

Minutes
Board of the Department of Natural Resources
Rembert C. Dennis Building, Room 335
1000 Assembly Street
Columbia, SC
January 26, 2012 10:00 am

The regular meeting of the Board of the South Carolina Department of Natural Resources was held at 10:00 a.m., January 26, 2012, 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. Acting Director Alvin Taylor 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 Stan Halliday, Wildlife and Freshwater Fisheries Advisory Committee; Senator Ronnie Cromer; Scott Whitaker, Executive Director, Coastal Conservation Association; Douglas Ford, Research Director, Senate Fish, Game and Forestry Committee; Madison Walker, Governor's Office; and Sammy Fretwell, *The State*.

Chairman Rhodes read a statement of apology about the events surrounding the retirement of Mr. Frampton.

V. Constituent Comments

Mr. Winslow noted that there was one request for constituent comment.

Senator Ronnie Cromer stated that he had a personnel matter to discuss and asked the Board if they would like to hold this discussion in executive session.

VI. Executive Session

Mr. Evans made a motion for the Board to hold an Executive Session to discuss a personnel matter. Mr. Hutchins seconded the motion and the motion carried unanimously.

VII. Open Session

Mr. Evans 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. Pulliam made a motion that the Board appoint Col. Alvin Taylor as DNR Director, effective March 17, 2012. Mr. Hutchins seconded the motion and the motion carried unanimously.

VIII. Approval of Minutes

Chairman Rhodes asked if there were any amendments, additions, deletions or corrections to the December 8, 2011, meeting minutes. *Mr. Evans made a motion that the Board approve the minutes of the December 8, 2011, meeting with the following amendment.*

IX. Advisory Committee Reports

D. Governor's Cup Billfishing Series

Robert Boyles, Deputy Director for Marine Resources, reported that the Governor's Cup Billfishing Series Advisory Committee met October 27. The Advisory Board welcomed new members Mark Daniels, Mark Rogers and James Zachrich. The Advisory Board approved three motions. The first two motions pertain to changes to series tournament guidelines:- 1) allowing the fishing rod to be passed to any angler once, 2) language changes to make clearer photography and videography allowance for released billfish, and 3) allow for proposed federal regulations for dolphin. The Advisory Board also approved a motion to transfer \$1,500 for the Governor's Cup scholarship and \$1,000 for the yearly pledge to Harry Hampton. Foster McKissick ~~resigned~~ completed his term as Chairman and Ed Holder was nominated and elected as Chairman. A motion was made to strike the weather rule in the contract but received no second so no action was taken.

Mr. Pulliam seconded the motion and the motion carried unanimously.

IX. Presentations/Commendations

Col. Taylor and the Deputy Directors announced and commended the 2010 Division and Department Employees of the Year. Executive Office: Angie Williams; Law Enforcement: Sandra Burton; Marine Resources: Betty Burn; Outreach & Support Services: Nancy Hoover; Wildlife & Freshwater Fisheries: Dan Rankin; and Land, Water & Conservation and 2010 DNR Employee of the Year: Joy Sullivan.

X. Advisory Committee Reports

A. Saltwater Recreational Fisheries

Robert Boyles, Deputy Director for Marine Resources, reported that the Saltwater Recreational Fisheries Advisory Committee met October 6. The Advisory Committee received a report on saltwater license sales to date. The Advisory Committee received a presentation on establishing size and bag limits for sheepshead. The Advisory Committee passed a motion to recommend to the DNR Board to seek legislation to establish a 14 inch minimum size limit, a 10 fish personal bag limit and a 20 fish per boat limit. The Advisory Committee received a presentation on the activities of the Coastal Law Enforcement Program. The Advisory Committee received an overview on the trammel net program.

B. Wildlife and Freshwater Fisheries

Emily Cope, Deputy Director for Wildlife and Freshwater Fisheries, reported that the Wildlife and Freshwater Fisheries Advisory Committee met on March 11 and January 10. The Advisory Committee discussed the Comprehensive Deer Management Legislation. The Advisory Committee received updates on the public dove field opening day results, the reservoir enhancement program, the 2011 bear season results, cormorant issues and feral hog concerns. The Advisory Committee was given a directory of General Assembly members and asked to let staff know which members they may be able to contact.

C. Migratory Waterfowl

Mr. Hutchins reported that the Migratory Waterfowl Advisory Committee met on November 2. A quorum was not present so no action could be taken. The Advisory Committee was informed that the color separations have been completed for the upcoming stamp. Due to the fact that a quorum was not present the artist commission will be in place until November 21. The Advisory Committee was provided a summary of revenue. Mr. Hutchins made a recommendation, upon the Board's request, to consider consolidating the Migratory Waterfowl Advisory Committee with the Wildlife and Freshwater Fisheries Advisory Committee. Mr. Hutchins noted that a request was made for feedback from the Committee and stated that the Board would not insist on the consolidation if the Committee felt it was not necessary. The Advisory Committee also met on November 21, via conference call. **The Advisory Committee reelected Milton Brazzell was reelected as Chairman and Bobby Creech was elected Joe Johnson as Vice Chairman.** The Advisory Committee approved the contract with Jim Killian for the 2013 stamp. Mr. Brazzell informed Mr. Hutchins that the Advisory Committee opposes the consolidation of the two Advisory Committees. Mr. Hutchins stated that he would provide the information to the Board. Mr. Hutchins proposes no further action and recommended that the Committee stand alone, for now.

D. Heritage Trust

Ken Rentiers, Deputy Director for Land, Water and Conservation, reported that the Heritage Trust Advisory Committee met November 10. The Advisory Committee received updates on the Poinsett Bridge Project; activities at Savage Bay Heritage Preserve, Longleaf Pine Heritage Preserve and Lynchburg Savanna Heritage Preserve. The Advisory Committee was also provided a budget and revenue update.

E. Land, Water and Conservation

Mr. Rentiers reported that the Land, Water and Conservation Advisory Committee met October 19. The Advisory Committee received updates from all Land, Water and Conservation Division section chiefs and water planning activities. The Advisory Committee took action on conservation district commissioner appointments and reappointments.

Hope Mizzell, State Climatologist, provided the Board with a drought update and reviewed rainfall totals, precipitation percentiles, streamflows, lake levels, and ground-water monitoring wells around the state.

F. Marine

Mr. Chastain reported that the Marine Advisory Committee met January 13. The Advisory Committee received an overview of South Carolina government and the regulatory authority and management of saltwater fisheries. This led to a discussion about their limited authority and desire to obtain additional authority to manage fisheries and wildlife. Derrick Meggie, Director of Legislative Services, stated that this would be quite an effort and would probably require sunset stipulations. The Advisory Committee received an update on the recommendations for sheepshead management. The Advisory Committee passed a motion to recommend to the DNR Board to seek legislation to establish a 14-inch minimum size limit, a 10 fish personal bag limit. The Advisory Committee passed a second motion to recommend to the DNR Board to seek legislation to establish a 30 fish per boat limit. The Board decided to delay action on this request until they receive the full report at the next meeting.

X. Items for Board Information

Report on Bear Season

Deanna Ruth, Wildlife and Freshwater Fisheries Division, reported that the first coastal bear season was held December 1-15. There were 297 applicants with only one being non-resident. All tags (30) that were drawn were resident hunters. Three drawn hunters were unable to hunt and returned their survey and tag. Seven of the hunters used WMA's and the remainder used private lands. One 197- pound female was harvested in Georgetown County.

XI. Items for Board Action

A. Updates - EPMS and Reduction in Force (RIF) Policies

Terri McGee, Human Resources Director, briefly reviewed the updates for the EPMS and RIF policies as included in the Board meeting package. *Mr. Evans made a motion that the Board approve the EPMS and RIF policies as presented. Mr. Chastain seconded the motion and the motion carried unanimously.*

B. Comprehensive Deer Management Program

Charles Ruth, Wildlife and Freshwater Fisheries Division, informed the Board that information about the Comprehensive Deer Management legislation was included on the Department's website; included in news releases; placed on Facebook and Twitter; and provided to 111,000 Big Game Permit holders. Mr. Ruth noted that 493 people submitted 500+ comments, as some submitted more than one comment, and 76% of the comments were positive. *Mr. Pulliam made a motion that the Board approve the Comprehensive Deer Management Program as presented allowing the flexibility for necessary language changes to be in line with other regulations/legislation and to provide meetings as necessary. Mr. Hutchins seconded the motion and the motion carried unanimously.*

XII. Director's Briefing

Col. Taylor gave the Board an update on the budget. He also informed the Board that the Department will be asking for a class of officers, funding for IT and funding for the Hydrology/Geology program in the Land, Water and Conservation Division.

Col. Taylor reminded the Board that their Statement of Economic Interests forms are due by April 15.

XIII. Legislative Report

Mr. Meggie gave the Board an overview of this week's legislative activities. The Chapter 13 Fisheries part 1 and part 2 bills are on the way to the Governor's office. Mr. Meggie reported that in addition to the fisheries bills the Department has been monitoring the House Resolution that would transfer DHEC's permit responsibilities along the Savannah River to the Maritime Commission. Mr. Meggie informed the Board that clarification legislation to the board regarding the Catawba Claims Act of 1993. Mr. Meggie reviewed bills introduced that week.

XIV. Environmental Programs

Bill Marshall, Office of Environmental Programs, reviewed the briefing document in the Board meeting package noting that new information/updates are in red.

XV. Deputy Directors' Reports

A. Marine Resources

Mr. Boyles distributed a news release from National Marine Fisheries Service regarding annual catch limits and possession limits on artificial reefs off of South Carolina. Mr. Boyles reported that the commercial trawl fishery closed on January 17. Mr. Boyles informed the board that renovations have begun on the Eltzroth Building.

B. Outreach and Support Services

Scott Speares, Assistant Director for Outreach and Support Services, reported that the Quality Assurance Quality Control position has been filled.

C. Land, Water and Conservation

Mr. Rentiers reported on the draft 2012 Aquatic Nuisance Plant Management Plan. The plan is out for public comment until February 12. Mr. Rentiers noted that the biggest change is the increase in grass carp for Lakes Marion and Moultrie. Mr. Rentiers informed the Board of staff assistance provided by the Geology Section to Georgetown County concerning the recent sinkholes. Mr. Rentiers reminded the Board of the Kolb Site annual archaeology project. Mr. Rentiers briefly reported on the recently held Water Summit.

D. Wildlife and Freshwater Fisheries

Mrs. Cope distributed photographs and briefly reported on the Yawkey shop fire. Mrs. Cope distributed and reviewed the timber inventory update.

E. Law Enforcement

Col. Taylor gave the Board a brief update on dove season. Col. Taylor reported on a hunting deer over bait case that has gone through the courts in the upstate. The plaintiff was found not guilty due to the fact that the law does not say you cannot hunt over bait, only you cannot bait. The opinion from the Attorney General's Office concurred with the ruling in this case.

XV. Time and Location of the Next Meetings

The February Board meeting will be held Friday, February 17, 2012, in Charleston.

The March Board meeting will be held Friday, March 23, 2012, in Columbia.

The April Board meeting will be held Thursday, April 19, 2012, location to be determined.

XVI. 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

Director John Frampton participated in the North American Waterfowl Management Plan Committee meeting on January 4-5 in San Diego, California. Mr. Frampton traveled from San Diego to Washington, D.C., where he represented DNR at the National Rifle Association annual banquet on January 6.

Chief of Staff Don Winslow chaired Frampton Retirement Celebration Committee meetings during the month on January 4, 18 and 24 in preparation for the February 22nd event.

During the day on January 5, Acting Director Alvin Taylor attended meetings with Representative Mike Pitts, Ben Gregg (Executive Director of the SC Wildlife Federation) and DNR staff including Kevin Kibler and Deputy Director Ken Rentiers. On January 6, Col. Taylor met with Deputy Director Robert Boyles and his senior staff in Charleston to answer questions and discuss future plans; later during the day, he met with Senator Kent Williams and Representative Jim Battle.

Mr. Frampton participated in a conference call with Douglas Ford, Ken Moffat and Melanie Wiedel, at Mr. Ford's request, on January 9. Col. Taylor participated in the Captains' meeting in Columbia on January 9. On January 10-12, Mr. Frampton participated in the Archery Trade Association Board Meeting and Annual Trade Show in Columbus, Ohio.

On January 10, the first day of the 2012 Legislative Session, Col. Taylor was in the Columbia office and met with various legislators during the day in the State House Lobby. Mr. Winslow attended the Wildlife & Freshwater Fisheries Advisory Committee meeting held in the Florence Office. Breck Carmichael attended the monthly meeting on January 10 with the DNR Engineering Section staff to discuss ongoing projects.

Col. Taylor and Mr. Carmichael attended the Senate Briefing, "Conversations with Conservationists," on January 11, sponsored by Senators John Courson and Phil Leventis and organized by the Conservation Voters of SC. Mr. Carmichael also met with Freshwater Fisheries Chief Self and Assistant Chief Quattro to discuss the Americans with Disabilities Act (ADA) compliance and Land and Water Conservation Fund (LWCF) project certifications.

On January 12, Col. Taylor attended the Fisheries Technicians meeting at the Webb Center and had lunch with the group and discussed future plans and answered questions. Mr. Carmichael traveled to Clarendon County on January 12 to inspect ADA compliance issues at the John Land Boat Launch Facility and the Alex Harvin Boat Launch Facility.

Mr. Frampton traveled to Tallahassee, Florida, and participated in an annual meeting with President Larry Selzer and staff of The Conservation Fund on January 13-14.

Col. Taylor attended the Marine Advisory Committee meeting in Charleston on January 13 and later met with Deputy Director Boyles on personnel issues.

Mr. Frampton worked in the office on State Holiday, Monday, January 16, and later that afternoon traveled to Las Vegas where he participated in the Annual Shot Show on January 17-20. While in Las Vegas, he participated in a meeting of the Council to Advance Hunting and the Shooting Sports.

Col. Taylor attended the Law Enforcement Region 1 meeting at the Clemson Office on January 17 and presented state service pins and announced the Region 1 Officer of the Year. Mr. Carmichael represented DNR at the South Atlantic Landscape Conservation Cooperative Steering Committee meeting in Pine Mountain, Georgia, on January 17-19.

On January 18, Col. Taylor participated in the SC Law Enforcement Training Council meeting at the Criminal Justice Academy. Mr. Winslow represented DNR at the House Regulations Subcommittee meeting for a discussion of the WMA Regulations. Later, Col. Taylor chaired the Deputy Directors Staff Meeting in the Board Room, with Mr. Winslow in attendance. Col. Taylor later met with Deputy Director Emily Cope and her senior staff to answer questions and discuss future plans.

Col. Taylor attended the Joint Other Funds Oversight Committee meeting on January 19 for a discussion of the DNR Water Recreation and County Funds. That afternoon, he met with Marcia Lindsay of the Legislative Audit Council for an exit conference concluding the audit of agency forestry management practices.

Mr. Winslow traveled to Charleston where he participated as a judge of the Junior Duck Stamp competition on January 19. Col. Taylor and Bob Perry met with Chairman Rhodes in Charleston on January 20 for an update on environmental issues.

Col. Taylor met with Representative Bill Hixson in North Augusta on January 23 and also later met with Board Member Larry Yonce. Col. Taylor met with Representative Mike Pitts in his office on January 24 on budget and legislative issues.

On January 25, Col. Taylor represented DNR at the agency's budget hearing, along with Mr. Winslow, during the House Ways & Means Law Enforcement and Criminal Justice Subcommittee meeting on January 25, and Col. Taylor later met with various legislators on constituent and budget issues. Mr. Carmichael attended the House Conservation Briefing, "Conserving Communities...naturally," sponsored by Representatives Kenny Bingham and Harry Ott and organized by the Conservation Voters of SC. That afternoon, Col. Taylor, Mr. Winslow, Mr. Carmichael, Deputy

Directors Cope and Boyles and DNR staff met with US Fish & Wildlife Service's Charleston and Atlanta office staff in Columbia to discuss collaboration on reviews of species for potential listing under the Endangered Species Act.

Col. Taylor and Mr. Winslow participated in the DNR Board Meeting on January 26 in the Board Room in Columbia, with Mr. Carmichael in attendance. During the Board Meeting, the Board announced its selection of Col. Alvin Taylor as permanent DNR Director effective upon Mr. Frampton's retirement on March 16.

Mr. Frampton met on January 26 with Sara Robbins of Columbia Regional Business Report for a profile for her "At Work Series." On January 27, Mr. Carmichael visited a Darlington County property owner to discuss potential bequeath of the property to the DNR upon the owners' passing.

Mr. Frampton participated in the US Fish & Wildlife Service Joint Federal Aid Task Force meeting in Denver, Colorado, on January 31-February 1.

Col. Taylor attended the Wildlife Section Coordinators Meeting at Millaree on January 31 and answered questions and discussed future plans; Mr. Carmichael attended the meeting as well and discussed ADA compliance issues. That afternoon, Col. Taylor met with Senator Yancey McGill and later met with Senator Hugh Leatherman on legislative and budget issues.

During the month, Mr. Carmichael also continued coordination of annual conservation easement monitoring and LWCF project certifications by DNR staff.

Marine Resources Division

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

- A pre-proposal centering on oyster reef restoration for shoreline protection in the ACE Basin was submitted for the NERRS Science Collaborative Request for Pre-Proposals.
- Two multi-partner pre-proposals to study low-polluting fish feeds and wastewater recycling from shrimp mariculture will be submitted in early February. Each project will be in the \$400,000 to \$500,000 range.
- In collaboration with the South Carolina Chapter of The Nature Conservancy, a proposal for a dedication session of presentations on oyster reef restoration techniques was submitted to Restore America's Estuaries' 6th National Conference on Coastal and Estuarine Habitat Restoration to be held in Tampa, Florida on October 20th-24th.
- Section staff visited the Waddell Mariculture Center along with other Marine Resources Research Institute colleagues to discuss logistics for the South Carolina Sea Grant Consortium-funded polyculture research project.
- Submitted pre-proposal to the NERRS Science Collaborative: "Expanding Living Shorelines within the ACE Basin NERR to Reduce Climate Change Vulnerability through the Application of Collaborative Science-Based Habitat Restoration", \$580,937, PIs: John Leffler, Peter Kingsley-Smith, Blaik Keppler, Co-PIs: Al Segars, Nancy Hadley, Michael Hodges, Kristin Schulte
- Letter of Intent "Characterization of uptake, accumulation and depuration of dispersed oil compounds by eastern oysters and analyses of biological responses using an integrated transcriptomic, proteomic and metabolomics approach" has the Letter of Intent Submission Number: [GoMRI2012-II-490](#). Gulf of Mexico Research Initiative Request for Proposals (RFP-II). PI R.W.Chapman, co PI's Jerome Lapeyre and Dan Bearden
- We assisted Dr. Paul Anderson of CofC in the preparation of a seed proposal to Sea Grant for construction of a pipeline for processing and analysis of high through-put sequencing data. This proposal was submitted 30 Jan 2012.
- Dr. Greenfield & colleague from Old Dominion University submitted a preproposal to the National Science Foundation (through USC). If invited for a full proposal, this project would investigate relationships between phytoplankton blooms and climate change. Budgets were not required at this stage.
- A proposal to complete an assessment of benthic communities in the vicinity of the Captain Sam's Inlet Relocation Project before and after relocation was submitted to the Seabrook Island Property Owners Association and was funded. Total project costs for three years: \$70,367.
- We requested and received approval for a 60-day extension for the completion of the 5 yr MARMAP final report. The new due date is March 29, 2012. A large part of the report has been completed.
- SEAMAP received word about funding of \$1,326K for the period July 1, 2012 through June 30, 2013. This is a 4% reduction from the funding level in the previous year.
- MARMAP funding for the period May 1, 2012 through April 30, 2013 is in the (signed) congressional budget for \$504K. This constitutes a major (39%) reduction from the \$829K 2011/12 funding level. We are currently examining the consequences of this funding reduction for the regional monitoring of commercially and recreationally important reef fishes. There is a very good chance that MARMAP will receive about \$350K from SEFIS to assist this program with reef fish sampling and continue processing life history samples.

