

EXECUTIVE OFFICE

OFFICE OF THE DIRECTOR

Acting Director Alvin Taylor had breakfast and met with the Fisheries Biologists during their annual meeting at the Webb Center on the morning of March 1, with Chief of Staff Don Winslow attending as well.

Breck Carmichael inspected boating access facilities in Berkeley and Williamsburg counties on March 5 for Land and Water Conservation Fund certification. On March 6, he attended the annual SC Cooperative Fish and Wildlife Research Unit Coordinating Committee meeting in Clemson.

Col. Taylor attended a SC Law Enforcement Officers Hall of Fame Advisory Committee meeting on March 5 at the Criminal Justice Academy. Director John Frampton participated in the ACE Basin Task Force meeting on March 5 at Donnelley WMA and was presented with a token of their appreciation of his land protection efforts.

On March 6, Col. Taylor met with Mr. Winslow and the Deputy Directors. That morning, Mr. Frampton was recognized by the SC Senate in the Senate Chambers at which time they read a Joint Resolution commending his career and state service and wishing him well in his upcoming retirement. Later that day, Mr. Frampton and Col. Taylor attended the Captains' meeting.

Mr. Frampton attended the Senate Fish, Game & Forestry Committee meeting on the morning of March 7. Col. Taylor participated in the Senate Finance Subcommittee on Natural Resources Budget Hearings, including DNR, PRT, JEDA, Forestry Commission and Consumer Affairs, and spoke to the senators on behalf of DNR and its budget needs.

Mr. Winslow and Mr. Carmichael attended the Migratory Waterfowl Committee meeting on March 7. Mr. Carmichael also attended a meeting with State Park Service Director Gaines and Deputy State Forester Felder to discuss joint compliance with new Department of Justice regulations regarding access to outdoor trails by persons with disabilities. Mr. Winslow met with Josh Addy, a Clemson University student, on March 9 to discuss intern opportunities at our agency.

Col. Taylor and Mr. Winslow participated in a budget meeting with the Deputy Directors and business managers on March 12. Mr. Winslow represented DNR at the SC Boundary Commission meeting on March 13 in Columbia.

Mr. Frampton and Mr. Carmichael attended the North American Wildlife and Natural Resources Conference in Atlanta, GA, on March 12-15. Mr. Carmichael also attended a one-day meeting of the Atlantic Flyway Council in addition to numerous other committee and working group meetings during the conference.

Col. Taylor attended the 77th Annual North American Wildlife and Natural Resources Conference in Atlanta on March 14, returning to Columbia on March 15 to meet with Senator Yancey McGill on the budget.

Mr. Winslow met with staff of the St. Johns Yacht Club on March 15 in Charleston for a discussion of BIG grant opportunities.

On March 19, Col. Taylor's first official day as Director upon Mr. Frampton's retirement on March 16, Director Taylor met with Jason Johnson of The Conservation Fund to discuss land protection partnership opportunities.

Mr. Carmichael inspected the Styx Communications Center and Hunter Education classroom and shooting range for compliance with the Americans with Disabilities Act (ADA) on March 19.

Col. Taylor met with staff on March 20 to discuss future plans for expansion of the Styx facility and later participated in the State Homeland Security Council meeting. On March 21, Col. Taylor attended the House Agriculture, Natural Resources & Environmental Affairs Wildlife Subcommittee meeting.

Mr. Carmichael inspected a tract in Charleston County for potential acquisition and also inspected facilities at Fort Johnson for ADA compliance on March 21. On March 22, he inspected a tract in Lexington County for potential acquisition.

Col. Taylor, Mr. Winslow and Mr. Carmichael participated in the DNR Board Meeting on March 23 in Columbia. The annual Palmetto Sportsmen's Classic was held on March 23-25 at the State Fairgrounds, with Col. Taylor and Mr. Winslow in attendance during the Classic. Mr. Carmichael worked at the youth fishing pond at the Classic on March 23 and worked at the Wildlife Section booth on March 24.

Mr. Carmichael met with DNR Information Technology staff on March 27 to discuss a new web page concerning the ADA and access for mobility-impaired persons to DNR properties. On March 28, he inspected the Florence Regional Office, the Marsh WMA clubhouse in Marion County, and Ashwood Lake in Lee County for ADA compliance. Mr. Carmichael completed his DLEO in-service training on March 29 at the Criminal Justice Academy.

Col. Taylor attended the House Agriculture, Natural Resources & Environmental Affairs Committee meeting on March 27. He met with Senator Yancey McGill on March 28 on budget and legislative matters.

On March 29, Col. Taylor, Bob Perry and Board Member Mike Hutchins attended a meeting of the Bureau of Ocean Energy Management in Charleston. Col. Taylor met with senior Law Enforcement staff on the afternoon of March 29 and on March 30 at the Donnelley Wildlife Center.

Marine Resources Division

Office of the Deputy Director

Mr. Boyles was in Savannah, GA March 5-9 to attend a South Atlantic Fishery Management Council (SAFMC) meeting. On March 6th Mr. Boyles travelled from Savannah, GA to Columbia, SC to attend the DNR Deputy Directors meeting, after which he returned to Savannah for remainder of the SAFMC meeting. On March 12th Mr. Boyles returned to Columbia for a Deputy Directors meeting with Business Managers at the Styx compound. Mr. Boyles travelled to Atlanta, GA March 13-15 where he attended the North American Wildlife & Natural Resources conference. Mr. Boyles attended the National Marine Fisheries Service State Directors meeting in Alexandria, VA March 19-21. On March 27th Mr. Boyles attended the DNR Marine Resources Institute In-shore Fisheries Science Symposium. On March 30th Mr. Boyles hosted the Marine Advisory Committee meeting at the Marine Center.

Marine Resources Research Institute (MRRD):

Grant Proposals

A final scope of work and budget was submitted to Dr. Todd Kellison at the South East Fishery Independent Survey (SEFIS) at the South East Fisheries Science Center in Beaufort NC. The requested funding is \$351,554 (no match requirement) for MARMAP to assist SEFIS by providing scientific staff for SEFIS reef fish monitoring cruises on board the *R/V Savannah*, processing all reef fish life history samples collected by SEFIS, and coordinate sampling, data management, and analyses with SEFIS staff. It is expected that the funding will be available mid-April.

- *Submitted:* "Development of population genetic tools for blue crab management" (4/1/2012 – 10/1/2012). T. Darden, SC Sea Grant Program Development, \$9,152.

Publications

- Arendt MD, Schwenter JA, Barans CA. Reef fish attraction and production at an artificial reef in the Northwest Atlantic Ocean as documented by remote underwater video. Submitted to Bulletin of Marine Science for initial consideration (22 March 2012)
- Arendt MD, Schwenter JA, Segars AL, Byrd JI, Whitaker JD, Parker L. Temporal trends (2000–2011) and influences on fishery-independent catch rates for loggerhead sea turtles (*Caretta caretta*) at an important coastal foraging region of the Southeast U.S. Revised and resubmitted to Fishery Bulletin (27 March 2012)
- Arendt MD, Schwenter JA, Byrd JI, Segars AL, Whitaker JD, Parker L, Owens DW, Quattro JM, and Roberts MA. Temporal monitoring of demographics reveals dynamic distributions of loggerhead sea turtles (*Caretta caretta*) at an important foraging ground in the Northwest Atlantic Ocean. Submitted to Biological Conservation for initial consideration (28 March 2012)
- THE STRIPED BASS *Morone saxatilis* OVARIAN TRANSCRIPTOME
Benjamin J. Reading*, Jennifer E. Schaff, Robert W. Chapman, and Craig V. Sullivan
Aquaculture America 2011 New Orleans, Louisiana

Presentations & Outreach

- Peter Kingsley-Smith "Field evaluation of diploid and triploid Eastern oysters (*Crassostrea virginica*) – an industry collaboration to investigate the value of future investment in polyploidy oysters." Conference presentation at the 104th Annual Meeting of the National Shellfisheries Association, Seattle, Washington, March 25th-29th 2012.
- Leffler, J.W., J.F. Brunson, D. Arrington, E. DuRant, R.D. O'Quinn, IV. "Impact of reused water from superintensive, minimal-exchange, biofloc systems on the production of Pacific white shrimp (*L. vannamei*). Presented at the United States Aquaculture Society Annual Meeting. March 1, 2012, Las Vegas, NV.
- Brunson, J.F., E. DuRant, J.W. Leffler. "Production and economic comparison of *L. vannamei* raised in biofloc under a full light greenhouse environment versus indoor, low-light conditions in an insulated building." Presented at the United States Aquaculture Society Annual Meeting. March 1, 2012, Las Vegas, NV. Brunson also participated in a panel discussion on the economics of indoor shrimp production.
- Stokes, A.D., J. Brunson, J. Leffler, D. Arrington, J. Richardson, R. Shumate. "Bait shrimp research studies performed at the Waddell Mariculture Center" Presented at the United States Aquaculture Society Annual Meeting. March 1, 2012, Las Vegas, NV.
- Greenfield, D.I. Linking pond water quality with algal bloom dynamics: Implications for ecosystem and human health. Plenary: Grand Strand Stormwater Pond Conference, March 2.
- Greenfield, D.I. Linking pond water quality with algal bloom dynamics: Implications for ecosystem and human health. Invited Oral Presentation: Charleston Stormwater Pond Conference, March 22.
- Bacheler, N.M, M.J.M. Reichert, and V. Bartolino. Does catch-per-unit-effort decline with increasing soak time in a multispecies reef fish trap survey? AFS Tide Water Chapter annual meeting, March 10, Beaufort, NC.
- Darden, T. participated in a meeting of the Pee Dee/Yadkin Robust Redhorse Technical Working Group as a representative of the Robust Redhorse Genetics Technical Working Group for discussion of potential stock enhancement within the Pee Dee River drainage.

- Darden, T. and Estuarine Finfish Research Group (2012), “Striped bass research on the Ashley River,” presentation at the Ashley Scenic River Council’s annual meeting Ides on the Ashley River.
- Meadors, W., Steve A. Arnott, & William A. Roumillat Southeastern Society of Parasitologists Meeting, KY: Distribution and health assessment of red drum, *Sciaenops ocellatus*, exhibiting external lesions within South Carolina estuaries.
- Van Dolah R.F., and J. Boynton. Development of a Comprehensive Marine Spatial Database on Coastal Resources and Uses for South Carolina’s Coastal Zone. Presented at joint SC/BOEM Task Force Meeting. N. Charleston, 3/29

The following presentations were made at the MRRI Auditorium for the Estuarine Finfish Research Annual Review:

- Yost, J Overview of Cobia Research in SC: Lessons Learned
- Perkinson, M Cobia life history: A regional perspective
- Anweiler, K Low-temperature tolerance of juvenile spotted seatrout, *Cynoscion nebulosus*, in South Carolina
- O’Donnell, T Characterizing the genetic population structure of spotted seatrout (*Cynoscion nebulosus*) along the southeastern United States
- Arnott, S Analysis of southern flounder catches in the SCDNR Inshore Fisheries surveys
- Darden, T Genetic diversity of Atlantic red snapper
- Murray, D Spatial and temporal change of red porgy (*Pagrus pagrus*) off the Southeast US
- Johnson, J Quantification of life history parameters in South Carolina spot (*Leiostomus xanthurus*)
- McDonough, C Black drum in South Carolina: A biological summary of data from fishery dependent and fishery independent monitoring 1990 through 2010
- Frazier, B Regional variation of adult red drum size- and age-structure in SC
- Walker, M The potential for genetic aging of wild red drum in South Carolina
- Jamison, M Development of a genetic identification tool for *Cynoscion* species for management application
- Brenkert, K Side-scan Sonar: A new tool available for habitat evaluation
- Farrae, D Evaluations of river utilization, recruitment bottlenecks, and movement of a coastal striped bass population
- Anderson, D Past and present genetic structure of striped bass (*Morone saxatilis*) populations in South Carolina
- Cushman, B Stocking as a fisheries management tool for American shad in the Edisto River
- Brunson, J Fecundity of wild-caught, exogenous blue crabs, *Callinectes sapidus*
- Arrington, D Development of blue crab (*Callinectes sapidus*) larvae culture techniques at Waddell Mariculture Center
- Tarpey, C Genetic characterization of the Savannah and Pee Dee River populations of robust redhorse with conservation implications
- McAbee, B Estimation of growth and survival in WMC red drum fingerling ponds

Progress Report and Activities:

Coastal Finfish

The final report for the 2006-2011 MARMAP grant was submitted on time to the MARMAP technical monitor at NOAA Fisheries. The report details the MARMAP’s accomplishments between May 2006 and October 2011. In this period, MARMAP successfully completed 5 sampling seasons with a combined total of 119 realized days at sea on the *R/V Palmetto* and 33.5 days on the *R/V Lady Lisa*. Note that this does not include sea days funded by SEAMAP. A total of 3,831 gear deployments were made during the reef fish monitoring cruises, and MARMAP staff collected data on 164,025 individual fish representing 115 different species. Nine species (black sea bass, tomtate, scup, vermilion snapper, bank sea bass, red porgy, gray triggerfish, sand perch, and white grunt) made up 95% of the total catch. In the same period, MARMAP also processed 22,864 fish, representing 65 species, to collect detailed life history information such as age, reproductive state, etc. The data have been used for stock assessments and to assist with regional fisheries management. MARMAP staff (and students) provided information and participated in 13 regional SEDAR stock assessments and contributed to 33 peer-reviewed scientific publications and over 40 other reports and publications.

The consequences of the 40% reduction in MARMAP funding for the period May 2012 – April 2013 are still being investigated, but will probably include halting the long bottom long-line (tilefish) survey aboard the *R/V Lady Lisa*, a reduction of at least 10 sea days for the reef fish survey aboard the *R/V Palmetto*, and a reduction of about 50% of our capacity to process reef fish life history samples to support regional SEDAR stock assessments.

Preparations for the SEAMAP and MARMAP cruise seasons are on schedule. The *R/V Palmetto* returned to Charleston and staff is installing equipment in the newly renovated lab in collaboration with the vessel crew. The first MARMAP cruise is scheduled for the week of April 16. MARMAP had a pre-season meeting with staff from the SouthEast Fishery Independent Survey via teleconference on March 20 to prepare for and discuss the 2012 sampling season. SEAMAP staff is preparing for the spring coastal survey cruise in collaboration with the *R/V Lady Lisa* vessel crew. The departure for the first sampling week of the spring cruise is scheduled for April 16.

Preparations for the vermilion snapper and red porgy SEDAR update assessment are on schedule, but as a result of reduced MARMAP funding, not all red porgy data may be available by the SEDAR deadline for data submission (June 1).

Kevin Kolmos organized a MRRI Histology Facility User Group meeting on Feb 22nd to discuss new equipment, use of the lab, and a new cost/slide scheme. The later was done to incorporate service contract charges into the cost/slide for all users who do not directly contribute funds toward service contracts. Staff from DNR, Medical University of SC, College of Charleston, and Hollings Marine Laboratory attended.

Marcel Reichert attended the South Atlantic Fisheries Management Council meeting on March 5-9 in Savannah Georgia. Marcel also participated in the SEDAR 28 Data Webinar on March 14 as the Council’s Scientific and Statistical Committee representative.

Environmental Research

Captain Sam's inlet monitoring - Staff began processing some of the benthic samples, about 90% of the February samples have been sorted and identified. Due to permitting issues, sampling and sample processing beyond the current set of samples will be suspended until further notice.

Hilton Head/Bay Point Borrow area - Coastal Carolina University and DNR staff completed a three day cruise on the Silver Crescent to deploy sediment monitoring equipment in the Pt Royal Bay Point borrow and reference areas. CCU and DNR staff will return in late March to check on the deployed equipment.

Hilton Head/Piping plover habitat monitoring - All the benthic samples have been sorted and the taxonomy for the January samples is about 60% complete. Our next sampling events will begin in December of 2012.

SERTC - A draft of the SERTC sargassum poster was completed this month. Staff responded to 3 information requests from outside the agency for images and posters.

SCECAP - Staff completed initial data review, summary and graphics for most of the 2009-2010 SCECAP water quality measures. Initial analyses were also completed for selected sediment contaminants, sediment characteristics, and benthic community measures. All the SCECAP water quality, sediment characteristics, and benthic taxonomy samples have been completed and passed the QA protocols.

Bottom Mapping Activities: Bob Van Dolah attended the kick-off meeting for the SECOORA funded effort to develop a web portal and databases to inform marine comprehensive spatial planning. This is a new grant that will involve MRD staff in expanding existing databases for the region. Van Dolah also presented an overview of the Division's recent mapping project to the South Carolina/BOEM Task Force, which met for the first time on 3/29 in Charleston. See presentations for details.

Misc: Staff participated in two CMS cruises to collect fish and one helicopter flight in the Port Royal area to evaluate oyster resources.

Estuarine Finfish Research

Striped Bass: Staff are continuing to genotype historic genetic samples for a temporal comparison across South Carolina with preliminary analyses complete, indicating the maintenance of genetic population structure and moderate levels of genetic diversity since the mid-90's, along with decreasing levels of inbreeding. Additionally, the ACE and Santee-Cooper systems appear to show less genetic uniqueness in the contemporary samples. The genetic processing of the Jul-Dec 2011 fin clips from the Ashley River are complete, including an additional 2010YC non-stocked individual. Consistent with prior collection years, recaptures of stocked fish are dominated by those stocked as phase IIs (~6 months of age). Staff have completed the genotyping, data analyses and report for the 2011 North Carolina contract – interestingly, 2010 YC juvenile samples from two NC rivers show 100% contribution of stocked fish to those populations. Staff are continuing discussions with NC regarding incorporation of these results into stocking management plans.

Genetic Influences of Overfishing: For the red porgy project, staff are completing the genotyping of samples to evaluate the potential of latitudinal genetic structure within these reef fish, nearshore/offshore analyses are completed indicating no genetic partitioning along this gradient; for the red snapper project, genotyping based on DNA from otoliths of fish sampled during 1983-1984 are completed, the 1977-1978 sample genotyping is ongoing. Staff are completing the data analyses of the 1983-1984 data to compare with previous data from 1999-2000 and 2007-2009.

