanding Climate Change Impacts on Estuaries", for the upcoming Southeast Tidal Creek Summit to be held in Charleston in December. Initiated an environmental monitoring plan for the proposed oyster cage culture project to be situated in Fish Creek within the ACE Basin NERR. Developing a proposal for vegetation and groundwater monitoring to quantify sea level changes within the ACE Basin NERR for submission to the National Oceanic and Atmospheric Administration's Estuarine Reserve Division (NOAA-ERD).

Crustacean Monitoring: Monthly trawl sampling collected above average numbers of white shrimp, especially in the Ashley River, which could bode well for overwintering stocks, depending on winter weather conditions. Black gill infection rates have declined to low levels, normal for this time of year. A few small blue crabs were taken in trawl samples, while fall pot samples for larger crab have been above levels not seen in recent years. Trawl sampling south of Charleston is planned for early December.

Office of Fisheries Management (OFM):

Shellfish Management:

Commercial Management

5 permit holders requested verification for legally required shellfish culture permit plantings for 10 separate permits during November. Through calendar year 2011, 42 permit holders have requested planting verification on 82 different permits with 68 completing planting quotas for 2011. A total of 62,134.1 U.S. bushels of shellfish seed, green oyster shell, clam cover or approved cultch or cultivation has been planted. The assessed planting quota for the state's 121 culture permits is 85,557.2 U.S. bushels after taking into consideration permit cancellations, acreage reductions or increases, boundary modifications and approved variances. Shellfish seed may be planted throughout the calendar year, however by S.C. law (§ 50-5-940), cultch must be placed between 01 May and 31 August for credit. There are still 23,219.15 BU remaining to be planted in 2011 with only 17 working days in which this can be accomplished with DNR verification. If planting is not completed by December 31, 2011, staff will consider revoking permits for non-compliance with the mandatory planting.

Experimental permits were issued to three growers who are participating in a demonstration project with Sea Grant Extension. A shipment of seed clams going to mariculture permits in the McClellanville area under an Indigenous Importation Permit was inspected and found to be free of any obvious hitchhikers.

A new report card system for evaluating culture and mariculture permittees was tested. This process will "go live" in 2012 and be used to determine whether to renew permits which are expiring. This is an effort to insure that culture permits are issued to good stewards and to broaden access to culture permits by eliminating inactive permit holders. All permit holders will be notified of the new process this month.

One mariculture permit holder was notified that his permits will not be renewed in January due to continued non-compliance with permit requirements.

The Shellfish Permit Committee met to consider the disposition of surrendered acreage resulting from the new resource assessments. The SPC recommended the creation of 3 new SSGs, the expansion of 3 SSGs and 1 PSG, the expansion of 4 existing culture permits, and the creation of 9 new culture permits. Changes include a large expansion of S101 Station Creek (Beaufort County) which is highly needed due to heavy use. The new culture permits will be advertised in January.

OFM and MRRI staff met to develop a process for ongoing updates to the shellfish resource acreage. Acreage will be continuously modified as new information becomes available but will only be incorporated into the official maps every 3-5 years.

Shell recycling and planting; recreational management

A new wooden cattle pin style oyster shell recycling bin was built at Trask Landing. The opening of this bin brings the total number of public oyster shell drop-off sites to 25. The bins are predominantly along the coast with one bin in the Hartsville area. There are current plans for two more locations, one at the Beaufort County Recycling Facility on St. Helena Island and the other in the Columbia area.

Ben Dyar represented DNR and the Oyster Shell Recycling Program at the Charleston County Joint Delegation Meeting at the Yorktown on November 21st. DNR and the Recycling and Planting Program are requesting Water Rec Funds for the purchase and transportation of shucked oyster shell to be planted in Charleston County waters. Mr. Dyar was there to field and questions pertaining to the program. The request was approved.

2163 bushels of shell were recycled this month which included three events in Columbia. Bins at Jessen Boat Landing, Sol Legare Boat Landing, and Ft. Johnson were cleaned out this month. SCORE volunteers in Beaufort expanded shell recycling efforts to include a 2nd restaurant. Thus far volunteers have recycled about 12 bushels of shell which are being placed in the Port Royal drop-off bin.

The Oyster Shell Recycling and Planting Program was shadowed by a Johns Island High School student for his career day and completion of high school credits.

This month 6 new shellfish boundary signs were put out and mapped, completing one SSG in Leadenwah Creek.

Mitigation Projects

A bid for 40,000 bushels of oyster shell for Macalloy and Calhoun Park projects was awarded to Green's Oyster Company. Green's has started to deliver shell to the Veteran's Terminal. Another bid for oyster shell for various Shellfish Management Projects is in preparation.

Grant activities

ARRA (Stimulus) project: Michael Hodges and Nancy Hadley met with City of Charleston project lead Ross Eastwood, Howard Schnaboltz (NOAA) and a representative of Collins Engineering at the Daniel Island site to discuss the possibility of additional shoreline stabilization behind the reefs. A final budget report for this grant was submitted.

State Wildlife Grant: Five shell bagging events were held at Fort Johnson producing a total of almost 800 bags. Participants included students from Porter Gaud, James Island Charter High (2 occasions), East Cooper Montessori, Ashley Hall, and Trident Tech; a Master Naturalists class sponsored by CCPRC; and Students in Free Enterprise club from College of Charleston. We had 5 bagging events (creating almost 800 bags) and 3 classroom education events this month.

Allison Kreutzer and Stephen Czwartacki taught the "Oysters as Living Classrooms" lesson to 3 classes of 5th graders at Ashley Hall. Stevie trained a volunteer to monitor water quality at Palmetto Islands County Park.

National Fish and Wildlife Federation: We worked with the ACE basin NERR section and the SEWEE Center to schedule the "Estuary 101" teacher's workshop for March 23, 2012, and a Coastal Exploration Series event for March 20, 2012.

Allison Kreutzer and Stephen Czwartacki worked with the 30 students from an afterschool club at Cainhoy Middle School (Huger, SC) to build a greenhouse out of PVC on their campus for the From Seeds 2 Shoreline program. One volunteer was trained to monitor water quality at Daniel Island and Garriss Landing.

Southeast Aquatic Resources Partnership-NOAA and Atlantic Coast Fish Habitat Partnership: SCORE staff taught the "Oysters as Living Classrooms" lesson to 8 classes of 8th graders at Colleton Middle School. These students will be participating in shell recycling, bagging and reef building later in the school year.

Meetings and Collaborations

Allison Kreutzer and Stephen Czwartacki attended the quarterly meeting of the Ashley Cooper Stormwater Education Consortium.

Stevie Czwartacki helped the Shellfish Research Section assess status of crab trap reefs on the Dawho River.

Michael Hodges worked with Glenn Gardner, SC Wildlife Television, to produce a video segment on how to harvest and cook oysters which will be played at the license office in Columbia and on You Tube. Four staff members requested permission to attend the Tidal Creek Summit in Charleston in early December.

Michael Hodges has submitted a travel request for the National Shellfisheries Association meeting in Seattle in the spring. Michael has submitted an abstract entitled "Evaluating Success of Oyster Restoration for Mitigation in an Industrialized Harbor in South Carolina" to the special session on oyster restoration.

Finfish Management:

I. SECTION ACTIVITIES

Artificial Reef Program personnel are working with Japanese TV on a documentary about secondary use materials for artificial reef construction. The reef program has provided underwater video and still pictures of South Carolina artificial reefs and will be interviewed on camera for the production.

Artificial Reef Program personnel gave presentations this month to the East Cooper Fishing Club in Charleston County and the Seacoast Anglers Association in Horry County.

Statistics:

General Activities:

Delinquent letters for late submission of October mandatory logbooks were mailed on November 16th (181 letters) to license holders for October reports not yet received by the November 10th deadline. The affidavit list which includes delinquent offenders for October and prior months will be generated on November 29th (71 offenders) and will be turned over to the Law Enforcement Division.

- Several data requests were completed this month including Shrimp, Black Sea Bass, Golden Tile, Wreckfish, Spanish Mackerel, and Cobia catch and effort data.

Commercial Trip Interview Program

- November sampling efforts provided 11 commercial trips being sampled, with 211 length frequencies with 169 associated age structures being obtained. Weather impacted fishing and sampling efforts this month.
- DNA collections from a grouper fish landed in Murrell's Inlet were set off to be analyzed as staff were unsure of the species identification. It was determined that the fish was a tiger grouper, and is the first to be positively identified in the commercial landings data for SC.

State Finfish Survey Summary

- Creel Clerks intercepted 314 fishing parties with a total of 696 anglers interviewed during the months of September and October 2011. Fish measured included: 145 red drum, 40 spotted seatrout, 77 southern flounder, 77 southern kingfish, 143 sheepshead, 22 Atlantic Croaker, 9 black sea bass, 1 Atlantic Sharpnose, 10 bluefish, 2 weakfish, 184 spot, 2 bonnethead shark, 4 pinfish, 15 pigfish, 6 silver perch, 5 black drum and 1 lizardfish. Otoliths were collected for the inshore fisheries section of MRD from; Atlantic Croaker, spot and weakfish.
- Deep hole shrimping intercepts and flights will continue until December 15th.
- Planning continues for the 2012 Grand Strand pier survey to be conducted with the cooperation of CCU. Comments from DNR staff are being incorporated into the final draft of the survey instrument.
- SFS and charter boat data on Spanish Mackerel and cobia were prepared for upcoming SEDAR and sheepshead data was summarized for OFM staff for possible recommendations to the General Assembly on future regulations.
- Completed online Sheepshead Management Survey and data analysis is underway.
- Additional activities during the month of August included: working closely with commercial seafood dealers to ensure compliance with reporting, assisting DNR's oyster shell recycling program and freezer program, distributing rules & regulations books and fish rulers to coastal businesses as requested, collecting samples and catch information from shrimp trawler captains reporting catches of tiger shrimp. Tiger shrimp posters were distributed at tackle shops/boat landings asking recreational shrimpers to report catches of this shrimp species.

WILDLIFE AND FRESHWATER FISHERIES

DEPUTY DIRECTOR'S OFFICE

Deputy Director

October: Considerable time was spent transitioning into the role of Deputy Director and in staff meetings to discuss status of current projects and issues. Other key meetings included the WFF Advisory Committee meeting, meeting with the Yawkey Foundation trustees in Georgetown County, Charleston County Parks and Recreation Commission to discuss WMA opportunities, a public deer meeting in Edgefield, the Corps of Engineers regarding the potential swing bridge at South Island, and several meetings with constituents to discuss quail feeding issues. Two mobility impaired hunt luncheons were also attended.

November: In addition to normal staff meetings, many meetings were conducted with human resources staff to address vacancy and hiring issues for the division. Other meetings of interest included meeting with Santee Cooper and the Corps of Engineers to discuss aspects of our existing partnership and receive updates on projects, the Heritage Trust Advisory Board meeting, a meeting with American Timberlands to discuss mitigation bank opportunities on properties adjacent to SCDNR lands, an American Oystercatcher meeting, a US Forest Service land protection meeting and the USFS 75th Anniversary of the Weeks Act. Considerable time was spent preparing the FY 2013 Forest Legacy project submission for SC.

Assistant Deputy Director

October: Reviewed and took action on various administrative and budgetary matters. Coordinated employee of the year nominations for division. Contracted for new appraisal of vacant fish hatchery in Region 1. Reviewed contracts and insurance concerning equipment rentals in Regions 2 and 4. Met with landowners concerning property for sale in Laurens County. Prepared contract extension for land acquisition in Barnwell County and visited site with staff. Assisted in providing tour of DNR preserve in Lexington County to State Comptroller General. Meetings and events attended: Wildlife and Freshwater Fisheries Advisory Committee meeting; DNR Board meeting; meeting with The Nature Conservancy; public meeting on deer management in Edgefield; meeting with Fisheries leadership staff; luncheon for mobility impaired hunters in Union County and in Laurens County.

November: Coordinated review of two projects following environmental protocol. Obtained updated appraisal on vacant DNR property in Region 1 and forwarded to Budget and Control Board. Spoke to two realtors about land for sale in Edgefield and Aiken Counties. Wrote letter of intent concerning property in Horry County. Visited Great Pee Dee Heritage Preserve/WMA and Poinsett Bridge Heritage Preserve. Meetings and events attended: Heritage Trust Advisory Board meeting; Budget and Control Board meeting; meeting with Human Resources staff; meeting on status of Comprehensive Wildlife Conservation Strategy; South Atlantic Landscape Conservation Cooperative conference call; meeting with US Association of Reptile Keepers; Conservation Bank meeting; and holiday luncheon at Region 1 office.

Public Information Director

October: Participated in two day CPM training class; Completed mid-term report for HHP grant and submitted it to NSSF; Participated in SARP Outreach and Communication Committee conference call; Participated and took meeting minutes for Feral Hog Task Force conference call; Attended Edgefield deer management public meeting and took public comments; Organized and facilitated Shooting Range Association meeting; Participated in live chat practice session and follow-up meeting; Attended meeting with Clear Channel to discuss advertising for upcoming Palmetto Sportsmen's Classic; Visited South of the Border to review DNR signage within alligator facility; Verified piers and bank access points on lakes Hartwell, Succession, and Russell; Coordinated with MRD, LE and Technology Department the distribution of various e-blasts; Worked with field staff and Technology Department to verify dove field information; Worked with fisheries and wildlife staff to determine issues with licensing; Continued implementation of fishing, hunting, aquatic nuisance, and tree stand safety marketing campaigns.

November: Participated in CPM training class; Participated in Feral Hog Task Force planning session; Continued to verify bank and pier access points; Met with USC to discuss future advertising opportunities; Participated in Fisheries Coordinator's meeting; Coordinated and attended SCNBTA meeting; Met with Time Warner Cable on advertising for upcoming Classic; worked with Continued implementation of fishing, hunting, aquatic nuisance, and tree stand safety marketing campaigns.

Office of Environmental Programs

Permitting and Review

During the months of October and November, DNR staff coordinated 78 reviews (21 COE, 30 DHEC, 5 State Clearinghouse, 22 Misc.) of environmental permits and authorizations for the 38 inland counties. Staff attended

the IRT Meeting in Charleston on October 5, the Taylors Creek Mitigation Bank Site Inspection in Fairfield County on October 21 and participated in an Interagency Mitigation SOP Workshop at SCDHEC on October 25 & 26. Staff also participated in a site inspection of the proposed Carter-Stilley Mitigation Bank in Horry County.

FERC Projects

Columbia Canal Hydroelectric Project (FERC Project No. 1895)

DNR staff participated in meeting (Nov 8) with City staff, Kleinschmidt Associates, Riverbanks Zoo, and SCE&G to provide review and input to the 2011 Annual Report for the Rocky Shoals Spider Lily Monitoring Plan; and to plan for spider lily monitoring activities in 2012. DNR staff also participated in a meeting (Nov 2) with conservation groups and Lockhart Power (new operator for Columbia Hydro) to share information regarding community interests in the hydro project. Staff participated in a site visit to Columbia Hydro Fishway (on Oct 12) and the Columbia Hydro Fishway Annual Meeting of Oct 25 to address the 2011 fishway report and plans for monitoring and management of the fishway for 2012.

Keowee-Toxaway (KT) Hydroelectric Project (FERC Project No. 2503)

DNR staff submitted comments to FERC on Nov 28 addressing Duke's Proposed Study Plan for relicensing the Project. DNR staff participated in Resource Committees to address fishery and water supply issues within the relicensing process. Staff participated in the KT Stakeholders meeting of Oct 26 and began developing components of a relicensing agreement. Staff completed a revised study plan to assess stream fish communities and the status of redeye bass, a study the DNR will propose to be included in Duke's study plan to FERC

Neal Shoals Hydroelectric Project (FERC Project No. 2315)

DNR staff met with SCE&G on Nov 1 to address agency concerns with sediments being released at the dam and options to remedy impacts to downstream aquatic resources. A subsequent meeting and site visit occurred on Nov 7 and included SCE&G, Army Corps of Engineers, DHEC, U.S. Fish and Wildlife Service, and DNR. Currently the Army Corps and FERC are conducting investigations of the incident to assess SCE&G compliance with related permits and the FERC license. SCE&G is in consultation with DNR and other agencies seeking to complete its planned gate replacement as soon as possible. Related to this incident, DNR staff assessed a fish kill on Oct 17 caused by SCE&G's drawdown of the reservoir at Neal Shoals, and staff is currently drafting the fishkill report.

Santee Cooper Hydroelectric Project (FERC Project No. 199)

DNR staff is participating in the Santee Cooper-NMFS consultation process regarding shortnose sturgeon protection measures, which included a Nov 8 video conference; and DNR is attempting to ensure that resulting recommendations for sturgeon can be reasonably implemented and will be beneficial to the restoration of the species.

NRC Projects

VC Summer Nuclear Project. DNR submitted comments on October 19, 2011 on additional information provided by the applicant for 401 Water Quality Certification.

William States Lee Nuclear Project. A public meeting for the National Pollution Discharge Elimination System permit was attended by DNR on November 17, 2011. A meeting was attended with Duke Energy to discuss construction plans for the Lake Cherokee Dam.

Special Projects

SAC #1992-24122-41A Haile Gold Mine, Inc. Interagency and Public Scoping meetings were attended by DNR staff on October 27, 2011. DNR staff reviewed and provided comment on aquatic and terrestrial resource study plans that will be conducted by the applicant in support of the DEIS.

WILDLIFE SECTION

October: Public hunts progressed as planned during the month. Youth deer hunts were held at Fant's Grove, Tibwin, Marsh, Cross, Belfast and on upstate private lands with 94 youth harvesting 25 deer. Mobility impaired hunts were held at Belfast, Tibwin and upstate private lands with 154 hunters harvesting 53 deer. Preparations were made for the upcoming waterfowl hunts including construction and camouflage of blinds with 1100 palmetto fronds cut for camo and 26 blinds camouflaged at Bear Island. A minimum of 180 hogs were removed from Bear Island, Donnelley, Crackerneck, Santee Coastal, Samworth, Webb and Hamilton Ridge WMAs during the month. To date, in the Antlerless Deer Quota Program, 1,651 cooperators were issued 62,714 tags.

The two-week upstate bear season was held during October with 80 bears harvested, the second highest annual harvest on record. Region 1 staff implemented a cooperator hat program to improve data collection.

Staff continues to monitor the Private land and Public alligator harvest programs. To date, 416 alligators were reported harvested under the public land harvest program.

Dove wings collected during opening day hunts were aged (4,906 wings).

Staff continues to collect deer samples for Chronic Wasting Disease surveillance.

Staff monitored conservation easements during the month.

The SC Prescribed Fire Council meeting was attended.

The Summer Turkey Brood Survey Report was completed and distributed.

The 2011 Turkey Hunter Harvest Survey Report was completed with 17,085 turkeys reported harvested during the 2010 season. This represents a slight (1%) increase over the 2009 reported harvest.

The 2010-11 Quail Hunter Survey and Rabbit Hunter Survey reports were completed and cooperators sent results.

A new Farm Bill Wildlife Habitat Brochure was prepared and posted on the DNR website.

Thirty-nine nuisance bear complaints were handled in Region 1, four in Region 4.

Annual monitoring of Schweinitz's sunflower was completed at Rock Hill Blackjacks HP.

Botany Bay Plantation WMA received 3,240 registered guests during the month including 9 horseback parties with 28 riders.

A public meeting on future deer management was held in Edgefield.

Region 1 staff assisted with the Upstate National Hunting & Fishing Day event held at Duke Energy's World of Energy facility.

One hundred seventy-seven visits to Heritage Preserves were conducted during the month including 56.5 hours of exotic plant control on 7 acres of 9 Heritage Preserves. 3 field trips were conducted. 16 acres were mowed, 275 acres control burned, 6.5 miles of firelanes were disced and 1.5 miles of trail mowed. 12 acres of exotic vegetation was treated with herbicide at Rock Hill Blackjacks HP.

Management recommendations were provided to 7 landowners and deer data analysis was conducted for 2 hunt clubs. 402 nuisance wildlife investigations were conducted including 68 nuisance alligators. 16 nuisance wildlife site visits were conducted. Other agencies were provided assistance on 16 occasions requiring 9.75 man/days. Presentations were given to 15 groups totaling 625 people. Seven environmental reviews were conducted. Field studies required 26 mandays and data analysis required 17.5 mandays. Waterlevel management required 61.5 man/days. Eleven news releases were submitted. Surveys included 4 quail surveys, 60 furbearer scent station routes and RCW cavity surveys included 2 clusters checked. Fall migration bird banding was conducted with 495 birds banded.

Field agricultural activities on WMAs included 575 acres annuals planted, 22 acres perennials planted, 432 acres mowed, 510 acres disced, 221 acres prescribe burned, 195.5 acres fertilized and herbicide vegetation control conducted on 120 acres. Approximately 29.6 miles of fire lanes were disced, 214,314 linear feet of dike mowed, 600 feet of dikes re-topped, 4 new watercontrol structures installed, 32.2 miles of roads mowed, 27.3 miles of roads scraped, 5.25 miles of roads graveled and 1 mile of road re-furbished. .5 acres was hydro-seeded. 89 WMA signs were erected on 4.8 miles of boundary. Other signs erected during the month included 35 road closed signs, 12 dove field signs, 30 heritage preserve boundary signs and 39 misc. signs. Four gates were re-furbished and 1 new gate installed. A new trunk was installed at Bear Island. Repairs were completed on the dike at Clemson Waterfowl Area. Three new watercontrol structures were installed at Hickory Top Greentree Reservoir. The pump motor was replaced at Beaverdam Waterfowl Area. 100 tons of gravel were distributed on Jocassee roads. 350 tons of gravel were placed on 4 miles of roads at Great Pee Dee HP and 4100' of boundary painted. During October, Regional Wildlife Section staff made 9 contacts with NGOs and conservation organizations.

November:

Public hunts progressed as planned during the month. Twelve youth deer hunts were conducted including hunts at Tibwin, Cross Generating Station, Sandy Beach, Samworth, Belfast, Clemson and Marsh. One mobility impaired hunt was held in Region 1. Reported harvest of waterfowl on 10 Category I and II waterfowl areas was good with 201 hunters harvesting 511 ducks. A youth dove hunt was held at Botany Bay Plantation WMA.

To date, 450 alligators were reported harvested during the public waters season.

CWD sample collection continued.

The ADQP Program was active with 62,949 tags issued to 1651 applicants to date.

Two sea turtle strandings were reported during the month. Four turtle necropsies were performed.

Staff continued to monitor DNR-held conservation easements.

The Wildlife Control Operators data base and web list were updated.

Section staff participated in a Calhoun County Soil and Water Conservation District beaver and hog management workshop attended by 75 individuals.

The SC Trappers Association meeting was attended.

The SC Bear Hunters Association meeting was attended.

The Summer Turkey Survey Report was completed.

The 2011 Summer Quail Brood Survey Report was completed.

12 bear complaints were handled in Region 1. 3 bears were killed by automobiles.

1553 registered guests were recorded for Botany Bay Plantation WMA during November including 11 horse groups with 27 riders.

Ninety-one site visits were conducted on Heritage Preserves and 1 field trip conducted. 28 hours were dedicated to 3.5 acres of exotic vegetation control on 3 sites. On Heritage Preserves, 3.5 miles of firelanes disced and 4 miles of roads were scraped. 215 acres of understory herbicide treatment was conducted at Aiken Gopher Tortoise HP and 30 acres understory treated at Long Branch Bay HP.

Field agricultural activities included 374 acres annuals planted, 339 acres mowed, 395 acres disced, 1565 acres prescribe burned, 250 acres fertilized, 13 acres limed and 239 acres treated with herbicide. 15 miles of fire lane were disced, 246,075 linear feet of dike mowed, 2000 feet of dike re-topped, 5 miles of roads mowed, 18 miles of roads scraped and .8 mile of road re-furbished. 100 WMA signs were erected on 4.8 miles of boundary. Other signs erected during the month included 60 safety zone signs, 4 dove field signs, 30 HP boundary and 55 misc. signs. 2 gates were re-furbished and 2 new gates erected. 190 acres of understory herbicide treatment was conducted at Palachucola WMA.

Management recommendations were provided to 15 landowners, 154 nuisance wildlife investigations conducted (12 site visits) including 24 nuisance alligators. 15 man/days were spent on field studies and research and 43 days on data analysis. Other agencies were provided assistance on 17 occasions requiring 26.25 man/days. 120 environmental reviews were conducted. Slide presentations were given to 26 groups totaling 805 people. Waterlevel management required 103.5 man/days. Seven news releases were submitted. Surveys included 13 quail counts and 200 RCW clusters checked.

Regional Wildlife staff made 12 contacts with 10 different NGOs and Conservation Organizations.

FRESHWATER FISHERIES

Freshwater Fisheries Coordination and Administration (Chief's Office)

October

Staff participated as a Peer Coach at the National Conservation Leadership Institute.

Staff attended the Wildlife and Freshwater Fisheries Advisory Committee Meeting.

Staff meet with a representatives of the Corp of Engineers and SCDHEC concerning permit applications for reservoir habitat enhancement activities on Lakes Wylie and Wateree.

Staff participated with staff from the IT section to conduct interviews for a data base developer to continue work on the Freshwater Fisheries Section's data base applications.

