

# South Carolina

## Department of Natural Resources



# DNR

**2006-2007 Annual Accountability Report**

**SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES**

Accountability Report Transmittal Form

Agency Name: SC Department of Natural Resources

Date of Submission: September,

Agency Director: John E. Frampton

Agency Contact Person: Derrick Meggie

Agency Contact's Telephone Number: 803-734-9911

**SECTION I**  
**EXECUTIVE SUMMARY**  
**2006/2007 ANNUAL ACCOUNTABILITY REPORT**  
**SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES**

**Mission & Values**

During FY 2006-2007, DNR operated its programs based upon the DNR Board's Strategic Plan entitled SCDNR Vision for the Future. The DNR's mission is to serve as the principal advocate for and steward of South Carolina's natural resources." DNR accomplishes its mission based upon an agenda that encompasses these values:

1. **Teamwork** - We will accomplish our mission and achieve our vision through goal-focused, cooperative efforts that rely on effective internal and external communication and partnering;
2. **Integrity** - We will lead by example, ensuring that our standards are high, and our actions are fair, accountable and above reproach;
3. **Dedication** - We will maintain a steadfast commitment to the state's natural resources and our agency's mission;
4. **Excellence** - We will always do our best, and continuously strive to improve our processes, activities, policies, operations and products; and
5. **Service** - We will provide quality service that meets the needs and exceeds the expectations of the public and our employees.

**Major Achievements**

SCDNR implemented the Strategic Plan's primary goals and strategies to accomplish significant results and major achievements over the past year. Some of these major achievements include the following:

- ◆ The establishment of Board approved guidelines for the public use of properties and facilities under its responsibility.
- ◆ The hiring of 27 new Law Enforcement field officers in FY 06-07. This was the second consecutive fiscal year that new officers were hired since the loss of 90 positions in the face of budget cuts from previous years.
- ◆ Renovation of ten ponds at the Dennis Wildlife Center was completed. Techniques and information gained from these initial renovations will be applied to addition ponds as funds become available.
- ◆ The passage of Act 84 of gave the SCDNR authority to regulate a multitude of "non-hunting" violations on leased WMA properties. This Act provides for the same protections covering state lands owned by DNR to extend to private properties leased by the DNR under the WMA program.
- ◆ The passage of Act 85 which supported a proactive and precautionary approach in natural resources management to help deal with the negative consequences of increasing pressures and environmental stresses placed on the state's marine finfish resources from unprecedented growth and development along the coast by imposing new bag and size limits on eight marine finfish species.
- ◆ The Law Enforcement Division developed and implemented a new summons and warning ticket system and corresponding computer database changes to meet internal and external reporting needs. This brings the Division into compliance with the S.C. Incident Based Reporting System, and National Incident Based Reporting System requirements for the digital transfer of criminal information to SLED and the FBI for criminal statistics reports.

- ◆ The implementation of S.C. Boat Facts, an on-line boating registration query system, which provides users of the system information as to a boat and or motors ability to be titled before it is purchased or it is attempted registration.
- ◆ The Law Enforcement Division also entered into an agreement to participate in the sharing of criminal and contact information in the South Carolina Information Exchange (SCIEEx) system. SCIEEx is managed by SLED as a clearinghouse for sharing criminal and homeland security intelligence information.
- ◆ Merging individual programs previously located in the Freshwater Fisheries Section and the Marine Resources Division has created a single Diadromous Fish Project. The project, now in the Freshwater Fisheries Section, is responsible for operation of DNR fish passage structure, eel, shad, herring and sturgeon management statewide.
- ◆ The Law Enforcement Division also began utilizing quantifiable data from the SCDNR officer activity and violations systems to make objective management decisions in the utilization of manpower, resulting in measurable increases in efficiency and productivity of field officers.

## **Key Strategic Goals**

### **1. Enhance the effectiveness of the agency in addressing natural resource issues.**

- a. Broaden strategies to address the impacts of population growth, habitat loss, environmental alterations, overuse and other challenges faced in protecting, enhancing and managing diverse natural resources;
- b. More effectively develop, coordinate, and integrate resource-specific conservation and management plans, research and policies within the agency; and
- c. Expand sound application of science for natural resource management and decision-making.

### **2. Improve the general operations of the agency.**

- a. Develop and implement department-wide operational plans that clearly connect all agency activities to specific goals and annual accountability reports;
- b. Fully develop the agency's regional hub system;
- c. Continue to develop and maintain modern, well-integrated information systems and technology throughout the agency;
- d. Enhance and maintain effective communications throughout all levels of the agency;
- e. Maximize efficiency of internal operations and business procedures; and
- f. Aggressively pursue increases in revenue, state and federal funding, and identify new funding sources to support accomplishment of our mission.

### **3. Create an agency environment that supports a dedicated, professional workforce.**

- a. Implement comprehensive workforce planning that is consistent with agency priorities;
- b. Expand consistent, agency-wide employee training, retention, and compensation efforts;
- c. Implement initiatives that improve employee morale and teamwork, instill a sense of pride in the agency, and emphasize the importance of its mission.

### **4. Enhance public trust and confidence in the agency.**

- a. Foster more effective communications, outreach, and partnering with the public and State Legislature;
- b. Develop strategies that address divergent public opinion and expectations concerning issues related to accessibility, use, and protection of natural resources; and
- c. Optimize our customer service through regular monitoring of constituent needs, public opinion, and agency performance; and
- d. Enhance natural resource education to provide the public with knowledge necessary in making informed natural resource decisions.

## **Opportunities**

Various opportunities exist that aid DNR in fulfilling its mission and achieving its strategic goals. The agency will continue to implement the DNR Board's vision of placing the highest priority on protecting and managing the state's natural resource base. Major legislative efforts for habitat conservation and permanent land acquisition will be continued. New sources of federal and private funds, as well as additional increases in state funding, will be actively pursued for protection and management of natural and cultural resources. Actions to protect human life and property will be emphasized through law enforcement activity and boater/hunter education programs in order to continue to reduce accidents and loss of life and property. Development and application of the best available scientific information will serve as a focus area in the agency's mission of managing and protecting natural resources. Public outreach and education efforts through the DNR website, legislative recommendations from publicly appointed advisory committees, an open public policy process, and the agency's educational programs will provide a basis for maintaining and improving relationships with DNR's constituents and stakeholders. Technology upgrades, from licensing applications that benefit both the public and DNR, to communication upgrades which protect the public and our officers, are being piloted and implemented. Opportunities such as these allow the DNR to serve, act and react as efficiently and as effectively as possible.

The main barriers that are impeding the agency's success in fulfilling its mission and achieving its strategic goals is the impact of the \$12.8 million (41 percent) reduction in state appropriated funds, coupled with additional \$4 million reduction from agency revenue accounts that impacted the DNR from July 2001 through June 30<sup>th</sup> 2004; and the loss of institutional knowledge through the concentrated loss of experienced and highly skilled staff. Those early reductions continue to affect all of the agency's programs and its ability to meet objectives established for DNR by statute and the DNR Board. Finding new and adequate funding is of utmost importance to successfully protect and manage the unique natural and cultural resources of South Carolina and to make the public's interaction with the DNR both efficient and user friendly. In FY 2006-2007, the DNR continued to make progress toward regaining a portion of these funds by receiving funds for the hiring of 25 new law enforcement officers.

With the exit of 29 TERI employees in 2006 and the exit of 14 TERI employees in 2007, the agency will face a high number of vacancies in long-term staff. Recent attempts to hire and retain professional staff in such areas as biology, hydrology, climatology, engineering and law enforcement have shown the agency not to be competitive in salary offers. This is compounded when the agency attempts to make the salaries of current staff competitive. Recent research has shown that DNR employees are approx. \$1.1 million behind other state employees in comparable positions. The agency also recognizes the need to improve on the recruitment of minorities and has taken steps to implement a minority intern program and become more visible at traditional minority recruitment events. The current minority intern program is available during the summer months to 20 students, but could be expanded to a larger audience during the school year with additional funding. If the agency is to be successful in the recruitment and retention of staff, it must increase its hiring rates.

## **Use of the Accountability Report**

The accountability report is utilized by SCDNR to monitor the agency's progress in accomplishing our strategic plan goals, measuring organizational performance, addressing areas in need of improvement and setting improvement initiatives in order to better focus on primary core missions.

**SECTION II  
BUSINESS OVERVIEW  
2006/2007 ANNUAL ACCOUNTABILITY REPORT  
SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES**

**Main Products and Services & Primary method of delivery**

The main service of the DNR is the protection and propagation of an enviable quality of life for our citizens, which is created by the quality and abundance of South Carolina’s natural resources. The wealth created by these natural resources are unsurpassed by other states and regions of the country and attract and sustain business activity, which translates into economic wealth for all South Carolinians. This service is delivered through products and services that include administrative licensing/permitting processes and procedures; public outreach programs and activities that range from general information, to detailed resource management; and promotion of South Carolina through the responsible use of these invaluable assets.

By The Numbers, **Products and Services** include, but are not limited to:

860,000	Records submitted annually to county treasurers for tax purposes
811,025	Resident & Non-Resident licenses and permits purchased last year
433,158	Owners of actively registered watercraft
60,000	Subscribers to the <i>S.C. Wildlife</i> magazine
46,561	Individuals that participated in the Individual Antlerless Deer Tag Program
16,000	Children participating in conservation education programs
6,000	Individuals participating in Beach Sweep/River Sweep cleanup activities
2,210	Landowners that were consulted (from our Conservation District Section)
1,772	Landowners that participated in the Antlerless Deer Quota Program
796	Requests for hydrological data and technical assistance

**Chart 1**

**Key Customers segments and their key requirements/ expectations.**

As the advocate for and steward of the state's natural resources, DNR’s primary customers are the citizens of South Carolina, and specifically sportsmen and members of a broad range of hunting, fishing, conservation, business and environmental organizations. In order to meet our customer’s key requirements/expectations, the DNR manages, protects, enhances, conserves and propagates the state’s natural resources through science, research, education and state and federal statutory and regulatory frameworks.

The DNR’s customers not only include residents of South Carolina, but non-residents as well. These include, but are not limited to, commercial fishermen and trappers, landowners participating in department land and species management programs, educational institutions and their students, teachers and staffs, operators of private and corporate watercraft, development interests needing land and water scientific data to plan, locate and build facilities and infrastructure, public and private planning organizations needing a wide array of scientific research and monitoring data. Additionally, the DNR assists other state, federal and local government agencies, universities and colleges, planning agencies, and information and educational organizations needing information. The breadth and depth of our customer segments show that in addition to managing natural, cultural, and historical resources of the state, DNR is also a major economic development and tourism agency.

**Key Stakeholders (other than customers)**

The DNR’s key stakeholders that are not customers are the numerous hunting, fishing, conservation and environmental organizations, various state, county and municipal entities, and professional associations. Some of these groups have members who individually are customers, but their organizations as a whole are stakeholders. Many of these stakeholders, through partnerships with SCDNR, are in fact suppliers to the department. Look within Chart 2 below are examples of such organizations.

## Key Suppliers & Partner

<b>SCDNR Key Stakeholders Other Than Customers (including but not limited to)</b>		
<p><b>Hunting &amp; Fishing Organizations</b></p> <p>◆ <b>Hunting:</b>            S.C. Sportsman’s Coalition            Ducks Unlimited*            Wild Turkey Federation*            Quail Unlimited *            Five Rivers Coalition</p> <p>◆ <b>Freshwater Fishing:</b>            Bass Anglers Sportsman’s Society            Trout Unlimited*            Greenville Striper Kings            Midlands Striper Club            Lake Murray Guides Association</p> <p>◆ <b>Saltwater Fishing:</b>            Recreational Shrimper’s Association            S.C. Marina Association            S.C. Shrimper’s Association            The S.C. Crabbers Association            Coastal Conservation Association *</p>	<p>◆ <b>Conservation &amp; Environmental Organizations:</b></p> <p>Harry Hampton Wildlife Fund*            Wildlife Federation*            S.C. Farm Bureau*            The Nature Conservancy*            S.C. Forestry Association            Nemours Environmental Foundation*            Focus Groups            Palmetto Conservation Foundation*            The Conservation Fund*            The Land Trust Alliance*            S.C. Land Trust Network            S.C. American Fisheries Society            S.C. Fisheries Workers Association            S.C. Wildlife Society            Wildlife Action, Inc.            Sierra Club            Audubon Society            Coastal Conservation League            S.C. Forest Watch</p>	<p><b>Other state, county and municipal entities:</b></p> <p>S.C. Conservation Bank*            S.C. Emergency Preparedness Division            Local Emergency Preparedness Offices            Various law enforcement and entities            State water users (industry, agriculture, &amp; regional, county &amp; municipal water processors and providers            S.C. Department of Education            Regional Climate Centers *</p> <p><b>Professional Associations</b>            S.C. Wildlife Officers Association*            S.C. Association of Conservation Districts*            Soil and Water Conservation Society            Climatological Society            S.E. Assoc. of Fish &amp; Wildlife Agencies            Assoc. of Fish &amp; Wildlife Agencies</p> <p><b>Corporate Partners*</b>            Duke Energy            Crescent Resources            International Paper</p> <p>* Denotes entities that DNR has partnered with.</p>

**Chart 2**

DNR has a diversity of suppliers that provide input for the agency’s operations. This has evolved as DNR has maintained a traditional focus to develop partnerships and cooperative efforts with state and federal agencies to include: S.C. Department of Health and Environmental Control; S.C. Department of Parks, Recreation and Tourism; S.C. Forestry Commission; Department of Commerce; Sea Grant Consortium; Medical University of South Carolina; Clemson University; Francis Marion University; College of Charleston; University of South Carolina; State Technical Education System; U.S. Fish and Wildlife Service; U.S. Forest Service; National Marine Fisheries Service; U.S. Coast Guard; National Oceanic and Atmospheric Administration; and the Natural Resources Conservation Service, to name a few.

Other suppliers of input to DNR are: owners of over 2,030 acres of private land in 53 public dove fields; timber companies; U.S. Forest Service and other state and federal agencies and private individuals in the 1.1 million acre Wildlife Management Area Program; federal grant agencies providing over \$4 million for marine resources research and monitoring projects; 1,463 environmental permit applicants related to commercial and residential development; nearly 100 requestors seeking resource planning and stewardship assistance; over 200 communities identified as flood hazard areas; city, county and regional water authorities; local river management and conservation organizations; SCDNR Advisory Committees; Deputy Law Enforcement Officers; boating dealers; marinas; sporting goods dealers and manufacturers; vehicle dealers; ATV dealers; law enforcement suppliers; agricultural and wildlife management suppliers; pond and aquaculture owners/operators; commercial fishermen; shooting preserves owners; hunting guides and lodges; and commercial and recreational oyster bottoms lessees.

The DNR has developed partnerships with several institutions of higher education and with organizations denoted with asterisks in Chart 2.

## DNR Operation Locations & Employee Count

<b>Four Regional Hub Offices</b>	<b>State Fish Hatcheries</b>
Clemson, Columbia, Charleston, Florence	West Columbia (Cohen), Mountain Rest (Wahalla)
	Heath Springs (Springs Stevens), Cheraw &
<b>Major Operational Locations</b>	Bonneau (Dennis Center)
Rembert Dennis Building (Columbia)	
5 Geology Road (Columbia)	<b>Freshwater Fisheries Work Centers</b>
Dennis Wildlife Center (Bonneau)	Greenwood, Rock Hill, Barnwell, Eastover, Bennettsville
Marine Resources Center (James Island)	
Waddell Mariculture Center (Bluffton)	<b>Land, Water and Conservation District Offices</b>
	46 counties offices, primarily in each county seat
<b>Wildlife Management Area Offices</b>	<u><b>SCDNR Employee Count (Filled)</b></u>  Permanent..... <b>726</b> Grant..... <b>99</b> Temporary..... <b>143</b> <b>Total.....968</b>
Yawkey Wildlife Center	
Samworth and Santee Delta (Georgetown)	
Santee Coastal Reserve (McClellanville)	
ACE Basin / Donnelley and Bear Island (Green Pond)	
Webb Wildlife Center (Garnett)	

**Chart 3**

### Regulatory Environment

The DNR operates under numerous state and federal laws and regulations covering resource management, environmental affairs, administration and other areas specific to the agency’s mission. Chart 4 below provides just a few examples of statutes and regulations under which the DNR operates.

<b>Resource Management</b>	<b>Environmental</b>	<b>Administrative</b>	<b>Other</b>
All State and Federal Game & Fish Laws which include: S.C. Code of Laws Title 50; Federal Migratory Bird Act; Endangered Species Act Atlantic Coastal Fisheries Cooperative Management Act; Magnuson Stevens Fishery Conservation & Management Act;	DHEC Regulations, U.S. Army Corps. Of Engineers Regulations, Clean Water Act (U.S.C.) Rivers and Harbors Act (U.S.C.) SC Coastal Zone Management Act S.C. Code of Law Title 49 (Land & Water)	Administrative Procedures Act GAAP Welfare Reform Act / Deadbeat Dad Statute FOIA Family Privacy Act Fair Labor Standards Act OSHA Americans With Disabilities Act Equal Employment Opportunity	US Coast Guard Regulations for titling of watercraft

**Chart 4**

### Key Strategic Challenges

Most of DNR’s program areas are working with limited and strained human and fiscal resources that constrain DNR’s ability to manage its programs effectively. The time and process involved for DNR to promulgate regulations through the Administrative Procedures Act, also governs the effectiveness of the agency. This compliance requirement often limits the DNR’s Board’s ability to react to resource needs in a timely manner based on public safety, biological imperatives and public opinion data.

### Performance Improvement Systems

Implementation of action items is accompanied by measures. Measures provide the feedback loop needed to improve key processes. For example, the EPMS will be used to document important training initiatives, such as Supervisory Practices for all DNR supervisors. Training and development is tied to all four Strategies listed in the “Vision for the Future” document. The EPMS becomes the feedback mechanism to ensure it is able to approach performance improvement.



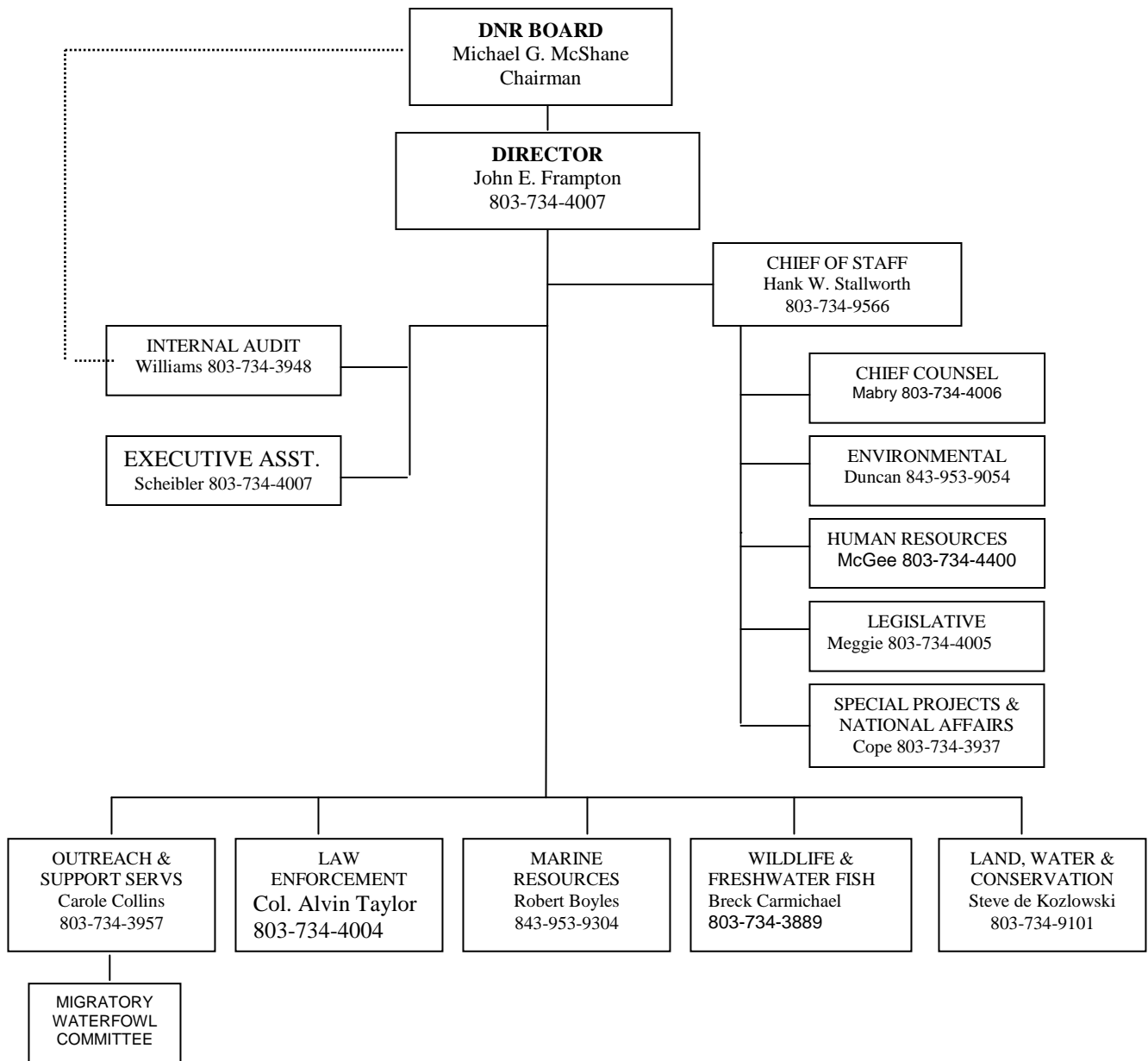
Other performance improvement systems include, but are not limited to: the Strategic Planning Process “ Vision for the Future”, Regional Hub\*\* coordination of agency programs and activities, DNR’s Internal Auditor, the Federal Aid Coordinator and various internal training programs by the human resources section. Human dimensions surveys are routinely performed to determine public opinions, attitudes and behavior related to programs and activities. These measures are used to develop data trends to compare performance and aid in setting priorities.

