

**Minutes**  
**Board of the Department of Natural Resources**  
Rembert C. Dennis Building, Room 335  
1000 Assembly Street  
Columbia, SC  
September 16, 2011 10:00 am

The regular meeting of the Board of the South Carolina Department of Natural Resources was held at 10:00 a.m., September 16, 2011, in room 335 of the Rembert C. Dennis Building, Columbia, SC. Notice of the date, time and place of the meeting was posted and mailed to the news media. Chairman Caroline Rhodes presided at the meeting. Board members present included Cary Chastain, John Evans, Michael Hutchins, Randy Lowe, Norman Pulliam and Larry Yonce. Director John Frampton and staff members of the Department of Natural Resources were present at the meeting.

**I. Call to Order**

Chairman Caroline Rhodes called the meeting to order at 10:00 a.m. and welcomed everyone to the meeting.

**II. Invocation**

Chaplain Eric Skidmore offered the invocation.

**III. Pledge of Allegiance**

Vice Chairman John Evans led the group in the Pledge of Allegiance.

**IV. Introduction of Guests**

Emily Cope, Assistant Director, Special Projects and National Affairs, introduced Wayne Grooms, Cary Chamblee, SC Wildlife Federation; Bill Short, SC Ducks Unlimited; Andy Stevenson, SC Ducks Unlimited; Craig LeSchack, SC Ducks Unlimited; Madison Walker, Governor's Office; Joey Holleman, *The State*; and Douglas Ford, Research Director, Senate Fish, Game and Forestry Committee.

**V. Constituent Comments**

Mrs. Cope noted that comments will be made as items come before the Board.

**VI. Approval of Minutes**

Chairman Rhodes asked if there were any amendments, additions, deletions or corrections to the August 18, 2011, meeting minutes that were distributed this morning. *Mr. Pulliam made a motion that the Board approve the minutes of the August 18, 2011, meeting as presented. Mr. Evans seconded the motion and the motion carried unanimously.*

**VII. Presentations/Commendations**

Bill Short, SC Ducks Unlimited, pledged to the Department that Ducks Unlimited will cover 50% of the expenses for the Wood Duck Box Program. Mr. Short referenced the long-standing cooperative relationship between DU and SCDNR.

Chairman Rhodes and Mr. Frampton presented the Meritorious Service Award to Al Stokes.

**VIII. Advisory Committee Reports**

**Marine**

Cary Chastain reported that the Marine Advisory Committee met September 9, 2011, in Charleston. The Advisory Committee received reports on the Long Term Inshore Fishery Trammel Net Survey; the commercial shrimp trawling season; and the status of regulatory authority for the sheepshead fishery. The Advisory Committee made a recommendation to the Board to approve the following changes in regulation for sheepshead: reduce the minimum size

to 12” and reduce the creel limit to 10 fish. David Whitaker, Assistant Deputy Director for Marine Resources, informed the Board that staff will seek public input on this change and will ask for Board action at a later date. Director Frampton asked that if public meetings are held for public input that other fisheries issues also be discussed such as the upcoming limits of dolphin.

**IX. Items for Board Information**

**Review of License Recommendations**

Chairman Rhodes began the discussion of the Review of License Recommendations by stating that after gathering feedback from some key legislators it appears that this year is not the best time to try to introduce this legislation. *Mr. Hutchins made a motion that the Board postpone the license recommendations for a definite time. Mr. Evans seconded the motion. After a lengthy discussion, Mr. Pulliam made a motion to amend the previous motion in its entirety to state that the DNR Board supports the license recommendations, receives them as information but will take no action at this time. Mr. Evans seconded the motion and the motion carried unanimously.*

Mr. Hutchins noted, for the record, that the date on the resident license sheet included in the meeting package should be 1985/86 not 1958/86.

**X. Items for Board Action**

**A. South Carolina Black Bear Management and Conservation Strategy 2011**

Sam Chappellear, Wildlife and Freshwater Fisheries Division, briefly reviewed the SC Black Bear Management and Conservation Strategy 2011, as included in the meeting package, and informed the Board that eight comments were received with six being in favor and two no comment.

Cary Chamblee, SC Wildlife Federation, informed the Board that SCWF endorses both the SC Black Bear Management and Conservation Strategy 2011 and the proposal for a limited black bear season in Horry, Georgetown and Williamsburg counties.

*Mr. Hutchins made a motion that the Board approve the South Carolina Black Bear Management and Conservation Strategy 2011 as presented. Mr. Chastain seconded the motion and the motion carried unanimously.*

**B. Proposal for Limited Black Bear Season**

Mr. Chappellear briefly reviewed the Proposal for a Limited Black Bear Season in Horry, Georgetown and Williamsburg counties, as included in the meeting package. After a brief discussion, *Mr. Pulliam made a motion to approve the Proposal for Limited Black Bear Season with the following additions:*

*Legal weapons are archery equipment (expandable broad-heads required); muzzleloaders; centerfire rifles (calibers of 270 or greater); and handguns (44 caliber or greater); and shotguns with slugs or buckshot*

*Mr. Hutchins seconded the motion and the motion carried unanimously.*

**C. Comprehensive Deer Management Program**

Charles Ruth, Wildlife and Freshwater Fisheries Division, briefly reviewed the Comprehensive Deer Management Program as included in the meeting package. *Mr. Evans made a motion that the Board approve the Comprehensive Deer Management Program as presented. Mr. Hutchins seconded the motion and the motion carried unanimously.*

D. Proposed Reedy River Trust Fund Expenditure (Laurens County)

Mrs. Cope reviewed the Proposed Reedy River Trust Fund Expenditure for Laurens County and noted that staff are requesting approval to utilize \$60,000 of the remaining balance to improve the primary access roads. *Mr. Pulliam made a motion that the Board approve the Proposed Reedy River Trust Fund Expenditure (Laurens County) as presented. Mr. Yonce seconded the motion and the motion carried unanimously.*

XI. Director's Briefing

Mr. Frampton had a brief discussion with the Board regarding the State Water Plan.

Mr. Frampton distributed the 100 Day Plan and asked Board members to provide him any feedback. This will be an information item at the October meeting.

XII. Legislative Report

Derrick Meggie, Director of Legislative Services, informed the Board that the pre-file dates have not yet been set.

XIII. Environmental Programs

Bob Perry, Director of the Office of Environmental Programs, reported on the Public Notice for the City of North Myrtle Beach for dredging of fingerling canals at Cherry Grove. Mr. Perry also informed the Board that DHEC has posted draft regulations for the Surface Water Withdrawal Act.

XIV. Executive Session

*At this time, Mr. Yonce made a motion for the Board to hold an Executive Session to discuss personnel matters. Mr. Chastain seconded the motion and the motion carried unanimously.*

XV. Open Session

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

At this time Mr. Frampton announced the following staff changes: Breck Carmichael will be moving to the Executive Office serving as the Special Assistant to the Director; and Emily Cope will be moved to the position of Deputy Director for Wildlife and Freshwater Fisheries.

XVI. Time and Location of the Next Meetings

The October Board meeting will be held Wednesday, October 5, 2011, in the DNR Board Room in the Dennis Building in Columbia, beginning at 10:00 a.m..

The November Board meeting will be held Thursday, November 3, 2011, location to be determined.

XVII. Adjournment

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

## EXECUTIVE OFFICE

### OFFICE OF THE DIRECTOR

Don Winslow and Jim Edwards met with Jennifer Cormack, a teacher from Horry County, on September 2 about the Junior Duck Stamp program. Mr. Winslow chaired the Rules & Regulations Committee meeting on September 7, and on September 8, attended the State Map Advisory Committee meeting in the Board Room.

On September 6, Emily Cope began development of the Forest Legacy Action Plan as response to Quality Assurance Inspection on appraisals for submittal to the US Forest Service on September 7. Ms. Cope met with Tim Rogers of the House Ways & Means Committee for a briefing on the Calhoun Falls project.

John Frampton chaired the Deputy Directors Staff Meeting on the morning of September 9, with Mr. Winslow and Ms. Cope in attendance. Ms. Cope met with staff of the Department of Commerce and Comptroller General's Office to brief them on the Calhoun Falls project.

Mr. Frampton participated in the 101<sup>st</sup> Annual Meeting of the Association of Fish & Wildlife Agencies (AFWA) on September 11-14 in Omaha, Nebraska. Ms. Cope also attended the AFWA meeting and attended various committee meetings while in Omaha. Mr. Frampton chaired the Fish & Wildlife Trust Funds Committee meeting on September 14. He also attended the AFWA Executive Committee Meetings, AFWA Business Meetings, other committee meetings and attended a dinner meeting with leadership of the Remington Outdoor Foundation. While in Omaha, Mr. Frampton participated in a conference call of the Marine Protected Area Federal Advisory Council.

Mr. Frampton participated in the DNR Board Meeting in Columbia on September 16, with Ms. Cope in attendance. They also participated, along with DNR Board Members and guests, in the Law Enforcement Officer of the Year annual awards banquet held in Columbia, with The Honorable Governor Nikki Haley giving the keynote address to the group. PFC Cary T. Robinson of Conway, representing Region 4, was honored as the 2011 Statewide Officer of the Year. Other regional recipients include: Region 1-CPL Henry Barnett, Region 2-PFC William Brady Branham, Region 3-SGT Jeffrey D. Derrick, Law Enforcement Education-SGT Karen D. Swink and NASBLA-SGT Ken Simmons.

During the week of September 19-23, Mr. Frampton, Mr. Winslow, Ms. Cope and Breck Carmichael attended meetings across the state with staff of the Wildlife & Freshwater Fisheries Division to brief them on forthcoming changes in their Division with Mr. Carmichael assuming duties as Special Assistant to the Director in the Executive Office and Ms. Cope as Deputy Director of the Wildlife & Freshwater Fisheries Division. These meetings were held on September 20 with Region 4 staff in the morning at the Dennis Center and Region 2 staff in the afternoon at the Florence Office, on September 22 with Region 3 staff in Columbia and with Region 1 staff on September 23 at the Clemson Office.

On September 20, Mr. Frampton provided input to the Southeastern Association of Fish & Wildlife Agencies (SEAFWA) Biologist of the Year Committee on review of the candidates for Wildlife Biologist and Fisheries Biologist of the Year Awards to be given at the SEAFWA annual meeting.

Mr. Frampton and Ms. Cope had a breakfast meeting on the morning of September 21 with Walter Dukes, Vice President of Lands, of Georgia Power, for a discussion of partnership opportunities and the Tugaloo tract. Later that morning, Mr. Frampton, Ms. Cope, Mr. Meggie and DNR Board Member Norman Pulliam attended the Conservation Voters of South Carolina's annual Green Tie Luncheon in Columbia.

Mr. Frampton met with Craig LeSchack of Ducks Unlimited on the morning of September 22, at his request, to discuss cooperative projects. Later that morning, Mr. Frampton and Ms. Cope met with Freshwater Fisheries Coordinators and Regional Coordinators during their meeting on September 22. Ms. Cope participated in a regional Forest Legacy conference call. Later that day, Mr. Frampton had an on-camera interview with Robert Kittle of WSTA-TV of Spartanburg on proposed license fee increases. That evening, Mr. Frampton spoke at the anglers dinner in Santee for the annual Palmetto Bluefish 2011 fishing tournament hosted by the Orangeburg County Sheriff's Office for the benefit of the Connie Maxwell Orphanage of Orangeburg.

On Sunday, September 25, Mr. Frampton and Mr. Winslow participated in the Governor's Cup Billfishing Series Awards Reception at the Governor's Mansion, with Governor and Mr. Haley hosting the event.

Mr. Frampton participated in a conference call of the Marine Protected Area Federal Advisory Council's Land, Sea & Communities Subcommittee with a focus on issues involving communities.

On September 27, Ms. Cope represented DNR at the Governor's Cabinet Meeting in Columbia. Mr. Winslow and Ms. Cope participated in a meeting that day with officials of Active Network on the DNR licensing system. That afternoon, Mr. Winslow attended the Land, Water & Conservation Division staff meeting at Styx.

Mr. Winslow represented DNR and spoke at the Orangeburg National Fish Hatchery's celebration of 100 years of fisheries conservation held at the fish hatchery in Orangeburg on September 28.

Mr. Frampton, Ms. Cope, Ken Rentiers and Ken Prosser met with Harry Shealy on the afternoon of September 29 and inspected Craig's Pond in Barnwell County, a Heritage Trust site.

# Marine Resources Division

## Office of the Deputy Director

Mr. Boyles travelled to Savannah, Georgia on September 7<sup>th</sup> to attend the South Atlantic Alliance meeting. On September 9<sup>th</sup> Mr. Boyles participated in the SCDNR Deputy Director's meeting via teleconference. Mr. Boyles also hosted the Marine Advisory Committee meeting at the Marine Center in Charleston on September 9<sup>th</sup>. Mr. Boyles attended the South Atlantic Fishery Management Council in downtown Charleston. September 12<sup>th</sup> – 16<sup>th</sup>. Mr. Boyles travelled to Palo Alto, California September 20<sup>th</sup> – 24<sup>th</sup> to attend the Fisheries Leadership & Sustainability Forum at Stanford University. On September 25<sup>th</sup> Mr. Boyles attended the South Carolina Governor's Cup Awards Reception at the Governor's Mansion in Columbia. On September 26<sup>th</sup> Mr. Boyles attended the South Carolina Sea Grant Board of Director's meeting at the Medical University of South Carolina.

## Marine Resources Research Institute (MRR):

### Program and Grant Development Activities

Proposal was submitted to the National Science Foundation with A. Mount and I. Sokolova on "Oyster Genomics and Climate Change" September 6th. DNR budget \$320, 993.

### Publications and Outreach

"Benefit/Risk Analysis using Chemical Concentrations and Fatty Acid Measures in Fish Sampled near Sapelo Island and Brunswick, GA". Presented at the *Chemical Contaminants in the Coastal Food Web and Impacts on Ecosystem and Human Health along the Georgia Coast* Collaborative Research Meeting, September 8, 2011, Hollings Marine Laboratory, Charleston, SC.

On Sept. 26-28 the Section hosted a regional gray triggerfish age and reproduction workshop in preparation of the SEDAR stock assessment for next year. Participants were DNR staff and other state agencies from the south-east region that are working on gray triggerfish. A workshop report will be completed in the next month.

Sheepshead Management: New regulations are being considered for sheepshead due to their pending removal from the federal snapper-grouper complex. With respect to this, Inshore Fisheries staff gave presentations to SCDNR's Marine Advisory Committee on sheepshead life history and the SCDNR trammel net survey, respectively.

The following manuscript was accepted by the journal *Marine Biology*:

Arendt MD, Segars AL, Byrd JI, Boynton J, Whitaker JD, Parker L, Owens DW, Blanvillain G, Quattro JM and MA Roberts. Distributional patterns of adult male loggerhead (*Caretta caretta*) sea turtles in the vicinity of Cape Canaveral, Florida, USA during and after a major annual breeding aggregation.

Kristen M. Gaworecki<sup>†</sup>, Robert W. Chapman<sup>†</sup>, Marion G. Neely<sup>†</sup>, Angela R. D'Amico<sup>\*</sup>, and Lisa J. Bain **Arsenic exposure during embryogenesis alters muscle development and structure.; accepted with revision in Toxicological Sciences.**

## Progress Report and Activities

### Coastal Finfish: SEAMAP and MARMAP:

Weather, in particular the storms Irene, Katia, and Maria, affected most Coastal Finfish Section sampling cruises this month, but we were able to complete two cruises. Leg 6 of the longline survey with the *R/V Lady Lisa* was completed on September 23 with tilefish collected off Georgia and southern South Carolina in depths of about 100 fathoms. Leg 13 of the reef fish survey with the *R/V Palmetto* was also completed on the 23rd, but this scheduled 10-day cruise was only 4 days long as a result of inclement weather. Reef fish samples were collected off South Carolina at various depths. This was the last reef fish cruise of the regular Reef Fish Monitoring season (May 1 - September 30). SEAMAP staff is preparing for the fall coastal survey which is scheduled to start on October 3<sup>rd</sup>.

Marcel Reichert and Joey Ballenger attended the SAFMC meeting on September 14-16. Among other things, the council discussed the SEDAR stock assessment schedule. The 2012 schedule includes two important update assessments and SEDAR 28. The south Atlantic red porgy and vermillion snapper update assessments will be conducted late summer of 2012 with no scheduled workshops, but several webinars may be organized. The report is scheduled to be available to the South Atlantic Fisheries Management Council in October 2012. SEDAR 28 is a benchmark assessment for Gulf of Mexico and South Atlantic Spanish mackerel and cobia. The Data Workshop is scheduled for February 6-10, 2012 in Charleston. The Assessment workshop is the following May (7-11), and the Review Workshop is in August (6-10). The assessment report is expected to be available to SAFMC in October, 2012. The Council also set the SEDAR priorities for 2013. Top priorities will be the benchmark assessments for red snapper and blueline tilefish. Other priorities are benchmark assessments for gray triggerfish, scamp and white grunt, and standard assessments for gag and snowy grouper.