Staff participated in a media event publicizing the stocking of redbreast sunfish into the Little Pee Dee River.

Staff conducted a conference call with the Section program coordinators to discuss project activities and administrative issues.

Staff attended a meeting the Columbia Fishway Cooperators to discuss the accomplishments of the 2011 fish passage season.

Staff participated in a call of the Natural Resource Trustee Council for the Lake Hartwell/Twelvemile Creek PCB settlement to discuss issues associated with the ongoing dam removal project on Twelvemile Creek.

Staff attended the SEAFWA meeting in Nashville and participated in meetings of the Fishery Resource Committee, SARP and the Recreational Boating and Fishing Foundation.

November

Staff participated in a media event publicizing the stocking of redbreast sunfish into the Edisto River.

Staff participated in a call of the Natural Resource Trustee Council for the Lake Hartwell/Twelvemile Creek PCB settlement to discuss issues associated with the ongoing dam removal project on Twelvemile Creek.

Staff participated in a meeting of the Santee Striped Bass Stakeholders to discuss the ongoing recovery of the Santee System striped bass population.

Staff participated in interview for temporary grant positions funded through the Santee Accord to conduct studies of habitat use and movements of sturgeon in the Santee system.

Staff participated in the meeting of the Atlantic States Marine Fisheries Commission in Boston.

Staff attended the Corp of Engineers/Santee Cooper/DNR partnering meeting in Monks Corner to discuss issues associate with the Santee Cooper Lake system.

Staff participated in an online meeting of an NCLI Peer Group.

Staff meet with the USFWS Ecological Services Staff in Charleston to discuss the potential for hydroacoustics surveys of the diadromous fish populations in the Santee Cooper system to be potentially funded by the Santee Accord.

Staff participated in a Region 1 staff meeting and the presentation of the Division's Employee of the Year award to Fisheries Regional Coordinator Dan Rankin.

Staff, by invitation, attended a stakeholder meeting with Anderson County to review the proposed development of a fishing event center on Lake Hartwell at the Green Pond access area.

Staff met with Duke Energy representatives to discuss issues associated with the development of the Lee Nuclear Station.

Staff participated, by invitation, in a meeting of the Appalachian LLC to discuss resource issues.

Staff attended a meeting of the General Assembly's Other Funds Committee.

Staff conducted a meeting of the Section's program coordinators to discuss project activities and administrative issues. The meeting was held at the Region 1 headquarters in Clemson and a field trip was made to Twelvemile Creek to observe the results of the completed removal of the Woodside I and II dams.

Region I

October

Finished demolition and rebuilding of the fishing pier at Russell ponds due to structure integrity to meet ADA standards. Also poured a concrete slab for easy access.

Conducted Standardized Trap netting on Lakes Thurmond and Greenwood to assess crappie populations.

Fished Standardized gill nets on Lake Thurmond to monitor survival and relative abundance of stocked striped and hybrid bass.

Conducted sampling on South Saluda River, with assistance from the stream team, to monitor post-conditions associated with stream habitat improvements.

Nine employees volunteered at the World of Energy for the National Hunting and Fishing Day event. Eight worked the fishing pier and one volunteered with the reptiles.

Assisted five pond owners with technical advice.

Continued ongoing creel surveys on Lakes Keowee and Greenwood.

Staff conducted fin clipping of brown trout at Walhalla Fish Hatchery.

Continued trout stocking in mountain streams on schedule.

Worked on graphs for upcoming annual progress report.

Planned habitat enhancement project with USFS on Moody Creek.

Continued conducting stream habitat surveys on Jocassee Gorges streams in conjunction with the SARP/EBTJV Grant - completed habitat assessment on Poplar Hollow and Laurel Branch.

Ran BVET analysis on Emory Creek, Willis Creek, Poplar Hollow Mill and Carrick Creek

Assisted state lakes maintenance crew by submitting soil samples to Clemson lab to determine liming needs on DNR state lakes.

Met with NRCS engineers and Greenville Soil and Water Conservation staff and Mark Hall to begin to develop a habitat enhancement prescription of the South Saluda River on DNR property.

November

Trap netting on Lakes Thurmond and Greenwood.

Set gill nets on Lakes Thurmond and Hartwell

Continued trout stocking in mountain streams on schedule, including successful stocking of backcountry areas on Chattooga and Chauga Rivers by helicopter.

Conducted standardized monitoring of trout populations in Lake Jocassee using gill nets. Also conducted supplemental netting to collect a sufficient number of blood samples to evaluate the performance of triploid brown trout stocked in the reservoir in Fall 2010.

Provided input to DNR Environmental Group on comments to FERC on the relicensing of the Keowee-Toxaway Hydro Project.

Attended an aquatics resource committee meeting in Mauldin on Keowee-Toxaway FERC relicensing.

Attended a Keowee-Toxaway FERC aquatics resource committee meeting in Mauldin.

Met with DNR research staff to discuss information needs to conserve native redeye bass populations in Region 1.

Continued BVET monitoring and collected water samples on Jocassee Gorges streams.

Erected sign posts at the newly renovated Calhoun Falls bank fishing area.

Hosted Fish Coordinators meeting at Region 1 Office. Included a tour of dam removal sites on Twelve Mile Creek.

Region II

October

Region 2 and other DNR fisheries personnel assisted Clemson University personnel with a stream survey of Big Black Creek, Chesterfield County.

Fisheries Biologist Robert Stroud assisted Region 1 Biologist Dan Rankin with a fish kill investigation at SCE&G's dewatered Neal Shoals Hydro Station on the Broad River, Union County, S.C.

Biologist Stroud and Fisheries Technician Jason Marsik investigated a shad/catfish die off at Lake Wateree determined to be from natural causes, i.e., a disease process, not pollution related.

Region 2 personnel initiated fall sampling of the Little Pee Dee River by boat electrofishing and the use of set hooks to collect resident species.

Fisheries Technician Wes Stewart participated in an in-service training day for DLEOs.

Region 2 personnel assisted Eastover staff with the collection of smallmouth bass from the Broad River.

Biologist Stroud represented Fisheries Region 2 in a Coordinator's conference call during the month.

Biologist Stroud identified sites for redbreast sunfish stockings on the Little Pee Dee River for Hatchery personnel.

Biologist Stroud assisted Hatchery personnel with stocking channel catfish in 3 ponds at the Draper WMA, York County.

Staff readied equipment for possible disaster relief response to possible tropical storms/hurricanes during the month.

Biologist Stroud responded to pond management inquiries from three private pond owners via telephone, email, mail, &/or fax response. In-house weed identifications/water quality tests were provided for one of these pond owners and management recommendations were provided.

Contact with NGOs: David Merryman – Catawba Riverkeeper, Dr. Bill Jarmin – PAWS, Douglas Cooke – Lake Wateree resident, Phillip Smith – NC resident fishing the Little Pee Dee River, Duncan Futrelle & C. Mazzone – constituents mailed 2011 SC Fish Consumption Advisory Booklets, Dara Park – Clemson University staff.

November

Region 2 personnel continued and completed fall sampling of the Little Pee Dee River by boat electrofishing, set hooks, and gill nets to collect resident species.

Biologist Stroud represented Fisheries Region 2 in a Coordinator's Meeting during the month.

Biologist Stroud assisted Hatchery personnel with stocking channel catfish in 3 ponds at the Worth Mountain WMA, York County.

Staff readied equipment for possible disaster relief response to possible tropical storms/hurricanes during the month.

Biologist Stroud responded to pond management inquiries from three private pond owners via telephone, email, mail, &/or fax response. No in-house weed identifications/ water quality tests were provided during the month.

Contact with NGOs: Dr. Bill Jarmin – PAWS, Dr. Doug Raynor – Wofford College biology professor, Robert Turner – Lynches River fisherman.

Region III

Reservoir Management

Annual crappie trap net sampling was begun in the upper portion of Lake Murray

Annual striped bass gill net sampling was conducted in Lake Murray

Stream Management

Fall electrofishing was conducted at four of five sites as part of the lower Broad River fish community study

A site visit with Lockhart Power Company to the Columbia fishway was held to discuss the fish passage operation at the Columbia hydro. Operation of the fishway and windows of operation to accommodate migratory fish were major topics of discussion.

Completed Edisto River Fall Centrarchid sampling despite near record low water levels.

Staff assisted the Research Section in field collecting of smallmouth bass from the lower Broad

A recon of access points on the Lower Saluda River was conducted in preparation for a proposed trout mortality and fish community study

Redbreast were collected for the Edisto River stocking evaluation study. This effort was very successful despite the low river level. Over 600 otoliths were removed to be examined for hatchery stock contribution from the 2010 stockings.

A total of 278,000 redbreast fingerling were harvested from Campbell Hatchery, marked with OTC and stocked at two locations in the Edisto River as part of the 2011 stocking evaluation study. Surplus fish were stocked outside of the study area.

Other

The first draft of the Lake Murray Management Plan update was circulated for review to Region 3 staff.
The 2011 Region 3 annual report was completed
Staff assisted Region 2 on one stream survey.
Routine maintenance and repairs on project boats and equipment was done.
Staff attended Aquatic Invasive Species meeting.
Staff responded to 23 inquiries regarding pond management and fish stocking activities
A meeting with the striped bass stakeholder was attended
Staff assisted with grass carp certification and redbreast harvest at the Campbell Hatchery
Preparations were made for the upcoming aerial trout stocking in the lower Saluda River

Region IV

Night electro-fishing assessment of juvenile striped bass, American shad, and white perch growth and abundance was conducted in lakes Marion and Moultrie.

Project personnel performed two striped bass electrofishing samples of the freshwater section of the Ashley River in coordination with the MRD mariculture section during October and November.

Project personnel assisted the Dennis Center Hatchery staff with the harvest of phase II striped bass fingerlings.

A presentation was given to the Conway Bass Masters Club regarding our spring Waccamaw River electrofishing survey. In addition, we tagged an additional 157 largemouth bass at the club's November 19th tournament weigh-in at Bucksport, which is part of an ongoing outreach effort to compare bass survival after release from summer and fall tournaments.

Personnel completed 5 stream surveys, and observed numerous other reference streams that were either dry or currently had too much water to sample. Temperature loggers were replaced or downloaded in Port Creek and Big Cypress Swamp.

Fish attractor work was conducted on Lakes Marion and Moultrie. Three more buoys were replaced and old PVC structures were re-anchored.

Project personnel participated in the Santee Cooper/DNR/ACOE partnership meeting as well as the Aquatic Plant Management Committee's meeting and all meetings leading up to it. Project personnel presented at the Santee Cooper Stakeholders meeting and addressed the South Carolina Outdoor Writers Association with a presentation on the state of the Santee Cooper Lakes.

The 25 year long Santee Cooper winter gillnet data set was re-worked to include previously omitted water temperature data so that the affect of this variable could be examined.

Annual report data analysis and write-up activities were pursued and the suggested revisions to the accepted North American Journal of Fisheries Management paper were made.

Falling reservoir water levels required visits to boat landings that have been normally used during winter gillnet season. Preparations for the December 1 start of gillnet season have begun.

Region IV Hub activities included attendance and participation in the November Charleston County Delegation Meeting to address questions about our 2012 County Game & Fish and Water Recreation Fund requests.

21 pond owners were assisted with pond management questions and issues.

Hatchery Coordination

Hatchery staff certified 11,971 grass carp as triploid and issued 8 permits for those fish to be sold statewide in October and 7,596 were certified and 5 permits were issued in November.

Hatchery staff participated in the monthly Freshwater Fisheries Coordinator Meeting via conference call in October and in November at the Clemson Office.

In October and November staff at the warm-water hatcheries harvested channel catfish, redbreast sunfish, threadfin shad, bluegill, redear sunfish, robust redhorse, phase II striped bass and smallmouth bass for stocking in public waters.

During the month of October, approximately 45,779 trout were released from the Walhalla State Fish Hatchery. Both brown and brook trout were spawned during the month and are currently incubating inside the hatchery building. In November 57,192 trout were stocked. Over 40,000 of that total were stocked via helicopter in the Chattooga and Chauga rivers in Oconee County.

During November, Walhalla hatchery staff's efforts were focused on inventorying raceways prior to the 2012 stocking season, caring for eggs and fry, and maintaining the facility as weather permitted.

Hatchery staff participated in interviews for an open Freshwater Fisheries Database Developer position.

Hatchery staff met with contracted engineers and the State Engineer to finalize plans for the Cohen Campbell renovation.

Outreach

Weekly trout stocking reports continue to be updated on the SCDNR website.

At Walhalla State Fish Hatchery four official tours were provided to 85 individuals in October and eight official tours were provided to a total of 353 individuals during November. This comprised both onsite and offsite speaking engagements. Visitation was high during the month as many visited the hatchery during the changing of the fall colors.

Cohen Campbell Hatchery, Dennis Wildlife Center, Cheraw hatchery, and Spring Stephens Hatchery all reported normal visitation.

State Lakes

Assisted in Grass Carp Certification at Campbell Hatchery on 3 occasions.

Assisted in harvest and distribution of Channel Catfish at Spring Stevens.

Assisted in harvest of Channel Catfish and Redbreast at Campbell Hatchery.

Assisted in harvest of Smallmouth Bass, Redbreast, Bluegill, Redear and Threadfin Shad at Cheraw Hatchery.

Remodeled existing fishing pier at Calhoun Falls bank fishing area. This included replacing floor boards, hand rails and floor structure. Also, a cement pad was poured for a handicap loading area.

Cut grass for final time this year at Starfort Pond, Lake Cherokee Dam, Jonesville Res., Dargan's Pond, Draper WMA, and Lake Brown.

Sprayed aquatic weeds in Lake Brown: Water Hyacinth.

Routine maintenance at all 18 State Lakes.

Diadromous Fishes

Efforts these months included: Weekly downloading of acoustic receivers to track sturgeon movements on the Santee, Waccamaw, Pee Dee, Edisto, Combahee, and Savannah Rivers, electro-fishing for juvenile shad in the Santee-Cooper Basin, Edisto, Pee Dee, and Savannah Rivers, coordinating with Bears Bluff National Fish Hatchery (BBNFH) concerning continuing Edisto River shad stock enhancement work, installing stop logs in the St. Stephen fish lift, and monitoring elver ingress at St. Stephen Dam. South Carolina's shad sustainability plan was approved by ASMFC's shad and river herring board. Public meetings have been scheduled to inform commercial and recreational fishermen. Interviews were conducted to hire staff for an upcoming sturgeon project, funded by the Santee Accord, on the Santee Cooper Lakes. Staff assisted in preparation for a NMFS ESA report and the diadromous program annual report. Comments/data were submitted to ASMFC concerning the petition to list the American eel as endangered. Routine maintenance was also performed on vehicles and boats.

Multi-State Sturgeon Research

Coordination between cooperating states (NC & GA) continue. Field efforts continue weekly.

Juvenile American shad monitoring

Because the Atlantic States Marine Fisheries Commission (ASMFC) mandated cooperating states prove river specific fisheries for American shad are sustainable or close those fisheries, SCDNR began sampling for juvenile shad to develop abundance indices. Collection sites have been identified and this month sampling occurred in the Pee Dee River (Cheraw, SC to Society Hill), in the Edisto River (Martin's Landing to Jacksonboro, SC), and the Savannah River (Purrysburg Landing to Millstone Landing). Weekly sampling continued with moderate catches. This sampling will continue through November.

Meetings and Outreach

Personnel participated in numerous conference calls and meetings concerning ASMFC shad and river herring Amendment 3, NMFS protected resources, and the Santee Accord. Staff attended the National Conservation Leadership Institute in Shepherdstown, WV. A Presentation was given in Orangeburg, SC to the Friends of the Edisto River highlighting shad and sturgeon studies. Another presentation was given to members of Santee Cooper and USACOE highlighting coastal and lake sturgeon studies. Personnel talked to Bishop England high school students about program studies. Staff also met with Lockhart Power, USFWS, and Kleinschmidt in Columbia, SC to discuss the Columbia Fishway. Personnel also met with the USFWS, SCE&G, and Duke Energy regularly.

Research

Eastover staff participated in four days of outreach. These included a two day workshop on research and lab techniques using otoliths for Central Carolina Tech students, a presentation to students at Forest Lake Elementary School on lake and pond ecosystems, and training of a middle school student in the estimation of fish ages using otoliths. Also, a Clemson staff member presented a lecture at Clemson University reviewing the history and current status of PCB contamination and dam removal in Twelvemile Creek.

We sampled for fishes and invertebrates and conducted geomorphological surveys of Twelvemile and Three and Twenty Creek stations in a continuing effort to document the changes in biological assemblage structure and channel dimensions due to dam removal.

A staff member sorted, identified, and curated invertebrates from the SC Stream Assessment project and entered data. Staff completed the GIS extraction of land use data from SC Stream Assessment sites in the Pee Dee, ACE, and Santee basins.

Staff assisted Region I and II staff with fisheries collections.

On 4 November, staff met with personnel from the Environmental Section to investigate the release of sediment from Neal Shoals Dam. Tons of sediment, primarily sand, was flushed from the reservoir covering bottom substrates in the river channel directly below the dam with up to several feet of sediment. Later, staff conducted a fisheries survey at Neal Shoals on the Broad River as requested by the Environmental Section, which will also serve as a preliminary sample in the Broad River Sediment Management Study. Eighteen species of fishes were collected. Sediment samples were collected and given to the Geology section for analysis.

A staff member attended the SEAFWA Annual Conference in Nashville, TN and participated as a member of the Southeast Aquatic Resource Partnership Science and Data Committee meeting at the same venue.

We attended a meeting of the Aquatic Resources Committee as part of the Keowee-Toxaway FERC relicensing process, reviewed Duke Power Co. documents, and provided comments to Environmental staff developing DNR's position on the Proposed Study Plans.

We analyzed stream invertebrate community metrics to develop biological response models to habitat and landscape factors in the Savannah and Saluda River basins as part of Clemson University collaboration on a U.S. EPA-funded grant.

We reviewed environmental planning documents for the Haile Gold Mine and the VC Summer nuclear facility at the request of the Environmental Section and provided comments on proposed biological sampling. Staff conducted follow-up searches (one day) for mollusks in the upper Little Lynches River (in reference to the Haile Gold Mine) with USFWS personnel. Only *Corbicula* sp. was found in a tributary stream; no native species of snails or mussels were located in any of 3 locations on 2 tributaries that were sampled.

Staff met with Land and Water Division staff to initiate joint efforts on the Broad River Sediment Study.

A meeting was held with Region I Coordinator to discuss new data on hybridization in redeye bass populations. This native species has been imperiled by the introduction of non-native Alabama spotted bass. The latest data shows a continued decline in redeye bass in reservoir environments, and new confirmations of hybrids in some tributary populations. Current issues impacting redeye bass in South Carolina, future research and survey needs, and strategies for filling those needs were discussed. An action plan is being laid out for section review.

A staff member, along with other SCDNR staff, met with U. S. Fish and Wildlife Service to discuss a proposed evaluation of abundance and growth of anadromous species in lakes Marion and Moultrie.

A staff member completed analysis of a model to evaluate the combined contributions of removal by *Corbicula* and hydrologic export to the loss rate of phytoplankton from Upper Lake Marion under a range of assumptions about phytoplankton concentrations in the in-flowing Santee River. Removal by *Corbicula* was estimated using abundances and size distributions from our 2009 quantitative samples and size-specific filtering rates derived from published experimental studies with *Corbicula* in North Carolina. The predicted loss of phytoplankton due to *Corbicula* filtering and hydrologic export was similar in magnitude to the potential growth rate of phytoplankton, indicating these two factors may suppress development of spring phytoplankton populations and may help to explain the surprisingly low, spring phytoplankton populations in Upper Lake Marion. The spring phytoplankton population is important as the base of the food chain supporting larval and juvenile fishes.

A staff member assisted South Carolina Parks, Recreation and Tourism by providing summary of lake water temperature records in the Low Country. They had been asked to provide the information to a film company to judge feasibility of filming summer water activities in December.

During October and November eel traps at Wateree and Columbia dams were checked on a total of nine dates and backpack electrofishing was conducted once at each site during November. No eels were captured during either month. Maintenance was performed on ramps at each site due to damage caused by high flows and loss of prime due to low flows. Seven eels have been collected during 2011, but none have been collected since 29 June. On 29 November an annual meeting was scheduled with USFWS and Duke Energy to inspect the ramp traps.

Work continued on the Thurmond striped bass telemetry project. During October 8 days were utilized to manually search the entire lake for tagged fish and we collected our last water quality profile of the year. During November 9 days were spent downloading receivers and replacing receiver batteries. Location data collected from receivers were processed and we began summarizing the data collected during 2010 and 2011.

We completed our smallmouth bass collections from the Broad River to determine the contribution of hatchery-stocked fish to the 2010 year class. During October and November 244 smallmouth bass were collected from three river sections on 4 dates with boat electrofishing and angling gear.

Work continued on our project to describe the first year growth and diet of several key fish species in the Santee-Cooper Lakes. Night electrofishing was conducted at two Lake Marion sites on 12 October. Data collected during summer 2011 was entered into a database and analyzed for inclusion in annual reports.

A species of leech, *Macrobdella sestertia*, was identified from several Savannah River basin tributaries in Edgefield County. It had been previously found only in Maine and Massachusetts and had been collected infrequently. A manuscript will be prepared to publish these significant distribution records.

A staff member worked on proposals for invertebrate project funding.

Revisions were made to the submitted manuscript "Retention and Physiological Effects of Surgically Implanted Telemetry Transmitters in Blue Catfish". Revisions will be completed and resubmitted to the North American Journal of Fisheries Management by early December.

A peer-reviewed paper was published: Taylor, B. E., F. W. Rich, M. J. Brooks, A. I. Ivester, and C. O. Clement. 2011. Late Pleistocene and Holocene vegetation changes in the Sandhills, Fort Jackson, South Carolina. *Southeastern Geology* 47: 147-163.

Staff prepared Freshwater Fishery Section and State Wildlife Grant annual report of activities.

Law Enforcement

DIVISION SUMMARY – COL ALVIN TAYLOR

Officers issued 779 summons and 1,655 warnings with 829 cases clearing court with fines totaling \$127,032.75 being assessed. A total of 2022.5 hours were spent on boating patrols resulting in 3,424 boats being checked. Officers spent 150.5 hours on Homeland Security, 612 hours on litter patrols and a total of 608.5 hours were spent patrolling Heritage Trust Preserve properties. Officers also spent 5,357 hours on night patrols. A total of 209 JEA hours were worked.

Region 1 - MAJ Mark Carey

Officers issued 212 summons and 190 warnings with 200 cases clearing court with fines totaling \$36,157.00 being assessed. Officers checked 449 fishermen and a total of 71 hours were spent on boating patrols resulting in 69 boaters checked. Officers gave a total of 53 public presentations. Officers spent 67 hours on Homeland Security, 221 hours on litter patrols. A total of 129 hours were spent patrolling Heritage Trust Preserve properties. A total of 137 hours were spent patrolling Jocassee Gorges resulting in 3 summons and 7 warnings being issued. Officers also spent 996 hours on night patrols. During the month there were 2 boating accidents, 2 drownings, 1 treestand fatality and 1 hunting incident reported.

Captain's Spotlight

- CPL Jordan and 1st SGT Staton charged 3 subjects for night hunting deer.
- All officers in the unit 1D were very active locating deer bait which resulted in 15 hunting deer over bait cases.

Unit 1A (Oconee / Pickens) 1st SGT D.J. Riley

Officers issued 35 summons and 16 warnings with 17 cases cleared court with fines totaling \$3,240.00 being assessed.

- SGT Busha and CPL Martin each made 1 case and SGT Winegard made 2 cases for deer hunting over bait this month.
- SGT Hedden made a case for baiting bears.
- CPL Brooking made a case on Lake Keowee for taking game fish with a cast net.
- CPL Barnett came upon 2 subjects on USFS property that had drove behind a closed gate, subjects were panning gold and digging ginseng. Subjects were in possession of a loaded pistol and 2 rifles. Subjects were also charged with possession of meth with intent to distribute.

Unit 1 B (Greenville / Spartanburg) 1st SGT Amy Staton

Officers issued 48 summons and 41 warnings with 29 cases cleared court with fines totaling \$4,392.00 being assessed.

- CPL Anders and CPL Jordan assisted Greenville City PD with a manhunt for a suspect that shot at a Greenville City Police Officer.

Unit 1C (Cherokee / Union) 1st SGT John McCraw

Officers issued 49 summons and 39 warnings with 48 cases cleared court with fines totaling \$9,020.00 being assessed.

- Unit C officers made 7 cases for hunting deer out of season, 12 cases for license violations, 6 cases for hunting deer over bait, and 8 cases for trespassing to hunt.

Unit 1D (Greenwood / Laurens) 1st SGT Kristie Lumley

Officers issued 55 summons and 56 warnings with 50 cases cleared court with fines totaling \$7,770.00 being assessed.