\*\* The state is divided into four regional hubs. Each division has a regional hub coordinator whose primary function is to coordinate his/her respective division’s activities along side his/her counterparts in order to ensure better coordination. This regional approach ensures better communication, coordination of efforts and quicker response times, thus avoiding unnecessary duplication of efforts.

## ORGANIZATIONAL CHART

### SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES

(09/5/07)



## Base Budget Expenditures and Appropriations

Major Budget Categories	FY 05-06 Actual Expenditures		FY 06-07 Actual Expenditures		FY 07-08 Appropriations Act	
	Total Funds	General Funds	Total Funds	General Funds	Total Funds	General Funds
Personal Service	\$ 32,059,369	\$ 13,736,346	\$ 33,485,209	\$ 14,613,956	\$ 38,707,824	\$ 16,201,357
Other Operating	\$ 24,915,215	\$ 4,109,740	\$ 28,805,830	\$ 4,317,130	\$ 38,961,960	\$ 3,902,940
Special Items	\$ 420,445	\$ 400,050	\$ 419,311	\$ 400,000	\$ 419,311	\$ 400,000
Permanent Improvements	\$ 10,624,631	\$ -	\$ 28,188,622	\$ -	\$ -	\$ -
Case Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Distributions to Subdivisions	\$ 1,308,797	\$ 414,000	\$ 863,275	\$ 552,000	\$ 1,931,761	\$ 690,000
Fringe Benefits	\$ 9,757,749	\$ 4,359,075	\$ 10,739,776	\$ 4,715,250	\$ 10,832,662	\$ 5,033,084
Non-recurring	\$ 727,942	\$ 119,044	\$ 3,375,647	\$ 1,083,137	\$ -	\$ -
<b>Total</b>	<b>\$ 79,814,148</b>	<b>\$ 23,138,255</b>	<b>\$ 105,877,670</b>	<b>\$ 25,681,473</b>	<b>\$ 90,853,518</b>	<b>\$ 26,227,381</b>

### Other Expenditures

Sources of Funds	FY 05-06 Actual Expenditures	FY 06-07 Actual Expenditures
Supplemental Bills	\$0	\$ 1,083,136
Capital Reserve Funds	\$0	\$ 2,292,390
Bonds	\$0	\$ 65,000

<b>Program Number and Title</b>	<b>Major Program Area Purpose (Brief)</b>	<b>FY 05-06 Budget Expenditures</b>	<b>FY 06-07 Budget Expenditures</b>	<b>Key Cross Reference for Financial Results</b>
I. Support Services	Administrative functions provide day-to-day operation of the agency and encompass a wide variety of activities that promote and support the implementation of all agency functions and the overall management of the agency.	State: 2,478,734 Federal: 0 Other: 2,360,708 Total: 4,839,442 % of Total Budget: 6%	State: 3,106,837 Federal: 0 Other: 2,599,525 Total: 5,706,362 % of Total Budget: 5%	7.1,7.9,7.16
II. A Outreach	Provides public information, outreach and educational services through a wide range of public and agency programs and activities.	State: 912,855 Federal: 122,634 Other: 856,300 Total: 1,891,789 % of Total Budget: 2%	State: 984,191 Federal: 236,936 Other: 1,183,822 Total: 2,404,949 % of Total Budget: 1%	7.21,7.22
II. B Boat Titling	Provides and maintains the system for processing renewals, new registrations, titles, and transfers of watercraft and outboard motors in the state and submits records to county treasurer for tax purposes.	State: 0 Federal: 0 Other: 1,241,244 Total: 1,241,244 % of Total Budget: 2%	State: 0 Federal: 0 Other: 1,243,694 Total: 1,243,694 % of Total Budget: 1. %	7.9
II. C Game Management	Natural resource biologists and technicians research, monitor and survey a broad range of native wildlife species, including non-game, game and endangered vertebrates. These individuals plan, direct and collaborate with Wildlife Section Regional Projects in this activity. Wildlife biologists and technicians utilize current technology and science to manage and protect wildlife species and their habitats throughout the state.	State: 0 Federal: 1,826,197 Other: 6,171,516 Total: 7,997,713 % of Total Budget: 10.0%	State: 301,600 Federal: 2,627,548 Other: 7,401,775 Total: 10,330,923 % of Total Budget: 10.0%	7.1,7.6,7.7, 7.8
II. D Freshwater Fisheries	The Freshwater Fisheries Section has among its objectives the protection, enhancement and conservation of South Carolina's inland aquatic resources, and to provide recreational fishing opportunities for the state's citizens. Fisheries biologists and technicians utilize current technology and science to manage and protect fisheries species throughout the state. Activities are carried out on a regional and statewide basis to protect, conserve and enhance South Carolina's freshwater fishery and other aquatic resources.	State: 0 Federal: 2,296,803 Other: 2,638,656 Total: 4,935,459 % of Total Budget: 6%	State: 15,470 Federal: 2,251,209 Other: 2,297,115 Total: 4,563,794 % of Total Budget: 5.0%	7.3,7.4,7.5, 7.6,7.7,7.8

### Major Program Areas

**Below: List any programs not included above and show the remainder of expenditures by source of funds. N/A**

<b>Remainder of Expenditures:</b>	State: Federal: Other: Total: % of Total Budget:	State: Federal: Other: Total: % of Total Budget:
-----------------------------------	--	--

## Major Program Areas

Program Number and Title	Major Program Area Purpose (Brief)	FY 04-05 Budget Expenditures	FY 05-06 Budget Expenditures	Key Cross Reference for Financial Results
II. E Law Enforcement	The Law Enforcement Division is responsible for enforcement of state & federal laws that govern hunting, recreational and commercial fishing, recreational boating, littering and other natural resources conservation concerns to ensure protection of life, property, and natural resources. The Division also assists other state law enforcement agencies with homeland security, executive protection, response to natural disasters and general law enforcement support functions for public safety matters.	State: 7,690,959 Federal: 474,980 Other: 5,736,435 Total: 13,902,375  % of Total Budget: 17%	State: 7,774,951 Federal: 1,036,964 Other: 6,260,452 Total: 15,072,367  % of Total Budget: 14%	7.14, 7.15, 7.16, 7.17, 7.18, 7.19
II.F Boating Safety	Administers the State Recreational Boating Safety Program, in compliance with U.S. Coast Guard. Promotes safe boating through public outreach boating safety saturation patrols, waterway zoning, registration compliance, boating accident investigations and search and recovery operations.	State: 0 Federal: 1,302,504 Other: 941,397 Total: 2,243,901  % of Total Budget: 3%	State: 0 Federal: 1,300,069 Other: 1,363,928 Total: 2,663,997  % of Total Budget: 3%	7.19, 7.20
II.G Marine Resources	The Division of Marine Resources is responsible for the management and conservation of the state's marine and estuarine resources. The Division conducts routine monitoring and research on the state's marine resources and makes recommendations for the management of those resources.	State: 2,943,977 Federal: 7,307,842 Other: 3,366,112 Total: 13,617,931  % of Total Budget: 17%	State: 2,981,765 Federal: 6,653,171 Other: 3,356,766 Total: 12,991,702  % of Total Budget: 12%	7.10, 7.11, 7.12, 7.13,
II. H Wildlife Diversity	Includes the state's Endangered Species Program and Heritage Trust Program, both established to protect and enhance a variety of declining species and diminishing habitats.	State: 503,115 Federal: 546,286 Other: 115,178 Total: 1,164,579  % of Total Budget: 2%	State: 0 Federal: 0 Other: 0 Total: 0  % of Total Budget: 0%	7.28
II.I. Land & Water	Land, Water and Conservation develops and implements programs that manage and conserve the state's land and water resources by providing guidance in resource development and management through planning, research, technical assistance, public education and development of a comprehensive natural resources database.	State: 4,249,539 Federal: 2,158,918 Other: 1,183,377 Total: 7,591,833  % of Total Budget: 10%	State: 4,718,271 Federal: 3,123,871 Other: 753,690 Total: 8,595,832  % of Total Budget: 8%	7.23, 7.24, 7.25, 7.26, 7.27, 7.28, 7.29, 7.30, 7.31

**Below: List any programs not included above and show the remainder of expenditures by source of funds.**

<b>Remainder of Expenditures:</b>	State:	State:
	Federal:	Federal:
	Other:	Other:
	Total:	Total:
	% of Total Budget:	% of Total Budget:

### Major Program Areas

Program Number and Title	Major Program Area Purpose (Brief)	FY 04-05 Budget Expenditures	FY 05-06 Budget Expenditures	Key Cross Reference for Financial Results
III. Employee Benefits	Employer's FICA matching, Worker's Compensation, Unemployment	State: 4,359,076 Federal: 1,993,599 Other: 3,405,074 Total: 9,757,719 % of Total Budget: 12%	State: 4,715,250 Federal: 2,174,468 Other: 3,850,058 Total: 10,739,776 % of Total Budget: 10%	7.1,7.2
		State: Federal: Other: Total: % of Total Budget:	State: Federal: Other: Total: % of Total Budget:	
		State: Federal: Other: Total: % of Total Budget:	State: Federal: Other: Total: % of Total Budget:	
		State: Federal: Other: Total: % of Total Budget:	State: Federal: Other: Total: % of Total Budget:	
		State: Federal: Other: Total: % of Total Budget:	State: Federal: Other: Total: % of Total Budget:	

**Below: List any programs not included above and show the remainder of expenditures by source of funds.**

Remainder of Expenditures:		
Capital Improvement Projects	State: 0	State: 1,083,137
Savannah River Basin Study	Federal: 2,789,334	Federal: 12,357,521
Law Enforcement Vehicles & Equipment	Other: 7,835,297	Other: 18,123,615
Infrastructure Repairs & Information Technology	Total: 10,624,631	Total: 31,564,273
	% of Total Budget: 13%	% of Total Budget: 30%

**SECTION III**  
**ELEMENTS OF MALCOLM BALDRIDGE AWARD CRITERIA**  
**2006/2007 ANNUAL ACCOUNTABILITY REPORT**  
**SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES**

**Category 1 – Leadership**

**1.1a-f: How do senior leaders set, deploy, and ensure two-way communication for: a) short and long term direction and organizational priorities, b) performance expectations, c) organizational values, d) empowerment and innovation, e) organizational and employee learning, and f) ethical behavior?**

Senior leadership in the agency consists of the Director, John E Frampton, a Chief of Staff, Deputy Directors, and Executive Office Administrators. The DNR Board sets the agency's short and long-term direction. The agency's strategic plan clearly communicates these short and long term directions and outlines our organizational values. The agency's values inherently embody innovation, empowerment, knowledge, and ethical behavior. The Board's direction is communicated by the Director to members of the senior leadership, and in turn to agency-wide. Communication methods used include electronic communications, office staff meetings, regional hub staff meetings, special purpose work groups and the Employee Performance Management System (EPMS). These communication methods allow for effective two-way communication to ensure that all employees are in concert with the agency's vision.

Senior leadership establishes and communicates key organizational priorities for improvement through the legislative and budgetary processes. Both the legislative package and budgetary proposals are linked to critical natural resource issues and needs as identified through staff and public input, interest group input and recommendations from legislators and/or key political leaders. It is through this input and these various processes that DNR can support and strengthen the community and determine areas of emphasis.

In working towards achieving the goal of creating an agency environment that supports a dedicated, professional workforce, the agency encourages organizational and employee learning. Employee training is encouraged and supervisors are required to identify professional and technical training needs, and document those needs and intended actions in the employee's EPMS planning stage. Learning is also enhanced through staff being assigned to special agency committees to provide greater exposure and understanding of the agency. The agency also encourages staff to participate in state, regional, and national professional organizations.

Ethical behavior is set in the core values and guiding principles of the agency strategic plan and is defined more clearly and specifically in the agency's policy manual. Senior staff communicates these values and expectations in routine discussions and formal meetings with staff and strive to model ethical behavior by their actions. When this standard is not met, the DNR responds in a fair, consistent and decisive manner.

By communicating the agency's mission, vision, core values, guiding principles and the strategic plan in order to achieve its goals, senior leaders have effectively laid the foundation for setting, deploying and ensuring two-way communication for empowerment and innovation amongst the DNR's employees.

**1.2: How do senior leaders establish and promote a focus on customers and other stakeholders?**

The DNR's core organizational values give the direction by which senior leadership establishes and maintains a continuous focus on customers and other stakeholders. The goals and strategies described in the Department's Strategic Plan provide the direction for each division and all the DNR's employees to focus on customer service and address issues identified by communication with customers and stakeholders. Examples vary from the utilization of the department's customer focused Regional Hub approach to the Spring 2006 introduction of S.C. Boat Facts, an on-line boating registration query system.

**1.3: How does the organization address the current and potential impact on the public of its products, programs, services, facilities and operations, including associated risks?**

DNR addresses current and potential impacts on the public of its products, services, facilities and operations in a variety of ways. These impacts are evaluated through legislative, regulatory, policy-making and related processes, to include extensive public involvement and meetings, in order to gain a diverse cross section of input. The impact of programs and operations is noted through legislative contacts, constituent organizations, commercial and recreational interests, advisory committees, and through other private/public entities. In each case, senior leaders review information provided on impacts of programs and services to ensure the resource is properly managed and protected, as well as representing the best interest of the public. In programmatic areas where there is potential risk, such as hunting, boating and other outdoor enjoyment, DNR actively promotes public outreach efforts to adequately inform the public of associated risks. Public outreach efforts are a major focus of the Law Enforcement Division Hunter and Boater Education programs. The Law Enforcement Division takes a proactive approach to conservation, property protection and public safety by pursuing specific laws, enacting regulatory controls and educating the public. During high use times and seasons, emphasis is placed on special law enforcement strategies and techniques to enhance safety and regulatory compliance.

**1.4: How do senior leaders maintain fiscal, legal, and regulatory accountability?**

The Director of the Office of Support Services and staff continually monitor the status of agency income and budget against current and anticipated expenditures. The Division Director then communicates such findings through regular reports and meetings with the Director, Chief of Staff and fellow Deputy Directors on a regular basis. Senior leaders maintain fiscal accountability through continual monitoring of their respective budgets and expenditures. Weekly division meetings are held to brief key staff on progress of department projects, functions, and budget status reviews. The Director and Chief of Staff hold monthly meetings with Deputy Directors and other key staff where fiscal guidelines are given. Deputy Directors and senior staff are held accountable for following those guidelines. Legal and regulatory accountability is maintained through the constant involvement of three staff attorneys, the Internal Auditor and the Federal Aid Coordinator. Accountability is also maintained by rigorous review of all contracts, purchase requisitions, grants, and travel requests. Under their guidance, staffs are in constant contact with the local, state and federal regulatory agencies that have purview over agency operations to insure that legal and regulatory requirements are understood and followed.

**1.5: What key performance measures are regularly reviewed by your senior leaders? (Actual results to be reported in Category 7)**

Key performance measures that are regularly reviewed by senior leaders include data relating to: boating and hunting accidents and fatalities; boating and hunter safety participation; sixteen (16) separate measures of officer activities, including the number-law enforcement cases made; warnings and summons issued; hours assisting other law enforcement agencies; educational events and classes and the number of participants. Other measures include the cost per acre of land acquired under the Heritage Trust Program; the number of activities within the S.C. Climate office; nuisance aquatic weed coverage on public waters of the state; the states artificial reef activities; the number of pounds of commercial shrimp and crab landed in state; US bushels of oyster shell recycled and planted; red drum catch and release activity; and employee turnover. With new database capabilities, the DNR will have the ability to gather, process and trend even greater data in the near future.

**1.6: How do senior leaders use organizational performance review findings and employee feedback to improve their own leadership effectiveness and the effectiveness of management throughout the organization? How do their personal actions reflect a commitment to the organizational values?**

Employee feedback is routinely submitted to senior leaders through direct contact, visits to field by senior leadership, regional workshops, and special purpose committees and through the chain of command within the agency's divisions. Senior leaders review this information and feedback, determine what is applicable in each division and implement needed changes to improve leadership effectiveness and management of the agency. They also use inter and intra-divisional task forces to review particular issues/problems and provide feedback and performance review findings.

**1.7: How do senior leaders promote and personally participate in succession planning and the development of future organizational leaders?**

Senior leaders promote and personally participate in succession planning and the development of future organizational leaders by constantly looking to identify those individuals within the organization who possess the needed competencies or who have potential to possess the needed competencies. Potential future leaders are encouraged to receive appropriate training in leadership skills and to serve on special committees that address high level management issues and provide exposure to agency programs and management staff. In order to ensure the retention of these individuals, the DNR looks to promote from within when availability arises. Each division has succession program in to insure a training process is in place for future key staff position changes and each division has an assistant deputy director.

**1.8: How do senior leaders create an environment for performance improvement, accomplishment of strategic objectives, and innovation?**

The DNR uses four approaches to create an environment for performance improvement, accomplishment of strategic objectives and innovation. First, the DNR leadership is actively involved in the implementation of the "Vision for the Future" document. This document, along with supporting business plans, includes various measures to ensure that performance is "on target" and to identify areas needing improvement. Second, senior leaders participate in the monthly DNR Board meetings, and priorities are communicated and reinforced within the Department through monthly Deputy Director meetings, quarterly meetings with all Division Managers, and staff meetings within each division and their respective sections. Third, the DNR leadership relies on the Accountability Team to stay abreast of strategic objectives and key measures as well as opportunities for innovation. All members are either senior leaders or high-level managers. This team also reviews and participates in the writing of the agency's accountability report. Finally, the DNR utilizes the EPMS document to hold individual employees accountable for achieving important goals and addressing areas needing improvement. Staff is also encouraged to participate in professional and scientific organizations where they are exposed to new innovations in their respective fields and implement them throughout the DNR when appropriate.

**1.9. How does senior leadership actively support and strengthen the communities in which your organization operates? Include how senior leaders and employees contribute to improving these communities.**

The DNR's outreach programs provide continuous involvement in the community. Education programs provide schools throughout the state the opportunity to increase knowledge and awareness of the state's natural resources. The fishing rodeos, the Palmetto Sportsmen's Classic, Reel Kids, National Hunting and Fishing Day, and Beach Sweep River Sweep events are just a few examples of the Department of Natural Resources' partnering efforts with the community. The Department also encourages its employees to participate in such events as the Walk for Life, United Way Campaign, and the March of Dimes Walk. Quarterly, the Department sponsors a blood drive for the local Red Cross. Scholarship programs for dependents of DNR employees are offered through the Harry Hampton Fund and the Greenville Saltwater Sportfishing Club. The Law Enforcement Division collected 350 shoeboxes for the Christmas 2006 Samaritan's Purse Operation Christmas Child.



## **Category 2 – Strategic Planning**

**2.1: a-g. What is your Strategic Planning process, including KEY participants, and how does it address: a. Your organization’s strengths, weaknesses, opportunities and threats; b. Financial, regulatory, societal and other potential risks; c. Shifts in technology or the regulatory environment; d. Human resource capabilities and needs; e. The opportunities and barriers you described in the Executive Summary, (question 4); f. Business continuity in emergencies; g. Your ability to execute the strategic plan.**

DNR’s “Vision for the Future” Strategic Plan was developed in FY2005-FY 2006 and the document is in the process of being finalized. The development of specific action items, which fall under the general action plan / initiatives as shown in the Strategic Planning Chart below will connect the divisions key performance measures that have been or are currently in the process of being reassessed and updated. The goals and objectives of the strategic plan in the Executive Summary are serving as the standardized outline for the development of the action plans and initiatives and will link the DNR’s key measures back to specific goals,

In FY 2006 – FY2007 the DNR plans on full deployment of the new “ A Vision for the Future strategic plan to all of the divisions. This will include the development of divisional action plans, a review, reassessing and updating of all existing key measures as necessary, and a direct link to each employee’s EPMS planning stage. Once deployed, each division and the agency’s accountability team will routinely review specific Action Plan timelines and results. These action plans will take the DNR’s organization’s strengths, weaknesses, opportunities and threats into consideration during the development.

The Key participants in the strategic planning process are the following agency senior leaders: the Director, Chief of Staff, Deputy Directors, and Executive staff. In addition to these senior leaders, DNR has an Accountability team, which is comprised of at least two senior staffers from each division.