Publications and Outreach

- The following manuscripts were accepted for publication:
 - Arendt MD, Schwenter JA, Byrd JI, Segars AL, Whitaker JD, Parker L. 2012. Fishery-independent catch rates for loggerhead sea turtles (*Caretta caretta*) in coastal forecasted to continue. *Fishery Bulletin*
 - Gaworecki KM, Chapman RW, Neely MG, D'Amico AR, and Bain LJ. 2012. Arsenic exposure in killifish during embryogenesis alters muscle development and structure, *Toxicological Sciences*, 125:522-531.

- Lefebvre, L. and M.R. Denson. 2012. Inshore spawning of cobia (*Rachycentron canadum*) in South Carolina. *Fishery Bulletin*.
- Cushman, E., C. Tarpey, W. Post, K. Ware and T. Darden. 2012. Genetic Characterization of American Shad in The Edisto River, South Carolina and Initial Evaluation of an Experimental Stocking Program. *Transactions of the American Fisheries Society*.
- The SCECAP technical report covering the 2007-2008 sampling period is at the printer. Copies should be available in late February-early March.
- Health status, infection and disease in California sea lions (*Zalophus californianus*) studied using a canine microarray platform and machine-learning approaches, Annalaura Mancina James C. Ryan , Robert W. Chapman , Qingzhong Wu, Gregory W. Warr , Frances M.D. Gulland , Frances M. Van Dolah. *Developmental and Comparative Immunology* 36 (2012) 629–637
- A final report was submitted NMFS for the project “Fishery Independent Assessment of Adult Red Drum & Coastal Sharks in South Carolina” (2006-2011). The report covered the first four seasons of a re-designed and expanded longline survey that now samples the outer and coastal parts of Winyah Bay, Charleston Harbor, St. Helena Sound and Port Royal Sound. One thousand five hundred and thirteen red drum were caught from 2006 – 2010. Of these 1,054 were tagged and released alive and 84 tagged fish were recaptured. By ageing otoliths, we found that the adults can live up to 39 years, and that year class composition relates closely with juvenile recruitment patterns seen in our inshore trammel and electrofishing surveys. Sixteen species of sharks were also caught, and 2,215 individuals belonging to thirteen species were tagged and released alive. Data from the new survey have been very valuable in several recent assessments.
- The Year 2 Interim report the multistate NMFS Sturgeon grant has been completed and submitted; the genetics portion reported on our progress on the development of a telomere-based aging tool for Atlantic sturgeon. Initial analyses have been completed suggesting a relationship does exist between portions of the cell telomere population and spine-based age estimates. We are currently working to increase the predictive power of the tool through evaluation of alternate analyses.
- ERS staff attended two meetings of the HML Pollution Steering Group and Dr. Bob Van Dolah was identified as Chair of this group. The Steering Committee is preparing for the external Science Review panel to be held at the end of February. Focus of the group is on highlighting the types of pollution research being conducted by the HML partners and recommended future directions.
- M. Arendt and J. Schwenter each delivered four x 30-min presentations to approximately 120 6th grade students at James Island Middle School (10-11 January).
- R. Chapman gave the Plenary lecture at the Plant and Animal Genome conference 14 Jan 2012. Genomics of Cultured Species: From Discovery to Mechanism
- T. Darden gave a presentation on the use of genetic tags and an update on striped bass work within Lakes Marion and Moultrie at the FWF Technicians Annual Meeting.
- T. Darden and K. Brenkert) presented on our red drum, striped bass, red snapper, American shad, and robust redhorse projects at the 2012 Southern Division AFS meeting.
- SEDAR 24 (Cobia and Spanish Mackerel) activities: Darden provided preliminary genetic data analyses at the DW Webinar indicating that populations along the Gulf of Mexico and Atlantic coasts of the US are genetically unique, with the separation occurring somewhere between the middle east coast of Florida (Port St. Lucie) and southern South Carolina (Port Royal Sound). Perkinson and Denson provided an evaluation of multi-state tagging and recapture data during the following Data Workshop Webinar which supported the genetic conclusions and clarified that a zone of mixing occurs along the Brevard County, FL coast.
- Carrie Norwood gave four presentations on January 11 for a “Scientist Day” to sixth graders at James Island Middle School.
- Tracey Smart gave a College of Charleston Marine Biology seminar on Friday Jan. 13.
- David Wyanski gave a presentation on fish reproduction in the College of Charleston Fishery Science Course on January 31.

Progress Report and Activities

Coastal Finfish: SEAMAP and MARMAP: Scott Blalock started on January 17 as the new SEAMAP Oracle data base programmer. He will work with Jeanne Boylan, Jim Scurry and others through April 30 to develop a SEAMAP Oracle data base with a web interface to make summaries of SEAMAP data available on-line.

- Preparations for the 2012 SEAMAP and MARMAP sampling seasons are on schedule and staff is preparing to provide data and analyses for upcoming regional stock assessments for Spanish mackerel, red porgy and vermilion snapper.
- Repairs to the MARMAP Q-hut are expected to be completed mid-February. This Q-hut is used for the storage of MARMAP and SEAMAP sampling gear, and past termite and weather damage were causing a safety hazard for staff working there.
- The date for the external review of the Regional Reef Fish Monitoring, which includes the MARMAP, SEAMAP Reef Fish, and SEFIS programs, is scheduled for Feb. 28 – March 2, 2012. Marcel Reichert, David Wyanski, Tracey Smart, Laurie DiJoy, and Michelle Pate will provide overviews of MARMAP/SEAMAP reef fish sampling history, protocols, data management, and use of data in the stock assessment and fisheries management in the region. It is expected that the review panel will provide recommendations for reef fish monitoring, sampling and data collection in the SE region.
- Marcel Reichert (as Scientific and Statistical Committee representative), Jeanne Boylan, and Pearse Webster (both participating in the Indices Working Group) participated in a SEDAR 28 Data Webinar. SEDAR 28 is a benchmark stock assessment for Spanish mackerel and cobia. The SEDAR 28 Data Workshop is scheduled for February 6-10 in Charleston, SC.

Environmental Research: *Capt. Sam's Inlet Realignment project:* Preliminary sampling surveys of Piping plover feeding habitat have been conducted with initial sampling scheduled for early February. Piping plover habitat sampling in response to the terminal groin on Hilton Head was completed for January.

Hilton Head Piping Plover and Borrow Site Study: The dredging and nourishment on the north end of Hilton Head was completed by the ACOE contractor. ERS staff completed sampling of the beach fauna for January and are preparing for the February sampling. ERS staff also will be sampling the borrow pit and reference area in mid-February. In a related project, DNR and Coastal Carolina staff are working out the logistics of monitoring sediment quality and infill rates in the borrow area relative to a reference area. Work should begin for this component in March.

Charleston Harbor Deepening: Several ERS staff attended a meeting held by the SCDNR to discuss biological and environmental issues associated with the Charleston Harbor Deepening Project. ERS staff also met with Corps staff to review their concepts for expansion of the Ocean Disposal Area (ODMDS). Based on those discussions, the Corps is going to consider modifying their plans to be more in line with the earlier design, which should reduce some concerns about habitat that will be affected by this project (i.e., the expansion would largely be located within the previous boundary study areas where data on bottom habitat already exist).

Folly Bridge Study: We are waiting on a final decision from the SCDOT on whether the DNR will be involved in the environmental sampling related to the replacement of the Folly River bridge.

Algal Ecology: *Routine Monitoring and Fish Kill Responses (private contract & CDC project)* – No fish kills were reported during January. However, staff investigated multiple complaints about orange-stained water from Dorchester County. No algal blooms or other unusual microbial activity was observed in any samples, suggesting that the discoloration may have been due to iron-rich compounds, tannins, or another chemical. The landowners did not request additional analyses. The deadline for applications for the part time health specialist at the SCSG office has passed, and applications are still being reviewed.

Assessing Phytoplankton Responses to Nutrient Levels in SC Estuaries (EPA project) – Staff are in the midst of the January/February field experimentation and sampling/monitoring. Dr. Greenfield made a final decision on which SCECAP stations will be used for 2012 sampling, and staff are coordinating with SCDHEC for sample exchange. The student identified for the field component of this project has begun to write her thesis proposal.

Morgan Island – Dr. Greenfield & project partners discussed a publication strategy. We devised a plan for 3-4 publications, each with a separate lead author, with each paper describing a unique aspect of the project. We expect papers to discuss (1) land use characteristics of the ACE Basin, (2) interannual monitoring and field assessment of a wide range of water quality parameters using both random and fixed station sampling arrays, (3) field-based

experimentation and instrument deployment, and (4) microbial indicators. Staff are in the initial stages of developing outlines for the various manuscripts that will become products of this work.

Sea Grant – Drs. Greenfield & Arnott interviewed several graduate students for the upcoming molecular/red drum SCSG-funded project. A student was selected for the project and will focus on adapting the sandwich hybridization assay (SHA), a molecular approach that Dr. Greenfield uses in her lab for phytoplankton species identification and quantification, to red drum eggs. Drs. Greenfield, Arnott, and staff also began initial planning stages for field sampling and collection.

Other –Dr. Greenfield is assisting her USC-funded student complete his thesis assessing SHA and quantitative PCR for characterization of harmful algal bloom species, focusing on how various aspects of cellular physiology influence molecular characterization, which can be substantial.

Estuarine Finfish Research: *Striped Bass:* All remaining 2011 year class striped bass have been harvested from ponds at the Waddell Mariculture Center and transported by the WFWFD to Lake Greenwood. A total of 8,006 fish (0.33/lbs) were released between Jan 17th and Jan 26th. Staff are continuing to genotype historic genetic samples for a temporal structure comparison across South Carolina; genetic processing of the Jul-Nov 2012 samples from the Ashley River have begun, as well as 2011 North Carolina samples.

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 binning analyses and marker tests are being completed); for the red snapper project, otoliths from fish sampled during 1977-1985 (provided by Jennifer Potts at NMFS) are being genotyped.

Robust Redhorse: Staff have completing the reconstruction of genetic spawning records for the first two years of the Santee restoration project and are coordinating sample collection for the 2012 field season.

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 analyses are ongoing.

Cobia: Staff have been working on finalizing cobia collection data for SEDAR 28. Working papers were submitted on cobia stocking results, cobia tagging results, and cobia age data. Staff completed the genotyping and analyses of the SC 2011 cobia samples; which will be incorporated into the ongoing evaluation of stocking contribution and large-scale population structure. Based on the 2011 collections, stocked fish made a 4.7% overall contribution to the South Carolina population, with 75% of cultured fish captured within the Broad River and the remaining 25% offshore of Port Royal Sound. Similar to previous collection years, year-class-specific contributions remain high with 15.9% contribution to the 2007 YC and 2% contribution to the 2008YC. Additional 2011 samples have been received from Texas and Australia, which are being genotyped; samples from Florida and North Carolina are being processed.

Spotted Seatrout: An initial range-finding study on winter temperature tolerance of juvenile spotted seatrout has begun in Environmental Chamber 1 and will determine low temperature when 100% mortality occurs to better understand winter mortality.

Staff completed the optimization of a suite of microsatellite markers to characterize 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 complete, with the final marker suite including 13 loci that are useful to evaluate population structure as well as identify hatchery released fish. Initial data analyses of North Carolina to Georgia samples suggest a clear stepping stone pattern of gene flow throughout the range, with significant genetic differentiation occurring at scales of approximately 300 km. Therefore, conservative recommendations for stocking of spotted seatrout include the maintenance of estuary-specific stocks. Staff are beginning to genotype samples to evaluate the effect of cold winters on genetic diversity.

Weakfish Genetic Identification: Staff are in the final stages of developing genetic identification keys for the weakfish verification project; processing of historic samples to verify identifications continues and application of the identification key to those samples will occur shortly.

Inshore Fisheries staff has been processing Maryland DNR's (Atlantic States Marine Fisheries Commission partner) weakfish and croaker otoliths to determine population age structure for stock assessments. Maryland DNR has now purchased necessary equipment and we are assisting to ensure a smooth transition and consistency of methodology. Trammel and Electrofishing surveys: January schedule was completed successfully for both surveys.

Genetics: - Most of the effort this reporting period was focused on analyzing data from the OHHI supported oyster studies and the shrimp gene expression work done by Karen Burnett's group and preparing for the Plant and Animal Genome conference.

Dr. Chapman met with NCSU researchers on processing the sequencing data on striped bass. The data contains 140 million sequences and comprises 20 Gbytes of data. We are in the process of working with NCSU and CofC to develop a local pipeline to analyze this data.

Shellfish Research: *National Shellfisheries Association (NSA):* Dr. Peter Kingsley-Smith finalized the program of talks for the special session on restoration that he will be co-chairing at the NSA meeting in Seattle, WA in March 2012. Ballot forms for elections to the NSA Board were distributed; Dr. Peter Kingsley-Smith has been nominated for the position of Vice President.

Minorities in Marine and Environmental Sciences (MIMES) Program: Despite a decision by the NSF review panel not to fund the MIMES Program for summer undergraduate research, the NSF Program Officer that has worked closely with MIMES staff in recent years is recommending funding for MIMES to occur in the summer of 2012 albeit it at a reduced scale (4 students). Promotional materials have been distributed and school visits organized. Inquiries from interested students have started to come in.

South Carolina Sea Grant Consortium Triploid Oyster Project: Final sampling was conducted at the Whale Branch grow-out site, as the oysters were ready to be marketed, and interim sampling was conducted at the North Edisto tributary site, the Toogoodoo Creek site, and the May River site.

Southeast Aquatic Resources Partnership (SARP) crab-trap based oyster reef restoration: Reef photographic footprints were taken for all three Charleston Harbor sites, all three Stono River sites, and two of the three Ashley River sites.

State Wildlife Grant (SWG) restoration project: Additional crab traps for reef construction in the spring of 2012 have been collected from the Fort Johnson grounds.

Saltwater Recreational Fisheries Advisory Council (SRFAC) / Dingle-Johnson (DJ) Funding for Oyster Reef Assessments: Helicopter-based assessment of oyster habitat was partially completed for Clark Sound (S205), with additional assessments conducted in Bulls Bay and Sewee Bay. George Riekerk is learning how to navigate to increase the pool of capable and available staff to complete this work. Novel methods for estimating oyster density from the helicopter photos (SigmaScan, Coral Point Count, etc.) are also being investigated.

Asian tiger shrimp (Penaeus monodon) research: Data for 2011 collections of Asian tiger shrimp has been updated and shows an increase from 20 caught in SC in 2010 to 113 in 2011. The number of animals reported across the Gulf and southeastern United States in 2011 was 286 compared to 32 reported in 2010. Collection and analysis of tissue samples for genetic analysis continues. Staff are in discussions with collaborators at the NOAA-NMFS laboratory in Beaufort, SC as to the merits of writing an integrated assessment for this species.

Miscellaneous: Edits to the marine components of the Comprehensive Wildlife Conservation Strategies document continue. A presentation abstract for work on the SARP and SWG projects was accepted for the South Carolina Fisheries Workers Association-South Carolina American Fisheries Society (SCFWA-SCAFS) meeting to be held February 9th-10th at Santee State Park.

Sustainable Mariculture/Crustacean Monitoring:

Sustainable Mariculture:

- A study comparing native white shrimp (*L. setiferus*) grown in zero exchange biofloc systems to those grown in flow-through systems concluded. This completes the experimental work on the South Carolina Sea Grant bait shrimp project. Shrimp grew faster on average in the biofloc systems, but their size was more variable.
- Final preparations are being made for the Population Demographics study, the last task funded by the United States Marine Shrimp Farming Program. We will attempt to assess population density in biofloc-based shrimp culture raceways using several different sampling techniques. The study will begin the first week of February.
- Shrimp stocked into the commercial scale raceway in early December using water recaptured from the previous shrimp trial suffered heavy mortalities from *Vibrio sp.* The raceway was harvested prematurely to reduce expenses of the trial.
- Arrangements are being made to enlist the help of two commercial crabbers to collect gravid female blue crabs for fecundity and larviculture studies.

ACE Basin National Estuarine Research Reserve:

- Staff participated with other SCDNR staff in a meeting with representatives of the OV Associates Oyster Gro Project being planned for the ACE Basin. A monitoring program conducted by the NERR staff is now underway.
- The Scott Creek land cover map has been completed and ground-truthing will be conducted in the spring.
- Staff participated in the "Water Words" workshop to learn how to communicate more effectively with the public about environmental issues. The workshop was sponsored by the ACE Basin NERR Coastal Training Program.

Crustacean Monitoring:

- Trawl sampling in Charleston Harbor collected below average numbers of white shrimp and blue crab. This is still much better than last year, when no live shrimp were collected after early January. Water temperature remains well above average at the end of the month.
- SCDNR is developing a plan to survey recreational and commercial crabbers on their activities.

Waddell Mariculture Center: Remer Lane, who is a board member of the Port Royal Sound Foundation, visited the center and met with Al Stokes. Remer is the Center's direct contact to the Port Royal Sound Foundation board member. Remer has worked all over the world for the federal government establishing food production and distribution centers. Before he retired to Hilton Head Island, he was stationed in Africa and is very familiar with aquaculture practices.

