Accountability Report Transmittal Form

Agency Name:_   _   SC Department of Natural Resources_____

Date of Submission: September 15, 2004_____   _____

Agency Director:_   John E. Frampton_____

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EXECUTIVE SUMMARY
2003/2004 ANNUAL ACCOUNTABILITY REPORT
SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES

The quality and abundance of South Carolina's natural resources create a wealth that is unsurpassed by other states and regions of the country. These resources bring an enviable quality of life to our citizens and attract and sustain business activity, which translates into economic wealth for all South Carolinians. A recent survey conducted by the U.S. Fish and Wildlife Service (USFWS) revealed state residents and non-residents spent $1.3 billion on wildlife-associated recreation in South Carolina. With a total agency budget of approximately $60.3 million, $1.3 billion in expenditures represents a return on investment of over $21 for every dollar expended by the S.C. Department of Natural Resources (DNR). These figures signify the substantial business and financial results that provide a benchmark for identifying benefits from DNR programs.

During FY 2003-2004, DNR operated its programs based upon the DNR Board's Strategic Plan entitled *The Natural Resources Agenda: A Strategy for Managing South Carolina's Natural Wealth.* As a result, DNR implemented the 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: consolidated the licensing and boating sections to create a "one stop shop" customer service area; merged Administrative Services Division IT with Land, Water and Conservation Division IT to form a total Department Information Technology group; completed 18 public boating access facilities statewide; initiated a pilot program that created a multipurpose license renewal form; developed a new model drought response plan/ordinance; acquired and/or protected 81,151 cumulative acres under the Heritage Trust Program; managed 99,515 acres of Department owned Wildlife Management Area (WMA) lands; managed 1,019,768 acres of (WMA) lands for public use and enjoyment; protected more than 645 natural and cultural elements under the Heritage Trust Program; instructed 18,450 children in conservation education programs; informed the public on various issues via 3,783,333 visits to DNR's website; made 53 public dove fields were made available for public hunting; and the S.C. Lands Legacy Initiative, with DNR as a partner, successfully convinced the General Assembly to fully fund the S.C. Conservation Bank at $10,000,000 level.

The DNR Board's Strategic Plan, the agency's mission is stated as follows: "The South Carolina Department of Natural Resources (SCDNR) is the advocate for and steward of the state's natural resources." DNR accomplishes its mission based upon an agenda that encompasses these values:

1. Places the resource first through permanent protection and management of habitat and cultural (archaeological) resources of special significance;
2. Protects human life, property, natural resources and the safety of the persons using those resources;
3. Manages natural resources under its jurisdiction sustainably, insuring their long-term integrity and diversity;
4. Uses the best available, sound, scientific and technical information in making natural resources decisions;
5. Conducts applied research to improve scientific knowledge upon which natural resource management decisions are based;
6. Protects, manages and enhances current and future public's use and enjoyment of South Carolina's fish, wildlife, aquatic, soil, water, geological, and cultural resources;

7. Educates and effectively communicates with the public about South Carolina's natural resources and environment, and provides accountability by routinely involving the public in DNR's decision-making process;
8. Speaks for the state's natural resources by commenting on proposed alteration to the environment; and
9. Maintains an agency culture that continuously seeks to improve operations and effectiveness in a professional manner for its employees and customers.

Various opportunities and barriers may affect DNR's success in fulfilling its mission and achieving its strategic goals. The agency will continue to implement the DNR Board's vision of placing 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 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 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. The major barrier to fulfilling the agency's mission is the $12.8 million (41 percent) in total budget reductions that have impacted DNR since July 2001. These reductions affect all of the agency's programs and the 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 habitat and cultural resources of South Carolina.

On June 20, 2003, the DNR Board approved a plan to consolidate DNR field offices statewide into four Regional Hub Offices. This action, along with many other cost-cutting actions, was made necessary by drastic reductions that have taken place in our agency's budget over the last four years. More than 41%, or $12.8 million, has been cut from our state appropriated funds. In addition, the General Assembly has also cut $4 million from agency revenue account over the same period. If this trend isn't reversed, elimination of additional programs and services could be necessary. Due to these budget reductions, DNR drastically reduced services and has 299 (26%) vacant and/or lost employee positions, including 82 law enforcement officer positions, that can't be filled. For the first time in decades, due to lack of funds to support their positions, DNR has not hired new law enforcement officers to replace those lost through attrition during the last four years. Such losses in the enforcement area have led to a reduced enforcement presence across our state. It was this effort to further reduce expenditures that resulted in a comprehensive review of agency field offices statewide. The plan called for 18 DNR field offices or facilities to be closed and consolidated into four major regional office hubs: Central Region with an office in Columbia; Coastal Region with an office in Charleston at Fort Johnson on James Island; Upstate Region with an office in Clemson; and Catawba-Pee Dee Region, which includes Horry County, with an office in Florence. The consolidation plan is expected to save a considerable amount of financial resources in facilities management costs, utility bills and employee salaries. By the end of FY 03-04, 16 offices had been closed and the remaining two are scheduled to be closed in January, 2005. A variety of agency functions and public services were offered or conducted at the affected locations across the state. Some were local field offices for DNR law enforcement officers, while others housed DNR wildlife and fisheries biologists. Many locations offered public services such as hunting and fishing license sales and boating titling, registration and renewals. After the consolidation plan goes into effect completely, these locations will no longer offer these services. DNR is determined to perform its core mission to protect and manage our state's natural resources, but doing that will require sacrifice and innovative planning. The office consolidation plan adopted by the Board is but one of many such initiatives.

DNR had 908 full-time equivalent positions at the end of FY 2003-2004. The agency's operations are located statewide. Major operational locations are: Rembert Dennis Building, 2221 Devine Street, and 5 Geology Road (in the Columbia area); Dennis Wildlife Center at Bonneau; Marine Resources Center at James Island; and Waddell Mariculture Center at Bluffton. The Land, Water and Conservation district offices are located in each of the 46 counties, primarily in each county seat. DNR field operations are consolidated into four regional hub offices in Clemson, Columbia, Charleston, and Florence. Freshwater Fisheries work centers are located in Greenwood, Rock Hill, Barnwell, Eastover, Pine Ridge, Bennettsville, and Bonneau, with hatcheries are located in West Columbia (Cohen Campbell Hatchery), Cheraw (Cheraw Hatchery), Heath Springs (Springs Stevens Hatchery), Bonneau (Dennis Center) and Mountain Rest (Wahalla Hatchery). Wildlife Management Area Offices are located are located at the Yawkey Wildlife Center, Samworth and Santee Delta at Georgetown, Santee Coastal Reserve in McClellanville, ACE Basin / Donnelley and Bear Island in Green Pond, and the Webb Wildlife Center in Garnett.

The SCDNR's customers include residents of South Carolina, as well as non-residents. Based upon the most recent survey commissioned by the U.S. Fish and Wildlife Service, conducted by the Bureau of the Census, 1.7 million people, age 16 and over, participated in wildlife-associated recreation in South Carolina. Of this total, 812,000 engaged in fishing, 265,000 hunted, and 1.2 million participated in wildlife-watching activities to include observing, feeding or photographing wildlife. Fishermen and hunters participated in 10.7 million days of fishing and 4.7 million days of hunting. The 1.7 million people who participated in fishing, hunting, wildlife-watching activities and other wildlife related recreation in South Carolina in 2002 spent over $1.3 billion. Other key customers include: over 1,905 landowners that participated in the Antlerless Deer Quota Program; 42,031 individuals that participated in the Individual Antlerless Deer Tag Program; nearly 1000 landowner that were consulted; over 18,000 children participating in conservation education programs; 57,000 subscribers to the *S.C. Wildlife* magazine; 46 Land, Water and Conservation Districts; over 5,000 individual that requested watershed and river corridor planning technical assistance; utilities and reservoir owners affected by nuisance aquatic plant species in public waters; public and private requestors of climate data, geological maps and information; other state, federal and local government agencies; universities and colleges; commercial/recreational fishermen; and planning agencies. Other key services include: boat registrations (over 372,074 active); 850,000 records submitted annually to county treasurers for tax purposes; fulfilling 4,023 requests for cartographic products; and responding to approximately 275 requests for hydrological data and technical assistance.

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: Department of Health and Environmental Control; Parks, Recreation and Tourism; 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. Partnerships with private organizations include The Conservation Fund, The Nemours Environmental Foundation, The Nature Conservancy, Duke Energy, Crescent Timber, Champion Timber, various land trusts, National Wild Turkey Federation,

Ducks Unlimited, Quail Unlimited, Trout Unlimited, Palmetto Conservation Foundation, S.C. Sportsmen's Coalition, and the Harry Hampton Wildlife Fund. Other suppliers of input to DNR are as follows: owners of over 2,030 acres of private land in 53 public dove fields; timber companies; U.S. Forest Service, 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.

DNR has a multitude of products and services generated by its programs. In general, primary outputs relate to management and protection of the state's natural resources along with an extensive data and information base that is developed, maintained and used in that regard. Major products and services are as follows: sale of hunting and fishing licenses, and permits; titling and registration of boats and motors; collection of casual sales tax for boats and motors; inventory of boats and motors to county tax offices for property taxes; collection and distribution of hunting, fishing and boating fines; design, construction and repairs to public boat landings; educational programs for educators, schools, youth organizations and other audiences on the conservation and wise use of natural resources; production, promotion and distribution of six issues of *SC Wildlife* magazine per year to paid subscribers; sale of natural resources related products and goods at the Wildlife Shop; outdoor workshops for youth, women and mobility impaired natural resources users; production and distribution of maps, brochures, rules and regulations, laws and information related to use and management of the state's natural resources; news media coverage, media relations, information and image distribution and public service announcements for the media relating to the state's natural resources; research, survey and management projects conducted to identify and protect threatened/endangered plant and animal species; acquisition of highly significant properties to preserve and protect the most significant natural and cultural resources; WMA lands provided for public hunting and quality outdoor experiences; technical assistance provided to landowners on wildlife management, pond management and freshwater fishery resources; survey and monitoring projects conducted to secure data for wildlife management and freshwater aquatic resources; agricultural and habitat management practices implemented to maintain and enhance the quality of wildlife; production and stocking of freshwater fish species in public waters, farm ponds and state-managed lakes; enforcement and investigative activities of the agency's law enforcement officers for wildlife, recreational and commercial fisheries, boating and specific environmental laws; support and assistance to other law enforcement agencies with search and rescue missions, manhunts and other special assignments; hunter (mandatory) and boater education classes conducted to enhance knowledge/skills in these activities to reduce accidents and fatalities; cartographic products and assistance to people through the Map and Natural Resources Information Center; administrative/technical assistance and educational programs for the State's 46 conservation districts; data collection, well logging and hydrological research to monitor local and regional changes in the state's hydrology; conservation and management of riverine resources through the State Scenic River Program; water bodies treated and technical information provided to prevent aquatic nuisance species in public waters; development and processing of requests for climate information and data; marine resources research, assessment and monitoring activities to evaluate the condition of the state's estuarine and marine resources; staff support and facilities for marine science education programs at the state's colleges and universities; marine resources educational tools and technology transfer to individuals and organizations involved in promoting utilization of commercial and recreational marine resources; and marine resources management through the regulation of fishing

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seasons, areas and methods, issuance of experimental, scientific and commercial fishing permits, management of public shellfish grounds and maintaining statistical records on marine fisheries.

**Base Budget Expenditures and Appropriations**

Major Budget Categories	02-03 Actual Expenditures		03-04 Actual Expenditures		04-05 Appropriations Act	
	Total Funds	General Funds	Total Funds	General Funds	Total Funds	General Funds
Personal Service	$33,091,824	$16,082,686	$30,887,344	$13,306,731	$29,374,300	$17,900,379
Other Operating	22,490,643	2,391,089	22,040,894	1,981,825	22,326,064	2,323,093
Special Items	19,311	0	19,311	0	419,311	0
Permanent Improvements	9,012,460	0	32,464,014	0	0	0
Case Services	0	0	0	0	0	0
Distributions to Subdivisions	1,379,467	409,650	2,091,388	414,000	1,630,761	414,000
Fringe Benefits	10,005,456	4,888,968	10,007,859	4,437,611	9,508,513	4,553,962
Non-recurring	0	0	0	0	450,000	0
Total	**$75,999,161**	**$23,767,393**	**$97,510,810**	**$20,140,167**	**$63,708,949**	**$18,290,560**

Other Expenditures

Sources of Funds	02-03 Actual Expenditures	03-04 Actual Expenditures
Supplemental Bills	$0	$0
Capital Reserve Funds	$0	$0
Bonds	$0	$0

Total 02-03 Interim Budget Reductions	Total 03-04 Interim Budget Reductions
2,250,243	**203,456**

S.C. Department of Natural Resources Organizational Chart

DNR BOARD
Michael G. McShane *
Chairman

DIRECTOR
John E. Frampton

INTERNAL AUDIT
Williams

ASSOCIATE DIRECTOR
Chamblee

LEGISLATIVE
Meggie

SPECIAL PROJECTS
Dobbins

ENVIRONMENTAL
Duncan

EXECUTIVE SECRETARY
Scheibler

CHIEF COUNSEL
Mabry

HUMAN RESOURCES
Cowell

ASSISTANT DIRECTOR DEVELOPMENT AND NATIONAL AFFAIRS
Vacant

CONSERVATION EDUCATION AND COMMUNICATIONS
Collins

ADMINISTRATIVE SERVICES
Collins

LAW ENFORCEMENT
Taylor

MARINE RESOURCES
Boyles

WILDLIFE AND FRESHWATER FISHERIES
Carmichael

LAND, WATER AND CONSERVATION
Vang

*On July 29, 2003, Governor Sanford named Michael G. McShane as Chairman replacing Dr. Joab M. Lesesne, Jr.