Genetic Tool Development: Staff have 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 have completed the processing of the Atlantic sturgeon samples for the sturgeon telomere aging project and analyses are ongoing.

Spotted Seatrout: Staff are nearing the completion of genotyping samples to evaluate the effect of cold winters on genetic diversity.

Cobia Population Genetics: Staff have 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. Additional 2011 samples have been received from Thailand and North Carolina and are being genotyped. Our Year 1 Interim Report for the MARFIN "Genetic Risk Assessment Modeling for Offshore Marine Aquaculture Operations" was completed, submitted and accepted; documenting the availability of aging and reproductive histology data from 1,773 cobia samples for the development of critical life history parameters as well as genetic data from 2,521 globally-distributed samples to evaluate global stock structure.

Weakfish Genetic Identification: Staff are continuing to process historic samples to verify identifications and application of the identification key to those samples is ongoing. Preliminary analyses do confirm the occurrence of *Cynoscion arenarius* (sand seatrout) and its hybrids with *C. regalis* (weakfish) along the southeast US Atlantic coast from Florida through southern South Carolina.

Trammel and electrofishing surveys: March sampling was completed successfully. A new electrode-holding boom was fitted to the electrofishing boat. A dead turtle and sturgeon were found washed up in Winyah Bay and reported to the appropriate DNR staff.

Sea Grant project on genetic detection of red drum eggs: March plankton sampling was completed in Charleston Harbor in order to confirm that genetic probes do not cross-react with eggs from non-target species.

RecFin: A progress report was prepared for RecFin (funding support for the Inshore Fishery trammel net and electrofishing surveys).

Algal Ecology

Routine Monitoring and Fish Kill Responses (private contract & Center for Disease Control, CDC, project) – No fish kills were reported during March, however, a substantial bloom of the HAB species *Prorocentrum minimum* was observed at Kiawah during the first two weeks. The bloom was dense enough to discolor the water (mahogany, typical for this species), and staff monitored the entire event. Populations of *P. minimum* have increased over the past 1-2 years. Dr. Greenfield represented the CDC PIs at the annual meeting in Atlanta (via VC) March 13-14th and presented our annual report. During the call, most states, including SC, noted blooms and a few health/wildlife events related to HABs. Discussions ranged from appropriate interactions with the media to how to publish and analyze data gathered by

the 13 states involved. The CDC alerted the group that continued funding for HAB-related efforts are unlikely due to budget cuts. Dr. Greenfield & co-PIs also compiled the Y4 report and Y5 work plan for the CDC.

Assessing Phytoplankton Responses to Nutrient Levels in SC Estuaries (EPA project) – Staff are analyzing samples from the February experimentation and monitoring. Staff are also preparing for our April/May deployments and quarterly monitoring of phytoplankton, nutrients, and other water quality parameters using select (tidal creek) SCECAP stations. The graduate student involved with this project selected her thesis committee and prepared her first proposal draft.

Adapting the Sandwich Hybridization Assay for Red Drum (Sea Grant) – We just received the funds to conduct this research. Staff & a CofC graduate student (R. Mortensen) began sampling, and the sampling schedule has been set for the remainder of 2012. Drs. Greenfield and Arnott are coordinating with USC to refine a protocol for capture probe development.

MERHAB: Comparative analyses of sandwich hybridization assay and quantitative PCR for identifying and quantifying harmful algal bloom species – We completed a number of experiments examining the molecular quantification of the ichthyotoxic raphidophyte species *Heterosigma akashiwo*. The student (C. Doll) involved with the project is assessing how nutrient status affects molecular assay responses using laboratory experiments (the assay quantifies cellular RNA, which sometimes varies according to physiological status). Results will enable us to better understand how this powerful molecular tool analyzes HAB population dynamics relative to nutrient levels in the environment. The student is preparing a manuscript describing the first half of his thesis.

Cyanobacteria population genomics (USC Investigator Award) – Staff are compiling sample-specific molecular tags on PCR amplicons for the September cyanobacteria bloom event in Kiawah (that tested positive for the hepatotoxin microcystin). These genetic tags are specific to a gene that is known to help regulate toxin production. Once these sample-specific tags are completed, samples will be sequenced using 454-pyrosequencing technology to elucidate any population variability within a toxic bloom.

Genetics

Most of the effort the reporting period was focused on analyzing data from an alligator study by Lou Guillette and Brandon Moore (Louisiana Tech), a study of toxin mixtures with Peter Moeller (NOAA) and Matt Bertin (MUSC) and analysis of genetic determination of phenotypic traits in striped bass I with Craig Sullivan (NCSSU).

The alligator work focused on assessing the response of sex determining genes to environmental temperatures conducive to producing male and females. The classifications were 100% accurate.

The effort in toxin mixtures is an effort to solve a long standing problem in toxicology and other exposure studies, which is limited to one or a few compounds and have difficulty identifying interactions among compounds. Our approach allows multiple compounds and multiple levels of each compound to be assayed with a very small number of samples (ca <100) and produces highly reliable results.

The study of genetic variation in striped bass identified 21 alleles over 16 loci that were perfectly correlated to length, weight, gonad weight and gonosomatic index. A single allele accounted for 73% of the variation in total weight. Two other alleles accounted for 60% of the variation in length.

The semi-annual report for the Marfin grant was accepted by the technical monitor (Nancy Cummings, NOAA).

Shellfish Research

104th Annual Meeting of the National Shellfisheries Association (NSA): Shellfish Research Section Manager Dr. Peter Kingsley-Smith attended the annual NSA meeting in Seattle, Washington, March 25th-29th at which he presented on the SC Sea Grant Consortium Triploid Oyster Project (details above). At this meeting, Dr. Kingsley-Smith co-chaired a special session on shellfish restoration that included a presentation by Michael Hodges on the South Carolina Oyster Restoration and Enhancement (SCORE) community-based restoration program.

SC Sea Grant Consortium Triploid Oyster Project: Final sampling for the triploid-diploid oyster comparative growth study was completed at sites in Toogoodoo Creek (March 7th-8th), the May River (March 14th), and the Romain River (March 21st), leaving only a second site in Toogoodoo Creek awaiting final sampling (total of 7 project sites distributed from Murrell's Inlet to the May River). Final sampling involves the collection of shell height data, survival counts, and samples for meat weight analysis were taken. Dr. Peter Kingsley-Smith is involved in discussions between SC shellfish industry members and the proprietors of the triploid technology to improve growers' access to obtain triploid seed in 2012. Preliminary data from this project were presented at the National Shellfisheries Association Meeting (see details above).

Office of Fisheries Management assistance: Dr. Peter Kingsley-Smith provided shellfish research updates at the quarterly meeting with the representatives of the South Carolina Department of Health and Environmental Control Shellfish Section and the SCDNR Law Enforcement Division.

Saltwater Recreational Fisheries Advisory Council / Dingle-Johnson Act funding for oyster reef assessments: Three helicopter flights to capture oyster reef imagery were completed during the week of March 5th 2012. Flights for Distant Island and Clark Sound were completed, along with the majority of the reefs within the Morse Island State Shellfish Ground boundary. A helicopter flight was made to the Beaufort area on March 19th and surveillance of Trenchards Inlet State Shellfish Ground (S100) was nearly completed, with a follow-up flight scheduled for April 4th-5th. The photographs from the Kiawah Island (West) State Shellfish Ground (S194W) are being used to update the oyster layer and this area is close to completion. A database has been created for tracking editing changes as helicopter images are used to improve the mapped oyster GIS layer and to note the condition of individual reefs.

Southeast Aquatic Resources Partnership (NOAA): A semi-annual progress report was submitted for the project entitled "CONSTRUCT – Creating oyster niche structures through restoration using crab traps." Primarily, this progress report highlighted monitoring efforts conducted in the fall of 2011 and the spring of 2012 directed towards crab trap-based reefs established in the spring of last year.

The Nature Conservancy-NOAA Global Marine Team Community-Based Restoration Matching Grants Program: Jeremy Island Oyster Castle Project. Quarterly sampling visit for March 2012 was completed with the help of a student volunteer and a TNC staff member (Joy Brown) at both sites on Jeremy Island near McClellanville. Monitoring included the capture of digital photographs of the

castles, the collection of surface sediment samples for the detection of possible erosion, the quantification of cordgrass (*Spartina alterniflora*) shoot densities for control areas, nursery plant areas and transplanted wild *S. alterniflora* areas, and finally, the collection of marsh edge position using the Trimble R8 for the purposes of detecting future shoreline protection that may be facilitated by the installation of the concrete oyster castles.

Miscellaneous: Jordan Felber worked his last day for the SCDNR on March 8th 2012 after 8 years in service. Jordan left the SCDNR to join the Charleston County Public Works office as their Stormwater GIS Specialist. The Stratasfear (20' aluminum work boat) underwent engine replacement by Steve Marable using a Mercury engine that was recently removed from an Environmental Research Section vessel. Benjamin Stone and John Heinsohn completed the forklift training class on March 13th 2012.

Sustainable Mariculture/Crustacean Monitoring

USMSFP Population Demographics study: The study to assess the population size in biofloc-based shrimp culture raceways using different sampling techniques is well underway with the first of four phases completed by the harvest of the first raceway. Staff attended the 3rd Annual South Carolina Seafood Summit in Charleston.

Blue Crab Mariculture project: Two commercial crabbers are assisting in collecting and monitoring of gravid blue crabs for our fecundity and larviculture work. 20 females with advanced egg development are now in-house and producing larvae. Algae and high-density rotifer production systems have been constructed and are producing food for the hatching larvae. An improved hatching tanks system and a larviculture system have been constructed for collecting and raising the larval crabs.

ACE Basin National Estuarine Research Reserve: Completed Research Tasks section of the FY12 NERRS grant application. Routine SWMP sampling activities and data logging monitoring of the proposed oyster farm site were completed. Work is nearing completion on preparing the 2011 annual SWMP water quality report. Staff serving on the national Habitat Mapping and Change Oversight Committee reviewed and approved the final land cover map plans for the Padilla Bay NERR. Staff surveyed and selected field sites near the Big Bay SWMP station and the Edisto Environmental Learning Center for the ACE Basin NERR's first sentinel site location. This will be a reference site for monitoring estuarine changes over the coming decades.

Crustacean Monitoring: Good numbers of white shrimp were collected by trawling this month, indicating a substantial improvement over the last two springs. Water temperatures for the cruise south of Charleston reached the highest average recorded for the March survey, going back to 1976. Some shrimp exhibited advanced reproductive development, and significant spawning may occur next month if water temperatures remain above average. Blue crab catches were dominated by egg bearing females and immature crab nearing "shedding" stage. Staff completed draft Marine Species reports on white shrimp and blue crab for the DNR website.

Horseshoe Crabs: Staff met with facility manager and harvesters at Endosafe to discuss plans for upcoming Horseshoe crab season.

Waddell Mariculture Center

The Waddell Mariculture Center offered two regular tours during the past two weeks for 15 guests. The center hosted the Beaufort County Leadership Class. The group included 30 members and 4 guest speakers. Al Stokes was one of the speakers and he talked about the research being performed at the center and also provided a tour of the center's facilities.

The first shipment of native plants to be planted on the bluff of the Colleton River to reduce erosion in front of the Turnure House arrives on Friday. Sea Pines of Hilton Head donated and delivered 8 truckloads of mulch for the 250' by 12' project. Twenty Master Gardeners of the Lowcountry have volunteered to perform the work.

Al met with the Whale Branch Middle School Principal, Clemson University Extension Service, and community representatives to lay the ground work for a hydroponics project. The school has a glass pane greenhouse, 2 tanks and other supplies. A local non-profit group donated \$6500 to fund the projects startup. Al will be designing the fish production part of the project.

The center gets a number of calls each day to answer questions or to provide some assistance.

Al responded to a call by DNR Law Enforcement who asked him to put down a doe that had been hit by a car on highway 278. Al also responded to a call from Dean Harrigal about a turkey that was walking in the Sheridan Park area in Bluffton with an arrow protruding out of its body.

The center is also issuing DNR turkey tags to local hunters and answering questions regarding hunting on the DNR Victoria Bluff Heritage Trust property.

Al also provided information to three pond owners and one shrimp farmer.

The center auctioned off two electrical generators, two oxygen generators, and a compressor through state surplus. None of these items were operational. The funds from the sale will be used for tractor repairs.

A lightning storm knocked out the computer system, security system, and electronic security gate. Hargray Communications restored the computer system but repairs are still pending on the other items. The center has asked the security system company to see if there is a way some equipment could be deactivated remotely when a severe storm approaches.

Maintenance is installing the seawater bypass system. They are burying more than 200 feet of 8" pipe to do this. They also had to make repairs to the seawater pump. A shim broke loose and caused the 30 hp motor to shift and destroy the rubber pump/motor connector.

In Water Sea Turtle Project

M. Arendt completed a grant proposal entitled, "Evaluation of gear efficiency and catchability of loggerhead (*Caretta caretta*) and Kemp's ridley (*Lepidochelys kempii*) sea turtles in a random sampling regional trawl survey" and provided it to Co-Investigators for review. This proposal will be submitted for funding consideration by the Protected Species Cooperative Conservation Program in summer 2012.

M. Arendt completed a grant proposal entitled, "Temporal and spatial distribution of adult Atlantic sturgeon (*Acipenser oxyrinchus*) in U.S. Territorial waters off South Carolina and Georgia" and provided it to Co-Investigators for review. This proposal will be submitted for funding consideration by the Protected Species Cooperative Conservation Program in summer 2012.

M. Arendt submitted the Agreement between State Agencies paperwork to renew the three-year contract with the University of South Carolina, Department of Biology for genetic analyses of sea turtle blood samples during the 2012 through 2014 seasons.

M. Arendt received word from the NMFS Southeast Regional Office that year 5 of 5 (summer 2013 field season) is in the NMFS budget, but a final award amount has not yet been determined.

The GADNR permit has not been received; M. Arendt spoke with Tammy at the Social Circle, GA office and confirmed that the renewal paperwork had been received. We anticipate receipt of the permit renewal in mid-April.

Minorities in Marine and Environmental Sciences (MIMES) Program:

The deadline for applications for the MIMES Summer 2012 Program passed on March 9th. This year has drawn the highest number and caliber of applicants in recent years, with applications from 54 students (compared with 38 in 2011 and 19 in 2010); program coordinators were also pleased to see applications from a broader geographic range of academic institutions than in past years. Funding is expected from the National Science Foundation to support 5 students; however, program coordinators are still awaiting official confirmation of these funds.

Office of Fisheries Management (OFM):

Shellfish Management:

Commercial Management

Five permit holders requested verification for legally required shellfish culture permit plantings for 9 permits during March. Through calendar year 2012, twelve permit holders have requested planting verification on 24 different permits with 5 completing planting quotas for 2012. A total of 16,590.3 U.S. bushels of shellfish seed, green oyster shell, clam cover or approved cultch, cultivation, or equivalent has been planted. The assessed planting quota for the state's 117 culture permits is 121,225.4 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. 2 variance requests were processed this month.

Staff attended the joint DNR/DHEC meeting on 3/6/12.

The Shellfish Permit Committee met on 3/14/12 to consider applications for available culture permits. 35 applications were submitted for 8 available permits. There were no applicants for the other two available permits. After consideration of all applicants, Conditional Approval Status was given to the following applicants:

Brandon Wells/Vincent Chaplin - C-061

Michael Huff - C-065

Craig Valentine - C-067

Ed Atkins - C-069

Craig & Cameron Reaves - C-104

Perry Hall - C-105

Huff's Seafood - C-106

John Jackson - C-254

Staff attended the SC Shellfish Growers Association meeting on 3/28/12. There was some discussion of summer harvest of oysters. SCDNR and DHEC staff indicated that we were not in favor of allowing summer harvest for public health reasons. The attendees were largely in agreement with our reasoning.

One request to amend a mariculture permit was processed in March. We are awaiting approval from Parris Island before processing a mariculture permit request. An importation permit was issued to Island Fresh Seafood to import seed clams from New Jersey for growout in ponds on Yonges Island.

Nancy Hadley and Susan Davis (Environmental Programs) attended an interagency meeting at the USACE to discuss the status of the OV Associates oyster mariculture application.

Shell recycling and planting; recreational management

8,000 bushels of shell was moved from the Hobcaw-Barony quarantine site to the loading site at Nance's Creek Front Restaurant to be planted in Murrells Inlet. 2,000 bushels of shell that was donated by Nance's Creek Front is at the loading site as well, and will be planted in Murrells Inlet this summer.

Preparations continue on the oyster shell push boat *The Indigo Princess* and barge and the diesel saltwater pump for the summer planting season. This work will be primarily done by DNR staff. A diver has been hired to scrape the bottom of the push boat and barge of any fouling.

The oyster shell recycling dump truck has been down with a faulty water pump. Repairs should be complete by the first of April.

1,842 bushels of shell were recycled this month. Bins at Sol Legare Boat Landing and Ft. Johnson were cleaned out this month.

Alex Pasquini was hired to replace Sam Bennett. Alex will assist with shell recycling and planting and will also assist on SCORE projects when needed.

Mitigation Projects

Michael went out with Nat Ball from the Army Corp of Engineers to show him some of the SPA restoration sites that have been planted since 2008. Nat wanted to get a better understanding of the work that we are doing for that project.

The planting bid for the three mitigation projects was awarded to EH Clamboat INC out of McClellanville. We will start planting for that project in late May/early June and will take approximately 65 days of planting. We are scheduled to plant 37,500 bushels of oysters at 8 new sites for a grand total of 2.64 acres in Charleston Harbor Watershed. We will also be planting shell at 4 existing SPA sites as adaptive management.

Michael Hodges attended the 104th annual National Shellfish Association meeting in Seattle Washington. He presented a talk entitled "Monitoring Success of Large-Scale Oyster (*Crassostrea virginica*) Restoration as Mitigation in a South Carolina Industrialized Harbor".

Monitoring

We are continuing to process state-wide recruitment trays which have been deployed for 11 months and bags from one year old SCORE reefs. Early indications are that this year will have exceptionally high recruitment and exceptionally high growth rates.

Grant activities

State Wildlife Grant and SCORE:

Nancy Hadley gave a presentation to a Master Naturalist class of eleven. After the presentation, the class loaded shell bags for a reef construction at Edisto Island.