-Laura Lee Rose, the Clemson University Master Gardner Program Coordinator put together a group of master gardeners and landscape designers to develop a plan to plant the 250 by 12 foot bluff in front of the Turnure House. The center's maintenance personnel constructed a low lying berm near the bluff to direct stormwater away from the area to prevent erosion of this 19 foot bluff. The gardeners have a group of volunteers to install the vegetation and a budget to provide the plants. This work will be done at no direct cost to DNR. The mulch will be donated and delivered by Sea Pines of Hilton Head Island. The gardeners plan to tackle a few other landscaping projects while they are here.

-The May River Community Foundation made a donation to the Waddell Fund for \$3,500. These funds will be used to help cover the cost of repairs to the center's large backhoe.

-Al was contacted by Dave Harter and some of the builders on Hilton Head Island and Bluffton about donating their time and some funds to make repairs to the exterior of the Turnure House and paint it. They would like to get this work completed in February.

-The center had problems with both seawater pumps. A shaft broke off the center's primary number 2 pump. The seawater system was down for a couple of days while repairs were made. A new pump purchased by the REEF Foundation was installed. There was a minor delay in the installation as the base had to be modified to fit the new pump.

-An 8" seawater line broke late on Friday evening. The break was located and isolated and did not interrupt seawater service. The break was 5 feet below the road and the original cut to lay the pipe contained several electric lines. Seawater filled the hole and the water had to be pumped out to make repairs. The corner 8" elbow was broken and has been replaced.

-The Center has designed a new metal platform to install in the front of the water control structure valve stem. The platform will be held in place by the track grooves in the control structure. This will allow biologist to pull and install pond screens without standing over the open area of the water control structure. Once completed, the 24 platforms will be taken to Claxton, GA to be galvanized and the installed.

-The maintenance crew has been assisting with the harvest of striped bass. Matthew Brown operates the boom truck. The truck was recently serviced and repaired. The truck now meets OSHA certification requirements.

-Beaufort County has agreed to demolish the Center's Annex and recycle what they can and then dispose of the remaining debris. Gary Kubic, the county administrator, had Beaufort County paid for the DHEC demolition permit and the asbestos inspection. I have been notified that the Annex does not contain asbestos. We hope to schedule the removal of the Annex soon.

-The Center's heavy backhoe is in the repair shop for some extensive repairs. The Waddell Fund, supported by the community, has offered \$8,500 to complete the repairs of the backhoe.

-The Bluffton Fire Department has offered to send their Brush Control Unit here to burn the brush and small trees on the banks of the Center's drainage canals.

-The Center has been assisting two science fair project students for the past two weeks. The first student is testing alternatives to fish meal in shrimp feeds. She is comparing grow rates of Pacific white shrimp that were fed two

different types of mushroom powder. Zeigler Brothers, Inc., a feed company in PA, is assisting with feed testing. The student's family made a \$250 contribution to the center. The second student used flea and tick shampoo to wash her dog. All of the wash water was captured. She added some of the wash water to a container stocked with juvenile Atlantic white shrimp. In both replicated treatments, 100% of the shrimp died within 5 hours. Most rolled over in the first 15 minutes. She is concerned with storm-water containing pesticides found in products like pet shampoos entering the estuaries.

In Water Sea Turtle Project: Updated GADNR research permit (CN21303) renewal and will submit upon receipt of required \$50 permit processing fee (check request was submitted on 20 January) -Florida Turtle permit for 2012 was received and signature page signed/returned.

Office of Fisheries Management (OFM):

Shellfish Management:

Commercial Management

2 permit holders requested verification for legally required shellfish culture permit plantings for 2 separate permits during January. Through calendar year 2012, a total of 321.8 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 120 culture permits is 126,356.6 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. Four variance requests and one planting reduction request were approved by the Shellfish Permit Committee. The planting reduction request resulted from acreage lost due to storm damage.

The SPC reviewed permits which did not meet the 2011 planting quotas and held pre-revocation hearings for three permittees (5 permits). Only one permittee came to the hearing but a written statement was submitted for three permits (one permittee). Committee recommendations were forwarded to the OFM director. Three culture permit holders surrendered grounds in late December (paperwork not finalized until January). The surrendered grounds were C038, C247 and C131. The Shellfish Permit Committee decided not to reissue C131 since it is closed by SCDHEC. The committee decided to convert C-038 to a state ground and to advertise C247 (subtidal) as available. Five permit amendments were approved this month. All requests were to add additional permit holders.

The Shellfish Permit Committee recommended revoking 3 permits held by Dave Belanger for multiple violations of conservation laws related to shellfish. The recommendation was not supported by the OFM director. Alternative action will be taken.

Annual rental bills for culture and mariculture bills were mailed in January. These are the first bills based on the new acreage assessment. Lee Taylor assisted the permitting office in two road trip licensing events around the shellfish season change.

OV Associates invited interested parties from multiple agencies (DNR, DHEC, NOAA-NMFS, ACOE) to a presentation about the oyster-gro system. Bill Walton from Auburn University told attendees how the system was implemented and performed in the Gulf of Mexico. There was considerable discussion about DNR concerns as expressed in Bob Perry's response to the public notice for this project.

A shipment of broodstock from New Jersey for Island Fresh SEafoods was inspected and found free of any hitchhikers.

Shell recycling and planting; recreational management

Staff assessed areas to use for 2012 planting sites in Murrells Inlet and Beaufort County. Bids were prepared for contractual planting in Murrells Inlet.

The Boone Hall Oyster Roast saw records numbers of participants and shell recycled. 11,000 people attended and DNR recycled 1,400 bushels of shell. This event is the largest of its kind and the recycling of the shell is made possible by the many volunteers, mostly from the CCA, and staff from the Shellfish Management Section. In addition to all the recycling staff, Michael Hodges, Allison Kreutzer, Stephen Czwartacki and Jared Hulteen assisted with this year's event. Ben Dyar was interviewed by News 2 about DNR's part in recycling the shell for the event, which aired on the 27th.

Including Boone Hall, 4,929 bushels of shell were recycled this month. Bins at Murrells Inlet, Sol Legare Boat Landing, Ft. Johnson, and Mt. Pleasant were cleaned out this month.

Mitigation Projects

All oyster shell deliveries from Green's Oyster Company for the MacAlloy and Calhoun Park mitigation projects were received at the Veteran Terminal in North Charleston. A total of 40,000 bushels of oyster shell was delivered in 56 loads. The bid for planting 37,500 bushels of oyster shell for SPA/MacAlloy /Calhoun Park mitigation projects was submitted. Additional large scale restoration sites were scouted on the Ashley River (1 site/0.54 acres), Town Creek (6 sites/0.76 acres), Cooper River (2 sites/1.3 acres) and shorelines adjacent to Patriots Point (2 sites/1.92 acres). Total area for the 11 potential new sites is approximately 4.54 acres. Annual progress reports for the SPA and Maccalloy projects are in preparation. Michael Hodges will be present a talk entitled "Utilizing success criteria for monitoring large scale oyster restoration as mitigation in a South Carolina Industrialized Harbor" at the National Shellfisheries Association annual meeting in Seattle in March.

Grant activities

State Wildlife Grant and SCORE: 62 people made 725 oyster bags at 2 separate bagging events this month. Participating groups included: James Island Charter High School, Americorps Wings, Boy Scouts of America, Ashley Hall, Camp Sewee, and members of the general public.

Allie Kreutzer presented the "Oysters as Living Classrooms" lesson to 20 students at Murray Lasaine Elementary School. Stephen Czwartacki gave a short presentation of the SCORE program to the College of Charleston's Master of Environmental Studies Student Association, and trained them to monitor water quality at Waterfront Park in downtown Charleston.

Staff measured slope at Daniel Island with the Trimble R8 to document any changes to the shoreline post reef deployment.

An additional potential restoration site was located on Town Creek across from one of the SCSPA terminals. Staff visited a potential SCORE site between the two Ashley River bridges to check site suitability. Reef construction at this site would be spear-headed by Jared Hulteen as part of his Marine Geology class at C of C. Michael Hodges and Allison Kreutzer meet with Hilary Repik from the Town of Mt. Pleasant to discuss the construction of a SCORE reefs at the new Shem Creek Park and on shorelines adjacent to Patriots Point. The Town of Mt. Pleasant will be instrumental in identifying volunteer groups for shell bagging, reef construction and water quality monitoring.

Allie Kreutzer and Stephen Czwartacki attended a meeting with members of SC SeaGrant & Clemson Extension to plan spring activities for the marsh-grass husbandry program Seeds to Shoreline. Nancy Hadley met with Sea Grant and Clemson Extension representatives to discuss a teachers workshop for Seeds to Shoreline to be held in June. Allie Kreutzer and Stephen Czwartacki planted 9,550 seeds of *Spartina* with 600 students (24 classes) from 9 schools. Most seed trays were taken to the USDA's greenhouse on hwy. 17 South. Others were left in a newly refurbished greenhouse at Colleton Middle School (Walterboro, SC). Participating schools include: Colleton Middle School (Walterboro), William M. Reeves Jr. Elementary School (Summerville), H.E. McCracken Middle School (Beaufort), Murray Lasaine Elementary School (James Island), Cainhoy Elementary Middle School (Huger), James Island Middle School (James Island), Sullivan's Island Elementary School (Mt. Pleasant), Archibald Rutledge Academy (McClellanville), and James Island Charter High School (James Island).

National Fish and Wildlife Federation:

Allison Kreutzer coordinated with Sewee Center and OPA to advertise a teachers workshop to be held at the Sewee Center in March.

Southeast Aquatic Resources Partnership-NOAA and Atlantic Coast Fish Habitat Partnership

Staff are coordinating with Tom Salisbury to schedule a week of field work using the Discovery this year. The Discovery will transport volunteers to construct oyster reefs and plant marsh grass behind oyster restoration sites within a short distance of Bennetts Point and/or Live Oak Landing on Edisto. We were notified that we have a received a second grant from NOAA-SARP to continue our project in the ACE Basin.

Meetings and Collaborations

Michael Hodges and Nancy Hadley meet with Lisa Vandiver from NOAA's Restoration Center to discuss SCDNR's ongoing oyster restoration projects and future funding opportunities that may be of interest. Nancy Hadley and Michael Hodges worked with ACE NERR staff and Peter Kingsley-Smith to develop a pre-proposal for submission to the NERR Collaborative Research program.

Michael attended a meeting at DNR on the concerns with the Charleston Harbor Deepening Project. Major concerns of the shellfish management section are effects on established oyster reefs in Charleston Harbor and the potential for increased erosion due to the increase in shipping traffic.

Allie Kreutzer and Stephen Czwartacki attended the "Water Words That Work" conference at the USDA vegetable lab on hwy 17 S. Michael Hodges received approval for travel to the National Shellfisheries Association meeting in Seattle which is being held in March. He will be presenting a talk entitled "Utilizing success criteria for monitoring large scale oyster restoration as mitigation in a South Carolina Industrialized Harbor". Another talk was submitted for the Restore Americas Estuaries meeting entitled "Incorporating large scale oyster restoration into community based programs in South Carolina estuaries. The meeting will be held in Tampa, Florida in October, travel request for this meeting is in prep. Nancy Hadley received permission to attend the NC Aquaculture Development Conference in New Bern, NC in February.

Statistics:

General Activities

- Delinquent letters for late submission of December mandatory logbooks were mailed on January 18th (122 letters) to license holders for December reports not yet received by the January 10th deadline. The affidavit list which includes delinquent offenders for December and prior months will be generated on January 26th, 2012 (61 offenders) and was turned over to the Law Enforcement Division.
- Several data requests were completed this month including Shrimp, Spanish Mackerel, and Cobia catch/effort data, and landings from drag/dredge gears for oysters. In addition, data for compliance associated with Charter vessels, permitted harvesters, and Wholesale Seafood Dealers.

Commercial Trip Interview Program

- January sampling efforts provided 25 commercial trips being sampled, with 691 length frequencies with 654 associated age structures being obtained. Additionally, port agents have been sampling finfish that were landed whole by cooperating commercial fisherman in order to obtain values needed to determine if historical conversion factors used to calculate a whole weight from a traditionally landed gutted fish is accurate.

Recreational Statistics Section Summary

- Creel Clerks intercepted 153 fishing parties with a total of 300 anglers interviewed during the month of December 2011. Fish measured included: 95 red drum, 101 spotted seatrout, 8 southern flounder, 46 southern kingfish, 4 sheepshead, 4 Atlantic Croaker, 50 spot and 5 Atlantic Spadefish.
- Otoliths collected during 2011 were turned over to inshore fisheries personnel for processing. A total of 85 otoliths were collected from; spot, weakfish, black drum, Atlantic Croaker and bluefish.
- Flounder catch and length recreational fishery dependent data provided to inshore fisheries personnel. Charter Logbook and recreational fishery dependent data for cobia and spanish mackerel prepared and submitted for SEDAR 28.
- Planning continues for the 2012 Grand Strand pier survey to be conducted with the cooperation of CCU.

Additional activities during the month of January 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 and collecting samples and catch information from shrimp trawler captains reporting catches of tiger shrimp.

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Finfish Management:

Artificial Reef Management and Development

A contract has been awarded to Stevens Towing Company of Yorges Island to carry out the marine transportation portion of this year's Reef-Ex project, the joint reef-building exercise between DNR and the SC Army National Guard. Armored personnel carriers supplied by the Guard will be deployed on Paradise Reef and Ten Mile Reef off of Murrells Inlet. The National Guard expects to deliver the vehicles in early June.

WILDLIFE AND FRESHWATER FISHERIES

DEPUTY DIRECTOR'S OFFICE

Considerable time was spent preparing for and attending Legislative committee meetings. Other key meetings included attending a Wildlife and Freshwater Fisheries Advisory Committee, statewide wildlife coordinators, freshwater fisheries technicians, the USFWS to discuss endangered species issues, and the DNR Board meeting. Discussions with the SC Forestry Commission were initiated to identify opportunities to better coordinate forestry activities on DNR lands. Other activities included working with staff to identify options to improve the draw hunt application process, processing

Assistant Deputy Director

Spoke to four separate landowners regarding properties for sale in Dillon, Union, Georgetown and Aiken Counties. Examined tract for sale in Aiken County and visited three other DNR properties nearby. Compiled specifications to solicit bids for clothing contract. Reviewed mitigation plan for Lee Nuclear Pond C. Prepared and submitted documentation to Budget and Control Board to accept a property donation in Region 4. Completed one-day continuing education class regarding real estate license laws and procedures. Meetings and events attended: DNR Board meeting; Deputy Director's meeting; WFF Advisory Committee meeting; State Wildlife Action Plan meeting; Wildlife Coordinators meeting; Capture and Immobilization meeting; and Senate briefing on conservation issues

Office of Environmental Programs

Permitting and Review

Staff coordinated 55 DNR reviews (13 COE, 19 DHEC, 10 State Clearinghouse, 13 Misc.) of environmental permits and authorizations for the 38 inland counties.

FERC Projects

Catawba-Wateree Hydroelectric Project (FERC Project No. 2232). DNR staff completed work with Duke Energy and NC Wildlife Resources Commission to revise the Memorandum of Agreement Concerning Habitat Enhancement and Woody Debris Management for the Catawba-Wateree Hydro Project and the revised MOA was signed by DNR on Jan 27.

Columbia Hydroelectric Project (FERC Project No. 1895) -- DNR staff provided comments to the City of Columbia regarding their Embankment Surveillance and Monitoring Plan of Dec 2011 and met with City staff on Jan 30 to discuss related issues leading to more vegetation removal from the canal embankment.

Keowee-Toxaway (KT) Hydroelectric Project (FERC Project No. 2503). Relicensing process continues: DNR submitted comments Jan 12 to FERC on Duke's Revised Study Plan and requested additional studies to address fishery issues with hydro entrainment and tributary stream fish communities. FERC issued its Study Plan Determination on Jan 27, which accepted a portion of DNR's study requests regarding fish entrainment mortality. DNR staff participated in KT Stakeholder Team meeting on Jan 25, and a Water Quantity/Operations meeting on Jan 11.

Lockhart Hydroelectric Project (FERC Project No. 2620): DNR staff reviewed engineering drawings for a proposed minimum-flow turbine at Lockhart and discussed with Lockhart DNR concerns for water dispersal and wetted-habitat changes potentially affecting rocky shoals spider lilies at the Project.

Neal Shoals Hydroelectric Project (FERC Project No. 2315). DNR staff reviewed and provided comments to SCE&G regarding their proposed plan for monthly monitoring of stream-bed profiles for one year to assess change in sediments deposited from the Oct 2011 release from Neal Shoals Dam.

North Georgia Hydroelectric Project (FERC Project No. 2354). DNR staff provided comments to Georgia Power Company to address their Tugalo Recreational Use Study Report, 2011 Update, which reports the monitoring of Lake Tugalo uses and shoreline conditions.

Riverdale Hydroelectric Project (FERC Project No. 13590). Relicensing process continues: DNR staff is preparing comments in response to a second Additional Information Requests (AIR) from FERC to Lockhart Power Company about sediment management issues. Staff is also preparing comments to FERC on their Scoping Document 1, which identifies issues to be addressed in their Environmental Assessment of the Riverdale hydro project.

Santee Cooper Hydroelectric Project (FERC Project No. 199). DNR staff participated in a two-day meeting with staff of Santee Cooper Public Service Authority and the National Marine Fisheries Service. The meeting purpose was to view project facilities and to discuss alternatives for safe upstream and downstream passage and the restoration of the endangered shortnose sturgeon.

NRC Projects

William States Lee Nuclear Project. DNR staff are currently reviewing the Draft Environmental Impact

Statement and Section 404 Permit/401 Water Quality Certification Joint Public Notice and application documents for the William States Lee Nuclear Project.

SPECIAL PROJECTS

Haile Gold Mine. DNR staff participated in an Interagency EIS coordination meeting. Staff attended a public town meeting held in Kershaw.

Public Information Director

Participated in NBTA business meeting; participated in Fisheries Tech meeting; participated in CPM training, participated in WaterWorks training, participated in Checkoff Carolina planning meeting, worked with wildlife staff concerning promotional activities for DNR Field Day; provided information to Checkoff Carolina for website development; worked with magazine and IT staff to finalize in-house promotional materials for Contribution to Checkoff, worked with IT and graphics staff on promotional pieces for ANS and freshwater fisheries; worked with wildlife staff on development of draft endangered species license tag; completed HHP grant for NSSF, finalized fishing marketing plan with RBFF.

WILDLIFE SECTION

Public hunts progressed as planned during the month with significant time required to administer public waterfowl hunts. Through January, 1718 hunters harvested 4,080 ducks on monitored DNR waterfowl areas including 158 youth hunters harvesting 395 ducks. 127 small game hunters reported harvesting 279 squirrels and 73 raccoon hunters harvested 47 raccoons on Webb, Donnelley and Botany Bay WMAs. A youth raccoon hunt was held at Worth Mountain WMA in York County. An additional youth dove hunt was held on Botany Bay with 34 youth participating.