**2.2: How do you develop and track action plans that address your key strategic objectives? Note: Include how you allocate resources to ensure accomplishment of your action plans.**

In FY 2006 – FY2007 the DNR plans on full deployment of the updated strategic plan “ A Vision for the Future” to all of the divisions and hubs. This will include the development of divisional action plans, a review, reassessing and updating of all existing key measures as necessary, and a direct link to each employee’s EPMS planning stage. Once deployed, each division and the agency’s Accountability Team will routinely review specific action plan timelines and results.

**2.3: How do you communicate and deploy your strategic objectives, action plans and related performance measures?**

The Director, in Regional staff meetings, communicates the strategic plan to all employees at least once a year. Hub coordinators in quarterly meetings, and other senior leaders in sectional meetings within each division, then reinforce the plan throughout the year. At this point, the primary media tool has been the brochure titled, “ SCDNR Vision For the Future.” Future opportunities of communication include, but are not limited to, making the strategic plan, divisional action plans, and key related performance measures available and maintained on the Department’s Intranet web-site and providing a training class for new employees on the Strategic plan. The training will show new employees how the plan fits in with their duties and the role they play as a member of Team DNR.

#### **2.4: How do you measure progress on your action plans?**

By establishing benchmarks and timelines for specific action plans, the DNR will have the ability to measure each plan's progress. Progress is measured through the identification, assessment and the updating of performance measures, monitoring the frequency of assessment, and the monitoring of timeframes. By using these processes and evaluating each plan with questions such as: 1) How does the reported performance compare with previous performance; 2) Is the performance/schedule variance likely to prevent goal achievement; 3) Are external factors affecting performance? If so, what are these factors; 4) Is the performance/schedule variance due to unrealistic initial projections/planning; and 5) When will performance information be collected again, DNR can determine what modifications should be made to the action plan.

#### **2.5: How do your strategic objectives address the strategic challenges you identified in your Organizational Profile (Section II, Question 8)?**

Most of DNR's program areas are working with limited and strained human and fiscal resources as referenced in the Organizational Profile. These issues constrain DNR's ability to manage its programs effectively. Strategic goals 2 and 3 address these strategic challenges. Two of the objectives of Strategic Goal 2-(Improving the general operations of the agency) are maximizing the efficiency of internal operations and business procedures; and aggressively pursuing increases in revenue, state and federal funding, and identify new funding sources to support accomplishment of our mission. Two of the objective of Strategic Goal 3 -(Creating an agency environment that supports a dedicated and professional workforce) are the expansion of consistent, agency-wide employee training, retention, and compensation efforts; and the implementation of initiatives that improve employee morale and teamwork, instill a sense of pride in the agency, and emphasize the importance of its mission

#### **2.6: How do you evaluate and improve your strategic planning process.**

**2.7: The agency's strategic plan is available to the public through the agency's Internet website at [www.dnr.sc.gov](http://www.dnr.sc.gov).**

<b>Strategic Planning</b>			
<b>Program Number and Title</b>	<b>Supported Agency Strategic Planning Goal/Objective</b>	<b>Related FY 03-04 Key Agency Action Plan/Initiatives</b>	<b>Key Cross Reference for Performance Measures</b>
	<b>Strategy 1:</b> 1. Enhance the effectiveness of the agency in addressing natural resource issues.	<b>Action 1:</b> Broaden strategies to address the impacts of population growth, habitat loss, environmental alterations, overuse and other challenges faced in protecting, enhancing and managing diverse natural resources;	7.3,7.10,7.11,7.12,7.13,7.23,7.24,7.28
		<b>Action 2:</b> More effectively develop, coordinate, and integrate resource-specific conservation and management plans, research and policies within the agency	7.3,7.4,7.5,7.6,7.7,7.8,7.10,7.11,7.12,7.13,7.24,7.31
		<b>Action 3:</b> Expand sound application of science for natural resource management and decision-making	7.10,7.11,7.12,7.13,7.23,7.24,7.25,7.31
	<b>Strategy 2:</b> Improve the general operations of the agency	<b>Action 1:</b> Develop and implement department-wide operational plans that clearly connect all agency activities to specific goals and annual accountability reports	
		<b>Action 2:</b> Fully develop the agency's regional hub system	7.1
		<b>Action 3:</b> Continue to develop and maintain modern, well-integrated information systems and technology throughout the agency	7.31
		<b>Action 4:</b> Enhance and maintain effective communications throughout all levels of the agency.	7.2
		<b>Action 5:</b> Maximize efficiency of internal operations and business procedures.	7.1,7.9,7.15,7.16,7.17,7.19,7.27,7.28
		<b>Action 6:</b> Aggressively pursue increases in revenue, state and federal funding, and identify new funding sources to support accomplishment of our mission.	7.9,7.28,7.30

<b>Strategic Planning</b>			
<b>Program Number and Title</b>	<b>Supported Agency Strategic Planning Goal/Objective</b>	<b>Related FY 03-04 Key Agency Action Plan/Initiatives</b>	<b>Key Cross Reference for Performance Measures</b>
	<b>Strategy 3:</b> Create an agency environment that supports a dedicated, professional workforce	<b>Action 1:</b> Implement comprehensive workforce planning that is consistent with agency priorities	7.1
		<b>Action 2:</b> Expand consistent, agency-wide employee training, retention, and compensation efforts	7.1,7.2
		<b>Action 3:</b> Implement initiatives that improve employee morale and teamwork, instill a sense of pride in the agency, and emphasize the importance of its mission	7.1,7.2
	<b>Strategy 4:</b> Enhance public trust and confidence in the agency	<b>Action 1:</b> Foster more effective communications, outreach, and partnering with the public and State Legislature	7.18,7.20,7.21,7.22,7.27,7.29,7.30
		<b>Action 2:</b> Develop strategies that address divergent public opinion and expectations concerning issues related to accessibility, use, and protection of natural resources.	7.4,7.5,7.9
		<b>Action 3:</b> Optimize our customer service through regular monitoring of constituent needs, public opinion, and agency performance.	7.4,7.5,7.6,7.7
		<b>Action 4:</b> Enhance natural resource education to provide the public with knowledge necessary in making informed natural resource decisions.	7.14,7.18,7.20,7.21,7.22

## **Category 3 – Customer Focus**

**3.1: How do you determine who your customers are and what their key requirements are?**

**3.2: How do you keep your listening and learning methods current with changing customer/business needs and expectations?**

**3.1-3.2:** Through development of performance measures for programs in the agency, processes are identified that deliver services and provide customer satisfaction throughout the state. DNR places a great deal of emphasis on all employees being customer focused. With a broad-based staff located throughout the state, DNR employees are exposed daily to the agency's customer base and responds to their needs and expectations. One of the agency's primary listening and learning methods is through its advisory committees. Each division, with exception of Outreach and Support Services (Previously merged Administration and Communication Divisions) has at least one citizen advisory committee that is either provided for in statute or created by Executive Order. The purpose of these advisory committees is to solicit public input and to advise the DNR Board on matters of policy and issues that affect the state's natural resources. Public meetings are usually held by each committee every two months in locations across the state to make it convenient for the public to attend and interact with the committees and their respective staffs. DNR's website has installed a comments section that allows our customers to pose questions or lodge complaints about agency services, products and processes. Key individuals in each program area have been identified to receive and respond to these inputs from our customers, and the volume of contacts and responses will be tracked and analyzed in the future. In recent years, the volume of comments, questions and expressions of concern received in DNR's Executive Office has increased enormously. In order to deal with this challenge, an Executive Office Ombudsman function has been created to provide a more formalized and accountable system of response and information dissemination.

**3.3: How do you use information from customers/stakeholders to keep services or programs relevant and provide for continuous improvement?**

**3.4: How do you measure customer/stakeholder satisfaction and dissatisfaction, and use this information to improve?**

**3.3-3.4:** DNR has identified those persons, organizations and governmental agencies that are either recipients or beneficiaries of work efforts or purchasers of products and services produced by the agency. DNR works to determine and fulfill internal and external customers' key requirements by asking questions, defining terms, and setting standards for continuous improvement. An example of this continuous improvement is DNR's conversion of license sales to an on-line sales system, which streamlines the process while decreasing expenditures. On-line license sales are much more accessible and convenient to the customer. In addition to many additional future benefits this system will offer our customers, DNR will acquire the ability to capture and analyze information and forecast trends so that we can better respond to our customer's ever growing and changing needs. Currently 37 % of license sales agents have been converted to the electronic point of sale system, which represents 49% of total sales. This concept was also expanded to boating renewals in order to improve efficiency and customer service. The agency works to continuously monitor key processes to ensure that customer needs are met. A partial listing of agency customers is provided in Section II.

DNR maintains close contact with its customers and undertakes methods to listen and learn about changing customer/business needs. These methods enable the agency to secure information needed to improve services/programs and measure customer satisfaction and dissatisfaction. Improvements based on this information can be made through a number of processes that include, but are not limited to: administrative action, the advisory committee process referenced in 3.1-3.2, DNR Board action, and/or legislative action.

**3.5: How do you build positive relationships with customers and stakeholders? Indicate any key distinctions between different customer groups.**

**3.5:** Through the agency's processes, programs and services, DNR has built positive relationships with customers and stakeholders. As a resource management agency that operates throughout the state, DNR field staff has been an integral part of the community, which has resulted in developing credibility with the customer base. As a law enforcement agency, DNR has been effective in enforcing laws in a manner that protects the state's natural resources for use and enjoyment by a large portion of the state's citizens. With the state's natural resource base being such an important component of its culture, DNR's ability to preserve and protect this culture has resulted in building positive relationships. DNR has also been effective in the community by assisting other state, local and federal agencies during emergencies, manhunts, hurricanes, security, communications, search and rescue, and recovery activities.

**Category 4 – Measurement, Analysis & Knowledge Management:**

**4.1: How do you decide which operations, processes and systems to measure for tracking financial and operational performance, including progress relative to strategic objectives and action plans?**

**4.2: How do you use data/information analysis to provide effective support for decision making throughout your organization?**

**4.1-4.2:** DNR's performance management system is a reflection of the agency's vision and mission and how programs operationalize the vision and mission to produce effective business results. DNR's utilizes key measures that relate to the primary mission including resource impacts, financial performance, customer service, and allocation of resources. DNR meshed these key measures with the best scientific information available when it makes key management decisions. The category of collecting scientific information on natural resources managed by DNR is directly linked to the agency's vision and mission. A variety of programs exist in DNR where health, well-being and sustainability of natural resources are measured to ensure proper management and protection. These programs include the State Climate Office, hydrology, aquatic nuisance species control, flood mitigation, environmental review, habitat protection, the Southeastern Regional Climate Center, endangered species, Heritage Trust, wildlife management, freshwater fisheries, Marine Resources Office of Fisheries Management, Marine Resources Research Institute, and the S.C. Geological Survey.

Another category in which DNR develops measures is its customer base. With a finite level of natural resources and an expanding population in the state, the level of customer participation in outdoor activities and the trends in this participation has a key link to the vision and mission of DNR. In addition, measures of requests for data/information, technical assistance, maps, educational products/services, conflicts between resource users, and changing constituent groups are all critical to the agency's performance.

DNR also gauges performance in the financial arena and needs a sustainable financial base from year to year in order to meet the vision and mission of DNR. The level of state funding is an integral part of this category, as DNR secures 28.6% of its budget from state funds. The agency also collects revenue from a variety of sources that provide key support to law enforcement and wildlife/fishery programs. The levels of hunting and fishing license sales, boat titling and registration fees, marine resources licenses and permits, magazine subscriptions and related revenue sources are key performance measures to track as they affect programs, operations, and ultimately, the mission of DNR. Grants also serve as an important funding source for the agency and the level of extramural grants funded has a critical impact on key programs and projects.

In conjunction with the new Strategic Plan “Vision for the Future” which was initiated during FY2005-FY2006, each of the divisions has or is currently in the process of reassessing and updating their key performance measures, where appropriate. The goals and objectives of the strategic plan will serve as the standardized outline for the development of the action plans and initiatives. These action plans will link the DNR’s key measures back to specific goals.

**4.3: What are your key measures, how do you review them, and how do you keep them current with business needs and direction?**

**4.3:** DNR’s key measures are economic impact of hatchery production and expenditures, participation in hunting and fishing, wildlife watching, and wildlife related recreation compared to other states, revenue trends measured as watercraft titling and registration renewal methods and license sales comparisons with other states, boater access, marine species abundance surveys, gamefish tagging and charter vessel reporting trends, commercial landing trends, and artificial reef activity, law enforcement officer activity, and case load measures, hunting accident/fatality trends compared to other states, hunter safety student participation trends, boating safety measurements and case loads, boater safety student trends compared with numbers of boats registered, litter enforcement measures, numbers of and participation in education classes and programs, USDA cost share funding trends, scientific reports, presentations and publications, Geological Survey mapping trends, nuisance aquatic plant coverage trends, numbers of comprehensive environmental reviews, numbers of flood insurance policies and GIS data access trends. With this broad scope of measures, coupled with the new Vision for the Future Strategic Plan, the Department’s measurements and strategic planning process have been developed, and the document is in the process of being finalized. Once deployed, each division and the agency’s accountability team will routinely review specific Action Plan timelines and results.

**4.4: How do you select and use key comparative data and information to support operational and strategic decision-making and innovation?**

**4.4:** DNR uses comparative data and information in a continuous manner to provide effective support for decision-making. In the scientific arena, the analysis of data to include trends, regression, correlation analysis, etc., is an integral component of the scientific process. These types of analyses and others are used to draw conclusions on biological issues related to DNR’s mission to protect and conserve the resource. In the law enforcement arena, the agency maintains a comprehensive intelligence system used to develop intelligence and comparisons on natural resource violations in order to support effective decision-making for staffing, patrol patterns, duration of patrols, and the time of day/night or season. These objective measures and analysis are used by managers to monitor and direct officer activity, thus increasing the efficiency of manpower resources. Data collection and analysis relating to hunting and boating accidents/fatalities is important in investigating such occurrences to determine if criminal charges may exist and to provide feedback. This feedback provides trends and comparisons that support decision-making on methods to ensure the safety of human life and property. This data is used to determine the need for proactive measures in the area of boater and hunter safety and the need for regulatory actions. Changing demographics and land-use trends in the state provide valuable information to support planning and management decisions in the agency. Human dimensions data and changing landscape information are constantly developed by DNR to support decisions relating to future direction of programs and the allocation of resources to meet the vision and mission of the agency. Whenever possible, DNR will use comparative data and information from other agencies and/or states to support decisions, if compatible. With the dynamic nature of natural resources management from state to state, it is often difficult to identify compatible data for comparative purposes. Given this complexity, DNR will, at times, use its own database to make comparisons from one time frame to another for use in the decision-making process.

#### **4.5: How do you ensure data integrity, timeliness, accuracy, security and availability for decision-making?**

**4.5:** In the aforementioned categories, effective use of performance measures to make decisions is based upon data quality, integrity, timeliness, accuracy, reliability, quality, security, and availability. DNR ensures these factors occur through a variety of methods. Through the use of scientific research, the agency collects data pursuant to a protocol based upon standards for data quality and reliability. For deciding seasons, bag limits, hunting and fishing methods, etc., the data is collected based upon the time and availability needed to make such decisions and is complete before it is used in this process. Many of the agency's data collections are done through grants and contracts that require a final report for submission to the appropriate agency. In order to maintain credibility for utilizing such grants and to secure reimbursement for funds expended on a grant, the grantor will review the final report to ensure data quality, reliability and completeness. In the financial category, there are established standards that must be followed to maintain data quality and reliability. DNR routinely has internal and external financial audits to see that the standards are met. By maintaining a well-managed financial system with a diversity of checks and balances, DNR ensures such financial data is complete and available for use at the appropriate times for decision-makers. As a public agency serving a very broad customer base, DNR must maintain a quality database to make decisions regarding these customers. Through the use of current information technologies and a highly skilled workforce, the agency provides reliable and timely data for its customers and for use in the decision-making process. There are also peer reviews of the agency's data collection and use to further ensure its quality and reliability. Law Enforcement data are subjected to a three stage review process prior to entry into computer databases. This review begins with the first line supervisor, goes through the Regional Captain and ends with the Records and Intelligence Section staff. Records that do not meet the criteria are corrected and resubmitted. Security is maintained through limiting access to the records, timeliness is ensured by maintaining a rigorous reporting schedule from the officer through final administration of the data at headquarters. Law Enforcement data systems are under constant review to maintain the credibility of the information. This is more important today than ever, now that information is being shared for homeland security and criminal statistics reporting with other law enforcement agencies. Computer programs are run monthly to identify potential data problems for review and correction where necessary. This is an ongoing process to which the Division is committed. This process also provides feedback to the operational component of the Division. All information related to officer work activity and case load performance is reported from headquarters back down the line to regional and first line supervisors through monthly reports that are generated and emailed to the recipients.

#### **4.6: How do you translate organizational performance review findings into priorities for continuous improvement?**

Findings from activities as noted in 4.3 are reviewed with key senior leaders on a regular basis, either at the monthly Deputy Directors' Meeting, Board Meeting, or more often as needed. Information obtained from these findings immediately feeds into the priorities for the agency and results in appropriate action for improvement. Data collection obtained for grants and contracts is regularly reviewed in accordance with the regulatory requirement associated with the grant and/or contract. In many cases, data that extends beyond the grant's initial scope is needed in order to answer a scientific research question related to the grant. Such research is essential and critical to the continued functioning and maintenance of the DNR mission as the principal advocates for and stewards of South Carolina's natural resources. The DNR is also subject to reviews and audits by various governmental entities related to fiscal accountability, human resources, permitting and zoning regulations, etc. As a result, the DNR modifies processes, as necessary. Finally, the DNR listens to its customers and key stakeholders through public forums, advisory committee meetings, informal communication, and through the DNR website.



Customer and key stakeholder feedback is analyzed and acted upon, when appropriate. All such feedback is prioritized based on the overall direction of the DNR as documented in the “Vision for the Future”.

**4.7: How do you collect, transfer, and maintain organizational and employee knowledge (your knowledge assets)? How do you identify and share best practices?**

**4.7.** With the loss of personnel as a result of budget reductions and the anticipation of further losses of a significant portion of the agencies leadership as a result of the TERI program, the agency has become more acutely aware of the ongoing and accelerating loss of institutional knowledge. Our WILD leadership-training program was one response to this issue, but leadership is focusing on standardizing methods to maintain and accumulate employee knowledge and the identifying and sharing of best practices. The Director has instructed his Deputies to institute a succession program in each division to insure a training process is in place for future key staff position changes. In response to this directive, each division now has an assistant deputy director. The Information Technology Section of the Office of Support Services has been tasked with exploring and implementing technological programs that will facilitate the collection and accessing of existing published, printed and electronically filed information for ready retrieval, and methods of capturing existing institutional knowledge that will be needed in the future. In addition to ensuring better communications, coordination of efforts, quicker response times, and avoiding unnecessary duplication of efforts, the Regional Hub Structure is the primary vehicle for the identifying and sharing of best practices cross-divisionally and across the regions of the state.

**Category 5 –Workforce Focus**

**5.1. How do you organize and manage work: to enable employees to develop and utilize their full potential, aligned with the organization’s objectives, strategies, and action plans; and to promote cooperation, initiative, empowerment, innovation and your desired organizational culture?**

**5.1:** The DNR utilizes the Employee Performance Management System (EPMS) to organize and manage the work of the agency. The universal review date was implemented this past year, which required the majority of EPMSs be completed September 2. This due date coincides with dates that the Accountability Report and the DNR Director’s Performance Evaluation are due. Success Criteria, Objectives and business results found in these documents correspond with the strategies outlined in the Vision for the Future document. Guided by the DNR Director, the Chief of Staff, and the Deputy Directors, employees are prepared to respond to initiatives for the agency. While employees are empowered to complete their work, they are expected to cooperate within their respective divisions and with other divisions to perform their jobs. The Director and Deputies communicate this approach to the work to employees through Regional Hub meetings, Deputy Director Meetings, division meetings, and informal channels of communication.

The Director holds regional staff meetings periodically during each fiscal year to personally update employees on DNR initiatives, budget status and agency priorities. As reported in last year’s Accountability Report, committees comprised of employees from all divisions and all levels were selected to develop strategies for achieving the listed goals. The senior leadership met and discussed the results of these committees. In many cases the action items listed were in progress. By implementing the Vision for the Future, the Department continues to advance in strategic planning and forecasting to create a culture of accountability and progress.

## **5.2. How do you evaluate and improve your organization's human resource related processes?**

**5.2:** The Director is committed to achieving an agency culture of a well-qualified workforce that is provided the appropriate development opportunities to carry out the mission of the DNR and assist employees in their career development. An agency-wide training and development plan was created that incorporated both mandatory and elective development opportunities. Career development paths were created for three of the divisions and will be implemented once funding is available and the Director and the DNR Board have approved them. The career paths will emphasize achievement of specific work and experience milestones based on competencies. DNR offers an internal leadership development program (W.I.L.D.), which identifies employees interested in acquiring future leadership positions and exposing them to all aspect of the agency. In addition, the DNR supports the Associate Public Manager program and the Certified Public Manager program. Training initiatives are documented within the EPMS and are presented to the employee during the planning stage.