Major Program Areas

Program Number and Title	Major Program Area Purpose (Brief)	FY 02-03 Budget Expenditures	FY 03-04 Budget Expenditures	Key Cross Reference for Financial Results
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: 2,592,220 Federal: 0 Other: 2,066,190 Total: 4,658,410 % of Total Budget: 6.8%	State: 1,311,524 Federal: 0 Other: 1,867,301 Total: 3,178,825 % of Total Budget: 5.2%	7.11, 7.22
II. A Outreach	Provides public information, outreach and educational services through a wide range of public and agency programs and activities.	State: 1,298,995 Federal: 88,107 Other: 1,061,960 Total: 2,449,062 % of Total Budget: 3.6%	State: 1,118,891 Federal: 88,107 Other: 1,021,292 Total: 2,228,190 % of Total Budget: 3.6%	7.31, 7.32
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: 1,405,076 Total: 1,405,076 % of Total Budget: 2.0%	State: 0 Federal: 0 Other: 1,405,076 Total: 1,405,076 % of Total Budget: 2.3%	7.10, 7.28
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: 39,563 Federal: 1,949,778 Other: 5,622,566 Total: 7,611,907 % of Total Budget: 11.2%	State: 0 Federal: 1,949,778 Other: 5,058,053 Total: 7,007,831 % of Total Budget: 11.6%	7.7, 7.9
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: 236,451 Federal: 1,978,367 Other: 1,843,217 Total: 4,058,035 % of Total Budget: 5.9%	State: 94,615 Federal: 2,028,367 Other: 1,955,339 Total: 4,078,321 % of Total Budget: 6.7%	7.4, 7.5, 7.6, 7.7

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

N/A

Remainder of Expenditures:	State: Federal: Other: Total: % of Total Budget:	State: Federal: Other: Total: % of Total Budget:

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Major Program Areas

Program Number and Title	Major Program Area Purpose (Brief)	FY 02-03 Budget Expenditures	FY 03-04 Budget Expenditures	Key Cross Reference for Financial Results
II. E Law Enforcement	The Division of Law Enforcement is responsible for enforcement of state and federal laws that govern hunting; recreational and commercial fishing, recreational boating, and other natural resources conservation concerns to insure protection of life, property, and natural resources. Also assists other state law enforcement agencies with homeland security, litter violations, executive protection and natural disasters and general law enforcement support functions for public safety matters.	State: 6,739,020 Federal: 834,888 Other: 7,988,646 Total: 15,562,554 % of Total Budget: 22.9%	State: 4,880,707 Federal: 834,888 Other: 6,811,647 Total: 12,527,242 % of Total Budget: 20.7%	7.17, 7.18, 7.19, 7.20, 7.21, 7.23, 7.26, 7.27, 7.29, 7.30
II.F Boating Safety	Enforces boating safety as mandated by state and federal law, promotes safe boating and investigates boating accidents.	State: 0 Federal: 1,158,368 Other: 1,537,611 Total: 2,695,979 % of Total Budget: 3.9%	State: 0 Federal: 1,158,368 Other: 1,537,611 Total: 2,695,979 % of Total Budget: 4.4%	7.24, 7.25, 7.26, 7.27
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: 4,229,680 Federal: 4,209,519 Other: 1,616,170 Total: 10,055,369 % of Total Budget: 14.6%	State: 3,477,717 Federal: 4,209,519 Other: 1,616,170 Total: 9,303,406 % of Total Budget: 15.4%	7.12, 7.13, 7.14, 7.15, 7.16
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: 518,611 Federal: 550,453 Other: 610,510 Total: 1,679,574 % of Total Budget: 2.4%	State: 0 Federal: 550,453 Other: 610,510 Total: 1,160,963 % of Total Budget: 1.9%	7.8, 7.9
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: 4,982,932 Federal: 1,688,142 Other: 706,125 Total: 7,377,199 % of Total Budget: 10.8%	State: 4,431,249 Federal: 1,638,142 Other: 706,125 Total: 6,775,516 % of Total Budget: 11.2%	7.33, 7.34, 7.35, 7.36, 7.37, 7.38

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

Remainder of Expenditures:	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 02-03 Budget Expenditures	FY 03-04 Budget Expenditures	Key Cross Reference for Financial Results
III. Employee Contributions		State: 5,581,401 Federal: 1,648,541 Other: 3,045,301 Total: 10,275,243 % of Total Budget: 15.9%	State: 5,030,888 Federal: 1,845,621 Other: 3,045,301 Total: 9,921,810 % of Total Budget: 17%	7.1, 7.2, 7.3
		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:	State: Federal: Other: Total: % of Total Budget:	State: Federal: Other: Total: % of Total Budget:

Category 1 – Leadership

1.1a-f: The leadership system in DNR describes the direction of the agency and the means by which it is achieved. The primary focus of the agency's leadership is based upon DNR's Vision which states: "As the guardians of the state's natural resources, the Department of Natural Resources will strive to ensure healthy, sustainable levels of natural resources for the use and enjoyment of present and future generations." This Vision Statement sets the long-term direction and is manifested through DNR's Strategic Plan. Each year, DNR reviews its accomplishments to ensure performance expectations are achieved and progress is made to meet the Vision Statement. Accomplishments are presented to the DNR Board for their review and policy direction. This action also provides a forum by which the public may review progress toward those priorities deemed most important. In addition to programmatic accomplishments, DNR prepares and publishes a comprehensive annual report in which performance is communicated to the public and the state's legislative leadership. Through this annual report, DNR's values are identified, priorities are enumerated, and performance is detailed for major programs and projects in the agency.

1.2: Senior leadership establishes and maintains a continuous focus on customers. As the manager of the state's natural resources used and enjoyed by the public year-round, there is constant contact with customers ranging from those that own and operate boats, purchase hunting and fishing licenses, manage land and water resources, to commercial and recreational businesses, farmers, planning agencies, water authorities, university faculty and staff, and developers.

1.3 The Director of the Office of Support Services and her staff continually monitor the status of agency income and budget against expenditures and anticipated expenditures, and communicates through reports to and meetings with the Director, Associate Director 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 with key staff, with reports on progress of key department projects and functions and budget status reviews. The Director and Associate Director hold monthly meetings with Deputy Director's and other key staff, and fiscal status is monitored. Deputies are given strict fiscal guidelines by the Director and are held accountable for following those guidelines. Legal and regulatory accountability is maintained through the constant involvement of three staff attorneys in the Legal Office. Under their guidance, staff is 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 complied with.

1.3: Senior leaders in DNR regularly review key performance measures. This is done primarily through the annual goals and objectives developed for each division, which are linked to DNR's Strategic Plan and provide target levels for performance. These measures are a basis for the Employee Performance Management System review for all senior leaders. The DNR Board evaluates the DNR Director and their recommendations are submitted to the Agency Head Salary Commission.

1.5: Employee feedback is routinely submitted to senior leaders through direct contact, regional workshops, special purpose committees and through the chain of command in the agency's divisions.

Employee surveys are conducted to secure feedback on particular issues or problems. Input from employees is attained through DNR's website on matters having agency-wide significance, such as updating the Strategic Plan. 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 task forces to review particular issues/problems, providing feedback and performance review findings.

1.6: DNR addresses current and potential impact 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 contact, 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 outdoor enjoyment, DNR actively promotes public outreach efforts to adequately inform the public of associated risks. These potential risks are further addressed through special education and training classes such as Hunter and Boater Safety. When risks, such as boating-related fatalities, become major public policy issues, the agency will pursue specific laws and/or regulatory controls to protect the safety of people and property.

1.7-1.8: Senior leadership establishes and communicates key organizational priorities for improvement through legislative and budgetary processes. Senior leaders are directly involved in the preparation of DNR's legislative package, detailing legislative priorities for the year. These proposals are reviewed by the DNR Board and, upon approval, are submitted to appropriate committees in the General Assembly for consideration. A similar process is followed for development and submission of the annual DNR budget proposals which are prioritized based on needs of the agency for improvement and funding. Both the legislative package and budgetary proposals are linked to critical natural resource issues and needs as identified for emphasis 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. Senior leadership works to effectively implement these processes to maintain a primary focus on customers, the DNR vision and the well-being of the state's natural resources.

Category 2 – Strategic Planning

2.1: Primary focus of the planning process in DNR is the Strategic Plan, which was first adopted by the DNR Board in 1996. An update of the Strategic Plan was scheduled for 2003-2004, but was postponed until FY 2004-2005. With a new Director and complete change of the DNR Board in 2003-2004, this postponement was felt to be prudent. Once initiated, the plan update will provide structure and opportunity to improve methods for determining who the agency's customers are and their key requirements. The first comprehensive strategic document prepared by the agency in 1996 provided excellent direction to the newly structured agency. The plan was updated in 2001 and delineated into major strategies: 1) management, 2) science and technology, 3) education and public involvement, 4) landscape conservation, and 5) internal management and operations. For each strategy, there is a development of action items that cover all of the programs and activities of the agency. The plan provides a focus for budgeted programs of DNR and requires all of these programs be linked or related to strategies to accomplish the actions noted in the plan. Each division utilizes this focus to develop a programmatic delivery system that has a broad customer base and focuses on reaching intended targets identified in the plan. It also provides a forum and benchmark for setting priorities through a

comprehensive decision-making process based upon the strategies and action items. This decision-making process is clearly reflected in the interaction of program development through input from the Governor's Office, General Assembly, SCDNR Board, advisory committees, constituent organizations, professional groups, and the public to insure resources are used in the most efficient manner. With a newly appointed Board and a new Director, it has been decided that the plan will be updated again in 2004-2005.

2.2: Each program is required to develop specific goals and objectives. These are used to deploy strategies and action items in the plan so that results/outcomes are developed and evaluated. The deployment of these strategies and the relationship to the plan occurs each year as goals and objectives are developed for the programs in the agency. Additionally, they are reviewed and justified through the budgetary process implemented by staff and the DNR Board. The plan provides direction through the agency's strategic agenda, providing the foundation upon which the agency operates and determines how DNR accomplishes its mission. Components of this agenda are integrated into DNR's budget programs and are as follows: 1) places the resource first through permanent protection and management of habitat and cultural (archaeological) resources of special significance; 2) protects human life, property, natural resources and safety of the persons using those resources; 3) manages natural resources under its jurisdiction sustainably and as a system, insuring their long-term integrity and diversity; 4) uses best available sound scientific and technical information in making natural resources decisions; 5) conducts applied research to improve the base of scientific knowledge upon which natural resource management decisions are based; 6) protects, manages and enhances current and future public's use and enjoyment of South Carolina's fish, wildlife, aquatic, soil, water, geological and cultural resources; 7) educates and communicates with the public about South Carolina's natural resources and environment, and provides accountability by routinely involving the public in the department's decision-making process; 8) speaks for the state's natural resources in commenting on proposed alterations to the environment; and 9) maintains an agency culture that continuously seeks to improve operations and effectiveness in a professional manner for its employees and customers.

2.3: Strategic objectives and action plans are communicated and deployed to staff through the strategic planning process and updates that occur with the DNR Strategic Plan. Senior leadership also has specific strategic objectives and action plans as a formal part of their Employee Performance Management System and are evaluated on this basis; thus, the senior leaders in each division are allocated specific objectives and action plans through various programs and projects. Also, senior leaders communicate and deploy strategic objectives through the DNR Board, which establishes policy guidance for accomplishing such objectives throughout the agency. DNR's budgetary process also provides a means for communicating and deploying strategic objectives. This is done at the state and federal level as funding proposals and grants are pursued that are based upon specific objectives in DNR's Strategic Plan. Performance measures are also communicated through project reports developed for grants and/or federal aid utilized for programs in the agency. More detailed performance measures in DNR are maintained in an extensive database for Long Term Performance Measures. These measures are updated each year and are available for use in the strategic planning process and reported to the public in DNR's Annual Report.

2.4: Under Strategy 1: Management, our key action plans are: Plan 1: Establish an environmental baseline and identify trends by assessing the condition of the state's natural resources and periodically reporting on their status including recommendations to manage, improve or restore   ecosystems, lands, waters, habitats and species. Plan 3: Ensure the protection of life, property and natural resources through maintenance of a well-trained, professional natural resources law enforcement force appropriately distributed throughout the state, and Plan 5, Acquire and incorporate social and economic, as well as biological and physical, data into policies and processes to manage the state's natural resources and provide information on the social, cultural, economic as well as ecological significance of natural

resources to the public. Under Strategy 3: Education and Public Involvement, our key action plans are: Plan 1: Educate the public about the state's natural resources and encourage them to make more informed contributions to the management, use, stewardship and enjoyment of our natural resources, Plan 3: Promote safe, ethical and responsible use of the state's natural resources, Plan 4: Promote awareness of natural hazards and educate the public in ways to mitigate loss or injury, Plan 5: Emphasize the importance of education as a portion of every DNR employee's work responsibilities, and Plan 6: Utilize public opinion surveys and the talents of the Department's Advisory Committees to gauge public opinion and educate the public on important natural resources issues. Under Strategy 5: Internal Management and Operations, our key action plan is Plan 6: continue to attract and retain talented employees available to carry out the Agency's mission in a manner that includes career development and competitive compensation for staff.

2.5: Strategic objectives, action plans and performance measures are communicated and deployed primarily through the agencies strategic plan, *The Natural Resources Agenda: A strategy for Managing South Carolina's Natural Wealth*. The Director has instructed his Deputies that personnel review thought the State EPMS system is to relate directly to the strategic plan and be linked to each employee's job duties and evaluation. Each employee is informed of the location of the strategic plan on the agency's website and informed that their familiarity with it is required by the above process.

2.6 The agency's strategic plan is available to the public through the agency's Internet website at www.scdnr.state.sc.us.

		Strategic Planning	
Program Number and Title	**Supported Agency Strategic Planning Goal/Objective**	**Related FY 03-04 Key Agency Action Plan/Initiatives**	**Key Cross Reference for Performance Measures**
	Strategy 1: Management Protect, manage and sustain the public's enjoyment of natural resources through programs which support hunting, recreational boating, fishing, wildlife watching, soil and water conservation, land and water planning and management, public access, and technical assistance. Continuously refine these and other programs based upon current and anticipated future needs.	**Action 1:** Establish an environmental baseline and identify trends by assessing the condition of the state's natural resources and periodically reporting on their status including recommendations to manage, improve or restore ecosystems, lands, waters, habitats and species.	7.12, 7.13, 7.14, 7.29, 7.30
		Action 2: Identify and provide for recovery, restoration of threatened resources and for needed research in this area.	7.16
		Action 3: Ensure the protection of life, property and natural resources through maintenance of a well-trained, professional natural resources law enforcement force appropriately distributed throughout the state.	7.17, 7.18, 7.19, 7.20, 7.21, 7.23, 7.24, 7.25, 7.26, 7.27
		Action 4: Develop, implement and encourage multi-objective management plans for sustainable use of natural resources with appropriate public involvement	
		Action 5: Acquire and incorporate social and economic, as well as biological and physical, data into policies and processes to manage the state's natural resources and provide information on the social, cultural, economic as well as ecological significance of natural resources to the public.	7.5, 7.6, 7.36

		Strategic Planning	
Program Number and Title	**Supported Agency Strategic Planning Goal/Objective**	**Related FY 03-04 Key Agency Action Plan/Initiatives**	**Key Cross Reference for Performance Measures**
	Strategy 2: Science and Technology: Develop and apply resource management technologies to foster sustainable levels of natural resources.	**Action 1**: Obtain information required to support science-based decision-making and management for the state's natural resources through applied research, monitoring, surveys and cooperative partnerships with other resource/research agencies, academic institutions and conservation organizations.	7.4, 7.7, 7.8, 7.9, 7.11, 7.12, 7.13, 7.14,7.15, 7.34, 7.35
		Action 2: Collect and integrate scientific information and data into the agency's decision-making process for all issues and actions.	
		Action 3: Maintain, develop and implement technologies to enhance natural resources stewardship and conservation (including, but not limited to, fish hatchery, aquaculture and aquatic population restoration and rebuilding technologies).	7.4, 7.6, 7.15, 7.33, 7.34
	Strategy 3: Education and Public Involvement: Educate the public about natural resources issues and involve them in resource management decisions.	**Action 1**: Educate the public about the state's natural resources and encourage them to make more informed contributions to the management, use, stewardship and enjoyment of our natural resources.	7.31, 7.32, 7.38
		Action 2: Assess and communicate public interests, needs and knowledge as relates to natural resources.	7.5, 7.6
		Action 3: Promote safe, ethical and responsible use of the state's natural resources.	7.21, 7.27
		Action 4: Promote awareness of natural hazards and educate the public in ways to mitigate loss or injury.	7.37
		Action 5: Emphasize the importance of education as a portion of every DNR employee's work responsibilities.	
		Action 6: Utilize public opinion surveys and the talents of the Department's Advisory Committees to gauge public opinion and educate the public on important natural resources issues.	7.5, 7.6