The CWD project continued with data entry and sample labeling.

The Wildlife Section News Release Plan for 2012 was completed and distributed to staff.

The fawn mortality study at SRS continued with the beginning of deer trapping for the new study year.

The 2011 Fall Covey Count report was completed and provided to staff.

Staff continued implementation of the White-nosed Syndrome Response Plan.

Staff continued to monitor and report on DNR-held Conservation Easements.

Bear complaints included 3 in Region 1 and 4 in Region 4.

Deer spotlight surveys were conducted at Croft State Natural Area.

Seven midwinter bald eagle surveys were conducted.

Regional and statewide coordinators attended a chemical immobilization class given by DEA and SC DHEC.

The State Chapter NWTf board meeting was attended.

An Indian Creek Wildlife Habitat Restoration Initiative meeting was attended.

The Deer Project biologist compiled and summarized over 500 internet comments obtained on the proposed Deer Management Program.

Other meetings held and or attended during January included the Wildlife & Freshwater Fisheries Advisory Committee meeting and a Wildlife Section coordinators meeting.

2,098 registered guests were recorded for Botany Bay Plantation WMA during January including 9 horse groups with 17 riders.

Staff reviewed the Waccamaw National Wildlife Refuge hunt proposal and provided comments to the US F&WS.

Management recommendations were provided to 16 landowners, deer data analysis was conducted for 2 hunt clubs and 257 nuisance wildlife investigations including 12 alligators were conducted requiring 11 site visits. Other agencies were provided assistance on 14 occasions requiring 6.5 man/days. Three environmental project reviews were conducted. Focus Area coordination required 3 days. Presentations were given to 6 groups totaling 183 people. Waterlevel management required 62 man/days. Five news releases were submitted. Duck traps were constructed and sites baited in preparation of waterfowl trapping and banding. 10.5 man/days were spent on data analysis. Surveys included 5 waterfowl routes, 6 eagle surveys, one neotropical bird survey and RCW surveys of 4 clusters and 20 acres. Seven RCW cavity inserts were installed at Sand Hills State Forest. 83 woodduck boxes were checked. 78 bluebird boxes were checked. Almost 1000 woodduck boxes were distributed to private landowners in January.

Heritage Preserve activities included 137 site visits. Exotic vegetation control on 1.7 acres on 5 HPs required 19.5 hours. Agricultural activities included 8 acres mowed, 348 acres prescribe burned, 10.1 miles of fire lanes disced and 18 miles of road scraped. Boundaries painted and re-posted included 4 miles at Waccamaw River HP, 1.3 miles at Lynchburg Savannah HP and .75 mile at Woods Bay HP.

Field agricultural activities on WMAs included 32 acres annuals planted, 67 acres mowed, 285 acres disced, 576 acres burned, 13 acres fertilized, 43 acres treated with herbicide and 125 acres limed. 127 miles of fire lanes were

disced, 7500 feet of dike mowed, 7.6 miles of roads mowed, 38 miles of roads scraped and .5 mile of road re-furbished. 71 WMA signs were erected on 9 miles of boundary. Other signs erected during the month included 43 safety zone signs, 17 road closed signs, 6 dove field signs, 202 HP boundary signs and 84 misc. signs. 2 gates were re-furbished. 1500 feet of new dike was constructed as part of the NAWCA project at Santee Coastal Reserve. Regional staff made 5 contacts with NGOs and Conservation Organizations during the month.

FRESHWATER FISHERIES

Freshwater Fisheries Coordination and Administration (Chief's Office)

Staff meet with representative of the BASS Federation in South Carolina to discuss cooperative project opportunities and representatives of a the Saluda River Trout Unlimited Chapter to discuss Lower Saluda River trout management options.

Staff participated in NCLI Peer Group conference calls.

Staff participated in the meeting of the Wildlife and Freshwater Fisheries Advisory Committee.

Staff attended the annual meeting of the Freshwater Fisheries Technicians.

Staff attended a coordination meeting with the Inland Fisheries staff of the North Carolina Wildlife Resources Commission to discuss and coordinate fishery management activities on border waters.

Conducted a meeting of the Freshwater Fisheries Section Coordinators to discuss and coordinate resource management and administration issues.

Met with Anderson County representatives and their project design team to discuss the design and plans for the Green Pond Fishing Event Center on Lake Hartwell.

Staff made a presentation to the Lexington County Wildlife Federation Chapter.

Conducted a project inspection of Lake Wallace.

Region I

Fished standardized gill nets on Lake Hartwell to monitor striped and hybrid bass survival

Fished gill nets on Lake Jocassee as part of standard monitoring of sport fish populations

Prepared for upcoming fish attractor maintenance (got block and made contacts about picking up trees)

Completed fish attractors on Lakes Johnson and Rabon.

Began fish attractor work on other DNR state lakes (Long, Jonesville, Star Fort) and large reservoirs (Thurmond, Secession, Keowee).

Completed aging of striped bass collected from Thurmond

Continued the ongoing creel surveys of the Lake Greenwood and Lake Jocassee recreational fisheries.

Region 1 Fisheries Technicians participated in the Annual Technician Meeting at Webb Wildlife Center.

Attended the public meeting held in Gaffney by the Nuclear Regulatory Commission on the proposed Lee Nuclear Station.

Attended the SCDNR Board Meeting in Columbia.

Attended the Fisheries Coordinator Meeting at Cohen Campbell Fish Hatchery.

Spent considerable effort working on FERC relicensing of the Keowee-Toxaway project.

Provided comments on Georgia power's recreational monitoring on Lake Tugalo.

Conducted habitat enhancement efforts on Moody Creek on Andrew-Pickens District

Continued trout stocking in mountain streams on schedule

Continued conducting stream habitat and water quality surveys on Jocassee Gorges streams in conjunction with the SARP/EBTJV Grant

Region II

Region 2 personnel assisted the State Lakes crew with replacement of decking on the emergency spillway boardwalk at Lake Oliphant, Chester County.

Region 2 personnel gathered and transported discarded Christmas trees and blocks for replenishing 6 attractor sites each on Lakes Wylie, York County and Lake Wateree, Kershaw County.

Region 2 personnel attended a coordination meeting with NC Wildlife Resources Commission fisheries biologists to discuss issues and ongoing projects within each state.

Biologist Stroud attended a FWF Coordinator's Meeting at the Cohen Campbell Fish Hatchery in West Columbia.

Region 2 personnel, with assistance from the State Lakes crew, installed 3 framed gravel fish bedding areas at Dargan's Pond, Darlington County.

Biologist Stroud continued work on the annual report during the month.

Biologist Stroud provided a report on the Hams Creek stream survey results from summer 2012 to Nancy Jordan, biologist with the Carolina Sandhills National Wildlife Refuge as requested.

Biologist Stroud completed and forwarded Region 2's 2012 Stocking Request to Hatchery Coordinator Leo Rose as requested.

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

Contact with NGOs:

Tom B. and Reid P. – regarding stocking of striped bass into Lake Wateree; R. Brown – regarding size regulations for striped bass in Lake Wateree; L. Blohn regarding fisheries management and cormorants in Forest Lake, Florence; Dr. Bill Jarmin of PAWS regarding a habitat enhancement project on Lake Wylie, S.C.

Region III

Reservoir Management

Lake Murray striped bass gill net sampling completed. A total of 288 fish were collected this season. The data was entered and analyzed on spreadsheets and a presentation on the current status of the STB population was completed in preparation for presentation to the Midlands Striper Club.

Crappie otoliths from the 2010 gill net sample were extracted and examined for age determination.

A total of 400 Christmas trees were acquired for fish attractor refurbishment on Lake Murray

Initiated bid process for the repair of the parking lot at Lake Brown

Stream Management

Work was conducted on developing a draft study proposal a Lower Saluda River trout mortality study.

Trout stocking continued in the Lower Saluda. To date, approximately 22,000 fish have been stocked this season.

Staff met with several Saluda River TU members to discuss issues related to the management of the river's fishery.

Electrofishing was conducted in the Combahee river to evaluate the fish community especially striped bass and largemouth bass. There are growing concerns with the impact of continued salt water intrusion far upstream of Saltwater/Freshwater Dividing Line.

Discussions were held with Region 4 staff regarding possible stocking of largemouth bass in several of the ACE Basin Rivers in response to local bass club concerns and in response to possible impacts the drought may have had on the largemouth bass populations in these rivers.

Environmental

No activity.

Other

Work was conducted on the 2012 annual report.

Routine maintenance on boats and equipment were completed.

The Region's technician participated in organizing the fisheries technicians meeting as well as attended the meeting.

The Region's Coordinator attended the Southern Division AFS meeting in Biloxi Mississippi and presented the Small Impoundments Committee with a status update of SCDNR's state lake program.

Region technicians attended the annual Tech Meeting at the Webb Center.

Region IV

Winter gill net sampling was continued and all the January data and samples were archived for later analysis.

Project personnel performed striped bass electrofishing sampling of the freshwater section of the Ashley River in coordination with the MRD Mariculture section.

Fish attractor work was conducted on Lakes Marion and Moultrie. F.A.s 1, 3,10,4, and 11 were replenished with Christmas trees.

A presentation was made to the Bonneau Beach Garden Club on the current status of the striped bass fishery and the importance of being patient and giving the regulations time to improve striped bass recruitment and population age structure.

Assisted a fledgling local natural resource educational organization (Natural Knowledge), with planning and moderating the 1st annual Natural Knowledge Challenge for local high schools.

Two project personnel attended the Southern Division of the American Fisheries Society annual meeting and represented South Carolina on the Reservoir and Catfish Committees. They also attended a day-long workshop covering catfish population sampling.

Scott Lamrecht attended and participated in the meeting with North Carolina Department of the Environment and Natural Resources that was held to address resource management issues that are shared by both states.

A Santee-Cooper hydro-relicensing workshop was attended.

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

Hatchery Coordination

In January, Hatchery staff certified approximately 365 grass carp as triploid and issued 1 permit for those fish to be grown.

Hatchery staff participated in the monthly Freshwater Fisheries Coordinator Meeting at Cohen Campbell.

Staff attended the Annual Fisheries Technician Meeting.

Staff met with North Carolina to coordinate on mutual issues.

A total of 37,964 trout were stocked during the month of January. Overall fish health remained remarkably well as well as water flow through the hatchery remained high due to consistent rainfall.

Staff at Walhalla continued to work on caring for the fry and eggs as incubation and rearing dominate the production cycle this time of year. Hatchery-wide, raceway inventories were completed in preparation of the upcoming 2012 stocking season.

Outreach

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

At Walhalla State Fish Hatchery visitation was normal throughout the period and two tours were provided to twenty-three individuals.

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

State Lakes

Installed Christmas trees at Lake Johnson for fish habitat.

Remodeled walkway at Lake Oliphant

Attended Fisheries Technician Meeting at the Webb Center

Assisted in harvest and distribution of bluegill at the Campbell Hatchery

Stocked bluegill at Francis Marion University and Ashbury Hill (Greenville Co.)

Electrofished Lake Johnson for growth analysis

Installed gravel spawning beds at Dargan's Pond

Assisted in Grass Carp Certification

Diadromous Fishes

Activities

Efforts this month included: Weekly downloading of acoustic receivers to track sturgeon movements on the Santee, Waccamaw, Pee Dee, Edisto, Combahee, and Savannah Rivers, gillnetting for shortnose sturgeon in Lake Marion, gill netting for American shad in the Waccamaw and Santee Rivers, coordinating with Bears Bluff National Fish Hatchery (BBNFH) concerning continuing Edisto River shad stock enhancement work, monitoring elver ingress at St. Stephen Dam, continuing coordination with contractors responsible for construction of an eel ladder for Goose Creek Reservoir. Staff submitted a NMFS progress report for the multistate sturgeon work and edits were submitted for the CWCS. Routine maintenance was also performed on vehicles and boats.

Multi-State Sturgeon Research

Coordination between cooperating states (NC & GA) continue. Field efforts continue weekly. Staff are preparing for up to a 75% cut in funding for year 3 of the project.

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 ASMFC technical committee meetings for shad and river herring and American eel in Baltimore, MD. Employees attended a meeting to discuss FERC activities involving the Santee-Cooper System with members from Santee-Cooper, USACOE, NMFS and SCDNR. Personnel also met with the USFWS, SCE&G, and Duke Energy regularly.

Research

Staff worked on processing summer 2011 zooplankton samples from locations in Upper and Middle Lake Marion. Population abundances of copepodid stages of copepods were ~10/liter; cladocerans were ~20/liter. These values are 1-2 orders of magnitude greater than abundances recorded from samples in Upper Lake Marion in spring 2009. For the cladocerans, the ratio of eggs to animals indicates ample food resources and high productivity.

Staff used a hydrologic model for Upper Lake Marion to test the hypothesis that low spring zooplankton populations are due to a hydrologically-driven "spring flush" of the reservoir plankton. The spring zooplankton populations are a critical resource for fish larvae, including blueback herring, threadfin shad, anadromous shad, and striped bass, in Lake Marion.

The annual Freshwater Fisheries Technicians meeting was coordinated and attended at Webb Wildlife Center.

Initial data analysis was conducted to evaluate stocking success of individual genetic families of striped bass in

Lake Wateree. Results indicated that success varied significantly by family. A consultation with statistician John Grego helped define appropriate treatment of the data. All pertinent data sets were then provided to him for further analysis.

A survey of the Wateree River from Camden to Highway 378 near Sumter was conducted to aid the annual Bald Eagle Count. Fifteen individual eagles were counted.

Work continued on a stocking study of redbreast sunfish in Edisto River. Otoliths were taken from 250 redbreast for ageing and eventual mark detection. A subset of collected redbreast was aged in an effort to bracket minimum and maximum lengths of the year class that will be evaluated for oxytetracycline marks. Growth appears variable within year classes, however, and all otoliths (N=500) were transferred to Region 3 for ageing.

Eel traps at Wateree and Columbia dams were checked on two dates. No eels were captured on either date. Routine maintenance on the eel ramps and associated equipment was conducted as needed.

During fall 2010 smallmouth bass were collected from the Broad River to evaluate the SCDNR stocking programs. This month, the otoliths of 244 fall-collected smallmouth bass were aged and reviewed for OTC marks by two independent readers. Estimated age of smallmouth bass ranged from 0 to 5 and there were no disagreements in age between readers. Twenty-three otoliths contained at least one OTC mark and there was only one disagreement between readers; an age-3 smallmouth bass was identified as having one mark by one reader and two marks by the second reader. Hatchery stocked fish contributed 27% to the 2010 smallmouth bass year class; 9% of the fish collected were stocked as fry during spring and 18% were stocked during fall as fingerlings, the remaining fish were presumably wild.

Work continued on the Thurmond striped bass telemetry project. Nine person days were spent manually tracking the reservoir for striped bass. Data downloaded from 4 deepwater receivers was processed and a macro developed by the manufacture to correct receiver time drift was evaluated.

Growth models were developed for three species of fish collected from state lakes during 2007-2009. Von Bertalanffy growth models were developed for 9 bluegill populations, 10 largemouth bass populations, and 4 redear sunfish populations in South Carolina state lakes. Growth of each species varied among lakes. On average it took bluegill sunfish 3 years to reach quality size (150 mm TL) and 6.5 years to reach preferred size (200 mm TL). Largemouth bass reached quality size (300 mm TL) in 2.6 years and preferred size (380 mm TL) in 4.5 years.

Provided input for a SC Wildlife Magazine article.

Staff worked on Comprehensive Wildlife Conservation revisions for aquatic habitat, freshwater fishes, crayfishes, mussels, snails, and leeches. A draft of the first objective conservation ranking of stream fishes in South Carolina was produced.

We sorted, identified, and curated invertebrates from the SCSA project and entered and updated data.

Staff developed and submitted a SWG funding proposal for a crayfish species of high conservation concern.

Staff attended the Atlantic Slope Mussel meeting in Raleigh, NC and deposited SCSA collections of mollusks at the North Carolina State Museum of Natural Sciences.

Staff reviewed documents for environmental planning section and supplied stream data and comments related to a proposed mitigation site for the Lee Nuclear project.

Staff participated in a Coordination meeting with the NC Wildlife Commission

The Southern Division of American Fisheries Society meeting was attended in Biloxi, MS. A staff member chaired the striped bass technical committee meeting, where regional issues relevant to management of striped bass were discussed.

We completed GIS-based watershed delineation and spatial variable extraction for all statewide stream assessment sample locations and participated in a conference call meeting of the Southeast Aquatic Resource Partnership Science and Data Committee...

We facilitated and participated in the written and oral comprehensive examinations of staff biologist Cathy Marion. Congratulations to Cathy for moving on to candidacy for her doctoral degree!

Aquatic Education

Coordinated, prepped and facilitated a Family Fishing Clinic Certified DNR Fishing Instructor Training January 21st for 15 participants at the Hunter Education Classroom at Styx. Another training was held for all the staff of the Charleston Angler on January 25th for 14 participants at the Marine Research Institute Classroom at Fort Johnson in Charleston. Worked with graphics to update the Family Fishing Clinic fillable forms and flyer and the webmaster to update the participant registration form.

Continued working on development of the Bass Fishing Clubs. Currently, there are 12 schools onboard including Abbeville High, Barnwell County Career Center, Bonds County Career Center, Camden High, Dixie High, Greenville Senior High, Ninety Six High, North Augusta Middle, Saluda High, T.L. Hanna High, Waccamaw High and Wilson

Hall (private school). Over the past month, four more schools have expressed an interest—Dorman High & Freshman Campus, Conway High, White Knoll High and North Myrtle Beach Christian. The website was updated to include new tournaments through the TBF Student Angler Federation and to include new information about the TBF of SC Junior Championship.

The Fishing Tackle Loaner Program (FTLP) was transitioned over to me. All sites were asked to send updates as to who the contact person is at the park to oversee the program there and if there were any equipment, tackle or signage needs. Monthly logs are required for keeping track of FTLP participants. In the past, these logs were submitted to me on a monthly basis. It was unanimous for the park staff however, that it would be easier to go quarterly logs and so we will try that for the next year and see how it goes.

Three trout stockings for Trout in the Classroom were scheduled for Irmo Middle, Palmetto High and Slater-Marietta Elementary in conjunction with a school field trip so students can witness the stocking. Four more “Thinking outside the Tackle Box” Video tapings were scheduled for the spring—Trout Fishing, Hatchery Operations, Diadromous Fish Project and Bream Fishing.