## **5.3: How do you identify and address key developmental and training needs, including job skills training, performance excellence training, diversity training, management/leadership development, new employee orientation and safety training? How do you evaluate the effectiveness of this education and training? How do you encourage on the job use of the new knowledge and skills?**

**5.3:** As an evaluation phase of the agency wide training initiative, the human resources office receives feedback from employees pertaining to their training needs. The feedback received will be compared to current training sessions and modifications will be made as necessary. The training sessions, including external training programs, are evaluated through a course evaluation form. Attendance in Supervisory Practices is highly encouraged by the DNR's senior leadership. Ad hoc training programs are offered on a Just-in-time (JIT) basis. Feedback received is communicated to the Director, Chief of Staff and Deputy Directors on a case-by-case basis.

## **5.4. How does your employee training contribute to the achievement of your action plans?**

**5.4:** Several action items listed under strategy 3 of the Vision for the Future document address employee training. Therefore, employee training is linked directly to DNR's strategic plan and strategies. Actions items were reviewed and approved during two retreat sessions with the Director, Chief of Staff, Deputies and Human Resources Director. Later, four regional meetings were held throughout the State to share the status of the Vision for the Future document with all DNR employees.

## **5.5 How does your employee performances management system including feedback to and from, support high performance and contribute to the achievement of your action plans?**

**5.5:** The EPMS document provides feedback to employees, from the rater, during the annual evaluation component of the system. In addition, many supervisors provide informal feedback to employees throughout the rating period. Raters are thoughtful in awarding an Exceeds or Substantially Exceeds rating to employees. This approach to the evaluation has resulted a greater understanding of the success criteria and the expectations of the supervisor in determining an above meets rating. The timing of the EPMS documents contributes to the achievement of the agency's action plans as mentioned in 5.1.

## **5.6. How do you motivate your employees to develop and utilize their full potential?**

**5.6:** Employees are provided a motivational environment that allows them to develop and utilize their full potential through training opportunities, support for educational degrees and commitment by the Director to have a well-qualified workforce. Through the vacancy announcement processes, employees

are able to apply for promotional opportunities. Additionally, the evaluation system incorporates a development segment that allows communication between employee/supervisor concerning career goals and developmental objectives. All supervisors have been trained on the EPMS system and the human resources office offers refresher courses.

**5.7. What formal and/or informal assessment methods and measures do you use to determine employee well being, satisfaction, and motivation? How do you use other measures such as employee retention and grievances? How do you determine priorities for improvement?**

**5.7:** Although the Department's (8.33%) turnover rate is less than the state average (13.99%), the DNR knew throughout FY04 through FY06 that employees were leaving the agency at a much higher rate (10%) than prior to the budget cuts that occurred in FY01 (6.8%). Through various methods of feedback ranging from formal surveys to informal conversations, employees indicated they were leaving due to the low pay. As a result, the leadership of the agency began a salary study for administrative personnel to determine if salaries were competitive compared to employees in the same type of position. One hundred and twenty two (121) employees were selected for the study, representing 21 job titles. When salaries were compared to salaries of employees within the same job titles throughout state government, the analysis revealed that 97 of the employees in the study (79%) were making less than their counterparts in other South Carolina state agencies. It is believed that correcting employee salaries in the administrative fields attributed to the slightly improved turnover rate from FY06 to FY07 of 1.5%. In an effort to monetarily recognize employees outside of the administrative fields and exemplary staff, the Department awarded bonuses and salary increases to 188 deserving employees. Salary equity measures taken during FY07 only impacted a small number of employees at DNR. It is believed that further salary adjustments are greatly needed in other scientific and professional fields in order to address continued retention concerns, attract qualified employees with competitive salaries, and provide stability within the workforce.

**5.8: How do you maintain a safe, secure, and healthy work environment? (Include your workplace preparedness for emergencies and disasters.)**

**5.8:** The Department's Safety Committee assists with safety regulation compliance. This is accomplished primarily through raising awareness of safety issues, providing training to supervisors and employees, and conducting periodic safety checks to ensure compliance. The committee developed a formal safety plan for the Department that addresses safety issues, required training and other recommended training and awareness. This plan has been provided to Deputy Directors for comment; however, budget restrictions and limited personnel have delayed final implementation.

The Department conducts various wellness activities to include wellness walks and health screenings, as well as periodically including articles encouraging healthy lifestyles in agency communications to employees. CPR training is offered to DNR employees intermittently, and there are plans to offer this course as part of the annual training curriculum, as well as other safety related courses.

**Category 6 – Process Management**

**6.1: How do you determine, and what are your key processes that produce, create or add value for your customers and your organization? How do you ensure that these processes are used?**

**6.1:** DNR has developed a network of key processes for products and services to provide effective management of work in the agency. The primary processes are based upon DNR's mission and major strategic goal to enhance the effectiveness of the agency in addressing natural resource issues. There are a

variety of program delivery processes related to this goal. The key programs in this area include wildlife management and technical assistance, law enforcement, freshwater fisheries management plans and technical assistance, conservation districts, marine resources fisheries management and mariculture, endangered species and protected elements management, and the agency's 1.1 million acre Wildlife Management Area Program. Additional program delivery processes for this goal include the Marine Resources Research Institute, wildlife and freshwater fisheries research, hydrology, State Climate Office, State Geological Survey, Waddell Mariculture Center, Yawkey Wildlife Center, and the Southeastern Regional Climate Center. All divisions have delivery processes through programs for education and public involvement. Major products and services in this area include natural resources planning and public attitudinal surveys, DNR's website secures public input on management plans and projects, SCMAPS, Hunter and Boater Safety/Education, Take One Make One, Project WET, Project WILD, *SC Wildlife* magazine, DNR News Program, SC Reel Kids, and Hooked on Fishing Not on Drugs. Landscape conservation is also a critical component of this strategic goal. Key programmatic design and delivery processes include DNR's habitat acquisition program, Heritage Trust Program, Scenic Rivers Program, environmental planning, environmental coordination and permitting, conservation districts, drought management and water resources planning.

These program delivery processes are fundamental to our agency's mission and are incorporated in the strategic plan and the one completed divisional operational plan. Through regular monitoring of required measurements, use of these processes will be ensured in the existing operational plan, as well as those being developed. Progress is assessed on a regular basis through monthly staff meetings and EPMS reviews.

**6.2: How do you incorporate organizational knowledge, new technology, changing customer and mission-related requirements, cost controls, and other efficiency and effectiveness factors such as cycle time into process design and delivery?**

**6.2:** Monthly meetings of the Deputy Directors, divisions and division section chiefs facilitate open discussion of program operations and encourage sharing of knowledge and technology applications across process management platforms. Staffs are routinely encouraged to assess and contain cost of operations. Attendance at regional and national conferences exposes staff to new, innovative methods of implementing programs that result in more effective and/or efficient processes. Through direct contact and input from user groups and constituent-based surveys of customers that use the products and services of these delivery processes, DNR is able to adjust to changing customer requirements.

**6.3: How does your day-to-day operation of these processes ensure meeting key performance requirements?**

**6.3:** All activities function or will function in concert with the divisional operational plans, which are aligned with the agency strategic plan. This will ensure that all processes are meeting key agency objectives. All divisional tasks will have identified performance measurements to assess success. Annual assessment of set measurements helps managers determine if processes are meeting performance criteria.

**6.4: How do you systematically evaluate and improve your key product and service related processes?**

**6.4:** A systematic process to evaluate and improve products and services has not been in place until this year. Currently, only one division, Land, Water and Conservation, has developed an operational plan that includes measurements for all products and services that can be monitored and assessed at least annually and adjusted as needed. The remaining divisions will have a systematic process to evaluate and improve products and services online this fiscal year.

## **6.5: What are your key support processes, and how do you improve and update these processes to achieve better performance?**

**6.5:** DNR has an effective level of support processes that are used in the production and delivery of the agency's products and services. These support processes are used to provide needed assistance and guidance for the agency's major strategic goals. Major support processes in DNR are: a) planning, surveys and performance measures; b) legal; c) human resources; d) legislative affairs; e) environmental permits/coordination; f) data processing and information technology; g) supply and equipment; h) finance and accounting; i) procurement; j) licenses and fees collection; k) boat titling and registration; l) graphics, duplicating and mail services; m) news media and public relations; n) audio/video productions and o) engineering. Each of these processes includes highly skilled staff resources that maintain activities and performance based upon the most current information and technological strategies. Additionally, specialized training and career development plans are created and implemented to ensure the highest level of skill development and performance attributes. Through the agency's workforce planning tools and projects, DNR is able to improve and update these processes to achieve higher levels of performance. Support challenges are discussed and corrective actions identified during the meetings. Improvements are monitored and reviewed at subsequent meetings. Regular discussions between staff and help ensure smooth operations, mutual support, and rapid conflict resolution when needed.

DNR recognizes the information technology age is ever changing, and it is vitally important that DNR keep pace with customers' demands for the latest in business technology. DNR, having recognized the need to further simplify the process of working with our business community and constituents, has initiated a major systems conversion project to migrate the DNR boat registration and hunting/fishing licensing programs to a web-based Oracle solution. When completed, this will allow customers to purchase licenses on-line as well as, renew existing boat registrations. Staffs continue to refine the web-based violations query and retrieval system, the agency invoicing system, deer tag, license scanning system and conversion of the Hunter-Boater Education program data from Microsoft Access to Oracle. Each of these systems consolidates numerous client databases into a comprehensive database management system that provides more efficient access to data.

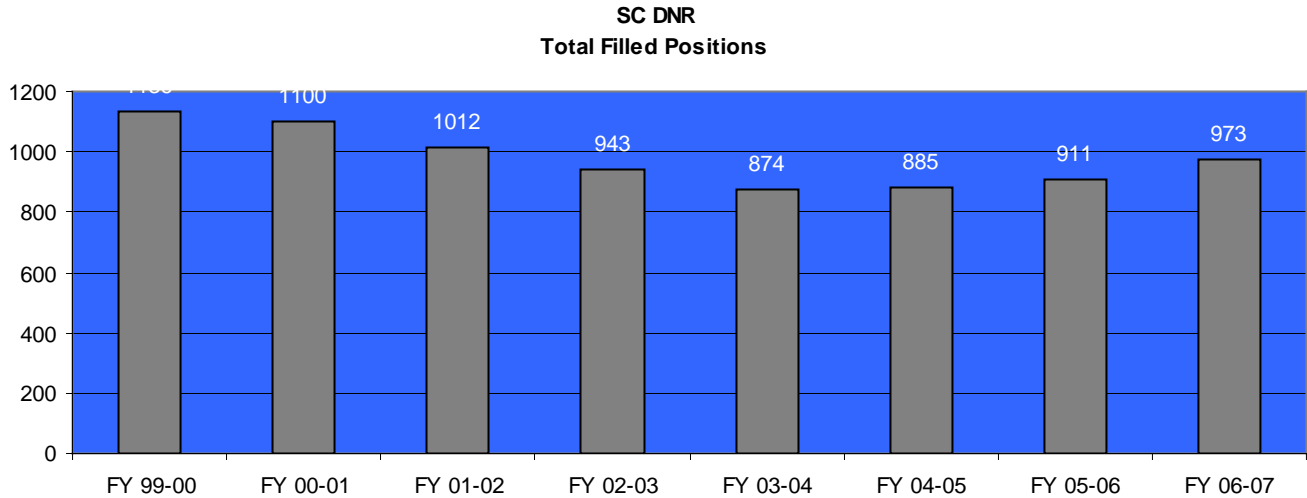
## **6.6: How does your organization determine the resources need to meet current and projected budget and financial obligations?**

### **Category 7 – Business Results**

**7.1-7.6:** DNR has developed the following business results based upon major programs in the agency that are related to the Strategic Plan. A critical agency responsibility is to produce statistical and survey information on performance and improvement measures and benchmarking efforts. DNR recognizes this responsibility and also recognizes the need to improve on previous years' efforts in this area. . As stated throughout this report, each division has or is in the process of reassessing and updating their key performance measures in order to determine meaningful performance and improvement measures for the agency so that they can be tracked and evaluated through time. Based on where DNR is in the strategic planning process, the agency must supplement quantitative measures with discussion of qualitative measures throughout Category 7.

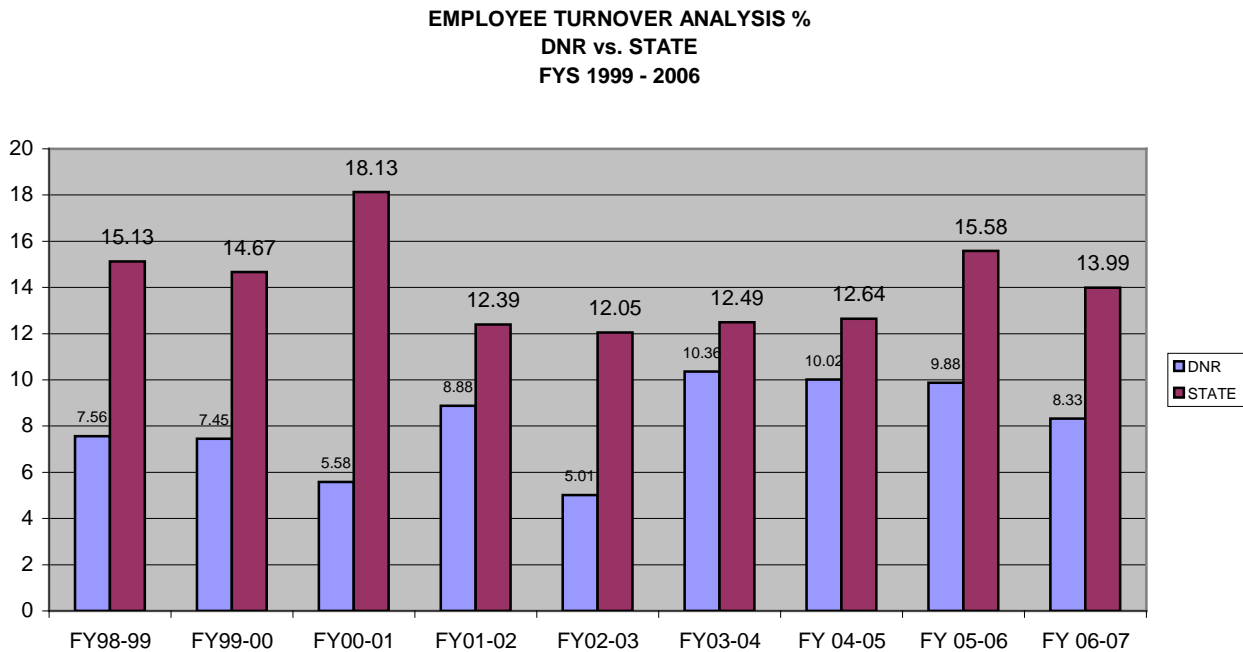
## Human Resources

The Department had 106 FTE vacancies as of 06/30/07. This vacancy rate is 14.6 % increase of 1.6% of the 973 total allocated FTE positions for this agency. Overall, including permanent FTE positions, temporary grant positions and temporary positions, the Department's staffing levels are down 11.5% since FY01 (1100), with 127 fewer employees. (See Figure 7.1)



(Figure 7.1)

Historically, DNR's turnover rate has been significantly lower than the state government's overall turnover rate. DNR's turnover rate is 8.33% compared to the state's 13.99% turnover rate. (See Figure 7.2)



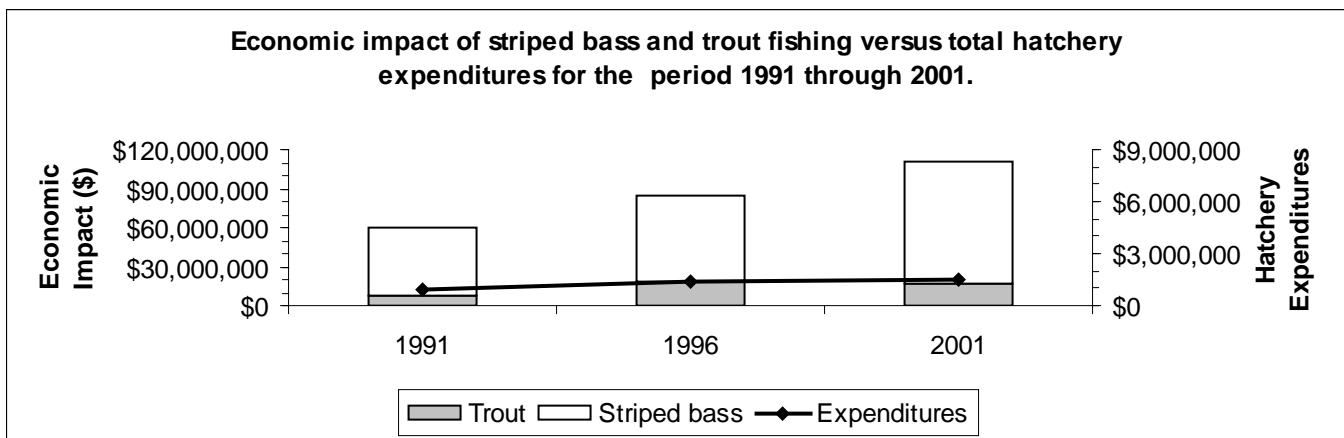
(Figure 7.2)

## Program: Wildlife and Freshwater Fisheries

The core mission of DNR's Wildlife and Freshwater Fisheries Division is to protect, manage and sustain the public enjoyment of natural resources through programs that support hunting, fishing, wildlife watching and other forms of outdoor recreation. South Carolina's abundant and well-managed fish and wildlife resources support a large number of hunting and angling constituents. This includes residents and nonresidents that select South Carolina as a hunting and fishing tourist destination. The annual economic impact of wildlife-associated recreation in the state is estimated to be over \$1.3 billion

The monitoring and quantifying of fish and wildlife populations is difficult and expensive to perform, and explaining the cause affecting these populations are often very uncertain due to the extensive number of variables that can change numbers and conditions. Accordingly, presenting biological data as a means of demonstrating progress can be misleading. The Wildlife and Freshwater Fisheries Division finds useful information and tracks progress and success through the understanding of public opinions, attitudes and behaviors relative to program activities and functions. The collection of these types of data is performed at appropriate intervals via sources that include, but are not limited to: 1) National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (collected every 5 years by the US Fish and Wildlife Service), 2) human dimensions surveys of licensed anglers and hunters, youth and the State's general population taken at five-year intervals (contracted to a professional, reputable and experienced company with subject related standards), 3) field activity studies of hunters and anglers specific to an area, subject or activity (i.e.: creel survey, waterfowl hunter survey, deer hunter survey, etc.), 4) assessment of economic value of specific activities or species groups (i.e.: economic modeling of the total impact angling has on the State's economy and species value.).

Annually, freshwater fishing has a total economic impact of over \$717 million in South Carolina. Fishing for striped bass and trout generates an economic impact in excess of \$93.9 million and \$17.4 million, respectively. In South Carolina, the products from the DNR's fish hatcheries support approximately 80% of the striped bass fishery and 90% of the coldwater trout fishery. The total annual cost for the operation of the Department's freshwater hatcheries averaged approximately \$1.5 million from 1996 to 2001. (See Figure 7.3) The economic impact of striped bass and trout fishing alone, when compared against the cost of the entire fish hatchery program, yielded a cost benefit ratio of 62 to 1 to South Carolina's citizens.

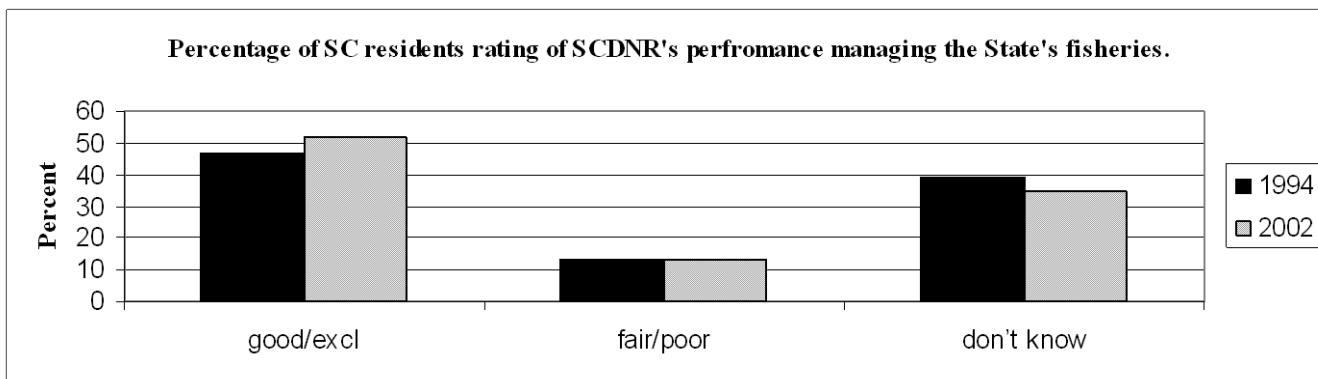


(Figure 7.3)

The Freshwater Fisheries Section has conducted surveys of customers concerning hatchery products, technical assistance and general angler attitudes. These surveys and the public attitudinal information provide a basis for the Strategic Plan update and detailed feedback from the public as to where resources

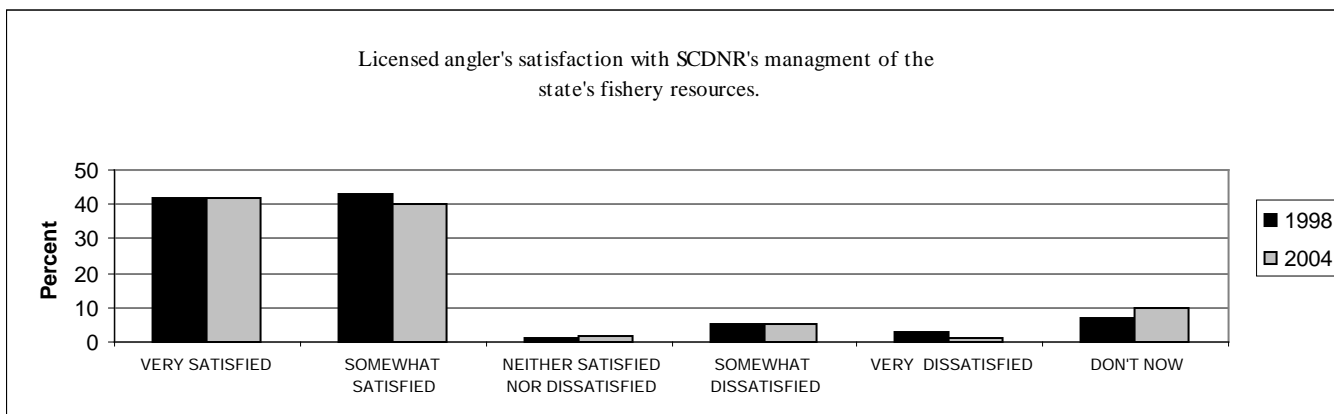
need to be focused in the future. These public opinion surveys are an important management tool for the agency and provide a solid basis for developing a comprehensive planning process, as well as developing budgetary recommendations for the allocation of resources in the agency.