The MARMAP/SEAMAP Reef Fish Program donated 965 lb of sampled and processed fish to the Low Country Food Bank this month. In addition, the program donated 100lb of fish to the Charles Towne Landing State Park.

**Environmental Research:** A Sea Grant proposal to Coastal Carolina University was funded with the DNR receiving monies to sample the benthic community and provide support for deploying equipment to monitor sand movements. Environmental research section staff sampled the borrow areas used for the most recent Folly Beach renourishment. There are still mud patches in the impacted areas six years after dredging. Staff made progress on the benthic samples collected by Sea Grant/NOAA related to the Oceans and Human Health Initiative Gulf of Mexico tidal creek sampling. Abundance and identification of prey items in Piping Plover fecal samples was completed and the data submitted to the USFWS. The benthic QA samples for the summer 2010 SCECAP sampling were submitted to Battelle for distribution to the QA lab. This includes a list of all reference material used for identifications. Data sets from the 2011 SCECAP sampling are being processed into the SCECAP database. A final report on juvenile fish and environmental data collected by SCECAP

was prepared and submitted to the Dingell-Johnson program. Section staff participated in two more crustacean monitoring cruises to collect fish samples as part of a new program to collect long-term fisheries data. The GIS analysis of the distribution of natural resources and human activities in the coastal zone of South Carolina is nearing completion and all data layers should be submitted to the Columbia office by the end of the month. A draft of the final report for this project is being prepared.

#### Algal Ecology:

**Routine Monitoring and Fish Kill Responses (private contract & CDC project)** Several cyanobacteria blooms on Kiawah Island have been reported, and follow-up sampling and analyses are ongoing. During the week of September 19, additional fish kills were reported at Kiawah, and one pond (K50) has an ongoing bloom of the raphidophyte species *Chattonella subsalsa*. Staff continues to monitor the events. Dr. Greenfield attended the quarterly conference call to the CDC via telephone on September 7<sup>th</sup>. Various opportunities for collaboration for freshwater HABs were also discussed as well as options to change the format of HABISS to resemble an Excel sheet (vs. the current data entry format).

**Assessing Phytoplankton Responses to Nutrient Levels in SC Estuaries (EPA project)** Staff completed all summer bioassays successfully, and the heavy volume of sample analyses is underway. Staff are preparing for the autumn field experiments, scheduled to commence in October. Old, unused analytical equipment was retrieved from DHEC in Columbia. As a result, the SCAEL can move forward with in-house analyses of total nitrogen using the Kjeldahl approach in addition to persulfate digestion.

**Development of Novel Molecular Assays (SCSG project)** PIs Greenfield & Arnott completed the responses to reviewers and updated the budget form according to the new SG guidelines. Staff began harvesting & freezing red drum eggs for initial experiments.

#### **Estuarine Finfish Research:**

**Trammel net and Electrofishing surveys:** September sampling is on schedule. Four of the seven trammel strata and five of the six electrofishing strata have been completed so far, with the remaining strata scheduled for the last week of the September. Unusually high salinities (due to low rain fall) hampered some of the electrofishing efforts in the Combahee River.

**Long-line survey (adult red drum):** The Port Royal, St Helena Sound and Winyah Bay strata were surveyed in September. Charleston Harbor will be completed in the last week of the month. Biological samples were obtained from at least 8 adult red drum. Red drum, finetooth, blacknose, sandbar, blacktip and spinner sharks were tagged and released. A satellite tag was received to implant in a large coastal shark in the near future.

**Red Drum project:** Over 36 million red drum eggs have been collected from 5 broodstock families in the past two weeks. Nearly 93% of these spawned eggs were viable and about 2 million hatched larvae were stocked into 4 ponds at Waddell. In addition, 250,000 eggs were given to Dianne Greenfield to conduct experiments on identifying eggs and larvae in plankton samples. Broodstock from a 6th genetic family were injected with spawning hormones on 9/12.

Staff completed a sub-sampling analysis of adult red drum genetic data to evaluate the influence of temporal design on population structure analyses – the outcome will be applicable to study designs for many marine species.

**Spotted Seat trout project:** A total of 1,330 spotted sea trout juveniles were harvested after 56 days in saltwater ponds at the Waddell Mariculture Center. They ranged from 42 mm TL to 160 mm TL. The large size range indicates that cannibalism was a factor in the low number of fish harvested. Staff completed the optimization of a suite of microsatellite markers to characterize the genetic population structure and genetic influences of cold winter events on spotted sea trout. Evaluation of the marker suite for parentage analysis and genetic evaluation should be completed this year.

**Striped Bass:** Staff are working cooperatively with North Carolina in the genetic management of broodstock and stocking within both North and South Carolina to allow for improved understanding of connectivity of striped bass populations through both freshwater and estuarine routes.

**Genetic Influences of Overfishing:** For the red snapper project, staff have obtained 1970's and 1980's otolith samples (from the NMFS lab in Beaufort) to expand the evaluation of historic levels of genetic diversity and effective population sizes. For the red porgy project, staff are competing the genotyping of samples to evaluate the potential of inshore/offshore genetic structure within these reef fish.

**Robust Redhorse:** Staff have completed the final project report and presentation for the robust redhorse project which establishes genetic baseline data for the Savannah and Pee Dee Rivers and parentage foundation for restoration work within the Santee-Cooper system.

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

**Cobia Population Genetics:** Staff have completed the genotyping of the historic cobia otolith samples from the Gulf of Mexico and are processing the 2011 cobia samples; both which will be incorporated into the ongoing evaluation of stocking contribution and large-scale population structure which will help us better manage cobia populations along the coast of SC.

**Weakfish Genetic Identification:** Staff completed the selection and optimization of *Cynoscion* species-specific markers for the weakfish verification project. Sample processing will begin shortly.

**Miscellaneous:** A brief update report was submitted to the Gulf & South Atlantic Regional Panel on Aquatic Invasive Species. The report detailed an ongoing Masters project (College of Charleston), which is using eel samples from our electrofishing survey to examine the occurrence of an invasive species of swim bladder parasite.

### **Genetics:**

Most of the effort this reporting period was focused on analyzing data from the Oceans and Human Health Initiative supported oyster studies and the cooperative shrimp gene expression research conducted by College of Charleston.

**Gag Grouper project:** All work is on schedule and the semi-annual report was submitted 29 August 2011. The preliminary analyses indicate population expansion since the 1990's, however, such an expansion could be the results of shifting reproductive output from fewer older to more numerous younger females as a result of early sex reversal. The nuclear DNA analysis will be required to distinguish the alternatives. We will continue to sequence selected individuals from the remaining samples as needed to gain resolution for our final analyses.

**Shellfish Research:** Details of the sub-award from The Nature Conservancy to the Marine Resources Division for the new oyster castle project at Jeremy Island were finalized.

Discussions are underway to develop a joint proposal from the Shellfish Research Section / Office of Fisheries Management / SCORE Program to be submitted to the USFWS Southeast Aquatic Resources Partnership to focus on shoreline and oyster reef restoration efforts in the Ashley River. If developed and funded, efforts would begin in October 2012.

**Oyster Castle Project:** New oyster castle sites were established around Jeremy Island in collaboration with The Nature Conservancy and with assistance from a number of volunteers. These structures will be monitored for their effectiveness to reduce shoreline erosion and promote salt marsh development.

**Triploid Oyster Project:** Grow-out bags were constructed and oysters of each of the three lines to be evaluated for comparative survival and growth have been distributed to commercial grow-out sites (10) through the coastal region of South Carolina after their nursery phases was completed in ponds on Yonges Island (Island Fresh Seafood, Inc.). A further budget re-alignment and year 2 no cost extension were requested to keep this grant on track.

**Southeast Aquatic Resources Partnerships:** A progress report was submitted to the Southeast Aquatic Resources Partnership (SARP) for the NOAA Community-Based Restoration Program-affiliated crab trap project. Staff also met with a student interested in developing a smart phone "app" to interface with our abandoned crab trap online reporting survey (<http://www.dnr.sc.gov/marine/crabtraps/index.html>) in the hope of making reporting more interesting for participants and more access to recreational users of South Carolina waterways.

**State Wildlife Grant Crab Trap Project:** More than 40 unwanted crab traps were donated to the Shellfish Research Section by a commercial fisherman and these will be used for the expanded scope of the State Wildlife Grant project to establish further crab trap-based oyster reefs in pluff mud habitats.

**Office of Fisheries Management Shellfish:** Annual shellfish maps and the large wall maps were completed and utilized at a meeting with the Law Enforcement Division to familiarize officers with changes to shellfish harvesting water body classifications.

**College of Charleston:** As Chair of the Colloquium Committee, Dr. Kingsley-Smith was working on various aspects of this event leading up to its occurrence on September 23<sup>rd</sup>-24<sup>th</sup>. In addition to a diverse range of student talks from both the Graduate Program in Marine Biology and the Masters in Environmental Studies Program, the schedule included presentations by keynote speaker on climate change by Dr. John Bruno from the Department of Marine Sciences, University of North Carolina – Chapel Hill

**Miscellaneous:** A meeting was held in the MRD Administration Building with a number of staff to discuss streamlining reports from commercial fishermen of landings of the invasive tiger shrimp, *Penaeus monodon* which are increasing in abundance and geographical extent this season (Georgia, Florida, Gulf of Mexico) compared to previous years. The status and source of these populations remain undetermined but efforts to address such questions are under discussion.

**Minorities in Marine and Environmental Sciences (MIMES) Program:** Dr. Kingsley-Smith has been invited to attend the "GEO REU Workshop 2011: Developing an REU Community and Best Practices Through Networking" to be held in San Jose, CA with funds for all travel, accommodation and registration to be covered by the National Science Foundation. Work began on final reports for the previous MIMES Program grant while the new submission for the summers of 2012-2014 is under review. A student from the University of Puerto Rico that participated in MIMES summer research internship program this past summer was recently awarded travel funds to attend the annual meeting of the American Society of Limnology and Oceanography in recognition of her academic performance.

### **Sustainable Mariculture/Crustacean Monitoring:**

**Sustainable Mariculture:** The commercial scale shrimp production raceway was stocked at a density of 503/m<sup>3</sup> and good growth is being observed. Pond and tank density cultivation work on native white shrimp for use as bait shrimp continues. We are beginning preparations for a trial of shrimp production in the prototype commercial raceway that will reuse all of the seasoned water from the trial currently underway.

**ACE Basin National Estuarine Research Reserve:** We are working with the SCDNR Colonial Wading Bird Geographical Information System (GIS) dataset to incorporate nesting and feeding habitats into the ACE Basin Critical Habitat mapping project. Staff presented an update on the GIS dataset review process to the National Estuarine Research Reserve System's Habitat Mapping and Change Technical Committee which met at North Inlet/Winyah Bay NERR September 29-30. This work involved revising the GIS Standard Operating Procedure manual sections on the Dataset Review process and the Accuracy Assessment methodology.

**Crustacean Monitoring:** Trawl sampling this month collected slightly below average numbers of white shrimp, in larger than average size. This is probably a reflection of reduced abundance because of the winter cold kill, which decimated the spawning stock. Levels of black gill infection remained high, although recent declines in water temperature should begin to ameliorate the infection levels. Blue crab numbers were low in trawl samples, as most were probably upstream of sampling locations. M. Childress of Clemson University presented an update on his SC Sea Grant-sponsored sampling and modeling efforts for blue crab in the ACE Basin to Marine Division scientists and managers.

**Waddell Mariculture Center:** The Waddell Mariculture Center continues its efforts to educate the public through tours and presentations. This month some of the activities included: a tour for 30 students and teachers from Hilton Head Island Preparatory Middle

School, also an adult learning class sponsored by USC. 30 students from Savannah High School, and an evening walking tour for 15 cub scouts and their parents. In addition the Center hosted 6 biologists from the Georgia DNR for a discussion pertaining to coastal fishery resources and the center's fishery research. A group of educators from the Charleston Aquarium spent 2 days at the center as part of a planning retreat.

## **Office of Fisheries Management (OFM):**

### **Shellfish:**

#### **Commercial Management**

4 permit holders requested verification for legally required shellfish culture permit plantings for 5 separate permits during September. Through calendar year 2011, 27 permit holders have requested planting verification on 55 different permits with 49 completing planting quotas for 2011. A total of 56,23 U.S. bushels of shellfish seed, green oyster shell, clam cover or approved cultch or cultivation will be planted by the end of the month. The assessed planting quota for the state's 121 culture permits is 85,552.7 U.S. bushels after taking into consideration permit cancellations, acreage reductions or increases, boundary modifications and approved variances. Shellfish seed may be planted throughout the calendar year, however by S.C. law (§ 50-5-940), cultch must be placed between 01 May and 31 August for credit.

Although the shellfish season will not open until October 1, culture permit holders were allowed to apply for early harvest permits beginning September 1. Thirteen early harvest permits were issued in September. Early harvesters operate under additional SCDHEC restrictions.

3 permit holders have turned in acreage in Charleston and Beaufort Counties that is under review by staff to determine how to re-plant (i.e., PSG, SSG, CP). At least one more permit holder is slated to turn in some acreage in Charleston County this month. These surrenders all resulted from the revised shellfish acreages which will take effect January 1, 2012.

Conditional approval was granted to Craig Valentine for three mariculture permits in Beaufort County. The Shellfish Permit Committee issued conditional approval for culture permit area C-070 to Craig Valentine and for C-072 to Joel and Luke Morris. An application has been received for a culture permit in the Stono River watershed in a currently undesignated area. This is under consideration by the Shellfish Permit Committee. A permit was issued for importation of seed clams from Florida for mariculture growout. The first shipment of seed under this permit was inspected at Fort Johnson and found to be free of "hitchhikers". Two mariculture operators appeared before the Shellfish Permit Committee and belatedly submitted required annual reports, thereby averting revocation.

The annual law enforcement/DHEC/shellfish meeting was held September 21 at the Marine Resources Center. 2011-12 water quality classifications were presented by SCDHEC. Permitting information was presented by Angel Curry Brown. Information on the new shellfish maps and their availability was presented by Nancy Hadley. Kris Schulte and Jessica Boynton prepared the new shellfish maps for the 2011-12 season using NAIP imagery as the base layer instead of topographic maps. This was huge amount of work but allows shellfish boundaries to more accurately depict actual conditions in the field.

Permitting, licensing, and shellfish management staff held satellite office hours in Beaufort and McClellanville to answer questions about this shellfish season, explain new maps, and issue licenses, permits, and shellfish ground stickers.

Nancy Hadley attended a pre-permit interagency conference (SCDHEC, ACOE, DNR, NMFS) with OV Associates to discuss their pending oyster aquaculture application. OCRM and ACOE will require a full permitting process. Representatives of ACOE and SCDNR visited the proposed site with the applicants on September 19. OCRM had previously visited the site.

The annual Shellfish Assessment Report for S-064 was submitted to Parris Island Marine Corps Recruiting Station in accordance with our Cooperative Shellfish Management Agreement of February 1978.

#### **Shell recycling and planting; recreational management:**

Oyster bed assessments were conducted on SRFAC beds planted in 2008 as part of the annual SRFAC monitoring. Assessments included bed footprints for area, photos, and qualitative assessment forms. Also as part of the annual SRFAC monitoring quadrat samples were taken on SRFAC beds planted in 2010. The samples are then washed and measured for spat collection to obtain recruitment success rates for beds planted. This data allows us to have an ongoing understanding for Best Management Practices, such as location to be planted and application of the shell. The data is still being processed and will be reported with next month's report.

A new recycling bin was completed for the N. Myrtle Beach area. The bin is a wooden cattle-pin style bin. A grand opening will be held the first week in October in order to get the word out to the public and to thank those involved.

Staff are looking for a location in the James Island and/or Mount Pleasant area to use as a shell quarantine site. We have outgrown our site at Fort Johnson Marine Center.

This month 8 new shellfish boundary signs were put out and mapped, completing 2 SSG's. The shellfish grounds were in Charleston County on the Wando River.

214 bushels were recycled this month.

**Mitigation projects:** The remaining footprints of SPA Large-Scale sites planted this summer were mapped with Trimble GPS.

#### **Grant activities**

**ARRA (Stimulus) project:** A budget reallocation request was submitted to the City of Charleston to allow us to spend remaining funds on personnel. A quarterly report was submitted to the City of Charleston. SMS staff collected additional marsh grass from highly eroding banks adjacent to Charleston Harbor and planted them at the ARRA Daniel Island Site. To date a total of 194 square meters of marsh has been planted at the site. Trimble footprints were taken of the restored area at Daniel Island, total restored area (oyster reef &

marsh)= 0.27 acres (1,110 m<sup>2</sup>). Additional sediment samples were collected to document any changes in composition associated with the deployment of these marsh grasses.

**State Wildlife Grant:** 153 volunteers participated in shell bagging as part of the Trident United Way Day of Caring. Groups from Navy Nuclear Power Training Command, South Carolina State Ports Authority, Hill-Rom, Blackbaud, and Richardson, Patrick, Westbrook, and Brickman Law Firm filled 2550 shell bags, a one-day record for the SCORE program. Due to the large number of volunteers, some also cleaned up the shoreline of Fort Johnson and the nature trail, collecting 21 bags of trash, 4 tires, 1 skateboarding ramp, and 11 pieces of scrap wood.