Other

Developed a press release with Brett Witt about the opening of the shad and herring fishing season to help ensure proper licensing and permitting

Attended the Freshwater Fisheries Technician Meeting January 11th

Attended the Spartanburg County Parks Commission Tyger River Park Preview

Attended the Freshwater Fisheries Coordinator’s Meeting January 24th.

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 for the bidding process.

Moved into a new office—Room 273A.

Law Enforcement

DIVISION SUMMARY – COL ALVIN TAYLOR

Officers issued 537 summons and 1,441 warnings with 911 cases clearing court with fines totaling \$117,903.01 being assessed. A total of 2,565.5 hours were spent on boating patrols resulting in 4,306 boats being checked. Officers spent 322 hours on Homeland Security, 645 hours on litter patrols and a total of 382 hours were spent patrolling Heritage Trust Preserve properties. Officers also spent 2,248 hours on night patrols. A total of 192 JEA hours were worked.

REGIONS 1 & 2 – MAJ WILLIAM POOLE

Region 1 – CPT Jamie Landrum

Officers issued 123 summons and 291 warnings with 201 cases clearing court with fines totaling \$30,991.00 being assessed. Officers checked 1,809 fishermen, 1,089 hunters checked and a total of 289 hours were spent on boating patrols resulting in 743 boaters checked. Officers gave a total of 14 public presentations. Officers spent 193 hours on Homeland Security, 291 hours on litter patrols. A total of 71 hours were spent patrolling Heritage Trust Preserve properties. A total of 17 hours were spent patrolling Jocassee Gorges resulting in 5 warnings being issued. Officers also spent 523 hours on night patrols. During the month there were 2-hunting incidents reported.

Captain's Spotlight

- SGT Busha spent several hours of surveillance watching a trap, resulting in 1 case being made for illegal trapping.
- LT Isaacs, SGT League and CPL Anders checked a private pen raised duck pond where they made cases for hunting without license, state duck stamps, federal duck stamps and unplugged guns.

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

Officers issued 20 summons and 29 warnings with 24 cases cleared court with fines totaling \$6,350.000 being assessed.

- CPL Barnett while on routine patrol of US Forrest property caught a subject that had stolen 48 foot of guardrail. Subject was also charged with a loaded uncased gun and driving under suspension.

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

Officers issued 27 summons and 46 warnings with 41 cases cleared court with fines totaling \$4,733.00 being assessed.

- CPL Holliday and Officer Miller worked a baited duck pond. CPL Holliday made cases for hunting waterfowl over bait and no state stamp.
- SGT Wilson made cases for hunting deer without a license and hunting deer out of season in Game Zone 2.

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

Officers issued 19 summons and 42 warnings with 15 cases cleared court with fines totaling \$1,416.50 being assessed.

- 1st SGT McCraw and CPL Quinn caught 3 subjects trespassing to hunt ducks in Cherokee County.
- Officer Miller issued a summons for hunting ducks over bait in Spartanburg County.
- SGT Adams and Officer Smith issued 6 summonses for WMA violations at the Tyger River Waterfowl Area.

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

Officers issued 34 summons and 96 warnings with 76 cases cleared court with fines totaling \$9,341.50 being assessed.

- CPL Taylor cited an adult hunting during youth deer day with a 30.30 rifle.
- CPL's Welch and Maxwell located a baited dove field where subjects threw out cracked corn and sunflower in a horse ring. Total of 3 cases were made for preparing and hunting over a baited field.
- SGT's Dudley and Vaughn each apprehended subjects trespassing for the removal of artifacts, on 2 separate tracts of land. A total of 5 subjects were caught and some have charges with the sheriff office for the stealing of scrap metal.

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

Officers issued 7 summons and 35 warnings with 18 cases cleared court with fines totaling \$5,780.00 being assessed.

- CPL Keeter, PFC Ginn, and CPL Bensel made a controlled buy of a deer processor who was selling venison (Jerky).
- CPL Bensel charged 2 subjects with trespassing to remove artifacts on private property.
- 1st SGT Barwick and CPL Keeter worked a hunting accident involving a 15 year old male who while Hog hunting shot himself in the upper chest with a 30/06 rifle. Juvenile was able to walk back to house approx. 100 yards and was airlifted to Greenville Memorial ER where he went to Surgery. Status is still Pending.

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

Officers issued 16 summons and 43 warnings with 27 cases cleared court with fines totaling \$3,370.00 being assessed.

- CPL's Cutter and Bridges made 2 cases for possession of lead shot.
- 1st SGT Talbert and Greenwood County officers worked a hunting incident in Edgefield County involving a rabbit hunter getting shot in the leg.

- CPL's Baker and Cutter assisted Aiken County in apprehending a subject that shot an Aiken Public Safety Officer.

Region 2 – CPT Sandy Young

Officers issued 113 summons and 257 warnings with 179 cases clearing court with fines of \$19,832.50 being assessed. Officers checked 1,570 hunters and 981 fishermen, and a total of 439.50 hours were spent on boating patrols resulting in 656 boats inspected. Officers spent 7 hours on Homeland Security and 131 hours on litter patrols, and a total of 157.50 hours were spent patrolling Heritage Trust Preserve properties. Officers gave a total of 42 public presentations. Officers also spent 488 hours on night patrols.

Captain's Spotlight

- Unit 2A conducted the Fifth Annual SCDNR/Rocky Creek Youth Rabbit Hunt this month in Chester County.
- Unit D Officers Arnold and Perry made 4 waterfowl over bait cases in 2 separate locations.

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

Officers issued 35 summons and 47 warnings with 55 cases clearing court with fines totaling \$6,047.50 being assessed.

- Officers Ferrell, Vissage and Forrester charged a subject with fishing illegal devices, illegal possession of Game fish, and tampering with another fisherman's traps.

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

Officers issued 36 summons and 96 warnings with 39 cases clearing court with fines totaling \$5,160.00 being assessed.

- Officers Coleman and Woodlief charged 3 subjects with hunting dove over bait.
- CPL Baird charged 2 subjects with hunting waterfowl in a State Sanctuary (Kershaw County).

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

Officers issued 5 summons and 28 warnings with 12 cases clearing court with fines totaling \$890.00 being assessed.

- CPL Josh Walters and Officer Paul McCurdy made 4 duck related cases for hunting with no license or stamp.
- CPL Josh Walters and Officer Paul McCurdy worked boat patrol on Little Pee Dee River and wrote several boating and set hook violations.

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

Officers issued 18 summons and 40 warnings with 29 cases clearing court with fines totaling \$3,375.00 being assessed.

- Officers Arnold and Perry made 4 cases for hunting waterfowl over bait.

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

Officers issued 19 summons and 46 warnings with 44 cases clearing court with fines totaling \$4,360.00 being assessed.

- Officer William Larymore made 1 case for hunting ducks after legal hours.

REGIONS 3 & 4, INVESTIGATIONS – MAJ CHISOLM FRAMPTON

Region 3 - CPT Harvin Brock

Officers issued 94 summons and 235 warnings with 167 cases clearing court with fines of \$23,156.01 being assessed. A total of 423 hours were spent on boating patrols resulting in 1,115 boaters checked. Officers spent 78 hours on Homeland Security 115 hours on litter patrols and a total of 48.5 hours were spent patrolling Heritage Trust Preserve properties. Officers gave a total of 23 public presentations. Officers also spent 644 hours on night patrols. During the month there were 8 hours spent on hunting accidents and 17 hours spent investigating boat accident.

Captain's Spotlight

- SGT's Smith and Derrick apprehended 5 people hunting ducks on a baited pond, resulting in 3 cases.
- CPL Collins wrapped up a night hunting investigation which netted four cases for night hunting deer and one failure to stop for a blue light. \$3000.00 in fines and \$1,000.00 for vehicle recovery was collected. These officers did a great job with this investigation. Also assisting with these cases were Pilot Bucky Harris, SGT's Herndon, Hiers and CPL. M. Lambert.
- Officers Henry Herndon, Raquel Salter, Gregg Pinckney, Brett Bannister, Hunter Robinson, and Marcus Smith worked the MLK Day in Columbia.
- We welcome Craig Bowers on his recent transfer to Region 3 Craig is assigned to Newberry County.

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

Officers issued 39 summons and 104 warnings with 42 cases clearing court with fines totaling \$5,786.01 being assessed.

- After answering a Night Hunting call, CPL Parrish determined that there was no case to be made for night hunting, but during his investigation he was able to cite the individuals for untagged furbearer traps and no state hunting license.
- SGT Derrick and CPL Parrish caught 4 individuals hunting ducks on Lake Murray too close to a residence. Upon investigating, three of the four subjects were without proper licenses, stamps, and unplugged guns. Seven cases and six warnings were written.
- SGT Robinson made one case for hunting deer out of season.

- SGT DeRienzo and CPL Parrish checked seafood vendors throughout Lexington County resulting in 27 contacts.
- CPL Johnson assisted with the TOMO Youth Hunt in Aiken County.

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

Officers issued 10 summons and 19 warnings with 4 cases clearing court with fines totaling \$320.00 being assessed.

- CPL Bassard made 16 contacts during the period with 9 of those being waterfowl related including cases for unplugged gun and lead shot.
- SGT Cope located a lost elderly man on Belfast WMA.

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

Officers issued 9 summons and 36 warnings with 33 cases clearing court with fines totaling \$4,945.00 being assessed.

- Barnwell & Aiken county officer's assisted Aiken's Department of Public Safety (DPS) & other LE agencies on a manhunt for a fugitive who murdered an Aiken DPS officer. Fugitive was taken into custody in Batesburg.
- CPL McDaniel was the judge at the Wild Game cook-off at the Langley Pond Park.
- BSGT Salter and CPL Terry assisted the BCSO & SLED with a search for a missing elderly woman who had Alzheimer's disease. The woman was located roughly 200 yards from her property and was taken to the hospital for treatment of exposure.
- SGT Salter & CPL Terry assisted the SCDNR covert team with an illegal sale transaction concerning wild hogs; the two subjects were transported to the Barnwell County Detention Center.
- Barnwell & Aiken county officer's assisted with the Wounded Warrior's hunt at Cowden Plantation.
- CPL Tyler worked many hours on multiple illegal dumping sites resulting in three cases for illegal dumping.

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

Officers issued 24 summons and 34 warnings with 30 cases clearing court with fines totaling \$6,185.00 being assessed.

- SGT's Yongue and Brown located a stranded boater on the Edisto River.
- SGT Lee located a stranded boater out of Stump hole Landing and assisted OCSO with recovering stolen golf carts and trailers. SGT Lee apprehended 2 subjects shooting ducks with lead shot and no state stamp.
- CPL Lambert worked an investigation where two subjects were involved in driving a truck across a farmer's field in pursuit of a deer which they shot from the vehicle. The subjects were charged and pled guilty.
- 1st SGT Pulaski and CPL Lambert made 2 cases on hunters shooting doves in a baited field.
- SGT Herndon and CPL Collins assisted with the recovery of a coon dog stolen from a hunt during the Grand American.

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

Officers issued 12 summons and 42 warnings with 58 cases clearing court with fines totaling \$5,920.00 being assessed.

- SGT D. Morris, SGT Wheeler, CPL's Jervey and Lambert assisted the USFW and DNR's Investigations Unit with a case; charges are pending the completion of the investigation.
- Officers assisted the Clarendon County Sheriff's Office with a search and rescue of a mentally ill subject that walked away from Willow Glenn. The subject was located by SLED helicopter and SGT Don Morris; subject had injured his leg and was transported to the hospital.
- 1st SGT G. Morris, SGT D. Morris and CO J. Smith had two subjects missing on Lake Marion for two days before the parents reported them overdue. While searching for the individuals they returned home safely, they had failed to tell their elderly parents they went camping.
- 1st SGT G. Morris assisted SCLEAP with Aiken Public Safety debriefing on the death of Officer Scotty Richardson. During this month they lost another Officer in the line of Duty, Officer Sandy Rodgers.

Region 4 – CPT Gentry Thames

Officers issued 202 summons and 649 warnings with 359 cases clearing court with fines of \$43,068.50 being assessed. Officers checked 2,749 hunters and 1,791 fishermen with a total of 1,389 hours being spent on boating patrols resulting in 1,755 boaters checked. Officers spent 44 hours on Homeland Security and 108 hours on litter patrols. A total of 105 hours were spent patrolling Heritage Trust Preserve properties. A total of 593 hours were spent on night patrols. Officers gave a total of 34 public presentations. Officers also spent 192 hours on JEA patrols. During the month there were 13 hunting accident investigation hours and 42 boating accident investigation hours conducted.

Captain's Spotlights

- 1st SGT Williams, CPL's Capps, Kaminskas and PFC Beacham apprehended 8 subjects for Wanton Waste of Waterfowl and Taking Non Game Birds (Shore Birds) while hunting the on Santee Delta.
- CPL Chavez assisted North Charleston Police Department in a man hunt that eventually led to the capture and incarceration of 3 individuals for Attempted Murder in the shooting of a North Charleston Police Officer.

- CPL Duncan conducted surveillance on a Duck pond for over 4 hours, witnessing an individual rallying Waterfowl by driving a truck and shooting into vacant ponds. SGT Monnet and CPL McClellan assisted with charges for rallying of Waterfowl and over the limit of Ducks.
- 1st SGT Ellis, SGT's Kinsey, Richardson, Manning, Gantt, Spann, LT Stackhouse, and CPT Thames responded to Lieber Correctional Facility to assist with an inmate uprising resulting in 220 plus inmates taking over the Ashley Building. SCDNR officers provided perimeter security until the inmates were subdued and the facility control was retaken by SCDC Officers.

Unit 4A (Horry) 1st SGT Joe Ard

Officers issued 21 summons and 117 warnings with 46 cases clearing court with fines totaling \$4,743.00 being assessed.

- PFC Pardue located an illegal trap. CPL Floyd assisted with waiting and watching this trap and after several days the individual was caught and charged.
- PFC Pardue and CPL Floyd made 2 cases for non-game net violations on the Waccamaw River.
- CPL Hutson and PFC Robinson has worked with the North Carolina Marine Patrol on Seafood sales and transactions between the 2 states. As a result of this continuous working relation between the 2 states, several illegal cases and warnings have been issued by both states along with valuable information being gathered for North Carolina.
- CPL Hutson and PFC Robinson made 3 cases for hunting Waterfowl after hours.
- PFC Robinson attended the National Wild Turkey Federation State Banquet at Hickory Knob State Park.
- All unit officers and DHEC are working closely with enforcement efforts on the new shellfish grounds that opened in Little River.

Unit 4B (Georgetown) 1st SGT Ryan Williams

Officers issued 62 summons and 58 warnings with 101 cases clearing court with fines totaling \$14,027.50 being assessed.

- CPL Kaminskas caught a Michigan resident obtaining a resident SC license by fraud. The subject was Duck hunting at the time and had lived and claimed residence in Michigan in April 2011.
- CPL Kaminskas caught 3 subjects with 3 bushels of oysters over the limit and 2 of the subjects did not have a license. The subjects been watched by CPL Kaminskas for weeks before he could finally make the case.
- The unit made a huge effort on Waterfowl and Shellfish enforcement this month. 1st SGT Williams, CPLs Capps and Kaminskas made many cases on Waterfowl that were very diverse and totaled 42 cases and 41 warnings.

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

Officers issued 48 summons and 169 warnings with 68 cases clearing court with fines totaling \$8,303.00 being assessed.

- SGT's Spann and Earhart assisted Berkeley County Sheriff's Office with an escaped inmate.
- Unit Officers responded to Lieber Correctional Institution for a Prison Riot.
- PFC Gilmore apprehended 2 subjects in possession of Black Sea Bass during the Federal Closure. CPL Crawford assisted Region 4 Wildlife Coordinator Sam Chappelle in citing individuals for uncased guns, driving closed roads, driving in Waterfowl closed areas, and failure to sign in on Bonneau Ferry.

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

Officers issued 34 summons and 171 warnings with 43 cases clearing court with fines totaling \$5,425.00 being assessed.

- SGT Gantt and CPL Whaley responded to a search and rescue at Limehouse Landing for an 81 year old man that was overdue. The subject was located in a creek near Johns Island in good condition.
- CPL Weaver assisted Charleston Co. Sheriff's Office with a drug investigation at the Riverland Terrace Boat Landing.
- CPL Whaley assisted CCSO with a search of Rosebank Plantation attempting to locate a subject trying to commit suicide on the property. The subject was located and taken for medical assistance.
- SGT Garner and CPL Whaley patrolled the Kiawah Island area locating a subject with undersized Trout resulting in 1 summons issued.
- SGT Kinsey presented a hunter safety program to 25 youth hunters at Hunters Chapel on the youth deer day.
- SGTs Gantt and Kinsey investigated a hunting accident at the Edisto River WMA. The investigation is still open and multiple cases are pending.
- 1st SGT Ellis, SGTs Garner, Shelton, Dawson, Richardson, Manning, CPLs Weaver, Whaley, Ladue, and DLEO Johnny Smith worked the Charleston Area Boat Show with the Fishing TOMO and JEA Booth.

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

Officers issued 24 summons and 75 warnings with 52 cases clearing with fines totaling \$4,355.00 being assessed.

- A large amount of time and effort by all Unit E officers was spent on a recovery effort for a missing commercial fisherman in St. Helena Sound.
- SGT Smith apprehended 3 individuals in possession of 131 undersize Clams and littering.
- After working for several weeks on a crab pot tampering issue, CPL Henderson apprehended 1 commercial fisherman stealing pots from another commercial fisherman. A total of 39 pots have been recovered. CPL. Brock and PFC Godowns assisted in making numerous commercial and boating charges against the subject.

- CPL Jones received information regarding a baited Duck impoundment in Colleton County. He went in and located the bait, the next morning CPL Jones, SGT Graham, and PFC Davis caught several subjects hunting the pond. 2 of the subjects were charged for placing bait and taking waterfowl over bait.
- During the course of a random Dove Field inspection CPL Jones noticed Wheat and Sunflowers in a Corn field. CPL Jones was able to determine the subject that had prepared the baited field. He charged the subject with preparing and hunting over bait. He also made an unplugged gun, license. And simple possession case.

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

Officers issued 13 summons and 59 warnings with 49 cases clearing with fines totaling \$6,215.00 being assessed.