Forty-one volunteers from the Air Force participated in a 2 hour bagging event at Ft. Johnson, filling 600 SCORE bags.

SCORE reefs were constructed at a site between the two old Ashley River Bridges with Leslie Sautter's Marine Geology Class from the College of Charleston. Students from seven universities (James Madison University, Michigan State University, Miami of Ohio University, Western Illinois University, John Carroll University, Bradley University and Illinois State University) participated in expanding the reefs at Fort Johnson this month. Two of the building events were sponsored by Student Today Leaders Forever and represented the largest volunteer events we have hosted to date, 150 students for one and 300 students for another.

Two volunteers were trained to monitor water quality at Palmetto Islands County Park.

A representative from the SCORE program participated in the Charleston County Parks and Recreation volunteer fair at Edisto Hall in James Island County Park.

National Fish and Wildlife Federation

3 people donated a total of 27 hours to build a 200 bag SCORE reef on the AICW near McClellanville, SC as part of our NFWF grant. A total of 6 recruitment trays from two separate sites and 6 bags from last year's 2 reefs were also collected as part of our monitoring efforts.

SCORE staff presented the "Oyster Reefs as Living Classrooms" lesson to a 7th grade and 8th grade class at Lincoln Middle School in McClellanville, SC.

Thirteen teachers attended a teacher's workshop organized by Allison Kreutzer at the Sewee Center in Awendaw, SC. Presentations were given Allie Kreutzer and staff from the MRD Outreach and Education section. Teachers in attendance were from various schools throughout the lowcountry including: Shaw Community Center, Ft. Johnson Middle School, Hilton Head Middle School, St. John's High School, Mason Prep School, Goodwin Elementary School, Cario Middle School, and The Sewee Education Center.

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

The planting bid for deploying 6,520 bushels of shell was awarded to EH Clamboat INC. We will start planting for this project in May and will be working out of B&B Seafood in Bennett's Point. We are scheduled to plant shell at 2 sites on St. Pierre Creek and 1 site on the South Edisto River. The bid for supplying and delivering 6,520 bushels of oyster shell had to be reposted due to lack of bids.

A representative from NOAA (Lisa Vandiver) joined SCORE staff in the field to assess the progress of the NOAA-SARP project. She helped SCORE staff retrieve and deploy 6 recruitment trays, retrieve 6 bags from 2 community SCORE reefs, and collect 9 quadrat samples from 3 large-scale reefs.

Two hundred bushels of shell were taken to Colleton Middle School to bag. All bags will be planted this summer with the middle school in the ACE Basin.

Thirteen volunteers from the University of Georgia donated 66 hours of volunteer time to the SCORE program by helping with fish sampling efforts over a large-scale planting site constructed last year in the ACE Basin. Large quantities of red drum fingerlings were caught over the reef with a seine net.

Two hundred and seventy-five bags were taken to Bennett's Point to prepare for this summer's community reef build events in the ACE Basin.

Semi-annual progress reports were submitted for our ACFHP and two NOAA/SARP projects.

Meetings and Collaborations

Michael Hodges and Nancy Hadley meet with Jason Ayers from USFWS to discuss potential funding opportunities. We will be submitting a proposal entitled "Oyster reef and saltmarsh restoration in SC". We are proposing multiple SCORE sites to be located in Cape Romain National Wildlife Refuge, ACE Basin and Wadmalaw River at the Bears Bluff National Fish Hatchery.

Our joint ACE NERR preproposal for the Collaborative Science program was selected to submit a full proposal. Staff met to discuss reviewer comments and how to address them.

Nancy Hadley met with Kim Counts and Elizabeth Vernon to plan the summer teachers workshop to be held at Bennetts Point in June. The workshop is part of the Seeds to Shoreline program.

Miscellaneous

Nancy Hadley prepared and submitted a pre-construction notification to the USACE for our oyster restoration activities for the year. The application covered 41 sites including large scale sites funded by SRFAC, mitigation projects and grants and SCORE sites. The application was 21 pages long and required more than a week's time to prepare. The application preparation and submission followed DNR's Environmental Review Protocol. We are working with USACE to try to get a general permit for our oyster restoration work so that an annual pre-construction notification will not be needed.

Two hourlies were hired this month. Alex Pasquini will divide his time between SCORE and shell recycling/planting. Holland Youngman is working fulltime for SCORE projects.

Nancy Hadley was invited to submit a paper for an Atlantic Coast Fish Habitat Partnership session at the American Fisheries Society meeting in August.

Nancy Hadley prepares a summary of all previously funded oyster restoration/SCORE projects in the ACE Basin for Sandra Upchurch to submit to NOAA. Nancy Hadley prepared a summary of all previous funding received from NOAA for oyster restoration for Lisa Vandiver, NOAA Habitat Restoration Southeast office.

Nancy Hadley attended the MAC meeting to field questions about the OV Associates mariculture application.

Statistics:

General Activities

- Delinquent letters for late submission of February mandatory logbooks were mailed on March 16th (147 letters) to license holders for February reports not yet received by the March 10th deadline. The affidavit list which includes delinquent offenders for February and prior months was generated on March 30th, 2012 (51 offenders) and was turned over to the Law Enforcement Division.
- Several data requests were completed this month including Menhaden, Oyster harvest, Snapper/Grouper, and Shrimp catch/effort and landings data. In addition, SCDNR provided current vessel information to the NMFS Fisheries Science Center which is a yearly task associated with the Memorandum of Agreement between the two agencies.

Commercial Trip Interview Program

- There was no March sampling effort as most Snapper Grouper fisheries were closed for a spawning period that will be lifted on May 1st. Port agents were active this month with data entry for ACCSP and TIP trips and QA/QC practices. In addition, the juvenile gag sampling traps were deployed this month in Winyah Bay/North Inlet. The traps will be sampled every Monday – Wednesday – Friday through mid June.

Recreational Statistics Section Summary

- Creel Clerks intercepted 86 fishing parties with a total of 179 anglers interviewed during the month of February 2012. Fish measured included: 47 red drum, 22 spotted seatrout, 1 southern flounder, 7 southern kingfish and 6 sheepshead.
- Field work began March 1, 2012 for the Horry County Pier Survey with Coastal Carolina University (CCU). OFM staff accompanied CCU students in the field for the month of March to complete field training and ensure proper conduct of the survey.
- OFM personnel conducted pre-season inspections of horseshoe crab holding ponds on March 13, 2012. The pre-season meeting for the horseshoe crab fishery was held on March 14, 2012 at Charles River Endosafe's facilities in Charleston, SC (Larry DeLancey and Brad Floyd attended from SCDNR). OFM personnel made a presentation on the SC horseshoe crab fishery to the Marine Advisory Committee on March 30, 2012.
- OFM personnel helped review the saltwater commercial fishing and saltwater recreational fishing components of the new Oracle based license system.
- Recreational fisheries staff submitted a proposal to NMFS to fund work to assist with completing the 2013 Marine Recreational Information Program (MRIP) Access Point Angler Intercept Survey (APAIS) South Carolina site register.
- Add-ons were ordered for wave 2 of the MRIP Coastal Household Telephone Survey for SC which will increase survey sample size and precision in the SC recreational saltwater fishing effort estimates.
- OFM personnel conducted sampling on two days in March for MARMAP's gag grouper ingress study in North Inlet (Georgetown, SC).

Additional activities during the month of March included: working closely with commercial seafood dealers to ensure compliance with reporting, assisting DNR's oyster shell recycling program and freezer program and distributing rules & regulations books and fish rulers to coastal businesses as requested.

Finfish Management:

I. SECTION ACTIVITIES

PRESS RELEASES/MEDIA CONTACTS

Local newspaper and television in the Myrtle Beach area reported on a deployment of concrete cones on the Jim Caudle Artificial Reef off Little River. The cones were constructed by the Ready Mixed Concrete Company in Myrtle Beach and donated to DNR's Marine Artificial Reef Program.

II. PROGRAM STATUS REPORTS

STOCK AND HABITAT ENHANCEMENT PROGRAM

ARTIFICIAL REEF MANAGEMENT AND DEVELOPMENT

Artificial reef deployments this month consisted of:

- 98 Ready Mixed concrete cones on the Jim Caudle Reef off Little River;
- Ten square concrete catch basins (2-3 tons each) on the Charleston 60' Reef; and
- 36 concrete culvert pipes (30"-48" diameter) on the Pawley's Island Reef.

WILDLIFE AND FRESHWATER FISHERIES

DEPUTY DIRECTOR'S OFFICE

Deputy Director

Key activities included attending the ACE Basin Task Force meeting, meeting with Deanne Meadus from Ducks Unlimited Canada, a site visit to the Kolb archaeological dig, negotiating a new sea turtle permit with the SC Aquarium, attending the North American Wildlife Resources Conference in Atlanta, meeting with Pickens County to discuss Sassafras Mountain, and attending numerous Legislative committee meetings to speak on behalf of the department regarding legislation. Considerable time was also spent dealing with budget issues, preparing for the WFF Advisory Committee meeting, and administrative matters.

Assistant Deputy Director

Investigated boundary line issue at Lake Warren. Initiated reimbursement process for property sale at Donnelley WMA. Contracted for appraisal of property in Charleston County. Spoke with two separate landowners regarding properties for sale in Greenville and Berkeley Counties, and visited both tracts. Coordinated with Law Enforcement staff on reward for theft of federally endangered plants on DNR land in Greenville County. Investigated status of Tanyard boat landing at Woodbury. Investigated request for filming at Lewis Ocean Bay. Examined potential clothing items for division staff. Reviewed agency list of public accessible facilities. Meetings and events attended: DNR Board meeting; meeting with Pine Ridge town councilman regarding easement request at Styx Compound; Southeastern Landscape Cooperative conference call; archaeological dig at Great Pee Dee Heritage Preserve; and luncheon at Belfast for departing Fisheries Section biologist.

Office of Environmental Programs

Permitting and Review

Staff coordinated 42 DNR reviews (10 COE, 17 DHEC, 4 State Clearinghouse, 11 Misc.) of environmental permits and authorizations for the 38 inland counties. Staff participated in site visits for the proposed Calhouns Mills and Carter Stillely mitigation banks.

FERC Projects

Bad Creek Hydroelectric Project (FERC Project No. 2740). Following the suggestion by DNR staff, Duke Energy will change the Keowee-Toxaway Fisheries Work Plan, 2006-2015 (aka, Bad Creek MOU) to discontinue extra creel surveys scheduled for 2013-15. Reason for this change is because FERC required entrainment studies under Keowee-Toxaway project relicensing, which will provide DNR with alternative, more desired information than the extra creel surveys.

Buzzards Roost (Lake Greenwood) Hydro Project (FERC Project No. 1267). DNR staff is in communication with Greenwood County and US Fish and Wildlife Service staff, seeking to facilitate County action to update the project's Fisheries Resource Enhancement and Mitigation Plan, which has been overdue for submission to FERC since Jan 2011.

Columbia Hydroelectric Project (FERC Project No. 1895). DNR staff participated in a Mar 8 meeting with the project operator, Lockhart Power, to hear about proposed changes to the Operations Monitoring and Compliance Plan; and in response, staff is preparing written comments for submission to Lockhart. Staff also participated in a Mar 29 meeting with the licensee, City of Columbia, to discuss the city's proposed plans for tree removal from the canal embankment; and in response, staff submitted comments to city staff on Mar 30.

Keowee-Toxaway (KT) Hydroelectric Project (FERC Project No. 2503). Relicensing process continues and DNR staff participated in the KT Relicensing Stakeholder Team meeting on Mar 14 as well the Resource Committee meetings of Aquatics and Shoreline Management on Mar 16 and 22, respectively, to address initial implementation of studies.

Neal Shoals Hydroelectric Project (FERC Project No. 2315). SCE&G is implementing fish and macroinvertebrate monitoring studies and continuing to monitor sediment profiles in the Broad River channel in response to the Oct-Dec 2011 sediment release from Neal Shoals Dam.

Riverdale Hydroelectric Project (FERC Project No. 13590). Relicensing process continues. FERC is currently evaluating the adequacy of information provided by the licensee to conduct an Environmental Assessment of the Riverdale hydro project.

Saluda (Lake Murray) Hydroelectric Project (FERC Project No. 516). DNR staff participated in a Mar 20 conference call with SCE&G to address the 2011 Annual Report on Water Quality and Aeration Operations, which includes plans for 2012 operations.

Santee-Cooper Hydroelectric Project (FERC Project No. 199). DNR staff participated in a Mar 29 meeting with Santee Cooper to discuss alternatives for sturgeon passage prior to another Endangered Species Act consultation meeting of Santee-Cooper with National Marine Fisheries Services, which is scheduled for Apr 2-3.

NRC Projects

VC Summer Nuclear Project. Staff is reviewing the National Pollutant Discharge Elimination System (NPDES) draft permit for the VC Summer Nuclear Project.

William States Lee III Nuclear Project. DNR provided comments on the Draft Environmental Impact Statement and Section 404 Permit/401 Water Quality Certification Joint Public Notice and application documents for the William States Lee III Nuclear Project. Staff is currently reviewing the NPDES permit application submitted by the Licensee, Duke Energy.

Special Projects

Haile Gold Mine. Staff is currently reviewing the Comprehensive Baseline Wildlife and Aquatics report submitted by the Applicant, Haile Gold Mine, Inc. in support of the draft Environmental Impact Statement.

WILDLIFE SECTION

Preparations were made for turkey season with distribution of tags to check stations statewide.

Youth turkey hunts were held at Crackerneck, Belfast, Webb, Palachucola, Hamilton Ridge and Marsh WMAs with 73 hunters participating.

Hog hunts were held at Santee Coastal Reserve, Samworth, Donnelley, Webb, Palachucola, Hamilton Ridge, Wambaw and Waterhorn with a minimum of 295 hunters killing 109 hogs. 12 hogs were trapped and destroyed at Keowee and Fant's Grove WMAs. A minimum of 43 hunters participated in raccoon hunts at Donnelley, Bear Island and Botany Bay with 17 raccoons harvested.

Antler scoring sessions were held during the Sportsmen's Classic where 45 staff and volunteers scored 255 sets of antlers. Additional scoring sessions were held throughout the state by Regional staff with an additional 198 sets of antlers scored.

Staff assisted with the Palmetto Sportsmen's Classic including manning the Wildlife Section Display.

The 25th consecutive annual Wild Quail Management Seminar was held at Webb Center with 20 participants.

Staff participated in a feral hog management workshop held in Abbeville County.

WNS surveillance continued with 5 sites monitored in Pickens and Oconee Cos.

The fawn mortality study continued at SRS with 18 does instrumented in preparation for this year's fawning period and 155 coyotes were removed from the study area.

The 2011 Alligator Harvest Report was completed and posted to the web.

3,624 guests signed in at Botany Bay Plantation during March. Equestrian use included 17 groups with 39 riders.

Ten bear complaints were handled in Region 1 and one in Region 2.

The Southern Appalachian Bear Meeting was attended.

The 4th International Bear Workshop was attended in Montana.

The SC Farm Bureau Wildlife Committee meeting was attended.

The winter meeting of the Atlantic Flyway Council Technical Committee was attended.

The ACE Basin Task Force meeting was attended.

The annual DNR/US Forest Service coop meeting was held at Webb.

Staff training during the month included Defensive Driving, DLEO In-Service, Pesticide Training, and CPR/First Aid.

Landowner Incentive Program reimbursements for management practices were processed during the month and seven site visits conducted.

Two new Safe Harbor agreements were signed during the month, 2 baseline surveys conducted and 2 Safe Harbor inspections conducted as well as 5 site visits.

Management recommendations were provided to 9 landowners. Deer harvest data analysis was provided to 2 hunt clubs. Other agencies were provided assistance on 5 occasions requiring 4.5 man/days. Two environmental reviews were conducted. 421 nuisance wildlife investigations conducted (including 123 alligator complaints) requiring 8 site visits. Focus area coordination required 1 day. Slide presentations were given to 27 groups totaling 649 people. Two workshops were given with 95 people in attendance. 50 woodduck boxes were checked. 269 bluebird boxes were checked. Waterlevel management required 88.5 man/days. Seven news releases were submitted. Duck trapping and banding continued with 44 woodducks and 3 other ducks banded. Two environmental reviews

were conducted. 10.5 man/days were spent on data analysis. RCW surveys included 175 acres surveyed for cavities. 18 RCW cavities were installed.

Heritage Preserve activities included 135 site visits. Exotic vegetation control on 3 HPs included 6.3 acres treated and required 12.5 hours. Agricultural activities included 1 acre disced, 182 acres burned, 8 miles of firelanes disced and .25 mile of road graveled. .3 mile of trail was mowed. Construction of the 6th tortoise pen began at Aiken Gopher Tortoise HP. Tree planting at 40 Acre Rock HP included 750 longleaf pine seedlings and 10,000 shorleaf pine seedlings. Five hemlocks at Eastatoe Creek HP and 17 hemlocks at Ashmore HP were treated with a soil drench insecticide in an attempt to reduce tree mortality along the trails. Ten miles of river boundary and 4 miles of land boundary were posted at Waccamaw River HP and 1200 ft. of road graveled. 2600 ft. of boundary was painted at 40 Acre Rock HP. Theft of bunched arrowhead plants was investigated at Bunched Arrowhead HP.

Field agricultural activities on WMAs included 98 acres annuals planted, 22 acres perennials planted, 105 acres mowed, 1081 acres disced, 17039 acres burned, 307 acres fertilized and 20 acres limed. 349 acres were treated with herbicide. Approximately 52.5 miles of fire lanes were disced, 31,680 feet of dike were mowed, 250 feet of dike re-topped, 6 miles of roads mowed, 22.3 miles of roads scraped, 2.1 miles of roads graveled and 3.5 miles of roads re-furbished. 42 WMA signs were erected on 20.1 miles of boundary. Other signs erected during the month included 2 safety zone signs, 41 road closed signs, 132 HP boundary signs and 42 misc. signs. 1 gate was re-furbished and 11 new gates installed. The Forest Service conducted 1760 acres of prescribed fire at Crackerneck WMA. Multiple-site contract prescribe burns (1250 acres) were conducted at Jocassee. 133 trees and shrubs were planted at Samworth WMA. Three miles of roads were limbed at Marsh WMA. 10 acres of quail habitat was planted in ragweed and partridge pea at McBee WMA. The parking lot was graveled at James Ross WMA in York County. New road work was completed at the Heritage Tract in Chester County with 1.1 miles of road graded and graveled and 6 gates installed on side roads. The contract road work began at the Reedy River Tract in Laurens County.