Three other shell bagging events were held at Fort Johnson this month with participants from area schools (James Island Charter High School, Academic Magnet, Fort Dorchester, and ROMS), College of Charleston's Students in Free Enterprise (SIFE) club, and the Air Force.

All SCORE reefs deployed at Fort Johnson between 2001-2011 were mapped using the Trimble, total reef area=0.40 acres (1631 m<sup>2</sup>).

**National Fish and Wildlife Federation:** Allie Kreutzer and Michael Hodges met with representatives from the SEWEE Visitor & Environmental Education Center (Julie Binz) and the SEWEE Association (Karen Beshears) to discuss organizational details of the grant. It was decided that the SEWEE Center will include information on the SCORE program's volunteer and educational opportunities in literature they distribute to teachers and other interested parties. This has already resulted in two interested teachers contacting the SCORE program and scheduling our "Oyster habitats as Living Classroom" lesson for their classes. Since the meeting three schools (Hanahan Middle School, Archibald Rutledge Academy, and Cainhoy Elementary) have agreed to participate in the Seeds 2 Shoreline program in the Cape Romain area.

**Southeast Aquatic Resources Partnership-USFWS:** An annual progress report was submitted to USFWS for this project. The final report due in October is being prepared.

Quadrat sampling of all test sites on Toogoodoo Cr. was completed. Overhead pictures were taken of all year 1 seeded sites for comparison to overhead pictures last spring. Field work for the last round of planting of seeded bags was planned for October.

100 spat collector bags were made by 13 staff and residents of the Bishop Gadsden Retirement Community as part of Trident United Way's "Day of Caring" on 9/9/2011.

**Southeast Aquatic Resources Partnership-NOAA:** A semi-annual progress report was submitted to NOAA.

**Atlantic Coast Fish Habitat Partnership** – funding agreement has been signed and accounts are being set up.

**Education and outreach:** Two volunteers were trained in water quality data collection at Palmetto Islands County Park in Mt. Pleasant, and Bowens Island Restaurant on James Island.

Allie Kreutzer conducted classroom lessons on biodiversity in oyster habitats with four fourth grade classes (a total of 108 students) at Jennie Moore Elementary School in Mount Pleasant.

Michael Hodges gave a presentation on oysters to 22 members of the National Society for Collegiate Scholars at the College of Charleston. We are in the process of coordinating a volunteer fish sampling effort with this group in the ACE Basin as part of our NOAA-SARP grant. Staff participated in College of Charleston's Volunteer Fair at the Stern Center; 12 students signed up to volunteer for various SCORE volunteer opportunities.

**Grant proposals:** SMS staff are developing proposals for submission to USFWS-SARP and NOAA-SARP for the next funding cycle. Proposals will potentially involve collaborations with the Shellfish Research Section, SC Sea Grant/COSEE and Clemson Extension Service.

**Personnel actions:** All supervisors completed required EPMS reviews by September 2.

**Miscellaneous:** Nancy Hadley met with Bill Pendergraft of Environmental Media, Inc., to discuss an article about oysters being prepared for South Carolina Wildlife Magazine.

## **Statistics:**

### **General Activities**

- Delinquent letters for late submission of August mandatory logbooks were mailed on September 16 (202 letters) to license holders for August reports not yet received by the September 10th deadline. The affidavit list which includes delinquent offenders for August and prior months will be generated on September 28th (84 offenders) and will be turned over to the Law Enforcement Division.
- Several data requests were completed this month including Snapper/Grouper, Shrimp, Crab, Yellowfin Tuna, Wreckfish, Atlantic Sturgeon and harvest numbers from State Shellfish Grounds.

### **Commercial Trip Interview Program**

- September sampling efforts provided 15 commercial trips being sampled, with 390 length frequencies with 352 associated age structures being obtained.

### **South Carolina Governor's Cup Billfishing Series**

- The 2011 SCGC Annual Awards Reception was held on Sunday, September 25 at the Governor's Mansion in Columbia. Governor Haley and Mr. Haley were gracious enough to allow the Series to utilize their home and participated in the evening festivities including presenting all the awards.

### **State Finfish Survey Summary**

- Creel Clerks intercepted 165 fishing parties with a total of 358 anglers interviewed during the month of August 2011. Fish measured included: 85 red drum, 2 spotted seatrout, 40 southern flounder, 11 southern kingfish, 42 sheepshead, 2 Atlantic Croaker, 2 king mackerel, 5 Spanish Mackerel, 3 black sea bass, 1 Atlantic Sharpnose, 1 bluefish, 1 flathead catfish, 1 weakfish and 1 Gulf Flounder. Otoliths were collected from 2 Atlantic Croaker for the inshore fisheries section of MRD.
- The final grant report for the FY2011 DJ Marine Recreational Fisheries Surveys was completed and submitted to USFWS.

- Deep hole shrimping intercepts and flights began in September and will continue until December 15<sup>th</sup>.
- Planning continues for the 2012 Grand Strand pier survey to be conducted with the cooperation of CCU. Licensed piers in the Horry/Georgetown region were visited to make initial contact with pier staff, gather information on hours of operation and seek cooperation.
- A telephone survey of multi-year license holders conducted in collaboration with Responsive Management was completed in September. The survey was designed to collect information on four primary areas of interest: saltwater fishing participation and avidity, use of and preference for updating contact information, demographic information, and verification/collection of contact information.
- Additional activities during the month of August included: working closely with commercial seafood dealers to ensure compliance with reporting, assisting DNR's oyster shell recycling program and freezer program, distributing rules & regulations books and fish rulers to coastal businesses as requested, collecting samples and catch information from shrimp trawler captains reporting catches of tiger shrimp, and participating in MARMAP and artificial reef cruises.

### **Finfish:**

## **I. SECTION ACTIVITIES**

### **REPORTS AND PUBLICATIONS**

The newest edition of the "Guide to South Carolina Marine Artificial Reefs" has been printed and is currently being distributed to fishing clubs and tackle shops along the coast.

### **TALKS**

Artificial Reef Program personnel gave a presentation on the program to the Stono River Fishing Club on John's Island this month.

## **II. PROGRAM STATUS REPORTS**

### **Artificial Reef Management and Development**

Artificial reef construction this month consisted of fourteen 1-ton concrete blocks and approximately 6 tons of concrete rubble deployed on the Kiawah Reef (4K1).

A missing reef buoy was replaced on the Parris Island Reef and a wayward buoy from that site has been retrieved.

## WILDLIFE AND FRESHWATER FISHERIES

### DEPUTY DIRECTOR'S OFFICE

The monthly Deputy Directors' Staff meeting and DNR Board meeting were attended. The DNR Law Enforcement Officer of the Year luncheon was attended. Staff was assisted with numerous details related to the coastal black bear draw hunt, including compiling public comments submitted to the DNR web site. Regional staff meetings were attended at the Dennis Wildlife Center, Florence regional office, in Columbia at the Dennis Building and at the Clemson regional office. A meeting of the Enrich SC Coalition was attended in Columbia.

#### Assistant Deputy Director

Reviewed and took action on various administrative and budgetary matters. Coordinated review of one project following environmental protocol. Assisted with obtaining grant information for Governor's Office. Researched information regarding agency structures and offices for Budget and Control Board. Completed work on land acquisition in Laurens County. Examined one tract of land for sale in Aiken County and another in Horry County. Visited Lewis Ocean Bay and Great Pee Dee WMAs. Meetings and events attended: Deputy Director's meeting; DNR Board meeting; Enrich SC meeting; agency meeting on commercial use permits; and Law Enforcement Awards Banquet.

#### Office of Environmental Programs

##### Permitting and Review

Staff coordinated 51 DNR reviews (4 COE, 21 DHEC, 15 State Clearinghouse, 11 Misc.) of environmental permits and authorizations for the 38 inland counties. Staff attended Keowee-Toxaway FERC Study Plan meetings in Greenville on September 13 -14.

##### FERC Projects

Buzzard Roost Hydro Project (P-1267) – Staff responded to the project operator to address a notice of deviation from downstream minimum flow requirements to the Saluda River; Catawba-Wateree Hydro Project (P-2232) – Staff participated in Habitat Enhancement Program committee meeting on Sep 23 to discuss funding requests for 3 new project proposals; Columbia Hydro Project (P-1895) – Staff meet with Lockhart Power, Kleinschmidt Associates, and USFWS staff to exchange information regarding Lockhart's new role as operator of Columbia Hydro, agency interest in the Broad River fishway, and related project operations. Staff reviewed and prepared comments regarding City of Columbia plans to remove selected trees from the Columbia Canal embankment; Keowee-Toxaway (KT) Hydro Project (P-2503) – Relicensing process continues: Staff participated in KT public meetings (Sep 13-14) to address Duke's Proposed Study Plan. Staff continued developing a revised study plan to assess stream fish communities and the status of redeye bass, a study the DNR will propose to be included in Duke's study plan to FERC; Broad River Fisheries Mitigation Trust Fund – Staff arranged and participated in meetings of the Basin Trustees on Sep 12 and 27, to address a project proposal of American Rivers and Upstate Forever to assess dam removal opportunities in the Broad River Basin. The Sep 12 meeting included a site visit to Clifton Mills Dam; Santee River Basin Diadromous Fish Accord – Staff participated in the annual Board meeting held on Sep 28.

## FRESHWATER FISHERIES

### Freshwater Fisheries Coordination and Administration (Chief's Office)

Coordinated comments on the Schlumberger restoration plan for the Woodside I reach of Twelvemile Creek.  
Met with UGA faculty to discuss angler satisfaction survey and assessment  
Met with Broad River Mitigation Fund Board for a presentation on dam removal project concepts.  
Met with staff from Ripleys Aquarium and the MRD to discuss invasive species display concepts.  
Attended the 100<sup>th</sup> Anniversary Celebration for the Orangeburg National Fish Hatchery.  
Attended the Santee Accord Board and Technical Committee fall meeting.  
Participated in the Region I state lakes management coordination meeting.  
Attended the meeting of the Rules and Regulations Committee to discuss new design concepts.  
Participated in an NCLI Peer Coach conference call.  
Participated in an NCLI webinar for new cohort members.  
Participated in a PAG conference call.

### Region I

Continued conducting stream habitat surveys on Jocassee Gorges streams in conjunction with the SARP/EBTJV Grant - completed habitat assessment on Emory Creek and Mill Creek. Data was entered for Emory Creek sampling.

Picked up stream temp loggers and water samples from Jocassee Gorge streams and entered/ran habitat assessment (BVET) data.

Deployed new temperature loggers on 8 streams, downloaded data from 7 temperature loggers, and collected water samples from all streams that had water in other Region 1 streams.

Conducted two Master Naturalist classes on Lake Hartwell and King Creek

Assisted Research Group with Reedy River sampling

Deployed net around fishing pier at World of Energy in preparation for catfish stocking for the National Hunting and Fishing Day event.

Read STB otoliths from Lake Thurmond.

Assisted two pond owners with technical advice.

Continued ongoing creel surveys on Lakes Keowee and Greenwood.

Continued trout stocking in mountain streams on schedule

Attended a Regional Fisheries Coordinator Meeting in Columbia

Regional Coordinator attended a meeting with the Chief of Fisheries and University of Georgia professors and graduate student regarding analysis of creel survey data.

Biologist staff attended a meeting with the Director, Chief of Staff and the former and new Deputy Director for W&FWF Division.

The South Saluda stream habitat project is almost complete. Responded to a FOIA request with regard to this project.

Attended the State Lakes coordination meeting with the state lakes crew.

Assisted USACOE in planting water willow at 8 South Carolina sites on Lake Russell

Began demolition of the fishing pier at Russell ponds due to structure integrity to meet ADA standards.

Staff attended a meeting to discuss the 2012 changes in the insurance program, and optional insurance programs available during the upcoming October Open Enrollment period.

Removed 22 year old ice machine and installed a new one at Abbeville work center

### **Region II**

Annual fish population survey for the Statewide Stream Assessment was completed with the remaining four streams being sampled during September.

Fisheries Biologist Robert Stroud attended the York County Sportsman's Coalition meeting to report on SCDNR stocking/management activities at the Draper WMA ponds.

Robert Stroud participated in a monthly Coordinator's Meeting held in the main office in Columbia.

Robert Stroud completed a required Energy Audit from the Budget & Control Board for the Rock Hill Workstation.

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

Staff readied equipment for the upcoming fall sampling on the Little Pee Dee River in October.

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

### **Region III**

#### **Reservoir Management**

The first draft was completed on the Lake Murray Management Plan update.

Monitoring for striped bass summer mortality was completed at Lake Murray. Mortalities appeared to be minor.

Fish attractor buoys were checked for condition and location.

Photos and coordinates were taken of unauthorized dock structures on Lake Brown and sent to the Chief of Fisheries

A meeting was held with the Research staff to discuss the development of a statewide crappie data base and management plan

#### **Stream Management**

Staff assisted Region 2 with two stream surveys.

Work was initiated on drafting a proposal for a Lower Saluda River trout and fish community study.

The Savannah River at New Savannah River Lock & Dam area and Steel Creek area downstream of SRS was electrofished to monitor the catfish population. One 15 lb. flathead catfish was collected. Other native catfish species were numerous.

A meeting was attended to discuss the operation of the Columbia hydro with Lockhart Power Company. Operation of the fishway and minimum flow releases were major topics of discussion.

Work was done on the development of a sampling protocol for the Edisto River redbreast sunfish stocking evaluation study.

#### **Other**

Equipment preparation was done to prepare for various fall sampling activities.

Edits were made to the Chapter 13 Training Guide

Data analysis for the Region's annual progress report was conducted.

Staff assisted the Outreach and Support Services Division on a public education project.

Staff assisted 12 pond owners with pond management issues.

#### **Region IV**

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

Project personnel performed one striped bass electrofishing sample of the freshwater section of the Ashley River in coordination with the MRD mariculture section.

A Waccamaw River power point presentation was compiled to be presented in October for the Conway Bass Masters.

Twenty seven Santee Cooper grass carp, collected for age, growth, and mortality estimates, were processed (weight, length, otolith removed) for the cooperative study with Santee Cooper, and the Army Corps of Engineers.

Personnel completed two stream surveys, and observed numerous other reference streams that were either dry or currently had too much water to sample (thank too random pop-up thunderstorms).

Fish attractor work was conducted on Lakes Marion and Moultrie. Four buoys were replaced on Moultrie attractors and needs were assessed on Marion.

Project personnel coordinated with Kinsey Driggers and the Palmetto Bluefish Tournament to ensure proper equipment was available for their weigh-in.

Signage was checked at Lake Moultrie and Cooper River landings.

Striped bass mortalities were surveyed along East Dike.

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

#### **Hatchery Coordination**

Hatchery staff certified 3,053 grass carp as triploid and issued 4 permits for those fish to be sold statewide. Two more grass carp certification are scheduled for later this month.

Hatchery staff failed a load of 2,400 grass carp from Southland Fisheries Corporation after testing revealed a non-sterile fish. Southland recently started producing Grass Carp in South Carolina after they received a special permit from SCDNR. As the law requires, Southland has been attempting to acquire DNR sterility certification for those fish for the last three months. So far Southland has failed 2 out of 8 certification attempts (25%). Before these two failures DNR staff had only failed 2 of the 405 loads from the last seven years (0.5%).

Hatchery staff participated in the monthly Freshwater Fisheries Coordinator Meeting in Columbia.

Production ponds are being prepared for October harvest. Robust redhorse, phase II striped bass, advanced bluegill, redbreast sunfish, advanced redear sunfish, phase II smallmouth bass, channel catfish and threadfin shad are all on track to meet stocking requests.

Catfish are scheduled to be harvested from Cohen Campbell Fish Hatchery later this month. They will be stocked in Lake Keowee.

A total of 4,775 trout were stocked to date during the month of September. The result of low water levels and high temperatures led to significant stress on the fish during much of the month. An outbreak of Columnaris was the most notable result of the aforementioned stressors during the period. The bacterial infection was aggressively treated with medicated feed when dissolved oxygen levels were permissible. Staff continues to work diligently to mitigate these effects.

Presently, higher rainfall and cooler temperatures have alleviated much of the stress on the trout. The first shipment of eggs from Erwin National Fish Hatchery was received during September and hatched within eight days of arrival. Staff is now preparing for the upcoming spawning season that will begin in late October.

Hatchery staff plans to attend the Shad Accord Board and Technical Committee Meeting later this month to update the members on shad production activities this year and to present and request funding for next year.

#### **Outreach**

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

Hatchery staff was invited to give a presentation to the Hilton Head Plantation Fishing Club. The presentation was well received.

Hatchery staff was invited to give a presentation to the Striper Kings. The presentation was well received.

Walhalla State Fish Hatchery reported normal visitation.

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

### **State Lakes**

Cut grass at Starfort Pond, Dargan's Pond, Draper WMA, Jonesville Reservoir and Lake Cherokee Dam.

Meet with engineering staff and Region 1 fisheries staff about remodeling fishing pier at Calhoun Falls.

Fertilized Mountain Lakes II.

Routine maintenance at all 18 lakes: litter pick up, terrestrial weed spraying.

