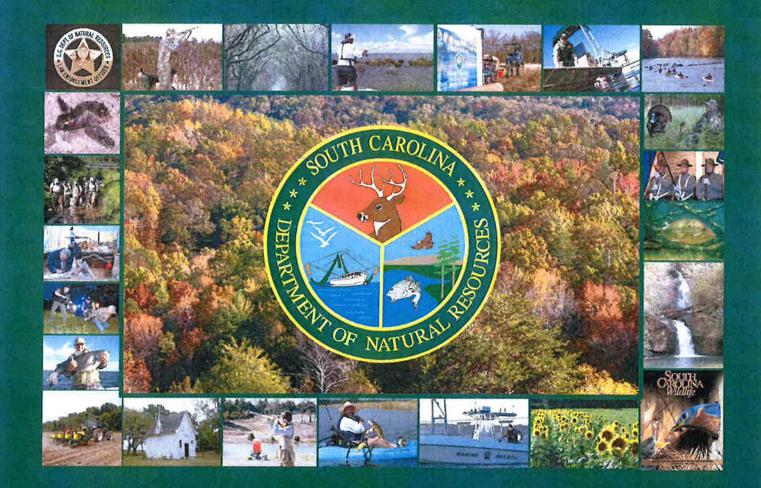
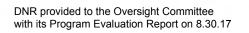
# South Carolina Department of Natural Resources



# 2014 Accomplishments

www.dnr.sc.gov

with its Program Evaluation Report on 8.30.17



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## **Cultural Resources Program**

- Increased awareness of the DNR Cultural Resources Program through improved public outreach. Had over 400 people visit the Kolb Site Archeological Dig the past two years.
- Initiated an archeological survey and access improvement project at Fort Frederick Heritage Preserve in Beaufort County. 30 news articles have been written about the work taking place. During the two week public tour project, it is estimated that about 200 people will have visited the site.
- Wrote a Cultural Resources Management Plan for the Haile Gold Mine mitigation properties (Rainbow Ranch, Goodwill Plantation and Cook's Mountain).

# Hydrology

- Obtained funding for, wrote RFP, selected contractor and began work on the development of surface water quantity models and water assessment project.
- Secured commitment from Charleston District Corps of Engineers to provide funding for Statewide Water Planning from the Planning Assistance to States Program.
- Partnered with Clemson University's Strom Thurmond Institute and Center for Watershed Excellence for stakeholder engagement in State Water Plan update.
- The groundwater monitoring network was expanded from 114 to 134 wells. The 20 new wells were established as follows: 2 in Chesterfield County, 5 in Lee County, 1 in Lexington County, 4 in Calhoun County, 1 in Barnwell County, 4 in Charleston County and 3 in Georgetown County.

# Geology

- Three coreholes were drilled during the year: one in Calhoun County to a depth of 1,038 feet; one in Georgetown County to a depth of 830 feet and one in Chesterfield County to 400 feet. This drilling produced a total of 2,268 feet of subsurface information that is available in the State Core Repository.
- Saltwater intrusion monitoring was also implemented. Eight wells were equipped with new conductivity instruments to monitor saltwater,
- Partnered with the College of Charleston to produce offshore map of the Folly Beach area.





- 40 new geologic maps were released as Open-File reports and made available through the publication webpage. At the end of the year, digital maps covered 46.5% (263 of the 566 quadrangles) of the State.
- The Governor's South Atlantic Alliance funded Physical Change Along the Coast work, digitizing three temporal shorelines. The 2,078 miles of digitized shoreline (coastal and estuarine) were analyzed for rates of shoreline change and used in further analysis to characterize shoreline vulnerability.
- Began 2-year, Bureau of Offshore Energy Management funded project (\$200,000) to inventory and assess offshore sand resources for potential beach renourishment projects.

# **Flood Mitigation Program**

• Assisted 28 communities in adopting new Flood Insurance Rate Maps, along with recruiting nine new communities to join the National Flood Insurance Program.