- Unit F officers assisted Unit E with the recovery effort of a missing commercial fisherman in St. Helena Sound.
- PFC Wallace made 2 over the limit of Waterfowl cases. He watched the subjects shoot 2 more ducks after they had reached 12 Ducks. Both subjects were charged.
- CPL Pope worked with Arkansas Game and Fish on a case that involved 2 SC residents purchasing Arkansas hunting licenses. Arkansas Game and Fish has issued 2 warrants for the subjects. US Fish and Wildlife are also assisting with the case.
- PFC Davis assisted CPL Jones with the takedown of a baited Duck pond in Colleton County. A total of 4 cases were made which included placing and taking Waterfowl over bait.
- PFC Godowns assisted CPL Henderson on a case that involved a commercial fisherman tampering with another commercial fisherman's crab pots.
- SGT Priester assisted CPL Jones with a baited Dove field in Colleton County. During the interview with the subject who prepared the Dove field, SGT Priester was able to locate a bag that contained marijuana that the subject had in his possession.

Investigations - CPT Gary Sullivan

Officers issued 5 summons and 9 warnings with 3 cases clearing court with \$690.00 in fines assessed. A total of 35 boats were inspected. A total of 25 boating hours were accrued this month. There were 3 boating incident/accident reports submitted and processed. There were 5 maintenance request received. There was 2 regulatory marker investigation request submitted and processed. There were 83 Marine Event Permits processed; 2 dive assignments were completed.

- The Investigations sections is preparing for the upcoming BSAF season.
- 1 boat and 1 motor were recovered valued at \$980.00

STAFF OPERATIONS – MAJ MARK CAREY

Legislation & Grants – CPT Mike Sabaka

- Completed the Certification of Numbered Vessels Report for the 2012 State Recreational Boating Safety grant.
- Completed the Report of Certificates of Number Issued to Boats for the 2012 State Recreational Boating Safety grant.
- Completed Semi-Annual Progress Report for the Port Security Watercraft Project Grant 09.
- Completed Financial Reports for the Port Security Watercraft Project Grant 09.

Records & Technology – Greg Miley

- Summons entered – 509
- Warnings entered – 1,317
- New suspensions – 25
- Suspensions closed – 15
- Current active suspensions – 614

Supply & Equipment – SGT George Dukes

- Received float coat and bib shipments and distributed to the field;
- Delivered electronics package to Pioneer Boats for installation on new boats;
- Met with Surplus re: auction items;
- Met with fabricator on t-top and leaning post problems on patrol boats, and worked out a no cost resolution.
- Worked on filling back ordered items;
- Assisted accounting section with monthly inventory report information;
- Worked with SCEIS on crediting items properly on the system.

Homeland Security/EMD/Dispatch – SSGT Rick Dye

- Attended initial planning conference for the State Full Scale exercise;
- Coordinated with York County on Lake Clearing plan;

- Coordinated with SCHP on inclement weather plan.
- Total calls for service logged: 1,192
- Litter Buster Total Calls:198 Top three counties; Charleston (47); Greenville (39); Horry (23)
- Total calls forwarded to officers 994: Top three call types: Trespassing to Hunt/Fish (146); General Information Call (114); General Hunting Violation (103)
- Warrant activity for December: Statewide started month with 367, added 5, removed 1, ended month with: 371

Communications - Vandy Waller

- Repaired communications equipment as needed. Repaired / reprogrammed 46 800MHz wt's, 6 mobile radios, 1 boat radios, 0 base stations, 0 repeaters, 0 phone line tickets to Radio Room, 3 canopy sites. 1 Console problems.
- Installed electronics in 4 new vehicles.
- Assisted Sled in the setup of communications and operations of two Presidential Debates on the coast.
- Worked on Hopkins, Santee, Parler, and Little Mountain Tower Sites.
- Pre-wired switches and relays for the new vehicles ordered.
- Used the new Auto Tune software to calibrate 2 mobiles and Wt's.
- Worked on FCC license upgrades and modifications.
- Worked on tower contracts for Aynor, Pee Dee.
- Continued reprogramming updates into other division's radios.

Education – LT Billy Downer

Officers issued 0 summons and 0 warnings with 2 cases clearing court with \$165.00 in fines assessed. A total of 2 boats were inspected and a total of 40 presentations were given to the public.

- 913 students were certified in 23 Hunter Education classes; 176 students were certified in Hunter Education Internet classes; 99 CD-ROMs were mailed and a total of 53 students were certified in Hunter Education CD-ROM classes; and 43 workbooks were mailed and a total of 7 students were certified by workbook.
- 179 students were certified in 9 Boater Education classes; 31 students were certified in Boater Education Internet classes; 9 students were certified in Boater Education Video classes.
- There were 1540 shooters at the Pickens Range and 615 shooters at the Spartanburg Range during the month.

Special Detail/Training – LT Robert McCullough

- **Number of Confiscation Sales:** 1
- **Equipment buy back:** \$ 1,000.00
- **OGT Activity:** \$330.00 payouts / Balance \$24,000.00
- **Property Watch Activity:** 7 signed up for program \$160.00 in sign sales
- **Media/Special Operations:** MLK Day at the Capital 7 Officers assisted SLED and Columbia City with security. Worked with SLED and Local Police on sight security for both Republican Presidential debates in state. Vandy Waller was a great help and did an outstanding job during these events.
- **Training:** Weapons qualification with the Detail and continued planning for in-service.

Aviation - Pilots Bucky Harris, Owen Barker

- 16 flights resulting in 72.5 flight hours
- 22.0 Law Enforcement flight hours
- 3.6 JEA flight hours
- 46.9 SAR flight hours

OUTREACH AND SUPPORT SERVICES
JANUARY 2012 MONTHLY REPORT

Jocassee Gorges Education and Recreation

- Conducted day-long Tour de Jocassee (Sassafras Mountain Overlook, Jumping-Off Rock Overlook, Jocassee Dam) for AmeriCorps group (eight young men and women between ages of 18-24) that is renovating Raven Rock Trail at Keowee-Toxaway State Park for State Park Service.
- Met with Upstate Master Naturalist Association at Pickens County Museum and Hagood Mill.
- Developing story ideas for Spring/Summer 2012 issue of Jocassee Journal newsletter, making contacts with various contributors, article on rattlesnake research at Table Rock State Park already received.
- Attended board meeting for Foothills Trail Conference at Table Rock State Park, developed a series of 11 outings for 2012.
- Fielded inquiries on recreation (roads open/closed, hunting, hiking, backpacking, paddling, etc.) in Jocassee Gorges and mountain region, mailed out newsletters and brochures and added subscribers received from DNR Jocassee Gorges site.
- Other
- Working with DNR graphics on plastic bags featuring sponsor logos for Upstate National Hunting and Fishing Day at Duke's World of Energy near Seneca in the fall.
- Working with Clemson Forest, Clemson Extension and U.S. Army Corps of Engineers on Water-n-Wildlife Day on Lake Hartwell and the Clemson Experimental Forest Saturday, March 31.
- Corresponded with Hartwell Lake News about promoting boating safety inspections on Lake Hartwell during upcoming Memorial Day and July 4th weekends.
- 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.

New Desk

- 36 direct contacts for information through the DNR Facebook page.
- 7 direct contacts via email.
- 17 direct contacts via phone.
- Jan 25 - Check Off event at State Museum (stand-up interview for WLTX)
- 26 news releases written and/or edited for Jan.
- Daily posting via Facebook/Twitter and the DNR website.

Graphics

- The Graphics section completed fifty-six jobs in the month of January. There were seven mailer forms that were completed for Licensing, Boat Titling, and Hunter & Boater Education. There were several promotional materials completed for the Classic, Field Day and Hunter Education. There were also several items that were reprints of previous materials. The agency spent approximately \$152,000.00 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.

Palmetto Sportsmen's Classic

- The PSC will be held March 23-25, 2012. Work on the Classic is progressing very well. The number of vendors booked as of February 1, 2012 is 250. Our goal is 300 vendors.
- Volunteers are being recruited to help work critical areas throughout the Classic.

Magazine

South Carolina Wildlife magazine staff continued editing copy for the March-April 2012 issue. Other functions that occurred during this month include:

- Staff received office copies of the January-February 2012 special issue on "First Light," which features the Palmetto State in four regions --Coast, Midlands, Upstate and Pee Dee -- and highlight what occurs during the early daylight hours with the state's animals, plants and other natural resources.
- 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.
- Continued updating magazine issue and magazine/products material on DNR/magazine's website.
- Estimated sales for the month totaled over \$18,153, which includes the magazine subscriptions and Wildlife Shop sales.

Quality Management

- Tested SCI Recreational Licensing and Boating system, reported errors and bugs to SCI in test system.
- Tested internal customer management program to merge customer id's, reported errors and bugs in test system to programmer.
- Updated boat make table and motor make table for IT to prepare for transition into the new SCI boating and licensing system.
- Coordinated and assisted with the removal of "Street Address 2" from the current operating system to prepare for transition to the SCI boating and licensing system. Approximately 8,000 records.

Video

- Update license lobby videos in Columbia and Charleston
- Edit and upload two more How To videos for Aquatic Ed
- Determine problem with formatting and redo some of the Aquatic Ed videos
- Salvage usable/historical prints and slides that had to be scuttled for space
- Set up wildlife shoots in Newberry and Laurens counties
- Provide video dubs to SC Garden Club
- Career DVDs to Climatology for programs
- Webcast Board meeting
- Assemble media for Mr. Frampton's retirement
- Meet with LE about their summer ad campaign

Recognition and Rewards

- Thank You Card Program started back up in January
- 1 Team Award issued in December for South Carolina Migratory Game Bird Hunting Guide committee members: Denise Froehle, Billy Downer, Billy Dukes, Derrell Shipes, and Dean Harrigal
- On the Spot Awards issued to: Molly Price, Caroline Pinckney, Mike Denson, Danielle Cox and Eileen Heyward

Engineering

Priority

1 - Completed Projects

County

Project Name

Horry
Richland

Red Bluff Landing Courtesy Dock
Geology Building Expansion

2 - Under Contract

Charleston
Kershaw
Laurens
Laurens
Richland

Santee Coastal Blake House
Hwy. 1 Landing - Lugoff (Phase II)
Belfast Archery Range
Boyd's Mill Pond Boating Access
Bates Bridge Landing Ramp Relocation

3 - Permitting & Design

Aiken
Allendale
Anderson
Anderson
Colleton
Dorchester
Horry
Horry
Horry
Jasper
Jasper
Kershaw
Laurens
Marion
Marion
Marion
Pickens
Spartanburg
York

Riverview Park Transient Courtesy Dock Addition
Highway 301 Fishing Access
Dolly Cooper Park Canoe Access
Green Pond Boating Facility
National Estuarine Research Reserve Bank
Bacons Bridge Boat Ramp
Bucksport Ramp Renovation
Hwy 22 and 17 Boating Facility
Rosewood (Socastee) Ramp Repair
Knowles Island Fishing Pier
Tuten Landing Resurfacing
Habitat Enhancement
Belfast Restroom Rehabilitation
Hwy 301 Ramp Relocation
Shotgun Range at Marsh
Woodberry Rifle Range
Pickens Range Archery Range & Tower
James Thomason Range
SC Hwy 211 Boating Access

4 - Pending Projects

Anderson
Georgetown
Horry
Laurens
Laurens
Richland
Saluda

Piedmont Access
Rocky Point Landing
Savannah Bluff Ramp Repair
Laurens City Park Archery Range
Reedy River Carry Down Access
Columbia Canal Fishing Access
Chapells Boating Access

Purchasing

PURCHASE ORDER TRANSACTIONS	NUMBER	EXPENDITURES
Purchases, Quotes and Bids	79	\$653,098.05
Blanket Orders	0	\$0
Exempt	0	\$0
Sole Source Procurement	3	\$26,810.00
Emergency Procurement	0	\$0
Grant Exemptions	1	\$838.53
Total	83	\$680,746.58
FPR's	71	\$40,525.23
Check Request	68	\$408,631.73
Minority Vendors	4	\$3,943.31
Procurement Card Purchases		\$245,526.53

RFQ/Bid Awards					Term
Division	Commodity/Service	Requestor	Requisition #	Contracts	Award Amount
WFWF Division	Controlled Burning	Mark Hall	5400003761	No	\$ 30,951.00
WFWF Division	Prescribed Burning	Cory Drennan	5400003852	No	\$ 23,750.00

Technology

Data Base Management. Completed quality assessment and editing tools to identify problems with customer identification numbers and resolve impacts to licensing and titling programs. OSS staff starting using the program and are providing input on required bug fixes and long-term enhancements. Initiated development of financial interface program between SCI and SCEIS for handling licensing and titling transactions. Hired contract programmer to complete the design of the multi-state fisheries management database and software for the SEAMAP program. Initiated efforts to modify existing Oracle PL/SQL programs to access new data schema that will be implemented with the new licensing and titling system. 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. Continued to modify test database schema in accordance with system modifications and the implementation of new modules. Initiated migration of static data tables from the old tables to the new data schema to reduce the time required for system implementation. Due to continued staff shortages and demands for the QA/QC and licensing/titling database development, we indefinitely suspended the design of internal financial records management system to interface with SCEIS including the telephone and auxiliary credit card billing systems. 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. Due to scheduling conflicts, continued the suspension of EDMS project with the Engineering office to integrate facilities management records into the system. Continued document scanning and indexing for managed lands, hydrologic well data, law enforcement violations/summons billing and aviation log applications. Provided records management and permanent archival support to the agency using record export and archive process. Added 34,371 images and 11,822 records to the electronic document repository and transferred 9,763 boating records to archive.

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 counties captured during the 2010 and 2011 flights. Completed final QA/QC review and acceptance of LiDAR data for Allendale, Bamberg, Hampton, Lee, Saluda, Sumter, Richland, Berkeley, Kershaw and Florence data. LiDAR data for Charleston, Lexington, York, Anderson, Oconee and Pickens are in third QA/QC review. Provided GIS

database and GPS support to the various agency programs. Initiated 2012 project to capture and process LiDAR data for Calhoun, Aiken, Barnwell, Edgefield, McCormick and Abbeville counties.

Systems and Network Management. Initiated full deployment of Windows 7 operating system on 20 agency PCs and upgraded appropriate applications software. Created ftp data upload for Clarendon County flood maps. Sent weekly email blast to notify citizens of DNR activities. Updated anti-virus software to new release for servers and workstations. Added latest security patches and operating system service pack upgrades to agency servers. Completed installation of dedicated network circuit for DNR licensing and titling between the DNR and SCI the agency e-commerce vendor. Continued the conversion of printers to 64-bit drivers. Added backup 9 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 4 users. 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 14 technology procurement requisitions and provided specification, installation and configuration support for DNR staff. Help Desk staff answered 208 trouble tickets and developed specifications for four technology procurements.

GIS Applications and Web Development. Provided GIS and cartographic support to DNR staff including the generation of 12 maps for the WMA, SC Wildlife Magazine, Law Enforcement, Engineering Office and other programs. Continued suspension of development of Internet Map Server application for species-based data storage and access because of project priorities. Provided user support for ArcMap and GPS to DNR staff. Posted agency overview and major accomplishments for 2000-2010, marine turtle conservation and blueback herring, American and Hickory Shad regulations web pages. Continued the design of web pages for an integrated hydrologic/geologic well database application to provide input, editing and analysis of well data. Provided web site support for the SEAMAP, Camp Wildwood, Beach Sweep/River Sweep, Managed Lands 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. Created 19 new web & intranet pages and updated or modified 325 existing program web pages. Continued enhancement and maintenance of DNR managed lands and reservoir web applications. The DNR web site 161,063 visitors with the agency calendar, rules and regulations and trout book as the most viewed pages. The GIS Data Clearinghouse had 8,659 map files downloaded with LiDAR data (terrains and intensity images), Digital Orthophoto Quarter Quadrangles, hydrography, Digital Elevation Models, Digital Raster Graphics, Geology and National Wetlands Inventory 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 continues to meet with South Carolina Interactive regarding the design and implementation of the licensing and titling system scheduled for March. He also worked with the US Geological Survey, the Office of the State Engineer and the LiDAR acquisition firm, Dewberry and Davis, to create specifications and establish a contract for acquisition of six counties of LiDAR data in 2012. Attended the Information Technology Solutions Committee (ITSC) monthly meeting at the Division of State Information Technology. Submitted an Addendum to the State Information Technology Plan to support the DNR's Legislative IT appropriations request for 2012-2013. The DNR IT plan was approved by the State IT Planning Office.

Boating Operations January 2012

Basic Business Report

	MTD	Monthly Revenue	(previous ytd)	YTD
Watercraft - New Titles	491	\$6,103.13	\$45,370.00	\$51,473.13
Outboard Motor - New Titles	374	\$3,717.56	\$20,480.00	\$24,197.56
Watercraft - Transfers	1,174	\$6,750.50	\$35,046.00	\$41,796.50
Outboard Motor - Transfers	954	\$9,540.00	\$40,640.00	\$50,180.00
Internet Registration Renewals	487	\$4,870.00	\$25,400.00	\$30,270.00
DNR Office Renewals	3,338	\$33,380.00	\$54,490.00	\$87,870.00
Mail Renewals	1,948	\$19,480.00	\$98,850.00	\$118,330.00
Law Enforcement Boating Dollars (Drew's Law)		\$93,415.00	\$516,822.00	\$610,237.00
Active Watercraft Registrations				362,066
Inactive Watercraft Registrations (including dropped records)				288,506
Total number of Watercraft				365,544

Permitted Marine Dealers

Jan. 1, 07 - Dec. 31, 07	318
Jan. 1, 08 - Dec. 31, 08	363
Jan. 1, 09 - Dec. 31, 09	310
Jan. 1, 10 - Dec. 31, 10	286
Jan. 1, 11- Dec. 31, 11	284
Jan. 1, 12 - Dec. 31, 12	102

Testing and conversion work continues on the Licensing, Permitting and Titling System under development by South Carolina Interactive.