- 1st SGT Lumley, CPL's Welch and Taylor apprehended 4 separate subjects in 4 different areas hunting out of season with rifles during muzzleloader season.
- CPL's Maxwell and Anders set up the deer decoy, ultimately making 2 cases for public road hunting. CPL Vaughn also made a public road hunting case in Greenwood County.
- SGT Vaughn, CPL's Welch and Maxwell made a total of 3 shining cases.
- LT Landrum, CPL Maxwell, and DLEO Blackmon assisted with the mobility impaired hunt in Laurens County with 89 hunters participating.

Unit 1E (Abbeville / Anderson) 1st SGT Rhett Barwick

Officers issued 17 summons and 20 warnings with 18 cases cleared court with fines totaling \$3,060 being assessed.

- SGT Owens, PFC Ginn, and CPL Bense worked a tree stand fatality in Abbeville County where a subject fell from a lock on stand and was located after he did not return to truck to meet hunting party.
- SGT Owens along with PFC Ginn worked a hunting incident where a subject was located deceased near the location he was hunting all indications it appeared to be medical conditions pending Coroners report in Anderson County.
- Unit Officers made 3 deer hunting in a baited area, 2 untagged doe's and 1 hunting out of season cases for the month.

Unit 1F (Edgefield / McCormick) 1st SGT Ron Talbert

Officers issued 8 summons and 18 warnings with 38 cases cleared court with fines totaling \$8,675.00 being assessed.

- PFC's Baker and Cutter assisted with recovering the body of a victim that drowned in Stevens Creek.
- PFC's Baker and Cutter made 2 cases for untagged deer. 1st SGT Talbert and PFC Baker made 2 cases for hunting deer over bait.

Region 2 - MAJ William Poole

Officers issued 127 summons and 209 warnings with 134 cases clearing court with fines of \$18,568.00 being assessed. Officers checked 2,250 hunters and 729 fishermen, and a total of 151 hours were spent on boating patrols resulting in 233 boats inspected. Officers spent 10 hours on Homeland Security and 144 hours on litter patrols, and a total of 311.5 hours were spent patrolling Heritage Trust Preserve properties. Officers gave a total of 28 public presentations. Officers also spent 1,050.5 hours on night patrols. There were three hunting accidents.

Captain's Spotlight

- Unit 2A Officers made a total of 23 deer bait cases this month.
- Fairfield County spent many hours on foot checking for bait, this effort resulted in 16 bait cases being made.
- SGT Rick Stevens made 1 Renegade Hunter Act charge.

Unit 2A (Chester, Lancaster, York) 1st SGT Todd Campbell

Officers issued 50 summons and 37 warnings with 39 cases clearing court with fines totaling \$5,190.00 being assessed.

- Unit 2A Officers investigated 2 hunting incidents this month, 1 was a missing hunter that was located deceased after a 2 day search.
- CPL Shawn Hannah caught 2 subjects illegally mining on private property in Lancaster County without the owner's permission. The subjects were from Columbia and had researched the area and found this to be a good spot to mine and had been coming up for several weeks clearing land and mining, causing thousands of dollars in damage to the land owners property.

Unit 2B (Fairfield, Kershaw, Lee) 1st SGT Joey Cobb

Officers issued 46 summons and 44 warnings with 33 cases clearing court with fines totaling \$4,011.00 being assessed.

- CPL Branham, SGT Stevens, and 1st SGT Cobb inspected a new seafood house in Kershaw County where they found the owner to have 14 violations. Out of the 14 violations, 2 cases were written for no Bill of Laden (shrimp) and no Bill of Laden (Blue Crab). Two warning tickets were issued with other 12 violations listed on them.

Unit 2C (Chesterfield, Dillon, Marlboro) 1st SGT John Hillian

Officers issued 7 summons and 15 warnings with 6 cases clearing court with fines totaling \$110.00 being assessed.

- CPL Walters made 2 shinning cases while working night patrol.
- CPL Walters assisted by Officer McCurdy made 1 untagged deer case while checking a deer processor in Dillon.
- SGT Caldwell made 1 case for trespassing to hunt.

Unit 2D (Darlington, Florence) 1st SGT Benjy Byers

Officers issued 13 summons and 28 warnings with 34 cases clearing court with fines totaling \$3,937.00 being assessed.

- SGT Stevens and PFC Driggers made 2 shining cases this month.

Unit 2E (Marion, Williamsburg) 1st SGT Bill Huggins

Officers issued 11 summons and 85 warnings with 22 cases clearing court with fines totaling \$5,321.00 being assessed.

- CPL Dale Tanner made an untagged antlerless deer case
- Unit E Officers spent a significant amount of time working baited areas on WMA with no results.

Region 3 - CPT Harvin Brock

Officers issued 104 summons and 145 warnings with 139 cases clearing court with fines of \$ 25,135.75 being assessed. A total of 450.5 hours were spent on boating patrols resulting in 511 boaters checked. Officers spent 31.5 hours on Homeland Security 145 hours on litter patrols and a total of 30 hours were spent patrolling Heritage Trust Preserve properties. Officers gave a total of 45 public presentations. Officers also spent 2,250 hours on night patrols. During the month there were 59 hunting accidents and 59 boating accident hours investigated.

Captain's Spotlight

- Three Night Hunting Deer charges were made by SGT's Hiers, Herndon and CPL's Collins and Lambert. After receiving a call from an informant, CPL Collins coordinated with the others and with assistance from the airplane a vehicle was observed shining and finally stopped. One of the subjects fled on foot, but after gathering statements warrants were retained for the subject at large. Charges and warrants are still pending at this time.
- SGT Bannister made 2 night hunting deer, 2 hunting from a public road and 2 hunting deer within 300 yards of a residence. The deer was still alive when Bannister made the night hunting stop.

- SGT Wheeler made a Night Hunting case after receiving information about subjects shinning near the Maysville area.
- PFC Jervey made a Night Hunting case while working with SGT Wheeler.

Unit 3A (Lexington/Saluda) 1st SGT Ken Simmons

Officers issued summons 26 and 22 warnings with 67 cases clearing court with fines totaling \$14,757.50 being assessed.

- Unit- A Officers gave 13 Public Presentations utilizing both the hunting and fishing simulators at schools, churches, and civic groups throughout Lexington and Saluda counties.
- SGT's DeRienzo, Robinson, Derrick and CPL Parrish assisted Newberry County officers with two incidents on Lake Murray resulting in two fatalities.
- SGT DeRienzo worked a boating incident in Lexington County and assisted with another in Newberry County. Both incidents occurred on Lake Murray.
- After receiving a complaint of road hunting, SGT's Smith and Derrick worked the decoy deer several afternoons. Their efforts resulted in the apprehension of a mother and her 12 year old son shooting the decoy.
- SGT Smith received a complaint of illegal deer dumping in a creek. After obtaining a possible tag number from the complainant he located the suspects and questioned them. They both wrote statements admitting their guilt and were each charged for littering.
- CPL Parrish assisted Region 1 with bear season in Pickens County.
- CPL Parrish and SGT DeRienzo responded to a call on Bear Island in Lake Murray about minors with alcohol, marijuana, and operating a PWC after sunset. Their efforts resulted in 15 contacts for Minor in Possession of Alcohol, Simple Possession of Marijuana, and Boating Violations.
- SGT Robinson assisted the Lexington County Sheriff's Department with helicopter rescue training on Lake Murray.

Unit 3B (Newberry/Richland) 1st SGT Dudley Britt

Officers issued 24 summons and 30 warnings with 12 cases clearing court with fines totaling \$1067.00 being assessed.

- SGT Bickley and CPL Bassard made 2 shining cases as well as an untagged doe made by Bassard.
- SGT Roosen made a shining case as well as a closed season Bobcat case.
- Newberry worked and assisted with 4 boating accidents with 2 deaths and 1 personal injury.
- Newberry officers worked youth deer hunt with 24 hunters. The group harvested 17 deer.
- Officers attended firearms requalification at Criminal Justice Academy in Columbia.

Unit 3C (Aiken/Allendale/Barnwell) 1st SGT John Bedingfield

Officers issued 10 summons and 41 warnings with 16 cases clearing court with fines totaling \$3151.25 being assessed.

- While working a trespassing complaint, CPL Terry and CPL Tyler made an illegal possession of an antlerless deer.
- While looking for dove bait SSGT Bedingfield, CPL Tyler and CPL Terry located 15 marijuana plants and a trailer stolen from Indiana.
- CPL Terry conducted a boat titling investigation that resulted in multiple cases and warnings.
- CPL Bowers and CPL McDaniel made 3 cases on Cracker neck WMA for undersized bucks.
- 1st SGT Bedingfield assisted the Barnwell County Sheriff's Department and the SCDNR dive team on a body and evidence recovery from a local pond.
- After receiving a complaint from a local pet owner CPL McDaniel has initiated an investigation into illegally poisoning animals.
- CPL McDaniel set up a display at sears in Aiken for a public safety day along with ACSO, Aiken Fire and others. The unit officers assisted with the 2 day event.

Unit 3D (Bamberg/ Calhoun/ Orangeburg) 1st SGT Farrell Pulaski

Officers issued 20 summons and 25 warnings with 24 cases clearing court with fines totaling \$3940.00 being assessed.

- While working night deer patrol a suspicious vehicle was stopped by SGT.s Hiers, Lee and 1st SGT. Pulaski. The subjects inside the truck were smoking Marijuana with a small child inside. The driver was charged.
- CPL Lambert successfully prosecuted two subjects for hunting Alligator out of Season.
- The Unit is still actively working other Trespassing and Night hunting Complaints.

Unit 3E (Clarendon/Sumter) 1st SGT Gene Morris

Officers issued 24 summons and 27 warnings with 20 cases clearing court with fines totaling \$2,220.00 being assessed.

- Unit officers also went to Fall In-Service this month and attend a Region Meeting to be sized for new vest.
- 1st SGT Gene Morris made a boating in a closed area case the last day of alligator season. Subjects were gator hunting on the Federal Refuge. One summons was issued and two warnings.
- SGT Bubba Morris made a Trespassing to hunt case after receiving a complainant in Clarendon County.

- CO J. Smith assisted by 1st SGT G. Morris made Hunting from a Public Road case near Rowland Subdivision. Subject had killed a 10 point. Subject gave a statement that he did not have permission and decided to sit on the edge of the highway with a high powered rifle.
- CO A. Smith while working with 1st SGT G. Morris on the lake made an illegal trotline case.
- CO A. Smith also made a littering case (Dumping Deer Carcasses) off of the side of the highway. Subject was dumping 5 deer that were almost whole. One had not been cleaned at all. She made hunting without a big game permit after checking hunters' deer hunting with dogs. This club had several complaints about possible trespassing.
- SGT Wheeler made 2 cases for trespassing to hunt after receiving a complainant in the Sumter area.
- SGT Wheeler also did a public presentation at the Sumter Wal-mart.
- SGT Gibson made 2 cases for undersize largemouth while working the Packs Landing Area.
- PFC Jervey made an undersized largemouth case while working Packs and made a WMA case for hunting on a closed day while working WMA Property. He made 2 cases for hunting doves out of season after receiving a complaint in the Sumter area.

Region 4 – MAJ Chisolm Frampton

Officers issued 330 summons and 1,109 warnings with 334 cases clearing court with fines of \$43,432.00 being assessed. Officers checked 2,480 hunters and 4,635 fishermen with a total of 1,291 hours being spent on boating patrols resulting in 2,600 boaters checked. Officers spent 42 hours on Homeland Security and 102 hours on litter patrols. A total of 138 hours were spent patrolling Heritage Trust Preserve properties. A total of 1,060.50 hours were spent on night patrols. Officers gave a total of 44 public presentations. Officers also spent 209 hours on JEA patrols. During the month there were 27 hunting accident investigation hours and 32 boating accident investigation hours conducted.

Captain's Spotlight

- SGT Pop and PFC Beacham caught a Florida dive boat with 79lbs. over the limit of Gag Grouper and 2 Undersize Red Grouper. The subjects paid \$534.00 in restitution plus fines. SGT Pop and PFC Beacham worked this case under cover by observing the docks throughout the night because the officers believed the subjects were off loading illegal fish under the cover of night.
- CPL Brock caught 2 subjects in possession of 33 Black Sea Bass out of season.
- 1st SGT Thomas and CPL Jones caught a subject trawling for shrimp in closed waters. The subject was a mile and a half into closed waters and cut the net when approached by officers. After a brief chase the subject was apprehended and charged \$10,490.00. The net was found and seized as well.

Unit 4A (Horry) 1st SGT Joe Ard

Officers issued 50 summons and 149 warnings with 48 cases clearing court with fines totaling \$4,502.50 being assessed.

- PFC Robinson attended the South Eastern Officer of the Year banquet in Nashville.
- CPL Floyd, PFC Robinson and DLEO Miller caught 3 people for night deer hunting for this month.
- SGT Prosser and DLEO Miller caught 2 people for shining this month.
- CPL Hutson, PFC Robinson and 1st SGT Ard gave a TOMO presentation at Homewood Elementary School.
- PFC Robinson and CPL Chanaca worked a TOMO presentation at the Conway Tractor Supply Co.
- PFC Pardue made 2 cases for WMA abuse on mud bogging with vehicles.
- PFC Robinson caught 2 individuals for possession of game fish tackle while non-game fishing and gave several warnings for other non-game fish violations.
- CPL Chanaca gave a safety presentation at Sears for Safety Week.
- All unit officers completed fall in-service.

Unit 4B (Georgetown) 1st SGT Ryan Williams

Officers issued 59 summons and 160 warnings with 41 cases clearing court with fines totaling \$5,162.50 being assessed.

- 1st SGT Williams and CPL Capps caught 7 renegade dog hunters running dogs on another person's land and actively hunting the property. 2 subjects fled into the woods and were later captured.
- 1st SGT Williams, CPL's Capps and Kaminskis caught 2 subjects shining deer and as they fled the scene they threw 2 beer cans out the window before they were stopped.
- PFC Beacham has started working Commercial fishing vessels alone and was able to document and make a commercial charge.

Unit 4C (Charleston North/Berkeley) 1st SGT Angus MacBride

Officers issued 98 summons and 397 warnings with 130 cases clearing court with fines totaling \$17,662.00 being assessed.

- CPL's Crawford and Chavez assisted DLEO Ron Russell with a make a wish style gator hunt for 2 terminally ill children. The hunt was filmed by WCIV TV 4.
- After a complaint from local fishermen, SGT Monnet and CPL Crawford caught 4 individuals running unlawful trotlines in Lake Moultrie. 3 citations were issued and 43 warnings were issued to the offenders.

- CPL Duncan made 2 separate hunting over bait cases on WMA property this month.
- 1st SGT MacBride and PFC Gilmore filmed an alligator hunting story for a local television station.
- SGT's Pop, Monnet, CPL's McClellan and Crawford patrolled region 4 waters boarding several offshore shrimp trawlers, measuring net lengths and TED/BRD requirements.
- PFC Gilmore provided security/ safety patrol for the Swim Around Charleston event, pulling one swimmer to safety.
- SGT Monnet provided 93 hours of Division wide training.

Unit 4D (Charleston South/Dorchester) 1st SGT Lee Ellis

Officers issued 46 summons and 195 warnings with 51 cases clearing court with fines totaling \$5,615.00 being assessed.

- While working commercial crabbing complaints CPL Whaley issued 2 summons and 2 warnings to a commercial crabber for possession of 13 whole stone crabs and several boating violations.
- CPL Whaley made 1 case for trespassing to hunt on Wadmalaw Island.
- CPL Ladue made 2 cases for Renegade Hunter Act violations this month.
- CPL Ladue assisted SLED with a security detail for the Premier of Ontario Province in Canada and his family while staying at Kiawah Island.
- SGT Gantt and CPL Ladue worked a SAR case on the North Edisto for an overdue boater. The boat was located and 3 children ages 3, 7, and 9 were taken onto the DNR vessel and escorted back to the landing. The boat operator was issued a summons for insufficient PFD's due to one child was wearing an adult XL PFD.
- SGT Kinsey issued 2 citations for Renegade Hunter Act violations this month.
- SGT Kinsey dove for evidence in Barnwell County in reference to a suspicious death, the subject was found floating at the ponds spillway.
- SGT's Kinsey and Smoak assisted with security for the Swim Around Charleston Event.
- SGT's Garner and Shelton assisted with security for the Dragon Boat Races on the Ashley River.
- SGT Gantt completed 2 hunting accident investigations this month with one resulting in 1 case of criminal negligent use of a firearm charge being filed.
- SGT Shelton while patrolling the water ways within his unit area located 1 subject with 3 undersized redfish and 1 subject with 2 undersized flounder in possession while gigging.
- SGT Richardson made 1 case for shrimp baiting without a permit on the North Edisto.
- SGT Manning made 3 cases for no resident freshwater license and 2 cases for no resident saltwater fishing license.
- SGT Shelton made 3 cases for no resident saltwater fishing license and 3 cases for no navigation lights after sunset.
- SGT Shelton made 1 case with a crabber for possession of undersize blue crabs.
- Unit officers worked TOMO events at Mason's Prep School, Ashley Hall School, and Charleston Day School.
- CPL Brown assisted with the 2 day Wounded Warrior Hunt this month.
- SGT Smoak assisted Unit C with transporting a prisoner from Columbia to Berkeley County Detention Center who was wanted on a DNR warrant.

Unit 4E (Beaufort/Colleton) 1st SGT Michael Paul Thomas

Officers issued 43 summons and 145 warnings with 34 cases clearing with fines totaling \$5,295.00 being assessed.

- CPL Brock caught a subject in Broad Creek, on Hilton Head with 18 undersize trout, 5 undersize flounder, and undersize crabs that had all been caught in a cast net. The subject was charged for the fish violations and a running light violation.
- SGT's Smith, Long and CPL Brock assisted in the apprehension of 2 subjects who stole a boat and ran it up onto the hill in Beaufort County. The subjects were followed by the Coast Guard helicopter and then the Bloodhound team from BCSO. The subjects had stolen several other items as well.
- CPL Jones made an under size Striper case in the Combahee River.
- SGT Smith and CPL Henderson caught 2 subjects with over size Spot tail bass in Beaufort. Officers then went to a local restaurant and conducted a buy/bust operation. The owner of the restaurant bought the game fish for \$10.00.

Unit 4F (Hampton/Jasper) 1st SGT Michael Paul Thomas

Officers issued 34 summons and 63 warnings with 30 cases clearing with fines totaling \$5,195.00 being assessed.

- CPL's Pope and Wallace found a lost hunter on the Savannah National Wildlife Refuge.
- CPL Wallace caught a subject that ran from JCSO as they were attempting warrant service. CPLs Pope and Priester and LT Thames also assisted with the manhunt.
- CPLs Priester and Wallace assisted with the apprehension and recovery of a stolen boat. The subjects beached the boat and fled on foot. They were later apprehended by the BCSO Bloodhound team.
- CPL Davis caught a subject during alligator season that had not tagged his alligator and also did not have a hunting license.
- CPL's Priester and Davis watched a subject attempt to hide 6 Spot tail Bass from them while they were checking other fishermen. The subject was caught with 6 Spot tail; 4 of which were under size.

- PFC Davis and Godowns caught several hog hunters on Hamilton Ridge WMA with license violations and with marijuana in their possession. Upon further inspection of their vehicle PFC Godowns found that the subjects had been ripping WMA signs off of trees around the property. The subjects were issued 6 summons and numerous warnings for the violations.

Education – LT Billy Downer

Officers issued 0 summons and 0 warnings with 8 cases clearing court with \$1,220.00 in fines assessed. A total of 48 presentations were given to the public.

- 1,739 students were certified in 43 Hunter Education classes; 356 students were certified in Hunter Education Internet classes; 240 CD-ROMs were mailed and a total of 126 students were certified in Hunter Education CD-ROM classes; and 89 workbooks were mailed and a total of 8 students were certified by workbook.
- 156 students were certified in 6 Boater Education classes; 17 students were certified in Boater Education Internet classes; 55 students were certified in Boater Education Video classes.
- There were 1,868 shooters at the Pickens Range and 1,094 shooters at the Spartanburg Range.

Investigations - LT Gary Sullivan

Officers issued 6 summons and 2 warnings with 14 cases clearing court with \$2,520.00 in fines assessed. A total of 11 boats were inspected. A total of 59 boating hours were accrued this month. There were 4 boating fatalities this month. There were 9 boating incident/accident reports submitted and processed. There were 25 maintenance requests received. There was 1 regulatory marker investigation request submitted and processed. There were 19 Marine Event Permits processed and 3 dive assignments completed.

- 1 boat and 2 motors were recovered valued at \$1,725.00

Special Detail/Training – LT Robert McCullough

- **Sales and Equipment buy back:** \$1,000.00
- **OGT Activity:** \$00.00 payouts / Balance \$24,000.00
- **Property Watch Activity:** 13 signed up for program \$466.00 in sign sales
- **Media/Special Operations:** Media call on Lake Murray boating fatality in Newberry Co. Also media call on missing person in Newberry County, the subject was found deceased in the boat.
- **Training:** Completed in-service training in Regions 3 and 4 along with Investigations and Education. Worked on annual certification for DNR Officers at the CJA.

Aviation - Pilots Bucky Harris, Owen Barker

- 17 flights resulting in 66.3 flight hours
- 51.3 law enforcement flight hours
- 10.9 biology flight hours
- 4.1 SAR flight hours

Homeland Security/EMD/Supply– SSGT Rick Dye

- Attended the Saluda Hydro Table Top Exercise
- Attended the JTTF meeting
- Attended Parr reservoir Table Top Exercise
- Attended Lake Secession TTX,
- Attended Catawba Nuclear Initial Planning conference
- Worked with Gator Hawk and had each Region/Officer fitted for a new body armor

Communications - Vandy Waller

- Repaired communications equipment as needed. Repaired / reprogrammed 1 wt's, 12 mobile radios, 4 boat radios, 10 base stations, 0 repeaters, 0 phone line tickets to Radio Room, 2 canopy sites. 0 Console problems.
- Traveled to Dennis Center to reprogram a new modem that TDS Phone Company installed and did not work for the Georgetown radio link.
- Attended Region 3 meeting and were fitted for vest.
- Used the new Auto Tune software to calibrate 12 mobiles and Wt's.
- Working on an interference problem for Little Mountain and Santee repeater with digital interference from out of town.
- Continuing the testing and upgrading of the six 4.9 canopy dish's at 4 tower sites and have them working in test mode to check and set levels.

- CM Waller and SGT Dukes transferred some radios and completed the TID process and delivered old radios for disposal.

Law Enforcement

DIVISION SUMMARY – COL ALVIN TAYLOR

Officers issued 874 summons and 1,843 warnings with 644 cases clearing court with fines totaling \$104,852.63 being assessed. A total of 2,782 hours were spent on boating patrols resulting in 4,509 boats being checked. Officers spent 230.5 hours on Homeland Security, 535 hours on litter patrols and a total of 467 hours were spent patrolling Heritage Trust Preserve properties. Officers also spent 3,846.5 hours on night patrols. A total of 53 JEA hours were worked.

Region 1 – CPT Jamie Landrum

Officers issued 198 summons and 376 warnings with 181 cases clearing court with fines totaling \$38,096.50 being assessed. Officers checked 661 fishermen, 2286 hunters checked and a total of 359 hours were spent on boating patrols resulting in 509 boaters checked. Officers gave a total of 37 public presentations. Officers spent 91 hours on Homeland Security, 207 hours on litter patrols. A total of 33 hours were spent patrolling Heritage Trust Preserve properties. A total of 73 hours were spent patrolling Jocassee Gorges resulting in 8 summonses and 2 warnings being issued. Officers also spent 866 hours on night patrols. During the month there was 1 treestand fatality and 1 hunting incident reported.

Captain's Spotlight

- SGT Adams, Officer's Smith and Miller caught 2 subjects hunting waterfowl over bait in Union County.
- CPL's Welch and Maxwell made 3 road hunting and 2 shining cases. In one of the incidents a 14 year old and 17 year old shot a resident's pet deer displaying an orange collar.

Unit 1A (Oconee / Pickens) 1st SGT D.J. Riley

Officers issued 34 summons and 29 warnings with 29 cases cleared court with fines totaling \$15,497.00 being assessed.

- SGT Busha and CPL Martin while on night patrol made 2 cases for Night Deer hunting.
- 1st SGT Riley and CPL Martin each made cases for hunting deer over bait.
- SGT Hedden caught 2 subjects killing a deer on State Park property.
- CPL's Martin, Brooking and Barnett each made cases for illegal possession of antlerless deer.

Unit 1 B (Greenville / Spartanburg) 1st SGT Amy Staton

Officers issued 41 summons and 65 warnings with 56 cases cleared court with fines totaling \$7,836.00 being assessed.

- SGT's Wilson and Cartee investigated a hunting incident where the subject's shotgun blew up in his hands.
- LT Isaacs, 1st SGT Staton, SGT Cartee and CPL Jordan worked a security detail at Wofford College for the Republican GOP Debate.
- SGT Cartee made a case for selling quail without a permit.
- LT Isaacs and SGT's Cartee and Davis worked a buy and bust operation involving a processor selling deer meat.

Unit 1C (Cherokee / Union) 1st SGT John McCraw

Officers issued 30 summons and 46 warnings with 22 cases cleared court with fines totaling \$3,941.00 being assessed.