Assisted with certification of 2 loads of grass carp.

Meet with town of Bennettsville Rotary Club about how they can become involved more with activities at Lake Paul Wallace.

Treated aquatic weeds at Lake Warren.

### **Diadromous Fishes**

Efforts this month included: Gillnetting for and implanting transmitters in shortnose and Atlantic sturgeon in the Edisto and Pee Dee Rivers, weekly downloading of acoustic receivers to track sturgeon movements on the Santee, Waccamaw, Pee Dee, Edisto, Combahee, and Savannah Rivers, Electro-fishing for juvenile shad in the Santee-Cooper Basin, Edisto, Pee Dee, and Savannah Rivers, coordinating with Bears Bluff National Fish Hatchery (BBNFH) concerning continuing Edisto River shad stock enhancement work, and monitoring elver ingress at St. Stephen Dam. Personnel also assisted Myrtle Beach and Georgetown law enforcement with DIDSON multi-beam sonar. 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 was able to transmit 25 adult Atlantic sturgeons, in two days of sampling, on the Edisto River.

### **Juvenile American shad monitoring**

Because the Atlantic States Marine Fisheries Commission (ASMFC) mandated cooperating states prove river specific fisheries for American shad are sustainable or close those fisheries, SCDNR began sampling for juvenile shad to develop abundance indices. Collection sites have been identified and this month sampling occurred in the Pee Dee River (Cheraw, SC to Society Hill), in the Edisto River (Martin's Landing to Jacksonboro, SC), and the Savannah River (Purrysburg Landing to Millstone Landing). By continuing to sample on a weekly basis during juvenile shad outmigration, SCDNR will use these data, combined with other fishery-independent data and landings, to demonstrate recruitment is occurring and fisheries, in these rivers, appear to be sustainable.

### **Special Recognition**

Bill Post was selected to attend the National Conservation Leadership Institute in Shepherdstown, WV. He is one of only 36 people chosen, from a nationwide pool of applicants, to receive this honor.

### **Meetings and Outreach**

Personnel participated in numerous conference calls and meetings concerning ASMFC shad and river herring Amendment 3, NMFS protected resources, and the Santee Accord. Staff attended an ASMFC shad and river herring technical committee meeting in Providence, RI to defend our states sustainability plan and a Santee Accord board meeting to present project data and submit future proposals. Personnel also met this month with The Nature Conservancy, USACOE, SCE&G, and Duke Energy.

### **Research**

State stream assessment sampling continued. Staff sorted and identified invertebrate samples collected during the 2011 State Stream Assessment. Remaining sites were surveyed to see if there was sufficient water for sampling.

Five stations on the main stem of the Reedy River were scheduled for sampling during the last week of September to monitor the status of these sites to 1996, the date of a major oil spill into the Reedy.

Eel traps at Wateree and Columbia dams were checked on three dates. Rising river levels have allowed us to prime traps and keep the ramps at Columbia Dam operational. No eels were captured. The 2011 data was summarized and a presentation prepared that will be delivered to the Santee Accord Board on 29 September. Seven eels have been collected during 2011, but none have been collected since 29 June.

Work continued on the Thurmond striped bass telemetry project. Field activities during the month included downloading receivers, deploying deepwater buoy-less receiver sets, and collecting water quality data. All receiver data downloaded during 2011 was incorporated into our telemetry database which now contains more than 1.8

million fish location records. A presentation on the Thurmond telemetry project was prepared and presented to the Thurmond Lake Sail and Power Squadron on 23 September.

Work continued on our project to describe the first year growth and diet of several key fish species in the Santee-Cooper Lakes. Night electrofishing was conducted at two Lake Marion sites on 7 September. Young of year gizzard shad have been very abundant this year representing 16% of all fish captured. In previous years gizzard shad represented less than 1% of the total catch. Relative abundance of other species is comparable to previous years. Growth of striped bass and American shad juveniles appears to be similar to growth during 2010 and slower than that observed in 2009.

The energy content of stocked striped bass was determined with bomb calorimetry. At this point in the process, we are working on obtaining repeatable results for blind, replicate samples. Early in the month, the Santee-Cooper environmental laboratory determined sulfur content of these fish; this was needed for calorimetry, as sulfur must be corrected for when doing calorimetry.

Photographs were provided to Lorianne Riggan for the Chapter 13 training manual.

Progress was made at quantifying the relationship/interaction among inflow, nutrients, outflow, and phytoplankton production in upper Lake Marion.

We spent three days assisting Fisheries Region II with completion of their scheduled annual stream sampling.

We prepared otoliths from known marked bluegill sunfish for oxytetracycline evaluation. These are fish marked at Cheraw Hatchery and stocked in Lakes Long and Robinson. This was also used as a training exercise for one employee in the processing of otoliths.

We wrote an article and submitted it to David Lucas on SCDNR employment from a fisheries technician perspective. This was in response to Don Winslow's request for articles for the "Let Me Tell You About My Job" project.

Genetic analysis was completed for black bass samples collected from Savannah drainage streams in 2009 and 2010, and compared to results from 2004 collections. This is part of a drainage wide survey of redeye bass populations, to track the incidence of non-native bass and their hybrids with redeye bass. Spotted bass and/or their hybrids with redeye were collected from three stream sites. These are all tributaries associated with the reservoirs of the upper Savannah drainage, and are all sites where non-native bass had not been collected previously. These results indicate movement of spotted bass, or at least their genetic influence, up from the reservoirs where they are established. Smallmouth bass and their hybrids with redeye were also collected from the Savannah River at Augusta Shoals, where smallmouth bass have been introduced.

# Law Enforcement

## DIVISION SUMMARY – COL ALVIN TAYLOR

Officers issued 1,089 summons and 2,120 warnings with 1,002 cases clearing court with fines totaling \$147,317.61 being assessed. A total of 2,942.5 hours were spent on boating patrols resulting in 5,585 boats being checked. Officers spent 639 hours on Homeland Security, 683 hours on litter patrols and a total of 272.5 hours were spent patrolling Heritage Trust Preserve properties. Officers also spent 3,008 hours on night patrols. A total of 203 JEA hours were worked.

### **Region 1 - CPT Mark Carey**

Officers issued 229 summons and 324 warnings with 250 cases clearing court with fines totaling \$41,574.39 being assessed. Officers checked 845 fishermen and a total of 156 hours were spent on boating patrols resulting in 350 boaters checked. Officers gave a total of 36 public presentations. Officers spent 132 hours on Homeland Security, 204 hours on litter patrols. A total of 43 hours were spent patrolling Heritage Trust Preserve properties. A total of 18 hours were spent patrolling Jocassee Gorges resulting in 7 warnings. Officers also spent 412 hours on night patrols. One boating accident was reported.

### **Captain's Spotlight**

- SGT's Dudley and Vaughn with assistance from DLEO LeCroy finished their cases on the trespassing to remove archaeological resources. The victim was rewarded \$3,700 for property and historical damage, and suspect also paid \$930.00 in fines.
- PFC's Baker and Cutter wrote 3 night hunting cases in Edgefield County.

### **Unit 1A (Oconee / Pickens) 1<sup>st</sup> SGT D.J. Riley**

Officers issued 22 summons and 61 warnings with 31 cases cleared court with fines totaling \$5,203.50 being assessed.

- 1<sup>st</sup> SGT Riley, SGT Winegard and CPL Brooking made 3 cases for preparing a baited dove field and 3 cases for unplugged guns.
- Unit officers participated in a T.O.M.O event at Duke Power World of Energy for several schools in Oconee Co.

### **Unit 1 B (Greenville / Spartanburg) 1<sup>st</sup> SGT Amy Staton**

Officers issued 43 summons and 73 warnings with 49 cases cleared court with fines totaling \$7,591.00 being assessed.

- With the use of the plane on opening day of dove season, CPL Cooper and Pilot Barker assisted Greenville and Spartanburg Officers with 5 baited dove fields and cases.
- CPL Cooper and 1<sup>st</sup> SGT Staton worked a boating incident on Lyman Lake.
- CPL Jordan charged a subject with illegal possession of American Alligator.

### **Unit 1C (Cherokee / Union) 1<sup>st</sup> SGT John McCraw**

Officers issued 26 summons and 33 warnings with 30 cases cleared court with fines totaling \$6,576.00 being assessed.

- 1<sup>st</sup> SGT McCraw and SGT Camp caught 2 subjects trespassing to hunt, hunting without a license, no big game permit, and hunting with a rifle during archery season for deer.
- SGT Adams, Officer's Smith and Miller made 4 cases for preparing a baited dove field, 1 case for hunting dove over bait, 2 cases for unplugged guns and 1 WMA violation during the month in Union County.

### **Unit 1D (Greenwood / Laurens) 1<sup>st</sup> SGT Kristie Lumley**

Officers issued 63 summons and 75 warnings with 85 cases cleared court with fines totaling \$11,387.00 being assessed.

- CPL Welch caught 2 subjects using a cast net to catch game fish and in possession of 91 bream.
- CPL's Taylor and Maxwell made 4 cases and several warnings during early waterfowl season.
- CPL Welch and PFC Maxwell issued 20 cases for preparing a baited field and hunting doves over bait.

### **Unit 1E (Abbeville / Anderson) 1<sup>st</sup> SGT Rhett Barwick**

Officers issued 28 summons and 41 warnings with 26 cases cleared court with fines totaling \$6,686.88 being assessed.

- PFC Ginn made 2 cases for deer hunting over bait, and 2 cases for trespassing to hunt on opening day of bow season.
- PFC Ginn and CPL Keeter assisted the Virginia DNR with locating 2 suspects who moved to Anderson and questioning them concerning 10 violations that occurred several weeks ago in Virginia. Both subjects confessed to 10 separate violations and plead guilty to the charges in Virginia.
- PFC Bensel while patrolling some Property Watch Property located 2 subjects in a stolen vehicle. Subjects were charged with possession of stolen property, as well as Trespassing, and Possession of Drug Paraphernalia.

### **Unit 1F (Edgefield / McCormick) 1<sup>st</sup> SGT Ron Talbert**

Officers issued 47 summons and 41 warnings with 29 cases cleared court with fines totaling \$4,130.01 being assessed.

- Unit 1F made 11 dove bait cases and 9 other dove related cases in September.
- PFC Baker wrote 3 cases for hunting deer out of season.

### **Region 2 - CPT William Poole**

Officers issued 197 summons and 228 warnings with 196 cases clearing court with fines of \$22,097.72 being assessed. Officers checked 4,242 hunters and 788 fishermen, and a total of 197.50 hours were spent on boating patrols resulting in 425 boats inspected. Officers spent 29 hours on Homeland Security and 161 hours on litter patrols, and a total of 90.50 hours were spent patrolling Heritage Trust Preserve properties. Officers gave a total of 28 public presentations. Officers also spent 734 hours on night patrols. There was one 1 hunting accident reported during the month.

#### **Captain's Spotlight**

- Region 2 officers made a total of 64 dove baiting cases this month.
- SGT Richard Covington made 2 night hunting cases in Marlboro County by using video evidence on a cellular phone.
- CPL David assisted by SGT Roberts made 2 small game cases out of season.

#### **Unit 2A (Chester, Lancaster, York) 1<sup>st</sup> SGT Todd Campbell**

Officers issued 43 summons and 59 warnings with 37 cases clearing court with fines totaling \$5,350.00 being assessed.

- Unit 2 made a total of 5 dove related cases this month including 3 for doves over bait.
- CPL Ferrell worked 1 boating accident on Lake Wylie this month resulting in a negligent operation case being made.

#### **Unit 2B (Fairfield, Kershaw, Lee) 1<sup>st</sup> SGT Joey Cobb**

Officers issued 59 summons and 27 warnings with 85 cases clearing court with fines totaling 10,076.00 being assessed.

- Unit 2 B Officers spent many hours this month checking for dove bait. These hours paid off with the Unit making 38 cases for hunting dove over bait, 4 cases for unplugged guns, 9 cases for no hunting licenses, and 2 cases for hunting dove before legal shooting time.

#### **Unit 2C (Chesterfield, Dillon, Marlboro) 1<sup>st</sup> SGT John Hillian**

Officers issued 31 summons and 42 warnings with 39 cases clearing court with fines totaling \$3,515.00 being assessed.

- CPL David assisted by SGT's Covington and Roberts, located a baited dove field in Marlboro County which resulted in 6 baiting and 3 unplugged gun cases.
- CPL Jacobs located a baited dove field in Chesterfield County which resulted in 1 baiting case.
- SGT Caldwell with assistance from SGT Covington and DLEO McRorie worked a baited dove field in Chesterfield County which resulted in 2 baiting cases.
- Unit officers assisted the Chesterfield County Sheriff's Office on a missing person case in which the subject was located successfully.

#### **Unit 2D (Darlington, Florence) 1<sup>st</sup> SGT Benjy Byers**

Officers issued 41 summons and 53 warnings with 19 cases clearing court with fines totaling \$718.72 being assessed.

- Officers in Unit D made 22 cases for hunting dove over bait, 1 case for preparing a baited dove field.
- 1<sup>st</sup> SGT Benjy Byers and SGT Rick Stevens made 1 case for hunting deer out of season.
- SGT Rick Stevens made another case for hunting deer out of season.
- Officer Ezra Arnold assisted the Investigation Division and made 2 outboard motor title cases.

#### **Unit 2E (Marion, Williamsburg) 1<sup>st</sup> SGT Bill Huggins**

Officers issued 23 summons and 47 warnings with 16 cases clearing court with fines totaling 2,438.00 being assessed.

- Officers Britt, Oates and Larymore worked illegal set hooks on Little Pee Dee and Great Pee Dee Rivers making several night cases including, no fishing licenses, navigation lights, and untagged lines.
- SGT Kelley worked security detail in Charleston for the House Speakers Convention.
- While checking deer hunters, Officer Cody Britt located a stolen ATM machine and equipment stolen for CSX Railroad valued at approximately \$1,000.00.

### **Region 3 - CPT Harvin Brock**

Officers issued 181 summons and 261 warnings with 166 cases clearing court with fines of \$20,856.50 being assessed. A total of 624 hours were spent on boating patrols resulting in 1,012 boaters checked. Officers spent 216 hours on Homeland Security; 205 hours on litter patrols and a total of 22 hours were spent patrolling Heritage Trust Preserve properties. Officers gave a total of 36 public presentations. Officers also spent 1,017 hours on night patrols. During the month there were 52 hours spent on boating accident investigations.

#### **Captain's Spotlight**

- Unit 3A officer's efforts of searching for and documenting baited Dove fields last month paid off this year with an outstanding dove season. Their efforts produced 90 contacts including 12 cases for Preparing a Baited Dove Field and 31 cases for Hunting / Taking Doves over Bait.
- While working archery hunting on WMA, SGT's Smith and Derrick apprehended a subject hunting with a .270 rifle over bait on WMA. He claimed he was hunting coyote but after checking his hunting pack, officers found a grunt call and doe urine. He also did not have a WMA Permit.

### **Unit 3A (Lexington/Saluda) 1<sup>st</sup> SGT Ken Simmons**

Officers issued 87 summons and 62 warnings with 82 cases clearing court with fines totaling \$11,210.00 being assessed.

- Unit 3A officers assisted the U.S. Army and U.S. Coast Guard with security for Airborne Training with 60 Paratroopers jumping from a C-170 in Lake Murray.
- 1<sup>st</sup> SGT Simmons made 3 cases for possession of Undersize Striper and a dozen fish under 21 inches on Lake Murray
- SGT's Robinson and DeRienzo worked Security for the Annual Drew Swim across Lake Murray at the Dam.
- CPL Johnson and PFC Parrish made 6 WMA Permit cases while patrolling the WMA public Dove field in Lexington.

### **Unit 3B (Newberry/Richland) 1<sup>st</sup> SGT Dudley Britt**

Officers issued 36 summons and 76 warnings with 47 cases clearing court with fines totaling \$5,471.50 being assessed.

- Officers located and documented 7 baited dove fields in Newberry and Richland County resulting in 20 cases being written for hunting dove over bait, preparing a baited field.
- SGT's Bickley and Cope worked early waterfowl in their respective counties with 6 cases and 11 warnings being made.
- SGT Bickley and CPL Bassard made 2 shining cases in Richland County while working night deer patrol.

### **Unit 3C (Aiken/Allendale/Barnwell) 1<sup>st</sup> SGT John Bedingfield**

Officers issued 18 summons and 39 warnings with 16 cases clearing court with fines totaling \$1,540.00 being assessed.

- All Officers worked two night patrols this month with the airplane. They resulted in the apprehension of one individual illegally hunting Coyotes with an Infrared illuminator. He had a total of 14 loaded weapons in the vehicle including 11 long guns and 3 pistols. He was charged with Simple Night hunting, Litter and Illegal carry of a Firearm.
- PFC's Terry and Bowers assisted Georgia DNR with the Ironman 70.0 event on the Savannah River.
- 1<sup>st</sup> SGT Bedingfield received a tip from someone looking at Facebook pictures about Illegal possession of an American Alligator. Further investigation by Cpl. Tyler and Pfc. Terry revealed that two individuals had caught the alligator in a pond, posed with it at a party and then took it to the Salkahatchie River to release a few days later. The investigation resulted in two cases made.
- SGT's Davis and Pinckney were called to assist with a CDV; oddly the area where the CDV was occurring was a baited dove field the Officers didn't know about. Two cases were made for hunting doves over bait.