Section staff made contacts with 6 conservation organizations during the month.

FRESHWATER FISHERIES

Freshwater Fisheries Coordination and Administration (Chief's Office)

Conducted the annual meeting of the Freshwater Fisheries Section's biologists at the Webb Center. Representatives of Trout Unlimited, BASS South Carolina Federation, Santee Cooper and the US Army Corp of Engineers participated in day two and three of the meeting.

Attended the March Captains meeting to discuss implementation of the changes to the freshwater fishing laws.

Participated in a meeting of Natural Resource Trustee's, Schlumberger and the Court appointed receivers to discuss a path forward for stream restoration activities at Twelvemile Creek. This meeting was followed up by a site inspection later in the month. Dr. Greg Jennings with NC State has been contracted by the Department of Justice to provide expert technical assistance with stream restoration activities for the Natural Resource Trustee Council.

Met with GA DNR to discuss the impacts of SC law changes on the reciprocal agreement for our border waters and to develop a path forward to maintain as much consistency as is practicable.

Participated in judging the SC Reel Art completion.

Participated in a field activities planning meeting with the staff of Fisheries Region 1.

Participated in ASMFC conference calls to discuss the ramifications of NMFS decision to list Atlantic sturgeon as endangered. The result of the calls was that ASMC will send a letter to NMFS requesting a delay in the effective date of the listing in order to give States more time to prepare for the implementation.

Participated in the Palmetto Sportsman's Classic.

Presented a briefing on implementation of new freshwater fishing laws to LE in-services class at the CJA.

Conducted a conference call with Section Coordinators to discuss administrative issues and field activities.

Region I

Completed installation of a new sign at Calhoun Falls bank fishing area

Conducted day and night electrofishing sampling for striped bass on Lake Thurmond. Assisted Research group with tagging striped bass.

Began spring LMB electrofishing sampling on Lakes Greenwood and Hartwell. Finalized sampling on Boyd Mill Pond, Broadway Lake and Lake Lyman.

Technician Bryant met with Laurens County PRT about gaining launching access to the new boat ramp at Boyd Mill Pond for sampling

Continued updating MSDS sheets for Greenwood and Clemson work centers to comply with OSHA standards.

Dropped trees for trout habitat stream structures on Carrick Creek at Table Rock State Park

- Collected 50 WTB on Rocky River for hatchery use in growing SWH
- Continued ongoing creel surveys on Lakes Keowee and Greenwood
- Continued conducting stream habitat surveys on Jocassee Gorges streams in conjunction with the SARP/EBTJV Grant and the USFS Challenge Cost-Share agreement
- Continued trout stocking in mountain streams on schedule
- Answered numerous questions about the upcoming changes to Chapter 13 regulations
- Four Region 1 staff volunteered at Palmetto Sportsman's Classic
- Assisted pond owners with technical advice
- Attended biologist meeting at Webb Center
- Attended two meetings between Schlumberger, Natural Resource Trustees, and the special "Receivers/judges" for Judge Anderson. The meetings were to resolve stream restoration needs on Twelve Mile Creek.
- Conducted a Region 1 Staff meeting to coordinate spring 2012 spring-summer sampling, and to discuss sampling needs and priorities for the future. Also discussed the status and plans for special project grants and mitigation projects.
- Attended a coordination meeting with GA DNR on the new Chapter 13 fisheries laws.
- Attended a Keowee-Toxaway FERC relicensing meeting on entrainment studies to be conducted by Duke Energy.
- Attended a Fisheries Section coordinators conference call
- Submitted Sport Fish Federal Aid Work Plan for the next job segment

Region II

- Biologist Stroud attended an annual biologist's meeting at the Webb Wildlife Center in Garnett, S.C.
- Biologist Stroud hosted York High School student Alicia Dodge at the Lake Wylie office as part of York High School's Shadow Day.
- Region 2 personnel installed a fish feeder arm on its base at Fisher Pond at Draper WMA, York County.
- Biologist Stroud and Fisheries Technician Wes Stewart conducted an electrofishing demonstration and fish identification for Dr. David Kusher's Wofford University Biology class at Kings Creek, Cherokee County. Twenty-four students participated.
- Biologist Stroud and Fisheries Technician Wes Stewart presented the results of three years data collected regarding the blue catfish population at Lake Wateree to the Carolina Catfish Club. Twenty-five members were in attendance.
- Biologist Stroud and Fisheries Technician Wes Stewart participated in Indian Land High School's Career Day, Lancaster County, S.C.
- Biologist Stroud participated in a required Coordinator's conference call during the month.
- Region 2 Fisheries staff obtained fish specimens for the aquarium exhibited at the Palmetto Sportsman's Classic on the 19th; assisted with set up on the 20th; manned the Chapter 13 Rewrite booth, assisted with the kid's fishing pool, and helped with tear down on the 25th.
- Region 2 Fisheries staff completed spring sampling for largemouth bass on Fishing Creek Lake and initiated sampling on Lake Wateree.
- Biologist Stroud provided the Annual Work Plan for 2013 to Assistant Chief Lynn Quattro.
- Region 2 staff provided maintenance of equipment as necessary during the month.
- Fisheries Technician Jason Marsik provided water quality tests and weed identification for four pond owners at the Florence Office. Biologist Stroud provided weed identification and water quality tests for one pond owner from York County. Biologist Stroud provided management recommendations to these pond owners as required.
- Biologist Stroud responded to pond management inquiries from 9 private pond owners via telephone, email, mail, &/or fax response.
- Contact with NGOs:** Pete Rogers with SC Sportsman's Magazine concerning redbreast sunfish in the Little Pee Dee and Lumber Rivers for an upcoming issue; Dr. David Kusher of Wofford University.

Region III

Reservoir Management

- Spring largemouth bass and crappie electrofishing was conducted at 13 sites on Lake Murray and the data was entered on spreadsheets.
- Fish attractor refurbishment continued at Lake Murray.
- Threadfin shad were stocked in Lake Brown as a forage supplement.
- Largemouth bass sampling, via electrofishing, was conducted at Lake Brown.

Stream Management

- Work continued on developing a draft study proposal the Lower Saluda River.

Other

Maintenance on project boats and equipment was conducted
One or more of the Region's staff was involved in the following activities:
Assisted in otolith extraction and analysis of redbreast sunfish collected from the Edisto River.
Attended a presentation on the geology of the Congaree River floodplain.
Assisted with the Fisheries Section's displays at the Palmetto Sportsman's Classic. This included set-up, manning the display and take-down.
Assisted with an education project for a local high school.
Hosted a Trout Unlimited council meeting and gave a brief presentation on current activities related to the Saluda River trout fishery.
Attended a meeting to discuss the operations of the Columbia Fishway.
Worked with FFA classes to clean up the myrtle trees on the dike for Lake Brown.
Responded to 9 pond owners request for assistance with pond management issues
Met with local school class at the Saluda River to conduct a "Trout in the Classroom" fish stocking
Attended DLEO in-service at the SCCJA
Attended a joint meeting with GDNr to discuss implementation of new Chapter 13 regulations on the Savannah River system

Region IV

Project personnel collected Cooper River largemouth bass for display at the Palmetto Sportsmen's Classic. Project personnel also worked the DNR fishing pond and also manned the Freshwater Fisheries Displays.

Spring Largemouth Bass sampling were begun on earlier than ever before as water temperatures reached levels established by standard protocols. Six of the eight days required were completed in March.

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

Eighty Christmas trees were added to fish attractor #5 in Lake Moultrie

A Clemson graduate student working on cormorants was assisted with fish collections at sites in both Lakes Marion and Moultrie.

Project personnel prepared and manned a freshwater exhibit at Nature Scope, an event hosted by Santee Cooper. Approximately 5,000 K through 5th grade kids attended the event over two days. The young people were educated about what aquatic animals live in and use freshwater ponds and creeks in the low country.

Completed the aging of all the striped bass collected during winter sampling and began the analysis of the blue catfish portion of the sample.

Project personnel collected data from grass carp collected for the Army Corp of Engineers mortality study.

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

Hatchery Coordination

In March, Hatchery staff certified 10,960 grass carp as triploid and issued 13 permits for those fish to be grown or sold in state.

Hatchery staff provided a tour and assistance to Trout Unlimited for their planning meeting at Cohen Campbell State Fish Hatchery.

The annual Hatchery and State Lakes Meeting was held at the Webb Center. Staff from all the public hatcheries in the State attended and presented updates.

Freshwater hatchery staff collected fish stored and harvested fish for the Carolina Sportsman's Classic.

Hatchery staff assisted with the set-up and takedown of exhibits at the Carolina Sportsman's Classic including the fishing pond and the Freshwater Fisheries aquarium and displays.

Hatchery staff attended the Carolina Sportsman's Classic to meet with the public and assist at the fishing pond and at the Freshwater Fisheries booth.

Outreach

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

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

State Lakes

Set up, worked and broke down Freshwater Fisheries Booth, Fishing Pond and Bass Tub.

Assisted Campbell Hatchery Staff with Grass Carp Certification.

Got 8 Fish Feeders operating again at Lake Johnson.

Put out 44 tons of lime at Lake Long, 22 tons at Lake Johnson and 22 tons at Mt. Lakes I.

Repaired Split rail fencing at Lancaster Res. and Sunrise Lake.

Repaired wash out on dike at Lake Wallace with sand/clay and rip-rap.

Removed existing gate pipes in walking trail, removed debris from spillway at Lake Brown.

Diadromous Fishes

Activities

Efforts this months 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, collecting adult shad for brood fish from the Edisto River, monitoring elver ingress at St. Stephen Dam and Goose Creek Reservoir, continuing coordination with contractors responsible for construction of an eel ladder for Goose Creek Reservoir, conducting creel surveys for the recreational shad fishery for the Cooper and Santee Rivers and the Rediversion canal, and using the DIDSON to evaluate shad passage at the New Savannah Bluff Lock and Dam. 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 78% cut in funding for year 3 of the project.

St. Stephen Fish Lift

The fish lift had a major malfunction March 13th and has not been operational since. The ACOE personnel are working feverishly to right the problem. Up to the point of the malfunction, operations occurred with only 6 hours of turbine activity per day. To date passage number are as follows:

American shad 76,017

Blueback herring 35,545

Santee Accord Sturgeon Lake Study

Field sampling and receiver downloads continue. A total of 30 shortnose sturgeon have been captured and transmitted. Netting will continue year round to assess the lake population. Staff is preparing gear in efforts of collecting eggs and YOY sturgeon from potential spawning habitat in the Wateree River.

Meetings and Outreach

Personnel participated in numerous conference calls and meetings concerning ASMFC shad and river herring, NMFS protected resources, and the Santee Accord. Staff attended and presented project data at the annual biologists meeting at the Webb Center in Garnett, SC. Personnel also took part in judging the reel kids art contest and assisted with the Palmetto Sportsman Classic. In addition, employees made an informational video for SCDNR and were interviewed by the Augusta Chronicle (http://chronicle.augusta.com/latest-news/2012-03-29/savannah-river-shad-and-sturgeon-arrive-early-year-1?mmo_ccc=xfinity) and the Associated Press (http://hosted2.ap.org/OREUG/d0732c86f9b44a428fc30e935ef90fcf/Article_2012-04-03-Food%20and%20Farm-Eel%20Frenzy/id-dd13b75896a746b5b338a19828e8d046). Personnel also met with the USFWS, SCE&G, Normendeau Associates, Kleinschmidt, and Duke Energy regularly.

Research

During March eel traps at Wateree and Columbia dams were checked on two dates. No eels were collected from either site during March. Routine maintenance of the eel ramps and associated equipment was conducted as needed. On 13 March a project site visit was conducted with representatives from SCDNR, USFWS and NOAA.

Work continued on the Thurmond striped bass telemetry project. During March we worked with GADNR and USACE to collect striped bass from Thurmond tributaries on 4 dates. In all 28 striped bass (567 – 1025 mm TL) collected from four tributaries were implanted with transmitters. Nine person days were spent downloading and deploying automated receivers.

Staff participated in the setup and teardown of the Palmetto Sportsman's Classic, assisted Region II staff with annual largemouth bass sampling, and assisted hatcheries with striped bass brood stock collection.

Staff retrieved temperature loggers and conducted geomorphological assessments from last year's Stream Assessment sites in the Pee Dee and ACE river basins.

We presented an update on the SC Stream Assessment at the Freshwater Fisheries Biologist meeting, including an assessment of conservation priority rankings for South Carolina stream fishes and status of modeling efforts to forecast habitat and fish metrics from watershed characteristics.

We participated in a conference call with SARP and the South Atlantic LCC to discuss current and future regional instream flow science needs; we reviewed trends in the current regional flow-ecology literature, and reviewed flow-related spatial variables available in a recently developed GIS program.

We presented a lecture regarding stream fish sampling and fish community health assessments to a Clemson University class, and conducted two labs instructing students on backpack electroshocking and indices of biotic integrity.

We submitted an abstract to the SC Water Resources Conference titled "Stream habitat templates in the Coastal Plain influence prevalence of fish life-history traits".

Staff planned and began acquisition of equipment for the Broad River Sediment Management study.

Staff evaluated the estimated feeding rates for *Corbicula fluminea* in Upper Lake Marion. Plans for spring sampling on Upper Lake Marion were finalized.

We made presentations at schools about careers in Fisheries and how we "get our jobs done".

Otoliths were pulled from around 200 redbreast sunfish. This completes otolith extractions from redbreast collected this year from Edisto River. Aging of these fish is in process. Fish from the 2010 year class will be evaluated for oxytetracycline marks in an effort to assess hatchery contribution to this important sport fishery.

We catalogued and entered information into the database crayfish collections made in 2012.

Aquatic Education

Family Fishing Clinics

Worked with graphics to get certificates for Certified DNR Fishing Instructors.

Continued to work towards putting together more Teacher's Kits for instructors for the upcoming spring clinics. So far clinics have been scheduled for April 21 at Sergeant Jasper County Park and Sesquicentennial State Park, April 28 at Devils Forks State Park, April 29 at Camp Gravatt, May 19 at Oconee State Park, and June 5th and 7th at Cohen Campbell Fish Hatchery.

Sent out information about the Family Fishing Clinics via a press release, DNR social media and through email lists.

Begin receiving registrants for the upcoming clinics, entering their data for instructors.

Fishing Tackle Loaner Program

Loaned equipment from the Columbia Office for a Girl Scout event.

Prepped new rods, reels and terminal tackle for Table Rock State Park for pick up.

Worked with graphics to update the Fishing Tackle Loaner Flyer for print and updated the website with the webmaster.

SC Reel Kids

Discussions were held to decide what to do about the future of the SC Reel Kids program. Due to the reduction in education staff support, the development of other aquatic education in other areas, and low active participation, it was decided that we would begin phasing out the SC Reel Kids program. No new kids will be allowed to sign up for the program; however, those still enrolled will continue to participate until they age out of the program at 16 years old.

Reel Art

Sorted and prepared Reel Art entries for the 2012 Judging held March 9th. There were a total of 877 pieces of artwork entered from approximately 54 different public, private and home schools.

Trout in the Classroom

On March 10th, I met with the South Carolina Trout Unlimited Council about Trout in the Classroom—where we are, where we are headed and the assistance needed from TU.

TIC Stockings occurred for Irmo Middle School at Saluda Shoals Park March 23rd with the assistance of Hal Beard and for Palmetto High School at Oconee State Park March 27th with the assistance of Joey Frazier and Stewart Grinton.

Continued to work with the remaining TIC schools to setup their stocking dates and locations.

Youth Bass Fishing Clubs

Received a lot of positive publicity for the Bass Fishing Clubs during the month of March including locally on WIS TV and nationally with FOX News as well as the Augusta Chronicle, The Sun News and The Post and Courier. This resulted in new schools expressing interest and other schools who had expressed interest to move forward!

Held a conference call March 21st with TBF's Youth Director, Mark Gintert, and Dave Gannaway, who worked on the Illinois High School Association and got bass fishing sanctioned there as a sport. It was decided on the call that we would try to meet with all of SC's current coaches and any interested schools on April 14th prior to FLW sponsored TBF National Collegiate Bass Fishing Championship on Lake Murray.

Continued working on development of the Bass Fishing Clubs. Currently, there are 16 schools onboard including Abbeville High, Aynor High, Barnwell County Career Center, Bonds County Career Center, Camden High, Conway High, Dixie High, Dorman High, Greenville Senior High, Ninety Six High, North Augusta Middle, Saluda High, T.L. Hanna High, Waccamaw High, White Knoll High and Wilson Hall (private school). Over the past month, five more

schools have expressed an interest—Lake City High School, Union High School, Blue Ridge High School, Carolina Forest High School and Mid-Carolina High School.

Other

Attended the Freshwater Fisheries Biologists Meeting February 29th and March 1st to present information on the current Aquatic Education programs and efforts.

Filmed a How to Trout Fishing Video at Paris Mountain State Park with DNR Videographer Glenn Gardner and Freshwater Fisheries Biologist Kevin Kubach March 8th for one of the Thinking Outside the Tackle Box Videos.

Filmed the All About Diadromous Fishes Video with Bill Post at the St. Stephens Fish Lift on March 14th.

Exhibited the Aquatic Education Programs and the 2012 SC Reel Art winners at the Palmetto Sportsmen's Classic March 23rd-25th. Setup, coordinated volunteers and facilitated the SC Reel Kids Catfishing Pond all weekend.

Finalized the Aquatic Resources Educator's Association (AREA) Awards and sent out to the AREA members to solicit nominations for award recipients for the October 2012 AREA Conference for Phoenix, Arizona.

Attended the required 4 hour Defensive Driving Course March 16th.

Finalized the Aquatic Education Sport Fish Annual Workplan for 2012-2013.

Assisted Region II Freshwater Fisheries Staff electrofish largemouth bass March 28th on Lake Wateree.