- 1st SGT McCraw and Officer Quinn caught 3 subject hunting deer over bait in Cherokee County.

Unit 1D (Greenwood / Laurens) 1st SGT Kristie Lumley

Officers issued 58 summons and 118 warnings with 50 cases cleared court with fines totaling \$7,175.00 being assessed.

- 1st SGT Lumley worked an elevated tree stand incident in Greenwood County that resulted in a fatality.
- CPL Welch caught 7 individuals operating ATV's on WMA closed roads.
- 1st SGT Lumley and CPL Maxwell made 2 cases on Boyd's Mill pond for the unlawful killing of Grebes.
- 1st SGT Lumley, SGT's Cline and Vaughn and CPL Taylor apprehended 5 subjects trespassing to hunt waterfowl.

Unit 1E (Abbeville / Anderson) 1st SGT Rhett Barwick

Officers issued 14 summons and 47 warnings with 12 cases cleared court with fines totaling \$1,672.50 being assessed.

- SGT Owens assisted Anderson County Sheriff's Office with locating a missing suicidal subject in the woods in Townville, subject was located deceased.
- PFC Ginn made a Deer Hunting in a baited area for the month.
- Unit officers worked waterfowl season checking 154 hunters issuing 5 summons and 24 warnings for numerous offenses.

Unit 1F (Edgefield / McCormick) 1st SGT Ron Talbert

Officers issued 21 summons and 71 warnings with 12 cases cleared court with fines totaling \$1,975.00 being assessed.

- Unit 1F issued 9 summons and 32 warnings for the early waterfowl season.
- PFC Baker issued a summons for selling deer meat.

Region 2 – CPT Sandy Young

Officers issued 176 summons and 296 warnings with 64 cases clearing court with fines of \$9,450.00 being assessed. Officers checked 2,577 hunters and 645 fishermen, and a total of 372 hours were spent on boating patrols resulting in 551 boats inspected. Officers spent 10 hours on Homeland Security and 122 hours on litter patrols, and a total of 234 hours were spent patrolling Heritage Trust Preserve properties. Officers gave a total of 41 public presentations. Officers also spent 972 hours on night patrols. There was one 1 hunting accident worked during the month.

Captain's Spotlight

- CPL Baird, acting on information he received from another officer outside the county, found a subject fishing on Lake Wateree that had 63 crappie in his possession. Subject was charged with over the limit of Game fish.
- Officer McCurdy assisted by SGT Roberts made a covert buy of deer meat and charged the deer processor for selling venison in Chesterfield County. After receiving information that the practice was continuing to sell the meat, a second covert buy was made with the assistance of Chesterfield County Sheriff's Dept. The second charge was made about 6 hours after the subject pled guilty and was fined for the first charge.
- CPL Tanner made 4 night hunting deer cases and 4 trespassing to hunt cases.

Unit 2A (Chester, Lancaster, York) 1st SGT Todd Campbell

Officers issued 53 summons and 65 warnings with 37 cases clearing court with fines totaling \$5,325.00 being assessed.

- Unit 2 officers made a total of 7 cases for hunting deer over bait this month.
- CPL Vissage made 2 cases for night hunting deer while working night patrol in a high activity area of York County. Two subjects were arrested. Located in the truck was a dead fox shot out of season, and one of the subjects had already killed 2 legal bucks that day which made him over the limit on the daily limit of buck.

Unit 2B (Fairfield, Kershaw, Lee) 1st SGT Joey Cobb

Officers issued 47 summons and 91 warnings with 7 cases clearing court with fines totaling \$1,415.00 being assessed.

- SGT Stevens and CPL Branham made two cases for hunting waterfowl over the bait in Fairfield County.
- CPL Branham and CO Bessinger made one case for hunting geese in a baited area in Lee County.
- SGT Stevens and CO Bessinger located a dove field in Lee County. Subjects were on field at the time and were charged with hunting dove over bait.

Unit 2C (Chesterfield, Dillon, Marlboro) 1st SGT John Hillian

Officers issued 18 summons and 46 warnings with 12 cases clearing court with fines totaling \$1,230.00 being assessed.

- CPL Jacobs, assisted by SGT Caldwell made 2 cases for hunting ducks over bait.
- SGT Covington, CPL Walters and Officer McCurdy made 4 cases for hunting ducks after hours.
- SGT Roberts made 1 case for shining in Chesterfield County

Unit 2D (Darlington, Florence) 1st SGT Benjy Byers

Officers issued 19 summons and 50 warnings with 4 cases clearing court with fines totaling \$580.00 being assessed.

- SGT Stevens and PFC Driggers made 2 Renegade Hunter Act cases.
- PFC Perry made 2 Renegade Hunter Act Cases and 1 no Federal Duck Stamp.
- CO Arnold made 2 after hour duck hunting cases and 1 no Federal Duck Stamp case.

Unit 2E (Marion, Williamsburg) 1st SGT Bill Huggins

Officers issued 39 summons and 44 warnings with 4 cases clearing court with fines totaling \$900.00 being assessed.

- SGT's Kelley and McKnight made 3 cases for hunting dove over bait.
- Officer Cody Britt made a deer baiting case on Woodbury WMA and a participating in a hunt while under the influence of alcohol on WMA.

Region 3 - CPT Harvin Brock

Officers issued 147 summons and 299 warnings with 99 cases clearing court with fines of \$20,568.63 being assessed. A total of 366 hours were spent on boating patrols resulting in 1,002 boaters checked. Officers spent 74.5 hours on Homeland Security, 138 hours on litter patrols and a total of 35 hours were spent patrolling Heritage Trust Preserve properties. Officers gave a total of 32 public presentations. Officers also spent 1,082 hours on night patrols. During the month there were 4 hours of hunting accidents investigated and 5 hours of boating accident investigated.

Captain's Spotlight

- While looking for duck bait, SGT Salter and PFC Terry saw a pair of Alligator hides nailed to a shed. After serving a search warrant they recovered 2 skulls and hides as well as photos of the subject posing with the gators. The subject confessed and was charged.

Unit 3A (Lexington/Saluda) 1st SGT Ken Simmons

Officers issued 34 summons and 64 warnings with 32 cases clearing court with fines totaling \$9,936.63 being assessed.

- Due to low water / drought conditions on county ponds and rivers, waterfowl activity was low throughout Lexington and Saluda counties. These conditions though did not deter Unit A officers from searching for bait and patrols. Unit officers made 11 cases and 33 warnings related to waterfowl over the Thanksgiving season.
- SGT Smith, CPL Johnson and CPL Parrish all made Untagged Antlerless Deer cases this month.
- SGT Derrick made one case for Hunting Deer over Bait in Saluda County.
- SGT Robinson utilized the Hunting Simulator TOMO Trailer at two different public presentations.
- While answering a call in reference to duck hunting too close to a residence, SGT Smith jumped a deer along the lake and witnessed the hunter shoot and kill the deer as SGT Smith was sneaking through the woods. The hunter loaded the deer in the boat and took it back to a residence. SGT Derrick met the subject at the residence and he was charged for untagged deer and PFD.

Unit 3B (Newberry/Richland) 1st SGT Dudley Britt

Officers issued 44 summons and 51 warnings with cases 22 clearing court with fines totaling \$2,297.00 being assessed.

- Officers Bickley and Bassard located and documented a baited dove field and a baited duck impoundment in Richland County, but neither area was hunted. They made after hours and lead shot case on a club and while doing the paperwork apprehended a subject with an illegal antlerless deer.
- Roosen and Bannister made 8 shell limit cases as well as others on Enoree WMA.\
- All officers went above and beyond working waterfowl hunting. This effort is evident with 47 contacts being made related to waterfowl enforcement.

Unit 3C (Aiken/Allendale/Barnwell) 1st SGT John Bedingfield

Officers issued 20 summons and 48 warnings with 13 cases clearing court with fines totaling \$1,350.00 being assessed.

- PFC Terry received a complaint in reference to a boat titling question. It seems the purchaser could not get a title from the seller. After some investigation there were 3 subjects who failed to transfer the title on the boat. There were 3 cases for failure to transfer.
- PFC Terry and CPL Tyler worked a trespassing complaint for 8 days when they located a subject in a tree stand, trespassing to hunt and possession of crack cocaine and Methamphetamine. Officers Tyler and Terry assisted Blackville PD with a missing suicidal woman. They located the woman hiding near the pond that she had said she was going to drown herself in.
- After receiving a call from a citizen who witnessed a vehicle stop, shoot a deer and load it into their vehicle at night then proceed to pursue the vehicle, SGT Davis responded, intercepted the vehicle and made a traffic stop. The passenger confessed to night hunting and gave a complete statement. There were 2 night hunting deer cases made and a possession of an untagged deer.
- SGT Pinckney assisted Region 4 on 2 occasions resulting in the undercover purchase of shrimp.
- CPL McDaniel set up a career booth / display at Langley Middle school career day.

Unit 3D (Bamberg/ Calhoun/ Orangeburg) 1st SGT Farrell Pulaski

Officers issued 18 summons and 72 warnings with 8 cases clearing court with fines totaling \$1,480.00 being assessed.

- 1st SGT. Pulaski, SGT. Herndon and CPL. Collins assisted Clarendon officers on Lake Marion when a subject fell into the Lake from the I-95 Bridge.
- 1st SGT. Pulaski, SGT's. Hiers and SGT. Lee assisted Bamberg County with a search for an elderly man. He was found the next morning in fair condition.
- CPL's Collins and Lambert served a warrant on a subject who fled on foot after his vehicle was stopped for Night Hunting deer. The case is still pending.

Unit 3E (Clarendon/Sumter) 1st SGT Gene Morris

Officers issued 31 summons and 64 warnings with 24 cases clearing court with fines totaling \$5,505.00 being assessed.

- DLEO Burke Watson and Cpl Jervey made three cases trespassing to Hunt on the Congaree National Park. 1st Sgt G. Morris got in contact with Federal Agent Joe Meekins working the Park and he contacted Cpl Jervey. The Federal Agent has adopted the case and is following up with additional Federal charges.
- CPL Jervey made a case for trapping hawks (pole trap) and it has led into more possible charges that will be made by USFW Agent Jay Pilgrim.
- SGT Gibson made 1 hunting over bait case for ducks during the first season. He sat it every day and caught the subject the Friday before the season went out.
- 1st Sgt G. Morris and CO J. Smith worked most of the month together and made a trotline violation, subject baiting with game fish. While working in the Jacks Creek area, they made an over the limit violation of bream and crappie and a case for undersize largemouth bass.
- SGT Wheeler and Cpl Jervey worked the WMA Biedler Impoundment with 10 cases and 12 warnings made during the first season of duck hunting.

- The Unit had one boating accident at Elliot's flats with no serious injuries worked by Cpl Jervey. We also had one drowning at the I-95 bridges. Subject fell off bridge while exiting his vehicle which was a large truck level with the top of the bridge railing. Subject was recovered by DNR Dive team.

Region 4 – CPT Gentry Thames

Officers issued 350 summons and 859 warnings with 295 cases clearing court with fines of \$36,352.50 being assessed. Officers checked 4,496 hunters and 2,208 fishermen with a total of 1,578 hours being spent on boating patrols resulting in 2,359 boaters checked. Officers spent 55 hours on Homeland Security and 68 hours on litter patrols. A total of 165 hours were spent patrolling Heritage Trust Preserve properties. A total of 926.50 hours were spent on night patrols. Officers gave a total of 39 public presentations. Officers also spent 53 hours on JEA patrols. During the month there were 39 hunting accident investigation hours and 88 boating accident investigation hours conducted.

Captain's Spotlights

- CPL Brown while patrolling the ACE Basin observed a waterfowl hunter shoot an endangered Wood Stork. The subject was issued a federal pink slip.
- CPL Henderson obtained information regarding illegal shrimp trawling activities in Beaufort County. CPLs Henderson, Pope, SGT Smith, and DLEO Amsler conducted surveillance on the subjects, when approached by SGT Smith and DLEO Amsler the subject cut his net and attempted to outrun the officers. After a long pursuit it was decided the subject was not going to stop for officers. SGT Smith directed DLEO Amsler to jump into the subject's boat while running nearly 50mph. DLEO Amsler did so and got the subjects to stop. The net was recovered as well as a quantity of shrimp. Both of the subjects were jailed.
- PFC Davis caught 2 individuals who had a hidden compartment in the floor of their boat. The compartment was only accessible by lifting the gas tank up. The subjects had 12 Red Drum over the limit. The subjects were charged \$1,092.00 each.

Unit 4A (Horry) 1st SGT Joe Ard

Officers issued 60 summons and 89 warnings with 42 cases clearing court with fines totaling \$3,420.00 being assessed.

- 1st SGT Ard and DLEO Miller recovered a stolen watercraft on the ICW. This watercraft was turned over to the investigations section.
- CPL's Chanaca and Floyd gave presentations on hunting safety at Aynor High School.
- CPL Hutson and PFC Robinson gave a fishing presentation to the Blue Water Fishing Club.
- CPL Floyd and DLEO Hyman caught 1 person shining, and PFC Robinson caught 1 person for shining.
- CPL Chanaca has made several cases on trespassing to hunt on Property Watch Program Property.
- SGT Prosser, CPL Hutson and PFC's Pardue and Robinson made several cases and related warnings for late shooting waterfowl.
- CPL Hutson and PFC Robinson made 2 cases for selling fish without a commercial license.
- PFC Robinson made 1 case for hunting deer from a public road. PFC Robinson witnessed him shooting from his vehicle.

Unit 4B (Georgetown) 1st SGT Ryan Williams

Officers issued 73 summons and 90 warnings with 56 cases clearing court with fines totaling \$6,462.50 being assessed.

- CPL's Capps, Kaminskas and 1st SGT Williams located a baited Dove field and charged 5 subjects for hunting over bait and 2 for placing Dove bait.
- 1st SGT Williams and CPL Capps caught 7 subjects shooting waterfowl after hours over a baited pond and 1 subject was shooting lead. The owner of the pond was charged with hunting over bait, after hours, and lead shot.
- 1st SGT Williams and CPL Capps caught and charged 3 subjects for Renegade Dog Hunting Act after the subjects killed a deer ahead of their dogs while trespassing.
- CPL's Capps, Kaminskas and 1st SGT Williams caught a subject duck hunting that obtained a resident license by fraud. The subject used an old SC driver's license he had to obtain the license but he had his federal stamp on his resident NC hunting license and it was noticed by the officers. The subject has lived in NC for several years.
- SGT Pop and PFC Beacham caught a subject altering a shellfish tag to try and make it look like the clams were harvested on their legal bed but the officers observed the fisherman harvesting in closed waters.

Unit 4C (Charleston North/Berkeley) 1st SGT Angus MacBride

Officers issued 80 summons and 289 warnings with 96 cases clearing court with fines totaling \$12,871.00 being assessed.

- PFC Gilmore apprehended an individual in the National Forest with an illegal doe deer.
- CPLs Crawford and Bowers assisted DEA with a joint operation on the Cooper River.
- 1st SGT MacBride, CPL's Crawford, McClellan and PFC Day caught 3 separate individuals shrimp baiting out of season during a routine night patrol of Charleston Harbor.
- CPL McClellan apprehended 2 individuals in possession of Black Sea Bass during the federal closure.

- CPL Chavez made a fatality recovery while on a dive assignment on Lake Marion.
- SGT Monnet and CPL Chavez apprehended 2 subjects rallying waterfowl on the Cooper River.

Unit 4D (Charleston South/Dorchester) 1st SGT Lee Ellis

Officers issued 52 summons and 190 warnings with 57 cases clearing court with fines totaling \$8,367.00 being assessed.

- CPL Weaver and SGT Garner attended the SAFMC meeting in Charleston.
- SGT Garner and CPL Brown attended NASBLA Tactical Boat Operations Training at FLETC.
- Officers assisted SGT Camlin with a boating fatality on the Ashley River for 6 days until the victim was recovered.
- CPL Weaver presented her case to the Grand Jury resulting in 2 charges of Felony BUI moving forward.
- SGT Garner caught several subjects on Seabrook Island with undersized, and over the limit of saltwater game fish.
- SGT Richardson made 3 cases for possession of lead shot on opening day of waterfowl season.
- SGTs Kinsey and Gantt investigated a hunting accident in Rowesville.
- SGT Garner caught a subject in possession of several undersized Red Drum which he had hidden under the vehicle's passenger seat.
- SGT Garner caught a subject fishing while under suspension while he was conducting surveillance of a creek off the Stono River.
- CPL Whaley and SGT Shelton assisted DEA with a case on the Cooper River resulting in the recovery of 6 kilos of cocaine, 15 lbs of marijuana and 60,000 pills of Ecstasy valued between \$400,000.00 and \$500,000.00.

Unit 4E (Beaufort/Colleton) 1st SGT Michael Paul Thomas

Officers issued 41 summons and 130 warnings with 32 cases clearing with fines totaling \$2,710.00 being assessed.

- SGTs Graham and Mears caught 3 individuals shooting ducks after hours. The subject's boat had overturned and they were rescued by a fisherman who happened to be in the area. Also 1 of the subjects did not have a plug in his shotgun. 1st SGT Thomas arrived and assisted the officers with the inspections.
- SGT Graham and CPL Jones inspected a fox pen in Colleton County and issued tickets for hunting violations.
- Unit E officers did an outstanding job during the duck season.

Unit 4F (Hampton/Jasper) 1st SGT Michael Paul Thomas

Officers issued 44 summons and 71 warnings with 12 cases clearing with fines totaling \$2,522.00 being assessed.

- PFC Davis received numerous complaints regarding night hunting in the Cummings area. PFC Davis worked the area for several weeks until he and CPL Pope caught a subject one night in the exact field where the complaints were coming from. The subject was a convicted felon that had just been released from prison for several burglary convictions. The subjects were jailed and his truck and gun was seized.
- PFC Wallace caught 2 individuals with undersize Winter Trout that had been caught in a cast net at Salzburg boat ramp in Jasper County. The subjects also left the landing with open containers of alcohol and were charged with that as well.
- CPL Priester checked a duck pond on the opening morning of Duck Season and found numerous violations. The subjects were over the limit, possessed lead shot, and were not picking up their ducks. A total of 8 cases were made for various Migratory Waterfowl Violations.
- CPL Henderson and PFC Godowns worked the Combahee River one morning and issued 7 summons and 23 warnings for various Migratory Waterfowl Violations.

Education – LT Billy Downer

Officers issued 0 summons and 0 warnings with 1 case clearing court with \$0.00 in fines assessed. A total of 38 presentations were given to the public.

- 1,613 students were certified in 41 Hunter Education classes; 479 students were certified in Hunter Education Internet classes; 136 CD-ROMs were mailed and a total of 127 students were certified in Hunter Education CD-ROM classes; and 68 workbooks were mailed and a total of 17 students were certified by workbook.
- 52 students were certified in 6 Boater Education classes; 29 students were certified in Boater Education Internet classes.
- There were 1,251 shooters at the Pickens Range and 685 shooters at the Spartanburg Range during the month.

Investigations - LT Gary Sullivan

Officers issued 3 summons and 13 warnings with 4 cases clearing court with \$385.00 in fines assessed. A total of 88 boats were inspected. A total of 107 boating hours were accrued this month. There was 1 boating fatalities this month. There were 2 boating incident/accident reports submitted and processed. There were 4 maintenance request received. There was 1 regulatory marker investigation request submitted and processed. There were 99 Marine Event Permits processed and 4 dive assignments completed.

- 1 boat was recovered valued at \$3,610.00.

Special Detail/Training – LT Robert McCullough

- **OGT Activity:** \$00.00 payouts / Balance \$24,000.00
- **Property Watch Activity:** 15 signed up for program \$386.00 in sign sales
- **Media/Special Operations:** Assisted SLED with the Republican Primary Debate in Spartanburg with sight security. Media on drowning at the I-95 Bridge on Lake Marion DNR divers made recovery.
- **Training:** Worked the range at SCLEOA Conference and attended training classes.

Aviation - Pilots Bucky Harris, Owen Barker

- 20 flights resulting in 78.7 flight hours
- 68.2 law enforcement flight hours
- 6.6 biology flight hours
- 3.9 SAR flight hours

Communications - Vandy Waller

- Repaired communications equipment as needed. repaired / reprogrammed 5 wt's, 8 mobile radios, 12 boat radios, 2 base stations, 2 canopy sites, 2 console problems.
- Completed the re-banding and Flashing on 5 of the 800 radios and tuned. Reprogram 5 radios.
- Assisted Sled three days in reprogramming of their radios for Midlands, Pee Dee, and Low Country.
- Flashed upgraded the 3 radios in the planes for the new re-banding programming.
- Pre-wired switches and relays for the new vehicles ordered.
- Installed electronics in 8 new vehicles.
- The electrical power to the Rutledge Building was disconnected for service on Saturday Nov 19 and we ran off a portable generator for about 8 hours until the work was complete.
- Attended a meeting at Sled's request with a vendor that wants to install a new 4G network down the interstate system.
- Used the new Auto Tune software to calibrate 5 mobiles and WT's.
- Assembled electronic kits for 4 boats ordered and delivered to the factory.
- Worked on an interference problem for Little Mountain and Santee repeater with digital interference from out of town.
- Continuing the testing and upgrading of the six 4.9 canopy dish's at 4 tower sites and have them working in test mode to check and set levels.
- CM Waller and SGT Dukes transferred some radios and completed the TID process and delivered old radios for disposal.

OUTREACH AND SUPPORT SERVICES

EDUCATION/GRAPHICS/MAGAZINE

Aquatic Education Happenings

- In addition to 7 existing Trout in the Classroom schools, 12 more schools were chosen through an application process. The new schools receiving the program are as follows: BJ Skelton Career Center, Blue Ridge Middle, Brashier Middle College, Catawba Trail Elementary, Christ Church Episcopal, Claude A Taylor Elementary, Hagood Elementary, Hampton PRTF, Irmo Middle School, JT Simpson Alternative, Nevitt Forest Elementary, Palmetto High, Pendleton High, Pickens Middle, Rice Creek Elementary, Slater-Marietta Elementary, Summit Middle Parkway, Walhalla Middle and White Knoll High School. Teachers will attend a Trout in the Classroom Teacher Workshop in December. Preparations for the workshop are underway. Dan and Lorianne picked up the remaining Trout in the Classroom equipment from Palmetto Middle School who will not be participating in the program this year to allocate to one of the new schools.
- Lorianne made the final edits for the Chapter 13 Staff Training Guide that includes fish descriptions and all about the new regulations that will more than likely be effective July 2012. This document will serve to train Law Enforcement Officers on the new regs. The document is waiting for final edits from the Fish Chief before going out to the bidding process.
- Dan and Lorianne coordinated and facilitated a Family Fishing Clinic at the Cheraw Fish Hatchery on October 12th for approximately 15 participants.
- Dan and Lorianne recruited 14 participants for the first Family Fishing Clinic Certified DNR Fishing Instructor Training on Saturday, October 15th. The training was well received. Many of the participants are fishing guides or already in an outreach type position where they will partner with SCDNR to provide the Family Fishing Clinics. These folks will allow the Aquatic Education section to reach a larger number and a greater diversity of participants from all over the state. Due to the number of requests to become a Certified DNR Fishing Instructor, we have setup another workshop training January 21st for a group of 13 participants and another one with the Charleston Angler's staff for January or February.
- Dan finalized the Beginner's Guide to Angling with graphics. Lorianne finalized the fish identification guide in a new format. The new guides are in and everyone should take a peek!
- Reel Kids prizes were awarded. 36 kids turned in a total of 146 goals.
- Lorianne and Amanda Stroud continued traveling to collect data for the Fish South Carolina publication. They are traveling to all the freshwater pier and bank fishing access sites in the state to collect GPS coordinates and information about the site such as available parking, handicap accessibility, restrooms available, etc. This information will all be compiled into a fishing type atlas for distribution to the public. Data collection and travel takes a while, but we hope to have this project completed within a year's time.
- Lorianne met with Florence County School, Dewey Carter Elementary, on starting an elementary fishing club. These students would learn throughout the year about fishing and the state's aquatic resources through monthly meetings after school. At the end of the year, a formal Family Fishing Clinic will be held for students and their families.
- Dan attended the 2nd Annual Berkeley Big Bass Challenge on Lake Murray October 22nd to advertise some of the Aquatic Education Section's programs.

Camp Wildwood

- Dan developed a new Facebook group for Camp Wildwood, worked on updating the Camp Wildwood brochure in house with new information using labels and worked with graphics to develop a billboard to advertise the program. Recruitment for campers will begin soon for the 2012 Camp Wildwood program.

Other

- Lorianne attended the Fisheries Coordinators Meeting.
- Lorianne assisted Region 2 Fisheries Staff sample smallmouth bass from the Broad River with hook and line on October 25th outside of Greer.

Jocassee Gorges Education and Recreation

* Coordinated Oct. 11 event at Pickens High School that featured authors Debbie Fletcher and Dot Jackson talking to 11th grade American Literature students about Jocassee Valley, Keowee and "The Horsepasture."