# **State Climate Office**

- Provided prompt and accurate response to more than 300 public service requests for climate and weather information.
- Installed a new automated weather station on South Carolina's highest point, Sassafras Mountain, which will fill important data gaps in the mountain region. The new Station went online in December 2014. This is the first automated weather station made available by the South Carolina State Climate Office.

# **Conservation Districts**

 Staff provided technical assistance to the public in conjunction with the 46 Soil and Water Conservation Districts and the USDA's Natural Resource Conservation Service (NRCS).

# **Aquatic Nuisance Species Program**

• Worked with wildlife staff to spray 624 acres of phragmites on several wildlife management areas in Georgetown and Charleston counties to benefit waterfowl and wading birds.



- Continued to provide support, cost-share and/ or application of herbicides in order to keep South Carolina's public waters free of invasive species.
- Capture of high-resolution digital images of herbarium specimens. With support from the National Endowment for the Humanities, this project processed these images so that they can be viewed online for use by the public, educators, land managers and plant scientists.

# Law Enforcement Division



- With almost 30,000 Law Enforcement contacts (summons/warnings), complaints against officers have been extremely minimal and in almost every single case, officers were found to have used good judgment and due diligence in carrying out their duties.
- All officers throughout the Division were issued iPhones. They now can receive calls, emails, and statewide texts immediately resulting in quicker response times. Provided laptops for all 1st Sergeants and replaced investigator laptop and instructor laptops within the Division. iPads were issued to key personnel which will enhance and improve response times. Hot spots were activated to eliminate additional air card fees.
- All major cell phone service providers have implemented #DNR on cell phones.
- Researched and implemented a Boating Compact with the State of Georgia. This is the first such boating compact with neighboring states in U.S., allowing our residents to be treated the same in either state when it comes to violations of law.
- Posted a position at Seahawk in Charleston, which provides for an intelligence-based liaison between DNR and local, state and federal agencies.
- Started a "Wills for Heroes" class with DNR Chief Counsel to provide free wills service to all DNR officers.
- An additional officer was assigned to the Governor's Detail.

## **Business/Finance**

Completed Law Enforcement Facilities Management booklet including pictures, insurance and utility information.

# **Field Operations Regions**

- Conducted saturation patrols and Courtesy Boat Inspections during all major boating holidays and high activity events resulting in: 1,450 summons, 5,868 warnings, held 95 different CBI sites, inspected 705 boats, prevented 190 violations and resulted in 54 BUI arrests.
- Officers issued 9,609 summons from January 1 November 30 2014, maintaining near 95% conviction rate.
- Officers issued 28,331 warnings from January 1 November 30 2014.
- Officers cleared 306 Warrants.

- Regions hosted 17 Fish Rodeos with 3,110 kids attending. Rodeos were held in the following counties: McCormick, Union, Edgefield, Oconee, Greenwood, Chesterfield, Darlington, York, Lancaster, Barnwell, Lexington, Charleston, Berkeley, Jasper, Horry and Dorchester.
- Officers gave 3,270 public presentations to civic groups, churches and schools.
- Region officers held 133 Take One Make One events with 14,680 kids participating.
- Officers spent 52,256 hours on boating patrols resulting in 104,648 boats being inspected and 3,895 hours conducting search and rescue missions.

# Accomplishments

- Major Jamie Landrum graduated from the FBI Academy.
- Received National Association of State Boating Law Administrators Accreditation and incorporated standards in training and employee performance standards.

# **Overt/Covert Investigations** Marine Theft Investigations Operations

- 1,130 marine theft investigations were initiated.
- Recovered \$97,426.00 of equipment.

#### **Wake Zone Investigations**

- Completed 46 NO WAKE zone investigations.
- Three NO WAKE ZONES approved.

#### **B-SAF**

- Added eight field officers to the B-SAF team.
- Conducted 8 B-SAF patrols inspecting 1,052 boats, resulting in 94 summonses, 306 warnings and 9 BUIs.