Chapter 13 Outreach & Education

Continued to make the final edits for the Chapter 13 Staff Training Guide that includes fish descriptions and all about the new regulations that will be effective July 2012. This document will serve to train Law Enforcement Officers on the new regs. The guide was also adapted to have an online version that would be available for the public.

Worked with Patty Epley and Sam Hahn on development of the Chapter 13 new fish regs website. The site went live March 23rd. Visit www.dnr.sc.gov/fishregs/ to see the listing of the new freshwater fishing regulations. Worked with Freshwater Fish Chief, Ross Self and Assistant Chief, Lynn Quattro and David Lucas, Editor of SC Wildlife on the development of an article for the upcoming issue of the magazine.

Law Enforcement

DIVISION SUMMARY – COL ALVIN TAYLOR

Officers issued 922 summons and 2,436 warnings with 627 cases clearing court with fines totaling \$91,418.78 being assessed. A total of 3,491 hours were spent on boating patrols resulting in 6,848 boats being checked. Officers spent 504.5 hours on Homeland Security; 861 hours on litter patrols and a total of 256.5 hours were spent patrolling Heritage Trust Preserve properties. Officers also spent 2,056 hours on night patrols. A total of 244 JEA hours were worked.

REGIONS 1 & 2 – MAJ WILLIAM POOLE

Region 1 – CPT Jamie Landrum

Officers issued 388 summons and 761 warnings with 178 cases clearing court with fines totaling \$26,633.88 being assessed. Officers checked 5,491 fishermen, 221 hunters checked and a total of 580 hours were spent on boating patrols resulting in 1,882 boaters checked. Officers gave a total of 64 public presentations. Officers spent 226 hours on Homeland Security, 339 hours on litter patrols. A total of 47 hours were spent patrolling Heritage Trust Preserve properties. A total of 34 hours were spent patrolling Jocassee Gorges resulting in 2 summonses and 2 warnings being issued. Officers also spent 520 hours on night patrols. During the month there was 1 drowning, reported.

Captain's Spotlight

- SGT's Riley and Winegard have worked with Safe Kids, Duke Energy and the Keese Water Safety Organization for the past year. On March 27th was able to un-veil a kiosk at South Cove County Park in Oconee Co that will hold loaner PFD's, that DNR has provided. This is one of 3 kiosk's that will be available to the public in an attempt to prevent drowning, resulting from swimming or boating accidents.
- SGT Owens and 1st SGT Barwick answered a call in reference to subjects shooting a turkey from the road. Suspects were apprehended and charged with turkey hunting out of season, no hunting licenses, and no big game permit. Suspects pled guilty in court with fines of \$ 1,790.00.

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

Officers issued 30 summons and 56 warnings with 23 cases cleared court with fines totaling \$5,596.88 being assessed.

- SGT Busha made a case for turkey hunting out of season.

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

Officers issued 78 summons and 147 warnings with 36 cases cleared court with fines totaling \$4,674.00 being assessed.

- CPL Anders signed warrants on 2 subjects for unlawful transportation or transfer of wild hogs.
- This month SGT Cartee, SGT Fox and CPL Holliday all made cases for illegal sale of white tail deer parts.
- CPL Cooper watched a 4 hour turkey hunt from the wood line on youth day. The youth killed 2 turkeys and failed to tag them at the point of kill. Warnings were issued to the adult in charge of the youth.

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

Officers issued 70 summons and 115 warnings with 21 cases cleared court with fines totaling \$2,349.00 being assessed.

- Officer Smith made a BUI case on Broad River in Union County.
- 1st SGT McCraw and Officer Smith issued 2 summonses for trespassing to hunt turkeys and uncased gun on WMA during Youth Day.
- Officer Miller, with assistance from Officers in Spartanburg County, issued 3 summonses for the illegal sale of whitetail deer parts.

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

Officers issued 151 summons and 300 warnings with 51 cases cleared court with fines totaling \$8,334.00 being assessed.

- CPL Welch made 3 simple night hunting and 2 hunting small game out of season cases. The subjects were killing rabbits while hunting with an AK-47, shotgun, and a 30-30.
- CPL Vaughn concentrated on working the Buzzard Roost area at night which paid off with 4 cases of undersized striped bass and 2 cases for fishing in a restricted area.
- CPL Welch made 1 case for hunting Turkey over bait on Youth Day.
- 1st SGT Lumley and CPL Vaughn rescued 2 fishermen that over turned their vessel on Lake Greenwood.

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

Officers issued 26 summons and 62 warnings with 30 cases cleared court with fines totaling \$3,600.00 being assessed.

- PFC Ginn made 2 turkeys hunting over bait cases on Youth Day.
- SGT Monts worked a drowning on Lake Secession involving a 50 year old male who jumped in the water to get his boat.

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

Officers issued 33 summons and 81 warnings with 17 cases cleared court with fines totaling \$2,080.00 being assessed.

- 1st SGT Talbert, CPL's Bridges, Cutter and Baker worked the TOMO trailer at McCormick High School and at a wild game supper at Sweetwater Church.
- CPL Baker issued 3 summonses for littering.
- Unit 1F documented 7 turkey bait sites.

Region 2 – CPT Sandy Young

Officers issued 183 summons and 462 warnings with 119 cases clearing court with fines of \$10,975.75 being assessed. Officers checked 90 hunters and 3,240 fishermen, and a total of 902 hours were spent on boating patrols resulting in 1,538 boats inspected. Officers spent 101 hours on Homeland Security and 232 hours on litter patrols, and a total of 87 hours were spent patrolling Heritage Trust Preserve properties. Officers gave a total of 53 public presentations. Officers also spent 468 hours on night patrols. There was 1 boating accident and 2 drownings.

Captain's Spotlight

- Officer Coates made 3 contacts on an individual for no set hook permit, illegal possession of game fish and untagged set hooks in the Catawba River.
- SGT McCaskill and Officer Bessinger made 2 cases for untagged and unmarked trotlines in Lake Wateree.

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

Officers issued 58 summons and 83 warnings with 20 cases clearing court with fines totaling \$2,797.75 being assessed.

- Officer Rogers caught a subject on Lake Wylie with over the limit crappie. The subject had 54 crappie.
- Officer Plemmons made 3 over the limit on largemouth bass in Chester County.

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

Officers issued 87 summons and 231 warnings with 64 cases clearing court with fines totaling \$5,543.00 being assessed.

- SGT McCaskill made 2 cases for trespassing to hunt raccoon in Kershaw County.

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

Officers issued 4 summons and 10 warnings with 6 cases clearing court with fines totaling \$655.00 being assessed.

- DLEO McRorie, CPL Walters, PFC's David and Jacobs worked a drowning involving 2 victims over a 4 day period on Lake Robinson.

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

Officers issued 25 summons and 84 warnings with 19 cases clearing court with fines totaling \$970.00 being assessed.

- Unit assisted Chesterfield County with drowning on Lake Robinson.

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

Officers issued 9 summons and 54 warnings with 10 cases clearing court with fines totaling \$1,010.00 being assessed.

REGIONS 3 & 4, INVESTIGATIONS – MAJ CHISOLM FRAMPTON

Region 3 - CPT Harvin Brock

Officers issued 145 summons and 367 warnings with 126 cases clearing court with fines of \$28,132.15 being assessed. A total of 702 hours were spent on boating patrols resulting in 1,679 boaters checked. Officers spent 109.5 hours on Homeland Security; 191 hours on litter patrols and a total of 13.5 hours were spent patrolling Heritage Trust Preserve properties. Officers gave a total of 51 public presentations. Officers also spent 571 hours on night patrols. During the month there were 71 hours spent investigating boat accidents.

Captain's Spotlight

- SGT Smith and CPL Parrish apprehended two subjects on the Congaree River working an illegal gill net strung across a tributary of the river.
- SGT Roosen apprehended and charged two subjects with over limit and undersize crappie on Lake Murray. The two subjects had 89 crappie, [49 over the limit] and 14 undersize fish. The subjects pled to two counts each and were fined and forfeited a total of \$1,600.00

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

Officers issued 50 summons and 110 warnings with 41 cases clearing court with fines totaling \$12,418.90 being assessed.

- All Unit A officers searched for and documented 3 turkey bait sites.
- SGT's DeRienzo and Robinson, along with Unit B officers 1st SGT Britt and SGT's Bickley and Barnes, worked a boating accident on Lake Murray where a subject operating a bass boat before sunrise ran into an island and sustained serious injuries including a dislocated pelvis, broken hip, cracked skull, and missing teeth. During the investigation, marijuana was found leading to a blood draw to be analyzed at SLED. The case is pending further investigation.
- CPL Johnson made a case for Possession of Undersized Striper and SGT Derrick made 2 cases for Possession of Undersized Crappie and 1 case for Over the Limit of Crappie all on Lake Murray.
- SGT DeRienzo provided information to Barnwell Officers on turkey bait which resulted in 2 cases for Hunting Over Bait and 2 cases for Untagged Turkeys.

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

Officers issued 33 summons and 129 warnings with 41 cases clearing court with fines totaling \$7,073.00 being assessed.

- SGT's Roosen and Bickley testified in a weeklong trial involving a double fatality boating accident on Lake Murray.
- SGT's Barnes, Bickley and 1st SGT Britt worked boating accident in on Lake Murray with Unit 3A Officers. Subject struck an island and was injured.

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

Officers issued 19 summons and 29 warnings with 9 cases clearing court with fines totaling \$2,120.25 being assessed.

- CPL's Tyler and Terry made two cases for hunting turkey over bait and two for untagged turkey. They also made two more cases of hunting turkeys from a boat after numerous trespassing calls across the county, with CPL Terry finding a suspicious vehicle at Ray's Crossing Landing. Both officers' follow up resulted in two cases of hunting turkeys from a boat and two cases of no PFD's with 2 warnings written for trespassing to hunt.
- SGT Salter received information regarding suspicious activity, and as a result of her investigation made two cases of trespassing to hunt at the Milliken plant in Barnwell.

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

Officers issued 26 summons and 56 warnings with 26 cases clearing court with fines totaling \$5,290.00 being assessed.

- 1st SGT. Pulaski, SGT. Herndon and SGT Lee apprehended two subjects hunting turkey in a baited area in Bamberg County. One of the subjects also did not have tags in possession. The subjects were fined \$250.00 each.
- SGT. Yongue and CPL. Collins searched the Congaree from Hwy 601 to Eastman for overdue boaters. The subjects were located in good health the next day.
- 1st SGT. Pulaski and SGT. Yongue worked a Career Day presentation at South Carolina State College.
- CPL. Collins and PFC. Lambert apprehended two subjects hunting turkey in a baited area in Orangeburg County. The subjects were fined \$470.00 each.

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

Officers issued 17 summons and 43 warnings with 9 cases clearing court with fines totaling \$1,230.00 being assessed.

- He made two cases for failure to inspect trotline and one case for illegal bait.
- CO April Smith made two warning cases for trotline violations and a boating case for insufficient PFD's. CO J. Smith made a case for undersize largemouth.
- CPL Jervey worked water patrol and made two violations for set hooks and one case for undersize largemouth.

Region 4 – CPT Gentry Thames

Officers issued 201 summons and 831 warnings with 196 cases clearing court with fines of \$25,622.00 being assessed. Officers checked 513 hunters and 2,776 fishermen with a total of 1,223 hours being spent on boating patrols resulting in 1,741 boaters checked. Officers spent 68 hours on Homeland Security and 99 hours on litter patrols. A total of 109 hours were spent patrolling Heritage Trust Preserve properties. A total of 497 hours were spent on night patrols. Officers gave a total of 71 public presentations. Officers also spent 244 hours on JEA patrols. During the month there were 56 hunting accident investigation hours and 64 boating accident investigation hours conducted.

Captain's Spotlight

- CPL's Capps and Kaminskas apprehended 2 subjects hunting turkeys out of season. While on patrol on Youth Day, officers spotted the subjects' truck, then followed the hunter's foot tracks and located the 2 adults hunting turkey. Both subjects were charged with Hunting Turkey Out of Season and several warnings were issued for license violations.
- CPL Pope, CPL Wallace and 1st SGT Thomas located and documented a marijuana grow site consisting of approximately 200 plants.
- During a JEA patrol, SGT Smith, SGT Priester and CPL Wallace located a charter fishing vessel without his federal snapper/ grouper permits, as well as, in possession of an oversize redfish. SGT's Smoak, Gantt and CPL Ladue conducted JEA Patrols resulting in 6 summons, 20 warnings and 12 EARs being issued for possession of Black Sea Bass, Red Snapper and boating violations.

Unit 4A (Horry) 1st SGT Joe Ard

Officers issued 38 summons and 126 warnings with 20 cases clearing court with fines totaling \$2,015.00 being assessed.

- PFC Pardue and CPL Hutson caught 1 person for transporting hogs illegally.
- CPL Chanaca and PFC Robinson caught 1 person in the Cherry Grove area for having Black Sea Bass and a BUI.
- PFC Robinson caught 1 person for taking waterfowl out of season with an unplugged gun with the assistance of CPL Hutson.
- CPL Floyd and SGT Prosser caught 1 person for hunting turkeys over bait that PFC Pardue had located a few days before.

- PFC Robinson worked on the Waccamaw River checking for set hook violations making 8 cases for non-game violations.

Unit 4B (Georgetown) 1st SGT Ryan Williams

Officers issued 25 summons and 47 warnings with 58 cases clearing court with fines totaling \$7,730.00 being assessed.

- CPL's Capps and Kaminskas caught a subject for BUI on the Waccamaw River.
- CPL's Kaminskas and Duncan worked a Catfish tournament on the Santee River and caught 4 subjects with illegal set hooks, illegal bait, set hours and no license. The subjects also did not have enough PFD's.
- SGT Pop and DLEO Altman were able to conduct a Buy/ Bust operation on a subject selling illegal shellfish. The subject was charged with selling without a license and improper handling of shellfish.
- 1st SGT Williams and CPL Capps performed a rescue mission in Winyah Bay on lost boaters that called in that they were sinking and then contact was lost. The distressed boaters were located by USCG helicopter; and then picked up by 1st SGT Williams and CPL Capps who then took them to safety.

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

Officers issued 67 summons and 270 warnings with 53 cases clearing court with fines totaling \$6,655.00 being assessed.

- CPL's McClellan and Crawford worked commercial herring fishing resulting in 2 cases being made.
- CPL Chavez assisted ATF Arson investigators and USCG Special Investigators on a suspicious boat fire in the Wando River.
- SGT Earhart concluded an investigation resulting in charges for 2 individuals for possession of Bald Eagle parts.
- PFC Day and 1st SGT MacBride apprehended a subject in Charleston harbor, operating erratically in a rubber dingy at 7:30 in the morning. The subject was charged with Boating under the Influence, failure to register water craft, and failure to title motor.
- PFC Duncan made 6 cases for hunting turkeys over bait, 2 for no turkey tags, and 1 for use of an electronic call. He also made cases for placing bait on WMA and hunting out of season.

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

Officers issued 40 summons and 288 warnings with 31 cases clearing court with fines totaling \$4,812.00 being assessed.

- SGT Richardson and CPL Ladue worked commercial crab pot issues resulting in 5 cases and 85 warnings being issued.
- SGT Gantt worked a hunting accident in Dorchester County where the subjects were quail hunting out of season. Charges are pending.
- 1st SGT Ellis, SGT's Richardson and Gantt worked a trespassing to fish call resulting in 3 cases being made and 1 subject arrested on an outstanding warrant with the North Charleston Police Department.
- 1st SGT Ellis and SGT Richardson conducted a training class for approximately 40 to 50 Wal-Mart employees regarding hunting and fishing license sales and requirements.
- SGT Kinsey worked a litter patrol off of Sandy Landing Road resulting in 1 case being made.
- SGT Garner and CPL Brown assisted SGT Pritcher with a boating fatality on the Stono River near Coburg Creek.
- CPL Brown caught 4 subjects stealing shellfish from a commercial lease. The subjects were charged and convicted resulting in fines of \$2,000.00
- CPL Brown also dealt with commercial crabbing issues resulting in 2 cases and 4 warnings being issued for commercial crab violations.
- Officers had their vehicles and vessels surveyed for computer mounts related to the port security grant MDT project.

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

Officers issued 13 summons and 39 warnings with 19 cases clearing with fines totaling \$2,450.00 being assessed.

- SGT Graham caught a subject hunting over bait in Colleton County.
- SGT Graham and CPL Jones caught 3 subjects with open containers at a boat ramp in Colleton County. 1 of the subjects was wanted by Walterboro PD on a warrant.

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

Officers issued 18 summons and 61 warnings with 15 cases clearing with fines totaling \$1,960.00 being assessed.

- CPL Pope caught a subject taking a Turkey over bait and waited on him to come out of the woods before he approached the hunter. The hunter also did not tag the turkey and was charged for both violations.
- CPLs Davis and Wallace worked set hooks in the Savannah River and made 24 contacts ranging from illegal possession of game fish and game fishing devices, untagged lines, and after hours.
- CPL Godowns and 1st SGT Thomas caught 2 subjects in possession of a game fish while running set hooks. The subjects had also left their lines in the water all day. CPL Godowns issued 3 cases and 1 warning for the violations

Investigations - CPT Gary Sullivan

Officers issued 5 summons and 8 warnings with 8 cases clearing court with \$55.00 in fines assessed. A total of 8 boats were inspected. A total of 84 boating hours were accrued this month. There was 1 boating incident/accident report submitted and

processed. There was 1 boating fatality this month. There were 2 hours of Homeland Security work conducted. There were 11 maintenance request received. There were 173 Marine Event Permits processed; 5 dive assignments were completed.

STAFF OPERATIONS – MAJ MARK CAREY

Legislation & Grants – CPT Mike Sabaka

- Completed and sent the 2012 State Recreational Boating Safety Grant budget application and report narrative to the US Coast Guard.
- Worked with Region 4 on updates to existing Port Security Grants.
- Worked on CAD project for dispatch.