		Strategic Planning	
Program Number and Title	**Supported Agency Strategic Planning Goal/Objective**	**Related FY 03-04 Key Agency Action Plan/Initiatives**	**Key Cross Reference for Performance Measures**
	Strategy 4: Landscape Conservation: Advance a habitat stewardship and management program to provide for the long-term conservation of the states natural resources. Prepare and implement a comprehensive strategy to protect, understand, manage and restore terrestrial and aquatic habitats, including farm and forest lands, that are necessary for the long-term conservation of the state's natural resources.	**Action 1**: Expand habitat protection, restoration and conservation programs, emphasizing expanded acquisition and conservation easements for properties with high ecological value.	7.16
		Action 2: Support local, regional and state efforts to conserve and sustain natural resources through comprehensive land use planning.	
		Action 3: Advocate environmentally sound approaches to economic development planning, permitting and other decision-making in order to maintain and sustain the state's natural resources.	7.29, 7.30
	Strategy 5: Internal Management and Operations Continuously review the agency infrastructure, human resources and funding sources to maximize efficiency and effectiveness of operations.	**Action 1**: Provide for effective staff development and training in natural resources management, planning and customer service, including continuing education, leadership training and formal education.	
		Action 2: Explore and develop applicable technological innovations to improve natural resources management, planning and customer service.	
		Action 3: Continually evaluate efficient use of present funding and pursue new sources of funding for management, conservation and protection for the state's natural resources.	7.10, 7.22, 7.28
		Action 4: Maintain and enhance facilities and infrastructure to continually improve management and stewardship of the state's natural resources and customer service.	
		Action 5: Develop opportunities to promote diversity both within the agency and in its constituents to enhance participation in nature-related activities by all citizens of South Carolina.	
		Action 6: Continue to attract and retain talented employees available to carry out the agency's mission in a manner that includes career development and competitive compensation for staff.	7.1, 7.2. 7.3

Category 3 – Customer Focus

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 respond to their needs and expectations. One of the agency's primary listening and learning methods is through its advisory committees. Each division 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. Pubic 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 staff. To develop a comprehensive customer focus for DNR and insure the agency is providing effective treatment and evaluation of all aspects of customer satisfaction, DNR developed and implemented a comprehensive survey in 1994. This survey consisted of a public opinion and attitude survey conducted by Responsive Management, Inc., which specializes in surveys of state natural resource agencies, focused on gauging public opinion and attitudes of the state's residents towards the use and management of the state's natural resources. It also provided feedback from customers to assist DNR in development of its initial Strategic Plan. The specific survey objectives were to identify the following:

    a. the Department's total market,
    b. the market size,
    c. what citizens think the Department is doing right,
    d. what constituents want from the Department in terms of programs and services,
    e. willingness to pay for specific programs and services, and
    f. sources of information on wildlife for citizens.

Survey results provided very detailed information for use in natural resource management in South Carolina. The customer feedback provided the following results: 1) the public supports a broad range of natural resource management programs administered by DNR, 2) the public supports an expansion of natural resource program emphasis, 3) the residents are most supportive of and have the least opposition to spending more time and money on programs related to education and conservation, 4) residents are willing to pay for these programs in the agency, and 5) the agency is highly regarded by the constituent groups it has served in the past. The more contact a respondent had with DNR, the more likely they are to be aware of the agency, and to think highly of the agency. 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, which tracks and analyzes trends of customer satisfaction.

3.3-3.4: DNR has identified those persons, organizations and governmental agencies that are either recipients or beneficiaries of outputs of work efforts, or purchaser of products and services produced by the agency, both internal and external. DNR works to determine and fulfill customers' key requirements by asking questions, defining terms, setting standards and through continuous improvement. The agency

works to continuously monitor key processes to ensure that those requirements are met. A 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. In a recent survey by USC entitled *Growth In South Carolina: A Public Perspective,* one of the major findings of this survey noted that South Carolinians overwhelmingly want both continued growth and a high quality environment with protected natural resources.

3.5 Through the actions noted, 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 it's 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: DNR's performance management system is a reflection of the agency's vision and mission as programs operationalize the vision and mission to produce effective business results. The agency decides which operations, processes and systems to measure from several categories. One category used to gauge DNR's performance is the financial arena. The organization 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 approximately 28% 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. Another category in which DNR develops measures is related to 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. 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, endangered species, Heritage Trust, wildlife management, freshwater fisheries, marine resources, and the S.C. Geological Survey. DNR makes key management decisions based upon science in order to utilize the best information available in this process.

4.2: 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 effort 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, liter enforcement measures, numbers of and participation in education classes and programs, USDA cost share funding trends, Geological Survey mapping trends, nuisance aquatic plant coverage trends, numbers of comprehensive environmental reviews, numbers of flood insurance policies and GIS data access trends.

4.3: 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 fir decision-making. 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 making decisions on 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, completeness and availability. In the financial category, there are established standards that must be followed to maintain data quality and reliability. DNR routinely has financial audits to see that the standards are met. These audits occur internally and from various outside sources. Through the maintenance of 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 is dependent upon maintaining a quality database to make decisions regarding these customers. Through the use of current information technologies and a highly skilled workforce, the agency has historically provided 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.

4.4-4.5: 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 and the like, 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 resources violations in order to support effective decision-making for staffing, patrol patterns, duration of patrols and the time of day/night or season. Data collection and analysis relating to hunting and boating accidents/fatalities are 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. 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.

4.6:   With the loss of personnel as a result of the last four years of budget reductions and the anticipation of further losses of a significant portion of the agencies leadership as the TERI program begins to run its course, the agency has become more acutely aware of the ongoing and accelerating loss of institutional knowledge. Our Project WILD leadership-training program was one response to this issue, but leadership is just beginning to focus on standardizing methods to maintain and accumulate employee knowledge and the identifying and sharing of best practices.   The Director has instructed his Deputy's to institute a succession program in each division to insure a training process is in place for future key staff position changes. 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 instructional knowledge that will be needed in the future.

Category 5 – Human Resources

DNR, to date, has absorbed approximately a 44% budget reduction, which continues to cause a reduction in personnel, equipment, travel, training and programs. The most visible area in which the Department has lost personnel is in the Law Enforcement Division where there were 82 vacant law enforcement officer positions at the end of FY04. Eleven of these positions were permanently lost through the 2001 separation incentive.

The majority of the permanent FTE staff reductions have been accomplished through voluntary retirements and separations. To date DNR has offered the Separation and Retirement Incentives on four separate occasions with a total of 144 employees participating. Additionally, vacant positions are being filled only in the most mission critical circumstances with only 16 permanent positions being filled in FY04. Of these positions, 50% (8/16) were filled by existing, permanent internal DNR candidates, resulting in realignment of existing staff.   While this has helped meet some of our fiscal reductions, at the same time it has caused remaining employees to assume additional duties, often with no monetary incentive to do so. In fact, only 11% (82/688) of permanent FTE employees received any type of employee salary action in their current jobs.   While workforce planning and succession planning are high priority initiatives in all state agencies, retention of existing employees for DNR has risen to the forefront of imminent needs.

5.1   Motivating and encouraging employees continues to be challenging during these austere budget times. While the state's compensation system provides avenues to reward employees, such as compensation for assuming additional duties and responsibilities, attainment of additional knowledge and skills, as well as providing avenues for pay for performance and bonuses, these flexibilities have been used very conservatively during the past fiscal year as referenced earlier. It is incumbent upon DNR to seek ways to increase compensation opportunities for existing staff.

Since compensatory acknowledgement has been rare, DNR has continued to seek non-monetary mechanisms to reward employees.   Currently, the primary method of rewarding employees is acknowledgement at Board meetings, Deputy Director meetings and division level meetings, as well as

receiving acknowledgement in agency magazines, newsletters and website communications. The Department periodically submits nominations to the Blue Granite Recognition Program spearheaded by Senator Phil Leventis. Due to the nature of the work in which this agency is involved, employees often are recognized regionally and nationally for their efforts. Feedback from past surveys indicates the preferred form of recognition is at the division level. Awarding of certificates is usually handled at division staff meetings. Divisions have implemented various morale building, recognition oriented activities for their employees to include such activities as semi-annual oyster roasts, employee picnics, ice cream socials and pizza parties. These activities assist with building camaraderie and employee morale. Each year the agency participates in Public Employee Recognition Week ensuring that the Employee of the Year and the State Service Awards ceremony is conducted during that week. The Agency Director sends a letter or memorandum to all DNR employees recognizing their contributions to the agency during this time frame, as well as division Directors recognizing employees in some manner ranging from individual thank you notes, to on-site visits to the employees' work stations, or to group pizza parties. The agency encourages individuality and creativity in determining the best form of recognition for different work groups rather than a "one size fits all" mentality.

The selection of the Employee of the Year is a culmination of individual selections made by each division for its representative. That representative then is considered along with other division representatives for the Employee of the Year. Each division representative is given a $250 bonus as the division employee of the year, and the agency employee of the year receives an additional $750 bonus.

During FY04, the Department initiated a comprehensive study to develop a formalized Reward and Recognition Program. The design team was comprised of representatives from each division, with the State Office of Human Resources facilitating the development of the plan. This program will be implemented in FY05 and has the strong support of the DNR Board, the Agency Head, and the Executive Management Team.

Another form of acknowledgement is the scholarship program for dependents of DNR employees offered through the Harry Hampton Fund, as well as scholarships offered by the Greenville Saltwater Sportfishing Club. These programs are beneficial as morale boosters for employees in recognition of their offspring's accomplishments.

The Department continues to offer programs that assist employees in balancing their work and personal lives. These programs include flexible work schedules, voluntary furloughs and telecommuting opportunities. Additionally, the Department has a Tuition Assistance Program; however, this program has been suspended since FY02 due to budget restrictions.

With the ongoing budget situation and realignments necessitated by this crisis, employee morale is not at its highest level; however, employees continue to be committed to the mission of the agency and to their jobs. The Agency Head is working diligently to resolve the budget shortfalls partially through realignment and consolidation. Reorganization of the Department into four distinct regions has improved communication issues over the last fiscal year. Moreover, greater program efficiency has been realized in breaking down barriers to shared resources and shared manpower. The Agency Head continues to charge his Executive Management Team to think "outside the box" for greater effectiveness and efficiency.

5.2   The Department continues its efforts to provide a full complement of training opportunities for its employees with approximately 20 different courses offered in FY04. The training provided is based upon

the agency Management and Leadership Plan developed several years ago. The plan encompasses management/leadership training, supervisory training on core skills, and professional development. In FY 04, based upon a needs assessment conducted by the Human Resources Office, training opportunities were offered on a reduced basis, simply because supervisors and employees alike stated that with reductions in staff and increased workloads, they were reluctant to allocate time for training. The Department did, however, complete an intensive mandatory training program for all current supervisors and managers on the Employee Performance Management System (EPMS) in efforts to assist supervisors in accurately evaluating staff performance. There were ten (10) sessions offered.

 Participants are asked to evaluate internal training programs after each session for effectiveness and applicability, and the feedback from these evaluations is consistently favorable. These evaluation forms, along with one-on-one discussions with participants are used to enhance the courses so that they are most effective for the participants.

DNR continues to partner with other agencies to offer a broader spectrum of courses as space is available. Through the State Agency Training Consortium, additional courses are made available to employees.

The Department continues its Management and Leadership program with the second class of W.I.L.D. (Workshop in Leadership Development Program) participants. There are currently 10 participants in this class. This program is in alignment with the Department's need to emphasize workforce planning due to recent separations and the overall aging workforce. Besides the internal leadership program offered at DNR, the Department has employees participating in the following statewide programs: Executive Institute, Excel Program, the Certified Public Manager Program (CPM), and the Associate Public Manager Program (APM).

5.3   The Employee Performance Management System is used as a tool to communicate to employees the expectations of the job. Supervisors receive training on effective use of the planning document to convey expectations of the job, on ensuring ongoing communication with the employee concerning those expectations and on conducting the final review process. the Human Resources Office is in the process of transitioning to an agency-wide universal review date. The outcome of this initiative will be to allow better coordination in evaluating employees in line with annual goals and objectives. Also, as part of this new process, the Department is implementing a combined position description-EPMS form to ensure employees are privy to updated job descriptions on an annual basis and that EPMS job functions align with the position description. There will be an employee developmental element included in the planning process so that employees and supervisors will have a uniform mechanism to plan training and development activities to complement the employee's career goals and objectives.

Periodically, the Department surveys employees either through formal surveys to all employees, targeted surveys to particular groups or general employee meetings to assess employee satisfaction and concerns. Additionally, exit interviews are reviewed in the Human Resources Office to determine any indicators of dissatisfaction. Relationship with fellow employees and the mission of the agency continue to be factors in sustaining job satisfaction for DNR employees. With the current budget situation, there is concern that the employee satisfaction level may decrease due to increased workloads, lack of equipment or outdated equipment that cannot be replaced, and limited opportunity for monetary rewards.

5.4 The Department's Safety Committee is responsible for ensuring that the Department is incompliance with safety regulations. 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 has developed a formal safety plan for the Department that addresses safety issues, required training, other recommended training and awareness. This plan has been provided to Deputy Directors for comment; however, budget restrictions 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.

The Department's outreach programs provide continuous involvement in the community. Education programs provide to schools throughout the state the opportunity to increase their knowledge and awareness of the state's natural resources. The fishing rodeos, the Palmetto Sportsmen's Classic, Reel Kids, National Hunting and Fishing Day, 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.

Category 6 – Process Management

6.1-6.2: DNR has developed a network of key processes for products and services to provide effective management of work in the agency. The key processes are based upon DNR's mission and major strategic goals of: a) management, b) science and technology, c) education and public involvement, and d) landscape conservation. There are a variety of program delivery processes related to the management strategic 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. Primary program delivery processes for DNR's science and technology 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 State Water Plan. All divisions in the agency 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 (HOFNOD). Landscape conservation is also a critical 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. Each of these programs and systems incorporate the use of up-to-date technology and information so as to provide the most effective service delivery. 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 maintain changing customer requirements.

6.3: The day-to-day operation of the key delivery processes noted in Section 6.1 are very important to meeting the key performance requirements that ultimately lead to the business results in Category 7. These operations are able to meet these key performance requirements through a diversity of outputs from services and products of the agency. While all of the outputs are too numerous to list, the key outputs from DNR's major strategic goals are as follows: a) management – number of Wildlife Management Area acres/hunters, number of public dove fields, number of deer depredation permits issued, number of finfish caught by recreational anglers, number of state lakes managed, total number of fishery species produced and stocked, number of management projects for protected elements, and number of acres under conservation plans; b) science and technology – number of wildlife and freshwater fishery research projects, extramural dollar value of marine resources research and monitoring projects, number of technology transfer opportunities from mariculture research, number of water quality/quantity database projects conducted, number of data requests filled for climate information, percentage increase in climate information dissemination via the Internet, number of wildlife diversity research, survey and monitoring projects conducted, and the number of geological maps produced and published for scientific use; c) education and public involvement – number of public attitudinal surveys conducted, number of visits to DNR's website, number of *SC Wildlife* magazine subscribers, number of programs and participants for conservation education programs, number of workshops and teachers trained, number of hunter and boating safety students certified, and number of customers reached through DNR news releases and media programs; d) landscape conservation – number of acres of habitat acquired per year, number of dedicated Heritage Preserves and/or additions, number of communities identified as flood hazard areas, percentage of cropland and pasture with adequate soil and water conservation management, number of environmental permits/projects reviewed each year, number of Scenic Rivers managed, and number of drought management plans developed and monitored.