Survey results of the residents of South Carolina from 1994 and 2002 indicate that the percentage of the population who feel DNR does a good or excellent job managing the state’s fisheries increased over the period from 47% in 1994 to 52% in 2002 (Figure 7.5). Over the same period the percentage of residents who indicated they did not know how DNR performed decreased from 39% in 1994 to 35% in 2004. Over the eight year period from 1994 to 2002, South Carolina residents have become more aware of DNR’s performance in managing the state’s fishery resources and their opinion DNR’s performance has improved.



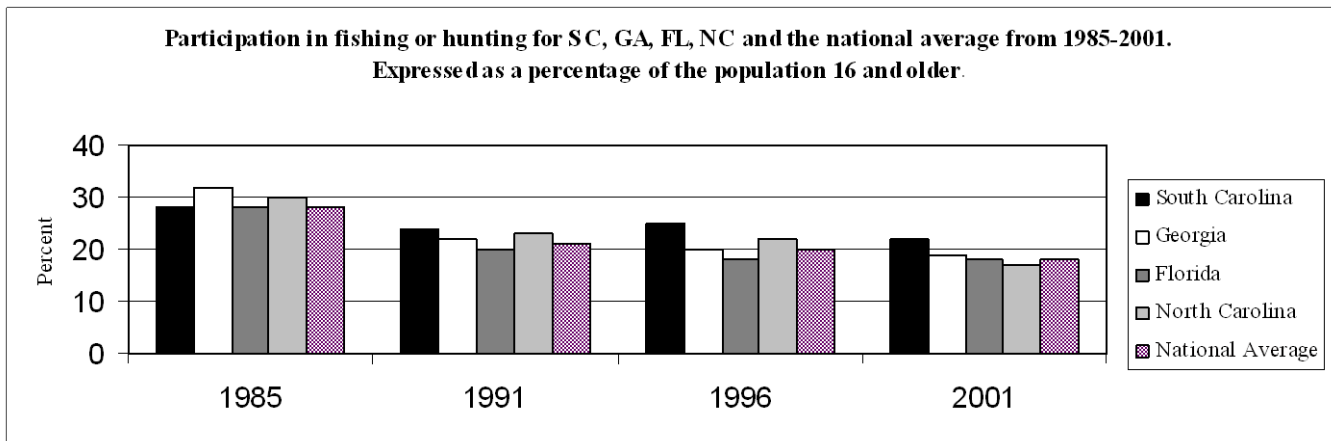
(Figure 7.4)

In a 2004 survey of fishing license holders, active anglers were told that DNR was responsible for the protection, conservation and enhancement of the state’s fisheries resources while providing recreational fishing opportunities. Active anglers were then asked if these responsibilities were appropriate and if they were satisfied with DNR’s performance meeting their responsibility (Figure 7.6). Eighty-nine percent (89%) of active anglers thought the responsibilities were appropriate while only one percent (1%) did not agree. Eighty-two percent (82%) of active anglers were satisfied with the performance of DNR at meeting its responsibilities to manage the state’s fisheries. Only six percent (6%) of licensed anglers were dissatisfied.



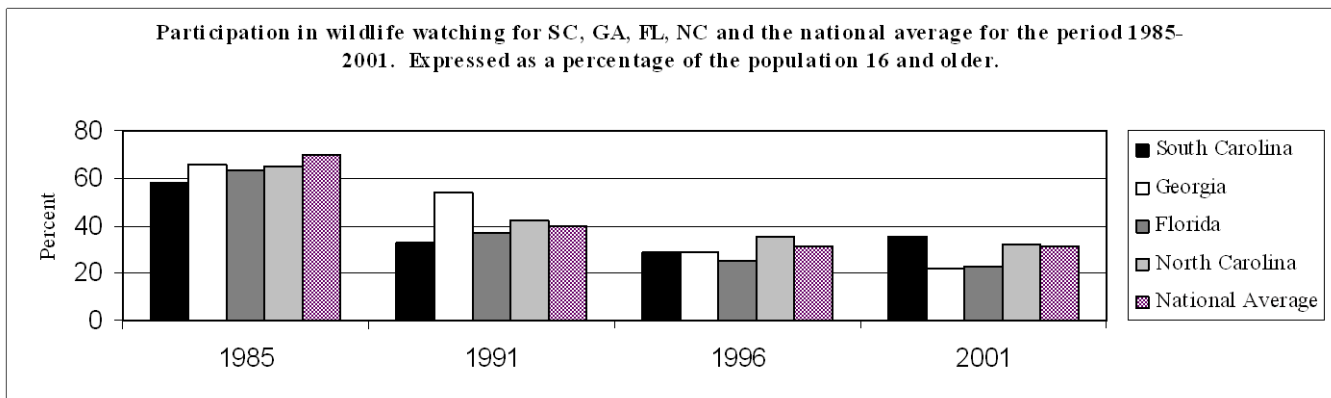
(Figure 7.5)





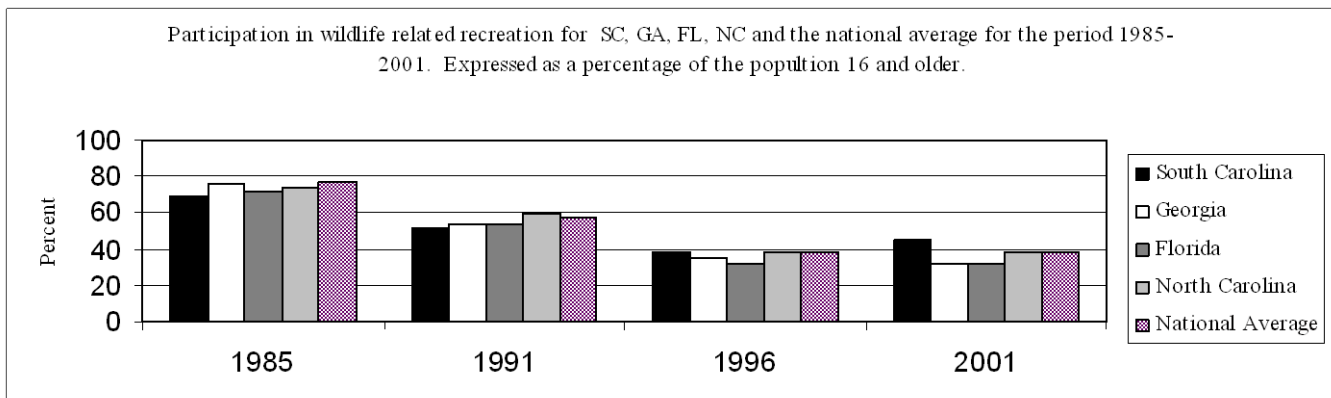
(Figure 7.6)

While participation in hunting and fishing has declined since 1985 nationally, the decline in South Carolina has been slower than in our neighboring states and the nation (See Figure 7.6). We trailed our neighbors and the national average in the percentage of population participating in hunting and fishing in 1985. However, from 1991 through 2001, a larger percentage of South Carolina’s residents have hunted and fished than residents of Georgia, Florida and North Carolina. South Carolina’s participation rate has been higher than the national average since 1991.



(Figure 7.7)

While participation in wildlife watching has declined across the region and the nation, the decline in South Carolina has been slower than in other states in the region or the national average. From 1996 to 2001 South Carolina experienced increased participation in wildlife watching; an increase not observed in neighboring states or the national average. (See Figure 7.7)

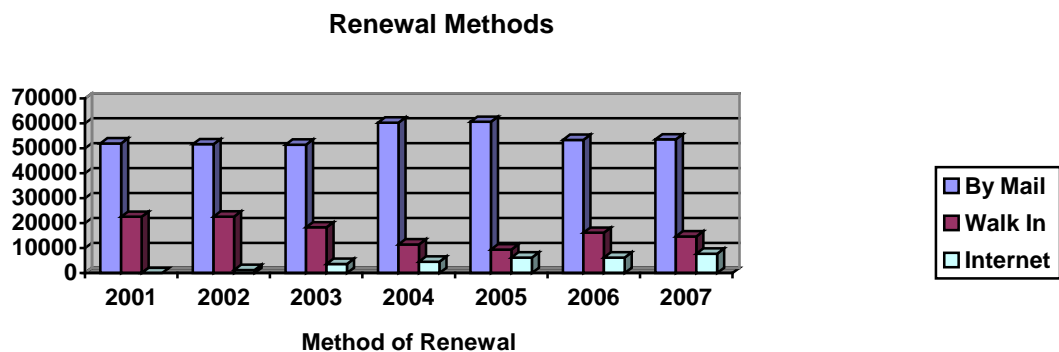


(Figure 7.8)

Participation in wildlife related recreation has decline across the region and the nation since 1985. However South Carolina’s rate of decline in participation has not been as great as that observed in our neighboring states or in the national average. Between 1996 and 2001 South Carolina actually experienced an increase in wildlife related recreation. There was no evidence of increased participation in South Carolina’s neighboring states or the national average. (See Figure 7.8)

**Program: Watercraft Registration and Titling**

All watercraft and outboard motor titling and registration for the State of South Carolina are handled through the Watercraft Titling and Registration Program. For the past several years, South Carolina has ranked 4<sup>th</sup> in the nation in per capita boat ownership, a ranking which remains steady. Currently, 433,158 boats are actively registered in S.C., a 4% increase from 2006. This area remains a particular focus point for the DNR and customer service is of vital importance. In the ever-constant quest for more convenient and efficient methods of accomplishing the task of renewing registration of watercraft, three methods of renewal are offered. Consumers can renew by physically coming into one of the regional offices, by mail, or electronically using the Internet. As anticipated, electronic methods are growing in popularity. In 2007, the number of consumers utilizing this option rose to 10% of the 75,997 renewals, up from the 8% from the previous year. An enhanced online watercraft system launched in October 2006, now offers customers the option of requesting a duplicate registration card or registration decal from the convenience of their home. Customers are also able to view registration records online at any time of the day or night. (See Figure 7.9)



(Figure 7.9)

In March 2007, a new feature was launched to assist individuals preparing to buy previously owned watercraft or outboard motors that have been titled in South Carolina. “SC Boat Facts” allows a buyer to check the current financial lien status, the personal property tax status and registration status of a watercraft or outboard motor. If personal property taxes are delinquent, the prospective buyer can see to which county taxes are owed.

**Program: Licenses Sales**

With a volume of 811,025 licenses purchased last year, representing our front line of constituent interaction in many cases, customer service is a primary factor. A goal for this year was to increase licenses sales by further enhancing customer service and making the purchase of hunting and fishing licenses more convenient. In June of 2007, approximately 650,000 multi-purpose mailers were sent to customers allowing them to purchase licenses, permits and tags through the mail or the Internet. This convenient mailer offered the option of using check or credit card to order hunting or fishing licenses, antlerless deer tags, shrimp baiting licenses and non-game fish tags. License orders were processed and

returned to the customers, saving the time and expense of a trip to their local license vendor and allowing DNR to maintain more accurate customer data in-house. For the past four years, the response rate has held at 11%. Since 2000, license sales have been available by phone. This program was expanded five years ago to provide Internet access as well.

DNR continues to offer all of its 761 license agents the opportunity to convert to a Point of Sale license system. This program allows vendors to print licenses for the customer at the point of sale. This system eliminates the twice-monthly paperwork associated with manual license sales. It also provides an immediate database of customers to DNR for law enforcement verification and trend analysis. Currently, 287 (37%) agents are using the electronic point of sale system.

### **Program: Boater Access**

The DNR Engineering Section is the primary component of the Boating Access Program. This group provides technical assistance to state, county, and municipal government entities by providing professional engineering services and oversight in the design, construction, and renovation of boating access facilities within the state. In addition to boating access facilities, the group also provides design and construction management assistance for other water recreational related facilities, such as fishing piers and docks, as well as general engineering assistance to other groups within the Department.

The Engineering Section has utilized needs assessment studies to project current and future usage and of boating access needs. The last statewide study was conducted in 1990, and the results of this study indicated a projected growth in demand for boating access to be over 75% in the following 20-year period. Of this projected growth, the largest percentage of demand increase was, not surprisingly, projected to be in the coastal areas of the state.

A study to analyze needs for boater access in the coastal counties was completed in FY 2007 and a final report has been issued. The study is currently being utilized by the Engineering Section to prioritize projects in the coastal counties. The Engineering Section is currently finalizing plans for a new statewide study that will provide a report on current needs and long term statewide needs projections. This study will be conducted in FY 2008 and will be used to complement the coastal counties study. Data from these studies will be used by the Engineering Section to develop a long term plan for meeting the changing boater access needs within the state as well as long range fiscal needs assessment for the implementation of this plan.

During FY 2007, the Engineering Section completed 17 projects related to boating access. These projects included repairs to existing facilities, complete renovations to existing facilities as well as new construction of ramps and docks. The total cost of all of these projects was \$668,214.00. In addition to this work, the Engineering Section has worked with the divisions within DNR on facilities repairs and construction.

### **Program: Marine Resources**

Marine recreational fishermen represent a large and significant portion of the DNR customer base. This customer base represents a diverse group of both licensed and non-licensed consumptive and non-consumptive users including anglers targeting finfish, oysters and clams, shrimp, and crabs. The customer focus in this case can be broadly summarized as: 1) to understand and report to constituents the long and short term status and trends of SC marine resources; and 2) to protect, conserve, and enhance fishing opportunities and access for SC citizens and guests. In order to meet these needs the Marine Resources Division (MRD) utilizes staff and funding opportunities from a wide variety of sources. MRD is a regional leader in marine resource management generating \$2.50 dollars in federal grants and

contracts for every state appropriated dollar. For example, the DNR utilizes federal funds from USFWS Sportfish Restoration Program, a “user pays, user benefits” approach that builds upon a 25% state match.

The South Carolina Marine Gamefish Tagging Program is an angler-based project that utilizes recreational anglers for deploying external tags in marine game fish. In addition to providing fisheries managers with valuable information on fish stocks, the program also has an important outreach component which seeks to promote catch/tag and release and overall resource conservation. In the past year, 225 certified fish taggers tagged 2,917 fish considered as priority species. With the help of recreational fishermen, 387 tagged fish were reported recaptured. Red drum is one of the most sought after species of marine finfish in this state. As a result of these efforts, SC fishermen have been releasing alive over 89% of the red drum taken in the recreational fishery, promoting angling ethics and conserving this popular gamefish for future generations. (See Figure 7.10) Although release rates of red drum have increased over recent years, fishery independent monitoring conducted by the MRD provides some evidence that the estuarine population of sub-adults may decrease over the next few years due to natural variability in year classes entering the fishery. This may be aided in part by the red drum stocking program which used saltwater fishing license and other funds, to add 2,000 15 inch long juveniles; 13,000, 5-6 inch long juveniles; 2.5 million, 2 inch fingerlings; and 49 million genetically marked 2-3 day-old larvae at multiple sites throughout South Carolina’s estuaries in FY 2007.

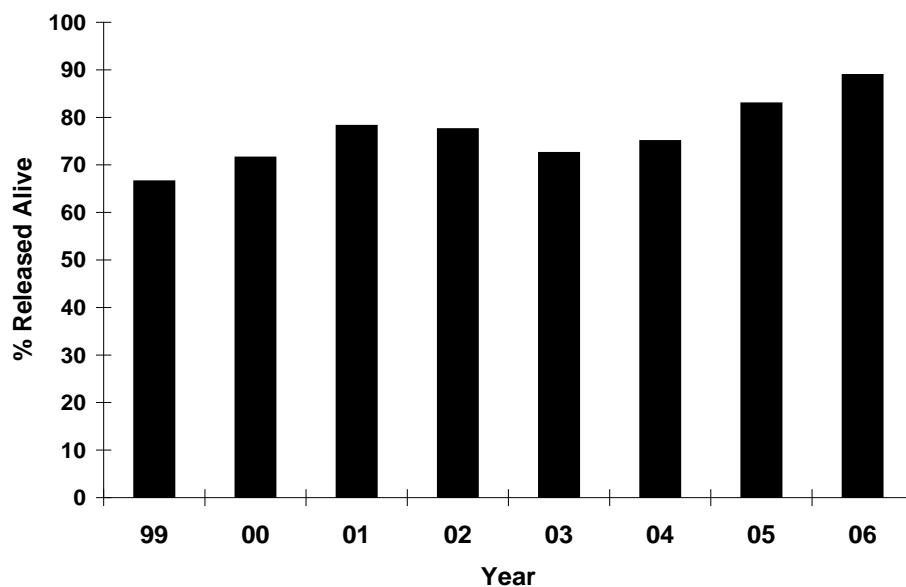
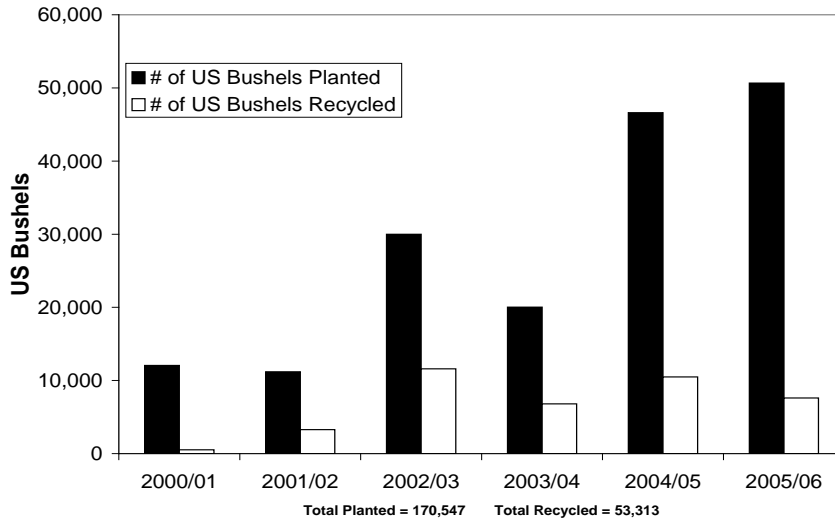


Figure 7.10. Red drum release rates.

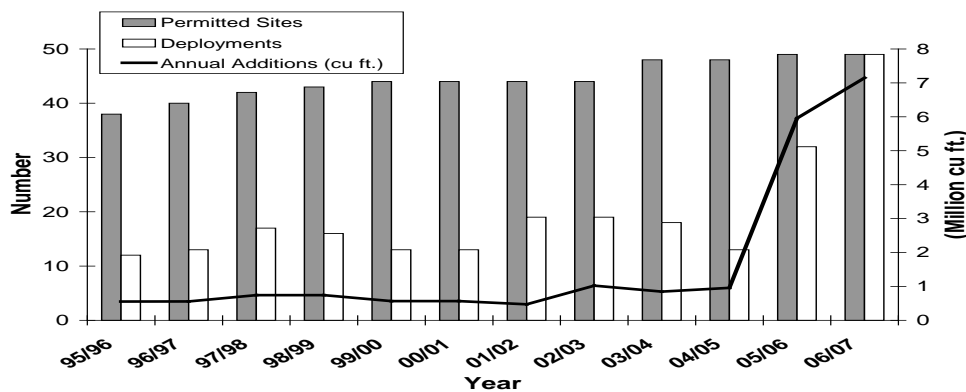
During FY 2007 there were 100,807 resident (up 9.2%) and 28,697 (up 10.8%) nonresident saltwater recreational fishing licenses sold to shell fishers and boat anglers. Boat anglers represent a large portion of the DNR customer base. This customer base is extremely important, not only because of its size and continued growth, but also because it helps support a number of recreationally oriented programs through the revenue created by licenses sales. Shore based anglers are another important component of the DNR customer base. Not enough is known about this group due in part to the lack of a shore based marine recreational fishing license. This does not allow DNR to fully assess fishing effort and mortality and impedes data collection for surveys used in management decisions.