### **Unit 3D (Bamberg/ Calhoun/ Orangeburg) 1<sup>st</sup> SGT Farrell Pulaski**

Officers issued 18 summons and 32 warnings with 13 cases clearing court with fines totaling \$1,620.00 being assessed.

- Unit Officers located and worked baited dove fields, and also worked Lake Marion during the Labor Day Holiday.
- CPL. Collins made two charges and CPL. Lambert made two charges for hunting over bait, and another charge was made for preparing a baited dove field.
- SGT's Yongue and Lee assisted Orangeburg County with Marijuana eradication.
- Officers worked the Alligator and early Teal seasons this month. Hunting activity was down some due to low water.
- Several presentations were made to youth organizations in the unit this month. 1<sup>st</sup> SGT Pulaski and SGT Brown went to the Connie Maxwell Children's home in Orangeburg with the TOMO hunting trailer. CPL Lambert gave a program to a Cub Scout troop in North at the Air base.
- SGT Yongue went to Orangeburg Prep and gave a presentation to the Elementary classes.
- Officers assisted in a manhunt near Branchville for suspects that shot at officers of the Orangeburg County Sheriff's Office. All three subjects were apprehended.

### **Unit 3E (Clarendon/Sumter) 1<sup>st</sup> SGT Gene Morris**

Officers issued 22 summons and 52 warnings with 8 cases clearing court with fines totaling \$1,015.00 being assessed.

- The Unit worked opening weekend of Dove season and made 2 cases for preparing a baited field.
- Unit Officers in Sumter concentrated around Packs and Sparkleberry due to the information that large numbers of crappie were being caught and undersize largemouth were being taken 4 summons were issued.

### **Region 4 – CPT Chisolm Frampton**

Officers issued 437 summons and 1,198 warnings with 349 cases clearing court with fines of \$57,169.00 being assessed. Officers checked 3,805 hunters and 3,876 fishermen with a total of 1,727 hours being spent on boating patrols resulting in 3,376 boaters checked. Officers spent 262 hours on Homeland Security and 113 hours on litter patrols. A total of 117 hours were spent patrolling Heritage Trust Preserve properties. A total of 1,145 hours were spent on night patrols. Officers gave a

total of 45 public presentations. Officers also spent 203 hours on JEA patrols. During the month there were 30 hunting accident investigation hours and 15 boating accident investigation hours conducted.

#### **Captain's Spotlight**

- SGT Pop and PFC Beacham made 2 federal fisheries cases the first being on a Commercial vessel for 64 Red Porgy over the limit, 8 undersize Red Porgy and 71 pounds over the limit of Snowy Grouper. The second case was made on a commercial vessel for 200lbs over the limit on Snowy Grouper. Both fishermen were charged federally.
- CPL Brown received information regarding early trawling off Morris Island. CPLs Brown, Ladue and SGT Garner conducted an early patrol resulting in 3 trawlers being boarded and 1 count of trawling early before sunrise.

#### **Unit 4A (Horry) 1<sup>st</sup> SGT Joe Ard**

Officers issued 62 summons and 184 warnings with 78 cases clearing court with fines totaling \$10,265.00 being assessed.

- PFC Robinson caught 2 individuals dumping 2 untagged antlerless deer. 2 summonses were issued for untagged antlerless deer, and 2 warnings for no hunting license, no big game license, and littering.
- SGT Prosser, CPL Hutson, DLEO's Miller and Spires worked a 2 day boat drag racing event at Bucksport marina.
- SGT Prosser, DLEO Miller and 1<sup>st</sup> SGT Ard conducted a CBI at the Craig Campbell Landing.
- PFC Robinson gave a television interview with WPDE-15 on Alligator Season.
- 1<sup>st</sup> SGT Ard, PFC Pardue and CPL Chanaca assisted the U.S. Coast Guard with the sinking of a shrimp trawler (Poor Boy, Supply N.C.) on the ICW. Crew and vessel were located and brought to safety.
- PFC Robinson and DLEO Alford caught 1 person for night deer hunting.
- 1<sup>st</sup> SGT Ard and PFC Robinson attended the officer of the year banquet in Columbia. PFC Robinson won the State Officer of the Year Award.
- PFC Robinson and CPL Hutson worked around the Cherry Grove area and caught 2 individuals pulling a net and keeping everything they caught. 2 summonses were issued for taking game fish and undersize Red Drum.

#### **Unit 4B (Georgetown) 1<sup>st</sup> SGT Ryan Williams**

Officers issued 81 summons and 124 warnings with 75 cases clearing court with fines totaling \$13,337.50 being assessed.

- SGT Pop charged a local bar in Georgetown for selling shrimp without bills of laden.
- 1<sup>st</sup> SGT Williams, CPLs Capps and Kaminskas charged a subject for preparing unlawful dove fields.
- CPL's Kaminskas and Capps caught a subject that had made his own registration stickers for his vessel in his sign shop after his registration expired. The subject had 5 violations that included undersize black sea bass, no saltwater license, no PFD, an expired registration and obtaining fraudulent SC boat registration decals.
- CPL Kaminskas made a BUI.
- CPL's Kaminskas, Capps, SGT Pop and PFC Beacham caught 7 subjects hunting doves over bait. As the officers entered the field 5 of the hunters fled on foot and hid in the woods. After about 30 minutes all 5 subjects were caught or found in the woods and transported to the detention center. All hunters were charged with hunting doves over bait.

#### **Unit 4C (Charleston North/Berkeley) 1<sup>st</sup> SGT Angus MacBride**

Officers issued 139 summons and 431 warnings with 68 cases clearing court with fines totaling \$12,304.00 being assessed.

- CPL's Chavez and Crawford, with assistance from Sam Chappelle, set up surveillance over the Hatchery WMA and apprehended 2 separate parties illegally hunting alligators on wildlife management area property.
- PFC Day, after putting in many hours of night work in Charleston Harbor, apprehended 5 separate people shrimp baiting without a license.
- 1<sup>st</sup> SGT MacBride, SGT Monnet, CPL's Crawford, Chavez and DLEO Dupree apprehended 2 individuals who had been observed working 6 illegal trotlines in the Copper River, without licenses, tending them at night, improperly marked, improper bait and hook size, no commercial licenses, in possession of game fish, and several other violations.
- CPL Chavez, working on a tip, apprehended an individual trespassing to hunt, hunting within 3 hundred yards of a residence and, without a license. The individual was wanted by Berkeley County and was a convicted felon in possession of multiple firearms, who was turned over to Berkeley County and the case for felon in possession of a firearm was forwarded to ATF.
- PFC Day apprehended an individual who ran from USCG, and charged the individual with DUI.
- PFC Day, assisted by L17, found 4 vessels from Georgetown County to the Savannah River shrimp baiting out of season.
- SGT Spann apprehended an individual on a private club in St. Stephens who was in possession of a doe deer.
- PFC Day apprehended 4 people harvesting clams out of season in a polluted area.
- PFC Day, working on a tip from a CPL Duncan apprehended 3 individuals targeting Red Drum with a cast net.

#### **Unit 4D (Charleston South/Dorchester) 1<sup>st</sup> SGT Lee Ellis**

Officers issued 86 summons and 284 warnings with 71 cases clearing court with fines totaling \$10,472.50 being assessed.

- SGT Richardson was given information on a subject removing sand from a critical area off Cosgrove Ave. SGT Richardson followed up on the information with OCRM. The subject was caught removing approximately 6

truckloads of sand from the area of the Cosgrove Bridge. The subject was charged with 1 count of removing sand from a critical area.

- CPL's Ladue and Brown documented a baited Dove field on Edisto Island resulting in 1 count of preparing an illegal Dove field.
- CPL Weaver caught a subject in possession of Marijuana while fishing a tidal pond on Folly Island.
- CPL Brown worked alligator hunting on the Edisto River resulting in 3 counts of no hunting license being made.
- CPL Ladue assisted homeowners with a trespass issue resulting in 3 counts of trespassing to hunt being made.
- CPL Whaley documented a baited Dove field on Wadmalaw Island resulting in 2 counts of preparing.
- CPL Whaley caught 2 subjects for undersized crabs, illegal taking of game fish, no saltwater license, and littering. 2 citations and 6 warnings were issued.
- CPL Whaley caught a subject harvesting oysters out of season and in a closed area. Investigation found the subject was harvesting during the closed season, in a closed area, in possession of undersize spot tail bass, and undersized crabs. 1 citation and 3 warnings were issued.
- CPL Weaver cited 2 hunters for violation of the Renegade Hunter Act on Wadmalaw Island.
- 1<sup>st</sup> SGT Lee Ellis issued 1 citation for preparing an illegal Dove field and 1 citation for taking Doves over bait in the Grover area of Dorchester County. 1<sup>st</sup> SGT Thomas and USFWS SA Pilgrim assisted with this case.
- SGTs Kinsey, Richardson, and Manning checked a field in St. George resulting in 1 count of preparing an illegal Dove field. 1<sup>st</sup> SGT Thomas and USFWS SA Pilgrim assisted with this case.

#### **Unit 4E (Beaufort/Colleton) 1<sup>st</sup> SGT Michael Paul Thomas**

Officers issued 30 summons and 118 warnings with 27 cases clearing with fines totaling \$6,975.00 being assessed.

- SGT Smith, CPL Henderson, and PFC Godowns caught 3 subjects hunting deer at night on Lady's Island in Beaufort. Officers received information regarding the case and worked it the same night; within 30 minutes of being set up the officers caught 3 subjects.
- SGT Smith and CPL Henderson worked a drowning in the Beaufort River.
- SGT Smith caught a commercial crabber with 3 commercial crab pot violations in Wimbee creek.
- CPL Jones spent many hours checking Dove fields that he had documented as baited fields. He charged 4 different subjects with preparing a baited Dove field. He also issued several other migratory bird tickets during the season.
- SGT Graham received information regarding a possible baited Dove field and upon entering the field found the bait and charged the owner of the field for preparing a baited Dove field.
- 1<sup>st</sup> SGT Thomas, SGT Graham, and CPL Jones worked a hunting accident in Colleton County.
- 1<sup>st</sup> SGT Thomas, SGT Long, and CPL Jones worked a hunting accident where the subject fell from a tree stand.

#### **Unit 4F (Hampton/Jasper) 1<sup>st</sup> SGT Michael Paul Thomas**

Officers issued 39 summons and 57 warnings with 30 cases clearing with fines totaling \$3,815.00 being assessed.

- 1<sup>st</sup> SGT Thomas, CPL Pope, PFC's Wallace, Godowns, LT Thames, and S/A's Pilgrim and Huggins caught a baited Dove field that officers had been documenting for 3 years. The owner of the field admitted to preparing the field and will be charged by USFW. Officer put a large amount of time into documenting the field and did an excellent job.
- 1<sup>st</sup> SGT Thomas, PFC Davis, and DL Cantrell caught several out of state subjects on Hamilton Ridge WMA hunting with rifles during a closed season, driving ATVs on WMA, no hunter orange, license and permit violations, and destroying WMA property. PFC Davis followed through with the investigation from the spring and did a great job staying with the investigation. The subjects had taken a bulldozer and plowed shooting lanes into the WMA and then put out feeders on the WMA as well. The President of lease admitted to the wrong doing and charges are pending on the operator of the bulldozer.
- PFC Godowns, SGT Smith and CPL Henderson caught 3 subjects night hunting for deer in Beaufort County
- PFC Davis conducted an investigation into the killing of a wild hen turkey. The subjects both juveniles have admitted to shooting the turkey and dumping it out on a side road.
- PFCs Godowns and Davis caught several hog hunters on Hamilton Ridge WMA with license violations and with marijuana in their possession. Upon further inspection of their vehicle PFC Godowns found that the subjects had been ripping WMA signs off of trees around the property. The subjects were issued 6 summons and numerous warnings for the violations.

#### **Education – LT Billy Downer**

Officers issued 9 summons and 41 warnings with 3 cases clearing court with \$380.00 in fines assessed. A total of 215 boats were inspected and a total of 99 boating hours were accrued this month. A total of 47 presentations were given to the public.

- 1734 students were certified in 43 Hunter Education classes; 478 students were certified in Hunter Education Internet classes; 270 CD-ROMs were mailed and a total of 102 students were certified in Hunter Education CD-ROM classes; and 56 workbooks were mailed and a total of 17 students were certified by workbook.

- 73 students were certified in 5 Boater Education classes; 66 students were certified in Boater Education Internet classes; 0 students were certified in Boater Education Video classes.
- There were 1497 shooters at the Pickens Range and 754 shooters at the Spartanburg Range during the month.

#### **Investigations - LT Gary Sullivan**

Officers issued 36 summons and 68 warnings with 38 cases clearing court with \$5,240.00 in fines assessed. A total of 207 boats were inspected. A total of 139 boating hours were accrued this month. There were 2 fatalities investigated along with 14 boating incident/accident reports submitted and processed. There was 10 maintenance request received. There were 3 regulatory marker investigation requests submitted and processed. There were 28 Marine Event Permits processed; 3 dive assignments were completed.

- 3 boats, 3 trailers and 3 motors were recovered valued at \$68,100.00

#### **Special Detail/Training – LT Robert McCullough**

- **Confiscation Sales:** 1
- **OGT Activity:** \$400.00 payouts / Balance \$24,000.00
- **Media/Special Operations:** Media event at Lake Murray Light House Marina Four Sheriffs and Colonel Taylor meet with the Lake Association. Media calls about two drowning one in Marion and Beaufort Counties. Worked the National Speakers Conference in Charleston SC . Honor Guard attended the Officer of the Year Banquet.
- **Training:** Fall in-service weapons qualification started in region 1 and will continue into next month in all regions. Shot gun class for New class of Officers. AAA driving for the New Officer class.

#### **Aviation - Pilots Bucky Harris, Owen Barker**

- 20 flights resulting in 71.5 flight hours
- 58.8 law enforcement flight hours
- 8.2 biology flight hours
- 4.5 JEA flight hours

#### **Homeland Security/EMD/Supply– SSGT Rick Dye**

- Attended North Santee Dam Exercise
- Applied for an extension for CAD grant
- Completed NIMSCAST for Nims compliancy
- Took fingerprint cards to SLED
- Ordered all items for the Winter 2011 order
- Scheduled everyone to be fitted for new body armor.
- Created a new DNR contract for Duty Gear
- Ordered Logo's for trucks and boats

#### **Communications - Vandy Waller**

- Repaired communications equipment as needed. Repaired / reprogrammed 76 wt's, 38 mobile radios, 4 boat radios, 1 base stations, 1 repeaters, 0 phone line tickets to Radio Room, 2 canopy sites. 1 Console problem.
- Assisted with providing communication for the US Speakers Conference in Charleston.
- Completed the re-banding and Flashing on 53 of the 800 radios and tuned. Waiting on the new program to be completed to install in the radios.
- Replaced a bad antenna for the Anderson control station at Little Mountain tower site.
- SGT Dukes completed the applications for new hires for the Communications Center.
- SGT Dukes traveled to each Region and exchanged all of their WT batteries with new ones and assisted with float suit fittings.
- Removed electronic equipment from vehicles at STYX.
- 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.