6.4: 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. One area in which the agency is making considerable progress is in the Procurement Services Section of the Administrative Services Division. The procurement Web site was initially designed in 1998 to open up the electronic age of *Doing Business With SCDNR*. The business community, a vitally important customer and tax revenue constituent, needed a mechanism to simplify the old, antiquated system of doing business. It was felt that DNR's procurement site would allow people in the business community to acquaint themselves with several key areas in the procurement cycle. The site would also teach them how best to do business with the State of South Carolina and the Department of Natural Resources.

One page provides a means for the vendor to review new, innovative techniques for requesting bids. Instructions on how to use this tool are included in the "What's New in Procurement Services" section. A second page will allow the vendor to review all solicitations, awards and public notices issued by DNR

on-line in "DNR's Bulletin Board" section. MBE vendors can receive information on how to become a Certified Minority Business in South Carolina, which may qualify vendors for a MBE bid preference. At the initial start-up of the Web page in 1998, the page received 1,000-1,200 hits per month, and in 1999, monthly site hits rose to 2,000. In 2002, site hits soared to 11,598 hits per month, and in 2003, site hits rose to 15,683 hits per month.

DNR recognizes the information technology age is ever changing, and it is vitally important that DNR keep pace with customers' demands, providing the latest in business technology. DNR, having recognized the need to further simply the process of working with our business community and constituents, has initiated a dedicated telephone number from which vendors can request bid solicitations that were reviewed either on-line via DNR's Web site or in the *SC Business Opportunities* Newspaper. This option provides access to buyer contact information, commodity service descriptions and other useful information. Vendors can also request vendor payment status on-line at the DNR procurement Web site.

Those who visit and use the "Procurement Web Page" now have a communication avenue to express ideas, thoughts, questions and even concerns through the "Lets Talk" page. Should the customer have questions, comments or suggestions regarding hunting, fishing, license issues, rules and regulations or other resource related matters, they can post comments to the "comments section" where a DNR employee will electronically respond to the question or comment. Suggestions for improving the format and content of the Web site and/or any purchasing-related questions may also be submitted directly to the procurement staff at this Web page. To enable Procurement Services to compare DNR with its peers within the State of South Carolina and other states of the nation, one of our goals for 2004 will be the creation of key demographic indicators that could be benchmarked across performance areas of the procurement process and across fiscal years. Surveys would seek DNR performance data for our customer base, and populations to be surveyed might include DNR employees, general public and DNR's vendor base of 9,654 vendors.

DNR's primary focus will be on initiating and receiving survey data designed to facilitate many aspects of the business cycle, targeting DNR's vendor base. Also, to ensure that the target base of vendors is adequately solicited, will be to mail survey instruments to vendors along with DNR's purchase orders. And, as the final and critical element, DNR will target its home base of customers, DNR employees, to whom Procurement Services provides administrative support in performance of the employees' assigned respective duties.

6.5: The management and support provided for key supplier/contractor/partner interactions and processes to improve performance are based upon the actions of the individual work units in DNR. This area has received some degree of attention and direction in the agency and will be a new area of focus in the future.

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. An important component of the Strategic Plan update initiative planned for 2003-2004 will be to determine

meaningful performance and improvement measures for the agency so that they can be tracked and evaluated throught time.

Human Resources

The Department had 220 FTE vacancies as of 06/30/04, excluding the 22 positions lost in 2001 because of the separation incentives. This vacancy rate is 24% of the 908 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 30% since FY00, with 262 fewer employees. (See Figure 7.1)

SC DNR
Total Filled Positions
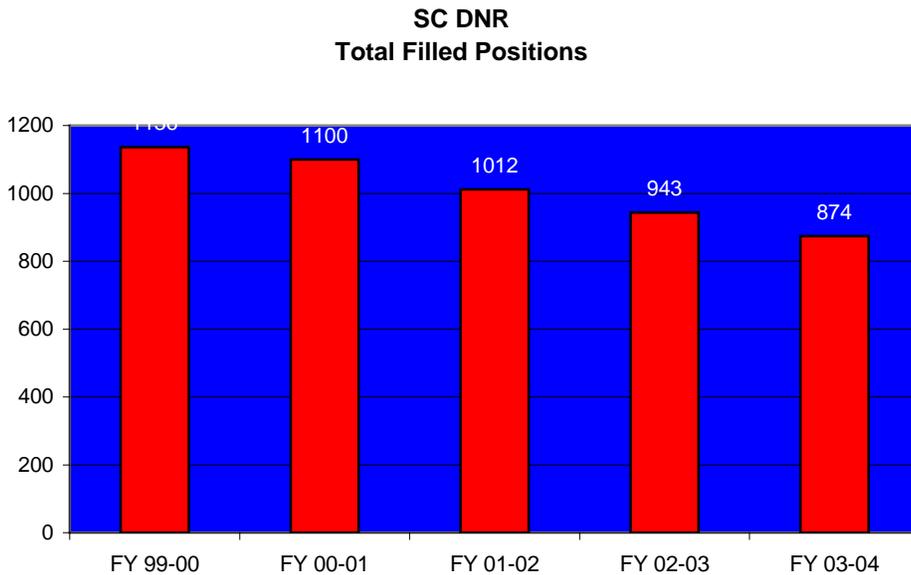
(Figure 7.1)

Historically, DNR's turnover rate has been significantly lower than the state's turnover rate; however with 75 permanent employee terminations in FY04, DNR has risen to a 10.36% turnover rate compared to the state's 12.49% turnover rate. The higher than average turnover for DNR in FY 03-04 is primarily attributed to the 49 employees who participated in the August, 2003 Separation/Retirement incentives. (See Figure 7.2)
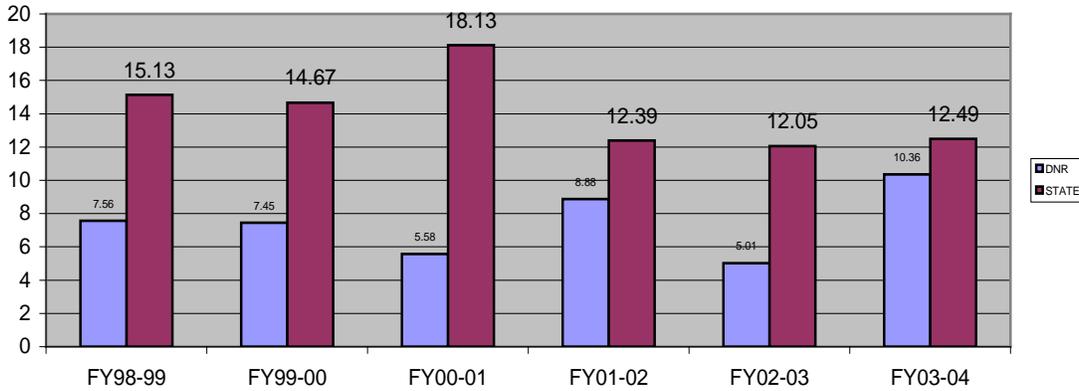
(Figure 7.2)

Only 11% (82/688) of permanent FTE employees received any type of employee salary action in their current jobs. While workforce planning and succession planning are high priority initiatives in all state agencies, retention of existing employees for DNR has risen to the forefront of imminent needs. (See Figure 7.3)
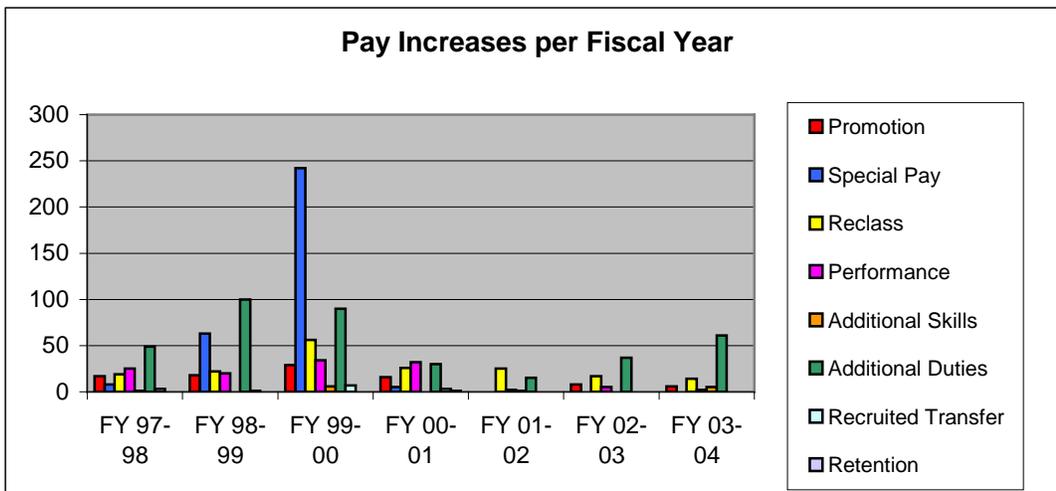
(Figure 7.3)

Program: Wildlife and Freshwater Fisheries

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 has averaged approximately $1.5 million over the last five years. (See Figure 7.4) The economic impact of striped bass and trout fishing alone, when compared against the cost of the entire fish hatchery program, yields a cost benefit ratio of (62 to 1) to South Carolina's citizens.

Economic impact of striped bass and trout fishing versus total hatchery expenditures for the period 1991 through 2001.
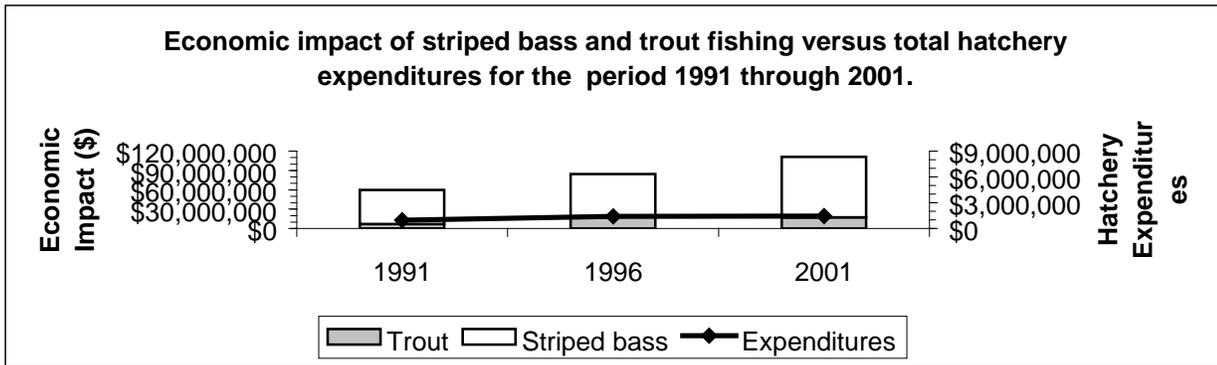
(Figure 7.4)

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.
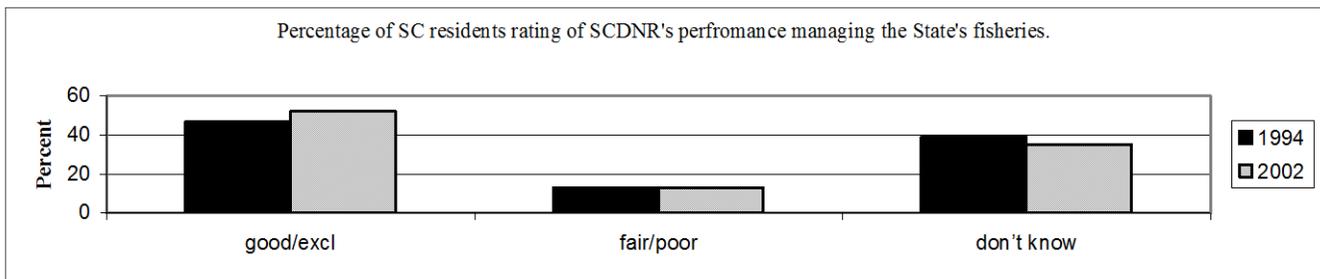
(Figure 7.5)

Licensed angler survey results from 1998 and 2004 have very similar results regarding satisfaction with DNR's performance in managing the state's fishery resources (See Figure 7.5 & 7.6).

Licensed angler's satisfaction with SCDNR's managment of the state's fishery resources.
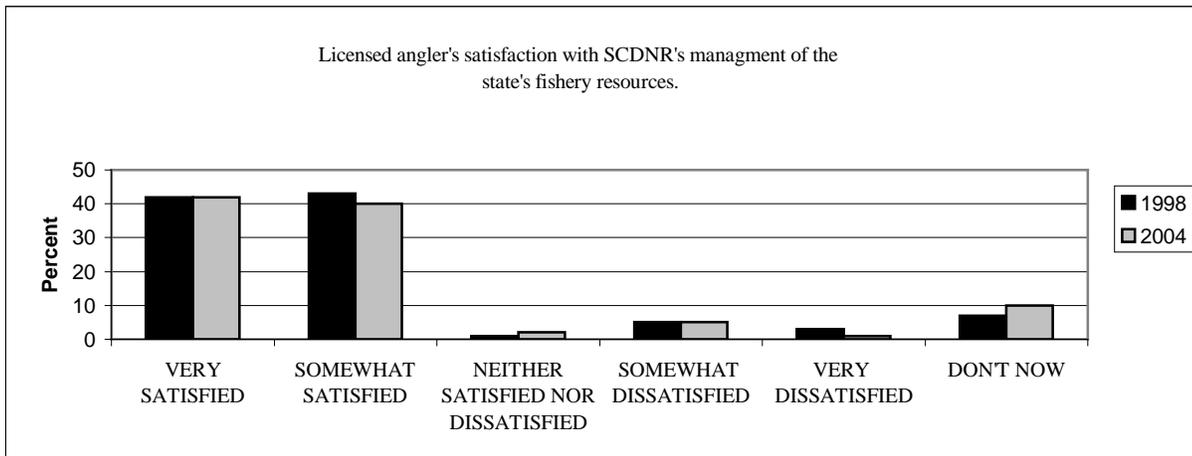
(Figure 7.6)

Survey results of the residents of South Carolina from 1994 and 2004 indicate that the percentage of the population who feel DNR does a good or excellent job managing the states fisheries has increased over the period from 47% in 1994 to 52% in 2004. 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 ten year period from 1994 to 2004 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.

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. 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 it's responsibilities to manage the state's fisheries. Only six percent (6%) of licensed anglers were dissatisfied.

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.

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Participation in fishing or hunting for SC, GA, FL, NC and the national average from 1985-2001. Expressed as a percentage of the population 16 and older.
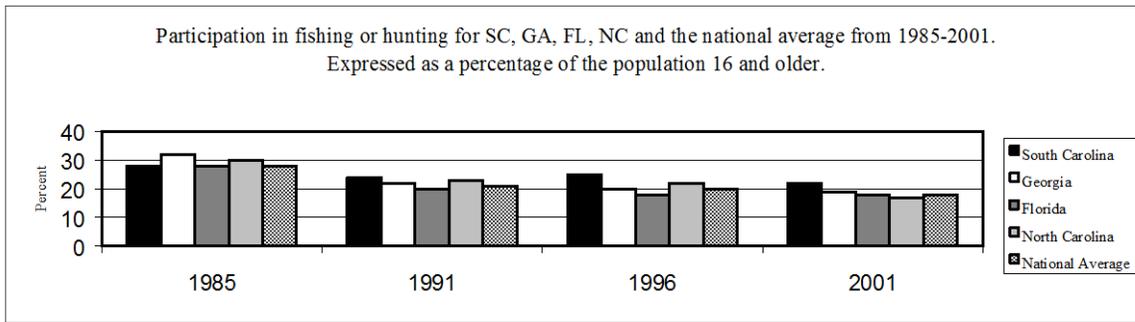
(Figure 7.7)

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 7.7)We trailed our neighbors and the national average in the percentage of population participating in hunting and fishing in 1985. However, from1991 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.