#### **Diving Operations**

- 20 body recovery assignments made, resulting in 9 bodies recovered.
- Upgraded the laptops in the dive vans

#### **ATN Operations / Marine Events**

- Surveyed 2,107 aids to navigation buoys and replaced 326 missing or damaged buoys/signs.
- Started illegal buoy survey (125 removed to date on lakes Keowee, Murray, and Wylie)
- Approved 617 marine events.



## Education Section Hunter Education

• Taught 19,586 students in Hunter Education for 2014, up 21% from 2013. 78% of all students were taught in a classroom.`

#### **Boater Education**

- Taught 4,011 students in Boater Education, an increase of 17%.
- Continued to foster partnership with Wendy's for the "I Got Caught Wearing My Life jacket" tickets for a free Frosty.
- Boating Safety radio commercials aired at all University of South Carolina & Clemson University baseball games March through April.
- Coordinated Boating Safety displays at Clemson University and University of South Carolina baseball games, including the 17 foot Boating Safety wrapped pioneer boat.



# **Archery in the Schools**

- Held 9th annual South Carolina Archery in the Schools state archery tournament at the Palmetto Sportsmen's Classic in March of 2014. A total of 1,131 students participated.
- There are 27,000 students actively shooting archery in 271 schools across South Carolina.
- To date, 1,006 teachers have been trained as Basic Archery Instructors.





#### Take One Make One (TOMO)

- TOMO coordinated 74 hunts in 2014 for 333 participants.
- TOMO trailers visited 99 events, with 16,167 people participating in 2014.
- Added an inflatable Archery Range from S.A.F.E Archery to the Take One Make One Heritage Trailer.
- Offered six hunting clinics providing advanced hunting skills on deer, dove, turkey and waterfowl for TOMO participants and the public.
- Over 80 veterans participated in three Wounded Warrior hunts.
- Assisted with the 1st Annual Gold Star Youth Program deer hunt for eight youth who had lost a father in special forces.
- Took a blind 12 year old on a turkey hunt allowing him his first shot ever at a turkey.
- Officers escorted a child battling cancer on stage live during the FLW event with country singer Rodney Atkins.
- Awarded TOMO graduating participant Keith Black a lifetime license for his winning essay "What TOMO has Meant to Me".
- TOMO recruited 80 new youth in 2014, including 14 from Connie Maxwell Children's Home and 13 from the National Guard Youth Challenge Academy.
- Three TOMO students appeared on two Outdoor Hunting Shows featuring Bob Redfern and Hank
  Parker.
- Recruited 120 new mentors in 2014, bringing the total to 287 statewide.
- Partnered with the National Wild Turkey Federation in Edgefield to create a new hunting site in which five new deer stands were placed.
- TOMO Coordinator, Eddie Monts, named QDMA Officer of the year.

#### Youth Clay Target Sports

- DNR sponsored the 2014 SC Youth Shooting Foundation State Sporting Clays Championship. 412 students participated in this year's state event.
- Through a grant with the Hampton Wildlife Fund, DNR gave the top three male and female graduating seniors \$6,000 in scholarships.
- Sponsored the largest youth skeet and trap competition held to date in the Palmetto State on December 13. 157 youth shot at Mid-Carolina Gun Club in Calhoun County in a skeet and trap event that was co-sponsored by 4H Shooting Sports. DNR awarded two



\$1,000 scholarships to the top graduating senior male and female shooter-

#### **Shooting Ranges**

- Developed the Palmetto Hunting Heritage Shooting Center (\$2,000,000) in Edgefield, SC with the NWTF.
- Completed two 18-station sporting clays ranges and five skeet and trap ranges.
- Awards Pavilion completion set for March 2015.
- In 2014, 13,959 shooters visited Pickens County Range and 7,455 visited James O Thomason Firing Range.

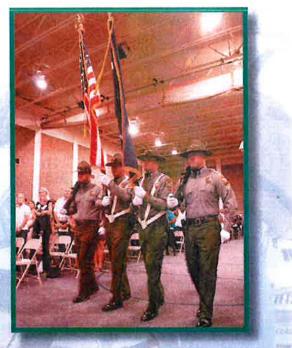
#### **Honor Guard**

- Trained four new officers for the Honor Guard to replace officers lost and to meet increasing requests.
- Completed seven assignments.