- * Conducted animal program for Kamp Kid, camp for abused children, at Table Rock Wesleyan Camp.
- * Scheduled 10 hikes for Nov. 4-6 Foothills Trail Conference annual meeting at Table Rock State Park. Serving as Foothills Trail Conference board member, representing DNR, also serve as outings and public relations leader.
- * Submitted request for grant to Harry Hampton Memorial Wildlife Fund to reprint 20,000 copies of Jocassee Gorges map/brochure. Only about 1,000 copies remain. Mailed copies of map/brochure and Jocassee Journal newsletter as requested via DNR Web site.
- * Helped coordinate photo shoot for The Bounce Agency, working for State Park Service, at Jumping-Off Rock Overlook.
- * Fall/winter 2011 issue of Jocassee Journal newsletter completed, to be in mail soon.
- * Serving as DNR coordinator for Upstate Master Naturalist class, which consists of 12 weeks of all-day-Thursday classes. Led Oct. 13 trip through Jocassee Gorges.
- * Fall Jocassee Gorges class for Osher Lifelong Learning Institute (OLLI) began Oct. 5, continuing through Nov. 9, includes six field trips to various destinations including Sassafras Mountain, Twin Falls, Lower Whitewater Falls, Jumping-Off Rock Overlook and Pinnacle Mountain petroglyph site.
- * Working with local American Legion officials to place memorial and kiosk near Bully Mountain in Jocassee Gorges to commemorate 1950 crash of Air Force aircraft there and death of four servicemen.
- * Fielded inquiries on recreation (roads open/closed, hunting, hiking, backpacking, paddling, etc.) in Jocassee Gorges and mountain region.

Other

- * Safety boat for all-day kayaking event at Upstate National Hunting and Fishing Day celebration at Duke's World of Energy.
- * Contacted Edgefield-area media by phone and e-mail about upcoming redbreast sunfish stocking in Edisto River.
- * Served as model for bicycle photograph shoot by South Carolina Wildlife on SC 11, for upcoming special issue on daybreak activities.
- * Helped coordinate and write stories for DNR statewide weekly news package.
- * Fielded animal nuisance calls and calls about hunter and boater education and other general phone questions, such as boat titling and registration.
- * Serving as Region One hub coordinator for OSS Division and region chair.

Graphics

The Graphics section completed approximately forty-six jobs in the month of October. Several log books, property maps and car data tags were completed. The Shrimp Baiting Survey materials, SC Reel Kids brochures, and ticket books for law enforcement were also completed. The agency spent approximately \$24,000.00 on printing and publications this month. This cost is not all state funding but includes grants, nonprofit charitable donations and federal monies as well.

SC Wildlife Magazine/Wildlife Shop

- Staff continued editing copy for the "First Light" January-February 2012 special issue of *South Carolina Wildlife*.
- Staff received office copies of the November-December 2011 issue. This issue offers our readers articles on the ultimate sacrifice of conservation officer Frank Floyd, a historical piece on John Audubon and John Bachman, memories of hunting, the history of Cherokee Path in South Carolina, the South Carolina natural museums, winning photos from the 2011 SCW photography contest, Out Scoutin' to Lewis Ocean Bay Heritage Preserve, and For Wildlife Watchers piece on the horseshoe crab.
- Staff approved the color proof and received copies of the 2011-12 Wildlife Shop catalog.
- Magazine photo staff continued providing photo assistance to the DNR and outside requests.
- Editorial assistant continued fulfilling magazine photo requests, including archiving digital photos, pulling photos/slides/digitals for DNR's graphics and other staff.
- Handled magazine requests from the public and within the DNR. Staff also assisted fulfillment personnel with promotions publications.
- Magazine photography staff provided photo coverage at the DNR's board meeting and other DNR staff.

- Life's Better Outdoors campaign ad placed in the 2008's May-June, July-August, September-October and November-December and January-February 2009, March-April 2009, May-June 2009, July-August 2009, September-October 2009 and November-December 2009, January-February 2010, May-June 2010, July-August 2010, September-October 2010, November-December 2010, January-February 2011, March-April 2011, May-June 2011, and September-October magazines.
- Continued archiving and backing up the magazine photo and digital files.
- Completed updating the magazine index through November-December 2011.
- Continued updating magazine issue and magazine/products material on DNR/magazine's website.

Sales for the month totaled over \$34,370, which includes the magazine subscriptions and Wildlife Shop sales.

TECHNOLOGY

Data Base Management. Continued to develop quality assessment and editing tools to identify problems with customer identification numbers and resolve impacts to licensing and titling programs. Continued to support the geologic carbon sequestration and geothermal data management projects. Provided continuing support to South Carolina Interactive, agent POS vendor for the DNR licensing program and the Hunter-Boater Education systems. Continue to revise data schema for integration of internal licensing, POS and Internet systems licensing and titling systems to address customer identification number and other issues as the software design reaches its final phase. Due to continued staff shortages we were unable to resume the design of internal financial records management system to interface with SCEIS including the telephone and auxiliary credit card billing systems pending resolution to the customer identification number issues. Performed weekly maintenance and updates to various database and applications programs using the DNR's development framework protocols.

Continued work with the boat titling program and the SCI, POS vendor, to implement and enhance the ImageNow electronic document management system for document and records management. Continued development of a DNR photographic document reference library and provided document management support to the diadromous fish project to evaluate the use of barcode scanning system for data capture. Continued EDMS project with the Engineering office to integrate facilities management records into the system. Continued document scanning and indexing for hydrologic well data, DNR Managed Lands, law enforcement violations/summons billing and aviation log applications. Completed scanning of various agency property files. Added 15,691 records and 39,975 images to the EDMS document library. Provided records management and permanent archival support to the agency using record export and archive process. Archived 9,792 boating records from the document management system.

Continued the suspension of a major project to standardize all DNR GIS data to SC State Plane coordinate system and to establish web services for enhanced sharing of DNR data with other agencies due to changes in project priority and staff shortages. Continued project to generate Digital Elevation Models (DEMs) and 2-foot contours from county LiDAR data. Provided routine maintenance for Managed Lands, Reservoir and WMA data and applications. Continued processing of LiDAR data for nine counties captured during the 2010 flight and four counties captured during the 2011 flight. Completed first QA/QC review of LiDAR data deliveries for Sumter County. Five previous counties have that passed internal QA/QC continue to be evaluated by USGS for final review and acceptance. Provided GIS database and GPS support to the various agency programs including continued testing of the smaller format Trimble Juno GPS units with external antennas.

Systems and Network Management. Initiated deployment of Windows 7 operating system on several agency computers to test its operation and performance. Completed 12 email blasts to notify citizens of DNR activities and programs. Added latest security patches and operating system service pack upgrades to agency servers. Established VPN connections for staff at SCI to initiate testing of the new licensing and titling system scheduled to begin in mid-November. Continued to convert printers to 64-bit drivers. Added 14 backup clients in Columbia, Clemson and Charleston. Resolved several network, email and communications issues. Provided data recovery support to the agency including recovery of deleted files and directories for 10 users. Added three new printers to the print services and modified the printer queues to support additional Xerox multifunction devices. Monitored network, email and server security issues. Continued support to county auditors for mainframe access to DNR boating records. Processed mainframe daily transaction requests. Performed routine mainframe and server system maintenance functions. Researched and developed IT procurement requisitions and provided specification, installation and configuration support for DNR staff. Help Desk staff answered 196 trouble tickets.

GIS Applications and Web Development. Provided GIS and cartographic support to DNR staff Continued suspension of development of Internet Map Server application for species-based data storage and access because of project

priorities. Published shellfish maps to the web site for the MRD. Initiated design of web pages for an integrated hydrologic/geologic well database application to provide input, editing and analysis of well data. Provided user support for ArcMap and GPS to DNR staff. Provided web site support for the Managed Lands, SEAMAP, shooting ranges and SC Wildlife Magazine programs. Continued to research the design and implementation of mobile web applications that would not require complete redesign of the DNR web site. Provided routine maintenance of DNR web site including news releases, publications, Board minutes and other agency web pages. Provided routine maintenance of DNR Intranet site including an upgrade to the design of the DNR calendar system. Created 63 new web & intranet pages and updated or modified 179 existing program web pages. Continued enhancement and maintenance of DNR managed lands and reservoir web applications. The DNR web site 209,326 visitors with the agency calendar, trout book and rules and regulations as the most viewed pages. The GIS Data Clearinghouse had 16,416 map files downloaded with LiDAR data (terrains and intensity images), Digital Orthophoto Quarter Quadrangles, hydrography, Digital Raster Graphics, and Digital Elevation Models as the most commonly downloaded data.

Administrative. Tim De Troye continued to work with various state agencies and local governments to increase statewide participation in the GIS Coordination Council. Jim Scurry attended the Information Technology Solutions Committee (ITSC) meeting at the Division of State Information Technology and continues to meet with South Carolina Interactive regarding the design and implementation of the licensing and titling system scheduled for March 16. Work continued on the development of a five-year strategic plan to direct technology development in the agency through 2015. An appropriations request was submitted for the 2012 Legislative Session to provide funding for the upgrade of mission critical technology equipment that will no longer be supported in FY2013.

PROCUREMENT

<u>Purchase Order Transactions</u>		<u>Expenditures</u>
Purchases, Quotes, Bids	78	\$ 2,301,230.17
Blanket Orders	0	\$ 0.00
Exempt	0	\$ 0.00
Sole Source Procurement	2	\$ 12,116.00
Emergency Procurement	0	\$ 0.00
Grant Exemptions	0	\$ 0.00
Total Purchase Orders	80	\$ 2,313,346.17
FPRs	82	\$ 44,027.26
Check Request	93	\$ 315,881.89
Minority Vendors	4	\$ 3,739.69
Procurement Card	1	\$ 294,461.66

RFQ/Bid Awards					Term
<u>Division</u>	<u>Commodity/Service</u>	<u>Requestor</u>	<u>Requisition #</u>	<u>Contracts</u>	<u>Award Amount</u>
W&FWF	17' Fiberglass Boat	Mark Spinks	5400003592	No	\$ 18,504.00

ENGINEERING

Priority	County	Project Name
2 - Under Contract	Charleston	Santee Coastal Blake House
	Colleton	Mars Oldfield Boat Landing
	Horry	Red Bluff Landing Courtesy Dock
	Kershaw	Hwy. 1 Landing - Lugoff (Phase II)
	Richland	Bates Bridge Landing Ramp Relocation
3 - Permitting & Design	Aiken	Riverview Park Transient Courtesy Dock Addition
	Allendale	Highway 301 Fishing Access
	Bamberg	Bob Cat Landing Bank Stabilization
	Colleton	National Estuarine Research Reserve Bank Stabilization
	Dorchester	Bacons Bridge Boat Ramp
	Horry	Hwy 22 and 17 Boating Facility
	Horry	Rosewood (Socastee) Ramp Repair
	Jasper	Knowles Island Fishing Pier
	Jasper	Tuten Landing Resurfacing
	Kershaw	Habitat Enhancement
	Laurens	Belfast Archery Range
	Laurens	Belfast Restroom Rehabilitation
	Laurens	Boyd's Mill Pond Boating Access
	Marion	Shotgun Range at Marsh
	Marion	Woodberry Rifle Range
	Pickens	Pickens Range Archery Range & Tower
	Richland	Geology Building Expansion
	Spartanburg	James Thomason Range
	York	SC Hwy 211 Boating Access
4 - Pending Projects	Anderson	Piedmont Access
	Berkeley	Wando River Access
	Georgetown	Rocky Point Landing
	Horry	Savannah Bluff Ramp Repair
	Laurens	Laurens City Park Archery Range
	Laurens	Reedy River Carry Down Access
	Marion	Hwy 301 Ramp Relocation
	Richland	Columbia Canal Fishing Access
	Saluda	Chapells Boating Access
	Williamburg	Ferry Lake Boating Access

BOATING/LICENSING**Boating Operations October 2011****Basic Business Report**

	MTD	Monthly Revenue	(previous ytd)	YTD
Watercraft - New Titles	661	\$8,222.84	\$45,370.00	\$53,592.84
Outboard Motor - New Titles	499	\$4,960.06	\$20,480.00	\$25,440.06
Watercraft - Transfers	1,298	\$7,463.50	\$35,046.00	\$42,509.50
Outboard Motor - Transfers	1,074	\$10,740.00	\$40,640.00	\$51,380.00
Internet Registration Renewals	534	\$5,340.00	\$25,400.00	\$30,740.00
DNR Office Renewals	3,090	\$30,900.00	\$54,490.00	\$85,390.00
Mail Renewals	1,673	\$16,730.00	\$98,850.00	\$115,580.00
Law Enforcement Boating Dollars (Drew's Law)		\$92,993.00	\$516,822.00	\$609,815.00
Active Watercraft Registrations				363,621
Inactive Watercraft Registrations (including dropped records)				284,813
Total number of Watercraft				367,092

Permitted Marine Dealers

Jan. 1, 07 - Dec. 31, 07	318
Jan. 1, 08 - Dec. 31, 08	363
Jan. 1, 09 - Dec. 31, 09	310
Dec.	
Jan. 1, 10 - 31, 10	286
Jan. 1, 11	283

M.T.I. Cases

Since July 1 , 2011	
Stolen/Recovered Case files created	3 191

Licensing Operations October 2011

Basic Business Report

	MTD Quantity	MTD Revenue	Last Year MTD Quantity	Last Year MTD Revenue
Resident Hunting Licenses	29,150	\$ 127,202.50	29,030	\$ 123,732.00
Non-Res. Hunting Licenses	7,984	\$ 714,503.00	8,246	\$ 747,874.00
Total	37,134	\$ 841,705.50	37,276	\$ 871,606.00
Resident Fishing Licenses	19,162	\$ 163,142.00	22,595	\$ 193,534.00
Non-Res. Fishing Licenses	13,644	\$ 201,576.00	14,594	\$ 212,300.00
Total	32,806	\$ 364,718.00	37,189	\$ 405,834.00
Combo. Licenses	14,379	\$ 438,441.00	14,664	\$ 449,734.00
3 Yr. Resident Hunt	124	\$ 2,923.50	89	\$ 2,200.50
3 Yr Resident Fishing	346	\$ 9,342.00	397	\$ 10,719.00
3 Yr Non-Res Fishing	29	\$ 2,958.00	40	\$ 4,080.00
Lifetime Licenses	1,024	\$ 24,469.00	914	\$ 22,392.00
L/T Disability Licenses	6	\$ -	4	\$ -
3YearDisability	305	\$ -	337	\$ -

Turkey Tags	1,971	\$ 0.00	Opens 03-15-12
Antlerless Deer Tags	31,109	\$ 155,545.00	Open 09-15-11
Shrimp Baiting	343	\$ 8,575.00	Closed 11-08-11

License Agents Numbers and Sales (Month To Date)

LicenseAgents Quantity	Manual 0	Point of Sale 507	Internet & Call Center 1	SCDNR Offices 4	Totals 512
Total License		67,065	16,553	1,637	85,255
Total Revenue	\$ 0.00	\$1,063,423.00	\$ 565,575.50	\$ 40,264.50	\$1,669,263.00
% sales to agent type	0.00 %	63.71%	33.9%	2.4%	

NEW POS
AGENTS 0

Commercial License Operations October 2011
Basic Business Report

License Type	Licenses Sold		MTD	\$ YTD	\$ YTD Last	
	MTD	Sold Last Month			Month	\$ MTD
Commercial Saltwater Res	959	816	143	\$86,403.75	\$20,342.50	\$23,906.25
Commercial Saltwater Non	129	112	17	\$126,210.00	\$30,000.00	\$38,565.00
Commercial Saltwater Total	1088	928	160	\$212,613.75	\$53,342.50	\$62,471.25
Trawl Res	303	280	23	\$130,550.00	\$34,881.25	\$37,793.75
Trawl Non	105	89	16	\$63,825.00	\$26,100.00	\$31,365.00
Trawl Total	408	369	39	\$194,375.00	\$60,981.25	\$69,158.75
Crabs Res	297	282	15	\$76,605.25	\$18,700.00	\$19,225.00
Crabs Non	9	9	0	\$14,068.75	\$3,375.00	\$3,375.00
Crabs Total	306	291	15	\$76,605.25	\$22,125.00	\$22,600.00
Shellfish Res	139	59	80	\$32,433.75	\$4,417.00	\$10,395.00
Wholesale Res	245	230	15	\$93,195.00	\$22,975.00	\$24,485.00
Wholesale Non	4	3	1	\$10,500.00	\$1,475.00	\$2,000.00
Wholesale Total	249	233	16	\$103,695.00	\$24,450.00	\$26,485.00
All Commercial Types Res	2766	2278	488	\$493,279.25	\$119,471.75	\$135,071.75
All Commercial Types Non	262	225	37	\$248,337.00	\$65,300.00	\$76,800.00
All Commercial Types Total	3028	2503	525	<u>\$741,616.25</u>	<u>\$184,771.75</u>	\$211,871.75
Totals	3028	2503		<u>\$741,616.25</u>	\$184,771.75	\$211,871.25

OUTREACH AND SUPPORT SERVICES

EDUCATION/MAGAZINE/GRAPHICS

SC Wildlife Magazine/Wildlife Shop

- Staff continued editing copy for the January-February 2012 special issue, "First Light," of South Carolina Wildlife, which features photos of early morning activities at first light in the outdoors.
- Staff received office copies of the November-December 2011 issue. This issue offers our readers some outdoor experiences the way it happened, the historical insight of the natural history museums and the Cherokee Path, the winning photos from the 2010 *SCW* photo contest, Out Scoutin' to Lewis Ocean Bay Heritage Preserve, and For Wildlife Watchers piece on the horseshoe crab.
- *SCW* featured an article in the November-December 2011 issue about the ultimate sacrifice/death of conservation officer Frank Floyd back in 1949, which also featured a list of the ten officers who died in the line of duty and the South Carolina Law Enforcement Officers memorial monument photo.
- Magazine photo staff continued providing photo assistance to the DNR and outside requests.
- Editorial assistant continued fulfilling magazine photo requests, including archiving digital photos, pulling photos/slides/digitals for DNR's graphics and other staff.
- Handled magazine requests from the public and within the DNR. Staff also assisted fulfillment personnel with promotions publications.
- Provided support for and included Take Me Hunting/licenses promotions in the September-October 2011 issue.
- Magazine photography staff provided photo/video coverage to other DNR staff.
- *SCW* featured the 2011 Law Enforcement Officers of the Year in the November-December 2011 issue.
- Continued archiving and backing up the magazine photo and digital files.
- Continued updating magazine issue and magazine/products material on DNR/magazine's website.
- Sales for the month totaled over \$25,186, which includes the magazine subscriptions and Wildlife Shop sales.

OSS Education

Aquatic Education Happenings

- Lorianne traveled with videographer Glenn Gardner to the Walhalla Fish Hatchery to discuss the development of a video for the fish house and the equipment required for setup.
- Lorianne continued prepare for the Trout in the Classroom workshop by ordering equipment, printing materials for the workshop, finalizing presentations and the agenda. Dan and Lorianne setup trout tanks, chillers and filters for Catawba Trail Elementary, Palmetto High School, Rice Creek Elementary, Brashier Middle College, White Knoll High School, Irmo Middle, Walhalla Middle, Summit Middle Parkway, Blue Ridge Middle and Pendleton High School during the week of November 28th. Dan and Lorianne met with Chuck Pressley of Trout Unlimited who will now be Lorianne's main line of communication with all of the Trout Unlimited Chapters in South Carolina in regards to the Trout in the Classroom Program.
- Lorianne made the final edits for the Chapter 13 Staff Training Guide that includes fish descriptions and all about the new regulations that will more than likely be effective July 2012. This document will serve to train Law Enforcement Officers on the new regs. The document is waiting for final edits from the Fish Chief before going out to the bidding process.
- Lorianne continues to recruit participants for a Family Fishing Clinic training to be held January 21st. Currently, we have 15 participants signed up thus far. Lorianne also continues to work with the Charleston Angler to setup training for them in January or February. These folks, once trained as Certified DNR Fishing Instructors, will allow the Aquatic Education section to reach a larger number and a greater diversity of participants from all over the state.
- Dan finalized the Beginner's Guide to Angling with graphics.
- One of our Family Fishing Clinic Instructors facilitated a Family Fishing Clinic on November 26th.

Camp Wildwood

- Dan updated all forms and applications for the 2012 Camp Wildwood 1st, 2nd and 3rd year programs. The facility at Kings Mountain State Park used for 1st and 2nd year was booked as well as the 2nd year's rafting trip with Wildwater Ltd. Initial contact was made with counselors and professional staff.
- Dan worked on ways to brand Camp Wildwood as Camp Wildwood of South Carolina creating a new logo, updating the Facebook page and working with the web design staff to update the website. There are numerous Camp Wildwoods nationwide and has been a bit of a problem in trying to get folks to the right one when searching via the internet.

Other

- Dan attended and became trained in the CPR/AED Training offered November 2nd.
- Lorianne attended the Aquatic Resources Education Association's Board Meeting via conference call as the Southeastern Representative.
- Lorianne attended the monthly Fisheries Coordinator's Meeting in Clemson. Coordinators traveled to Twelve Mile Creek to see the recent dam removals as a part of the Schlumberger PCB settlement.

Jocassee Gorges Education and Recreation

- * Fall/winter 2011 issue of Jocassee Journal newsletter printed, 2,200 copies sent to subscribers, remaining 800 distributed to Jocassee Gorges "gateway" State Parks Keowee-Toxaway, Devils Fork and Table Rock.
- * Coordinated hikes at Nov. 4-6 Foothills Trail Conference annual meeting at Table Rock, and led Nov. 6 trip to Virginia Hawkins Falls and Jumping-Off Rock Overlook.
- * Led Lowcountry Master Naturalists on one-day "advanced training" through Jocassee Gorges, to Sassafras Mountain, Jumping-Off Rock Overlook and across Jocassee Dam.
- * Completed DNR coordination of Upstate Master Naturalist class, which graduated in November after 12 weeks of classes.
- * Completed fall Jocassee Gorges class for Osher Lifelong Learning Institute (OLLI) with November field trips to Jumping-Off Rock Overlook and Pinnacle Mountain petroglyph site.
- * Chaired Nov. 14 meeting of Jocassee Gorges Working Group at Clemson DNR office.
- * Fielded inquiries on recreation (roads open/closed, hunting, hiking, backpacking, paddling, etc.) in Jocassee Gorges and mountain region.

Other

- * Conducted wildlife program at Belton Elementary School Math and Science Night.
- * Manned all-day wildlife program at Pendleton High Farm-City Day at Link Farm near Pendleton.
- * Conducted all-day wildlife and science program for fourth graders at Liberty Elementary School.
- * Conducted wildlife programs at Mt. Lebanon Elementary Career Day.
- * Helped coordinate and write stories for DNR statewide weekly news package.
- * Fielded animal nuisance calls and calls about hunter and boater education and other general phone questions.
- * Serving as Region One hub coordinator for OSS Division and region chair.

Graphics

The Graphics section completed approximately thirty jobs in the month of November. The Jocassee Journal Newsletter, several Car Data Tags, Camp Wildwood Billboard and many signs were among some of the items completed. The agency spent approximately \$32,000.00 on printing, signs, specialty items and publications this month. This cost is not all state funding but includes grants, nonprofit charitable donations and federal monies as well.

TECHNOLOGY

Data Base Management. Continued to develop quality assessment and editing tools to identify problems with customer identification numbers and resolve impacts to licensing and titling programs. Demonstrated prototype system to licensing and titling staff and are making changes as requested. Continued to support the geologic carbon sequestration and geothermal data management projects. Provided continuing support to South Carolina Interactive, agent POS vendor for the DNR licensing program and the Hunter-Boater Education systems. Finalized data schema for integration of internal licensing, POS and Internet systems licensing and titling systems to initiate testing of the SCI system. Staff are making changes as issues are identified from the testing. Due to continued staff shortages we were unable to resume the design of internal financial records management system to interface with SCEIS including the telephone and auxiliary credit card billing systems pending resolution to the customer identification number issues. Performed weekly maintenance and updates to various database and applications programs using the DNR's development framework protocols.

Continued work with the boat titling program and the SCI, POS vendor, to implement and enhance the ImageNow electronic document management system for document and records management. Continued development of a DNR photographic document reference library and provided document management support to the diadromous fish project to evaluate the use of barcode scanning system for data capture. Due to scheduling conflicts, suspended EDMS project with the Engineering office to integrate facilities management records into the system. Continued document scanning and indexing for hydrologic well data, DNR Managed Lands, law enforcement violations/summons billing and aviation log

applications. Completed scanning of various agency property files. Provided records management and permanent archival support to the agency using record export and archive process.

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Administrative. Tim De Troye continued to work with various state agencies and local governments to increase statewide participation in the GIS Coordination Council. Jim Scurry attended the Information Technology Solutions Committee (ITSC) meeting at the Division of State Information Technology and continues to meet with South Carolina Interactive regarding the design and implementation of the licensing and titling system scheduled for March 16.