Records & Technology – Greg Miley

- Number of Summons entered – 691
- Number of Warnings entered – 1337
- New Suspensions – 36
- Suspensions Closed – 39
- Current Active Suspensions – 619
- Number of Pending Suspensions – 57

Supply & Equipment – SGT George Dukes

- Received, processed, and issued several new boats and vehicles for various divisions including: 1 van; 1 car; 10 trucks; 4 ATV's; 3 ATV trailers; and 3 patrol boats.
- Installation of emergency lighting and radios in one new Law Enforcement vehicle.
- Worked to identify vehicles and boats for disposal at surplus property.
- Worked with MMO and vendors re: uniform orders.
- Received and issued several parts of spring uniform and equipment order.
- Finalized Outboard Oil and Fuel Treatment orders.
- Continued repairs and updates at Styx warehouse to including roof repair estimates; vendor meetings; and general equipment repairs and service.
- Continued work with Verizon and DPS on inventory tracking solutions.
- Assisted Communications Manager to Ship radio equipment to Boat Mfg. for installation and auto-tuned Investigations radios.
- Assisted training with vehicles for in-service.

Homeland Security / EMD / Dispatch – SSGT Rick Dye

- Escorted Nuclear shipment
- Attended SCHP Hurricane Table Top Exercise
- Attended 3 day Emergency Management Conference in Spartanburg
- Participated in Conference call with Southern Software reference the Computer Aided Dispatch system
- Attended the State Full Scale Mid-planning conference
- Attended the North Santee Dam Initial Planning meeting in Monks Corner
- Attended in-service
- Wrote a warning for littering (Fish entrails)
- Total dispatch calls for service logged: 1,179
- Litter Buster Total Calls: 273 Top three counties; Greenville (57); Charleston (44); Lexington (39)
- Total dispatch calls forwarded to officers 906: Top three call types: Nuisance Wildlife Cal (198); Injured Animal (127); General Information Call (109)
- Warrant activity for March: Statewide started month with 369, added 2, removed 0, ended month with: 371

Communications - Vandy Waller

- Assisted Sled in one FNS shipment.
- Problem with the Radio Room's net clock repaired and reinstalled.
- Used the new Auto Tune software to calibrate 1 boat radios and 51 Wt's for Regions 2, 3, and 4.
- Prepared one new vehicle for the Exec Protection detail.
- Called out approximately 8 hours after hours during some storms and restored communications as needed.

- Working on an interference problem for Little Mountain and Santee repeater with digital interference from out of town.
- Working on FCC license upgrades and modifications.
-
- Continuing to reprogram all of the other division's radios with the updates. We reprogrammed approximately 25 of their radios this month.
- CM Waller and Sgt Duke's transferred some radios and completed the TID process and delivered old radios for disposal.

Education – LT Billy Downer

Officers issued 0 summons and 7 warnings with 0 cases clearing court with \$0.00 in fines assessed. A total of 14 boats were inspected and a total of 8 boating hours were accrued this month. A total of 72 presentations were given to the public.

- 644 students were certified in 25 Hunter Education classes; 121 students were certified in Hunter Education Internet classes; 74 CD-ROMs were mailed and a total of 40 students were certified in Hunter Education CD-ROM classes; and 22 workbooks were mailed and a total of 15 students were certified by workbook.
- 328 students were certified in 15 Boater Education classes; 71 students were certified in Boater Education Internet classes; 8 students were certified in Boater Education Video classes.
- 1,770 shooters at the Pickens Range and 687 shooters at the Spartanburg Range during the month.

Special Detail/Training – LT Robert McCullough

- **Property Watch Activity:** 14 signed up for program \$854.00 in sign sales
- **Media/Special Operations:** Media calls on 2 deaths boating fatality in Chesterfield Co. Media call on 1 fatality boating Charleston Co. Media calls on trial of Lake Murray fatalities. Security at the Classic all Officers did an outstanding job and represented the Department well.
- **Training:** Spring in-service started with Department LE and DLEO's attending. A hunting incident school was held at Webb Center. Diver training seminar was held in Richland Co with divers from around the state in which LT Baxley was a keynote speaker.

Aviation - Pilots Bucky Harris, Owen Barker

- 19 flights resulting in 50.8 flight hours
- 38.5 Law Enforcement flight hours
- 5.9 Restricted/Law Enforcement
- 3.7 JEA flight hours
- 8.6 SAR flight hours

OUTREACH AND SUPPORT SERVICES

MAGAZINE

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

- Magazine photo staff continued shooting photos for the upcoming 2012 magazine issues.
- Magazine photo staff continued providing photo assistance to the DNR, including covering the Palmetto Sportsmen's Classic, WFF freshwater fishing videos and outside photo requests.
- Staff received office copies of the March-April 2012 issue, which features articles on the Boykin Spaniel field trials, the impact of bass fishing tournaments at some of the state's high schools, dolphins strand-feeding, the foldingdoor spider, the South Carolina/North Carolina border survey, the Chinese tallow tree, and the watchable wildlife piece on the chuck will's-widow bird.
- Editorial assistant continued fulfilling magazine photo requests, including archiving digital photos, pulling photos/slides/digitals for DNR's graphics and other staff; coordinated photo judging and notifying winners of the SCW Photo Exhibition; set-up, man, and takedown of the Wildlife Shop and SCW Photo Exhibition exhibits at the Palmetto Sportsmen's Classic.
- 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 \$43,327, which includes the magazine subscriptions and Wildlife Shop sales.

GRAPHICS

- The Graphics section completed fifty-nine jobs in the month of March. Much of this month was spent preparing items for the Palmetto Sportsmen's Classic. Some of these items were displays, signs, and materials explaining Chapter 13. There were several brochures completed to assist with the Aquatic Education program. We also completed several specialty items for the Classic. The agency spent approximately \$27,222.00 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.

NEWS DESK

- Inquiries via Facebook: 31
- Phone inquiries: 37
- Email inquiries: 8
- Facebook posts: 46
- Twitter posts: 26
- News releases: 26

QUALITY MANAGEMENT

- Tested SCI Recreational Licensing and Boating system, reported errors and bugs to SCI in test system.
- Continued to clean up data from the current operating system, including the lien holder table and other tables as needed.

REWARDS AND RECOGNITION

Three On The Spot Awards were given out in March:

3/2/2012 WFWF

TREYE BYARS

3/2/2012 WFWF

DREW ROBB

3/2/2012 WFWF

APRIL ATKINSON

PALMETTO SPORTSMEN'S CLASSIC

The final number of vendors booked for the 2012 show was 325 which exceeded our goal of 300. This total is 45 more vendors than the 2011 show.

Total Number of Vendors	
2011	280
2012	325

Ticket Sales

- Ticket sales this year increased by approximately 200 tickets. Comp tickets usage increased by approximately 100 tickets.

Demographic Information

- We hired the USC Institute for Public Service and Policy Research to survey our attendees at the 2012 Classic. This will provide us with the first demographic data for the Classic since 1999. We are anxious to find out where these attendees heard about the Classic so that we can modify our advertising as well as what attendees are looking to buy, where they are located, and a range of additional information that will help us to plan the 2013 show.

Advertising

- We took a fresh look at advertising this year. We advertised on billboards for the first time in years and added cable TV. We switched up some of our radio station advertising and increased our web presence. We also had our brochure distributed at several USC Baseball games and gave out free tickets.

TECHNOLOGY DEVELOPMENT

Data Base Management and Applications Development.

Continued development of financial interface program between SCI and SCEIS for handling licensing and titling transactions. Continued installation and configuration of Computer-aided Dispatch (CAD) system for Law Enforcement Communications Center that will utilize GIS for incident mapping and dispatch. Installed the database and server operating system and upgraded the memory to support the LE CAD. Continued the development of a multi-state fisheries management database and software for the SEAMAP program. Completed modifications to existing Oracle PL/SQL programs and stored procedures to access new data schema that will be implemented with the new licensing and titling system. Internal testing has been completed. User testing will proceed when the SCI programs are completed. Continued migration of static data tables from the old tables to the new data schema to reduce the time required for system implementation. Continued to support the geologic carbon sequestration, hydrologic well 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. Restarted the design of internal financial records management system to interface with SCEIS including the returned checks, 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. Completed initial design and

demonstration of a DNR photographic document reference library. Developed various fillable forms for agency programs including ADA and travel request forms. 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 case files, violations/summons billing and aviation log applications. Provided records management and permanent archival support to the agency using record export and archive process. Added 42,139 images and 15,142 records to the electronic document repository and transferred 8,196 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, hydrology/geology wells and WMA data and applications. Completed LiDAR data acquisition and cross-calibration flights for six counties (Calhoun, Aiken, Barnwell, Abbeville, Edgefield and McCormick). Data are now being processed. Continued QA/QC evaluation of LiDAR data for Lexington and Charleston. Provided GIS database and GPS support to the various agency programs.

Systems and Network Management.

Developed server and installed database and memory upgrades to support the LE CAD system implementation. Updated and tested computers and scanners to support the archery scores. Installed upgrades to Mail Order Manager software. Sent weekly email blast to notify citizens of DNR activities. Added latest security patches and operating system service pack upgrades to agency servers. Upgraded MS Exchange & Blackberry server to latest version and patches. Resolved issues with internet authentication system. Added 17 backup clients in Columbia, Clemson and Charleston. Resolved several network, email and communications issues. Provided data recovery support to the agency including recovery of deleted files and directories for 5 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 6 technology procurement requisitions and provided specification, installation and configuration support for DNR staff. Help Desk staff answered 196 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 Law Enforcement, Engineering, Flood Insurance Program, Executive Office, Wildlife Magazine 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 or updated SC Wildlife Magazine, Junior Duck Stamp, SC ReelKids, Turkey regulations, Palmetto Sportsman's Classic. Title 50 Freshwater Fishing and other web pages. Provided web site support for the SEAMAP, Managed Lands, Shooting ranges and SC Wildlife Magazine programs. Posted Archery in Schools scores for annual competition. 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 53 new web & intranet pages and updated or modified 379 existing program web pages. Continued enhancement and maintenance of DNR managed lands and reservoir web applications. The DNR web site 230,487 visitors with the agency calendar, trout book and freshwater fishing pocket guide as the most viewed pages. The GIS Data Clearinghouse had 24,725 map files downloaded with LiDAR data (terrains and intensity images), Digital Orthophoto Quarter Quadrangles, Digital Raster Graphics, soils and geology 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. Attended the SC Information Technology Director's Association spring conference and volunteered to serve on the fall conference planning committee.

PROCUREMENT

PURCHASE ORDER TRANSACTIONS	NUMBER	EXPENDITURES
Purchases, Quotes and Bids	108	\$1,021,734.58
Blanket Orders	0	\$2,450.00
Exempt	6	\$53,581.24
Sole Source Procurement	4	\$142,449.00
Emergency Procurement	0	\$0
Grant Exemptions	<u>0</u>	<u>\$0</u>
Total	118	\$1,220,214.82

FPR's	72	\$42,622.20
Check Request	57	\$282,065.33
Minority Vendors	5	\$21,338.54
Procurement Card Purchases		\$304,905.50

RFQ/Bid Awards					Term
<u>Division</u>	<u>Commodity/Service</u>	<u>Requestor</u>	<u>Requisition #</u>	<u>Contracts</u>	<u>Award Amount</u>
WFWF Division	Deliver&spread gravel	Gerald Moore	5400003969	No	\$ 42,950.00
WFWF Division	Grass mowing	Joey Lindler	5400003961	Yes	\$ 15,000.00
WFWF Division	Deliver Fertilizer	Dean Harrigal	5400004070	No	\$ 10,699.75
Marine Division	Haul Oyster Shell	Ben Dyar	5400004030	No	\$ 7,200.00
Marine Division	Plant Oyster Shell	Michael Hodges	5400004049	No	\$ 65,250.00
Marine Division	Plant Oyster Shell	Michael Hodges	5400004099	No	\$ 11,801.20

ENGINEERING

Priority	County	Project Name
2 - Under Contract	Charleston	Santee Coastal Blake House
	Laurens	Boyd's Mill Pond Boating Access
	Marion	Shotgun Range at Marsh
	Richland	Bates Bridge Landing Ramp Relocation
3 - Permitting & Design	Aiken	Riverview Park Transient Courtesy Dock Addition
	Allendale	Highway 301 Fishing Access
	Anderson	Dolly Cooper Park Canoe Access
	Anderson	Green Pond Boating Facility
	Barnwell	Highway 39 Boat Ramp Repairs
	Colleton	National Estuarine Research Reserve Bank
	Bacons Bridge Boat Ramp	Dorchester
	Horry	Bucksport Ramp Renovation
	Horry	Hwy 22 and 17 Boating Facility
	Horry	Rosewood (Socastee) Ramp Repair
	Jasper	Knowles Island Fishing Pier
	Kershaw	Habitat Enhancement
	Laurens	Belfast Restroom Rehabilitation
	Pickens	Pickens Range Archery Range & Tower
	Spartanburg	James Thomason Range
	York	SC Hwy 211 Boating Access
4 - Pending Projects	Anderson	Piedmont Access
	Georgetown	Rocky Point Landing
	Georgetown	Tom Crocker & Shell Road Ramp Repairs
	Horry	Savannah Bluff Ramp Repair
	Jasper	Tuten Landing Resurfacing
	Laurens	Laurens City Park Archery Range
	Laurens	Reedy River Carry Down Access
	Marion	Hwy 301 Ramp Relocation
	Marion	Woodberry Rifle Range
	Richland	Columbia Canal Fishing Access
5 - New Project Requests	Saluda	Chapells Boating Access
	Beaufort	Beaufort Waterfront Transient Dock
	Greenville	Piedmont Saluda River Access
	Lee	Highway 76 @ Lynches River

BOATING/LICENSING

Boating Operations March 2012

Basic Business Report

	MTD	Monthly Revenue	(previous ytd)	YTD
Watercraft - New Titles	1,125	\$13,983.75	\$45,370.00	\$59,353.75
Outboard Motor - New Titles	819	\$8,140.86	\$20,480.00	\$28,620.86
Watercraft - Transfers	2,413	\$13,874.75	\$35,046.00	\$48,920.75
Outboard Motor - Transfers	1,902	\$19,020.00	\$40,640.00	\$59,660.00
Internet Registration Renewals	1,498	\$14,980.00	\$25,400.00	\$40,380.00
DNR Office Renewals	9,717	\$97,170.00	\$54,490.00	\$151,660.00
Mail Renewals	5,786	\$57,860.00	\$98,850.00	\$156,710.00
Law Enforcement Boating Dollars (Drew's Law)		\$250,291.00	\$516,822.00	\$767,113.00
Active Watercraft Registrations				362,066
Inactive Watercraft Registrations (including dropped records)				288,506
Total number of Watercraft				365,544

Commercial License Operations MARCH 2012

Basic Business Report

License Type	Licenses Sold		Licenses Sold Last		\$ YTD	\$ YTD Last Month	\$ MTD
	MTD	Month	MTD	Month			
Commercial Saltwater Res	1,176	1,150	26		\$196,665.50	\$28,737.50	\$656.25
Commercial Saltwater Non	158	158	0		\$47,400.00	\$47,400.00	\$0.00
Commercial Saltwater Total	1334	1308	26		\$244,065.50	\$76,137.50	\$656.25
Trawl Res	310	310	0		\$392,390.00	\$38,750.00	\$0.00
Trawl Non	108	107	1		\$32,385.00	\$32,100.00	\$285.00
Trawl Total	418	417	1		\$424,775.00	\$70,850.00	\$285.00
Crabs Res	356	340	16		\$158,481.50	\$21,050.00	\$622.50
Crabs Non	17	17	0		\$29,068.75	\$6,000.00	\$0.00
Crabs Total	373	357	16		\$187,550.25	\$27,050.00	\$622.50
Shellfish Res	256	252	4		\$100,387.50	\$18,900.00	\$300.00
Wholesale Res	273	272	1		\$198,375.00	\$27,200.00	\$100.00
Wholesale Non	11	11	0		\$5,500.00	\$5,500.00	\$0.00
Wholesale Total	284	283	1		\$200,875.00	\$32,700.00	\$100.00
All Commercial Types Res	3971	3861	110		\$1,105,633.50	\$160,585.50	\$2,694.50
All Commercial Types Non	371	369	2		\$614,629.50	\$95,825.00	\$332.50
All Commercial Types Total	4342	4230	112		\$1,720,263.00	\$256,413.50	\$3,027.00

Licensing Operations MARCH 2012

Basic Business Report

	MTD Quantity	MTD Revenue	Last Year MTD Quantity	Last Year MTD Revenue
Resident Hunting Licenses	2,513	\$ 16,213.00	1,215	\$ 15,282.50
Non-Res. Hunting Licenses	2,425	\$ 151,079.00	2,435	\$ 150,147.00
Total	4,938	\$ 167,292.00	3,650	\$ 165,429.50
Resident Fishing Licenses	31,153	\$ 246,967.00	20,724	\$ 166,238.00
Non-Res. Fishing Licenses	10,904	\$ 152,120.00	8,334	\$ 115,620.00
Total	42,057	\$ 399,087.00	29,058	\$ 281,858.00
Combo. Licenses	959	\$ 28,828.00	784	\$ 23,710.00
3 Yr. Resident Hunt	21	\$ 532.50	25	\$ 591.00
3 Yr Resident Fishing	626	\$ 16,902.00	379	\$ 10,233.00
3 Yr Non-Res Fishing	48	\$ 4,896.00	18	\$ 1,836.00
Lifetime Licenses	1,274	\$ 18,214.00	1,056	\$ 8,481.00
L/T Disability Licenses	5	\$ -	2	\$ -
3YearDisability	370	\$ -	403	\$ -
Turkey Tags	4,407	\$ 0.00	Opens 03-15-12	

License Agents Numbers and Sales (Month To Date)

LicenseAgents Quantity	Manual 0	Point of Sale 507	Internet & Call Center 1	SCDNR Offices 4	Totals 512
Total License		40,930	7,329	447	48,706
Total Revenue	\$ 0.00	\$ 443,237.50	\$ 168,932.00	\$ 7,227.50	\$ 619,396.50
% sales to agent type	0.00 %	71.56%	27.3%	1.2%	
NEW POS AGENTS	0				