## EMD/Supply/Dispatch/Communications/ Aviation EMD/Homeland Security

All key personnel completed all ICS classes and are up to date with required courses.

Met with region captains prior to hurricane and winter storm seasons to review existing plans and practice them. Changes were made to minimize drive time for officers. Pre-paid rooms were acquired and reserved in case of another winter storm lasting more than two operational periods this year.



#### **Aviation**

- Conducted 170 Flights
- Flew 251.6 law enforcement flight hours (night patrols, bait patrols); 34.6 restricted law enforcement (SLED) flight hours (extraditions and transports); 83.9 search and rescue flight hours; 38.80 JEA flight hours; 132.9 biology flight hours; 10.7 SCEMD/SCDPS hurricane evacuation exercise flight hours; 2.5 aeronautics commission flight hours (airport runway inspections).
- Total of 555 Flight Hours of all missions.

# **Legislation, Grants & Technology Section**

- Worked with the legislature as the division liaison to meet law enforcement needs related to specific bills.
- The division worked with the General Assembly on passage of bills including:
  - Amendments to hunting within 300 yards of a residence
  - Increased trespassing to hunt and fish penalties
  - Revocation of WMA lottery draw hunts
  - State lakes regulatory authority
  - Blue catfish amendments
  - Great white shark protection
  - Aggregate saltwater fish limits

# Non-Department Deputy Law Enforcement Officers

Completed 7,069 hours with 108 current DLEOs.



# Marine Resources Division

• Finalized and implemented a pay plan for MRD staff as part of an effort to recruit and retain a qualified workforce.

# Marine Resources Monitoring, Assessment and Prediction/Southeast Area Monitoring and Assessment Program Reef Fish Survey

- Staff completed 47 sea days on the R/V Palmetto and 19 days on the R/V Silver Crescent.
- Deployed 519 chevron traps, 60 short bottom long lines, 97 CTD casts, and made 297 hook and line collections (total gear deployments: 1,005).

# SEAMAP-SA Trawl Survey

- Staff completed 65 sea days on the R/V Lady Lisa.
- e
- Caught and processed 855,013 fish, 45,604
   crustaceans and 45 turtles, and kept 3,795 individuals for life history.

# **Estuarine Finfish Research**

• Marine finfish production for stock enhancement and lab research experiments was over 703,000 red drum juveniles, 30,000 spotted seatrout juveniles and 25,000 advanced phase I striped bass.

# **Ecosystem Research**

- Responded to 50 fish kills and/or algal blooms.
- Collected approximately 200,000 water quality readings at six sites in the ACE Basin National Estuarine Research Reserve.

## **Shellfish Research Section**

- 183 crab traps used as artificial substrate to create new oyster reef habitat.
- 142 of these traps were abandoned and recovered from the environment.

# In-Water Sea Turtle Research

47 sea days (417 trawling events) were completed aboard the RV Lady Lisa and the RV Georgia Bulldog.



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- Trawling resulted in the capture of 106 loggerhead sea turtles, 23
   Kemp's ridley sea turtles and one green sea turtle.
- Two satellite transmitters and 14 acoustic transmitters were deployed on male and juvenile loggerhead sea turtles, respectively.

## Marine Resources By the Numbers

- **481,131** recreational saltwater privileges issued
- **4,234** commercial saltwater privileges issued
- 30,972 commercial trips taken
- 997 saltwater (commercial/scientific) permits issued
- 231,938 acres of shellfish culture permit areas; 123 culture permit areas managed by 58 individual permit holders
- 41 mariculture permit areas totaling 1,189 acres; worked by 28 individual mariculture permitees
- 101 public/state shellfish grounds totaling 133,109 acres
- Total area of ocean bottom: 869 square miles or 556,160 acres
- Total area of estuarine bottom: 344 square miles or 220,160 acres
- Total volume of material on the artificial reefs: **28.3 million cubic feet** of artificial reef material on South Carolina's **45** reef sites, spread within **37.75 square miles** of permitted sites



# Wildlife and Freshwater Fisheries Division

• Finalized and implemented a pay plan for WFF staff as part of an effort to recruit and retain a qualified workforce.