Participation in wildlife watching for SC, GA, FL, NC and the national average for the period 1985-2001. Expressed as a percentage of the population 16 and older.
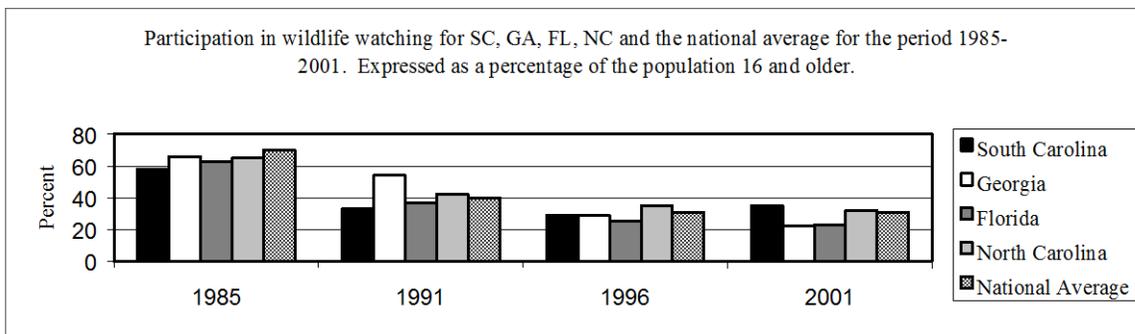
(Figure 7.8)

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 7.8)

Participation in wildlife related recreation for SC, GA, FL, NC and the national average for the period 1985-2001. Expressed as a percentage of the popultion 16 and older.
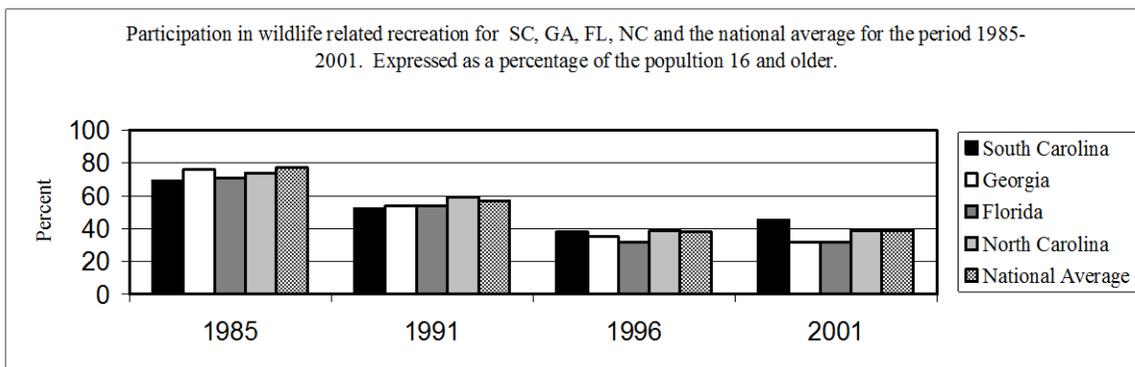
(Figure 7.9)

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 and increase in wildlife related recreation. There was no evidence of increased participation in South Carolina's neighboring states or the national average. (See Figure 7.9)

Renewal Methods
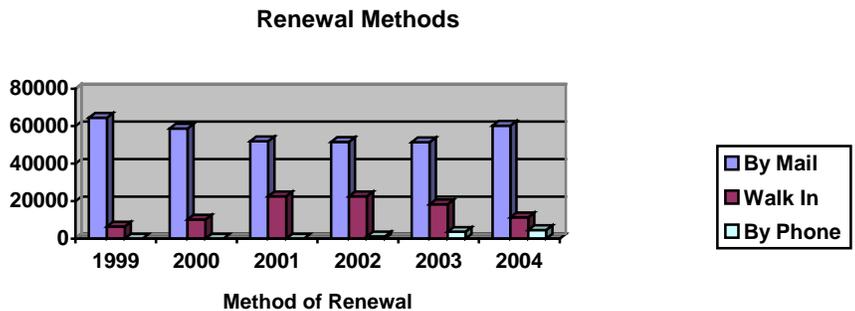
(Figure 7.10)

Program: Watercraft Registration and Titling

The Boat Titling and Registration Program provides registration and titling services for the watercraft and outboard motors. Given that South Carolina is ranked 4th in the nation in per capita boat ownership, with 379,773 actively registered boats, this is an area of particular constituent concern where customer service is of the utmost importance. (See Figure 7.10) To that end, over the past few years, a new manner of access has been successfully introduced. Beginning in February of 2002, DNR began offering the option of boat renewal via the same toll-free number available for renewing licenses. Each month, watercraft renewal notices are sent out informing those customers that it is time to renew the decals on their boat. The renewal mailer includes the toll-free number that may be used for registration renewal. This option of phone registration renewals has been a success. In 2003, a full 6% of the 76,339 boat registration renewals were transacted via the toll-free number, and that figure is anticipated to rise steady as the program matures.

Program: Licenses Sales

Through the use of electronic information exchange, we have increased license and permit sales, provided timely information concerning hunting and fishing opportunities, and increased nationwide exposure of South Carolina's natural resources.

License Sales as a % of State Population
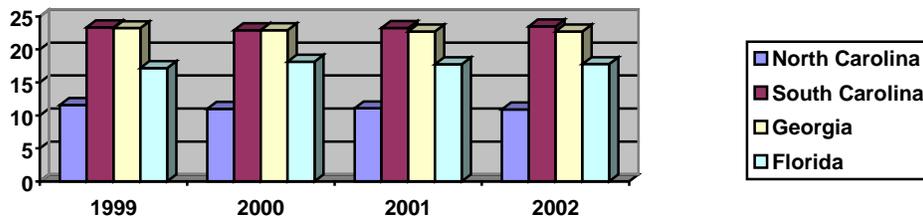
(Figure 7.11)

Since 1999, South Carolina has consistently had higher license sales as a percent of the state's population than the States of North Carolina, Georgia and Florida. (See Figure 7.11) The primary function of the Licensing program is administration of licensing and permitting both resident and non-resident sportsmen as required by law. This program, however, positively affects and/or interacts with a number of other areas of the agency. This program produces significant revenue for the agency and its evolution toward promotion of SC outdoor sporting resources at a national level through our association with Bass Pro Shops has been a very positive step. Information from other states was unavailable at the time this report was due and will be updated the next report.

With a volume of 704,882 licenses purchased last year, representing our front line of constituent interaction in many cases, customer service is a primary factor in all aspects of this area. A goal for this year was to increase sales of licenses by further enhancing customer service and making the purchase of hunting and fishing licenses more convenient. In May of 2004, a program that allowed customers to renew licenses, permits and tags through the mail was implemented. Approximately 450,000 multi-purpose renewal mailers were sent to our customers. This convenient mailer offered the option of using check or credit card to order, hunting or fishing licenses, anterless deer tags, shrimp baiting permits or non-game fish tags. License orders were processed and returned to the customer, saving the time and expense of a trip to their local license vendor also allowing DNR to maintain more customer data in-house. Although too early to report results of this mailer, the initial results are promising.

For the past six years in conjunction with BASS PRO shops and Great Lodge Company, license renewal has been available by phone. This program was expanded three years ago to provide Internet access as well. This program was expanded three years ago to provide Internet access as well. A full 10% of our license revenue was processed through BASS PRO and Great Lodge this year.

This past year, DNR combined with Great Lodge to initiate a test Point of Sale license sales. This program allows vendors to print licenses for the customer at the point of sale. This system eliminates the paperwork associated with license sales, and provides an immediate database of customers to DNR. Six test vendors were brought on line this past year , and it is anticipated that this program could expand in the coming years if adequate funding is made available..

Program: Boater Access

The main component of the Boating Access Program is the SCDNR Engineering Section, which provides assistance to state, county, and municipal government entities in the design, construction and renovation of boating access facilities throughout South Carolina. The Engineering Section also provides design and

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construction assistance for other water recreation related structures, such as fishing piers and boarding docks.

There are 3 main goals that the Engineering Section strives to meet. Those goals are:
1). Meet current and future demands for boating access.
2). Renovate existing access facilities to meet both state and national safety and usability standards.
3). Disseminate information on available boating access to the public.

In 1990, the Engineering Section commissioned the *South Carolina Registered Boat Owner Survey*, which was prepared by Clemson University. The objectives of the study were "to identify characteristics of registered boat owners, to determine the use of public boat launch facilities to estimate the demand for public boat launch facilities, to evaluate the condition of boat launch facilities, and to determine the quality of public boat launch facilities." The most significant finding was: The total demand for the use of public launch facilities in the state of South Carolina is projected to be 11,131,653 visits by the year 2010. This is a 75.4 percent increase in use during the 20-year time period 1990-2010. Demand is projected to be greatest for the "coastal county" group (89.2 percent increase), followed by the "lake county" group (76.0 percent increase), "primary inland water county" group (70.4 percent increase), and "secondary inland water county" group (70.0 percent increase). In general, use of public boat launch facilities should be expected to increase in the future, with the greatest increase projected for the public boat launch facilities along the coast.

Further studies where commissioned to analyze individual counties and Lake Groups in the areas that the Clemson Study projected the highest demand, with the coastal counties receiving the most focus. Studies have been performed in Beaufort, Berkeley, Charleston, Colleton, Dorchester, Florence, Georgetown, Horry, and Marion counties. Also, a study was done for the counties bordering the Santee Cooper Lake system. The Engineering Section has used these studies to identify the facilities that need to be renovated, and also to locate areas that may need additional landings to be constructed. Since 1996 the Engineering Section has been responsible for the renovation or construction of 40 boating access facilities throughout the state, 32 of the 40 were sites detailed in the boating needs studies. Even though much progress has been made in boating access, there remains much to be done. The biggest limiting factor is money – there are inadequate funds renovate all the facilities or to build the types of new sites necessary to meet demand. Additional studies are needed to determine how demand has changed from the previous studies, and also to generate more creative ideas to meet this demand. The Engineering Section is currently partnering with DHEC, Office of Coastal Resource Management to develop strategies to reduce, or even eliminate some of the regulations that slow the construction of sites in critical areas of the coastal counties.

In 2002, the Engineering Section completed the SC Boating Facilities Guide of which 7000 hard copies were made available to the general public. This information was also posted on DNR's web site. One major objective of the Engineering section is to provide mapping data in a revised guide book that was previous omitted due to lack of funding. This document was so successful and very popular with the general public and provided a wealth of knowledge of the state's boating access faculties.

Program: Marine Resources

Marine recreational fishermen represent a large and significant portion of DNR's 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) providing continued and better recreational fishing opportunities for the citizens and guest of South Carolina; and 2) ensuring that the natural marine resources of this state are protected and conserved for future generations.

In order to meet these needs the Marine Resources Division (MRD) utilizes staff and funding opportunities from a wide variety of sources. In addition to state appropriations, DNR utilizes federal funds from USFWS Sportfish Restoration Program, a "user pays, user benefits" approach that requires a 25% state match.

The South Carolina Marine Gamefish Tagging Program encourages anglers to tag and release fish not only for scientific purposes, but also as a conservation measure to help conserve stocks. In the past six years (1998–2004) the program supplied tagging kits to anglers who tagged 43,828 fish of priority species. 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 70% of the red drum taken in the recreational fishery, promoting angling ethics and conserving this popular gamefish for future generations. (See Figure 7.13) Angler success for red drum is also increasing and fishery independent monitoring conducted by the MRD provides evidence that the red drum stock, which has been over-fished, is improving. This has been aided by a new red drum stocking program using fish license revenues, which added 1.8 million juveniles to SC estuaries in 2003. (See Figure 7.12 & 7.14).
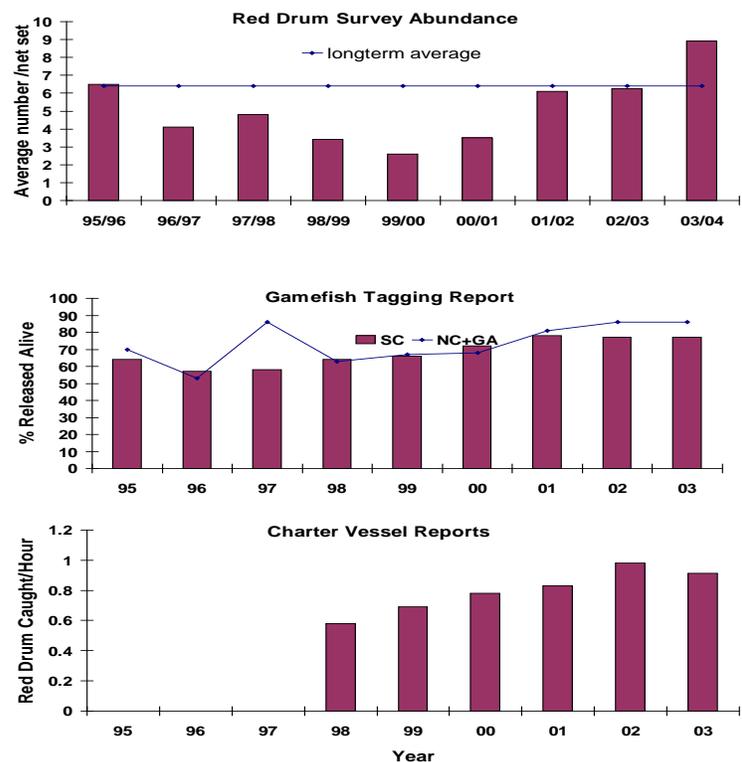
(See Figure 7.13, 7.12 & 7.14)

Program: Marine Resources

The S.C. seafood industry plays an important role in the lives of 1500-2000 commercial fishermen, countless seafood wholesale and retail dealers, and is an important component of the coastal economy and its heritage. During calendar year 2003, the total weight of wild saltwater stocks landed in this state was 14,658,278 lbs. with an ex-vessel value of $19,633,225. The customer focus in this case can be broadly summarized as the fishermen's desire to ensure sustainable, economically viable marine fisheries. Significant components of the SC seafood harvest are the shrimp and blue crabs. During FY 2004, 555 commercial shrimp trawl licenses were sold, a decline of 18 (3%) from the previous year.   The commercial shrimp season typically opens in spring and closes sometime after New Years Day depending mainly on environmental factors. Landings are comprised mainly of two species, white and brown shrimp. In addition, the fall 60-day recreational baiting fishery of shrimp was comprised of 12,445 licenses in fall 2003. After early rapid expansion, the baiting fishery has stabilized in recent years although the fishery continues to account for a substantial annual harvest.