Licensing Operations January 2012

Basic Business Report

	MTD Quantity	MTD Revenue	Last Year MTD Quantity	Last Year MTD Revenue
Resident Hunting Licenses	5,255	\$ 28,985.50	5,448	\$ 30,348.50
Non-Res. Hunting Licenses	2,281	\$ 98,060.00	2,207	\$ 94,788.00
Total	7,536	\$ 127,045.50	7,655	\$ 125,136.50
Resident Fishing Licenses	5,474	\$ 45,852.00	3,206	\$ 27,220.00
Non-Res. Fishing Licenses	2,307	\$ 41,406.00	1,368	\$ 24,960.00
Total	7,781	\$ 87,258.00	4,574	\$ 52,180.00
Combo. Licenses	700	\$ 21,591.00	646	\$ 20,234.00
3 Yr. Resident Hunt	26	\$ 751.50	27	\$ 820.50
3 Yr Resident Fishing	136	\$ 3,672.00	75	\$ 1,285.00
3 Yr Non-Res Fishing	16	\$ 1,632.00	9	\$ 918.00
Lifetime Licenses	629	\$ 19,303.00	434	\$ 14,423.00
L/T Disability Licenses	3	\$ -	2	\$ -
3YearDisability	157	\$ -	97	\$ -
Turkey Tags	196	\$ 0.00	Open03-15-12	
Antlerless Deer Tags	0	\$ 0.00	Clsd 01-01-12	
Shrimp Baiting	0	\$ 0.00	Clsd 11-08-11	

License Agents Numbers and Sales (Month To Date)

LicenseAgents Quantity	Manual	Point of Sale	Internet & Call Center	SCDNR Offices	Totals
	0	507	1	4	512
Total License		11,764	4,314	229	16,307
Total Revenue	\$ 0.00	\$ 143,735.50	\$ 96,387.00	\$ 4,067.50	\$ 244,190.00
% sales to agent type	0.00 %	58.86%	39.5%	1.7%	

NEW POS
AGENTS 0

Commercial License Operations January 2012
Basic Business Report

License Type	Licenses Sold MTD	Licenses Sold Last Month	MTD	\$ YTD	\$ YTD Last Month	\$ MTD
Commercial Saltwater Res	1,118	1085	33	\$167,271.25	\$27,121.25	\$27,930.00
Commercial Saltwater Non	158	152	6	\$261,675.00	\$45,585.00	\$47,370.00
Commercial Saltwater Total	1276	1237	39	\$428,946.25	\$72,706.25	\$75,300.00
Trawl Res	310	309	1	\$392,390.00	\$38,625.00	\$38,743.75
Trawl Non	107	107	0	\$32,100.00	\$32,100.00	\$32,100.00
Trawl Total	417	416	1	\$424,490.00	\$70,725.00	\$70,843.75
Crabs Res	324	320	4	\$136,809.00	\$20,182.50	\$20,421.25
Crabs Non	17	16	1	\$29,068.75	\$5,625.00	\$6,000.00
Crabs Total	341	336	5	\$165,877.75	\$25,807.50	\$26,421.25
Shellfish Res	243	217	26	\$81,187.50	\$16,271.25	\$18,183.75
Wholesale Res	267	260	7	\$171,075.00	\$26,000.00	\$26,690.00
Wholesale Non	10	9	1	\$22,500.00	\$4,500.00	\$5,000.00
Wholesale Total	277	269	8	\$193,575.00	\$30,500.00	\$31,690.00
All Commercial Types Res	3631	3226	405	\$942,350.50	\$149,112.00	\$156,000.25
All Commercial Types Non	356	339	17	\$518,472.00	\$91,360.00	\$94,545.00
All Commercial Types Total	3987	3565	422	\$1,460,822.50	\$240,472.00	\$250,545.25

BALANCES OF AVAILABLE CASH AS OF JANUARY 31, 2012

REG 1 HUB Balances	WREC	G&F	FY12 Lic Rev	FY12 Fine Rev
Abbeville	83,049.19	23,459.09	3,304.14	425.30
Anderson	40,643.43	136,423.68	10,541.21	2,214.37
Cherokee	193,736.07	151,403.18	8,134.79	913.80
Edgefield	65,573.29	34,219.28	2,881.44	1,925.02
Greenville	99,554.29	97,825.25	8,753.55	2,003.90
Greenwood	78,399.79	43,798.63	5,542.89	969.68
Laurens	107,563.58	46,934.04	4,792.69	4,366.46
McCormick	33,657.19	22,351.73	3,918.81	848.21
Oconee	433,697.72	312,372.77	15,575.39	581.80
Pickens	52,765.73	77,163.70	8,099.17	2,115.67
Spartanburg	53,676.04	144,843.97	11,019.68	2,579.36
Union	99,210.15	37,348.22	3,210.10	2,833.78
REG 1 Total	1,341,526.47	1,128,143.54	85,773.86	21,777.35
REG 2 HUB Balances	WREC	G&F	FY12 Lic Rev	FY12 Fine Rev
Chester	162,275.01	50,612.51	3,337.62	4,047.30
Chesterfield	52,766.41	19,579.09	3,647.47	640.99
Darlington	198,249.38	20,289.84	3,207.88	994.44
Dillon	162,820.11	47,966.75	4,421.46	228.90
Fairfield	56,737.51	138,429.97	5,876.50	2,296.83
Florence	412,646.97	50,775.16	3,832.86	669.02
Kershaw	230,135.64	70,282.18	4,369.00	556.75
Lancaster	257,734.45	119,860.09	8,973.19	1,547.78
Lee	105,042.78	13,303.91	2,412.68	417.29
Marion	118,794.42	28,037.34	2,719.42	573.18
Marlboro	98,677.87	27,285.10	3,190.07	486.76
Williamsburg	116,002.98	29,994.22	2,526.44	601.20
York	223,253.42	175,361.66	26,923.92	876.99
REG 2 Total	2,195,136.95	791,777.82	75,438.51	13,937.43
REG 3 HUB Balances	WREC	G&F	FY12 Lic Rev	FY12 Fine Rev
Aiken	17,778.84	57,605.85	5,204.23	1,139.27
Allendale	25,994.00	25,054.57	2,468.19	396.38
Bamberg	61,366.62	17,076.31	2,436.49	91.58
Barnwell	87,225.51	37,365.96	2,646.79	1,164.20
Calhoun	70,291.22	37,685.41	2,924.05	1,800.02
Clarendon	68,842.77	48,696.57	7,289.81	2,700.62
Lexington	710,101.31	118,413.39	10,365.32	5,922.72
Newberry	105,669.32	76,703.06	5,594.24	1,649.56
Orangeburg	170,586.28	107,703.43	7,620.78	1,424.16
Richland	328,313.59	98,053.04	10,868.92	1,386.33
Saluda	113,121.51	55,076.03	3,880.33	968.64
Sumter	165,200.14	29,541.83	3,492.05	1,812.14
REG 3 Total	1,924,491.11	708,975.45	64,791.20	20,455.62
REG 4 HUB Balances	WREC	G&F	FY12 Lic Rev	FY12 Fine Rev
Beaufort	102,561.37	87,375.82	3,765.11	4,110.82
Berkeley	404,064.74	161,056.44	10,734.62	3,578.27
Charleston	462,184.18	77,718.79	5,780.32	7,553.21
Colleton	97,101.38	54,319.67	3,175.36	803.62
Dorchester	268,053.53	33,017.29	3,558.15	465.05
Georgetown	18,626.91	96,599.81	4,169.73	7,191.43
Hampton	89,635.38	57,989.54	2,902.90	852.46
Horry	253,036.41	72,667.12	10,774.06	5,116.99
Jasper	60,396.95	72,962.57	3,860.72	2,199.57
REG 4 Total	1,755,660.85	713,707.05	48,720.97	31,871.42
AVAILABLE TOTAL	7,216,815.38	3,342,603.86	274,724.54	88,041.82

LAND, WATER & CONSERVATION

OFFICE OF DEPUTY DIRECTOR

Ken participated in the Water Planning Conference call with Duke Power & Santee Cooper staff (1/4). Attended a meeting with Georgia EPD re: Corps Comp II Study (1/5). Meeting at Beaufort Water & Sewer Authority (1/6). Attended the Water Plan meeting with American Rivers staff; and the Savannah River Basin Advisory Council meeting (1/9). Charleston Conservation District board meeting (1/10). Met with Senator Paul Campbell regarding Flood Mitigation project (1/11). Attended the Deputy Director's meeting, Water Team meeting (1/18). Ken visited the land acquisition site (Aiken Gopher Tortoise Heritage Preserve expansion project) (1/20). Ken attended the S.C. House Conservation briefing (1/25); and SCDNR Board meeting (1/26).

HABITAT PROTECTION AND ENVIRONMENTAL CONSERVATION SECTION

River Conservation

Ashley Scenic River Project:

Staff participated in an advisory council meeting of Jan 16 where the council addressed road construction and water quality concerns affecting the Ashley River; and they continued planning the annual Ashley River community education/outreach event for this Spring.

Black Scenic River Project:

Staff remains in email communication with the advisory council addressing ongoing issues with boat ramps and land management activities affecting riparian buffer areas along the river.

Broad Scenic River Project:

Staff continued reviewing the Draft Environmental Impact Statement issued on Dec 14 by NRC for the Duke Energy proposed Lee Nuclear Station; and staff attended a related public meeting on Jan 19. As mitigation for stream impacts will be required for the nuclear plant, various mitigation options are being explored and discussed among DNR staff.

Catawba Scenic River Project:

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

Edisto River Basin Project:

Staff participated in Friends of the Edisto (FRED) conference call on Jan 23 to plan for conservation outreach activities in the coming year.

Lower Saluda Scenic River Project:

Staff provided information to Saluda Shoals Park regarding optional structures to support river access for tubers and paddlers on the river.

Lynches Scenic River Project:

Staff continues to distribute Lynches River water trail guides and address public inquiries concerning travel on the river. Staff continues to address local concerns with logging activities and communicates with SC Forestry Commission about concerns and compliance with forestry BMPs.

FERC Hydro Projects:

- Catawba-Wateree Hydroelectric Project (FERC Project No. 2232). Staff completed work with Duke Energy and NC Wildlife Resources Commission to revise the Memorandum of Agreement Concerning Habitat Enhancement and Woody Debris Management for the Catawba-Wateree Hydro Project and the revised MOA was signed by DNR on Jan 27.
- Columbia Hydroelectric Project (FERC Project No. 1895) -- DNR staff provided comments to the City of Columbia regarding their Embankment Surveillance and Monitoring Plan of Dec 2011 and met with City staff on Jan 30 to discuss related issues leading to more vegetation removal from the canal embankment.
- Keowee-Toxaway (KT) Hydroelectric Project (FERC Project No. 2503). Relicensing process continues: DNR submitted comments Jan 12 to FERC on Duke's Revised Study Plan and requested additional studies to address fishery issues with hydro entrainment and tributary stream fish communities. FERC issued its Study Plan Determination on Jan 27, which accepted a portion of DNR's study requests regarding fish entrainment mortality. DNR staff participated in KT Stakeholder Team meeting on Jan 25, and a Water Quantity/Operations meeting on Jan 11.
- Lockhart Hydroelectric Project (FERC Project No. 2620): Staff reviewed engineering drawings for a proposed minimum-flow turbine at Lockhart and discussed with Lockhart DNR concerns for water dispersal and wetted-habitat changes potentially affecting rocky shoals spider lilies at the Project.
- Neal Shoals Hydroelectric Project (FERC Project No. 2315). DNR staff reviewed and provided comments to SCE&G regarding their proposed plan for monthly monitoring of stream-bed profiles for one year to assess change in sediments deposited from the Oct 2011 release from Neal Shoals Dam.

- North Georgia Hydroelectric Project (FERC Project No. 2354). Staff provided comments to Georgia Power Company to address their Tugalo Recreational Use Study Report, 2011 Update, which reports the monitoring of Lake Tugalo uses and shoreline conditions.
- Riverdale Hydroelectric Project (FERC Project No. 13590). Relicensing process continues: Staff is preparing comments in response to a second Additional Information Requests (AIR) from FERC to Lockhart Power Company about sediment management issues. Staff is also preparing comments to FERC on their Scoping Document 1, which identifies issues to be addressed in their Environmental Assessment of the Riverdale hydro project.

Other Rivers-Program Staff Activity:

- River Management Society -- Staff participated in a RMS National Board conference call on Jan 5. Staff continued planning and participating in committee teleconference calls to organize the April 2012 RMS symposium to be held in Asheville. Staff contributed a news update on Southeast activities for the RMS Journal.
- Wateree River/Cowassee Project: Staff supported the project by distributing Cowassee Basin signs to the Town of St. Mathews.
- Pacolet and Broad Rivers: Staff provided plan drawings to the town of Lockhart and Pacolet Mills for their consideration of possible landings and access sites along the Broad River and Pacolet River.

Heritage Trust

Data Management:

Information and data requests:

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

- Janet Steele, a consultant, as part of baseline documentation for conservation easements in Marlboro and Lancaster counties,
- Campbell Environmental, Inc. for a proposed sewer project in the City of Rock Hill, York County,
- Terracon Consultants, Inc. for an SCDOT bridge replacement on S-90 in Newberry County, and
- Land Consulting for the site of a new high school in Jasper County.

Two requests for GIS location data of rare, threatened and endangered species was received and processed from:

- Palmetto Environmental Consulting, Inc. for state wide data to be used in their consulting projects, and
- SC Department of Health and Environmental Control for a current version of the state wide data for use in-house.

Technical guidance and review: 1. One person was provided access to the protected web site and one person was assisted with problems accessing the protected web site. 2. The SC Army National Guard requested a review of the final draft of their Natural Resource Management Plan for McCrady Training Center in Eastover. 3. A review continues on the element occurrence records for federally listed plants as part of the federal project to survey those species on SCDNR lands. These records will be adjusted so that similar information is located in the same data fields across all the records for easier comparison. 4. Preparations were begun for the Palmetto Sportsman's Classic, with several word find puzzles being created for LWC sections. With the assistance of the Graphics Department, they will be a relatively cheap, but professional, way to promote our work.

Heritage Survey:

Approximately 35 specimens were processed to include species identification, vouchers listed, and collection numbers assigned for quick reference.

Eight new occurrence records - plus one update- for Peachtree Rock Heritage Preserve, included the following tracked elements of state concern: Woody goldenrod (*Chrysoma pauciflosculosa*), Pine-leaved goldenaster (*Pityopsis pinifolia*), Sandhill rosemary (*Ceratiola ericoides*), Creeping blueberry (*Vaccinium crassifolium*), Fox squirrel (*Sciurus niger*), and a "seepage slope" natural community. To facilitate databasing and image retrieval an online archive for the geo-tagged photographs that document these and other occurrence records were created

Staff continues to work on the establishment of a Symbiota node called *Flora Caroliniana*. Symbiota is an open source content management system funded by NSF that facilitates retrieval of biological specimen information from a diverse array of distributed resource databases. For example, a visitor searching for Dogwood specimens in South Carolina herbaria, need only visit this site, and all collection information from both the Clemson and USC herbaria will be retrieved simultaneously. The template with minimal functionality is currently available here: <http://herbarium.biol.sc.edu/floracaroliniana>. Symbiota also allows for easy 'masking' of data related to sensitive species, thus, only users with the correct permissions may view detailed locality information. Permissions are assigned by a database administrator.

Given the ease and real-time access to online mapping products like Google Maps and Goggle Earth through smart phone technology, navigation across remote or difficult terrain can be greatly enhanced with real color imagery and road overlays. In many instances field workers can more quickly and efficiently determine cross-country navigation routes and locations than by conventional map and compass or GPS methods. However, after testing known landmarks against known coordinates, staff determined that there are definite and demonstrable limits to the reliability of Google Maps and Google Earth for map coordinate determination. In those areas of the state that lack well-defined and sufficient control points, as in very steep terrain and large swamps or flood plains, these two very popular commercial products may give spurious coordinate readings with inaccuracies on the order of a 0.10 of a mile. While this level of inaccuracy may be acceptable for general location determination, any attempt to correlate these map coordinates as data points with other more precisely georectified data layers-- such as are available for soils, geology, hydrology, slope, aspect, property lines, etc.--this level of error will result in poor spatial congruence. In contrast, USGS base maps with scales of 1:24,000 are accurate to about 10 ft. with greater consistency and attention given to critical geodetic datums across all parts of the state. In the example below, the coordinates of a population of *Gymnoderma lineare* (Rock Gnome Lichen) were accurately determined with resource grade GPS unit along the eastern edge of a north-facing rock outcrop over the Middle Saluda River in Jones Gap State Park. When these coordinates are plotted in Google Earth, they project onto the opposite-facing slope overlooking Cold Branch about 1/10th of a mile in error to the south. See Figure 1 below.

In order to address the above issues of geospatial recording, reliability, error estimation and reporting from the perspective of the biological taxonomic community, staff attended Georeferencing Workshop in Boone, NC, sponsored by Southeast Regional Network of Expertise and Collections. Representatives from VertNet and GEOLocate presented best practices for adding coordinates to voucher specimen records with only verbal locality descriptions. Various tools and resources were presented and participants practiced using these methods with guidance from the instructors. Heritage staff is discussing the feasibility of applying some of these methods to current biological survey practices and providing some suggested guidelines to help data providers ensure locality information for Element Occurrences is accurate and verifiable. Currently, Heritage staff follow these best practices set forth by NatureServe which is facilitated through the program's use of Biotics.

Aquatic Nuisance Species Program

Technical

2012 Draft SC Aquatic Plant Management Plan was completed and posted on the web site for public comments.

Public comments are being received and compiled.

Staff completed 2011 treatment records and GIS maps of daily treatments.

Staff met with Santee Cooper to develop a plan for the Santee Cooper Lakes System for the 2012 Draft Aquatic Plant Management Plan.

Collected winter buds off *Valisneria* in the Santee Cooper lakes system for propagation.

Lower Saluda River was surveyed for *Egeria densa* populations in conjunction with a proposal by Carolina Biological to harvest most of the population to provide manual control efforts.

Lake Murray was also surveyed for invasive species as well as for possible sites for habitat enhancement plantings.

Outreach

Staff attended annual program update meeting with Deputy Director Rentiers.

Staff presented at the Freshwater Fisheries Technician's meeting at the Webb Center.

Staff corresponded with concerned waterfowl hunters about the 2012 Aquatic Plant Management Plan.

Staff attended and presented information at the SC Aquatic Plant Management Council meeting.

Work continued on a marketing plan with the fisheries division, Amanda Stroud, for aquatic invasive species outreach with funding provided through an existing Federal grant.

Invasive species signage was placed at boat ramps and will continue through the next several months

Other

Staff responded to numerous phone calls and emails regarding aquatic weed problems in public waters.

Equipment purchases, boat repairs, and vehicle maintenance were performed.

CONSERVATION DISTRICTS

Statewide Projects

Planning continued for the 2012 Conservation Partnership Conference to be held February 28 and 29 at the Columbia Marriott Hotel.

Technical

Jonathan Williams continues to assist landowners with conservation practices in **Orangeburg, Bamberg and Allendale Districts**. Marc Cribb met with **Pickens District** employee for training purposes.

Outreach

Staff attended district board meetings in Anderson, Calhoun, Fairfield, and Lexington Districts. Marc Cribb participated in a planning meeting for the future of the Carolina Coastal Adventure, along with Berkeley District commissioners and district employees from Berkeley and Clarendon Districts.

Conservation Districts

Barnwell District employee Linda Pickering presented 4 soil presentations to 188 third grade students at Barnwell Primary School and also presented Life in a Fish Bowl (pond pollution) to 20 home schooled students at Double Pond Baptist Church. Commissioner Hill presented programs on songbirds to 25 home schooled students and to the Blackville Garden Club. Commissioner Nettles and Linda Pickering presented their Wonderful World of Wildflowers program to the Iris Garden Club.