# **Freshwater Fisheries Section**

- Produced approximately 9 million fish in the freshwater hatchery system that were stocked in public waters across the state.
- Completed pond renovations at Cohen Campbell Fish Hatchery. These renovations will expand fish production capabilities and create more efficient harvesting operations.



- Conducted 2nd Annual Youth State
   Bass Fishing Championship tournament in conjunction with the Palmetto Sportsmen's Classic. The tournament launched 74 boats carrying, 148 anglers from 29 different schools.
- Conducted 52 Family Fishing Clinics which provided fishing opportunities for 1,251 participants.
   Volunteers donated over 900 hours of volunteer time to Family Fishing Clinics, the Palmetto
   Sportsmen's Classic and other fishing outreach events (FLW Forrest Wood Cup).

## **Wildlife Section**

- Acquired 2,958 acres to be added to DNR's Wildlife Management Area and Heritage Trust programs. The cost of this effort was \$4.5 million, with an additional donated value of \$5.9 million.
- Maintained a public hunting program on over 1 million acres of public land, providing over 415,000 person-days of hunting. Added over 3,600 acres of leased lands to the WMA program through cooperative agreements with landowners.
- Accomplished the first comprehensive revision of Wildlife Management Area regulations in over
- three decades, resulting in significant consolidation and simplification of regulations.
- Captured 49 wild turkeys and outfitted 36 with satellite transmitters as part a multi-year research project examining multiple aspects or turkey ecology and behavior.
- Managed habitat, facilities, infrastructure and access on over 260,000 acres of Department-owned lands that occur on over 85 WMAs and Heritage Preserves across the state.



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- Prepared and maintained 50 public dove fields, encompassing over 1,900 acres throughout 27 counties. These fields provided opportunities for 3,000 plus adult hunters and 200 plus youth hunters on opening day of dove season. Public dove fields annually provide over 25,000 person-days of hunting opportunity for South Carolina sportsmen, according to a recent survey from Responsive Management.
- Modified management and public access to Deveaux Bank, a popular sea bird island, which resulted in positive public support and improved sea bird nesting.
- Initiated the South Carolina Quail Council and began establishing quail focal areas.
- Planned and conducted coyote management workshops in conjunction with Clemson University and the South Carolina Trappers Association.

#### WMA Management By the Numbers

- Planted 2979 acres of annuals. These plantings included 1935 acres of dove field plantings on 50 fields across 27 counties
- Planted 114 acres of perennials for benefit of wildlife
- Mowed 14,014 acres for habitat maintenance
- Disced 6,965 acres for agricultural seed bed preparation or habitat manipulation
- Conducted prescribed burning on 17,134 acres of forest lands and 1,624 acres of agricultural lands (total acres burned =18,758)
- Applied herbicide to 2,920 acres of agricultural lands and 1,182 acres of forest lands for habitat manipulation and habitat enhancement purposes
- Disced or plowed 456 miles of firelanes
- Mowed 514 miles of dikes on waterfowl management areas
- Re-topped 37 miles of dikes on waterfowl management areas
- Installed 20 water control structures on waterfowl management areas
- Mowed 534 miles of roads for maintenance, improved access and safety
- Graded 371 miles of roads for maintenance, improved access and safety
- Graveled 18 miles of roads for maintenance, improved access and safety
- Constructed or rebuilt 82 miles of roads for maintenance, improved access and safety
- Mowed and otherwise maintained 55 miles of trails
- Posted 4,725 signs along 237 miles of boundary on WMAs

# **Office of Environmental Programs**



- Under permit application to expand the Boeing aerospace facility in Charleston County, DNR completed work in coordination with the Lowcountry Open Land Trust toward eventually accepting the donation of the Keystone Tract (1,682 acres) as mitigation for impacts to wetlands.
- In cooperation with American Timberlands and Tidewater Environmental DNR acquired 1,304 acres underlying the Carter Stilley Mitigation Bank in Horry County; this tract was subsumed and dedicated into the adjacent Waccamaw River Heritage Preserve.