The commercial blue crab fishery had 434 licenses (six nonresident) in the license year ending on June 30, 2004, representing an increase of 17 (4%). This fishery operates year round, and fishermen are not limited in the number of traps they may license. The Marine Division utilizes not only legal, licensing and permitting requirements, but also good science and management to help sustain the shrimp and blue crab fisheries. Since 1995, the combined shrimp and blue crab catch has been relatively close to the long-term average, although catches have declined in recent years. DNR biologists attribute this decline largely to severe drought that negatively impacted recruitment and distribution patterns of blue crab. Concurrently, the commercial shrimp harvest has declined slightly because of reduced fishing effort related to poor economic conditions in the fishery. Georgia also experienced a similar decline in shrimp and blue crab catch, although Georgia's decline has been somewhat greater. (See Figure 7.15)
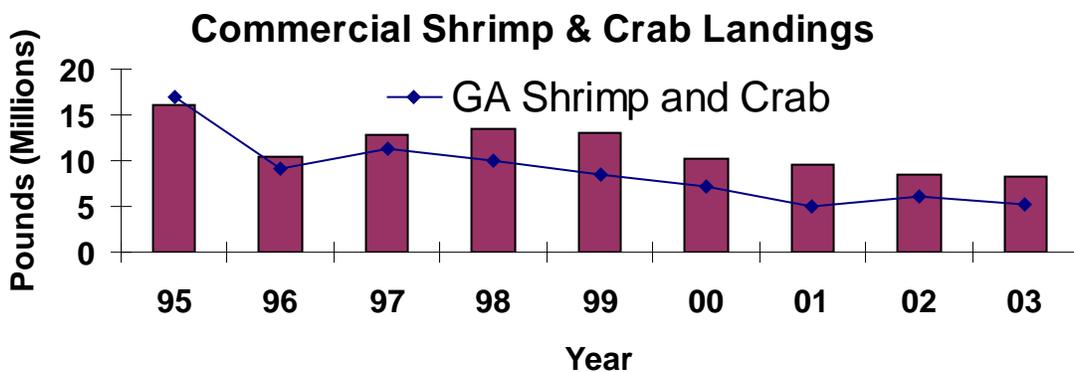
(Figure 7.15)

During FY 2004 there were 112,414 saltwater fishing licenses sold to shell fishers and boat anglers. Boat anglers represent a large portion of DNR's customer base. This customer base is extremely important, not only because of it's size, but also because they help support a number of recreationally oriented programs through their purchase of saltwater fishing licenses. The customer focus can be broadly summarized as: 1) providing continued and better recreational fishing opportunities for the citizens and guests of South Carolina; and 2) ensuring that the natural marine resources of this state are protected and conserved for future generations.

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The Marine Artificial Reef program is an excellent example of how the MRD fulfills its obligation to SC boat anglers by increasing and improving saltwater fishing opportunities. Established in 1975 the program now maintains 48 permitted reef sites. Over the past eight years 140 deployments have expanded the amount of fishable bottom on these sites by 6,186,600 cu ft. When compared to NJ, which has one of the best reef programs in the country, we have exceeded their annual coverage until the past three years. (See Figure 7.16)
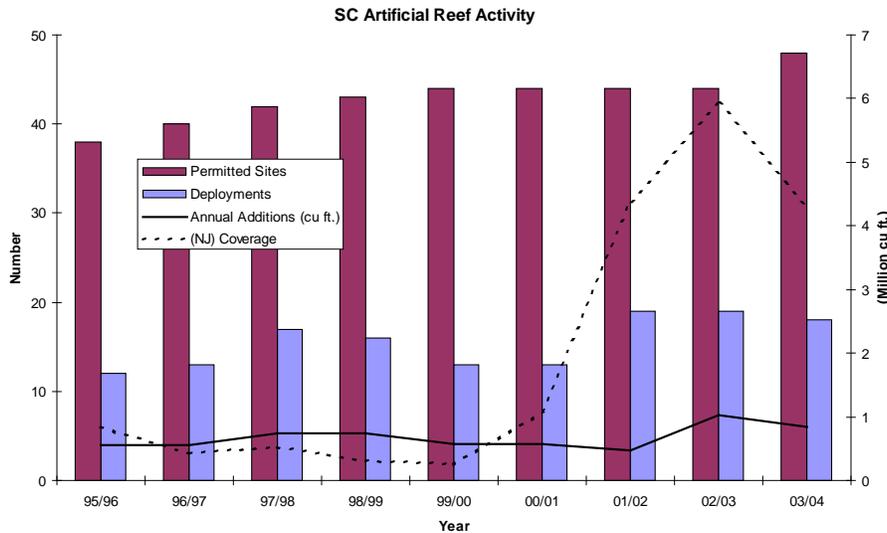
(Figure 7.16)

Program: Law Enforcement Operations

7.1-7.5: Tasked with the responsibility of managing and protecting the natural resources of the state, DNR is in a unique and challenging position of balancing the public desire to utilize our natural resources for recreational and commercial purposes, with the need to implement restrictions (laws and regulations) on the use of the resources to ensure their long-term viability. The Law Enforcement Division (LED) has the primary responsibility of protecting these resources and those who utilize them through the enforcement of laws and regulations. In addition to enforcement efforts, the LED conducts educational and public awareness programs to promote safety, improve compliance with the laws and regulations, and enhance ethical behavior. DNR law enforcement officers also routinely assist other law enforcement agencies with a variety of enforcement tasks. By combining resources with other agencies to meet specific needs (response to natural/manmade disasters, civil disturbances, manhunts, search and rescue operations), DNR, along with other law enforcement agencies, is able to serve the public in a cost-effective manner. (See Figure 7.17)

In order to assess job performance and the effectiveness of efforts to protect the state's natural resources and those who utilize them, the LED collects and monitors data relating to officer case load for Title-50 cases (game, fish, and boating) and non-Title-50 violations identified in 50-3-410 (littering, alcohol violations, disorderly conduct, simple possession of marijuana During 2003-2004, DNR officers made 20,859 game, fish and boating cases and made 2,864 non-title 50 cases. This equates to approximately 148 cases per field officer. (See Figures 7m & 7n)   In addition, these officers also provided 7,731 hours

assisting other law enforcement agencies in the state. Although, it is not the LED's intent to measure officer performance based on case loads alone nor is it totally accurate to correlate customer satisfaction to officer case load, it does present an opportunity to assess the type and number of violations that are being committed.

Based on an assessment of this data, law enforcement resources can be reallocated to address significant issues/concerns. Due to retirements and other losses, DNR has 79 officer vacancies. This represents an approximate 32% reduction in DNR law enforcement officers. In many situations, activities of DNR officers are directly focused on issues/concerns that the public has identified. The ultimate result of enforcement efforts should allow the public to enjoy the state's natural resources, with the knowledge and understanding that measures taken to ensure the protection of the resources and those who utilize them are paramount. The areas that are monitored reflect areas of concern to DNR and the general public. (See Figure 7.18 & 7.19)

Law Enforcement Hours Assisting Other Agencies FY 1995-2004

(Figure 7.17)

Caseload Per Officer FY 1995-2004

(Figure 7.18)

**Law Enforcement Non-Title 50 Cases FY 1995-2004**
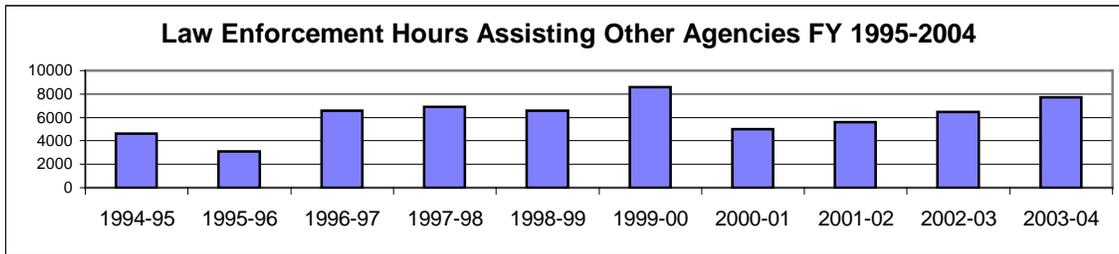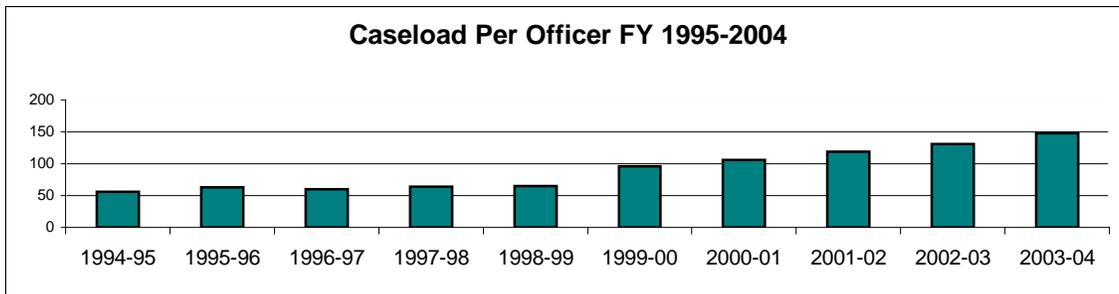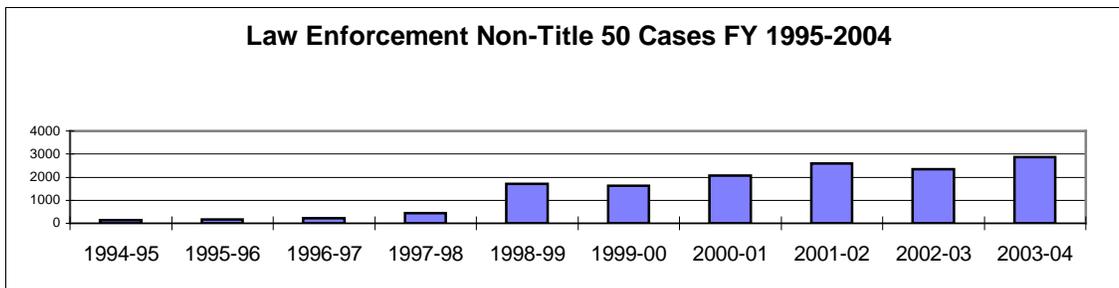
(Figure 7.19)

Program: Hunter Safety

7.1-7.2: 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 03-04 there were 27 non-fatal and 3 fatal hunting accidents that were reported to DNR. (See Figure 7.20)

Hunting Accidents/Fatalities FY 1995-2004

(Figure 7.20)

Number of Hunter Safety Student Particapants FY 1995-2004
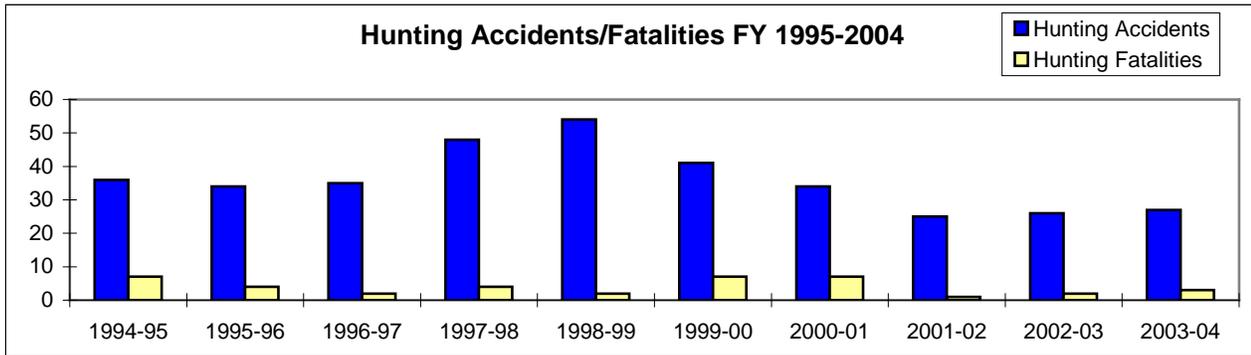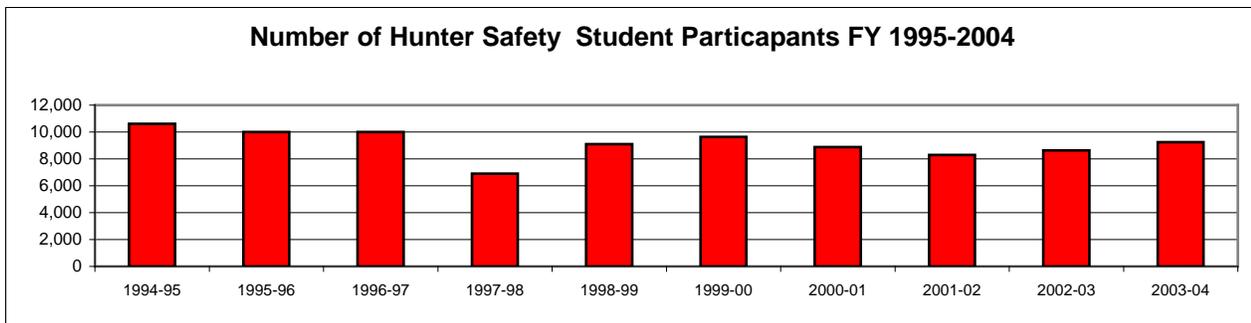

(Figure 7.21)

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 03-04 the total number of student participants in the Hunter Safety Program was 9,236. (See Figure 7.21)

7.4: A good measure of constituent trends is reflected in the total number of licensed hunters. Due to the varied game that is hunted in the state and the methods that are used, DNR has to work closely with different hunting constituent groups and the general public to address issues/concerns that affect them. This association has allowed DNR to be successful in obtaining legislation and additional resources to deal with specific hunting related issues/concerns. The partnering has also lead to the development of Public Service Announcements (PSA's) to address hunting safety and improvement of the educational programs intended to address hunting safety and ethical behavior. (See Figure 7.22)

**Total Number of Hunters Licensed in SC FY1995-2004
FY 1995-2002 does not include Lifetime or Gratis type license**
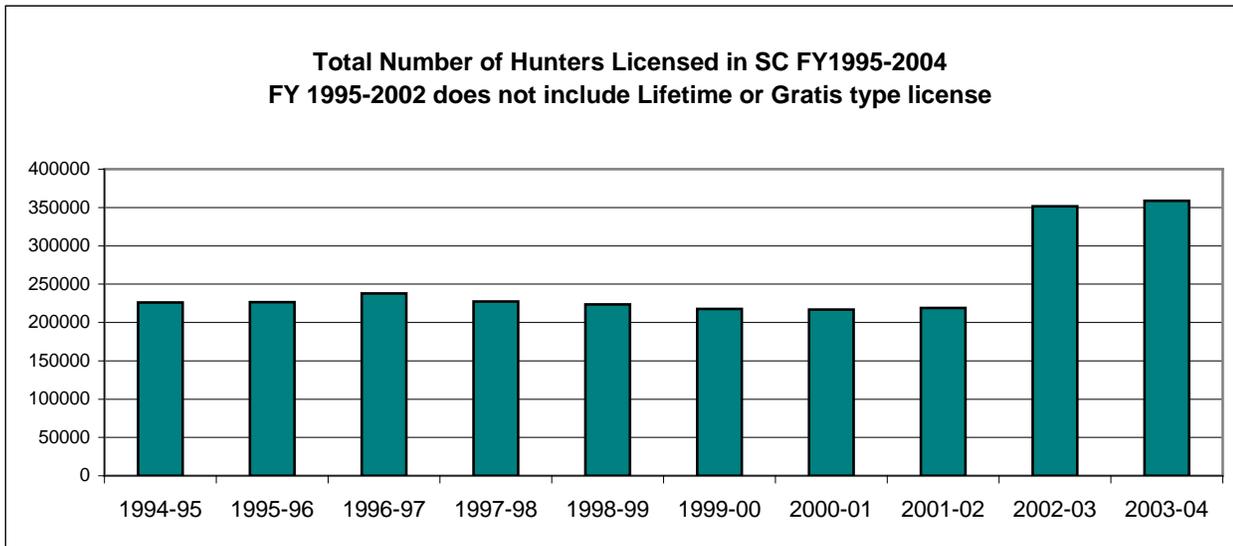