Two programs that are excellent examples of how MRD fulfills its obligation to these SC saltwater fishing license holders by increasing and improving saltwater fishing opportunities, are the Oyster Shell Recycling Program and the Marine Artificial Reef Program. Oyster shell recycling saves taxpayer dollars by recovering discarded shells from oyster roasts that are then returned to the marine environment by SCDNR. Shells attract larval oysters that grow into new oyster reefs and serve as finfish habitat, as well as ecosystem engineers, filtering water and removing nitrogen. In addition to planting and recycling shell, the program also monitors oyster recruitment to planted reefs to assure effectiveness and accountability and has involved the public, in the award-winning SCORE program, to help build a number of these reefs. FY07 was a very productive year for the program, with a record number of 13,031 US bushels of shell recycled. (See Figure 7.11.)



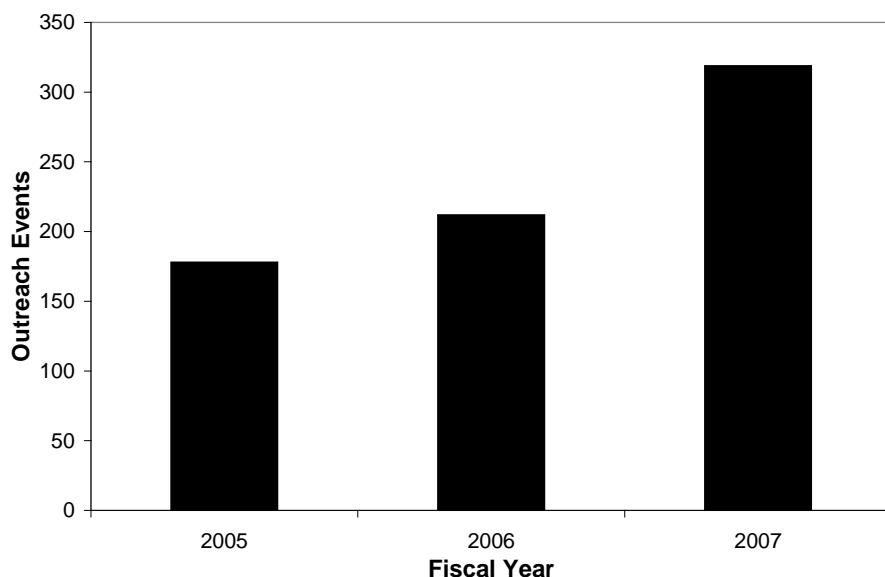
**Figure 7.11.** Oyster shell recycling and planting 2000-2007. Oystershell planting data not available in 2006/07 because planting operations not complete.

The Marine Artificial Reef program was established in 1975 and now maintains 49 permitted reef sites. Over the past twelve years, 241 deployments have expanded the amount of fishable bottom on these sites by 20,100,100 cu ft. (See Figure 7.12). There was a significant increase in bottom coverage in FY2006 and FY2007 resulting from the utilization of materials from the deconstruction of the old Cooper River Bridges in Charleston Harbor. Additionally, the number of non-bridge deployments in FY2007 was also higher than in any other year, resulting in the most productive year yet for this program. An Economic Impact and Use Survey of SC artificial reefs also found that in 2006 alone, artificial reef users represented an economic impact of approximately \$83 million in total sales that generated approximately 1,000 jobs.



**Figure 7.12.** Marine artificial reef activity 1995 – 2007.

Education and outreach efforts are an important component of MRD’s focus on conserving and protecting SC’s natural resources for future generations. Emphasis has been placed on not only presenting research at scientific conferences, but also disseminating this same information, as well as a variety of conservation messages and management strategies, to a range of public audiences. In FY2007 MRD also launched a statewide public meeting series to solicit opinions and raise awareness of the proposed saltwater finfish bill. This series was the first in what will become an annual event to help improve contact with constituents across the state and help keep them informed of important marine issues. In addition to conducting presentations, seminars and workshops, Marine Resources staff have also actively participated in the South Carolina Marine Educators’ Association, judged local science fairs, and hosted career shadowing for students. The recorded outreach efforts by the division have increased over the past three years, although it is important to note some of this increase may be due to a more focused monitoring effort. (See Figure 7.13.)

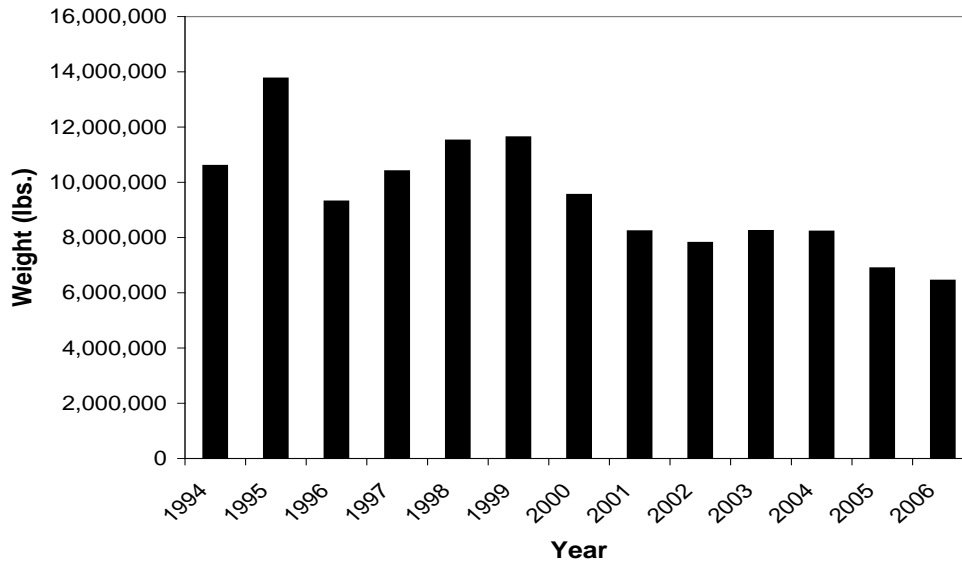


**Figure 7.13.** Outreach events conducted by MRD. Outreach events include presentations, seminars, workshops, and other educational programs and are conducted for a wide range of audiences...

The SC seafood industry is an important component of the state’s coastal economy and heritage. It also plays an important role in the lives of 1500-2000 commercial fishermen and seafood wholesale and retail dealers, another significant component of the MRD customer base. It also provides a foundation for SC’s growing coastal tourism industry. During calendar year 2006, the total weight of wild saltwater stocks landed in this state was 10,447,500 lbs. with an ex-vessel value of \$16,652,475. The customer focus in this case can be broadly summarized as the desire to ensure sustainable, economically viable marine fisheries. Significant components of the SC seafood harvest are shrimp and blue crabs. During FY 2007, 429 commercial shrimp trawl licenses were sold, a decline of 11 (2.5%) from the previous year and of 142 (25%) over the past 5 years. The commercial shrimp season typically opens in spring and closes sometime after New Years Day depending mainly on environmental factors. Landings are comprised largely of two species, white and brown shrimp. In addition, the fall 60-day recreational baiting fishery of shrimp was comprised of 10,091 licensed fishermen in fall 2006. After early rapid expansion, the baiting fishery has stabilized in recent years although the fishery continues to account for a substantial annual harvest (0.92 M pounds in 2006).

The commercial blue crab fishery had 320 licenses (eight nonresident) in the FY2007, representing a decrease of 46 (12.6%). This fishery operates year round, and fishermen are not limited in the number of traps they may license. The Marine Division utilizes not only licensing and permitting requirements, but

also good science and management to help sustain the shrimp and blue crab fisheries. From 1995 through 2000 landings were relatively stable, but since 2000, drought conditions have reduced blue crab abundance and declining market prices combined with high fuel prices have resulted in reduced fishing activity for both crabs and shrimp. (See Figure 7.14.) Stock abundance, however, as measured by fishery-independent methods indicate that stocks are relatively strong.



**Figure 7.14.** Wild caught heads off shrimp and hard blue crab landings 1994-2006.

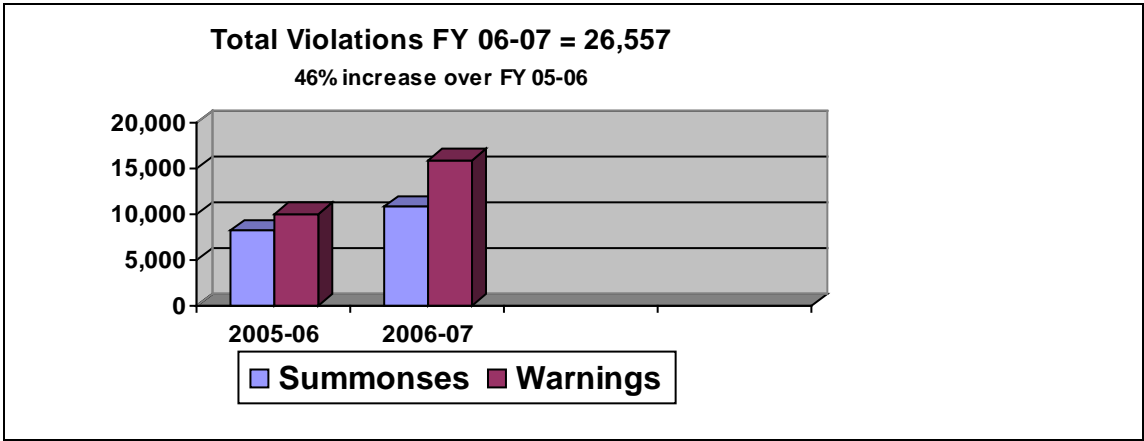
### **Program: Law Enforcement Operations**

7.1 – 7.5 Tasked with the responsibility of managing and protecting the state’s natural resources, the DNR is in the unique and challenging position of balancing the use of the state’s natural resources for recreational and commercial purposes with the need to conserve these same resources to ensure their long-term viability. The Law Enforcement Division has the primary mission of protecting these resources and those who utilize them through the enforcement of game, fish, boating, and litter laws. In addition to the primary enforcement mission, the Division also conducts educational and public outreach programs in the areas of hunter and boater safety, and promotes hunting, fishing, boating, and the ethical use of the state’s natural resources. Education and outreach programs also encourage compliance with laws and regulations. DNR law enforcement officers also routinely assist other law enforcement agencies with public safety missions including homeland security, civil disturbance prevention, emergency response to natural and man-made disasters, coordination of search and rescue missions, manhunts, and enforcement of public safety laws. By partnering with other law enforcement agencies toward common goals, the Division is able to provide cost-effective services to the public. The Division entered into an agreement in 2006-2007 with the State Law Enforcement Division to partner in the South Carolina Information Exchange system (SCIEEx). This partnering entails multi-agency sharing of intelligence information between SCIEEx, DNR, and other participating law enforcement agencies for the purpose of homeland security and criminal law enforcement efforts by all parties. This is a direct reflection of the ever-changing role of DNR law enforcement, and the Division’s adaptation to new responsibilities in the post 9-11 era.

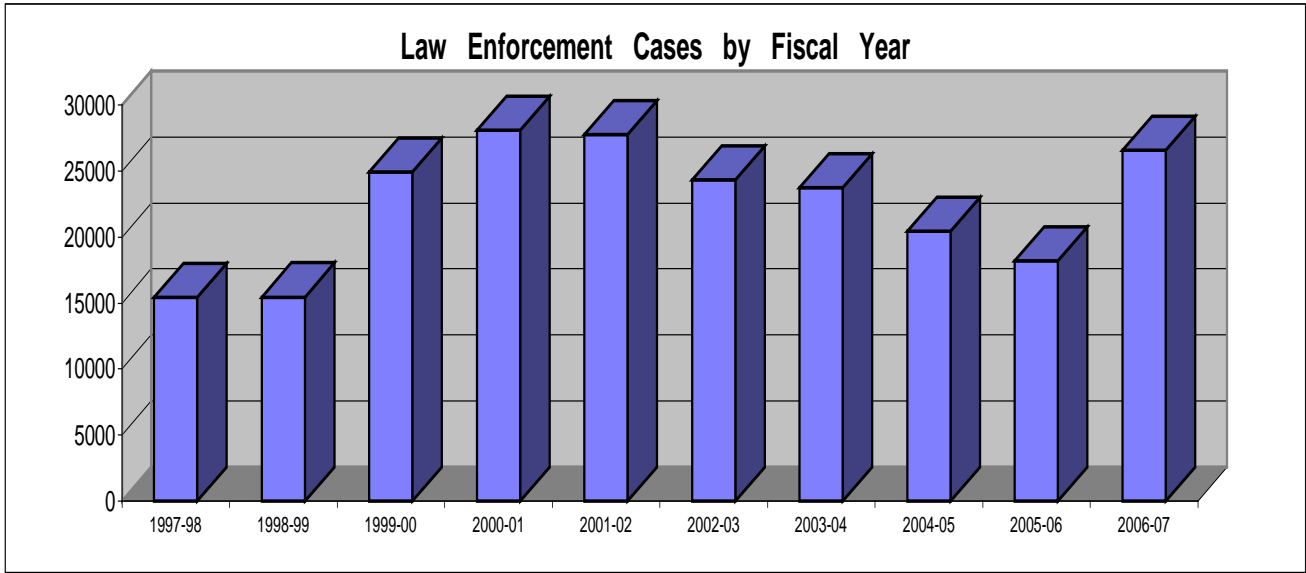
In order to assess mission performance and the effectiveness of efforts to protect the state’s natural resources and those who utilize them, the Division collects, assesses, and reports officer activity and criminal violation data. Officer activity data includes sixteen (16) individual mission related work

measures. Criminal violations data is collected from summons tickets and warning tickets. These data are collected and processed monthly, and reported back through the chain of command within the Division via email reports to supervisors, providing them with information relative to the performance of officers in the field. Senior staff within the Division can assess manpower and resource allocation and conduct appropriate planning based on these data. This fiscal year, the Division began a process of calculating and analyzing specific work measures across regions and units for comparison of work productivity over time. These measures are being used effectively to increase efficiency and effectiveness of law enforcement activities for every officer, unit, and region.

In fiscal year 2006-2007, DNR officers identified and resolved a total of 26,557 violations through the issuance of summons and warning tickets. Summonses accounted for 10,746 of these violations, or 40% of the total. Warnings accounted for the remaining 15,811 violations, or 60% of the total. (See Figure 7.15) These data represent the approach of DNR officers in the resolution of violations encountered in the field. Officers are as likely to educate the public regarding a violation through the use of warnings, as they are to bring formal charges. The increase in violations is attributable to the increase in the number of field officers hired by the division. More officers in the field resulted in a greater opportunity for the detection and resolution of violations.



(Figure 7.15)



(Figure 7.16)



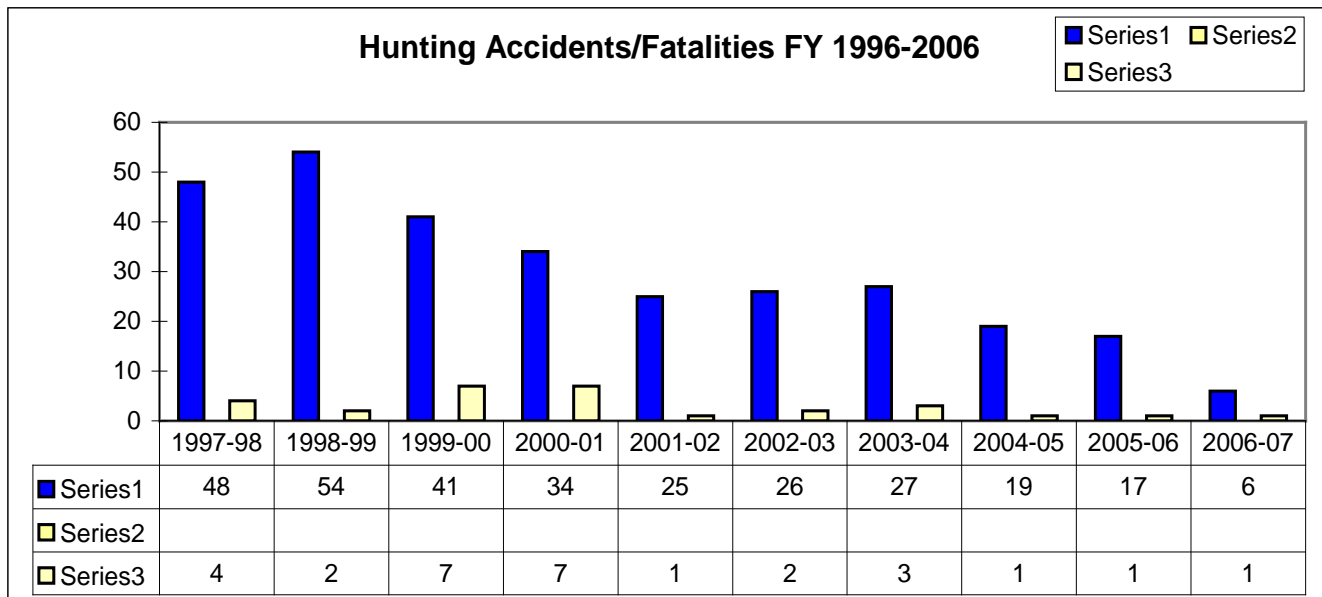
In fiscal year 2006-2007, DNR officers expended 7,154 man-hours assisting other law enforcement agencies, and made 2,047 arrests for public safety violations including trespass, litter, drugs and alcohol, and disorderly conduct. DNR officers spent another 3,698 man-hours conducting search and rescue missions. These numbers continue to reflect the broad spectrum of law enforcement duties carried out by DNR officers.

The Division entered the second consecutive year of a rebuilding effort in the wake of severe budget cuts from previous years. This fiscal year, the Division was able to hire 27 more officers to continue replacing officer positions lost during previous budget cuts. This year the Division was allocated funding for an additional 25 officers. The hiring process for those positions is underway and these officers will be hired in FY 07-08, further enhancing the Divisions ability to meet it’s missions. The hiring of 27 new officers, and plans for another 25 in FY 07-08 have resulted in a measurable increase in activity related to enforcement within the last fiscal year (See Figure 7.16). The 27 new officers hired and trained in the 06-07 fiscal year entered active field duty in June of 2007.

The primary mission of the DNR law enforcement officer is to protect the natural resources and those who utilize them. This mission takes on many forms, including crime detection, arrest and prosecution of offenders, formal education efforts and gaining compliance through informal educational efforts including warnings and instructions. Immeasurable crime deterrence is obtained by officer presence in the field. Ultimately, the role of the officer is to gain compliance with the laws, provide information to the sportsman, boaters, and public, educate resources users and ensure that the resources are conserved for the enjoyment and use of the public.

**Program: Hunter Safety**

7.1 - 7.5: The Law Enforcement Division collects and monitors data on several key functions that relate to job performance and constitute satisfaction. The areas that are monitored reflect areas of concern to DNR and to the hunting public. For FY 2006-2007 there were 6 hunting accidents that were reported to DNR, 5 were non-fatal, and 1 was fatal. (See Figure 7.17)



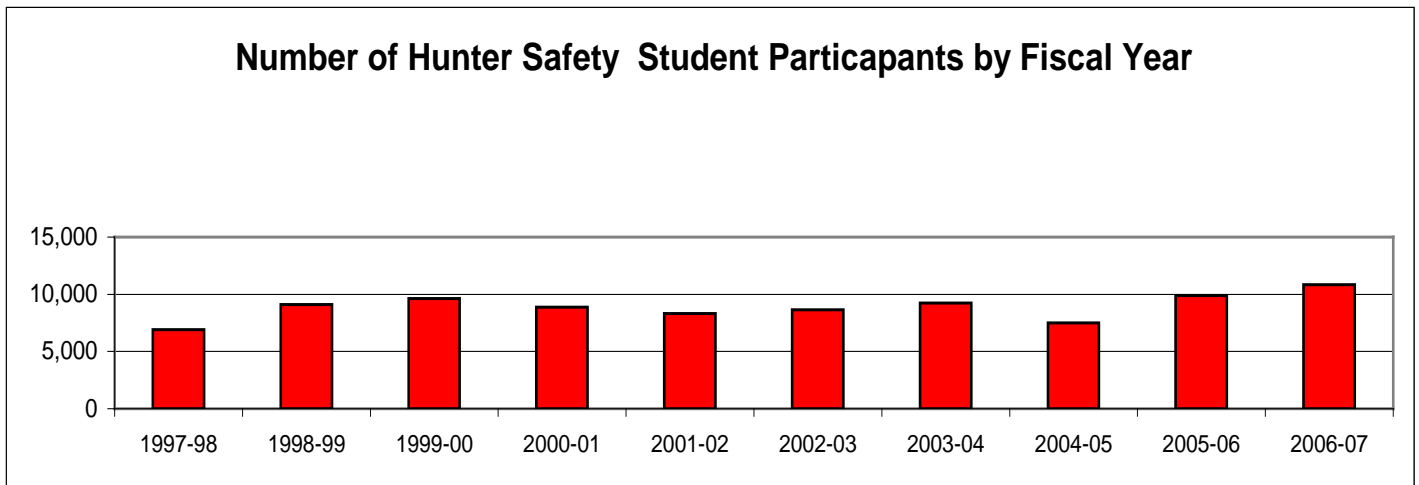
(Figure 7.17)

The Hunter Education Course is mandatory for all hunters born after June 30, 1979, prior to purchasing a license to hunt. However, there are many hunters who take the course in an effort to improve their

knowledge of hunting and other outdoor skills even though they are not required to attend. Many South Carolina hunters who travel out-of-state to hunt will take the course in this state in order to comply with the laws of the state in which they will be hunting. For FY 2006-2007, the total number of student participants in the Hunter Safety Program was 10,846.