- Approximately 1,200 environmental reviews were conducted, and science-based comments provided to state and federal regulatory agencies.
- Working with the Haile Gold Mine, Inc. and under their permit application to reopen the historic Haile Gold Mine in Lancaster County, DNR completed work in preparation for accepting mitigation tracts totaling 4,389 acres in Richland and Lancaster counties and a \$9.4M endowment for management of the mitigation tracts and aquatic restoration in the Lynches River Watershed.



In partnership with The Nature Conservancy, the OEP positioned the agency eventually to become the long-term steward of South Fenwick Island (approximately 400 acres) to secure the last significant unprotected tract in the ACE Basin National

Estuarine Research Reserve; the majority of the island was acquired by TNC before the end of the year.

Working with partners, DNR developed a strategy to allow the South Carolina Ports Authority to move forward with a conceptual mitigation plan on Daniel Island.



# **Boating Access and Engineering Section**

- Four new boating access projects were completed in Allendale, Anderson, Charleston, and Spartanburg counties.
- 17 new boating access projects in 15 counties were initiated.
- Two existing boating access facilities in Lexington and Pickens counties were renovated.
- New construction of a work center was completed at Jocassee Gorges in Pickens County to centralize field operations and provide better shelter and security for equipment.
- In coordination with the Hunter Education Section, renovations were completed at a shooting range in Spartanburg County.



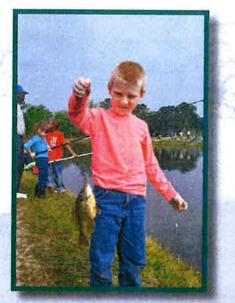
# Media and Outreach



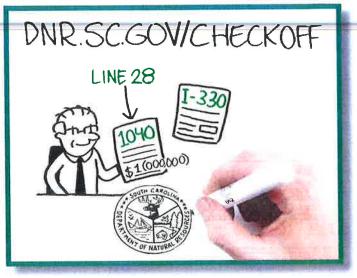
- Sponsored hunting and fishing shows on television and radio to promote the wide array of DNR programs, hunting and fishing opportunities, wildlife management areas, DNR state fishing lakes, and cultural heritage preserves.
- Advertised statewide in movie theaters pre-trailer advertising to promote safe boating and the 100 Deadliest Days of Summer campaign. These ads are aimed at preventing injuries and deaths related to boating accidents on public waters as a result of the unlawful of operation of watercraft by persons under the influence of alcohol and drugs.
- Advertised statewide via billboards and broadcast media to promote awareness of hunter and boater education; the prevention of injuries and deaths from boating under the influence, and hunting

and boating accidents; and awareness of the benefits of using international orange while hunting, personal flotation devices while boating, and the recruitment of hunters, anglers and boaters into the outdoors

- Sponsored youth fishing rodeos, one of the most popular programs of the DNR. The department stocks ponds, and allows youth the opportunity to learn fishing, and have a fun, successful day catching fish. It provides youth an opportunity to experience the thrill of landing fish, and adults the opportunity to teach and learn the sport with their children.
- Partnered with FLW to promote the Forrest Wood Cup Bass Fishing Tournament on Lake Murray highlighting the fishing opportunities available in the state. This effort was an international event covered by live television with nationwide participation by adult pros, and collegiate bass fishing teams highlighting the agency's desire to reach out to youth in the fast growing segment of sport fishing.