#### **Radio Room Monthly Report**

- Total calls for service logged: 924
- Litter Buster Calls: 246 Top three counties; Charleston (51); Richland (42); Greenville (34). Total calls forwarded to officers 678: Top three calls: Nuisance Wildlife (65); General Hunting Violation (63); Trespassing to Hunt/Fish (61)

## OUTREACH AND SUPPORT SERVICES

### EDUCATION/GRAPHICS/MAGAZINE

#### Aquatic Education Happenings

- 29 schools applied for the Trout in the Classroom program. Lorianne worked with Scott Poore, the Walhalla Fish Hatchery Manager and a Trout Unlimited Representative from each of state's TU chapters (Mountain Bridge, Chattooga and Saluda River) to score applications to determine the top 12 applicants. Awards will be announced on October 1<sup>st</sup> via email.
- Lorianne continued the editing and review process for the Chapter 13 Staff Training Guide that includes fish descriptions and all about the new regulations that will probably go into effect July 2012.
- As the school year has started back, the Youth Bass Fishing Clubs are gearing up again. Several schools have already set tournament dates for the season including Bonds Career Center, Dixie High School and TL Hanna High School. Dixie High School held their first season tournament September 17<sup>th</sup> with 20 student anglers participating catching a total of 78.92 pounds on Lake Secession. The upstate schools are planning to host a tournament together with multiple schools competing on Lake Hartwell in November. Three new schools have come forward and expressed interest in starting a team: Chapin Middle School, Mid-Carolina High School and Wando High School. Abbeville High School has already been added as a new team this month; with Ninety-Six High School not far behind them (they are still collecting dues from students.).
- Dan and Lorianne coordinated and facilitated a Family Fishing Events at the Cohen Campbell Fish Hatchery on September 12<sup>th</sup> for approximately 19 3<sup>rd</sup> graders and their parents from C.A. Taylor Elementary. 17 University of South Carolina Elementary Education Majors also came to assist with the course.
- The Family Fishing Clinic volunteer recruitment began this week. Volunteers will attend a mandatory training and undergo SLED background checks to become Certified DNR Fishing Instructors. These folks will allow the Aquatic Education section to reach a larger number and a greater diversity of participants from all over the state. Recruitment was done through a press release in the weekly news packet, posting to the DNR Facebook page and through partner organizations such as the South Carolina Wildlife Federation. Lorianne and Dan continued to work on the coordination of the Family Fishing Clinics Volunteer Training set for October 15<sup>th</sup>.
- Dan continued to work on the Beginner's Guide to Angling with graphics. Lorianne finalized the Family Fishing Clinic Volunteer Handbook and sent it to print. Work continues on the fish identification book in a new format.
- Lorianne worked with Bill Post, the Diadromous Fish Coordinator and Angel Brown to finalize a flyer for the public on shad and herring fishing regulations as well as a flow chart for the license clerks on what licenses, permits, etc. anglers need to buy when fishing for blueback herring, hickory and American shad. There is a lot of confusion for exactly what is needed to fish for these species as a nongame gill net license differs from a shad or herring gill net license. Hopefully, these documents will help clarify some of the problems that have occurred.
- Lorianne and Dan traveled to the Cheraw Fish Hatchery to meet with Rick Slack, hatchery manager, and Richard Bassett about hosting a Family Fishing Clinic. The date for this event is set October 12<sup>th</sup> and for now is open only to Chesterfield County residents. A flyer for the event was created with the graphic department's help which was sent to both of the local papers. Currently, working with the News Section to develop a press release to send to these papers too.
- Reel Art prizes, ribbons and certificate paper was ordered. The 2011 Reel Art topic for the 10<sup>th</sup>-12<sup>th</sup> grade category was determined. Artists in this category will have to illustrate the sport of fishing with a freshwater fish. A Reel Art brochure was mailed to every art teacher in the state from a SC Department of Education database.
- Reel Kids goals are starting to come in with as prizes are awarded each year in October and May. An email was sent to all Reel Kids (with email addresses) to remind them to turn in their goals for this prize deadline.
- 28 local bait and tackle shops have signed up to provide discounts on fishing merchandise, bait, etc. for any SC Reel Kid. In addition to a Thank You letter, these sponsors each received a SC Reel Kids I Support Youth Fishing decal to place on their store window or at the checkout register and SC Reel Kids brochures with a nicely graphic-designed acrylic brochure rack. Lake World in Lexington even had that they supported the program on their sign for a week! Every Reel Kid received a special license that looks almost identical to the decals the stores received in order to acquire the discount.
- Freshwater fish rulers were distributed to each region's law enforcement captain.
- Lorianne and Amanda Stroud continued traveling to collect data for the Fish South Carolina publication. They are traveling to all the freshwater pier and bank fishing access sites in the state to collect GPS coordinates and information about the site such as available parking, handicap accessibility, restrooms available, etc. This

information will all be compiled into a fishing type atlas for distribution to the public. Data collection and travel takes a while, but we hope to have this project completed within a year's time.

- Dan setup a new Fishing Tackle Loaner Site with Santee Wildlife National Wildlife Refuge and delivered their equipment to them on September 9<sup>th</sup>. Two in house Fishing Tackle Loaner orders were filled for a total of 75 rods and reels.

#### Camp Wildwood

- Dan inventoried and reduced the amount of supplies stored for the wildwood program by condensing, cleaning, reorganizing and discarding what was no longer needed for the program. Most of the wildwood stuff is now setup in one of the new shipping containers behind the Styx radio room.
- Dan closed out the financial records for the program and created the end of the year program report.

#### Other

- Lorianne attended the Fisheries Coordinators Meeting.

#### Jocassee Gorges Education and Recreation

- \* Delivered Jocassee Gorges program to Road Scholar (formerly Elderhostel) waterfalls trekking group at Clemson University Youth Learning Institute in Pickens.
- \* Met with regional wildlife biologist Tom Swaynham and Jocassee land manager Mark Hall to discuss a reprint of the popular Jocassee Gorges map and driving tour.
- \* Planning Oct. 11 event at Pickens High School to feature authors Debbie Fletcher and Dot Jackson to talk about Jocassee Valley, Keowee and "The Horsepasture."
- \* Working with local American Legion officials to place memorial and kiosk near Bully Mountain in Jocassee Gorges to commemorate 1950 crash of Air Force aircraft there and death of four servicemen.
- \* Serve as Foothills Trail Conference board member, representing DNR, also serve as outings and public relations leader.
- \* Working on fall/winter 2011 issue of Jocassee Journal newsletter.
- \* Serving as DNR coordinator for Upstate Master Naturalist class, which consists of 12 weeks of all-day-Thursday classes, including DNR programs on fisheries, wildlife and Jocassee Gorges. Sept. 1 program at King Creek included brook trout presentation by DNR fisheries staff Dan Rankin, Amy Breedlove and Wilson Norris. DNR wildlife biologist Mary Bunch led a Sept. 15 program on bats at Stumphouse Tunnel. Sept. 29 Lake Day to be held at the Clemson DNR office.
- \* Fall Jocassee Gorges class for Osher Lifelong Learning Institute (OLLI) begins Oct. 5 to include six field trips to various destinations including Sassafras Mountain, Twin Falls, Lower Whitewater Falls, Jumping-Off Rock Overlook and Pinnacle Mountain petroglyph site.
- \* Delivered additional Jocassee Gorges maps, WMA maps and Rules & Regulations booklets to Jocassee Gorges Visitor Center at Keowee-Toxaway State Natural Area in northern Pickens County. Mailed copies of Jocassee Gorges map/brochure and Jocassee Journal newsletter as requested via DNR Web site.
- \* Fielded inquiries on recreation (roads open/closed, hunting, hiking, backpacking, paddling, etc.) in Jocassee Gorges and mountain region.

#### Other

- \* Made TV appearance on WSPA News Channel 7 (Greenville-Spartanburg) to promote National Hunting and Fishing Day with Robert Cook of Duke Energy and Angela Viney of Upstate Forever.
- \* Belton Middle School programs on "How to Make a Difference" in conservation, delivered over the course of the school day to 165 students.
- \* Assisted with media and public relations training for wildlife biologists at state chapter meeting of The Wildlife Society Sept. 13 near Fort Jackson in Columbia.
- \* Helped coordinate and write stories for DNR statewide weekly news package.
- \* Fielded animal nuisance calls and calls about hunter and boater education and other general phone questions, such as boat titling and registration.
- \* Serving as Region One hub coordinator for OSS Division and region chair, chaired Sept. 27 hub meeting.

## Graphics

The Graphics section approximately twenty five jobs in the month of September. The Migratory Bird Hunting Guide and Regulations was completed. The Cowasee Basin Newsletter, Governor's Cup Banquet Program and the Governor's Cup Newsletter were also completed. Other items of note were Law Enforcement Banquet materials, Artificial Reef Development & Management Report and a Dove Identification Poster. The agency spent approximately \$16,500.00 on printing and publications this month. This cost is not all state funding but includes grants, nonprofit charitable donations and federal monies as well.

## SC Wildlife Magazine/Wildlife Shop

- Staff continued editing copy for the November-December 2011 issue of *South Carolina Wildlife*.
- Staff received office copies of the September-October 2011 issue. This issue offers our readers the family tradition of dove hunts, the history and mission of the Walhalla Fish Hatchery, the South Carolina Scholastic Clays Target program that DNR is involved in as part of our overall hunter and outdoor education programming, what's happening on Bulls Island now, more than 20 years later after Hurricane Hugo, an overview of DNR Scenic Rivers program, covers the basics of the stream survey project, Out Scoutin' to Webb Wildlife Center, and For Wildlife Watchers piece on the red-shouldered hawk.
- Staff continued proofing layouts for the 2011-12 Wildlife Shop catalog.
- Magazine photo staff continued providing photo assistance to the DNR and outside requests.
- Editorial assistant continued fulfilling magazine photo requests, including archiving digital photos, pulling photos/slides/digitals for DNR's graphics and other staff.
- Handled magazine requests from the public and within the DNR. Staff also assisted fulfillment personnel with promotions publications.
- Provided support for and included Take Me Hunting/licenses promotions in the September-October 2011 issue.
- Magazine photography staff provided photo coverage at the DNR's board meeting and other DNR staff.
- Life's Better Outdoors campaign ad placed in the 2008's May-June, July-August, September-October and November-December and January-February 2009, March-April 2009, May-June, July-August 2009, September-October 2009 and November-December 2009, January-February 2010, May-June 2010, July-August 2010, September-October 2010, November-December 2010, January-February 2011, March-April 2011 and May-June 2011 magazines.
- Continued archiving and backing up the magazine photo and digital files.
- Continued updating magazine issue and magazine/products material on DNR/magazine's website.
- Sales for the month totaled over \$37,053 through September 23, which includes the magazine subscriptions and Wildlife Shop sales.

## TECHNOLOGY

**Data Base Management.** Continued to develop quality assessment and editing tools to identify problems with customer identification numbers and resolve impacts to licensing and titling programs. Continued to support the geologic carbon sequestration and geothermal data management projects. Provided continuing support to South Carolina Interactive, agent POS vendor for the DNR licensing program and the Hunter-Boater Education systems. Continue to revise data schema for integration of internal licensing, POS and Internet systems licensing and titling systems to address customer identification number and other issues as the software design reaches its final phase. Due to staff shortages suspended the design of internal financial records management system to interface with SCEIS including the telephone and auxiliary credit card billing systems pending resolution to the customer identification number issues. Performed weekly maintenance and updates to various database and applications programs using the DNR's development framework protocols. Continued work with the boat titling program and the SCI, POS vendor, to implement and enhance the ImageNow electronic document management system for document and records management. Completed the design of a document management solution for boating and hunting incident/accident reports for the Law Enforcement Division and initiated user training sessions. Continued development of a DNR photographic document reference library and provided document management support to the diadromous fish project to evaluate the use of barcode scanning system for data capture. Continued EDMS project with the Engineering office to integrate facilities management records into the system. Developed scanner audit process to determine the frequency of use and connection time to the system. Continued document scanning and indexing for hydrologic well data, DNR Managed Lands, law enforcement violations/summons billing and aviation log applications. Completed scanning of various agency property files. Added 8,212 records and 26,670 images to the EDMS document library. Provided records management and permanent archival support to the

agency using record export and archive process. Archived 13,746 boating records from the document management system. Developed or updated fillable Adobe forms for procurement and grants management.

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

**Systems and Network Management.** Purchased and replaced network router for field office at Green Pond after equipment failure. Developed process to clean-up typographical mistakes in the customer email database to minimize risk of the agency being identified as a source for SPAM. Continued work with staff on construction specifications at Santee Coastal to enhance data communications. Added latest security patches and operating system service pack upgrades to agency servers. Defragmented agency servers and upgraded firmware on MRD server. Added 9 backup clients in Columbia, Clemson and Charleston. Completed deployment of new VirusScan upgrades with new antivirus signatures. Resolved several network, email and communications issues. Provided data recovery support to the agency including recovery of deleted files and directories for 3 users. Added three new printers to the print services and modified the printer queues to support additional Xerox multifunction devices. Monitored network, email and server security issues. Continued support to county auditors for mainframe access to DNR boating records. Processed mainframe daily transaction requests. Performed routine mainframe and server system maintenance functions. Researched and developed IT procurement requisitions and provided specification, installation and configuration support for DNR staff. Help Desk staff answered 198 trouble tickets.

**GIS Applications and Web Development.** Provided GIS and cartographic support to DNR staff including generation of two-foot contour data from LiDAR for the Engineering Section to support the design of agency boat ramps. Suspended 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. Provided web site support for the Managed Lands, shooting ranges, wading bird species, Beach Sweep/River Sweep, Palmetto Sportsman's Classic and SC Wildlife Magazine programs. Researched implementation of buttons on the web site that allow social media users to share DNR news releases with their friends and contacts. Researched options for implementation of mobile web services that would not require complete redesign of the DNR web site. Provided routine maintenance of DNR web site including news releases, publications, Board minutes and other agency web pages. Provided routine maintenance of DNR Intranet site including posting of information regarding flu shots clinics and defensive driving classes. Created 13 new web pages and updated or modified 116 existing program web pages. Continued enhancement and maintenance of DNR managed lands and reservoir web applications. The DNR web site statistics are not available until October 1.

**Administrative.** Tim De Troye continued to work with various state agencies and local governments to increase statewide participation in the GIS Coordination Council. Jim Scurry attended the Information Technology Solutions Committee (ITSC) meeting at the Division of State Information Technology and continues to meet with South Carolina Interactive regarding the design and implementation of the licensing and titling system scheduled for March 1. Work continued on the development of a five-year strategic plan to direct technology development in the agency through 2015.

**ENGINEERING**

Priority

County

Project Name

2 - Under Contract

Charleston Santee Coastal Blake House  
Colleton Mars Oldfield Boat Landing  
Horry Red Bluff Landing Courtesy Dock  
Kershaw Hwy. 1 Landing - Lugoff (Phase II )  
Richland Bates Bridge Landing Ramp Relocation

3 - Permitting & Design

Aiken Riverview Park Transient Courtesy Dock Addition  
Allendale Highway 301 Fishing Access  
Bamberg Bob Cat Landing Bank Stabilization  
Colleton National Estuarine Research Reserve Bank Stabilization  
Dorchester Bacons Bridge Boat Ramp  
Horry Hwy 22 and 17 Boating Facility  
Horry Rosewood (Socastee) Ramp Repair  
Jasper Knowles Island Fishing Pier  
Jasper Tuten Landing Resurfacing  
Kershaw Habitat Enhancement  
Laurens Belfast Archery Range  
Laurens Belfast Restroom Rehabilitation  
Laurens Boyd's Mill Pond Boating Access  
Marion Shotgun Range at Marsh  
Marion Woodberry Rifle Range  
Pickens Pickens Range Archery Range & Tower  
Richland Geology Building Expansion  
Spartanburg James Thomason Range  
York SC Hwy 211 Boating Access

4 - Pending Projects

Anderson Piedmont Access  
Berkeley Wando River Access  
Georgetown Rocky Point Landing  
Horry Savannah Bluff Ramp Repair  
Laurens Laurens City Park Archery Range  
Laurens Reedy River Carry Down Access  
Marion Hwy 301 Ramp Relocation  
Richland Columbia Canal Fishing Access  
Saluda Chapells Boating Access  
Williamburg Ferry Lake Boating Access

**PROCUREMENT**

<u>Purchase Order Transactions</u>		<u>Expenditures</u>
Purchases, Quotes, Bids	47	\$ 452,735.19
Blanket Orders	0	\$ 0.00
Exempt	4	\$ 40,181.15
Sole Source Procurement	2	\$ 10,115.00
Emergency Procurement	0	\$ 0.00
Grant Exemptions	0	\$ 0.00
Total Purchase Orders	53	\$ 503,031.34
FPRs	65	\$ 33,741.85
Check Request	56	\$ 218,291.31
Minority Vendors	2	\$ 3,371.55
Procurement Card	1	\$ 283,328.89

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	Road Maint.	Cory Drennan	5400003385	No	\$ 13,187.75
WFWF	Water Control Structure	Will Carlisle	5400003482	No	\$ 18,000.00
WFWF	Install/Remove Stop Logs	Brandon Eleby	5400003448	Yes	\$ 72,440.00
Marine	Microscope	Joseph Ballenger	5400003355	No	\$ 23,647.00
Marine	Ice Machine	Stephen Long	5400003437	No	\$ 24,292.00
Marine	Shucked Oyster Shell	Ben Dyar	5400003443	No	\$ 50,375.00
Marine	Dump Trailers	Ben Dyar	5400003468	No	\$ 14,479.50
LE	Storage Building	Billy Downer	5400003424	No	\$ 25,936.00

**BOATING/LICENSING**

**Boating Operations September 2011**

**Basic Business Report**

	MTD	Monthly Revenue	(previous ytd)	YTD
Watercraft - New Titles	769	\$9,566.36	\$45,370.00	\$54,936.36
Outboard Motor - New Titles	537	\$5,337.78	\$20,480.00	\$25,817.78
Watercraft - Transfers	1,521	\$8,745.75	\$35,046.00	\$43,791.75
Outboard Motor - Transfers	1,136	\$11,360.00	\$40,640.00	\$52,000.00
Internet Registration Renewals	631	\$6,310.00	\$25,400.00	\$31,710.00
DNR Office Renewals	3,932	\$39,320.00	\$54,490.00	\$93,810.00
Mail Renewals	2,160	\$21,600.00	\$98,850.00	\$120,450.00
Law Enforcement Boating Dollars (Drew's Law)		\$115,258.00	\$516,822.00	\$632,080.00
Active Watercraft Registrations				363,621
Inactive Watercraft Registrations ( including dropped records)				284,813
Total number of Watercraft				367,092

**Permitted Marine Dealers**

Jan. 1, 07 - Dec. 31, 07	318
Jan. 1, 08 - Dec. 31, 08	363
Jan. 1, 09 - Dec. 31, 09	310
Jan. 1, 10 - Dec. 31, 10	286
Jan. 1, 11	280