(Figure 7.22)

7.5: The total number and type of enforcement cases that are made are indicators of regulatory/legal compliance. From a review of cases made with regard to the nature and location of the violations, DNR is able to prioritize law enforcement resources and adjust the focus of education programs and public awareness campaigns to address hunting related issues/concerns. This information is also useful in establishing legislative priorities. In addition to addressing safety-related concerns in our education programs and public awareness campaigns, DNR also places great emphasis on the ethical use of our resources. In an effort to promote good citizenship and compliance with the laws that regulate hunting in our state, it has been DNR's experience that a viable and visible law enforcement presence tends to have the greatest influence in addressing hunting related problems. (See Figure 7.23)


Number of Law Enforcement Cases -- FY 1995-2004
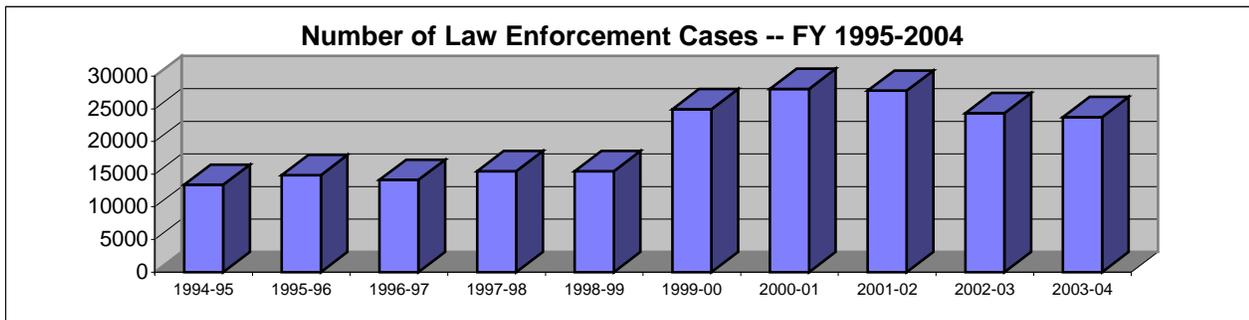
(Figure 7.23)

Program: Boater Safety

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. For calendar year 03-04 South Carolina recorded 113 boating accidents and 19 fatalities. (See Figure 7.24) These numbers equate to 29 accidents and 4.9 fatalities per 100,000 registered boats. Based on calendar year 2003, South Carolina ranked ninth in the country in total boat registrations. For comparative purposes, using the information on the two states ranked above and below South Carolina as base line data; we tracked this data for the past three years to see how our efforts to reduce boating accidents and fatalities compares to these states. (See Figure 7.24 & 7.25) In addition to tracking boating accidents and fatalities, DNR also monitors the number of "negligent boating operation" cases made. For FY 03-04 there were 201 negligent boating operation cases. (See Figure 7.26)

**Boating Accidents/Fatalities
FY 1995-2004**

■ Boating Accidents
■ Boating Fatalities

	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04

(Figure 7.24)

Calendar Year 2001 - 2003 Boating Accidents/Fatalities
(*registered boats)

□ Accidents
■ Fatalities

NY01 *526,190
OH01 *414,658
SC01 *382,072
IL01 *369,626
PA 01 *359,525
NY02 *529,732
OH02 *413,276
SC02 *372,074
IL02 *398,431
PA02 *357,729
NY03 *528,094
OH03 *413,048
SC03 *389,441
IL03 *360,252
PA03 *355,235

(Figure 7.25)

**Boating Safety -- Negligent Operation
FY 1995-2004**

	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04

(Figure 7.26)

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 03-04 the total number of reported student participants in the Boating Safety Program was 4,199. (See Figure 7.27)

Boating Safety Students -- FY 1995-2004
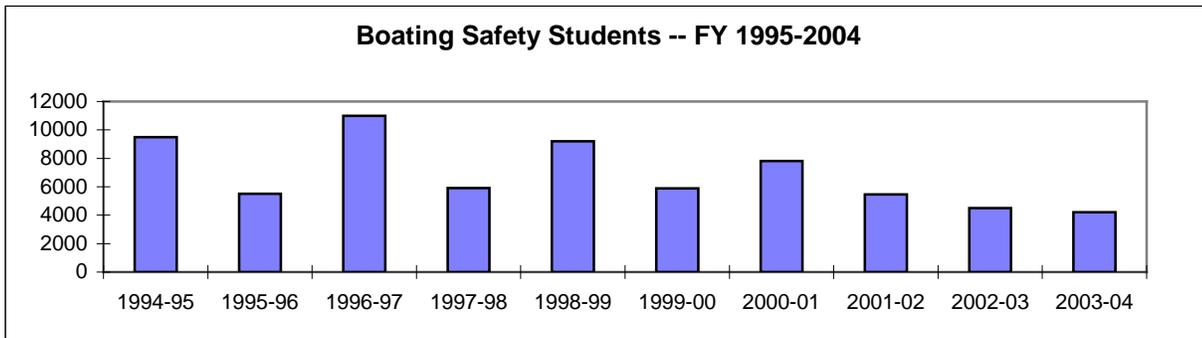
(Figure 7.27)

7.4: 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/associations to address issues/concerns. This association has allowed DNR to be successful in obtaining legislation and additional resources to deal with specific boating related issues and general growth of the activity. The partnering has also lead to the development of PSA's to address boating issues and educational tools. There were 389,441 registered boats in South Carolina in calendar year 2003. (See Figure 7.28)

Number Registered Boats in SC Calendar Year 1994-2003
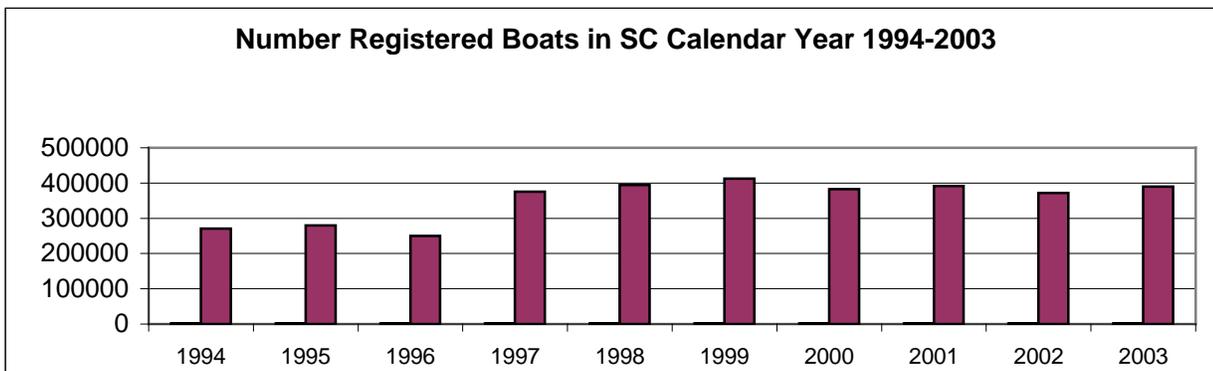
(Figure 7.28)

7.5: The number and type of enforcement cases made are indicators of regulatory/legal compliance. From a review of cases made with regard to the nature and location of the violations, DNR is able to prioritize law enforcement resources and adjust the focus of education programs and public awareness campaigns to address boating related issues/concerns. This information is also useful in establishing legislative priorities. In addition to addressing safety related concerns in our education programs and public awareness campaigns, DNR also places great emphasis on the ethical use of our resources. In an effort to promote good citizenship and compliance with the laws that regulate boating on the waterways of our state, it has been DNR's experience that a viable and visible law enforcement presence tends to have the greatest influence in addressing boating related problems.

Program: Palmetto Pride

Palmetto Pride designated LED over the last year to Chair and take the lead role in the fight against litter in South Carolina. These involve numerous state, local, and federal law enforcement agencies across S.C. To this date, LED has helped establish a litter task force in all of the 46 counties. Our communication center also mans and operates the "litter busters" hotline for reporting of litter violations. (See Figure 7.29 & 7.30)

Number of Bags of Litter Per Mile
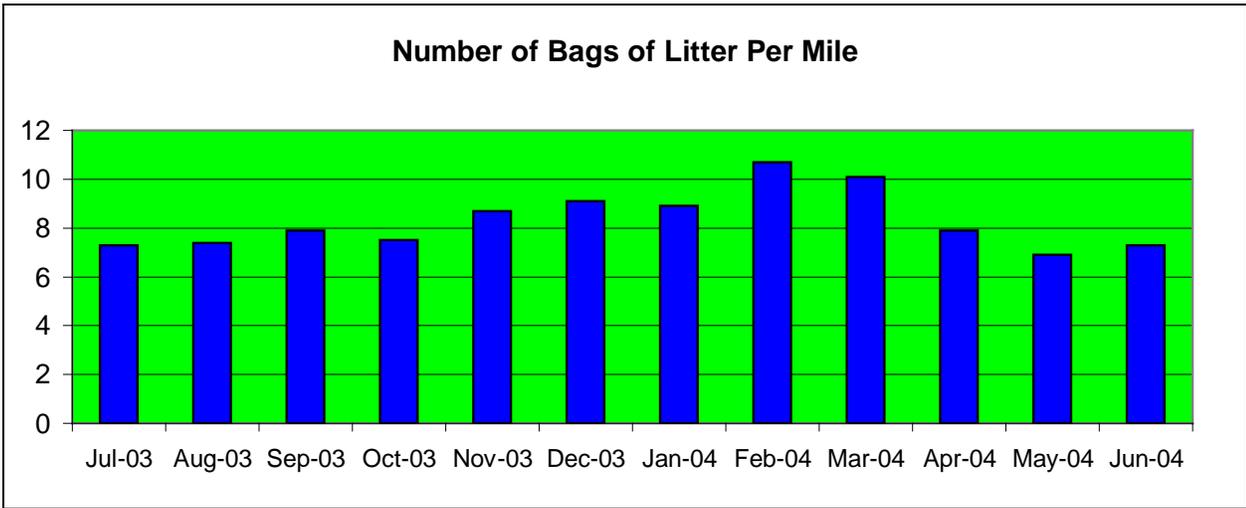
Source: S.C. Dept. of Corrections / Palmetto Pride   (Figure 7.29)

**Number of Litter Buster Hotline Calls Received at DNR's Communication Center**
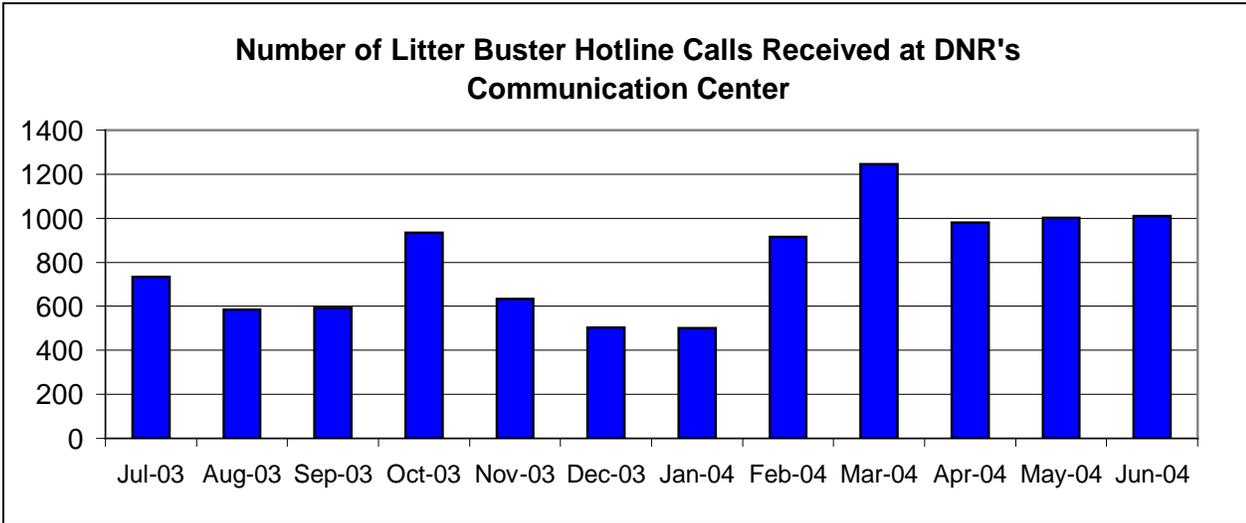
(Figure 7.30)

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. (See Figures 7.31 & 7.32) Educational programs include Project Wild, Project Wet, Camp Wildwood, Envirothon, Aquatic Education, Coastal Adventure Cruise Program, Marsh Classroom, Touch Tank Classroom Activity, MRD Tours, 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. Recent reductions in funding will result in changes in agency program and outreach efforts

 # DNR Educational Events/Classes

	1998	1999	2000	2001	2002	2003

(Figure 7.31)

 # Participants in DNR Educational Programs
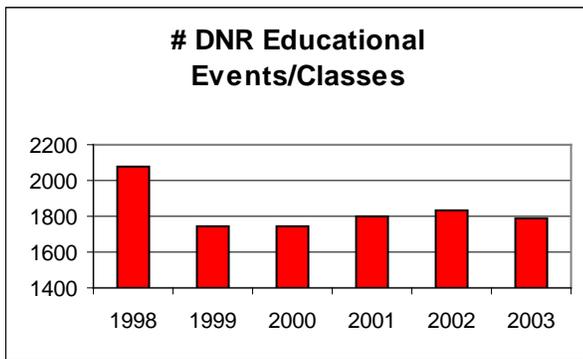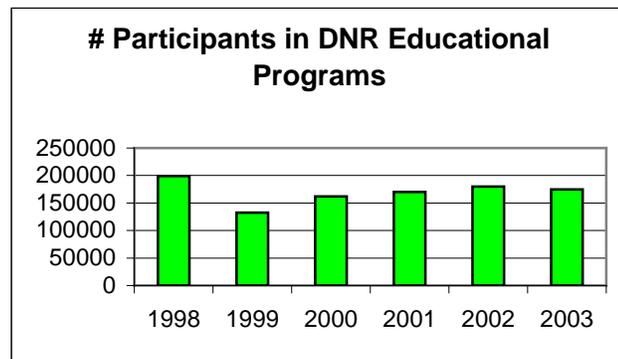
(Figure 7.32)

DNR's website was created in 1994. It contains organizational and administrative information such as job postings, procurement solicitations and awards, hunting and fishing rules and regulations, and research on fisheries and wildlife management initiatives, several sources of primary data including river and lake levels, precipitation and temperature station histories, and a series of GIS natural resources layers. There are numerous methods of measuring customer satisfaction and website effectiveness. DNR maintains several on-line forums, fact pages and e-mail opportunities for user feedback. A customer satisfaction survey was conducted in May 2001 as part of an overall website evaluation, and more than 140 users responded. The results indicate a 92% overall satisfaction with the website and their likelihood to revisit DNR's website. Public awareness is further enhanced through the 60,000 subscribers to the *SC Wildlife* magazine, approximately 375 statewide and regional news releases, and public service announcements aired by approximately 225 radio and TV stations in 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 the individual DNR divisions. Recently produced PSA's include the Palmetto Sportsmen's Classic, National Hunting and Fishing Day, limits on red drum fishing, hunting and boating safety, oyster shell recycling, Take Me Fishing and DNR Free Fishing Days. Current budget constraints also limit the number of PSA's that are being produced, along with the educational, promotional and institutional videos that are often produced for use at speaking engagements, educational, promotional and public events.