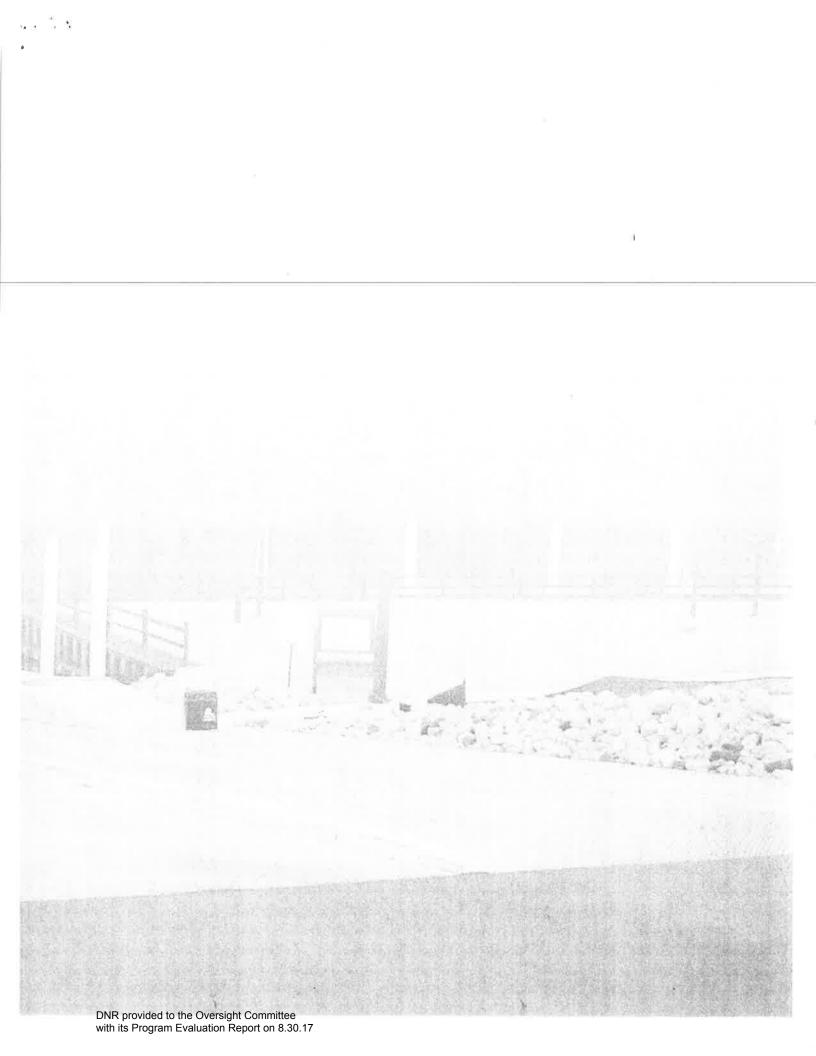
- Media campaign developed to encourage donations to the DNR via tax return filing. Monies received from these sources are used by the DNR to enhance access and provide opportunities to enjoy quality outdoor hunting and fishing experiences for the sportsmen of this state on DNR wildlife management areas, cultural heritage preserves and state lakes.
- Partnered with Hampton Wildlife Fund in hosting the Palmetto Sportsmen's Classic. This partnership makes the Palmetto Sportsmen's Classic a quality experience for the entire family while educating them about natural resource issues and opportunities. The Classic is expected to draw over 40,000 visitors.



# **Special Projects**

- A regularly scheduled Civil Rights Review of the agency by the U.S. Fish and Wildlife Service was reduced to a desk audit due to a comprehensive Self Evaluation and Transition Plan that was prepared by the DNR and provided to the Service ahead of time. There were no major findings of noncompliance with civil rights accessibility regulations.
- The first meeting of the South Carolina Quail Council was coordinated to provide advocacy and support for implementation of South Carolina's quail and Grassland Bird Habitat Restoration Plan. The Council consists of the leadership from five federal agencies, seven state agencies, 13 NGOs and five private landowners.
- The DNR was one of several agencies/organizations recognized with a National Joint Venture Champions Award for habitat protection efforts in the lowcountry of South Carolina.







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