The graph shows that the level of students participating in Hunter education has vacillated between 7,500 and 10,000 annually (See Figure 7.18). However, the message is being delivered in a more effective way as we see a steady decline in the number of hunting related accidents annually.

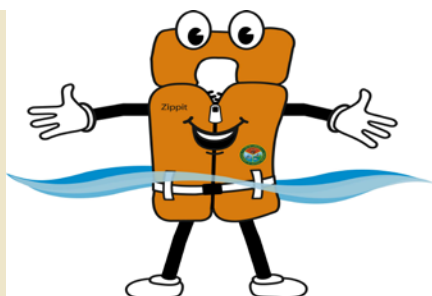
A new program was introduced this fiscal year called Archery in the Schools. It is another program in DNR’s outreach efforts to bring youth into hunting sports. This year the Division enrolled over 5,800 students in 59 schools in the program, which introduced them to the sport of Junior Olympic style archery.



(Figure 7.18)

**Program: Boater Safety**

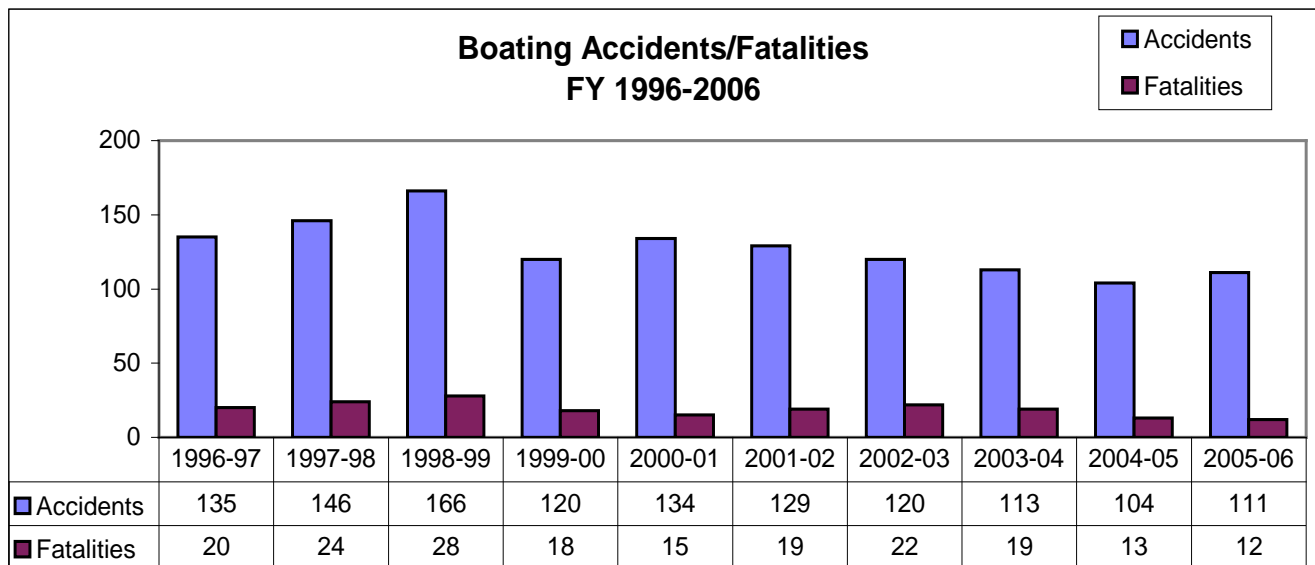
7.1 - 7.5 The Law Enforcement Division collects and monitors data on several key functions that relate to job performance and constituent satisfaction. The areas that are monitored reflect areas of concern to DNR and to the boating public. To increase public awareness of the importance of wearing a Personal Flotation Device (PFD) while boating, “Zippit”, the DNR Boating Safety mascot, was created. Zippit represents a wearable PFD that is required by law as boating safety equipment. Officers and other DNR employees can wear the Zippit costume at various events and it’s brilliant orange color is an eye-catching reminder to wear your PFD at all times while boating. Zippit is aimed at promoting safety among all boaters but is particularly appealing to children and youth. The campaign is aimed at establishing safe boating habits that will last for a lifetime of safe boating.



**Zippit**

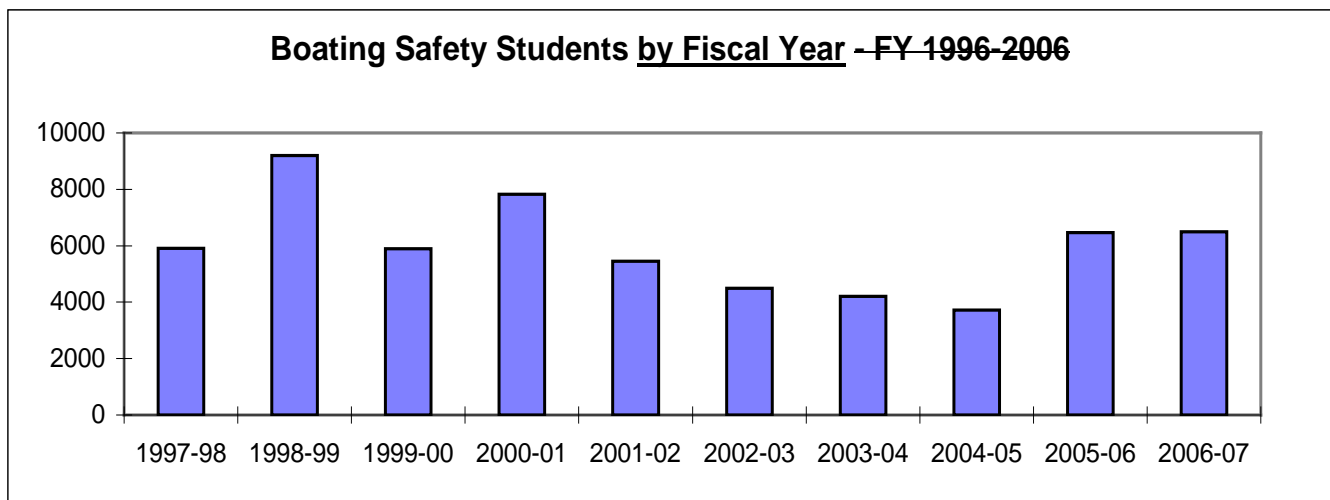
For fiscal year 2006-2007, the Division responded to 112 boating incidents and 12 boating incident fatalities. Watercraft registrations increased by over 50,000 during this period, while accidents and fatalities remained virtually the same. While the number of registered watercraft and users continues to increase, and the number of accidents and fatalities remains stable, the Division strives to continually increase the awareness of boating safety through education courses, courtesy boat safety inspections, public service announcements and officer contact. Each time an officer conducts a boating safety check on a water-bound vessel, it is an opportunity for the officer to impart the boating safety message. The fact that the number of users continues to increase dramatically and incident numbers remain constant is an indicator that the Division's message is being delivered effectively. One of the more effective programs put in place by the Division has been courtesy boat inspections. These are pre-launch inspections of safety equipment and registrations intended to ensure the vessel operator is legal and the watercraft is safe before going on the water. They are conducted by officers, and deputy officers, and provide another opportunity to deliver the safety message to the public. These are examples of the Division's commitment to a proactive approach to public safety and the enhancement of recreational boating activities in the State.

The Division continued a joint alcohol enforcement program this year between the State Highway Patrol and the DNR Law Enforcement Division. The State Highway Patrol recently purchased two mobile breath alcohol-testing vans (BAT-Mobiles), complete with holding cells, datamaster workstations, and office areas utilizing Federal funds for alcohol enforcement efforts. The DNR Boating Safety Action Force (B-SAF) Team used the BAT-Mobile during high traffic boating events on the waters of the State for BUI enforcement efforts. These events include regattas, water festivals, and holidays. The use of this tool has had a tremendous and noticeable impact on the rate and efficiency of BUI enforcement by this team. The agencies produced a joint public service announcement featuring both law enforcement entities efforts to reduce DUI and BUI violations on the highways and waterways of the state.



**(Figure 7.19)**

The DNR Boater Education Course is mandatory for boaters under the age of 16 who operate a watercraft powered by a 15 horsepower or larger motor without adult supervision. There are many other boaters who take the course in an effort to improve their knowledge of boating related issues even though they are not required to attend. For FY 2006-2007, the total number of student participants in the DNR Boating Safety Program was 6,493.



(Figure 7.20)

A good measure of constituent trends is reflected in the continued growth in the number of boats registered in the state. Growth of recreational boating in South Carolina has required DNR to work closely with the boating industry and boating groups and associations to address specific issues and concerns. This approach has allowed DNR to be successful in obtaining legislation and additional resources to deal with specific boating related issues and the general growth of boating activity. The partnering has also led to the development of public service announcements to address boating issues and educational tools. There were 468,238 actively registered boats in South Carolina in 206-2007. This represents an increase of over 52,000 watercrafts from the previous calendar year.

**Program: Education**

DNR employees are encouraged to actively participate in DNR’s education and outreach events. These programs and events are scheduled during the year at various locations around the state. These programs and events allow the employees of the agency to interact with the public that the agency is serving and increase their awareness of natural resources. Educational programs include Project Wild, Project Wet, Camp Wildwood, Envirothon, Aquatic Education, Coastal Adventure Cruise Program, Becoming an Outdoors Woman, Take One Make One, as well as various writing and art competitions conducted through schools and conservation districts. Outreach events include Beach and River Sweep, Hooked on Fishing Rodeos, Marine Resources Fair and Open House, and the Palmetto Sportsmen’s Classic.

Public awareness is further enhanced through the 50,000 subscribers to the *SC Wildlife* magazine, approximately 375 statewide and regional news releases, the *SC Wildlife* TV program, monthly one-hour radio show on SCETV radio and public service announcements aired by approximately 225 radio and TV stations in and around the state. The video production unit of DNR produces from four to eight public service announcements for television in a typical year, while the Communications Director produces approximately 20 for radio. The exact number varies according to the outreach and promotional needs of each DNR division. Recently produced PSA's include the Palmetto Sportsmen's Classic, MRD Marine Banquet and open house, Take One Make One, Marine Tagging Program, National Hunting and Fishing Day, Hunting and Boating Safety, Oyster Shell Recycling, Take Me Fishing, ATV Safety, SC Wildlife Shop and DNR Free Fishing Days.

PSA’s are mailed to 200 radio stations and 25 TV broadcast outlets in the state. Radio PSAs are also posted as audio files on the DNR Web site. They are also sent to radio and TV stations in adjoining states

whose broadcast signals serve South Carolina residents. This distribution further increases the likelihood of public service announcements being seen and heard statewide.

In 2006, the video section produced the *South Carolina Wildlife* television series for SCETV. The program airs several times per week on the South Carolina digital channel and monthly on the SCETV network *South Carolina Wildlife* features DNR programs and activities, field trips to state natural areas and information on conserving, protecting and enjoying our natural resources. *South Carolina Wildlife* television series continually grows in popularity. DNR Web page views have more than doubled over the previous year due to improved news and public information content being posted by the news, media relations and radio and TV productions section.

We strive to continue to further develop and improve our public outreach, information and education programs. In the coming year, the DNR communications office (news, media relations, public affairs and video) will explore opportunities to further enhance the public's perception and understanding of the agency's goals, mission and purpose. The communications office will continue to offer opportunities to involve media in the field, covering the activities of our staff including law enforcement, biologists, scientist and other resource managers.

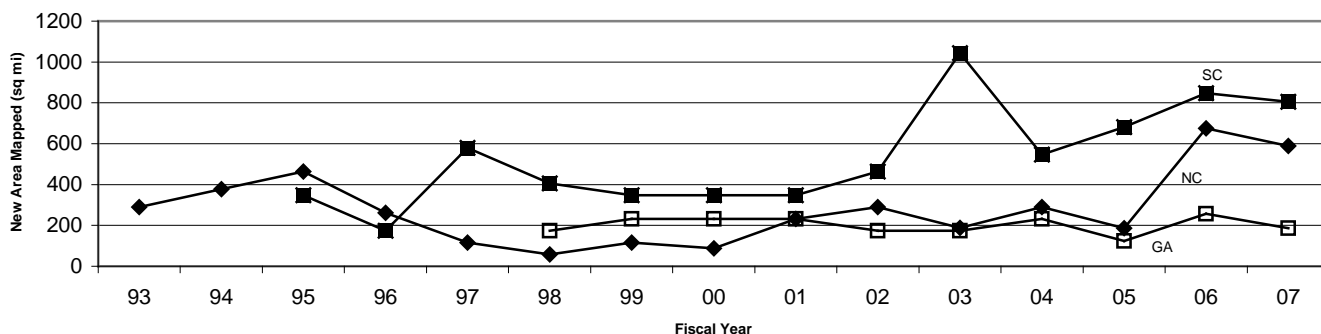
In the coming year, we hope to renew participation in the S.C. Broadcasters Association, Non-Commercial Sustaining Announcement (NCSA) program. NCSA participation offers government agencies and non-profit organizations an economical and effective means of airing frequent promotional announcements on radio and TV. Despite limited funding for promotional efforts, NCSA participants get affordable statewide distribution, reach and frequency of public service announcements.

### **Geological Survey Program**

The Geological Survey continues to be the sole source provider of geologic map information to the public within the state. Stakeholders and the STATEMAP Advisory Committee collaborate to define critical socio-economic needs for new geologic information. Land-use planning and protection of the environment were determining factors in the establishment of priorities. Development of geologic map information in those areas is proactive and could help mitigate the impact of geologic hazards, man's impact on the environmental or subsequent cost of clean up. During FY 2007, priority was given to the Mountain Bridge area, I-20 Growth Corridor between Columbia and Aiken, Lake Marion, and Congaree National Park, with approximately 845 square miles being mapped. Placing the information in a digital format increased perception of and added value to the final map product. Twenty-six (26) maps were digitized and cycle time for introduction of new map products was maintained at 21 months (planning to completion) and continues to be controlled by external funding, i.e. STATEMAP and the National Park Service.

Dissemination of geologic information in a digital format, a core competency, continued to be a long-term baseline measure in the operational plan. This baseline was defined by customer satisfaction, preference, acquisition and referral. At the beginning of FY 2007, digital products covered 15.2% (86 of the 566 quadrangles) of the state. The addition of the 26 new products increased digital map coverage to 19.8%. In comparison, North Carolina presently has 7% digital map coverage, while Georgia has only 2.8%.

STATEMAP Comparison of Area Mapped



(Figure 7.21)

### Aquatic Plant Management Program

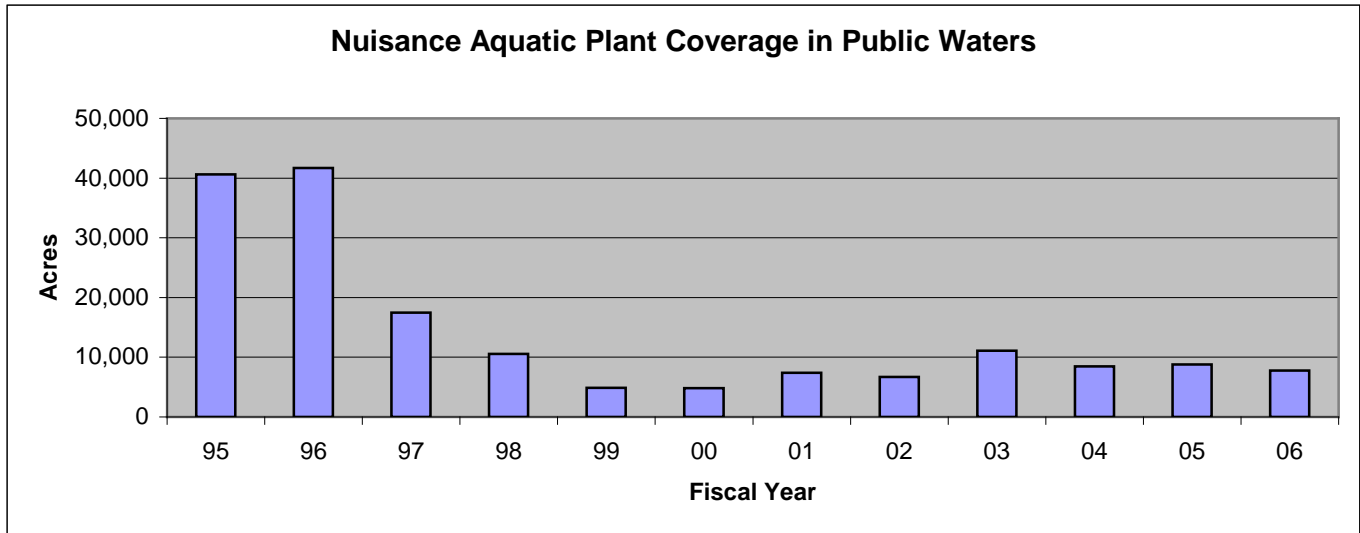
The purpose of the South Carolina Aquatic Plant Management Program (Section 49-6-10) is to prevent, identify, investigate, manage and monitor aquatic plant problems in public waters of the state. The program works closely with the Aquatic Plant Management Council (Section 49-6-30) and funding for the program is cost-shared between available federal, state and local (public and private) sources. Aquatic plant management operations were conducted on 25 water bodies at a cost of \$722,316, using only local and State Water Recreation Resource funds in 2007. Field operation expenditures increased by 10% primarily due to the SCDNR’s continued commitment to control *Phragmites* in the coastal areas of the state. The ultimate success of the program is measured by the presence of aquatic nuisance plants in the state’s public waters. During the past year, the total area infested with nuisance aquatic vegetation was 7,927 acres. This represents a 10% decrease in coverage from FY 2006. It also continues to represent an 81% decrease from peak coverage in 1996. (See Figure 7.33)

The Aquatic Plant Management Plan will allow DNR to address issues that involve invasive or problematic species. Originally, the 2006 Aquatic Plant Management Plan called for 4,316 acres of control work to be scheduled for 22 public water bodies and 6 State Parks. Six of those 22 public water bodies were not treated primarily due to the lack of problematic vegetation. Based on input from agency managers and regional and county planners, the focus in 2006 remained on *Phragmites* control in coastal South Carolina. The *Phragmites* work was coordinated with the Wildlife and Freshwater Fisheries Division, US Fish and Wildlife Service and several county entities to include several SCDNR wildlife management areas, including Donnelley/Bear Island WMA, ACE Basin Refuge, Santee Coastal Reserve, Yawkey Wildlife Center, Santee Delta WMA, and Samworth WMA, as well as several National Wildlife Refuges and other locally impacted sites. The purpose of this was to provide increased habitat opportunities for waterfowl and to reclaim other important areas. 1950 acres were treated at a cost of \$352,804, representing a slight decrease from 2005 but an increase of 538 acres (38%) over the original 2006 plan acreage of 1412 acres. Additional work was done in 4 different areas, 242 acres of *Phragmites* was treated on the US Naval Weapons Station in Charleston, 4 acres of *Phragmites* on Winyah Bay in Belle Isle. Additionally, milfoil was treated in Lake Darpo, Darlington County, and spatterdock on H. Cooper Black Recreation area, also in Darlington County. Maintenance stocking of Grass carp was accomplished on the Santee Cooper Lakes (2620 fish) and Goose Creek (185 fish), at no cost thanks to the assistance of the Santee Cooper staff.

In all, a total of \$722,316.00 was spent on 3,984 acres of control of invasive plants. Local sponsors provided 47% of the cost, while funds from the State’s Water Recreational Resource Fund (boat gas tax)

paid for 53% of all control costs. U.S. Corps of Engineers funding, which had been used in the past, was not available for 2005-06. Native, beneficial vegetation has continued to increase on the Santee Cooper Lakes (9% coverage), while grass carp continue to provide effective control of hydrilla on the Santee Cooper Lakes and have provided excellent control on Lake Murray.