**M.T.I. Cases**

Since July 1 , 2011		
Stolen/Recovered Case files created	5	188

Licensing Operations September 2011

Basic Business Report

	MTD Quantity	MTD Revenue	Last Year MTD Quantity	Last Year MTD Revenue
Resident Hunting Licenses	49,017	\$ 162,697.00	45,758	\$ 143,850.00
Non-Res. Hunting Licenses	7,739	\$ 745,929.00	7,101	\$ 678,061.00
<b>Total</b>	<b>56,756</b>	<b>\$ 908,626.00</b>	<b>52,859</b>	<b>\$ 821,911.00</b>
Resident Fishing Licenses	25,560	\$ 220,503.00	28,334	\$ 244,660.00
Non-Res. Fishing Licenses	10,808	\$ 171,488.00	11,129	\$ 174,098.00
<b>Total</b>	<b>36,368</b>	<b>\$ 391,991.00</b>	<b>39,463</b>	<b>\$ 418,758.00</b>
Combo. Licenses	25,388	\$ 788,659.00	24,561	\$ 768,100.00
3 Yr. Resident Hunt	147	\$ 4,107.00	140	\$ 3,724.50
3 Yr Resident Fishing	494	\$ 13,338.00	564	\$ 15,228.00
3 Yr Non-Res Fishing	31	\$ 3,162.00	28	\$ 2,856.00
Lifetime Licenses	1,079	\$ 26,946.00	917	\$ 22,029.00
L/T Disability Licenses	2	\$ -	3	\$ -
3YearDisability	330	\$ -	296	\$ -

Turkey Tags	2,570	\$ 0.00	Opens 03-15-12
Antlerless Deer Tags	39,383	\$ 196,915.00	Opens 09-15-11
Shrimp Baiting	2,735	\$ 68,375.00	Opens 09-09-11

License Agents Numbers and Sales (Month To Date)

LicenseAgents Quantity	Manual	Point of Sale	Internet & Call Center	SCDNR Offices	Totals
	0	507	1	4	512
Total License		92,082	24,307	3,463	119,852
Total Revenue	\$ 0.00	\$1,349,141.50	\$ 704,359.00	\$ 93,112.50	\$2,146,613.00
% sales to agent type	0.00 %	62.85%	32.8%	4.3%	

NEW POS  
AGENTS 0

Commercial License Operations September 2011  
Basic Business Report

License Type	Licenses Sold	Licenses Sold Last		\$ YTD	\$ YTD Last	\$ MTD
	MTD	Month	MTD		Month	
Commercial Saltwater Res	816	619	197	\$82,315.00	\$17,131.25	\$20,342.50
Commercial Saltwater Non	112	64	48	\$120,645.00	\$18,855.00	\$33,000.00
Commercial Saltwater Total	928	755	173	\$202,960.00	\$35,986.25	\$53,342.50
Trawl Res	280	243	37	\$127,637.50	\$30,081.25	\$34,881.25
Trawl Non	89	40	49	\$58,560.00	\$11,805.00	\$26,100.00
Trawl Total	369	283	86	\$186,197.50	\$41,886.25	\$60,981.25
Crabs Res	282	267	15	\$76,130.25	\$18,118.75	\$18,700.00
Crabs Non	9	9	0	\$14,068.75	\$3,331.25	\$3,375.00
Crabs Total	291	276	15	\$90,199.00	\$21,450.00	\$22,125.00
Shellfish Res	59	30	29	\$26,456.25	\$2,242.50	\$4,417.50
Wholesale Res	230	214	16	\$91,685.00	\$21,300.00	\$22,975.00
Wholesale Non	3	2	1	\$9,975.00	\$1,000.00	\$1,475.00
Wholesale Total	233	216	17	\$101,660.00	\$22,300.00	\$24,450.00
All Commercial Types Res	2278	1928	350	\$477,679.25	\$104,242.75	\$119,471.75
All Commercial Types Non	225	127	98	\$236,837.00	\$36,315.00	\$65,300.00
All Commercial Types Total	2503	2055	448	\$714,516.25	\$140,557.75	\$184,771.75
Totals	2503	2055	448	\$714,516.25	\$140,557.75	\$184,771.75

WATER RECREATIONAL AND GAME & FISH FUNDS  
BALANCES OF AVAILABLE CASH AS OF SEPTEMBER 23, 2011

REG 1 HUB Balances	WREC	G&F		FY12 Lic Rev	FY12 Fine Rev
Abbeville	83,911.92	20,950.65		565.54	50.60
Anderson	45,679.14	131,128.97		4,827.67	301.20
Cherokee	194,646.80	146,163.91		3,809.32	
Edgefield	66,221.84	29,727.85		262.01	53.02
Greenville	106,047.89	90,943.40		3,905.70	122.90
Greenwood	79,971.97	39,604.94		2,249.04	363.88
Laurens	109,567.42	40,965.97		1,741.74	1,619.34
McCormick	34,108.96	18,563.38		916.54	130.13
Oconee	436,586.20	305,479.34		9,017.58	331.18
Pickens	55,266.04	70,654.90		3,247.38	441.66
Spartanburg	58,400.37	138,107.33		5,885.68	1,061.72
Union	99,850.60	32,029.57		580.63	144.60
REG 1 Total	1,370,259.15	1,064,320.21		37,008.83	4,620.23
REG 2 HUB Balances	WREC	G&F		FY12 Lic Rev	FY12 Fine Rev
Chester	163,009.35	33,135.07		592.78	
Chesterfield	53,621.04	39,274.77		833.31	214.46
Darlington	200,098.73	16,529.85		442.33	
Dillon	173,635.14	44,596.71		1,280.32	
Fairfield	57,425.96	132,982.18		2,422.20	337.34
Florence	416,742.56	47,294.14		840.64	180.22
Kershaw	231,780.41	66,955.88		1,271.26	328.19
Lancaster	258,880.66	114,863.96		4,473.48	1,051.36
Lee	105,396.45	10,570.86		38.65	58.27
Marion	119,806.54	24,912.77		149.06	18.97
Marlboro	99,102.64	24,197.43		514.45	74.71
Williamsburg	116,989.30	26,947.97		98.39	
York	227,210.42	160,952.61		16,185.78	110.83
REG 2 Total	2,223,699.20	743,214.20		29,142.65	2,374.35
REG 3 HUB Balances	WREC	G&F		FY12 Lic Rev	FY12 Fine Rev
Aiken	227,737.48	56,676.72		1,885.45	28.92
Allendale	26,160.49	22,648.92		62.54	396.38
Bamberg	70,038.29	14,692.53		52.71	91.58
Barnwell	87,916.66	33,955.25		221.97	178.31
Calhoun	67,493.37	33,428.19		307.82	159.03
Clarendon	70,074.60	41,881.04		2,797.25	462.65
Lexington	697,295.84	107,423.28		5,062.08	370.60
Newberry	107,168.90	71,232.88		1,831.35	129.27
Orangeburg	172,649.22	102,054.48		2,798.82	648.17
Richland	332,991.13	94,231.28		6,485.55	145.94
Saluda	113,930.25	78,734.90		1,056.48	79.53
Sumter	167,697.75	25,284.63		709.77	354.22
REG 3 Total	2,141,153.98	682,244.10		23,271.79	3,044.60
REG 4 HUB Balances	WREC	G&F		FY12 Lic Rev	FY12 Fine Rev
Beaufort	304,658.23	82,364.01		629.09	2,235.03
Berkeley	408,749.78	153,401.25		5,016.74	1,640.96
Charleston	590,321.80	91,787.05		1,313.52	1,925.59
Colleton	98,690.36	50,870.66		467.44	79.53
Dorchester	271,928.13	29,929.59		733.10	202.40
Georgetown	21,311.70	96,725.17		971.52	1,260.71
Hampton	90,241.34	55,216.58		334.77	647.63
Horry	250,587.42	65,955.31		5,267.03	2,933.50
Jasper	60,987.90	69,067.74		1,023.29	1,035.27
REG 4 Total	2,097,476.66	695,317.36		15,756.50	11,960.62
GRAND TOTAL	7,832,588.99	3,185,095.87		105,179.77	21,999.80

## LAND, WATER & CONSERVATION

### OFFICE OF DEPUTY DIRECTOR

Ken participated in STATEMAP Committee meeting and Chaired Drought Committee meeting (9/8). Attended Deputy Directors meeting in Columbia (9/9). He met with USGS staff re: water monitoring (9/12). He attended National League of Cities Regional Water Conference (9/14-9/15). DNR Board meeting and Law Enforcement Officer of the Year recognition program (9/16). Participated in FEMA Webinar (9/20). Took part in Conference call with GA EPD and TNC re: Savannah River study (9/22). Meeting with Clemson University official re: water issues (9/23). Hydrology meeting re: State Water Plan (9/26). Held an LWC Division meeting at the Styx classroom (9/27). He attended the Silver Jackets meeting (9/28). Chaired Drought Committee meeting (9/29).

### HABITAT PROTECTION AND ENVIRONMENTAL CONSERVATION SECTION

#### River Conservation

##### Ashley Scenic River Project:

Staff and advisory council participated on Sep 16 in the Dorchester County dedication of a public park at Bacons Bridge on Ashley River. The advisory council met on Sep 21 to address plans for the annual Ashley River community meeting.

##### Broad Scenic River Project:

Advisory Council members conducted river cleanup for Sep 17 Beach Sweep/River Sweep.

##### Catawba Scenic River Project:

Staff conducted a meeting of the advisory council on Sep 9 to continue developing the Catawba Scenic River management plan.

##### Edisto River Basin Project:

Staff participated in Friends of the Edisto (FRED) board teleconference on Sep 19 to address plans for the upcoming FRED annual meeting and to discuss an alleged wastewater discharge to the North Fork at Batesburg-Leesville.

##### Lower Saluda Scenic River Project:

Staff began planning for October meeting of the advisory council.

##### Lynches Scenic River Project:

Staff investigated need for replacement of water-trail signs posted at landings.

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

Staff addressed options for developing the river management plan with advisory council member.

##### Other River Projects:

Waccamaw: Staff represented the DNR in dedication ceremony of public access facilities on the river.

Wateree: Staff participated in Cowasee Basin meeting on Sep 14 and assisted with signs production through DNR Graphics.

Edisto: Staff supported the Edisto River Canoe-Kayak Commission with Sep 10 river cleanup.

##### Beach Sweep / River Sweep:

The statewide Sweep day was held Saturday Sep 17 and an estimated 5,000 volunteers cleaned trash from several hundred locations on beaches and waterways of the state. To support the effort, staff assisted volunteer leaders by providing information and cleanup supplies, and keeping up-to-date the cleanup-site contact lists on the DNR website.

##### FERC Hydro Projects:

- Buzzard Roost Hydro Project (P-1267) – Staff responded to the project operator to address a notice of deviation from downstream minimum flow requirements to the Saluda River.
- Catawba-Wateree Hydro Project (P-2232) – Staff participated in Habitat Enhancement Program committee meeting on Sep 23 to discuss funding requests for 3 new project proposals.
- Columbia Hydro Project (P-1895) – Staff meet with Lockhart Power, Kleinschmidt Associates, and USFWS staff to exchange information regarding Lockhart's new role as operator of Columbia Hydro, agency interest in the Broad River fishway, and related project operations.
- Keowee-Toxaway (KT) Hydro Project (P-2503) – Relicensing process continues: Staff participated in KT public meetings (Sep 13-14) to address Duke's Proposed Study Plan. Staff continued developing a revised study plan to assess stream fish communities and the status of redeye bass, a study the DNR will propose to be included in Duke's study plan to FERC.

- Broad River Fisheries Mitigation Trust Fund – Staff arranged and participated in meetings of the Basin Trustees on Sep 12 and 27, to address a project proposal of American Rivers and Upstate Forever to assess dam removal opportunities in the Broad River Basin. The Sep 12 meeting included a site visit to Clifton Mills Dam.
- Santee River Basin Diadromous Fish Accord – Staff participated in the annual Board meeting held on Sep 28.

#### **Other Activity of Rivers-Program Staff:**

- River Management Society -- Staff participated in a RMS National Board conference call on Sep 1. Staff continued planning and participating in committee teleconference calls to organize the April 2012 RMS symposium to be held in Asheville.
- DLEO – Staff supported DNR-Law Enforcement with Labor Day weekend patrols on Lake Murray.

#### **Heritage Trust**

##### **Data Management**

The following information and data requests were answered:

- Four requests for verification of known occurrences in the vicinity of project sites were received and answered from Lower Savannah Council of Governments for water and sewer projects in Denmark, Blackville, Perry, and St. Matthews.
- One request for GIS location data of rare, threatened and endangered species was received and processed from Sam Grubbs, a graduate student at Clemson University for an independent study course examining the relationship between the population increases of invasive plant species and the population declines of federally listed plants.
- One request from a student in Greer for general information about deforestation and its effect on threatened and endangered species was responded to, with assistance from staff in the Wildlife and Freshwater Fisheries division.

The hardcopy documentation binders of projection projects approved by Heritage Trust Advisory Board and kept by the data manager have been consolidated to include two additional sets of binders located during the move to the third floor. All of the documentation was copied and scanned to ensure a good and undamaged version for storage on the agency server and for access by staff. Now, this information will be readily available in a digital format and less prone to loss or physical damage.

#### **Heritage Survey**

Staff led a field trip for the SC Native Plant Society to the Forty Acre Rock Heritage Preserve, Lancaster County and conducted an initial reconnaissance of the long leaf pine stands along Conservancy Road.

Heritage staff served in an advisory capacity by providing digital maps and background for the “ecoregions” of the state in support of revisions to the Conservation Wildlife Conservation Strategy and Plan.

Twenty-five specimens were processed for August 2011 for specimens collected during the Heritage Preserve Inventory Project. Lists are maintained with specimens and collection numbers for quick reference.

Two additional plant species, *Aristida mohrii* (Mohr’s Three-Awn Grass) and *Ceratiola ericoides* (Sandhills Rosemary), were evaluated as to distribution, abundance, and ecological threat. Both species are endemic to Longleaf Pine woodlands and savannas and are threatened by fire suppression and loss of and general decline of woodlands and grasslands throughout the Southeast. Also restricted to ephemeral wetlands in this system is the federally listed *Oxypolis canbyi* (Canby’s Dropwort). Data on this plant were updated and revised for those populations on the Lee County Longleaf Pine WMA and Heritage Preserve.

Staff continues discussion with both USC and Clemson herbaria regarding collaboration in securing National Science Foundation (NSF) support for the curation and housing of taxonomic collections, as well as another NSF program for advancing the digitization of these biological collections. Each proposal would include a strong specimen digitization component and a data sharing agreement with Natural Heritage Programs in the Southeast and others such as NatureServe.

Using high resolution aerial photography (true color and false color near-infra red), Pond Cypress - Pond Pine savannas and shallow ponds were mapped and evaluated for rare, threatened, and uncommon species on the Lynchburg and Lee County Longleaf Pine WMA’s and Heritage Preserves. These habitats are rich in both plant and animal species of concern and are being actively managed by prescribed fire and selective use of herbicides to maintain their typical open, grassland vegetation structure.

## Aquatic Nuisance Species Program

### Technical

SC invasive species management surveys were conducted on Santee Coastal Reserve, Cooper River, Back River Reservoir, Aiken State Park, Huntington Beach State Park, Lake Richard B. Russell, Lake Bowen and the Socastee Snail Population.

Communications with Santee Cooper staff concerning hydrilla acreage revealed about 1900 acres of hydrilla in a physical survey of Lake Moultrie which could potentially mean an increase in carp stocking numbers for next year.

Control operations were conducted on 137 acres at a total cost of \$27,857. That includes invasive Island apple snail control measures, 20 acres, in and around Socastee, SC. Other sites include 64 acres of hydrilla on the Back River Reservoir, 17 acres of phragmites control in Santee Coastal Reserve, 14 acres of phragmites control in the Georgetown Parks and 2 acres in Huntington Beach State Park.

Staff assisted the US Army Corps of Engineers and the SCDNR Fisheries section with a habitat enhancement project by planting 1200 water willow seedlings in Lake Richard B. Russell.

Staff assisted SCDNR Wildlife section by banding 50 mourning doves for the annual dove banding project and participating in the annual turkey and quail survey.

### Outreach

In a meeting and survey with Lake Bowen Lake Management a plan was discussed for future control efforts in Lake Bowen near Spartanburg. Triploid grass carp was recommended to control an outbreak of Chara (muskgrass).

A reply to comments from constituents sent to Senator Massey about Lake Thurmond was forwarded through Derrick Meggie to address the issues surrounding that lake and the problematic amount of hydrilla that is present.

Staff met with SCDNR Wading Bird Biologist to schedule invasive species and habitat enhancement treatments on Dungannon HP and other Wood Stork Rookeries around the state.

Work has continued with Amanda Stroud to coordinate a public service announcement campaign with the Freshwater Fisheries Section to provide PSA's, billboards and literature for an ad campaign highlighting aquatic invasive species prevention in SC for the fall and winter waterfowl season

Staff participated in a conference call with SC EPPC concerning upcoming workshops and educational activities.