ENGINEERING

Priority	County	Project Name
1 - Completed Projects		
2 - Under Contract	Colleton	Mars Oldfield Boat Landing
	Bamberg	Bob Cat Landing Bank Stabilization
	Charleston	Santee Coastal Blake House
	Horry	Red Bluff Landing Courtesy Dock
	Kershaw	Hwy. 1 Landing - Lugoff (Phase II)
	Laurens	Belfast Archery Range
	Laurens	Boyd's Mill Pond Boating Access
	Richland	Bates Bridge Landing Ramp Relocation
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	Kershaw	Habitat Enhancement
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<u>Division</u>	<u>Commodity/Service</u>	<u>Requestor</u>	<u>Requisition #</u>	<u>Contracts</u>	<u>Award Amount</u>
W&FWF	Crushed Stone	Mark Hall	5400003548	No	\$ 38,500.00
W&FWF	Lime Spread	Dean Harrigal	5400003619	No	\$ 10,988.25
W&FWF	Eel Passage Troughs	Allen Hazel	5400003680	No	\$ 27,000.00
W&FWF	Road Improvement	Brett Moule	5400003645	No	\$ 150,000.00
LE	Duty Gear	Rick Dye	5400003637	Yes	\$ 50,000.00
LE	Archery Park/Tower	Billy Downer	5400003641	Yes	\$ 27,967.00
Marine	R/V Lady Lisa Repairs	Randy Beatty	5400003603	No	\$ 16,377.28
Marine	Oyster Shell	Michael Hodges	5400003632	No	\$ 90,585.00

BOATING/LICENSING**Boating Operations November 2011****Basic Business Report**

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Jan. 1, 10 - Dec. 31, 10		286
Jan. 1, 11		284

M.T.I. Cases

Since July 1 , 2008		
Stolen/Recovered Case files created	5	196

Licensing Operations November 2011

Basic Business Report

	MTD Quantity	MTD Revenue	Last Year MTD Quantity	Last Year MTD Revenue
Resident Hunting Licenses	26,928	\$ 134,277.00	25,792	\$ 126,879.00
Non-Res. Hunting Licenses	5,480	\$ 412,077.00	5,624	\$ 415,482.00
Total	32,408	\$ 546,354.00	31,416	\$ 542,361.00
Resident Fishing Licenses	8,604	\$ 72,709.00	9,450	\$ 80,460.00
Non-Res. Fishing Licenses	6,439	\$ 93,862.00	6,434	\$ 95,252.00
Total	15,043	\$ 166,571.00	15,884	\$ 175,712.00
Combo. Licenses	7,371	\$ 218,573.00	7,185	\$ 204,988.00
3 Yr. Resident Hunt	89	\$ 2,275.50	70	\$ 1,881.00
3 Yr Resident Fishing	201	\$ 5,427.00	162	\$ 2,114.00
3 Yr Non-Res Fishing	31	\$ 3,162.00	11	\$ 1,122.00
Lifetime Licenses	595	\$ 14,755.00	607	\$ 16,158.00
L/T Disability Licenses	0	\$ -	3	\$ -
3YearDisability	179	\$ -	180	\$ -

Turkey Tags	1,005	\$ 0.00	Opens 03-15-12
Antlerless Deer Tags	31,109	\$ 155,545.00	Open 09-15-11
Shrimp Baiting	9	\$ 225.00	Closed 11-08-11

License Agents Numbers and Sales (Month To Date)

LicenseAgents Quantity	Manual 0	Point of Sale 507	Internet & Call Center 1	SCDNR Offices 4	Totals 512
Total License		43,402	11,174	1,032	55,608
Total Revenue	\$ 0.00	\$ 595,473.50	\$ 341,017.00	\$ 17,811.00	\$ 954,301.50
% sales to agent type	0.00 %	62.4%	35.7%	1.9%	

NEW POS
AGENTS 0

Commercial License Operations October 2011
Basic Business Report

License Type	Licenses Sold MTD	Licenses Sold Last Month	MTD	\$ YTD	\$ YTD Last Month	\$ MTD
Commercial Saltwater Res	1034	959	75	\$112,220.00	\$23,906.25	\$25,816.25
Commercial Saltwater Non	142	129	13	\$168,720.00	\$38,565.00	\$42,510.00
Commercial Saltwater Total	1176	1088	88	\$28,094.00	\$62,471.25	\$68,326.25
Trawl Res	309	303	6	\$169,162.50	\$37,793.75	\$38,612.50
Trawl Non	107	105	2	\$95,910.00	\$31,365.00	\$32,085.00
Trawl Total	416	408	8	\$265,072.50	\$69,158.75	\$70,697.50
Crabs Res	313	297	16	\$96,469.50	\$19,225.00	\$19,891.25
Crabs Non	12	9	3	\$17,443.75	\$3,375.00	\$4,487.50
Crabs Total	325	306	19	\$113,940.25	\$22,600.00	\$24,378.75
Shellfish Res	191	139	52	\$46,732.50	\$10,395.00	\$14,298.75
Wholesale Res	252	245	7	\$118,385.00	\$24,485.00	\$25,190.00
Wholesale Non	5	4	1	\$13,000.00	\$2,000.00	\$2,500.00
Wholesale Total	257	249	8	\$131,385.00	\$26,485.00	\$27,690.00
All Commercial Types Res	3050	2766	284	\$637,238.25	\$135,071.75	\$143,959.00
All Commercial Types Non	304	262	42	\$332,567.00	\$76,800.00	\$84,230.00
All Commercial Types Total	3354	3028	326	\$969,805.25	\$211,871.75	\$228,189.00
Totals	3354	3028	326	\$969,805.25	\$211,871.25	\$228,189.00

SC DEPARTMENT OF NATURAL RESOURCES
WATER RECREATIONAL AND GAME & FISH FUNDS
BALANCES OF AVAILABLE CASH AS OF NOVEMBER 30, 2011

REG 1 HUB Balances	WREC	G&F	FY12 Lic Rev	FY12 Fine Rev
Abbeville	83,049.19	20,877.43	848.99	298.79
Anderson	40,643.43	134,777.76	7,291.90	1,485.76
Cherokee	193,736.07	147,536.22	4,786.89	394.74
Edgefield	65,573.29	29,984.97	470.93	101.22
Greenville	99,554.29	92,958.95	5,606.80	284.35
Greenwood	78,399.79	40,621.62	2,848.77	486.79
Laurens	107,563.58	41,882.43	2,145.99	1,961.55
McCormick	33,657.19	19,448.79	1,374.91	489.17
Oconee	433,697.72	308,312.18	11,642.51	454.09
Pickens	52,765.73	73,386.37	5,073.66	1,363.85
Spartanburg	53,676.04	139,959.79	7,116.98	1,597.88
Union	99,210.15	32,339.65	803.95	231.36
REG 1 Total	1,341,526.47	1,082,086.16	50,012.28	9,149.55
REG 2 HUB Balances	WREC	G&F	FY12 Lic Rev	FY12 Fine Rev
Chester	162,275.01	44,094.60	867.01	0.00
Chesterfield	52,766.41	16,823.58	1,214.86	318.09
Darlington	198,249.38	16,861.06	773.54	0.00
Dillon	162,820.11	45,218.08	1,901.69	0.00
Fairfield	56,737.51	135,190.63	3,141.41	1,792.58
Florence	412,646.97	47,862.95	1,225.69	363.98
Kershaw	230,135.64	67,461.62	1,691.80	413.39
Lancaster	257,734.45	116,649.09	5,991.14	1,318.83
Lee	105,042.78	10,960.84	69.61	417.29
Marion	118,794.42	25,339.60	272.28	322.58
Marlboro	98,677.87	24,858.34	763.31	486.76
Williamsburg	116,002.98	27,036.72	170.14	0.00
York	223,253.42	168,393.50	21,712.37	720.38
REG 2 Total	2,195,136.95	746,750.61	39,794.85	6,153.88
REG 3 HUB Balances	WREC	G&F	FY12 Lic Rev	FY12 Fine Rev
Aiken	17,778.84	54,304.42	2,510.03	532.04
Allendale	25,994.00	22,702.13	115.75	396.38
Bamberg	61,366.62	14,738.30	98.48	91.58
Barnwell	87,225.51	34,711.78	280.92	875.89
Calhoun	70,291.22	34,168.88	503.90	703.64
Clarendon	68,842.77	43,785.89	4,191.79	887.96
Lexington	710,101.31	109,960.21	7,213.66	621.20
Newberry	105,669.32	72,634.09	2,620.48	554.35
Orangeburg	170,586.28	104,130.89	4,450.17	1,022.23
Richland	328,313.59	94,103.29	7,665.44	640.06
Saluda	113,121.51	52,049.73	1,282.95	539.72
Sumter	165,200.14	26,481.06	1,000.64	1,242.78
REG 3 Total	1,924,491.11	663,770.67	31,934.21	8,107.83
REG 4 HUB Balances	WREC	G&F	FY12 Lic Rev	FY12 Fine Rev
Beaufort	64,817.01	83,374.99	960.32	2,914.78
Berkeley	404,064.74	156,756.88	7,131.49	2,881.84
Charleston	531,062.59	91,260.75	2,356.17	4,519.32
Colleton	97,101.38	51,873.56	729.25	803.62
Dorchester	268,053.53	30,453.40	994.26	465.05
Georgetown	18,626.91	91,978.80	1,521.37	5,218.78
Hampton	89,635.38	55,557.22	470.58	852.46
Horry	253,036.41	67,348.35	7,339.63	3,232.65
Jasper	60,396.95	69,271.47	1,333.92	1,035.27
REG 4 Total	1,786,794.90	697,875.42	22,836.99	21,923.77
AVAILABLE TOTAL	7,247,949.43	3,190,482.86	144,578.33	45,335.03

LAND, WATER & CONSERVATION

OFFICE OF DEPUTY DIRECTOR

Ken met with LWC Division staff at Riverbanks Zoo (10/3); and with the Georgia EPD regarding water issues (10/4). Ken attended the DNR Board meeting in Columbia (10/5). Catawba River Basin Commission meeting (10/7). Met with USGS re: water monitoring programs (10/12). He participated in conference call with GA EPD and TNC re: COE Comp II Study (10/14). Ken met with CCL regarding the State Water Plan update (10/17). Hosted the LWC Advisory Committee meeting in Columbia (10/19). Met with the Governor's staff regarding water issues; and attended USDA meeting (10/21). Attended TNC meeting and the COE Charleston District meeting in Charleston (10/24). Interstate Council on Water Policy Legislative & Policy Committee and Lake Hartwell Association Annual meeting (10/27).

HABITAT PROTECTION AND ENVIRONMENTAL CONSERVATION SECTION

River Conservation

Ashley Scenic River Project:

Staff participated in an advisory council meeting of Oct 26 to address plans for the public park at Bacons Bridge on Ashley River, and to plan for the annual Ashley River community meeting.

Catawba Scenic River Project:

Staff and the advisory council continued developing the Catawba Scenic River management plan.

Edisto River Basin Project:

Staff assisted Friends of the Edisto (FRED) in organizing the FRED Annual Meeting on Oct 29 held Orangeburg in which DNR staff, Bill Post, provided a presentation about diadromous fishes of the Edisto River system.

Lower Saluda Scenic River Project:

Staff organized an advisory meeting of Oct 27 to address Sewer Overflows with City of Columbia staff and Riverbanks Zoo site management issues from Zoo staff.

Pee Dee Scenic River Project (Great Pee Dee/lower Little Pee Dee):

Staff reviewed a Scenic Byway Proposal for Plantersville Road submitted to SCDOT by local citizens and provided comments to DNR-WFF staff who are submitting a letter to DOT.

FERC Hydro Projects:

- Columbia Hydro Project (P-1895) – Staff participated in a site visit to Columbia Hydro Fishway (on Oct 12) and the Columbia Hydro Fishway Annual Meeting of Oct 25 to address the 2011 fishway report and plans for monitoring and management of the fishway for 2012. Staff began reviewing the annual report of monitoring the Rocky Shoal Spider Lily.
- Keowee-Toxaway (KT) Hydro Project (P-2503) – Relicensing process continues: Staff participated in KT meetings of Oct 13 and 18 to address studies for water quantity and operations. Staff participated in the KT Stakeholders meeting of Oct 26 and began developing components of a relicensing agreement. Staff completed a revised study plan to assess stream fish communities and the status of redeye bass, a study the DNR will propose to be included in Duke's study plan to FERC.
- Riverdale Hydro Project (P-13590) – Relicensing process continues. Staff awaits additional FERC response to the license application of Lockhart Power.
- Neal Shoals Hydro Project (P-2315) – Staff assessed a fish kill on Oct 17 caused by SCE&G's drawdown of the reservoir at Neal Shoal. The drawdown was done to allow for repairs to sand gates in the dam and the fish kill resulted from the stranding of fish as the reservoir was dewatered. Staff drafted DNR comments to SCE&G regarding this incident.
- Broad River Fisheries Mitigation Trust Fund – Basin trustees did not accept the project proposal of American Rivers and Upstate Forever to assess dam removal opportunities in the Broad River Basin. Staff communicated this decision to staff at American Rivers and UF.

Other Rivers-Program Staff Activities:

- River Management Society -- Staff participated in a RMS National Board conference call on Oct 6. Staff continued planning and participating in committee teleconference calls to organize the April 2012 RMS symposium to be held in Asheville.
- Broad River at Lockhart – Staff met with Lockhart Power on Oct 25 to continue evaluating options for developing additional public access to the river.
- Beach Sweep / River Sweep -- Staff continued to receive and compile cleanup results reported by the volunteers (Site Captains) who led the Inland Sweep of rivers and lakes on Sep 17.
- Education/instruction – Staff provided outdoor skills training at Wildlife Federation event on Oct 14-15.

Heritage Trust

Data Management

Information and data requests:

Three request for verification of known occurrences in the vicinity of project sites were received and answered from:

- Kimley-Horn & Associates for a road construction project in Rock Hill,
- Targus Associates for a housing project in North Myrtle Beach, and
- Lower Savannah Council of Governments for a revision of a water project in Blackville.

Three request for GIS location data of rare, threatened, and endangered species were received and processed from:

- Jackie Wagner, a graduate student at Appalachian State University, for information on the federally listed *Hexastylis naniflora* for a project to circumscribe and identify habitat characteristics,
- the Brigman Company for state-wide data to be used in various projects around the state, and
- Biological Integrity, L.L. C. for information in Berkeley, Colleton, Kershaw, Richland, and Sumter counties for use in assisting landowners with forest certification.

In addition several calls were received from DHEC for clarification of the ranking system, and questions about the ranks of specific species and the minutes of most of the HTAB meetings were reviewed to determine when projects were approved. No list has been kept in the past. The minutes of the majority of the meetings will be placed for storage at SC Archives and History.

Heritage Survey:

Approximately 15 specimens were processed for October 2011 for specimens collected from Heritage Preserve Inventory with a list of specimens and collection numbers maintained for quick reference.

Staff attended the annual SC-Exotic Plant Pest Council conference held at Riverbanks Botanical Garden which is working to control invasive species that occur in an adjoining ROW. These efforts are aimed at creating and maintaining the area as a native grassland/prairie vegetative community.

Staff assisted in the submittal of two National Science Grant applications to:

1. Collections in Support of Biological Research (CSBR) program involving a large scale collaborative effort between the herbaria at Clemson and USC. The proposal includes provision of a sub-award to SCDNR. The project goals will establish an efficient specimen digitization and data entry process which will facilitate development of a web site offering increased accessibility to herbarium specimen information. The collaborative scope of the project extends these services to all herbaria in South Carolina, and
2. Advancing the Digitization of Biological Collections (ADBC) program for a large scale collaborative effort involving herbaria across the Southeast. This SERNEC sponsored project aims to digitize specimens of Southeastern endemic plant species at all participating herbaria. The proposal includes provision of a sub-award to SCDNR, as well, and will facilitate further development of a web site offering increased accessibility to herbarium specimen information.

Two list of plant species under consideration for protection under the US Endangered Species Act were evaluated. The first of these 3 "warranted but excluded" species were determined to be native to South Carolina. Only one plant, Georgia Aster (*Symphotrichum georgianum*), would immediately present any impacts to land management activities on public property. The overwhelming majority of the known populations of Georgia Aster are on US Forest Service lands; Bog Asphodel (*Narthecium americanum*) is assumed extirpated in SC; and White Fringeless Orchid (*Platanthera integrilabia*) inhabits extremely steep mountain seeps. The deadline for action is the year 2012. The second list under consideration included 26 wetland plants which were determined by staff to be indigenous to the state and are to be considered by USFWS with additional range-wide surveys and evaluation. Many of these organism the Natural Heritage Trust Program currently maintains data on or will be able to do so readily with the many database improvements the section has made in the last several years. The deadline for action for USFWS is the year 2016.

Endangered species surveys were conducted on the Lynchburg Savannah and Marsh Furniture Heritage Preserves and Wildlife Management Areas across 9 pond- cypress ponds and 2 Carolina bays. These natural wetland communities harbor a great number of state and federal species of concern including Rafinesque's Big-eared Bat (*Corynorhinus rafinesquii*) and Sarvis Holly (*Ilex amelanchar*). Large and hollow Tupelo Gum trees, which typically function as hibernacula for the bat, and habitat for Sarvis Holly were both documented and described in a Carolina bay on the Marsh Furniture property.

Aquatic Nuisance Species Program

Technical

SC invasive species management surveys were conducted on Santee Delta East, Goose Creek Reservoir, Yawkey Wildlife Center, Lake Marion, Lake Moultrie, Bonneau Ferry WMA, Dungannon HP, Donnelly WMA, White Hall Plantation, Huntington Beach State Park, and the Socastee Snail Population.

Control operations were conducted on 144.45 acres at a total cost of \$18,337. That includes invasive Island apple snail control measures, 25 acres, in and around Socastee, SC. Other sites include 74 acres of hyacinth control on Goose Creek Reservoir, 14 acres of phragmites control at Yawkey Wildlife Center, 28 acres of invasive species work at Bonneau Ferry WMA, 2 acres of phragmites control at Santee Delta East, and 3.25 acres of phragmites control in Huntington Beach

State Park.

Staff met with DNR Wading Bird Biologist to survey and treat invasive species Dungannon HP and to survey invasive species at White Hall Plantation in Walterboro. Staff prepared and submitted a statewide NPDES permit for all divisions of the agency. Staff coordinated with staff from Santee Cooper and volunteers from Delta Waterfowl to gather vallisneria seed pods for later use in habitat restoration projects around the state.

Outreach

Work has continued with Amanda Stroud, Chris Thomason and Marine Staff to coordinate a public service announcement campaign to provide PSA's, billboards and literature for an ad campaign highlighting aquatic invasive species prevention in SC.

Staff participated in and gave presentations at the Aquatic Invasive Species Taskforce meeting at Styx Hunter Education Room. Staff provided aquatic invasive species brochures and information to the USFWS for use at several National Refuges. Staff presented a program overview at the LWC Advisory Committee meeting.

CONSERVATION DISTRICTS

Statewide Projects

Staff coordinated and participated in a meeting of the Land, Water, and Conservation Advisory Committee. The SC Association of Conservation Districts (SCACD) Pee Dee Area met in the Lee District with many district commissioners and partnership staff from the area in attendance. The meeting included a tour of the famous Pearl Fryar Topiary Gardens and a presentation by the Coca Cola Bottling plant staff on their conservation efforts and partnership with the Lee District. SCACD held its annual Mid-year meeting to develop policies for 2012.

Technical

Jonathan Williams assisted landowners with conservation practices in **Orangeburg**. He participated in the Orangeburg Young Farmers meeting.

Outreach

Staff attended district board meetings and events in Orangeburg, Kershaw, Lee, Richland, Cherokee, Aiken, Sumter, Spartanburg and Horry Districts.

Conservation Districts

York District made 18 presentations to students at 5 different schools using Enviroscape, "Dragonfly Pond" activity and "Oh Deer" simulation. The District chaired "1000 Rain Gardens for York County" steering committee workshop planning group which conducted rain garden workshops at Sugar Creek Garden Center and Stacy's Nursery. Staff judged 50 posters and submitted winners to SCACD. Prepared fall newsletter with distribution to about 1000 by mail and email. The District began a school garden program at Cotton Belt Elementary with Kindergarteners in partnership with Clemson Extension/4H. Rented no-till drills to 13 users to plant 208.4 acres.

Williamsburg District Board invited the Director of the Williamsburg Water and Sewer Authority to their monthly meeting to discuss the local water project which has many citizens concerned. The District was a sponsor of the USDA – Field Day held on October 27 at Williams Muscadine Vineyard and Farm in Nesmith.

Sumter District hosted an Affiliate Tour to thank its members. The tour included a visit to the Mill Pond and a tour of the grits mill, the broom factory, church & other buildings surrounding the property. A farm tour was held at Commissioner Buddy Rivers' farm, 85 fifth grade students from Kingbury elementary school attended. Mr. Rivers showed the children corn, soybeans, cotton, peanuts & wheat, along with farm equipment used on the farm. The district is funding 3 gardens at Alice Drive School to use as an educational resource to show the children where their produce comes from. The children will be responsible for planting plants and maintaining it throughout the school year. The garden will be made handicap accessible so all students can have access to it.

Spartanburg District's Youth Board kayaked at Lake Blalock, and attended a fall color hike at Paris Mountain State Park. District staff made Enviroscape presentations for about sixty 7th and 8th graders at McCracken Middle School. Staff also taught a Soil & Water Conservation merit badge class to about 50 boy scouts. The District co-sponsored a bioretention project at Lyman Lake, and a seminar for engineers and landscape architects was held, based on that project's design. The District hosted a dedication ceremony and historical program for the recently refurbished Berry Gully historical sign, which marks the spot of the first Soil Erosion Service conservation project in the Southeast in 1933. SCACD and the Spartanburg District paid to have the sign refurbished.

Richland District has begun a two-year cooperative educational effort to inform producers about technical and financial assistance available from the USDA-NRCS under Farm Bill programs and to increase awareness of, and demand for, USDA Certified Organic products. District board members and staff established the District's long-range plan. The District continued to promote Richland County Farm-City Week by sponsoring K-12 competitions and making presentations about Farm-City Week to the Richland County Appearance Commission, Bookman Road Elementary School Second Grade, and at Kid City in the Richland County Neighborhood Planning Conference. District staff spoke about soil conservation with second and third graders in Round Top Elementary School's Garden Club. Through the Conservation Station at Sandhill, the District sponsored conservation education programs for 21 people. The District

began mentoring Green Steps School projects at five Richland County Schools. In collaboration with the SCACD, SCCDEA, NRCS, and DNR, the District staff created a SCACD youth education brochure. Staff attended the SCACD annual meeting, EEASC and Green Steps Schools meet and greet, and University of South Carolina Community Partnerships Breakfast.

Orangeburg District's Gabby Greenleaves had a busy month. She traveled around the county visiting schools in Orangeburg, Elloree and Holly Hill. Pre-K, kindergarten, first and second grade classes were given lessons that are standards based for their grade level. The tree costume has pockets that hide various objects – apple, orange, nuts; and animals, birds, squirrel, raccoon, frog, lady bug, etc. Project (Reform-based Environmental) RES continued with teachers attending a Growing Up WILD workshop facilitated by Diane Curlee. The 23 teachers completed 3 credit hours of training and received a curriculum guide that includes 27 activities that are each structured to be used for a day.

The Oconee County Council passed an ordinance creating the Oconee County Conservation Bank and **Oconee District** set about securing candidates to populate the bank board. The District organized the Conservation Corner at the Foothills Heritage Fair. The Conservation Corner had exhibits, displays, and interactive games aimed at teaching opportunities for elementary students to experience learning about farm and agricultural practices. The District was assisted at the Conservation Corner by the Seneca High School FFA who manned the game segments and helped teach the younger students about Earth Care and The West Oak FFA who led tours for the classes to the farm related aspects of the fair. The District held its Sixth Annual Celebrate Agriculture Banquet, a celebration of farming recognizing the important work of our local farmers. The District is working with the Mountain Lakes Visitors bureau to create several farm tours for visitors, as well as linking ag tourism to conventions and other events not associated traditionally with farming. District Manager Eddie Martin made a presentation about the importance of conservation work to the Leadership Oconee Class.

McCormick District supported and participated in Farm City Day. The District presented a program, "Living with Fire" for the 3rd grade students. The District is in the process of holding a poetry contest for 3rd - 12th grade students in McCormick County.

McCormick County accomplishments in conjunction with our USDA partner are as follows: conservation systems planned on 1,110 acres, conservation systems applied on 8,038 acres; technical assistance provided to over 400 individuals; 32,876 feet of firebreaks constructed; 3,174 acres of forest stand improvements applied; 461 acres of nutrient management completed; 2,742 acres of prescribed burning conducted; grazing management applied on 500 acres; and wildlife habitat improved on 3,320 acres.

Bill Melven, **Lexington District** Manager recently met and discussed rain gauges with Lexington County. The District will purchase 7 rain gauges, in an effort to get more accurate rain data from around the county. John Fetchel, Director of Public Works will distribute the rain gauges to the Lexington County fire stations. Hope Mizzell, SC State Climatologist, DNR will hold an official training session with fire station staff on how to properly install the gauges; and how to handle and report the data. Bill Melven's assistance was requested by the Newberry office for recommendations on how to close a dairy waste management lagoon. Tina Blum, Administrative Assistant volunteered for the Wood Magic Forest Fair. The purpose of the fair is to demonstrate that our society depends on forests for many products we use every day and that these products improve our quality of life. Associate Commissioner Wayne Grooms assisted at the "Fall Field Day" of the South Carolina Nursery & Landscaping Association. The SC Native Plant Society (SCNPS) and the SC Exotic Pest Plant Council (SC-EPPC) shared a display on the porch of the Lake House about the use of native plants and the effort to stop or slow down the use of invasive species.