SC DEPARTMENT OF NATURAL RESOURCES				
WATER RECREATIONAL AND GAME & FISH FUNDS				
AVAILABLE CASH AS OF March 31, 2012				
REG 1 HUB Balances	WREC	G&F	FY12 Lic Rev	FY12 Fine Rev
Abbeville	83,049.19	24,148.82	3,493.87	925.30
Anderson	40,643.43	138,288.38	11,914.34	2,705.94
Cherokee	193,736.07	151,922.32	8,653.93	913.80
Edgefield	65,573.29	34,567.91	2,999.45	2,155.64
Greenville	99,554.29	99,684.31	9,427.06	3,189.45
Greenwood	78,399.79	40,068.14	6,028.50	1,753.58
Laurens	107,563.58	48,187.22	5,053.03	5,359.30
McCormick	33,657.19	22,501.50	4,068.58	848.21
Oconee	433,697.72	314,976.55	17,458.42	1,302.55
Pickens	52,765.73	78,944.26	9,453.63	2,541.77
Spartanburg	53,676.04	146,422.17	12,018.61	3,158.63
Union	99,210.15	37,684.55	3,327.16	3,053.05
REG 1 Total	1,341,526.47	1,137,396.13	93,896.58	27,907.22
REG 2 HUB Balances	WREC	G&F	FY12 Lic Rev	FY12 Fine Rev
Chester	162,275.01	50,853.14	3,578.25	4,047.30
Chesterfield	52,766.41	19,743.11	3,811.49	640.99
Darlington	198,249.38	20,422.23	3,340.27	994.44
Dillon	162,820.11	48,524.95	4,864.00	344.56
Fairfield	56,737.51	138,814.64	6,261.17	2,296.83
Florence	412,646.97	51,365.93	4,005.79	1,086.86
Kershaw	230,135.64	70,679.08	4,599.04	723.61
Lancaster	257,734.45	120,778.68	9,609.85	1,829.71
Lee	105,042.78	13,708.20	2,460.28	773.98
Marion	118,794.42	28,116.47	2,798.55	573.18
Marlboro	98,677.87	27,457.32	3,328.56	520.49
Williamsburg	116,002.98	30,101.93	2,634.15	601.20
York	223,253.42	75,286.92	29,160.55	1,653.39
REG 2 Total	2,195,136.95	695,852.60	80,451.95	16,086.54
REG 3 HUB Balances	WREC	G&F	FY12 Lic Rev	FY12 Fine Rev
Aiken	17,778.84	59,208.63	5,611.34	2,334.94
Allendale	25,994.00	25,124.32	2,537.94	396.38
Bamberg	61,366.62	17,146.27	2,479.94	118.09
Barnwell	87,225.51	37,463.08	2,743.91	1,164.20
Calhoun	70,291.22	38,297.45	3,025.25	2,310.86
Clarendon	68,842.77	55,181.04	8,172.74	3,235.60
Lexington	710,101.31	119,565.42	11,098.11	6,341.96
Newberry	122,060.07	77,292.08	6,053.12	1,779.70
Orangeburg	170,586.28	108,982.75	8,436.34	1,887.92
Richland	328,313.59	99,480.12	11,536.92	2,145.41
Saluda	113,121.51	55,745.20	4,098.88	1,419.26
Sumter	165,200.14	32,075.80	3,708.70	4,129.46
REG 3 Total	1,940,881.86	725,562.16	69,503.19	27,263.78
REG 4 HUB Balances	WREC	G&F	FY12 Lic Rev	FY12 Fine Rev
Beaufort	102,701.37	87,613.58	4,002.87	4,110.82
Berkeley	379,064.74	162,949.73	11,732.14	4,474.04
Charleston	462,184.18	86,521.19	6,382.89	13,937.68
Colleton	97,101.38	56,120.96	3,333.27	2,447.00
Dorchester	268,053.53	33,366.41	3,690.39	681.93
Georgetown	18,626.91	100,180.90	4,392.22	10,550.03
Hampton	89,635.38	58,112.68	3,026.04	852.46
Horry	253,036.41	74,221.69	11,381.19	6,064.43
Jasper	60,396.95	73,235.86	4,134.01	2,199.57
REG 4 Total	1,730,800.85	732,323.00	52,075.02	45,317.96
AVAILABLE TOTAL	7,208,346.13	3,291,133.89	295,926.74	116,575.50

LAND, WATER & CONSERVATION

OFFICE OF DEPUTY DIRECTOR

Ken met with Savannah District Corps of Engineers, Georgia EPD & the Nature Conservancy in North Augusta regarding Savannah River Study (3/1). Participated in Kolb Site opening day ceremony (3/5). Attended the Deputy Director's meeting and met with the Chairman of the Savannah River Basin Advisory Committee (3/6). Attended Senate Fish, Game & Forestry Committee hearing (3/7). Ken chaired the S.C. Drought Committee meeting (3/8). Ken participated in Kolb Site Public Day activities (3/10). He attended the 2012 S.C. Environmental Conference (3/11-12). Visited the Heritage Trust potential land acquisition site in the Summerville area (3/13). Participated in the Interstate Council on Water Policy Washington Roundtable teleconference (3/14). Ken attended Ashley Scenic River Annual event (3/15). Ken met with Environmental Review staff regarding South Saluda River and the Water Planning team meeting (3/20). Met with CDM Consultants re: water planning (3/21). SCDNR Board meeting (3/23). Participated in the Palmetto Sportsman's Classic (3/23-25). Attended SE Regional Climatology Conference (3/27). Met with USDA/FSA re: water & drought issues (3/29).

HABITAT PROTECTION AND ENVIRONMENTAL CONSERVATION SECTION

River Conservation

Ashley Scenic River Project:

The Ashley Scenic River Event, a community education/outreach effort of the advisory council was held March 15 at Charlestown Landing. The event was sponsored by the Charleston and Dorchester Soil and Water Conservation Districts in partnership with SCPRT and DNR. Approximately 75 people were in attendance and three speakers addressed aspects of the river to include history, fishery research, and plans for new recreational access.

Catawba Scenic River Project:

Staff and the advisory 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 Mar 19 to address plans to redevelop the FRED website, promote Stewardship Day river cleanup, participate in Rose Festival in Orangeburg, and further investigate a wastewater issue in Batesburg-Leesville.

Lynches Scenic River Project:

Staff continues to distribute Lynches River water trail guides and address public inquiries concerning travel on the river.

FERC Hydro Projects:

Bad Creek Hydroelectric Project (FERC Project No. 2740). Following the suggestion by DNR staff, Duke Energy will change the Keowee-Toxaway Fisheries Work Plan, 2006-2015 (aka, Bad Creek MOU) to discontinue extra creel surveys scheduled for 2013-15. Reason for this change is because FERC required entrainment studies under Keowee-Toxaway project relicensing, which will provide DNR with alternative, more desired information than the extra creel surveys.

Buzzards Roost (Lake Greenwood) Hydro Project (FERC Project No. 1267). DNR staff is in communication with Greenwood County and US Fish and Wildlife Service staff, seeking to facilitate County action to update the project's Fisheries Resource Enhancement and Mitigation Plan, which has been overdue for submission to FERC since Jan 2011.

Columbia Hydroelectric Project (FERC Project No. 1895). DNR staff participated in a Mar 8 meeting with the project operator, Lockhart Power, to hear about proposed changes to the Operations Monitoring and Compliance Plan; and in response, staff is preparing written comments for submission to Lockhart. Staff also participated in a Mar 29 meeting with the licensee, City of Columbia, to discuss the city's proposed plans for tree removal from the canal embankment; and in response, staff submitted comments to city staff on Mar 30.

Keowee-Toxaway (KT) Hydroelectric Project (FERC Project No. 2503). Relicensing process continues and DNR staff participated in the KT Relicensing Stakeholder Team meeting on Mar 14 as well the Resource Committee meetings of Aquatics and Shoreline Management on Mar 16 and 22, respectively, to address initial implementation of studies.

Neal Shoals Hydroelectric Project (FERC Project No. 2315). SCE&G is implementing fish and macro invertebrate monitoring studies and continuing to monitor sediment profiles in the Broad River channel in response to the Oct-Dec 2011 sediment release from Neal Shoals Dam.

Riverdale Hydroelectric Project (FERC Project No. 13590). Relicensing process continues. FERC is currently evaluating the adequacy of information provided by the licensee to conduct an Environmental Assessment of the Riverdale hydro project.

Saluda (Lake Murray) Hydroelectric Project (FERC Project No. 516). DNR staff participated in a Mar 20 conference call with SCE&G to address the 2011 Annual Report on Water Quality and Aeration Operations, which includes plans for 2012 operations.

Santee-Cooper Hydroelectric Project (FERC Project No. 199). DNR staff participated in a Mar 29 meeting with Santee Cooper to discuss alternatives for sturgeon passage prior to another Endangered Species Act consultation meeting of Santee-Cooper with National Marine Fisheries Services, which is scheduled for Apr 2-3.

Other Rivers-Program Staff Activity:

Palmetto Sportsman's Classic: staff participated by manning the LWC-Division booth on Mar 22-25.

River Management Society -- Staff continued working RMS leaders to plan and organize marketing, programming, and sponsorship for the April 2012 RMS symposium to be held in Asheville Apr 23-27.

State Trails Advisory Committee: Staff participated in a Palmetto Conservation Foundation meeting to discuss Water Trails for South Carolina. Staff continued supporting the Southeast Saltwater Trail initiative.

SC Aquatic Barriers Committee: Staff provided comments to American Rivers regarding project proposals to receive grants from the American Rivers-NOAA Community-based Restoration Program.

Heritage Trust

Data Management:

Information and data requests.

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

Hart & Hickman for an environmental assessment of a property in Kershaw County,
Terracon for a SCDOT bridge replacement project in Fairfield County, and
GADOT for a bridge replacement project that spans from Georgia into Jasper County.

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

US Fish & Wildlife Service for data on *Platanthera integrilabia* (White fringeless orchid) for use in updating the candidate assessment form,
Terra Incognita for data on *Shortia galacifolia* (Oconee bells) in the Salem & Reid quadrangles for use in surveying Duke Energy properties in the Keowee-Toxaway Project area,
Open Land Trust for data for the Coosawhatchie River Basin to update its land preservation priorities, and
AMEC Environmental & Infrastructure, Inc. for statewide data to be used in various resource assessment and management projects throughout the state.

Technical guidance and review.

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, which will make them easier to compare.

Staff is cooperating with Anne Cubeta, a College of Charleston graduate student, to develop a predictive model for describing the open, pond cypress savanna habitat that supports *L. melissifolia* (Pondberry) by providing both occurrence data and field expertise. Using the model one new population of Pondberry was discovered and documented at Woodbury. Similarly, a copy of the Woodbury GIS project and other Carolina bay data were shared with NatureServe ecologists and the Congaree Land Trust in developing vegetation models of coastal plain habitats.

Public outreach:

- Prepared a tour of Peachtree Rock Heritage Preserve for the volunteers of USC's Belser Arboretum.
- Participated in educational component of Palmetto Sportsman's Classic.
- Updated the COWASEE Basin ownership maps for use by the SC Scenic Rivers working group of outreach effort

Heritage Survey:

Over 30 specimens were processed to include species identification, vouchers listed, and collection numbers assigned for quick reference as collected during the Heritage Preserve Inventory.

Staff continues to develop the establishment of a Symbiota node called Flora Caroliniana. Taxonomic checklists of plant

species collected on Heritage Preserve properties and now curated at state and regional herbaria are being built using Symbiota's data basing capabilities. These compiled lists will provide field scientists and land managers an easy way to access and edit floristic data online to be used in the field or compared against other data sources.

In cooperation with the SC Native Plant Society, the Lisa Matthews Bay in Bamberg County was prepared for a prescribed burn. *Aristida stricta* (Wiregrass), an important component of the longleaf pine ecosystem, was salvaged from the path of a planned firebreak along the sandy rim of the bay. The plants were potted and stored offsite, for distribution to local landowners enrolled in NRCS conservation programs. This bay is an exemplary site for the study of *Oxypolis canbyi*, Canby's cowbane -- a listed species under the protection of the US Endangered Species Act.

Surveys have extended the known stand limits of the *Ribes echinellum* (Miccosukee gooseberry) population at the Stevens Creek Heritage Preserve. While most of the stand is at the toe of steep bluffs, other very small and isolated ones extend near to the crests. In addition, mobile smart phone technology was tested in the field as a means to record and display rare species stand data. Also, the population estimates of *Amphianthus pusillus* (Poolsprite) at the Forty Acre Rock Heritage Preserve were updated with revised plant counts (generally increasing relative to 2011). Additional ephemeral pools not previously known to support the species were observed. Both species are protected under the US Endangered Species Act and are very narrowly endemic in unique habitats of the Carolinas and Florida.

Wetland habitats in eolian dune fields in the Tillman Sand Ridge Heritage Preserve were surveyed for *Lindera melissifolia* (Pondberry). This year the ephemeral wetlands that occupy such sites above the floodplain are extremely dry. Although no new populations were found, similar habitats in Georgia and the Woodbury tract in Marion County have confirmed the importance of these relatively small (often less than 10 acres) but biologically diverse wetlands.

Aquatic Nuisance Species Program

Technical

Staff met with Santee Cooper APC staff to distribute Triploid Grass Carp and to plan for the control work to be done in the Santee WMA, Stony Bay WMA, and Potato Creek WMA.

Herbicide application for habitat enhancement was done in Dungannon Heritage Preserve to increase viability of an existing wood stork rookery.

Staff met with regional biologists in the Dungannon WMA to determine the best course of action for habitat enhancement work in that area.

Outreach

Public outreach information was distributed in the SCDNR-ANS Booth at the Palmetto Sportsman's Classic in Columbia.

ANS Staff attended and presented information at a Clemson Extension Service Pond clinic in Myrtle Beach.

Floating key chains and measuring cups for aquatic invasive species outreach, with funding provided through an existing Federal grant, was delivered and distributed to the public at the PSC.

Staff attended a SC Aquatic Plant Management Society Board meeting.

Training

Staff attended SCDNR Law Enforcement In-service training at the SC Criminal Justice Academy.

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

State office staff processed the paperwork for six District Commissioner reappointments and four new appointees for District Commissioner. Staff assisted with the Palmetto Sportsman's Classic.

Technical

Conservation technical assistance was provided in **Horry, Marion, Clarendon, Sumter, Williamsburg, Aiken, Greenville, Union, Laurens, Orangeburg, Calhoun, Bamberg, and Allendale Districts**. Staff attended a Pasture Management workshop and a two-day training seminar on developing conservation plans for the Federal Conservation Reserve Program.

Outreach

Staff participated in district events in **Lancaster, Kershaw, Fairfield, Orangeburg, Spartanburg, Chester, and York Districts**. Staff participated in the Ashley Scenic River public meeting sponsored by the **Charleston and Dorchester Districts**. Preparation continues for the **SC Envirothon** scheduled for Friday May 4th. For more information on the Envirothon, go to the website at www.dnr.sc.gov/education/Envirothon

Conservation Districts

Abbeville District co-hosted a Feral Hog workshop with McCormick Conservation District and Clemson Extension. Soils programs were conducted by Brandon Durant and Elyse Benson for 120 third grade students at Westwood Elementary. The District received over 100 photos to be judged for the Annual Youth Photography Contest.

Barnwell District is working on their 2011 Annual Report and planning new litter projects. The District has been judging poster and essay contests titled **Put Litter in its Place**. Linda Pickering created a new PowerPoint presentation on the benefits of containerized gardening for a local women's church group.

Beaufort District is being awarded a \$4,000 grant from BoatsUS Foundation for a Marine Debris Cleanup in Beaufort County. The District is working with several partners county wide and will be kicking off the clean up with a celebration of World Oceans Day in June. The District is a key partner in planning Kidfest again this year and will run the hospitality tent for participants, assist Clemson 4H with the farm animals, and help Farm Bureau run the Combine Simulator. The education staff has been busy with several programs, mostly soil tunnel & beach in a bag presentation, as well as judging several area science fairs. NRCS and staff are partnering with USC to teach the soils class to local teachers CEU class.

Berkeley District sponsored a soils program at the Backyard Naturescope held at Old Santee Canal State Park presenting to 5,000 K- 5th graders. The District is providing materials for the repair of the Wildlife Action Outdoor Education Building and is pleased to announce the appointment of Mr. Keith Gourdin of Pineville to the Board of Commissioners.

Chester District held its annual Awards Banquet with 65 in attendance. The Robbie Banks Conservationist of the Year was presented to Ann Stringfellow McNerney and Conservation Teacher of the Year presented to Lucille Worthy-Allen, third grade teacher at Chester Park School of Inquiry. The State Poster Contest winner, Angilea D. Foster was also recognized. Victoria Roof, Chester County participant in the 2011 SC Conservation Districts Youth Workshop, gave a short speech. The program speaker was Liz Anderson of the Chester Historical Society and Museums. She gave a pictorial history of Chester County agriculture through the camera lens of Henry O. Nichol who recorded history with his camera lens for over 70 years collecting over 300,000 images. This collection is now part of the University of South Carolina Digital Library where nearly 2000 of these images have been digitally copied and can now be seen on the internet at www.scmemory.org. The District has begun to rent our two no-till drills to area land owners for \$9.00 per acre.

Dillon District mailed information to the area schools for the 2012 SC Conservation Districts Youth Workshop.

Fairfield District has made a contribution to the S.C. Envirothon. The District has announced its annual Scholarship to be awarded to a graduating 2012 senior, and is working with Clemson Extension 4-H to help with the purchase of trees for an Arbor Day Program.

Greenville District provided a Project Wild training program for teachers and judged two science contests. The District also conducted a worm bin building workshop at Greenbrier Elementary school for the teachers to use worms as classroom pets. This is part of a larger composting initiative for the school in which the final goal is to get the entire school to compost. In addition, the District completed an apartment recognition program for encouraging residents to properly dispose of pet waste which can add fecal coliform bacteria to our rivers and streams.

Hampton District sponsored the annual Essay and Poster Contest with the topic “Soil to Spoon”. Over 100 entertaining essays were received for grades 5-7 and 28 creative posters for kindergarten-4th grade. The Hampton Farm City Committee celebrated National Ag Day by presenting several programs for approximately 100 kindergarten students along with the Wade Hampton High School 4-H Garden Club. These kindergarten classes were also provided with incubators and eggs to aid the classes while they studied embryology. The students were delighted when the chickens started hatching!