Staff participated in the LWC annual meeting at Styx Fish Hatchery.

## CONSERVATION DISTRICTS

### Statewide Projects

Program Manager Marc Cribb participated in the annual meetings of the National Association of State Conservation Agencies and the SC Conservation Districts Employees Association. The Annual Conservation Partnership Conference Planning Committee met to begin planning the 2012 Conference to be held in Columbia on February 28 and 29. State funding has been distributed to 42 districts as of September.

### Technical

Jonathan Williams continues to assist landowners with conservation practices in **Orangeburg, Bamberg, Barnwell and Allendale Districts**. He also attended the Orangeburg Young Farmers meeting and the Orangeburg County Flood Mitigation public meeting.

### Outreach

Staff attended a district meeting in the **Oconee District** and the Local Work Group meeting in **Colleton District**.

## **Conservation Districts**

**Abbeville District** published 2012 calendar containing photographs that were submitted for the annual Photography Contest. Abbeville hosted the SC Conservation District Employees Annual Fall Training Workshop, 21 counties attended. NRCS State Conservationist Ann English and Assistant Conservationist for Operations Dennis Mobley joined the state district employees for dinner in Abbeville. Dixie High School FFA Vice President Michael Williams visited the district's board meeting and expressed his gratitude for sponsoring him to attend the SC Institute for Natural Resource Workshop. Michael told the board that it was very rewarding and he walked away with a lot more knowledge about the environment and timber production and uses.

**Barnwell District** and NRCS staff taught FFA students about soils and the duties of the conservation district. District employee attended the District Employees training in Abbeville.

**Beaufort District** is assisting NRCS in making a promotional video about local farmers, landowners, and their culture on St. Helena Island. NRCS, commissioners, and staff have been busy working on the Okatie Watershed 319 Grant, attending a Chinese Tallow workshop, planning a Together for Beaufort Water Quality Committee meeting, and hosting the Salkehatchie Watershed Local Work Group to set local questions and rankings for USDA Farm Bill programs. The Education staff has been busy scheduling several Soil Tunnels and other programs for the school year as well as preparing presentations for the upcoming local fall festivals.

**Cherokee District** Coordinator Karen Allen and Commissioner Willie Sarratt visited Granard Middle School to speak to two Academic Enhancement classes about water conservation. The program included an Enviroscape demonstration. The group discussed plans for work in an interior courtyard that the school would like to use for conservation practices. The District worked on plans for the upcoming Affiliate Member Appreciation in October.

**Clarendon District** employee mapped 16 Wetlands Reserve Program sites using the new 2011 Imagery, updated contact information for these sites, and made appointments for 35 Farm Bill contracts. The District participated in the Wateree Watershed Work Group meeting to help determine the counties resource concerns and ranking questions for the USDA Environment Quality Incentives Program. The Clarendon Conservation Youth Board participated in Beach Sweep/River Sweep by cleaning up Taw Caw Creek Park.

**Colleton District** hosted the USDA-NRCS Local Work Group meeting for the conservation districts in the Salkehatchie Watershed. The purpose of the meeting is to set priorities for funding Farm Bill programs in the watershed.

**Dillon District** is again sponsoring the Dillon Conservation District Essay Contest for 5th Grade. Several of the commissioners attended a meeting in North Carolina concerning cover crops. Local farmers met with Congressman Mick Mulvaney at the USDA Service Center in Dillon, to discuss the 2012 Farm Bill, FSA Programs, crop insurance, etc. The groups represented were The Dillon County Farm Bureau Board, SC Farm Bureau, and Dillon Conservation District along with SC Farm Bureau President, David Winkles, SCFB National Legislative Staffer, Michael Wright, and SCACD President, Sterling Sadler.

**Edgefield District** currently has the Poster Contest open for all 5<sup>th</sup> grade students that attend school in Edgefield County. The District Commissioners hosted an Appreciation Dinner for Edgefield County Legislative and County Council members.

**Fairfield District** has moved into their new location. The address is 155 South Congress St., Winnsboro, SC 29180. The District is working with local citizens and the Boy Scouts concerning an erosion problem at the "Old Brick Church". The district is offering financial assistance as well as technical assistance.

**Greenville District** has been active in a trout habitat restoration, irrigation audits and educational opportunities. The trout habitat project on the South Saluda River includes the addition of native rock cross vanes which will provide more habitat for trout along a section of the river that is already popular with trout fishermen. The Every Drop Counts South Carolina irrigation check program is in full swing. This program, a partnership between participating conservation districts, NRCS and water supply districts, gives free irrigation audits to citizens and producers in the water district areas to help educate on conserving water. Other educational opportunities in September included participating in two festivals to present information about fecal coliform due to dog waste and teaching about trees at an outdoor learning center.

**Lancaster District** staff person Amanda Roberts chaired the SC District Employees Association Annual Meeting and Workshop held in the Abbeville District.

**Richland District** is excited to announce that, with funding from a Community Conservation Grant from the Richland County Conservation Commission, Timothy D. Nafziger, Jr. has been retained as the new Outdoor Educator for the Conservation Station at the Clemson Sandhill Research and Education Center. The Conservation Station is a conservation education facility sponsored by the District. In September, Timothy and District staff presented programs for over 155 children and 46 adults at the Conservation Station. In addition, the District participated in the Green is Good for Business conference, NRCS Wateree Local Work Group meeting, and SC Conservation District Employees Association Fall Conference. Staff published a fall newsletter, conducted one schoolyard habitat/Green Steps Schools consultation, and continued promoting Richland County Farm-City Week K-12 competitions ([www.richlandonline.com/farmcity](http://www.richlandonline.com/farmcity)).

**Spartanburg District's** Youth Board participated in Spartanburg Water's Annual Lake Sweep and recruited 3 new members for the 2011-2012 school year. The District also presented an Erosion and Soil program at the Price House for

20 students and 8 adults. District staff was interviewed for WYFF Channel 4 about Spartanburg County's 319 and Community Development Block Grant programs for septic tank repair.

**York District** staff made 8 presentations to 3<sup>rd</sup> & 4<sup>th</sup> grade students at 4 elementary schools using Enviroscope and “Dragonfly Pond” activity. The District Chaired “1000 Rain Gardens for York County” steering committee and secured commitments for rain garden workshops at two area garden centers. An ad was placed in the local newspaper garden section. Arbor Day program information was distributed to area teachers and administrators; began receiving requests for tree grants and seedling programs. Assisted Fishing Creek Watershed Board to complete requirements to begin exercising their taxing authority beginning with 2011 taxes. Staff attended District Employees Association meeting in Abbeville. Rented no-till drills to users to plant 30.1 acres.

## **EARTH SCIENCE GROUP**

### **Hydrology Section**

**Water Planning:** A draft of the updated *State Water Plan* was distributed for internal review. Joe Gellici made a brief presentation about that update at a meeting of the Savannah River Basin Advisory Council. Comments were provided to DHEC regarding the proposed regulations being developed for the recently enacted *Surface Water Withdrawal, Permitting, Use and Reporting Act*. Staff also attended a DHEC Staff Information Forum public meeting that was held to discuss the proposed regulations.

**Savannah River Basin:** Staff participated in a conference call with the Corps of Engineers, DHEC, Georgia EPA, the Nature Conservancy, NFWS, and the National Weather Service to discuss the situation in the Savannah River Basin, as the Corps' lakes entered Level 2 Drought conditions at the end of August. The following week, the same agencies hosted a similar conference call that was open to other stakeholders in the basin.

**ADR Network:** 14 Coastal Plain and 15 Piedmont ADR wells were field-checked; data were downloaded, manual measurements were made, and equipment inspected at each well site. QA/QC was performed on all data before it was added to the database. Draft reports for the Black Creek and Middendorf aquifer potentiometric maps for November 2009 were completed and are undergoing peer review. A draft describing ground water levels measured in more than 100 wells from 2006 through 2010 is nearly complete.

**Climate Information:** In addition to providing stream-flow and lake-level information to the Climatology Office for its evaluation of the State's drought status and presenting this information to the State Drought Committee, Scott Harder continued to evaluate several alternative methods of using stream flow data as a drought indicator.

**Geophysical Logging:** A suite of geophysical logs was made in a new 500-foot public-supply well for the City of Aiken (Aiken County, Region 3).

**Websites and Databases:** 444 new well reports that were received from DHEC were sorted and processed. Work continues on a map showing the location of more than 1,500 wells in Lexington County (Region 3). A meeting was held with the Geological Survey to review and discuss their efforts to develop an Oracle database containing the DNR well data.

**Outreach:** Hydrologic information or assistance was provided to 29 customers.

### **Flood Mitigation Program**

**Staff Activities:** Maria Lamm participated in the monthly contractor conference call with URS. Ms. Lamm also met with FEMA Region IV and North Carolina NFIP officials to discuss the tie-in of the storm surge study of the South Carolina/North Carolina border. Andy Brandenburg currently is working with Greenville (Region 1), Charleston (Region 4), and Richland Counties (Region 3) to assist in the implementation of various flood-mitigation activities to structures located within those counties. Mr. Brandenburg also attended a meeting at EMD with FEMA to discuss upcoming projects and related flood mitigation information. Joy Sullivan wrote an article for a Department new release pertaining to September being *National Preparedness Month*. Karen Jones advised FEMA on the status of required compliance ordinance adoptions by communities with upcoming, new map effective dates.

**Outreach:** The Army Corp of Engineers was assisted with a proposal for funding a Flood Mapping Inundation pilot study and a Coastal Erosion Study. Preliminary results of storm surge levels were discussed with URS, along with Charleston County Floodplain Mapping (Region 4) and LIDAR. Mmes. Sullivan and Jones assisted 19 communities with updating their Flood Damage Prevention Ordinance before their new maps become effective. The counties and their participating municipalities assisted were in Region 1: Anderson, Cherokee; in Region 2: Chester, Chesterfield; and in Region 3: Newberry. Work continues with Marion County (Region 2) in getting its 5 community ordinances updated by their October deadline. Assistance also was provided to the Town of Blythewood (Region 3) in getting its ordinance updated to compliance in an effort to gain admission into the National Flood Insurance Program (NFIP). Preliminary DFIRM Community Coordination (PDCC) meetings were held for Clarendon and Orangeburg Counties (Region 3). Ms. Lamm conducted CAV (Community Assistance Visit) follow up for communities in Region 1: Greenville, and Region 4: Sullivan's Island, North Charleston, Hilton Head, and Edisto Beach. 420 technical assistance contacts (phone calls and

emails) were made; and technical assistance was provided to the following counties in Region 1: Anderson, Spartanburg; in the Region 2: Kershaw County; in Region 3: Saluda, Richland; and in Region 4: Charleston, Beaufort, Georgetown, Colleton, Horry. Staff provided CRS (Community Rating System) also support to Greenville (Region 1) and Colleton Counties (Region 4). An E-273 class, *Managing Floodplain Development through the NFIP*, was offered, with FEMA, to 23 participants. Mrs. Lamm also proctored the *Certified Floodplain Manager* exam to 15 individuals. Updates continue to be made to the webpage.

## **South Carolina Geological Survey**

### **Geological Information**

**Earthquakes:** M2-4 earthquakes continue to occur on nearly a daily basis around Mineral, Virginia. Earthquakes also occurred in northern Alabama and in western North Carolina.

**General:** A proposal is being developed to digitize Slate Belt geology maps stored in Geological Survey files. When completed, the proposal will be submitted to Haile Gold Mine Company. Repository renovation continues to move forward, and bids for construction may be sent out this week. Rock stock piles for mineral kits in the construction area continue to be relocated.

**Outsource Mapping:** Work continued in the Caesars Head area (Cleveland quadrangle, Greenville County, Region 1) with focus on the south flank of Campbell Mountain, east of Highway 276. Mapping shows that NW-striking, oblique brittle faulting offsets complex fold relations.

**STATEMAP:** The annual STATEMAP Advisory Committee meeting was held 8 September. The theme of the meeting was *Physical Change along the Coast*. Scott Howard and Will Doar gave presentations related to that theme. The committee set 2012 project priorities as: 1) Coastal Zone (mapping NE along coast toward Little River), 2) Savannah River Basin (finish 5-year plan), and Delmar quadrangle (Eastern Piedmont fault system study). Work began on preparation of the required proposal. As part of the Oceda fault study, drilling was done in Cedar Creek quadrangle (Georgetown County, Region 4). 16 holes (44 ft/aver.) were drilled on different north and south roads intersecting Walker Road east of Lambert. An en echelon, east-west segment of the Oceda fault was mapped and posted on the Cedar Creek map.

**Sea Grant:** Although favorable ratings were received from some reviewers, the fringe-unit proposal was not funded. Other venues for this proposal are being investigated.

**Geothermal:** Well-log information was compiled from the Hydrology Section's Coastal Plain files and assembled in a test data set.

**CO2:** Dr. Dick Berg (Illinois Geological Survey) will be making a presentation on September 28. The talk is hosted by the Geological Survey, and the topic is *Advances in 3D Mapping*.

**Broad River Project:** Repairs were made to the transom of small john boat, and the 8 hp kicker motor from the Whaler will be used for power. The Broad River geologist position was advertised, and one application was received. Paperwork to hire that person was completed and sent to Human Resources. A project meeting with Freshwater Fisheries group is planned for early October.

**SET:** All, but 2, SET stations along the Coast were measured. Inspection of stations showed that boards at two stations need to be replaced and that the station on St. Pierre Creek (Edisto Island, Charleston County, Region 4), will need to be re-located in the near future. Creek migration is slowly removing the measuring area of that station.

### **Digital Products**

**General:** A terrace/scarp map was developed for Beaufort County (Region 4). Summary of web statistics continues to indicate viewing and downloading up nearly 30% over 2010. 205 map layers and 437 education materials were downloaded, which are almost double of last month's numbers. Eighteen (18) maps printed.

**STATEMAP:** Drafts of the 2010 deliverables were completed and include maps in the Savannah River Basin (Region 4): Blue Springs Landing, Solomans Crossroads, Gifford maps; and along the coast (Region 4): Kilscock Bay, Georgetown South, Santee Point. Presently reviews, edits, and revisions are being made.

**Data Preservation:** Scanning by quadrangle of recent drill-hole logs continued. Scans of logs, reports, and site maps are being compiled in the Document Management Workflow. Over 2000 drill logs have been scanned, 1194 located geographically, and 281 QA/QC'ed to complete the work. Drill-holes are being located by UTM coordinates, a Geological Survey standard for locating points.

**CO2:** Meetings continue to discuss development of a well-data entry format, and a final draft is nearly complete. Data model and definitions for the Oracle database also are nearly complete. Discussions with ESRI about CO2 components to database continue.

**Geothermal:** Earthquake hypocenter data and a test package of well-log data were submitted to the Arizona Geological Survey, the project coordinator. Additional well-log information also was compiled.

**Estuarine Shoreline Change:** After review and revisions, GIS components of OCRM project were delivered.

**EMD Hazards Map:** Final revisions are being made.

### **Outreach**

**General:** Mr. Doar accepted an invitation from NRCS to join their Southeast working group steering committee to

update the soils maps. The steering committee also will review and advise future update work, with a goal to standardize the soils maps on a regional scale. Mr. Doar also attended the BOEMER-NOAA offshore sand resources meeting in Charleston. Drs. Howard and Castle participated in conference calls with USGS REE experts to discuss exploration approaches. 24 Rock& Mineral kits were prepared. General information was provided to 24 customers. Information was provided on the following county in *Region 2*: Dillon.

**Other Activities:** Dr. Clendenin gave a talk on stratigraphy to students and faculty in the USC-Aiken, Department of Biology and Geology Seminar Series. He also provided an internal review of the updated State Water Plan.

***Partnering:***

Furman University	SCEMD	
USGS – Earth Surface Processes Team	SCDHEC-OCRM	University of South Carolina -ESRI
National Park Service	College of Charleston	Citadel

**STATE CLIMATE OFFICE**

The SCO answered 49 information requests with two invoiced for \$50 and fifteen media interviews were provided. The Assistant State Climatologist for Service assisted SCDNR Law Enforcement with 3 accident investigations and the Richland County Public Defender’s Office with 1 criminal investigation. He assisted USDA Farm Service Agency with definitions for frost verification and minimum temperature observations occurring statewide autumn 2010. He completed a special weather summary for the heavy rain event (9/20-9/23).

The Severe Weather Liaison issued 3 Tropical Updates, 3 Advisories on Hurricane Katia, 2 Advisories on Tropical Storm Maria, and 4 Advisories for TS Ophelia. The WeatherAlert Listserv increased to 1226 subscribers. He provided forecast guidance for the USC Special Events Department (9/19).

The State Climatologist participated in the Southeast Regional Climate Center Technical Advisory Committee Meeting (9/7), a COCORAHS meeting with the Lexington County Public Works (9/8), and a conference call for District 4 Farm Service Agency Quarterly Plan of Work Meeting (9/22). She conducted a SC Drought Response Committee Meeting Conference Call (9/8). Staff distributed a press release and drought notification letter to all SC public water systems (465 total). She continued to focus on revising SCDNR’s report on Climate Change Impacts to Natural Resources.