Lancaster District Amanda Roberts gave the Hunter's Education test to 9 people. Amanda Roberts and Commissioner Bob Bundy presented the EnviroScape and a rock presentation for 29 third grade students at Buford Elementary School. They also went to Lancaster High School to talk about the Envirothon Competition with a science club. Bob Bundy, Commissioner Bill Ardrey and Amanda Roberts attended the SCACD mid-year meeting. Amanda Roberts was a guide for the Wood Magic Forest Fair in Columbia and helped judge some Lancaster County Clemson Extension 4-H contest entries.

Hampton District hosted two Beach Sweep/River Sweep litter pick-ups with the Wade Hampton High School Ecology Club. Both events brought in 42 volunteers and almost 300 pounds of trash was collected. District staff was involved in a strategic meeting of the Lower Savannah River Alliance where they are setting goals and objectives for the nature trail and education building at the old Welcome Center on Hwy 301 in Allendale County that will soon be open to the public. A pumpkin painting event was held at the Estill Library with approximately 132 students, teachers and chaperones enjoying a morning in the library park.

Horry District held their Annual Affiliate and Awards Banquet which included the kickoff to the year-long celebration of the District's 70th anniversary. The district recognized all commissioners, living and deceased, who served the district since its creation in 1941 with a plaque inscribed with each commissioner's name. The district also recognized the local high school FFA students and teachers and presented a Citizenship, Educator, Special Service and Farmer of the Year Awards.

Greenville District launched an outreach campaign for storm water this month. It is called "There is No Poop Fairy: Scoop Your Poop". The message is a humorous way to call attention to the fact that our pet's waste doesn't magically disappear. The program encourages people to Grab It, Bag It and Toss It, in order to keep storm water from washing the

fecal coliform into our rivers and lakes. The campaign was launched with radio and television spots, and there was a roll-out at the yearly Bark in the Park festival, where the District had a booth with educational games, exciting prizes and interesting information. A month-long reward program starts in November, with Greenville County Parks and Recreation employees giving out T-shirts and buttons with the Poop Fairy mascot and logo to people in the parks that they see scooping their dog's poop.

Fairfield District continues to assist the Boy Scouts to help end an erosion problem at the Old Brick Church. The District is sponsoring 20 sixth graders in the public school system who are involved in the D.A.R.E. Program. In return for the sponsorship, the D.A.R.E. instructors are teaching the students about conservation of our natural resources using materials supplied by the District. The Vocational School students are building bird houses for these 20 students to hang in different places throughout the county. "Farming for Clean Water" books have been placed in the library at Fairfield Senior High School.

Dillon District is sponsoring the Fourth Grade Foresters Project. The district will provide tree seedlings to Dillon County fourth grade students in observance of Arbor Day. District commissioners attended the 2011 SCACD Mid-Year Session. The District has had a good response from the county schools concerning the Fifth Grade Essay Contest.

Colleton District recognized Deborah Blankenship for 15 years of dedicated service as District Commissioner and Steve Edwards for his service to Colleton County as Lowcountry RC&D Coordinator. Flyers for the Annual Poster, Essay and Photo Contest were sent to area schools and a notice was placed in the local newspaper. This year's theme is "Forest for People". Also the Colleton SWCD Annual Membership Drive began in October.

Chester District was pleased to announce that the poster of Angilea Deann Foster, a seventh grade student at Chester Middle School, was chosen as the First Place South Carolina Winner in the 2011 Poster Contest. Miss Foster's poster will be forwarded to Washington to be judged in the National finals. The no-till drills were used to plant seed on 207 acres.

Beaufort District has been busy with soil tunnel programs, and water quality programs relating to the school district wide *River of Words* art and science initiative. Checkers, our district corn snake, was a big hit at Festival of the Sea teaching 400 folks about snakes. The Together for Beaufort Water Quality Committee met and discussed new shellfish classifications in some of our impaired waterways.

Barnwell District staff gave a presentation on litter, recycling, and composting for grades 2nd - 11th at the Calvary Mennonite School. These students plan to follow up with a litter cleanup in their community to promote November as litter awareness month as proclaimed by our district. Twenty-six Talented & Gifted students from Barnwell Primary School attended the Talking Trash and Recycling a Can programs.

Aiken District held its Annual Affiliate and Awards banquet. The district presented Mr. Barney Chavous, and AM&L Enterprise, Inc with the District's 2011 Conservationist of the Year award. AM&L Enterprise, Incorporated is a diversified farm consisting of row crops, pasture, hay, cattle, timber and wildlife. All planned and applied conservation practices have been done with regards to wildlife habitat management while protecting the natural resources.

EARTH SCIENCE GROUP

South Carolina Geological Survey

STATEMAP: Work began on the FY12 proposal. Proposal text and budgets have been finished. Revisions were made to the text after a discussion with Dr. Doug Howard, USGS program coordinator, about the content of a paragraph that was requested in the RFP describing use of geology information in water studies. Will Doar III worked on a manuscript with Ralph Willoughby that proposes a unified stratigraphic column for the marine Pleistocene units. FY11 Coastal Project drilling began in Georgetown County (Region 4); 15 holes averaging ~33-feet in depth were drilled in Waverly Mills and Magnolia Beach quadrangles. Permission is being sought to trespass and drill in other parts of this year's project area. Attempts also are being made to obtain map information from Georgetown County's GIS Department to help this year's mapping.

Outsource Mapping: Mapping continued to focus on northwest-striking faulting and on oblique offset across those faults between Campbell Mountain and Persimmon Ridge, located east of Highway 276 in the northwest corner of Cleveland quadrangle (Greenville County, Region 1). Dr. Dave Lawrence (ECU-retired) was contacted about the publication of his geologic maps of the east Carolina terrane.

Broad River Project: Dr. Castle met with John Shelton (USGS) to discuss available flow data for the Broad River. A 2010 data set is being analyzed using SonTek Flowtracker software. Digital floodplain-extent data were obtained from the Flood program. Work also began on compiling National Land Cover data and DEMs for individual sub-basins. The first Broad River Project meeting was held at Lake Greenwood on 10/5. All Principal Investigators and technical-support staff attended. Agenda items included: general collaboration and responsibility, report writing, schedules, field-work objectives, and overall goals for the first project year (Oct. 2011- Oct. 2012).

Geothermal: Well-log data collected from the Hydrology Section's files were assembled in a test data set.

CO2: Dr. Clendenin presented an abstract "*Reactivation and overprinting of South Georgia rift extension*" at annual meeting of the Geological Society of America meeting in Minneapolis, MN. Talk was co-authored with Drs. M. Waddell

and A. Addison, USC-ESRI, and focused on seismic images of the buried structure.

Coastal Change: The South Atlantic Alliance proposal was partially funded by NOAA; and subsequently, the scope of the project to examine change of different types of shorelines along the Coast was reduced 50%. Dr. Tim Callahan, College of Charleston, inquired about continued interest in the Fringe Project; partial support may be available through Sea Grant and the College of Charleston. A power-hammer drill for driving rods at SET stations was received.

Earthquake Activity: Two earthquakes occurred in South Carolina during the report period: M2.5 - Summerville area (10/15), and M2.1 - Aiken area (10/10). Earthquakes are still occurring around Mineral, Virginia. Dr. Howard gave a presentation to EMD executive staff on the revised Coastal Plain Hazards Map and the 1913 Union County earthquake study. EMD suggested developing a derivative product to complement the new hazards map. Comments by executive staff members also indicated that the size and occurrence of Virginia earthquakes has increased the interest in Piedmont earthquake activity.

Support Activities: Service was done and two tires were replaced on a field vehicle. Both the diesel and deck motors were serviced before resumption of drilling. Minor repairs also were made to the drill rig - the driller's deck was replaced, a rebuilt wiper motor was installed, and rusty areas on the truck cab were spray painted. New bits and pins were ordered to replace worn out tools. Repair costs for the drill rig over the last 3 years were compiled for OSS.

Digital Products

General: Dr. Dick Berg, Chief Scientist, Illinois State Geological Survey, gave a presentation on digital 3-D mapping to the Earth Sciences Group and different partners. A proposal to digitize maps covering the east Carolina terrane was revised and resubmitted to Haile Gold Mine Company. Earthquake updates were made to webpage. Web statistics show page requests are up 20% per day over 2010. 94 map layers and 309 education materials were downloaded this month. DIG concludes that numbers show a larger and more diverse audience is being reached. The entire catalog of SCGS publications is almost scanned. The files are being organized, quality checked, and stored for future use. Work now is focused on an archive system for both paper and digital formats. Eighteen (18) maps were printed.

STATEMAP: FY10 STATEMAP deliverables were forwarded to the USGS Program Officer. Cross sections to finish FY10 products are being prepared. A derivative geologic map for Hitchcock Woods (Aiken Co.) was developed. Figures are being developed for the FY12 proposal.

Data Preservation: Drill-hole logs, reports, and site maps continue to be scanned into the Document Management Workflow. 1047 scanned records need final QA/QC, and an additional 1174 files need attributed with various data prior to first pass QA/QC. Presently, 2501 records are in the Document Management System.

CO2: ESRI returned edits regarding the CO2 tables. Corrections were made and distributed internally. Meetings and sub-meetings continue to develop a well-data entry format. Data models and definitions for the final Oracle database are nearly complete. A conference call with DOE's NatCarb digital data group discussed availability of data layers to be distributed on their internet map viewer.

Geothermal: A compilation of earthquake hypocenter data was submitted to the Arizona Geological Survey for review and approval. After revisions and subsequent approval are received, the database will be submitted to the Kentucky Geological Survey for integration into a national database. The geophysical well log test dataset also was reviewed and returned with edits and corrections. Revisions are underway, and a finalized data set will be resubmitted for approval.

Estuarine Shoreline Change: GIS components of the estuarine shoreline project were delivered to OCRM.

EMD Hazards Map: Figures were created for the EMD presentation.

Outreach

General: CERT, a technology company, continues to pursue the possibility of rare earth element mining in SC. Staff have discussed exploration, provided data, and guided him with understanding the geology. General information was provided to 19 customers. Will Doar III attended the USACE working group meeting to identify partners for Charleston Harbor Deepening Study and a NRCS technical team meeting interested in the formation of soils in the Piedmont and Upper Coastal Plain. The latest version of the Climate Change report was critically reviewed. Staff also attended a discussion with Mr. Frampton at the Zoo.

Hydrology Section

Water Planning

General: Joe Gellici met with attorney Mullen Taylor to discuss the possibility of her participation as a member of the Water Plan Steering Committee. Brenda Hockensmith attended the R.C. Heath Symposium in Greenville, NC, entitled *Aquifer management in the Mid-Atlantic States*. The symposium focused on water-management issues such as aquifer storage-recovery (ASR) programs as a water management option; water-quality issues associated with ASR; coastal saltwater intrusion (both vertical and horizontal); and the use of wastewater and mine dewatering discharge. Andrew Wachob attended the quarterly meeting of the Catawba-Wateree River Basin Advisory Commission in Rock Hill, which focused solely on a proposal by the Lancaster County Water and Sewer District to construct a new water-supply reservoir adjacent to the Catawba River.

Savannah River Basin: Staff participated in a conference call with the Corps of Engineers, DHEC, Georgia EPD, the Nature Conservancy, NFWS, and the National Weather Service to discuss drought conditions in the Savannah River

basin. Staff also participated in a second conference call that was open to other stakeholders in the basin. Staff also participated in a conference call with Georgia EPD and the Nature Conservancy to discuss the possibility of further reducing releases from Lake Thurmond during the upcoming winter months. Two training webinars were completed on the HEC Regime Prescription Tool (RPT), a software program that aids in the evaluation of instream or ecological flow recommendations. The RPT program will be used to help determine future flow recommendations for the lower Savannah River basin.

Measurements

ADR Network: 15 Coastal Plain ADR wells area were field checked; data were downloaded, manual measurements were made, and equipment checked at each well. Draft reports for the Black Creek and Middendorf aquifer potentiometric maps for November 2009 are being revised. A final report describing ground water levels measured in 109 wells from 2006 through 2010 has been completed and is undergoing final review. A meeting was held between the Hydrology Section, DHEC, and the USGS to discuss plans to measure water levels in approximately 165 wells screened in the Middendorf aquifer in November for a new potentiometric map report.

Databases

General: 394 new well reports that were received from DHEC were sorted and processed. A second draft of a map showing the location of more than 1,500 wells in Lexington County was produced and is being reviewed. A meeting was held with the Geological Survey to review and discuss their efforts to develop an Oracle database containing the DNR well data.

Outreach

Broad River Project: Mr. Gellici attended a project meeting at Lake Greenwood with the Geological Survey and staff from the Wildlife and Freshwater Fisheries Division.

Climate Information: Scott Harder provided stream-flow and lake-level information to the Climatology Office for its evaluation of the State's drought status, and presented this information to the State Drought Committee at its October meeting. Mr. Harder continues to evaluate several alternative methods of using streamflow data as a drought indicator.

FERC: Mr. Wachob and Mr. Harder attended a meeting of the Water Quantity and Operations Resource Committee involved in the FERC relicensing of Duke's Keowee-Toxaway project. They also participated in a conference call and attended a meeting in Greenville regarding the two computer models being developed that will be used to re-evaluate the water-sharing agreement between Duke Energy and the Corps of Engineers in the upper Savannah basin.

Mitigation Banks: Mr. Harder completed a hydrologic review of new data collected for the Pigeon Pond Mitigation Bank and provided comments to the Environmental Office and Corps of Engineers. The purpose of the review was to assess the degree of hydrologic enhancement occurring at the bay, and consequently, the number of mitigation credits to be given.

General: Hydrologic information or assistance was provided to 36 customers. Staff attended a discussion at the Zoo with Mr. Frampton.

Flood Mitigation Program

Outreach: The Flood Mitigation staff provided 405 general assistance contacts with communities within the state. These general assistance contacts included mail, phone calls and emails. Maria Lamm closed out the CAV for the Region 4 community of North Charleston. Joy Sullivan released the Flood Mitigation quarterly newsletter, *The Mitigation Minute*, and distributed via the Flood listserv to all floodplain managers in the State. Ms. Sullivan and Karen Jones updated the webpage. Ms. Sullivan also is working on a map that will show the flood mapping schedule for counties across the state. Ms. Lamm and Ms. Sullivan participated in the monthly CTP (Cooperative Technical Partners) status call in which the contractors provide status updates of their on-going map studies. Ms. Sullivan completed the PDCC (Preliminary DFIRM Community Coordination) meeting minutes and sent letters to all affected communities (total of 10) in Orangeburg and Clarendon counties (Region 3) – thank you letters for communities represented, and sorry letters for those communities not represented in the PDCC Meetings held in September. Information that was provided to attendees on how the county preliminary Flood Insurance Rate Maps (FIRMs) were produced; and they were given a time estimate for their respective map effective dates; and the responsibilities of the participating communities to remain in the National Flood Insurance Program (NFIP), as well as the effects of non-participation for those non-participating communities, also was included with the letters for those communities not represented. Ms. Sullivan also contacted communities in Williamsburg County (Region 2) and in Laurens County (Region 1) regarding their Post Preliminary Process. Ms. Lamm attended the SC LiDAR Consortium to discuss the current status of the Statewide LiDAR project, project specifications, and future planning.

Compliance and Ordinances: Ms. Sullivan and Ms. Jones successfully offered assistance to Region 2 Marion County (5 communities) with updating their Flood Damage Prevention Ordinance by their respective new map effective date of October 18, 2011. Ms. Jones and Ms. Sullivan continued work with the Town of Blythewood (Regions 2 & 3), Town of Jefferson (Region 2), Town of Clio (Region 2), and Town of Luray (Region 4) in getting their ordinances updated to compliance in an effort to gain admission into the National Flood Insurance Program (NFIP). With the completion of Marion County, the Flood Mitigation Program remains in 100% compliance with FEMA in getting all community ordinances updated to compliance for the year. There were a total of 32 ordinance reviews completed for communities

involved with new map effective dates, CAV/CACs (Community Assistance Visit/Contact), and application to the NFIP (National Flood Insurance Program). Ms. Jones participated in the monthly call with FEMA to advise them of the status of required compliant ordinance adoptions by communities of Marion County (Region 2) with last upcoming new map effective date of October 18, 2011, for the year.

Mitigation Activities: Andy Brandenburg continued to provide assistance to the City of Greenville (Region 1), Sullivan's Island (Region 4), Edisto Beach (Region 4), and Richland County (Region 3) in the implementation of various flood mitigation activities to structures located within these communities. Mr. Brandenburg also provided assistance to Myrtle Beach (Region 4) in their planning grant along with their technical assistance grant and participated in the conference call with FEMA and SCEMD to discuss upcoming projects along with other flood mitigation related information regarding the state of South Carolina.

General: Ms. Lamm attended the quarterly Silver Jackets conference call to discuss participating agencies' ongoing activities; completed the application for grant extensions for CTP (Cooperative Technical Partner) grant, the grant application for the FY11 CTP funds, and the paperwork for the closeout of the FY10 CAP-SSSE (Community Assistance Program – State Support Services Element) grant; submitted the Mapping Activity Statements; and participated in a webinar on the Incentives and Disincentives to Natural Floodplain Protection. All staff attended the LWC Division meeting held in the Styx Classroom in which Ms. Lamm made a presentation about the Flood Mitigation Program and also gave a brief presentation on the Flood Mitigation Program at the LWC Advisory Committee meeting. Ms. Sullivan and Ms. Jones attended the LWC Division meeting held at the Zoo in which Mr. Frampton provided a question/answer forum. Ms. Sullivan has coordinated with Sonoco a contract to bring out recycling bins for the building.

Other Activities

Dr. Clendenin attended the Fall Meeting of the American Association of State Geologists while in Minneapolis, MN. He recommended that collection of water data should become an association priority along with geologic mapping and data preservation to the incoming president. The Illinois State Geologist also confirmed the Illinois State Geological Survey's offer of support and guidance in the development of 3-D maps. Deliverables, new projects, and funding were discussed with the National Park Service. Internally, Dr. Clendenin prepared statements to support budget requests and gave a presentation to the LWC Advisory Committee on priorities and directions of the Earth Science Group.

Partnering:

Furman University
USGS – Earth Surface Processes
Team
National Park Service

SCEMD
SCDHEC-OCRM

South Atlantic Alliance – SAA
University of South Carolina -ESRI

STATE CLIMATE OFFICE

The SCO answered 42 information requests with two invoiced for \$45 and eleven media interviews were provided. The Assistant State Climatologist for Service assisted SCDNR Law Enforcement with 3 accident investigations and the Charleston County Sheriff's Office with 1 accident investigation. Special weather summaries were prepared for the low temperatures of October 3, and the heavy rains and storm event of October 18-19. He gave a presentation to the Waccamaw Watershed Academy (10/4) and recruited six new CoCoRaHS volunteers to help monitor rainfall. He represented the SCO at the Fall Palmetto American Meteorological Society meeting (10/25). He prepared the weekly weather summary that is published online.

The Severe Weather Liaison issued 4 Tropical Updates (10/6, 10/13, 10/20, 10/27) ; 4 Tropical Storm Advisories for TS Ophelia and Philippe, 3 Tropical Storm advisories for TS/Hurricane Rina, and 2 WeatherAlerts for strong afternoon thunderstorms (10/13, 10/18). He participated in NOAA's 2011-12 Winter Weather Webinar (10/21). He worked to reactivate the web-based application to monitor water system's conservation actions during the drought https://www.dnr.sc.gov/pls/drought/drought_restrict. He continued updating the Southeast Temperature and Precipitation change study to extend through 2010. He also produced a GIS map coverage of South Carolina's COCORaHS stations. The State Climatologist participated in the Southeast Regional Climate Center Technical Advisory Committee Meeting (10/5), the Carolinas Integrated Science and Assessment conference call (10/8), and the Catawba Wateree Drought Management Group conference call (10/10). She provided two presentations on CoCoRaHS at the SC Association of Conservation Districts Mid-Year meeting. She provided a presentation on Weather and Climate to 92 4th graders in Richland One (10/20). She continued to focus on revising SCDNR's report on Climate Change Impacts to Natural Resources.

Staff began distribution of 144 rain gauges purchased through a Harry Hampton Grant. The rain gauges are being used to enhance South Carolina's grassroots rainfall monitoring program (CoCoRaHS).

LAND, WATER & CONSERVATION

OFFICE OF DEPUTY DIRECTOR

Ken attended the Deputy Directors meeting (11/1) and the Beaufort-Jasper Water & Sewer Authority meeting (11/4). He met with Representative Don Bowen regarding water issues (11/8). He participated in the National Park Service/Congaree Swamp water issues meeting (11/9). Ken attended the Heritage Trust Advisory Board meeting and met with CDM engineers re: water planning (11/10). Ken attended meetings with The Nature Conservancy and Senator Graham's staff (11/15). Meetings with COE Savannah District Comp II Study meeting (11/16); Columbia Water Supply meeting (11/17); USGS meeting re: water monitoring (11/21). Ken attended the Conservation Bank Board meeting in Columbia (11/29) and met with the Savannah River Basin Advisory Council. (11/29).

HABITAT PROTECTION AND ENVIRONMENTAL CONSERVATION SECTION

River Conservation

Ashley Scenic River Project:

Staff participated in an advisory council meeting of Nov 11 where the council received a DHEC staff presentation about water quality in the Ashley; and they continued planning for the annual Ashley River community meeting.

Broad Scenic River Project:

Staff participated in meetings with the Nuclear Regulatory Commission to address plans for the Duke Energy proposed Lee Nuclear Station.

Catawba Scenic River Project:

Staff and the advisory council met on Nov 28 and continued developing the Catawba Scenic River management plan.

Edisto River Basin Project:

Staff assisted Friends of the Edisto (FRED) in investigating potential increases of waste water discharge to the North Fork at Batesburg-Leesville.

FERC Hydro Projects:

- Columbia Canal Hydroelectric Project (FERC Project No. 1895) -- DNR staff participated in meeting (Nov 8) with City of Columbia staff, Kleinschmidt Associates, Riverbanks Zoo, and SCE&G to provide review and input to the 2011 Annual Report for the Rocky Shoals Spider Lily Monitoring Plan; and to plan for spider lily monitoring activities in 2012. DNR staff also participated in a meeting (Nov 2) with conservation groups and Lockhart Power (new operator for Columbia Hydro) to share information regarding community interests in the hydro project.
- Keowee-Toxaway (KT) Hydroelectric Project (FERC Project No. 2503) -- Relicensing process continues. DNR staff submitted comments to FERC addressing Duke's Proposed Study Plan for relicensing the Project. DNR staff participated in Resource Committees to address fishery and water supply issues within the relicensing process.
- Neal Shoals Hydroelectric Project (FERC Project No. 2315) -- DNR staff met with SCE&G on Nov 1 to address agency concerns with sediments being released at the dam and options to remedy impacts to downstream aquatic resources in the Broad River. A subsequent meeting and site visit occurred on Nov 7 and included SCE&G, Army Corps of Engineers, DHEC, U.S. Fish and Wildlife Service, and DNR. Currently the Army Corps and FERC are conducting investigations of the incident to assess SCE&G compliance with related permits and the FERC license. SCE&G is in consultation with DNR and other agencies seeking to complete its planned gate replacement as soon as possible.
- Santee Cooper Hydroelectric Project (FERC Project No. 199) -- As part of the extended relicensing process, DNR staff is participating in the Santee Cooper-NMFS consultation process regarding shortnose sturgeon protection measures, which included a Nov 8 video conference; and DNR is attempting to ensure that resulting recommendations for sturgeon can be reasonably implemented and will be beneficial to the restoration of the species.

Other Rivers-Program Staff Activity:

- River Management Society -- Staff participated in a RMS National Board conference call on Nov 3. Staff continued planning and participating in committee teleconference calls to organize the April 2012 RMS symposium to be held in Asheville.
- Broad River at Lockhart -- Staff produced plans with options for developing additional public boating access to the Broad River at Lockhart.
- Beach Sweep / River Sweep -- Staff continued to receive and compile cleanup results reported by the volunteers (Site Captains) who led the Inland Sweep of rivers and lakes on Sep 17.

Heritage Trust

Data Management:

Information and data requests - two requests for verification of known occurrences in the vicinity of project sites were received and answered from:

The City of Columbia for a housing rehabilitation project, and the Carolina Gas Transmission for a compressor station installation project in Bethune.

One request for GIS location data of rare, threatened, and endangered species was received and processed from Camfor Southern Pine for use in determining if globally imperiled species are located on stumpage tract prior to harvesting.

The inventory of the land protection projects and approval dates by the Heritage Trust Advisory Board was completed. Since no such list was kept in the past, it may be incomplete – requiring the addition of several projects to the Biotics list of sites.

Heritage Survey:

Approximately 80 specimens were processed for October 2011 for specimens collected from Heritage Preserve Inventory with a list of specimens and collection numbers maintained for quick reference.