Beaufort District commissioner attended "Water Words that Work" with 5 other Together for Beaufort Water Quality Coalition members. Beaufort District continues to be the lead agency for this important local work group. Staff also applied for a Marine Debris Removal Grant in preparation for World Oceans Day in June and is working with several local agencies to bring awareness of the huge problem of marine waste to our coastal county.

Chester District initiated a new Arbor Day Project this year. In cooperation with a local nursery, fifty oak trees were given away to Chester County residents. The free trees were Saw Tooth Oak and Live Oak in one gallon containers and were distributed one per household on a first come, first serve basis. Over 530 acres were planted in 2011 utilizing our two no-till drills. Another successful Bulletin Board Contest was held in January with thirteen classrooms from three elementary schools participating. First, second, and third place monetary gift awards were presented at each school.

Colleton District Commissioners will be attending the Partnership Conference in February. The District had great response to the Annual Poster, Essay, and Photo Contest. We received 18 posters, 112 essays, and 47 photos. The winners will be recognized at our Annual Banquet in April.

Dillon District was one of the organizers of Farm City Week, the tour and luncheon had very good attendance. The district winner for the Fifth Grade Essay Contest, sponsored by the Conservation District, was recognized during the Farm City Week Luncheon along with the winner's teacher.

Greenville District has nurtured a relationship with Greenville County's Animal Care Services. Animal Care Services provides low-cost spays and neutering, stray adoption, and low-cost veterinary services to people who can't afford vet care for their pets. One of the outcomes of this relationship is that Animal Care Services is now retailing buttons and T-shirts designed by the District that promote pick-up of pet waste to help keep fecal matter out of our rivers and lakes. The venture is win-win because the District gets the educational word out, and Animal Care Services gets fun T-shirts to add to their retail wares. The display was set up last month and feedback from Animal Care and their customers has been very positive.

Lancaster District Commissioner Bob Bundy gave a rock presentation and Amanda Roberts and Elizabeth Hunter did a soils presentation at Heath Springs Elementary School for eighty 3rd graders. Amanda Roberts and Elizabeth Hunter also presented the EnviroScape and soil presentations to the Environmental Science Classes at Andrew Jackson High School. Amanda Roberts and SC DNR Law Enforcement Officers did a career day at Erwin Elementary School. All of the 4th and 5th graders at Erwin participated along with Discovery Schools 5th graders. Amanda Roberts gave the hunters education test to one person this month.

Lexington District is working with Springdale Elementary School providing technical assistance on the land disturbance and stormwater drainage plans. Bill Melven and the Lexington Stormwater division are looking at plans to redo the playground by regrading and sodding. Melven is also working to renovate the Gilbert Middle School Wetland classroom, helping to make a list of the individual plant species in the wetland to teach the students about each plant. The students are upgrading the existing kiosk. Lexington District and Lexington County Community Development are planning the annual "Tree Care Workshop" which will be held on Friday, March 2, 2012.

Oconee District began its new in school presentation program at the Tamassee Salem Middle School and the Oconee Christian Academy. Students took part in discussions about solar power, photosynthesis, tree products, erosion, water conservation, the web of life and a project where teams had to come up with a management plan for 400 acres of donated land. The Conservation District is also a sponsor of the Chattooga River Festival, a three day event to take place in June 2012 promoting and celebrating environmental stewardship of the river, its watershed and the responsible recreational use

of this wild Scenic River and national treasure.

Orangeburg District, with the help of the Orangeburg County Litter Control, conducted a Litter Survey of Orangeburg County. The survey found that the towns in the survey area were clean, and the neighborhoods are fairly clean also. Outside of the towns and communities litter is from slightly littered to littered category. There were no illegal dumps or trash piles identified.

During the month of January the **Pickens District** has been focused on getting out information to the Pickens County schools for the annual Pickens County Essay/Poster Contest. The District is following the NACD National Theme of "Soil to Spoon". The information provided for the schools is very effective in teaching how our food follows its entire cycle from being placed in the soil to being served on our tables to eat.

Richland District began meeting with partner organizations to promote local, sustainable agriculture; conducted schoolyard habitat assessments at two elementary schools; advised environmental education programs at Forest Lake Presbyterian Church and the University of South Carolina Center for Science Education; and made a presentation about District education initiatives to teachers involved with a Keep the Midlands Beautiful literacy program. The District sponsored conservation education programs for 21 students and 13 adults through the Conservation Station at the Clemson Sandhill Research and Education Center. District staff participated in the South Carolina Outdoor and Information Educators' Summit, Gills Creek Watershed Association Technical and Education Committee meetings, Richland Countywide Stormwater Consortium quarterly meeting, Green Congregation workshops, 2012 Open Forum Meeting on Sustainable Agriculture, and Upstate Food Hub.

York District made 9 classroom presentations to 262 students. Began a gardening project with 35 members of a school environmental club in partnership with Clemson 4H. District staff gave a presentation to York chapter of DAR and began to plan for a summer teacher workshop. Provided administrative services to the Fishing Creek Watershed District Directors; and prepared and distributed the January newsletter.

EARTH SCIENCE GROUP

Hydrology Section

Water Planning: A presentation was produced outlining a proposed process for developing regional water plans in South Carolina. Joe Gellici gave an update of water planning efforts at the January meeting of the Savannah River Basin Advisory Council. Staff also met with members of American Rivers to discuss aspects of the water planning process. Methods began to be reviewed to estimate unimpaired flows or flows in ungaged watersheds throughout the State; unimpaired flow data will be an important component of hydrologic modeling and evaluating potential future water shortages.

Savannah River Basin: Staff reviewed numerous documents related to work done for Phase I of the Savannah River Basin Comprehensive study and participated in a conference call with the Corps of Engineers and Georgia EPD regarding accounting discrepancies related that project. Work also continued to resolve issues that are delaying the finalization of a cost-sharing agreement with the Corps of Engineers. The agreement would initiate a study to evaluate the Corps' current drought contingency plan for its Savannah River lakes.

FERC: As part of the relicensing of Duke Energy's Keowee-Toxaway project, Scott Harder participated in Water Supply Study Team and in Water Quantity and Operations Resource Committee Group meetings. Current water use and water-use projections were reviewed; comments are being submitted for consideration by Duke Energy. Two hydrologic models used to evaluate various water management scenarios also continue to be reviewed.

ADR Network: Approximately 20 Coastal Plain ADR wells were field checked; data were downloaded, manual measurements were made, and equipment checked at each well.

Nuclear Licensing: Mr. Harder completed reviewing a draft Environmental Impact Statement for licensing of Duke Energy's Lee Nuclear Plant; he focused on Broad River streamflow statistics and the water-balance model used to evaluate water needs during low flows. Comments were provided to the Environmental Office.

Broad River Study: Messrs. Gellici and Harder visited two, active, instream sand-mining operations in the Broad River basin with Geological Survey staff to evaluate the impact of instream mining on the ecosystem.

Websites and Databases: 203 new well reports that were received from DHEC were sorted and processed. Maps were produced for wells in the following counties in Region 2: Darlington, Marlboro; in Region 3: Barnwell; and in Region 4: Berkeley.

Outreach: Hydrologic information or assistance was provided to 19 customers. Staff met with DNR engineers and Heritage Trust personnel regarding the replacement of a bridge in DNR's Great Pee Dee River Heritage Preserve; estimates of flood magnitudes for Hurricane Creek also were requested to help design appropriately-sized culverts or bridge openings. Brenda Hockensmith (coordinating through Priscilla Wendt) instigated an interagency (DNR, MRRJ, NOAA) meeting to discuss the Charleston Harbor Deeping Project and issue a response to Corps of Engineers. Ms. Hockensmith also reviewed that project; as well as research involving hydrologic and sediment studies of Charleston Harbor, Winyah Bay, and other sites.

Flood Mitigation Program

Outreach: Maria Cox Lamm met with Patrick Brown, Town of Edisto Beach (Colleton County, Region 4), to discuss the Hazard Mitigation Assistance (HMA) grant requirements and timeline for the grant applied for by the Town; assisted Tim Vinson, SCDNR Engineer, with obtaining information regarding the Congaree River (Richland County, Region 3) and explained the datum used on the Flood Insurance Rate Maps (FIRMs); and assisted USGS in obtaining flood study models for the Black River at Kingstree (Williamsburg County, Region 2), North Fork Edisto River at Orangeburg (Orangeburg County, Region 3), and Edisto River near the community of Givhans (Dorchester County, Region 4). Mrs. Lamm also revised the Data Use Agreement for Richland County (Region 3), an agreement between the County and SCDNR to obtain digital information for their mapping study. She reviewed FEMA's comments on the Richland County Discovery Report and provided close-out information to FEMA on MMMS and CTP grants. In day-to-day operations, Ms. Lamm followed up on Community Assistance Visits (CAVs) for Port Royal (Beaufort County, Region 4) and Myrtle Beach (Horry County, Region 4) and continued follow up on CAVs for the City of Port Royal (Beaufort County, Region 4) and City of Myrtle Beach (Horry County, Region 4). Joy Sullivan notified Williamsburg County (Region 4) and the county municipalities of the official end of their preliminary Digital Flood Insurance Rate Maps (DFIRMs) appeal period and verified that no appeals were filed. Mrs. Sullivan began preparation, along with Mrs. Lamm and Andy Brandenburg, of presentations to be given at the Surveyor's Conference in Columbia February 9, 2012. She also began reviewing Flood Mitigation Program display ideas for the LWC booth at the 2012 Palmetto Sportsmen's Classic. Staff also participated in the CTP (Cooperating Technical Partners) status call to discuss the current progress made in the statewide mapping process and sent developed Risk MAP Project Charters to the participating municipalities, and the county, of Richland County (Region 3). The Charters are an agreement signed between FEMA, the community, and DNR describing the scope of the mapping project and the deliverables. Mrs. Sullivan and Karen Jones ensured there was a way to advise of training opportunities not sponsored by DNR on the Flood Mitigation Program website *Training* page with reference to the Flood Mitigation Program Calendar. Ms. Jones followed up with 8 communities throughout the state on their Community Assistance Telephone Contact (CAC-T) process, as well as completed the CAC-T process for the Aiken County (Region 3) communities of City of New Ellenton and City of Jackson. Mr. Brandenburg made a CAV to Georgetown County (Region 4) and to Anderson County (Region 1). He also made Community Assistance Contact (CAC) visits to Newberry County (Region 1), City of Newberry (Newberry County, Region 1), Fairfield County (Region 2), and Pawley's Island (Georgetown County, Region 4).

Compliance and Ordinances: A total of 15 ordinance reviews were completed for communities involved with CAV/CACs.

Mitigation Activities: Mr. Brandenburg continued to provide assistance to Edisto Beach (Region 4) and to Richland County (Region 3) in the implementation of various flood mitigation activities to structures located in those communities. He sent a letter to FEMA indicating completion of the 2008 Myrtle Beach (Horry County, Region 4) Planning grant.

General: Mrs. Lamm helped Mrs. Sullivan prepare for the Certified Floodplain Manager (CFM) exam that was proctored by Mrs. Lamm on January 23, 2012. Staff made 46 updates to the FEMA CIS (Community Information System) database. In addition, there were 74 general assistance contacts (phone calls and emails), of which 28 were FEMA related. (The capturing of the number of general assistance contacts is in the process of being revamped to provide clarification of the type of assistance.) Mrs. Lamm provided updated average hourly salary rates for staff members that work on the Community Assistance Program (CAP) grant to FEMA, per their request.

South Carolina Geological Survey

Geological Information

STATEMAP: Twenty-one (21) holes were drilled to an average depth of 49 feet in the Georgetown mapping project (Georgetown County, Region 4). Holes were sited in Georgetown North quadrangle to begin the expanded project. Work, however, has been delayed as a result of leaking hydraulic hoses on the drill and temporary loss of lodging at Samworth Plantation. Reconnaissance was done and holes were sited in Hampton and Jasper Counties (Region 4) to begin the Savannah Basin phase of the project.

Outsource Mapping: Reconnaissance was done southwest of Caesars Head in Table Rock quadrangle, Pickens County (Region 1).

Data Preservation: The final technical report was forwarded to the USGS to end project and close grant.

National Park Service: The National Park Service enquired into the possibility of mapping the Ninety-Six Historic Site (Region 1). A field visit was planned for March.

Coastal Projects: After 18 months, the South Atlantic Alliance proposal was officially funded, and funds were transferred to South Carolina Sea Grant for distribution. Sub award letters will be sent by Skidaway after funds are received. Announcement of an organizational meeting will follow the receipt of those letters.

CO2: Renovation of and paperwork on the Core Repository are done. The repository is being reorganized as core racks and shelving are assembled in the new space. A large pile of dirt was removed at no cost so that the area could be fenced. USC researchers examined the Clubhouse Crossroads core and selected samples for study. The *Eagle Mills series* manuscript was sent to Dr. Paul Olsen, Columbia University, for review. The quarterly report was written and supported by additional information about publications.

Broad River Project: Work continues on choosing and testing models for sediment budgeting. Input codes continue to be constructed for HydroTrend model runs that will simulate first-pass empirical-derived sediment and water flux. Different pieces of equipment were tested or ordered. Potential field measuring points were sited through satellite coverage assessment and will be field checked for accessibility. Contacts also were made with different USGS and private company offices about aspects of the project. Plans to measure 3 cross-sections downstream of Neal Shoals Reservoir were made to determine bed morphology and sediment movement following the closing of the reservoir's gates. Several potential geologists and interns were interviewed for temporary positions.

General: A 2.6M earthquake occurred in the Summerville area (Region 4) on 4 January; this is the sixth small earthquake in that area in the past 3 months. Work continued on a paper addressing the stratigraphy of marine Pleistocene units.

Digital Products and the Digital Information Program (DIP)

General: DOQQ information was compiled for Broad River Project. Steven Workman participated in a webinar on terrain visualization techniques using Global Mapper 13. The Orangeburg scarp was plotted on a topographic index map to help in field studies. Epicenters of recent earthquakes were plotted to illustrate aerial distribution across State. Earthquake updates were made to webpage, and a quick response code was generated for access to the webpage by cell phones. Illustrations for publications were prepared A PDF of Volume 35 of *South Carolina Geology*, that is out-of-print, also was added to the publications page.

STATEMAP: New lines and elements were digitized on the Cleveland map (GQM 33, Greenville County, Region 1) to continue product update.

Data Preservation: Keyonia Gallman continued to scan drill-hole logs, reports, and site maps into the Document Management Workflow. 443 records were scanned and attributed, along with 23 bulletins. A total of 4001 records are now in the Document Management System. Mineral Resources 5 also was scanned.

CO2: Development of a data website focused on GIS data was discussed in a conference call with NATCARB. Erin Koch will be the Point of Contact (POC) for the NETL Atlas. New pages for the borehole web application (database) were received from IT. Information was added to the flow chart and function specification document after new pages were reviewed. A workgroup meeting will be held on 31 January.

Geothermal: The quarterly progress report was submitted. Funding for Year 2 was approved, and accounts are being set up.

EMD Hazards Map: Revisions were received from EMD and were made on the Geologic Hazards map (GGMS-5) and pamphlet.

Outreach

General: Dr. Paul Heartly (UNCW) was taken to the field to look at the Orangeburg scarp. A citizen enquired about meteorite identification. 3 Rock and Mineral kits were sold, and a piece of blue granite was sent to a school in Wisconsin. Two abstracts were submitted for the Southeast Section of the Geological Society of America meeting to be held in Asheville, NC, in March. SCE&G was contacted about permission for access to the Lake Murray spillway exposure. Downloads were made of 85 geology quadrangles and of 220 education presentations.

Economic: Information was requested on gold and on sources of material for roofing tiles.

Other Activities:

Joy Sullivan, Flood Mitigation Program, was selected SCDNR Employee of Year; the announcement was made at the Board meeting 26 January. Brenda Hockensmith, having completed her South Carolina Master Naturalist Association training last year, was elected Vice President – Program Chair, Coastal Master Naturalists, in January. Dr. Clendenin gave a lecture on tectonics at Furman University.

STATE CLIMATE OFFICE

The SCO answered 39 information requests with 5 invoiced for \$155 and thirteen media interviews provided. The Assistant State Climatologist for Service assisted SCDNR Law Enforcement with 1 accident investigation. He worked with the Columbia NWS office in replacing Aiken's temperature sensor that failed. Weekly he prepared a weather summary that is published online and provided SC USDA -NASS with the end of the month agricultural weather summary. He prepared special weather summaries for the low temperatures of January 4, the heavy rains and storm event of Jan 8-11, the cold front and high winds of Jan 12-13, and the unseasonable warmth of Jan 24-26. He coordinated the distribution of eleven CoCoRaHS rain gages courtesy of a grant from the Harry Hampton Fund. The 2011 SC Annual Weather Summary was edited and placed on the SC DNR State Climatology Office website http://www.dnr.sc.gov/climate/sco/ClimateData/yearly/cli_sc2011review.php.

The Severe Weather Liaison finalized the mapping phase of the Southeast Temperature and Precipitation change study, extending the trend analysis through 2010 for 65 stations in Georgia, South Carolina and North Carolina. He completed the web portal providing online access to the maps and trend data http://www.dnr.sc.gov/climate/sco/Publications/2010TP_Trends/2010TP_main.php. He continued routine support for the Electric Cooperative of SC, Inc. by providing monthly temperature and heating degree day data. He provided

a forecast outlook for SCDNR Marine fisheries to determine end of shrimp season. He provided a "Climate Outlook" presentation at the SC Watermelon Growers Association Annual Meeting (1/14), attended the SCEMD Hurricane Season After Action/Lessons Learned Review Conference (1/19), participated in the Georgetown Hurricane Felix exercise (1/20), and attended the 2012 SC Full Scale Hurricane Exercise planning conference (1/31). He continued routine web page maintenance for the State Climate Office.

The State Climatologist participated in the monthly SERCC Technical Advisory Committee Conference Call (1/4) and the Carolinas Integrated Science and Assessment (CISA) monthly conference call (1/6). She conducted a SCDNR Climate Change Technical Working Group meeting (1/9), attended the NOAA Coastal Climate Workshop (1/11-1/12), the Keystone "Climate Conversations" workshop (1/14), and the Sea Grant Climate Extension Annual Advisory Committee Meeting (1/19). She provided a "Career Day" presentation for Dent Middle School (1/25) and provided a presentation on "SC's Climate Report Card: Understanding South Carolina's Climate Variability and Trends at the Fort Johnson Marine Science Seminar Series (1/27).