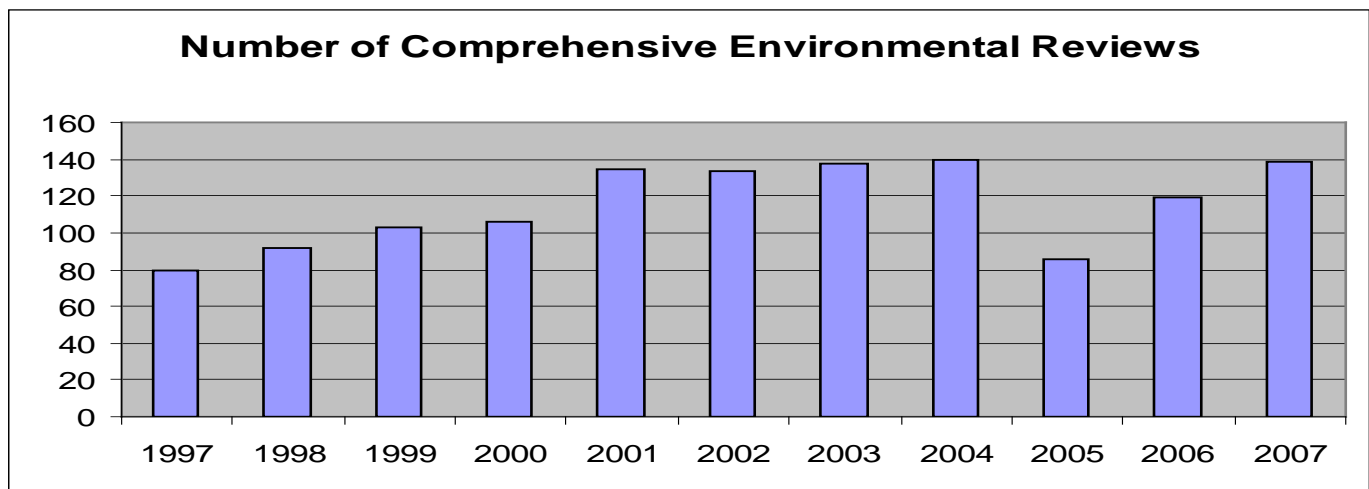
**Environmental Review Program**



(Figure 7.22)

The purpose of the Environmental Review Program is to coordinate the agency-wide review of environmental permits and other environmental actions affecting natural resources in the 38 inland counties of the state. Primary objectives of the program are to 1) keep abreast of local, state and Federal environmental regulatory requirements, 2) coordinate the inter-divisional review of all environmental review requests, 3) ensure that all agency comments and positions on environmental reviews are scientifically sound, timely and in conformance with DNR policies and procedures, and 4) ensure that all comments and positions are unified and that the agency speaks with one voice.

Customer satisfaction and mission accomplishment may be assessed by the timeliness of review completion and response, and by the comprehensiveness of reviews conducted. For the time period 1997 - 2007, more than 90% of all requested environmental reviews have been completed within the requested time period. The number of comprehensive reviews conducted (those for which a field site visit and/or a G.I.S. evaluation are performed) increased steadily for the five-year period 1997 – 2001. From 2002 - 2005, travel restrictions due to budget reductions and a decrease in the number of public notices received from the environmental regulatory agencies led to a leveling off and slight decline in the number of comprehensive reviews conducted. Since 2006, the number of comprehensive environmental reviews completed has increased steadily. During 2007 program staff also continued to represent the Department in a planning process for the proposed Interstate 73 corridor in the Pee Dee area of the state and initiated the review process for the proposed Pee Dee Electric Generating Station in Florence County.



(Figure 7.23)

### Laboratory Services Program

The purpose of the Laboratory Services Program is to provide analytical, chemical and biological services in support of the agency's resource management, assessment and monitoring programs and activities. The laboratory specializes in analyzing water, sediment and tissue samples, and provides analyses on over 45 chemical constituents for field staff from all divisions within the department, as well as occasional requests from outside the agency. Time-critical chemical analyses are provided for a number of programs.

During FY 2006, the laboratory conducted 4276 analyses on 1121 samples from all DNR resource management divisions. The laboratory completed method developments on Anion Analysis, Hardness determination, Chlorophyll a determination and Acid Neutralizing Capacity for use in analyzing stream assessment samples.

### Flood Mitigation Program

The purpose of the Flood Mitigation Program is to minimize the impact of floods and reduce flood related disaster costs in South Carolina. The program provides technical assistance to communities in administration of the National Flood Insurance Program and financial assistance for flood mitigation planning and projects with funding from the Federal Emergency Management Agency (FEMA).

During FY 2006, program staff trained over 200 community officials and professionals, provided technical assistance to over 3000 citizens and delivered information with over 2000 website visits. The program is undertaking its second year of the Flood Map Modernization Initiative that will provide more accurate GIS based Flood Insurance Rate Maps. FEMA awarded SCDNR approximately \$19.6????? to support the effort thus far. Program staff assumed a new cooperative agreement program with FEMA to support the Map Modernization effort. The new program is called Map Modernization Management Support and funding has been received for two additional positions. One measure of the effectiveness of the program is community participation in the National Flood Insurance Program (NFIP). There are 205 communities now participating in the NFIP, with South Carolina ranking sixth in the nation for flood insurance policies in effect. The number of policies in 2006 exceeds 180,000 and has steadily increased over the past 20 year, with an 18 percent growth this past year.



## **Hydrology Program**

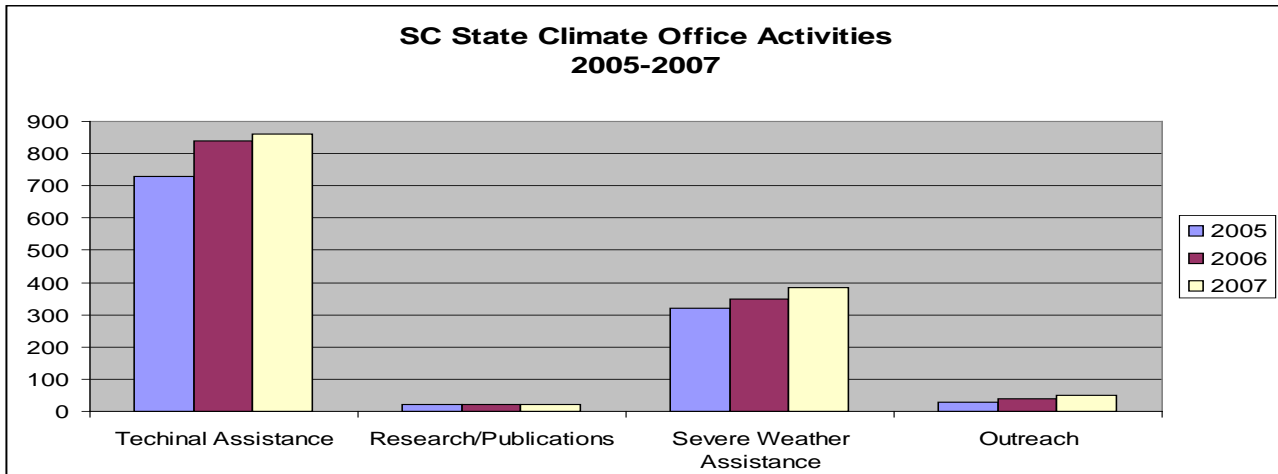
Staff is working with South Carolina Electric & Gas on the Federal Energy Regulatory Commission's relicensing application for the operation of the Saluda Dam hydropower facility at Lake Murray. Specifically, staff are reviewing and assisting with an IFIM study that is currently being done by Kleinschmidt Associates of the lower Saluda River and are developing the operational hydraulic/hydrologic model for water allocation. Additional projects undertaken include: A completed study that examined the feasibility of restoring the natural flow regime of Scott Creek and the surrounding salt marsh ecosystem by replacing a section of the Edisto Island causeway with a bridge; another study was completed that examined the flow patterns and bathymetry of the diversion canal below St. Stephen Dam to determine if changes can be made to improve the effectiveness of the fish lift at the dam; and a ground water flow model of Coastal Plain aquifer systems is being developed with the USGS to determine ground water availability. A flow model of the Floridan aquifer system is being evaluated to determine how saltwater intrusion can be slowed at Hilton Head Island.

Two phases of a collaborative study between the Hydrology and the Habitat Protection sections of DNR have been completed. The study is investigating the hydrogeologic characteristics of a Carolina Bay at Ditch Pond Heritage Preserve in Aiken County to determine if the bay can be restored to natural conditions. Bay and ground water levels and rainfall will continue to be monitored for another year.

During the past year, ground water levels were monitored at 107 wells; surface water flows at 92 gauging stations; saltwater intrusion at 2 wells at Edisto Island; pond levels at one Carolina Bay; 3 rain gages and 2 weather stations were monitored; 1,420 records were added to the ground water database; 56 Piedmont wells were sited; and 60 springs were added to the spring database. Eight technical reports were published, and one scientific paper was presented at a hydrologic conference. Twenty presentations were made to water professionals and to the general public regarding the state's water resources. Staff responded to nearly 820 technical-assistance requests during the year.

## **State Climate Office**

During FY 2006, the State Climate Office (SCO) fulfilled the office mission through outreach, research and publication dissemination and by providing technical and severe weather assistance to state agencies and the citizens of SC (Sections 49-25-10 et seq., Code of Laws of South Carolina, 1976, as amended). The primary research and application development focused on developing an online regional drought application (<http://drought.dnr.sc.gov>), analyzing the temporal and spatial distribution of tropical precipitation and producing the 2008 Weather Calendar. The office assisted state and federal agencies in data acquisition and interpretation before, during and after periods of severe weather and provided hazard mitigation through conference calls with SC Emergency Operations team and email weather advisories. Outreach included meeting participation and presentations to school and organizations.



(Figure 7.24)

### Habitat Protection Section

The Habitat Protection Section includes the Heritage Trust Program and the River Conservation Program. The section's mission is to protect land through acquisition of significant natural and cultural properties and work with communities through community-based planning efforts to protect and manage river corridors. Another objective of the section is to ensure that lands acquired by DNR are compatible with the agency's mission and can be easily incorporated into the existing management program.

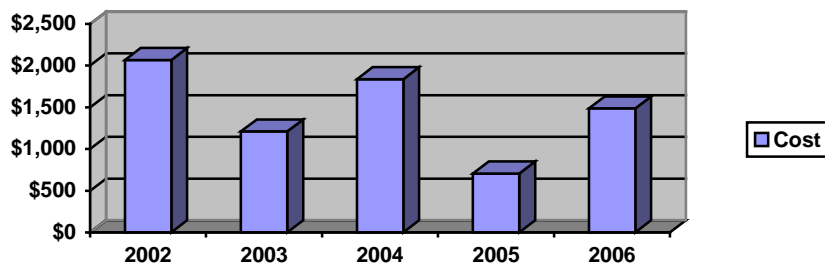
The section also provides, through the agency Habitat Committee, enhanced coordination of several DNR programs including the Heritage Trust Program, the National Estuarine Research Reserve Program, Focus Area Initiative, Scenic Rivers Program and the Forest Legacy Program. This section also coordinates with the Environmental Review staff to provide guidance with FERC relicensing issues and selection of appropriate mitigation sites when the intent is for DNR to hold title of such property.

Over 3600 person hours were volunteered to river management through advisory councils and other meetings and conservation activities in FY 2006-2007; an eligibility study was initiated for a 50-mile segment of the lower Lynches River; over 4900 volunteers in 111 sites participated in Beach Sweep/River Sweep in FY 06/07 and picked up over 33 tons of trash.

During FY 2006-2007, the Heritage Trust Program participated in the purchase of five properties comprising 39,913 acres. Currently, there are 80 Heritage Preserves, which protect more than 80,000 acres statewide. Overall, the Habitat Protection Section acquired six different properties comprising 40,347 acres. The properties, located in six different counties, were acquired using a variety of local, state and federal funds. Partnering with other conservation entities proved essential in safeguarding these areas.

Properties acquired during the fiscal year included a large land parcel in Marion County known as the Woodbury tract; an addition to the Webb Wildlife Center in Hampton County referred to as Hamilton Ridge; an in-holding at Lewis Ocean Bay Heritage Preserve in Horry County, an addition to Forty Acre Rock Heritage Preserve in Lancaster County, a Revolutionary War battle site known as Fish Dam Ford in Chester County and additional habitat adjoining the McBee Wildlife Management Area in Chesterfield County.

Annual Cost Per Acre for Heritage Trust Acquisitions  
2002-2006



(Figure 7.25)

### Conservation Districts Section

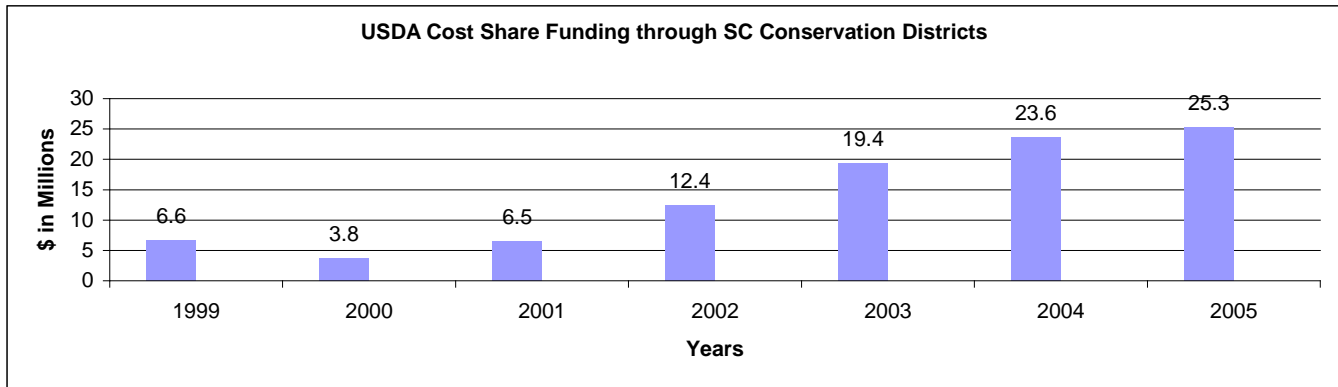
Department staff provided technical assistance to the public in conjunction with the 46 conservation districts and the U.S. Department of Agriculture-Natural Resource Conservation Service (NRCS). Technical duties of staff include planning and application of soil and water conservation practices, promoting wildlife habitat, monitoring soil erosion, assessing sediment and storm water problems and conducting technical clinics and workshops.

Staff provided direct technical assistance in planning and implementation of Farm Bill program applications through a cooperative working agreement with USDA-Natural Resources Conservation Service (NRCS). Section staff conducted field status reviews of Environmental Quality Incentives Program (EQIP) contracts in 6 counties. Technical assistance totaling 1250 staff-days were provided for land protection and management, conservation planning, water quality and watershed protection.

Through Farm Bill conservation programs, \$16.5 million in federal cost share assistance was provided for installation of Best Management Practices. An additional 322,858 acres were placed in a conservation plan, bringing the grand total to 8.4 million total acres in South Carolina covered by a conservation plan.

Staff continued implementation of contract agreements to provide technical and administrative assistance in five watersheds, covering 289,920 acres in nine counties. These watersheds are targeted by SC DHEC to receive special funding under the Federal Clean Water Act. Staff completed contract work in the Fork Creek, Thompson Creek and Upper Little Pee Dee watersheds in 2007.

Staff assisted the 35 Watershed Conservation Districts with administrative, legal and technical support. Issues addressed include easement challenges and interpretations, property rights issues, navigability and maintenance questions, budgeting, inspections and Watershed District Law interpretation.



(Figure 7.26)

### Technology Development Program

The Division established the Technology Development Program in 2002 to provide a holistic, integrated approach to systems, database and information management. The mission of the program is to maintain operational efficiencies in computer resources while planning and implementing short and long-term technology needs. This Program provides operational support, data processing standards, information management and analysis and application design services to the agency through successful implementation of five primary objectives: 1) develop and maintain a technological infrastructure; 2) develop, maintain and integrate statewide digital spatial and tabular data; 3) provide complex spatial and statistical analyses, applications programming and cartographic and multimedia development; 4) develop short and long- range system design and implementation plans and establish standards and procedures for information management; and 5) disseminate information and data to the general public through the development and maintenance of DNR’s website.

The primary focus the past year was to continue the improvement of the computing environment throughout the agency. Several critical components were completed, initiated or enhanced. Upgrades to the communications infrastructure between the Columbia office and the Regional offices and field stations were installed to provide standardized high-speed file transfer and data access to all agency staff. All frame relay circuits were replaced by MPLS or broadband DSL networks, which provide a 1.5 megabit connection to the regional offices and primary field offices. Technology Development staff continued the migration of the DNR boat registration and hunting/fishing licensing programs to a web-based Oracle solution. When completed, this will allow citizens to purchase licenses on-line, as well as renew existing boat registrations. Staff continued to work with the Comptroller General, Treasurer and Chief Information Office to identify programmatic needs for conversion of mainframe financial systems to the SC Enterprise Resource Planning System. Staff also initiated installation and configuration of an electronic document management system to replace handling of paper and microfilm documents. This system, when completed, will provide an efficient method to index, store and retrieve photos, reports, maps and other documents, as well as replace the microfilm system as the agency boat title and record archives. In addition, the Law Enforcement Hunter-Boater education system was transferred from an MS Access based system to a web-based system with Oracle as the database. Finally, staff initiated the upgrade of all Microsoft Office software from the older 2000 version to the most recent release of the software (2007).

DNR has maintained several key natural resource GIS data layers, such as soils, wetlands, stream networks and elevations, since the mid-1990s. During the past year, staff initiated the integration of numerous internal agency geographic data, including various species locations, fisheries, DNR land

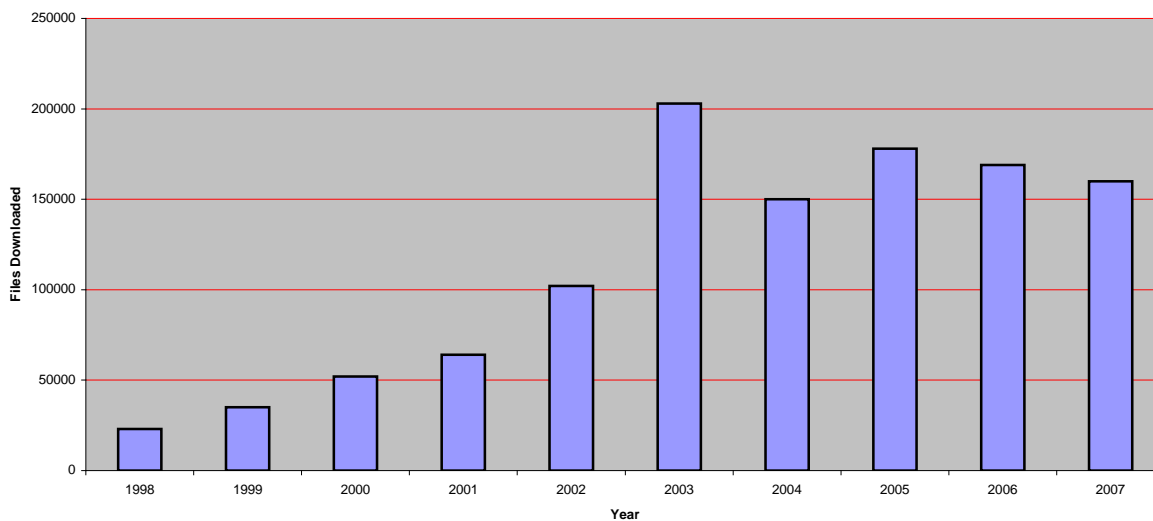
inventory, boat ramps, WMA boundaries and high resolution aerial imagery, into the agency GIS. These are data that are collected internally and are used to manage the state's natural resources. DNR lands, Wildlife Management Areas and boat ramps were completed. A project to integrate freshwater fisheries data into a comprehensive information management framework was initiated using grant funding from the U.S. Fish and Wildlife Service. A data dictionary of freshwater fisheries databases and an integrated data schema for migration of the data to Oracle was completed. Work was initiated on developing a list of input and access tools and analysis functions for programming by Technology staff.

Non-sensitive spatial data maintained at the DNR are provided at no cost to other state and federal agencies, local governments and the public through the SC DNR GIS Data Clearinghouse. This system provides substantial data base development; processing and file transfer cost savings. The clearinghouse, which has operated since 1997, has had a substantial annual increase in GIS data downloaded via the web until 2003-2004. Last year more than 160,000 GIS files were downloaded which is down from the peak year of 2003. (See Figure 7.31) This is primarily attributed to the lack of funding to support updates of many of the GIS data layers. Last year, however, a Digital Orthophoto Quarter Quadrangle (DOQQ) development project was funded by contributions from twelve state and federal agencies is in progress with data updates scheduled for fall and winter 2006-2007. These data began to arrive in December 2006 and have been included on the data clearinghouse. The project will be complete by September 2007.

Recently, the DNR installed an Internet mapping software through the agency website to provide for enhanced web-based visualization and query of various natural resources data layers without requiring special software on the web site visitor's computer. The IMS server installation was delayed substantially by electrical and HVAC problems in the DNR computer room in the Dennis Building. Hopefully, during FY2008, these issues will be resolved and the data viewer will go-live over the web.

During 2006-2007, the DNR web site was redesigned with a customer friendly "look and feel" and improved navigability. In accordance with federal regulations regarding access for citizens with disabilities, the DNR initiated a program to make the web site 508c compliant. Almost 75% of the web site now meets federal disability access requirements and standards. During the next year, accessibility for the remainder of the Internet will be addressed and a project to redesign the Intranet will be initiated.

**GIS Data Clearinghouse Statistics**



**(Figure 7.27)**