Staff attended a meeting for Columbia Hydro Project - 2011 Rocky Shoals Spider Lily Monitoring Effort to discuss the 2011 Report and 2012 Enhancement Efforts. Due to changes in seasonal flooding and increased scour of the shoals habitat, restoration efforts have been of limited success. However, census and monitoring methods have been improved in order to more accurately determine population trends in the River Vista populations.

An ongoing collaborative effort between SCDNR staff, the A. C. Moore Herbarium at USC, the University of North Carolina Wilmington's David J. Sieren Herbarium (WNC) and Center for Marine Science culminated in the completion of an update to Algal Nomenclature in the Taxon Tree used by several Southeastern Herbaria as part of their Specify 6 Collections Databases. This update includes over 100,000 plant names including Lichens, Bryophytes, Algae, and Vascular Plants. These products are freely available to other herbaria to use on the A. C. Moore Herbarium's website at www.herbarium.org.

Endangered species surveys were conducted in both upland and lowland natural communities once dominated, now greatly altered, by Longleaf Pine. Lowland surveys at Lynchburg Savanna, Marsh Furniture, and, and Woodberry Heritage Preserves and Wildlife Management Areas included over a dozen pond- cypress ponds and three Carolina bays. These natural wetland communities provide potential habitat for Pondberry (*Lindera melissifolia*) and is listed as "Endangered" under the US Endangered Species Act. In pocosins which align along ancient dune fields on the Woodbury tract, several hundred stems (presumably clonal) in a 30 x 50 meter area, were discovered in vegetative state only (with no flowers or fruit.) Stems are scattered in shallow swales (*i.e.*, in slightly undulating topography with some accumulation of organic matter in very slight depressions) beyond the southern rim of a Carolina bay.

In the more upland sites typical of PeachTree Rock Heritage Preserve there are several small populations of Sandhill Rosemary (*Ceratiola ericoides*). Within the recent Adcock Tract addition staff documented a stand of about 15 clumps of mature male and female plants (and some apparently viable seed, but no seedlings) in a relatively open area of ~5 acres, on a gentle northwest- facing toe slope in an eolian dune deposit known as the Pinehurst Formation. The life history of this endemic and monotypic shrub -- its closest relative being indigenous to the Iberian Peninsula-- is apparently closely associated with the fire -maintained longleaf pine ecosystem. Studies in Florida indicate that with too little fire, these plants will senesce in overly shaded conditions. However, with too frequent fire, recruitment of seedlings may be severely limited. This stand will need to be actively and carefully managed to address the offsite, artificially planted, loblolly and slash pine, and other woody plant growth that is degrading the once-open woodland habitat.

Aquatic Nuisance Species Program

Technical

SC invasive species management surveys were conducted on Back River Reservoir, Goose Creek Reservoir, Lake Marion, Lake Moultrie, and the Socastee Snail Population.

Control operations were conducted on 102 acres at a total cost of \$8363. That includes invasive Island apple snail control measures, 26 acres, in and around Socastee, SC. Other sites include 24 acres of hyacinth control on Goose Creek Reservoir, and 52 acres of hyacinth control on Back River Reservoir.

Staff received a statewide NPDES permit for all divisions of the agency. Staff cooperated with staff from Santee Cooper, US Army Corps of Engineers Staff and volunteers from Delta Waterfowl to gather valisneria seed pods for later use in

habitat restoration projects around the state.

Outreach

Mr. Page and Mr. Hook participated at the SC Aquatic Plant Management Society Board Meeting. Staff chaired and presented a program overview and began discussions relating to the 2012 SC Aquatic Plant Management Plan at the Aquatic Plant Management Council Meeting. Hydrilla acreage has increased significantly and has begun displacing native beneficial vegetation. Initial responses include increased carp stocking numbers to control hydrilla and prevent further loss of native species.

CONSERVATION DISTRICTS

Statewide Projects

Staff participated in meetings of the USDA-NRCS Natural Resources Committee, Food and Agriculture Committee, State Technical Committee, State Drought Committee, SCACD Executive Committee, Conservation Bank Board, and the SC Aquatic Plant Management Council. Marc Cribb and SCACD President Sterling Sadler attended the Customer Dialogue Conference hosted by the USDA-Agricultural Research Service in Florence.

Technical

Jonathan Williams continued technical assistance in **Allendale, Orangeburg, Calhoun, and Bamberg Districts**. District commissioners and staff from **Sumter, Lancaster, Lexington and Edgefield** participated in the State Drought Committee meeting.

Outreach

DNR Staff attended district events in **Newberry, Florence, Jasper, Calhoun, and Orangeburg Districts**. Staff chaired a meeting of the Planning Committee for the Annual Conservation Partnership Conference, slated for February 28 and 29 in Columbia. The **SC Envirothon** Steering Committee met for planning and coordination for the 2012 competition and Coach's Training.

Clarendon District staff Casey Blackmon attended the SCACD Conference Planning Committee Meeting and the SCACD Executive Board Meeting. District staff from **Lancaster, Lexington and Orangeburg Districts** attend the Southeast Conservation Districts Employees Annual Meeting in Tennessee. The District Employees Association's biannual newsletter distributed.

Conservation Districts

Abbeville District distributed 34 trees to schools throughout the county in preparation for Arbor Day on December 2. As part of litter awareness month, the **Barnwell District** hosted a marionette puppet show presented by the Columbia Theatre Marionettes for 800 plus students at Barnwell Primary School. The Peoples-Sentinel featured a news article by Chairman Hill reminding citizens to observe November as Litter Awareness month, to recycle, and be good stewards of the land. A local news reporter interviewed District staff Linda Pickering on her views on litter in the county and the district's litter programs. Pickering and Commissioner Nettles presented their program Working Trees, along with the district's tree "Miss Shady Lady" to all Pre-K and Kindergarten classes at Blackville Macedonia School.

Berkeley District reported that the Cooper River Navigation Aids Project was completed. The original 14 markers were refitted and/or replaced with 8 new markers installed. Much credit goes to the partnership of Santee Cooper, the Berkeley County Legislative Delegation, the Berkeley Conservation District, Berkeley County and SC Department of Natural Resources for improving the safety and function of the Cooper River for commerce and recreation.

Clarendon District hosted the annual Farm-City Community Luncheon with 70 people in attendance to celebrate the occasion. The district also awarded Thomas Durant, of Durant Farms with the Conservationist of the Year award. The District had a record breaking number of entries in the Arbor Day Poetry Contest, Farm-City Coloring Contest, and the Farm-City Scarecrow Contest. Winners were announced and prizes will be delivered the first week in December.

Dorchester District purchased 10 rain gauges from the DNR State Climatology Office. These gauges are to be distributed to county firemen to be used in the Community Collaborative Rain, Hail and Snow Network (CoCoRaHS). Commissioner Marie Dantzler gave a presentation on the function and responsibilities of conservation districts to the Women's Guild, with approximately 16 ladies present. The District has been busy sending information concerning the district photo contest to Dorchester County schools. Information concerning the 2012 Envirothon has also been distributed to county high schools.

Fairfield District is once again working with All Seasons Nursery for the "Third Annual Arbor Day 50 Free Trees Celebration". The District will purchase 50 trees of different varieties for families who live in Fairfield County to plant for Arbor Day.

Greenville District finished mowing the nine watershed dams. District staff taught a Project Wild teacher workshop at the Roper Mountain Science Center (RMSC) in Greenville and also attended a science teacher gathering at the RMSC in which we were able to share our curriculum offerings and Envirothon information to over 100 science teachers in the district.

Hampton District and the County Farm-City Committee hosted a cotton tour for 4th graders from Fennell Elementary School. Students visited a cotton field where they saw farm machinery in action picking cotton and preparing it to be transported to a cotton gin. Then the students traveled to a cotton gin where they observed the process the cotton goes

through in order for it to be made into products that we use every day. The 13th Annual Farm City Fun Day was at Lake Warren State Park. Attendees enjoyed corn shelling, making apple cider, face painting, antique tractor display, petting zoo and many other old fashioned farm activities. Approximately 250 adults and children enjoyed a beautiful fall morning at the event.

Jasper District held its annual Wildlife Breakfast to show appreciation to landowners and conservation agencies that support the district. The meeting was held at the district's Blue Heron Learning Center. A local forest landowner and a SC Forestry Commission staff person made presentations on the Value and Importance of the Forestry Industry in Jasper County.

Kershaw District worked with the South Carolina Rural Water Association in developing an invitation list for the Low Impact Development Series. The District also coordinated a teacher workshop at Jackson Elementary School with 35 in attendance. Other workshops are being coordinated within the school district. The District was also active in the Lake Wateree Stakeholders Protection Meeting that was held in November.

Lancaster District employee Amanda Roberts gave the Hunter's Education Test to 11 people and signed up Elizabeth Hunter and Nancy Fleming as Earth Team Volunteers to assist with school programs. Roberts and Fleming did a soils presentation for 29 third grade students at Buford Elementary School. Roberts and Hunter presented a soils program for 25 kindergarten students at Erwin Elementary School and 78 5th grade students at Brooklyn Springs Elementary School. Roberts attend Andrew Jackson High School FFA Farm-City Program. In cooperation with the DNR Climate Office, the District is promoting the CoCoRaHS within the schools and other agencies in the county.

Lee District co-sponsored the Farm-City Week Banquet at the Lee County Opera House, in cooperation with local USDA agencies and the Clemson Extension Service. There were over 120 people in attendance.

A committee formed by the **Lexington District** and the Lexington County Landscape Administrator, has been working on the 2011 Arbor Day Activities for County schools. The *Trees Are Important!* activities will culminate on Arbor Day. Lexington District was recognized by the County Council as the newest member in the County's **Green Business Certification Program**. The District received the Green Business Certification all four categories (energy, water, air quality and recycling). The 2012 Lexington Soil & Water Conservation District calendar is available for purchase. Proceeds will go to the District's conservation and educational activities. The pictures in the calendar are the winners in our "2011 Youth Photography Contest". The Lexington District is working with several retired teachers volunteering at local schools that have asked for assistance to renovate outdoor classrooms, a constructed wetland and fitness trail.

Newberry District held its Annual Affiliate and Awards Banquet. The program featured the Newberry Career Center FFA Officers and their teacher, Josh Waters, who received the Outstanding Service Award from the District. Mr. Roger Winn was recognized as Cooperator of the Year. Mr. Winn is the only organic certified farmer in the county.

Oconee District conducted meetings with Coneross and Beaverdam Watershed Boards. Plans were finalized for corrective and maintenance items to take place at dams and spillways. Oconee County was contacted about possible development encroachments below dam sites. The District met with a reporter from local paper about the continued efforts of the Oak Grove School/farm area project and stressed the need for community involvement. District staff attended the Heritage Corridor Development Summit held at Clemson University advocating conservation and agriculture being a larger part of the Heritage Corridor's focus.

Richland District sponsored a Feral Hog and Beaver Management Workshop in conjunction with **Calhoun, Orangeburg, and Bamberg Districts**. Experts from DNR, Clemson University, Clemson Extension, and USDA-APHIS presented information at the workshop, and approximately 60 people attended. Richland District staff judged Farm-City Week entries, announced County Farm-City Week winners, and coordinated a Farm-City Week Proclamation by Richland County Council. Three conservation education programs, one Sandhill Farmer's Market conservation activity booth, and one volunteer training session were presented through the Conservation Station at Sandhill. The District continues to mentor eight Green Steps projects at five schools, including four habitat projects, two composting projects, one rain barrel project, and one green purchasing project. Staff participated in the Carolina Farm Stewardship Association's Sustainable Agriculture Conference in Durham, NC, as well as meetings of the USDA State Technical Committee, SC Ag Council, Farm-City Week Committee, and SC Envirothon Committee.

Spartanburg District led trail tours on the Price House nature trail, for 34 people, and hosted a Green Steps training workshop/Environmental Education Association meet-and-greet for the teachers.

York District made 4 classroom presentations to 137 students and co-sponsored Farm City Day festival along with York County Engineering and Farm Bureau with 15 booths and hands-on activities for children. The District received SC Soil & Water Society Arbor Day Tree Grant and began to plan Arbor Day programs and seedling distribution for 3 schools. The District rented the no-till drills to 13 users to plant 219.9 acres.

EARTH SCIENCE GROUP

Hydrology Section

Water Planning: A white paper was prepared entitled *General Recommendations for the Development of Regional Water Plans in South Carolina*. Plans are being made for a public stakeholders meeting on December 15, at which the

water-planning recommendations will be discussed with all interested parties. To date, about 100 stakeholders throughout the State have been invited to the meeting.

A proposal also was reviewed for the South Atlantic Landscape Conservation Cooperative by the Nature Conservancy and Research Triangle Institute to develop a regional hydrologic model that would be used to predict the impact of climate change and population growth on aquatic resources in the South Atlantic region. Comments were forwarded to Breck Carmichael, who represents SCDNR on the SALCC Steering Committee. A proposed hydrologic monitoring plan for the Carter Stillely Wetland and Stream Mitigation Bank in Horry County (Region 4) also was reviewed, and comments were written.

Savannah River Basin: Andrew Wachob participated in a conference call with the USACE, DHEC, Georgia EPD, the Nature Conservancy, NFWS, and the National Weather Service to discuss drought conditions in the Savannah River basin. Mr. Wachob also participated in another conference call that was open to other stakeholders in the basin. A cost-sharing agreement continued to be negotiated with USACE, that would allow a study of the Corps' current drought contingency plans.

ADR Network: Approximately 50 Coastal Plain ADR wells area were field checked; data were downloaded and manual measurements were made. Equipment also was inspected for damage at each well.

Potentiometric Mapping: Draft reports of the November 2009 Black Creek and Middendorf aquifer potentiometric maps are being edited. Brenda Hockensmith and Scott Harder, as well as personnel from the USGS and Department of Energy, began measuring water levels in approximately 165 wells in the Middendorf aquifer to update the potentiometric map.

Climate Information: Stream-flow and lake-level information was presented to the State Drought Committee at its November meeting. Several alternative methods of using streamflow data as a drought indicator also continue to be evaluated.

Websites and Databases: 318 well reports that were received from DHEC were sorted and processed. A map showing the location of more than 500 wells in Orangeburg County (Region 3) was drafted and is being reviewed. Two meetings were held with the Geological Survey and IT staff to review and discuss efforts to develop a comprehensive Oracle database containing the SCDNR well data.

Outreach: Hydrologic information or assistance was provided to 25 customers. Brenda Hockensmith made several visits to the City of Georgetown (Region 4) to investigate sinkholes that have resulted in building and road damage. Mr. Harder attended a meeting of the Water Supply Study Team involved in the FERC relicensing of Duke's Keowee-Toxaway project (Region 1).

Flood Mitigation Program

Outreach: Maria Lamm processed paperwork for FMA (Flood Mitigation Assistance) grants, the extension for MMMS (Map Modernization Management Support), and submitted the Mapping Activity Statement Addendum to revise the budget for FY11-20. Ms. Lamm also reviewed, updated, and submitted the FEMA quarterly report for all grant activities, provided Community Rating System (CRS) support to the Region 4 communities of City of Beaufort and Town of Hilton Head, and did a CAV follow up for communities in Region 4: Port Royal and Myrtle Beach and in Region 1: Pickens. Andy Brandenburg scheduled Community Assistance Visits (CAVs) for Charleston, Goose Creek, and Dorchester County (Region 4). Joy Sullivan scheduled the PDCC (Preliminary DFIRM Community Coordination) meeting and Open House for Greenville County (Region 1) for December 14, 2011, and completed the SCDNR News Release for notification. Karen Jones worked with 24 communities throughout the state in completing their CAC-T (Community Assistance Contact Telephone) process. 310 technical assistance contacts (phone calls and emails were made. Ms. Lamm also provided technical assistance in regards to a potential LOMR (Letter of Map Revision) in the Town of Bishopville, as well as the Richland County (Region 3) Re-study – specifically the Congaree River for the Columbia Venture property.

Compliance and Ordinances: 38 ordinance reviews were completed for communities involved with CAV/CACs (Community Assistance Visit/Contact), and application to the NFIP (National Flood Insurance Program). Ms. Jones and Ms. Sullivan continued to work with the towns of Clio (Region 2), Luray (Region 4), and Turbeville (Region 3) to update their ordinances to compliance in an effort to gain admission into the National Flood Insurance Program (NFIP). Blythewood (Region 3) and Jefferson (Region 2) have successfully applied and adopted their Flood Damage Prevention Ordinances and are now awaiting admission by FEMA.

Mitigation Activities: Mr. Brandenburg continued to provide assistance to Greenville County (Region 1), Sullivan's Island (Region 4), Edisto Beach (Region 4), and Richland County (Region 3) in the implementation of various flood mitigation activities to structures located in those communities. He also participated in a conference call with SCEMD and DHEC to discuss the State Hazard Mitigation plan.

General: Ms. Lamm and Ms. Sullivan participated in the monthly CTP (Cooperative Technical Partners) status call in which the contractors provide status updates of their on-going map studies; participated in the two webinars: 1) Community Engagement 101, How Risk MAP engages with Communities and 2) Training on outreach for Risk MAP and Expanded Appeals Process; and attended the Cooperating Technical Partners Workshop held in Atlanta, GA, to distribute new Risk MAP information, provide training on new requirements and share information between all 8 states in FEMA

Region IV. Ms. Lamm also 1) participated in the webinar of Grantor Training, Training on use of grants.gov, 2) requested that Insurance Agent and Lenders training be provided by FEMA, and 3) continues to provide training sessions to Ms. Sullivan in preparation for the CFM (Certified Floodplain Manager) exam. Staff made 65 updates to the FEMA CIS (Community Information System) database. The Flood Mitigation website continues to be updated to ensure accuracy of information and to include new FEMA links showing Preliminary Maps and Flood Insurance Studies under Risk MAP. Ms. Sullivan continues to work on a map that will show the Risk MAP flood mapping schedule for counties across the State.

Geological Information

STATEMAP: The FY12 STATEMAP proposal was finished and forwarded to the USGS program coordinator via grants.gov by OSS. The proposal also included approved budgets and an electronic copy of Tigerville quadrangle map (Greenville County, Region 1). Sinkholes in Georgetown (Georgetown County, Region 4) were examined, and 8 sites were drilled to examine subsurface geology – a hard ground at ~52 feet caused refusal in all but one holes. Information will be added to the Georgetown South map. 30 holes (1019 ft) also were drilled in Georgetown North, Waverly Mills, and Magnolia Beach quadrangles, Georgetown County. The drill rig was put in the shop to repair hydraulic hoses.

Outsource Mapping: Mapping continues to delineate a complex structural pattern of ductile and brittle features on the south flank of Pinnacle Mountain, east of Highway 276 in Cleveland quadrangle (Greenville County, Region 1). Field data were plotted on office maps.

Geologic Hazards: No measured earthquakes occurred in South Carolina this month. Earthquakes continue to occur around Mineral, Virginia. A M5.8 earthquake shook Oklahoma and was followed by several aftershocks. Collapse and expansion of sinkholes damaged a building and a number of streets in Georgetown; another building has been condemned a block north of that building on Highway 17. Scott Howard finished a manuscript on the 1913 Union County earthquake.

Coastal Change: Two (2) of the remaining 3 USFWS SET's were installed at Cape Romain National Wildlife Refuge. The South Atlantic Alliance project will be funded (\$58k) for 1 year starting in March 2012. This project will develop shoreline data and test shoreline-change analysis software.

Geothermal: A test data set was completed of well-log and geophysical log data from the Hydrology Section records of Coastal Plain wells.

CO2: Staff excavated several buried cables to relocate outside wiring and began moving racks on rear wall of repository in preparation for construction. Several contractors are preparing bids for the on repo expansion.

Broad River Project: Kerry Castle spoke with Victor Levesque, USGS Water Science Center in Conway, regarding methods of calculating suspended sediment concentration from acoustic backscatter signals using a Doppler profiler. SonTek Flowtracker software is being used to evaluate a 2010 data set of the basin. National Land Cover data and DEMs are being compiled for individual sub-basins. The river at Woods Ferry Park in Sumter National Forest was observed and sampled.

The sluice gate at the Neal Shoals hydroelectric facility was opened and flow has incised stored sediments from behind the dam. Deposition of coarse sand was rapid on the downstream side, and the river is now ankle-deep in the immediate vicinity. SCE&G will provide estimates of how much sediment has been washed through the open sluice gate. Meetings were held at Neal Shoals with members of DNR, USACE, DHEC, and US Fish and Wildlife.

General: Steven Workman was hired to fill the Digitizer II position. Either repairs or service were done to two field vehicles.

Digital Products and the Digital Information Group (DIG)

General: Mr. Workman developed a 3-D visualization of the basement surface of South Carolina. Earthquake updates were made to webpage. The State geology postcard was updated and submitted for printing bids. Web statistics show page requests per day are up 20% in 2011 over 2010. 558 map layers (167) or education materials (391) were downloaded. We have now an archive system for both paper and digital formats. Thirty-five (35) maps and publications were printed.

STATEMAP: STATEMAP deliverables were submitted on time. Erin Koch produced the figures for and assembled the PDF of the FY12 proposal. Mr. Doar started working on backlog of cross sections of STATEMAP maps.

Data Preservation: Drill-hole logs, reports, and site maps continued to be placed in the Document Management Workflow. New QA/QC Workflow was added to Geology Drawer in Image Now to store the finalized drill log records. 1124 records are waiting final QA/QC, and 1868 need to be attributed with various data and first pass QA/QC. 3272 records are in the Document Management System; 281 QA/QC'ed and complete.

CO2: CO2 tables are being incorporated into the larger well-data model. Committee and sub-committee meetings continue to discuss how to develop the well-data entry format. DIG has reviewed and commented on versions of the Borehole Database. Data layers of seismic lines were forwarded to NATCARB to distribute on their national website.

Geothermal: Review comments were addressed, and a finished data set was submitted to Arizona Geological Survey in accordance with project plans.

EMD Hazards Map: The new geologic hazards maps was sent to Graphics for bids and printing. Figures also were done for an EMD presentation. EMD would like to see a new graphic product developed in addition to current maps.

Outreach

General: Will Doar, Brenda Hockensmith, Gered Lennon and Bill Clendenin field checked the area and documented damage. Another version of the Climate report was reviewed by Dr. Howard. Drs. Castle and Howard met twice with Ross Self to discuss channel conditions on Twelve Mile Creek in Pickens County (Region 1); isotopic or optical analysis of the sediment was recommended to rule out falsification by contractor. A draft proposal has been requested on how to proceed. Drs. Clendenin and Howard participated in an ETV-radio DNR talk show and answered questions about geology from interested citizens. An audio link to radio program was placed on the web page. Dr. Clendenin participated in an USC, PhD candidate's comprehensive exam.. Brian Mixon assisted Scott Harder, Hydrology Section, with water-level runs. Dr. Castle gave a guest lecture to a class at USC. Interest continues in REE mining in South Carolina. General information was provided to 26 customers.

Partnering:

Furman University	SCEMD	South Atlantic Alliance – SAA
USGS – Earth Surface Processes Team	SCDHEC-OCRM	University of South Carolina -ESRI
National Park Service		

STATE CLIMATE OFFICE

The SCO answered 31 information requests with 2 invoiced for \$45 and 7 media interviews were provided. The Assistant State Climatologist for Service assisted SCDNR Law Enforcement with 2 accident investigations. Special weather summaries were prepared for the severe weather/tornado event of November 16. He prepared historical summer temperature rankings summary for Hilton Head Island/Bluffton Chamber of Commerce. He prepared the weekly weather summary that is published online. Office distributed 25 rain gages to CoCoRaHS network of volunteer rainfall observers purchased through the Harry Hampton Grant Fund. The rain gauges are being used to enhance South Carolina's grassroots rainfall monitoring program (CoCoRaHS).

The Severe Weather Liaison issued 3 Tropical Updates on T.S. Sean and 2 WeatherAlerts for strong thunderstorms (11/16, 11/22). He provided a winter weather outlook presentation at the quarterly SCMD Region 1 County Emergency Managers meeting (11/4). He participated in the Carolina's RISA Climate Assessment Webinar (11/7). He provided special forecast information for the USC Homecoming activities and LLR Firefighting Academy Exercise. He provided wind dispersion forecast support for SCMD/ Darlington County Fixed Nuclear Facility Exercise. Per the request of SCMD, all remaining county emergency managers were added to the WeatherAlert ListServe. The Weather Alert Email List Serve now has 1,379 subscribers. He continued updating the Southeast Temperature and Precipitation change study to extend through 2010. He produced a GIS map coverage of South Carolina's Drought Management Areas.

The State Climatologist participated in the Southeast Regional Climate Center Technical Advisory Committee Conference Call (11/2), the Carolinas Integrated Science and Assessment conference call (11/4), and the Catawba Wateree Drought Management Group conference call (11/8). She coordinated a SC Drought Response Committee Conference Call (11/8) and issued public notices and letters to water systems in the counties upgraded to Severe Drought. She provided a presentation on drought at the Annual Certified Crop Advisor's Meeting (11/15). She provided southeast climatological heating and cooling degree data to the SCDNR Marine Resources Division for their study on winter and spring temperature effects on brown shrimp.