Kershaw District is working with a Boy Scout troop to install DNR’s ***Stop Aquatic Hitchhikers*** signs at all the public boat landings on Lake Wateree. The District is working with local fire stations to install weather reporting gages around the county to report on the national CoCoRaHS system. The District sponsored a DNR Hunter Education workshop.

Lancaster District and the Cane Creek and Little Lynches Watershed Boards made presentations to county council which included their annual report for 2011 and federal rehabilitation funds for the Cane Creek Watershed. Commissioner Bob Bundy and Amanda Roberts made a presentation to a Cub Scout group on endangered species and animals that are extinct. Commissioner Bill Ardrey and Roberts made a presentation to the Ag Teacher’s Adult Education Class for the community on the conservation district’s programs and forestry. Bundy, Roberts, Elizabeth Hunter and Jim Augustin, a Catawba Master Naturalist, did a tour of Forty Acre Rock with two Environmental Science Classes from Andrew Jackson High School. Roberts and Hunter assisted the Buford Middle School with a garden project; presented a soils presentation to 65 3rd graders at Brooklyn Springs Elementary School; presentations to the Ag classes at Buford High School total of 65 students. Amanda Roberts met with Indian Land Elementary School to complete their projects for the SC Green Steps School awards. Nancy Fleming and Elizabeth Hunter gave 59.5 volunteer hours as Earth Team Volunteers.

Lexington District is planning a Coyote Management Workshop. Bill Melven worked on 8 ponds, most with aquatic weed problems. Associate Commissioner Hugh Caldwell and Bill Melven attended the Stormwater Pond Management Conference. One of our Arbor Day trees was dedicated in memory of a school teacher at Pelion Elementary. The district participated in an event at the Lexington County Recreation and Aging Commission focusing on a healthy lifestyle.

McCormick District is making preparations for field day event at the local elementary school to be held in April. The District sponsored and attended Feral Hog Management in conjunction with Clemson Extension and Abbeville District. Commissioner Albert attended the CEPSCI (certified erosion prevention and sediment control inspector) class at Clemson University. Prescribed burning, firebreaks, tree planning, brush management, pipeline and wildlife habitat management were some practices that have been completed this month.

Oconee District held a benefit bluegrass concert for the Oak Grove Restoration Project. The event had a meet and greet Jambalaya dinner with the bands, allowed much discussion of conservation and raised money to further the project. Opus Trust received a grant from the Foothills RC&D Council that will also be used to help the Oconee District with this project. The District was also involved with a conservation presentation to Ravenel Elementary School at their “Day on The Green”. The students learned about the importance of conservation and preservation and the need to become involved stewards for life. The District also received over 170 entries to its education contests through the school system. There will be one hundred sixty participants at the Awards Banquet from the schools who participated this year. District Manager Eddie Martin presented a talk on conservation easements to a forestry meeting put on by Clemson Extension. The District’s nominee for teacher of the year, Ms. Brittany Adams was presented her state award at the Partnership Conference in Columbia.

Pickens District has been focused on a number of outreach projects in their local public/private schools. They have also partnered with Clemson Stormwater Extension to help educate residents on the importance of keeping local bodies of water clean by making wise choices to protect natural resources. District Manager, Cheryl Cassell, is working in the Pickens County Schools (planting seeds, rain barrel, and bioswale events). Ross Stewart, Soil Conservationist, spoke at several classes at Pickens Middle School regarding “Soil and Water Quality”.

Richland District reached over 2,000 people with information and brochures about its Organic Richland initiative at USC’s “Healthy Eating in Context: Local Solutions, Global Challenges” Symposium, the Sandhill Plant and Flower Market, the All Local Farmers Market, and an Organic Gardening 101 workshop at USC. The District funded an award at the USC Regional Science and Engineering Fair, and Associate Commissioner Mary Burts and staff member Chanda Cooper served as judges in the junior and senior divisions. A vermicomposting “Traveling Trunk” was created for teachers to borrow as they establish classroom worm bins; three elementary school classes took advantage of this resource. Conservation programs were presented for 456 students at five elementary schools and one high school on

topics including soil conservation, gardening, composting, and wildlife. Associate Commissioner Jeff Laney delivered several bags of potting soil to the Garden Club at Horrell Hill Elementary. Staff served as Merit Badge Counselors for Nature and Bird Study at the William T. Hornaday Award Weekend, helping some 30 Boy Scouts receive badges in these subjects. Staff also attended Conservation Reserve Program training. The H. Heath Hill Highway, a portion of SC Highway 48, was dedicated to Richland District Commissioner H. Heath Hill in a public ceremony.

Spartanburg District presented a recycling program to 120 students at Westview Elementary, and did EnviroScape presentations for 150 students at McCracken Middle School. The District's Youth Board participated in the South Tyger River Sweep, and staff attended a rainwater harvesting workshop.

York District began taking reservations for the 3-day summer teacher workshop and secured professionals to assist in water quality, soil testing and nature studies. The District office became a weather reporting station for the national CoCoRaHS program and signed up four new reporting stations and listed on CoCoRaHS web site as coordinator for York County. The District held training session for teachers at two middle schools who are taking it on as an instructional project for 6th grade. Also contacted 7 rural fire districts and 6 additional middle schools to participate in weather reporting. Made 3 soils presentations with watershed model demonstration to 3rd graders at Bethany and Kinard Elementary, total of 104 students. The District was notified that their "1000 Rain Gardens" program won a DHEC Earth Day Award to be presented in April. Staff planted a school vegetable garden with kindergarten classes at Cotton Belt and Oakdale Elementary Schools. Distributed Conservation Youth Workshop information to 7 high schools.

EARTH SCIENCE GROUP

Hydrology Section

Water Planning: An update on using a regional basin approach to water planning was prepared and given to the DNR Board March 23rd. Earlier in the month, Joe Gellici gave a presentation on the State Water Plan at the *S.C. Environmental Conference* in Myrtle Beach.

Savannah River Basin: Staff attended a meeting in North Augusta with representatives from the USA Corps of Engineers, Georgia EPD, SCDHEC, and The Nature Conservancy regarding the Project Management Plan for the next phase of the Comprehensive basinwide study; the meeting also addressed funding issues related to past and future work. Staff participated in a conference call related to the ongoing drought in the Savannah River basin.

FERC: Scott Harder participated in an Operations Scenario Committee meeting and ensured that SCDNR's interests were being considered in the relicensing of Duke Energy's Keowee-Toxaway project (Region 1). Staff also reviewed the CHEOPS hydrology model Operations Report. Mr. Harder also reviewed a monitoring and compliance plan for the Columbia Hydro project and provided comments to DNR's FERC coordinator.

ADR Network: Ground-water data for 15 wells in the Piedmont were uploaded into the ADR database. Site selection was made and bidding documents were developed for a new observation well located in Wee Tee State Forest in Williamsburg County (Region 2).

Mitigation Banks: Mr. Harder reviewed baseline data for the Carter Stillely Wetland and Stream Mitigation Bank, provided comments and concerns to the Environmental Office, participated in an interagency conference call on the bank, and visited the site in Horry County (Region 4). Mr. Harder also reviewed hydrologic data collected for the Pigeon Pond Mitigation Bank (Berkley County, Region 4) and participated in a meeting that evaluated the degree of hydrologic enhancement occurring at the site.

Websites and Databases: 252 new well reports that were received from DHEC were sorted and processed. The WellTab database for Aiken (Region 3), Clarendon (Region 3), and Chesterfield (Region 2) Counties was updated, with 231 new wells. A meeting was held with the Geological Survey and SCDNR-IT staff to meet the new database administrator and to review efforts to develop a comprehensive Oracle database containing well data.

Outreach: Hydrologic information or assistance was provided to 28 customers. Four abstracts were submitted for the October 2012 *South Carolina Water Resources Conference*; the topics addressed by those talks are regional water planning, the hydrogeologic framework of the Coastal Plain, and ground-water levels and trends. Mr. Gellici gave a talk about the State's water resources to the Quail Hollow Garden Club in West Columbia. Brenda Hockensmith also gave a presentation about the impact of droughts on ground-water levels to the Bamberg County Soil and Conservation District (Region 3) at its 2012 Conservation Banquet.

Flood Mitigation Program

Outreach: Maria Cox Lamm, along with Shawn Putnam, Executive Director of the SCAHM (South Carolina Association for Hazard Mitigation), provided instruction in a Certified Floodplain Manager (CFM) refresher course to 25 participants, providing an overview of the topics and materials that the CFM exam covers. Mrs. Lamm, along with Joy Sullivan, participated in the *CTP Monthly Study Status Conference Call* with FEMA and contractor staff to discuss the progress of active mapping projects in South Carolina. Mrs. Lamm also participated in the *Enhanced Coastal Risk MAP Products Webinar* that provided discussion on the Risk MAP products FEMA has developed for Coastal communities. Mrs. Sullivan continued working with the Town of Bowman (Orangeburg County, Region 3) and the Town of Turbeville

(Clarendon County, Region 3) in completing their application process for joining the NFIP; published a *Flood Mitigation News Release* regarding the 2012 National Flood Safety Awareness Week of March 11th–17th; and prepared this quarter's *Mitigation Minute Newsletter* that will be sent out via the listserv, as well as published on the Flood Mitigation Website. **Compliance and Ordinances:** 8 ordinance reviews were completed for communities involved with Community Assistance Visit/ Community Assistance Contacts (CAV/CAC) and upcoming new effective maps. Mrs. Lamm made one CAV visit to the City of Rock Hill (York County, Region 2) in preparation of its entrance into the Community Rating System (CRS) which is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. Andy Brandenburg made 1 CAC visit to the City of Forest Acres (Richland County, Region 3). Karen Jones made 6 CAC telephone follow-up contacts in an effort to provide direction and assistance to communities in updating their respective Flood Damage Prevention Ordinances. Mrs. Sullivan continued follow up with FEMA on the Project Charters for communities in Richland County (Region 3) needing FEMA signature.

Mitigation Activities: Mrs. Lamm, along with Mr. Brandenburg, EMD staff, and FEMA staff, attended the *SC HMA (Hazard Mitigation Assistance) Transition Video Teleconference* at EMD, which was meant to introduce personnel and their roles, as well as reach a common understanding of where South Carolina has been, where they are, and where they want to be in relation to mitigation. Mrs. Lamm also participated in the *Regional HMA Conference Call* with FEMA staff to discuss the non-disaster grant review process, periods of performance, and State priorities. Mr. Brandenburg continued working with community officials of North Myrtle Beach (Horry County, Region 4) and Richland County (Region 3) to discuss the communities' recently approved *Community Planning Grants*.

General: Mrs. Lamm processed the extension for the CAO-SSSE FY2011 funding, submitted the CTI FY2012 funding request, and requested explanation of a denial of one FMA grant request. 117 general assistance contacts were made by staff, and a total of 18 Community Information System updates were made to the FEMA database. Mrs. Sullivan helped to set up the Division's display at the 2012 Palmetto Sportsmen's Classic and provided information on the Flood Mitigation Program to approximately 20,000 attendees.

South Carolina Geological Survey

Geological Information

STATEMAP: Land owners in Hampton and Jasper Counties (Region 4) were contacted to gain access for drilling. 30 holes were sited in Hampton County. No drilling was done this month. Office space made available to Gered Lennon at MRD in Charleston.

National Park Service: Reconnaissance was done with Dr. Irene Boland, Winthrop University, in the Ninety Six area (Greenville County, Region 1) prior to the National Park Service meeting March 23rd. Mapping needs and approach were discussed at the Scoping Meeting covering the Ninety Six National Historic Site. A project outline will be developed and submitted to the National Park Service in next couple of weeks.

Outsource Mapping: Cartography issues concerning the Cleveland map product (Greenville County, Region 1) were discussed with Dr. Jack Garihan. The southern margin of the Caesars Head imbricate system was examined along Highway 276 and over the southern flank of Campbell Mountain (Cleveland quadrangle).

SAA Project: The project organizational meeting was held March 30th at Skidaway Institute, Savannah, GA. A budget also was prepared for a 2013 project proposal.

EMD Hazards Map: Project posters and pamphlets were delivered to EMD.

Geothermal: Year 2 Statement of Work and funding were approved. A webinar discussed sample intake into database.

CO2: USC returned 1 sample from Clubhouse Crossroads core with test results and selected 2 additional samples for testing. The map outline of the South Georgia rift was modified on the basis of regional magnetic patterns. Additional Clubhouse Crossroads core (Dorchester County, Region 4) was delivered by USGS.

Broad River Project: Kerry Castle attended the USGS Hydroacoustics Sediment workshop in Shepherdstown, WV, March 19-23rd. The RDI acoustic Doppler profiler, Garmin echosounder, YSI sonde, AA current meter, and reel/cable-bridge board assembly were borrowed from the Hydrology Section. Repairs will be made as necessary to the equipment. Dr. Castle contacted Earl Hayter with the Hydraulics Laboratory, USA Corps of Engineers, regarding sediment modeling, and he agrees that BASINS is the best model to use. The Neal Shoals sediment issue also continues to be watched. Tristan Childress began working on Broad River Project, March 15th.

General: Will Doar and Scott Howard presented abstracts at the Southeastern Meeting of the Geological Society of America in Asheville, NC. A new carburetor and fuel pump were needed on the drill motor; another hydraulic leak also is being repaired. 5 other vehicles were down for maintenance. Brakes were replaced on large boat trailer. A meeting with CME representative Joe Jennings discussed specifications of a larger drill rig. The chain-link fence has been replaced around the compound, and work continued on reorganization of Repository. General Services also began work on lighting in the new addition. Part of the library was reorganized. Mr. Doar and Dr. Howard provided a tour of Orangeburg scarp for the USGS Paleoclimate Group March 13th and discussed mapping contributions to a potential project. Joe Koch continued to collect minerals for the kits and provided samples for the Education Booth at the Sportsmen's Classic. Firebird Resources is sampling drill chips from Haile Gold Mine. In exchange, they have provided a site map of 30+

holes, but no location data were attached. A brief review was prepared on a climate survey of each state.

Digital Products and the Digital Information Program (DIP)

STATEMAP: Updating of the Cleveland product (GQM 33) continued. Rob Weems', USGS, drill logs from the Charleston area (Region 4) were scanned.

Data Preservation: Keyonia Gallman and Matt Henderson scanned 1294 drill-hole logs, reports, and site maps into the Document Management Workflow. Presently, a total of 5827 records are in the Document Management System. Dawn Misura prepped drill-hole files for Georgetown (Region 4) and Orangeburg (Region 3) Counties.

CO2: A location map was created for the CO2 Atlas Page. CO2 data also were uploaded to the NETL FTP site.

Discussions were held with the Hydrology Section about their continuous water-level data and integration of it into final database. Staff met the new Database Administrator and discussed new timelines for finalizing the data model.

Geothermal: Digitization of the aeromagnetic anomaly map of SC began.

General: 26 products were plotted on-demand for Sales, Outreach, and In-house use. *Geologic Hazards of the South Carolina Coastal Plain* (GGMS-5) was published and added to the web-site. Metadata for all OFR maps began to be developed. 144 Geology Quad Data and 533 Education Presentations were downloaded. The Dyson map (Greenwood County, Region 1), 15 maps of the Granitic Resources of South Carolina covering the Piedmont region, and the Gilbert 15-minute map (OFR53) were digitized. Erin Koch prepared graphics and maps for the two GSA presentations.

Outreach

General information was provided 36 customers. Specific customer needs were addressed in the following counties in Region 1: Greenwood; in Region 2: Chesterfield; in Region 3: Allendale; and in Region 4: Georgetown, Dorchester, Hampton. Mrs. Koch helped to set up the Division's display at the Sportsmen's Classic; she and others also helped to staff the booth during the event. Scotty Brown was recognized by Deputy Director Rentiers for his outstanding work at the booth. Rock kits and post cards were favorites, especially with teachers.

Partnering:

Furman University

USGS – Earth Surface Processes Team

AZ Geological Survey

SCEMD

SCDHEC-OCRM

NPS

South Atlantic Alliance – SAA

University of South Carolina -ESRI

STATE CLIMATE OFFICE

The SCO answered 52 information requests with 1 invoiced for \$30 and ten media interviews were provided. The Assistant State Climatologist for Service assisted SCDNR Law Enforcement with 2 accident investigations. He completed a special weather summary for the low temperatures of March 6 and the high temperatures of March 15. He prepared the CoCoRaHS Winter 2011-12 SC precipitation summary for online volunteer interest. He resumed providing the state weekly weather summary to the local USDA SC National Agricultural Statistics Service for publication.

The Severe Weather Liaison issued 2 email WeatherAlerts for strong thunderstorm events (3/2, 3/23). He attended the SCEMD Full Scale Hurricane Exercise planning brief (3/22) and the Governor's and SC Adjutant General forecast products briefing (SLOSH and overland surge depth forecast tools) (3/23). He provided February temperature and heating degree day data to support an ongoing long-term energy conservation study of new home building technologies by Electric Cooperatives. He provided two forecast outlooks for SC Forestry Commission (3/14, 3/20) and a weather outlook for USC Special Events Planner (3/31). He provided 43 county rainfall studies to DHEC for a lead in SC waters study. He completed a CoCoRaHS station inventory review and "climatology".

The State Climatologist participated in the monthly Carolinas Integrated Science and Assessment (CISA) conference call (3/2), the SERCC Technical Advisory Committee conference call (3/7), and the Catawba Wateree Low Inflow Protocol conference call (3/13). She coordinated a SC Drought Response Committee Meeting (3/8). She attended and gave a presentation on SC's Climate Trends and Variability at the Palmetto Chapter of the AMS Mini-Technical Conference (3/14). The climate intern gave a presentation, The Influence of ENSO Cold and Warm Event Cycles on South Carolina's Winter Weather. The State Climatologist participated in the NOAA in the Carolina's Annual Meeting (3/15-3/16). She continued to work with DHEC and the Town of Winnsboro to evaluate short and long-term solutions for Winnsboro's drought water supply shortage.

The SC State Climate Office hosted the Annual Southeast Regional Climate Center Technical Advisory Committee Meeting, March 26-29, 2012, Charleston, SC. The SCO staff organized the agenda, hotel and travel logistics. Sixteen climatologists from across the Southeast including Puerto Rico attended. The Southeast Regional Climate Center provided the funding for the meeting.