PSA's are mailed to 200 radio and 25 TV broadcast outlets in the state. They are also sent to adjoining states whose broadcast signals serve South Carolina residents. This saturation further increases the likelihood of public service announcements being seen in any given market, each of which contains at least four nationally affiliated TV networks.

In November 2003, the video section began producing 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 and features DNR programs and activities, field trips to state natural areas and information on conserving, protecting and enjoying our natural resources. Twelve programs are produced yearly.

Program: Land, Water and Conservation

Conservation Districts Program
To protect and manage the natural resource base, Department staff provided technical assistance to the public in cooperation with the 46 conservation districts and the USDA-Natural Resource Conservation Service. 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. Through Farm Bill conservation programs, $23.6 million in federal cost share assistance was provided for installation of Best Management Practices, a $4.2 million increase from the previous year. (See Figure 7.33) An additional 344,540 acres were placed in a conservation plan, bringing the grand total to 8.2 million total acres in South Carolina covered by a conservation plan.
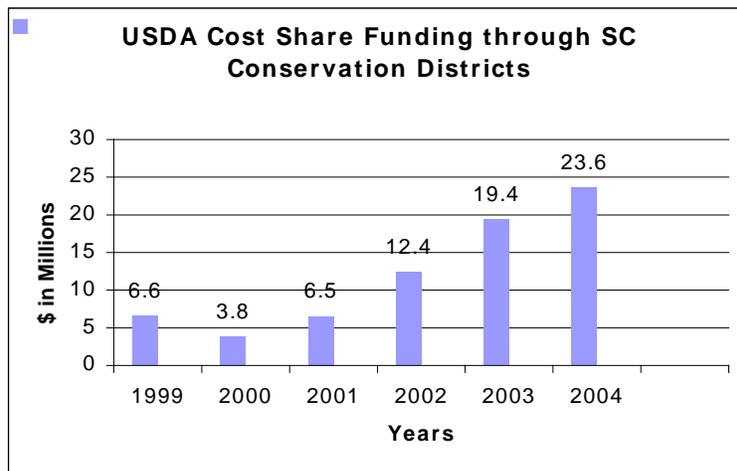
(Figure 7.33)

Staff provided direct technical assistance in planning and implementation of Farm Bill program applications through a cooperative working agreement contract with USDA-NRCS. Staff provided 600 staff days of technical assistance for the Environmental Quality Incentives (EQIP) cost share program, bringing in $142,000 to the Department. Staff provided assistance to conservation districts and land users on other Farm Bill programs including the Wildlife Habitat Incentives Program (WHIP) and the Farm and Ranch Protection Program (FRPP)

The state funded Aid to Conservation Districts at the $414,000 level in FY 2002-03. This funding enabled the 46 conservation districts to continue to provide assistance to local land users and other citizens. Direct staff assistance was provided by DNR to the 46 conservation districts and 230 commissioners on a regular basis through meetings, planning sessions, training, technical assistance, and public interaction.

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

Staff continued to provide management assistance at the Congaree Bluffs Heritage Preserve. Development continues on the Environmental Education Center at the Bluffs. Beginning on July 1, 2003, the Conservation Districts Section staff formally began providing management support to selected

Heritage Trust Preserves around the state. Staff conducted monitoring, management and protection activities on 33 Heritage Trust Preserves.

Due to budget cuts, staff participation in training workshops, seminars and periodic staff meetings was severely curtailed and in many cases eliminated. Due to travel restrictions, staff was unable to attend national and regional conservation meetings. Four field positions remain vacant requiring a redistribution of the workload. Employees were encouraged to be innovative, to look for ways to improve service, to interact with supervisors, and to network with coworkers and others to accomplish job tasks in spite of budget limitations.

Hydrology Program

Staff members continued working with the North Carolina Department of Environment and Natural Resources, Alcoa Power Generation, Progress Energy, and the Federal Energy Regulatory Commission to ensure that sufficient water is released into the Pee Dee River from lakes in North Carolina to meet environmental, industrial, and municipal needs of South Carolina. Staff hydrologists are also working with the Georgia Department of Natural Resources and the U.S. Army Corps of Engineers on the development of a management flow model to determine how to optimize and equitably utilize water of the Savannah River, and with the U.S. Fish and Wildlife Service, the Georgia DNR, and Augusta Water Utility on minimum flow requirements at Augusta Shoals in the Savannah River.

Hydrologists continue to monitor 56 wells for water-level changes, 2 wells for saltwater intrusion at Edisto Island, and 3 stations on the North and South Santee Rivers for river stage and seawater intrusion. Geophysical surveys and traditional mapping techniques were used to locate ground water at 22 well sites in the Piedmont.

A second edition of the South Carolina Water Plan was published that incorporates the experience and knowledge gained from the severe multiyear drought that occurred from 1998-2002. The Water Plan is a guide for managing the state's surface and ground water to maximize the use of this resource while protecting it for future use. Five other reports were published by staff members and are available on DNR's website. Hydrologists are also finalizing a comprehensive assessment of the state's water resources.

Several new studies were initiated during the past year. Hydrologists began working with the U.S. Geological Survey to develop a ground water flow model of the Coastal Plain. This will be used as a management tool to assess the impact that future withdrawals will have on existing users of the resource. Hydrologists are also studying the removal of a section of the Edisto Island causeway to restore the flow regime of tidal creeks and the marsh ecosystem.

Geological Survey Program

Based on citizenship, the Geological Survey is the sole source provider of geologic map information to the public within the state. Stakeholders and the STATEMAP Advisory Committee continue to define critical areas needing new geologic information. Once defined, critical areas are prioritized, and the development of action plans is guided by that prioritization. During FY 2004, priority was given to selected parts of the Jocassee Gorges, Bluffton, Lake Marion, and Greenville-Spartanburg areas. Impact on the environment established the Jocassee Gorges area as first priority; approximately 120 square miles were mapped. Impact of man's activities on the coastal ecosystem established the Bluffton area as second priority; approximately 136 square miles were mapped. Protection of stakeholders, a core function, established the Lake Marion and Greenville-Spartanburg areas as third and fourth priorities. Development

of knowledge in those areas is proactive and could lessen the impact of possible earthquakes. Approximately 290 square miles were mapped in the two areas.

Cycle time for introduction of new map products was maintained at 18 months and continues to be controlled by external funding, i.e. STATEMAP and the National Park Service. Georgia and North Carolina also participate in the STATEMAP program and maintain the same product cycle time. Value was added to new map products by placing the information in an electronic format. Electronic refinement added value to other maps covering approximately 783 square miles. Development of derivative products optimized available resources to bridge learning gaps. (Figure 7.34)

Area Mapped by State
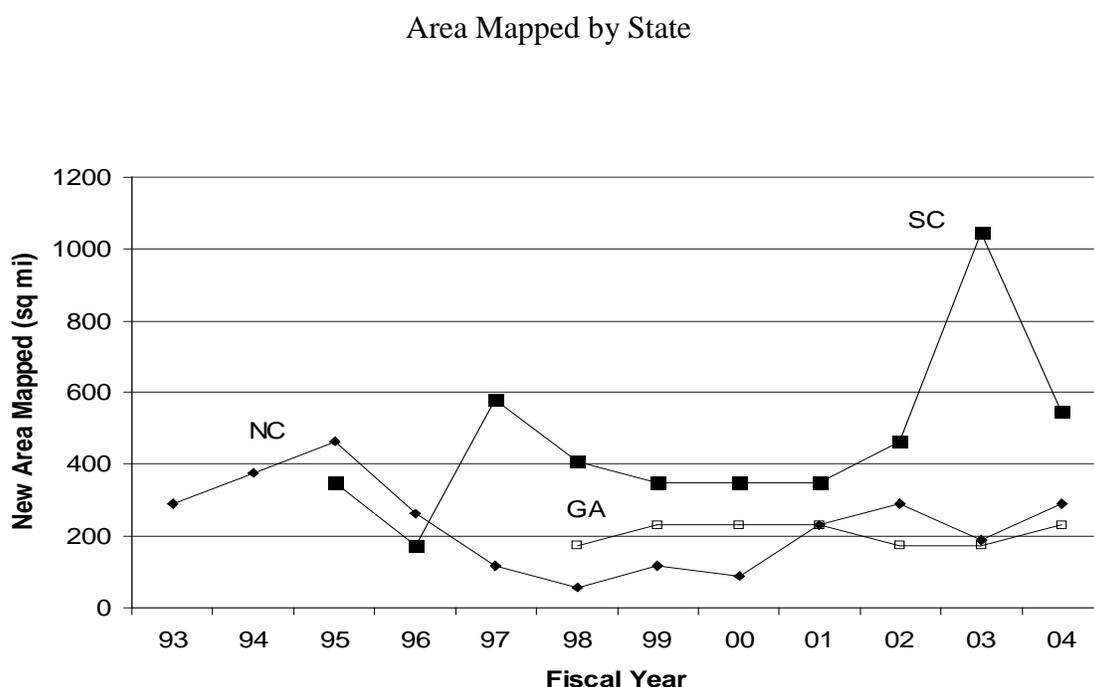
(Figure 7.34)

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). Funding for the program is cost-shared between available federal, state, and local (public and private) sources. Aquatic plant management operations were conducted on 17 water bodies at a cost of $633,045 using federal and local funds. 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 8,455 acres. This represents a 24% decrease in coverage from FY 2003 primarily due to drawdown control of hydrilla on Lake Murray. It also represents an 80% decrease from peak coverage in 1996. (See Figure 7.35)

Nuisance Aquatic Plant Coverage in Public Waters
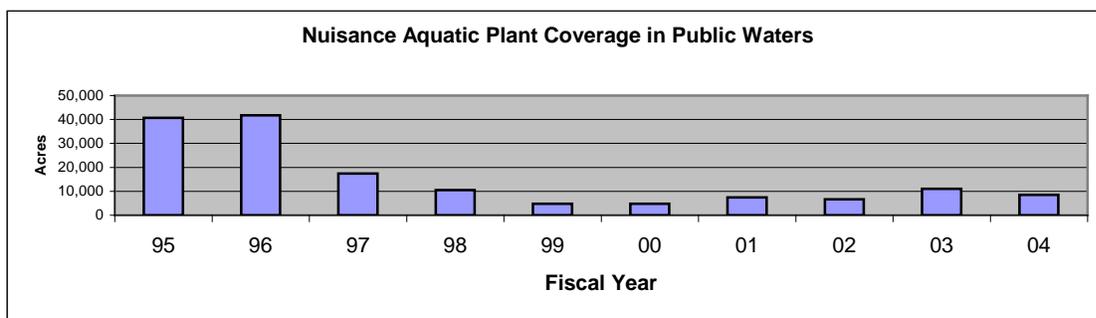
(Figure 7.35)

Environmental Review Program

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 each of the past five fiscal years, more than 90% of all requested environmental reviews were completed within the requested time period. The number of comprehensive reviews conducted (those for which a field site visit and and/or G.I.S. evaluation were performed) increased steadily for the five-year period 1997 – 2001. In 2002, travel restrictions due to budget reductions have led to a leveling off in the number of comprehensive reviews conducted. This trend has continued in 2003 and 2004 (See Figure 7.36).

Number of Comprehensive Environmental Reviews
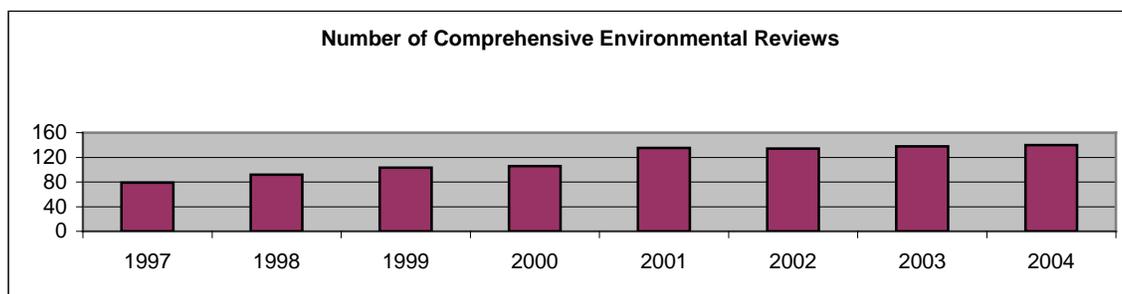
(Figure 7.36)

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 chemical analyses on over 32 constituents for field staff from all divisions with the department and occasional requests outside the agency. Time-critical chemical analyses are provided for a number for programs including herbicide residue analyses for the Aquatic Plant Management Program.

During FY 2004, the laboratory conducted 1393 analyses on 58 total samples from all DNR resource management divisions. Quality assurance and quality control measures were maintained. Staff

participated in DNR's Safety Committee and assumed the position of Flood Mitigation Assurance Program Coordinator.

River Conservation Program

The Rivers, Watershed and Stewardship Program includes the South Carolina Scenic Rivers Program, the Watershed and River Corridor Planning Program and the Stewardship and Outreach Program. The state Scenic Rivers Program, created by the South Carolina General Assembly in 1974, and the Watershed and River Corridor Planning Program have a strong community-based planning component. A key measure of effectiveness and mission accomplishment for these projects is the level of public participation. During FY 2003-2004, over 1200 constituents were directly involved in projects ranging from scenic river advisory councils, community outreach meetings and workshops or river corridor planning projects. Other measures are the completion of resource management plans and the completion of management objectives. A revision of the management plan was completed for the Broad Scenic River. Management plans were initiated for the Great Pee Dee and Black Scenic Rivers. Another measurement of effectiveness is the strength of our cooperative partnerships in our scenic river projects. Currently over 100 individuals are involved in river management through involvement in our Scenic River Advisory Councils.

In FY 2003-2004, we had two active programs in our Stewardship and Outreach area. In our Stewardship Program we provided assistance to several developers seeking advice on minimizing environmental impacts of development, provided natural resources planning assistance to Great Falls and participated in the South Carolina Mayor's Institute. A Stewardship Development Award was given to the Three Rivers Greenway project in West Columbia and Cayce. The Beach Sweep/Rivers Sweep cleanup involved over 1600 volunteers who picked up approximately 34 tons of trash at over 65 sites in South Carolina.

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 2003, program staff trained over 200 community officials and professionals, provided technical assistance to over 2,000 citizens, and delivered information with over 1,000 website visits. The program initiated a Flood Map Modernization Initiative that will provide more accurate GIS based Flood Insurance Rate Maps. FEMA awarded $3.145 million in FY 04 toward the project. One measure of the effectiveness of the program is community participation in the National Flood Insurance Program. South Carolina ranks sixth in the nation for flood insurance policies in effect. The number of policies in 2003 exceeds 141,000 and has steadily increased over the past 20 years (See Figure 7.37). South Carolina leads all neighboring States (GA, NC, TN) in the number of flood insurance policies.

Number of Flood Insurance Policies in SC
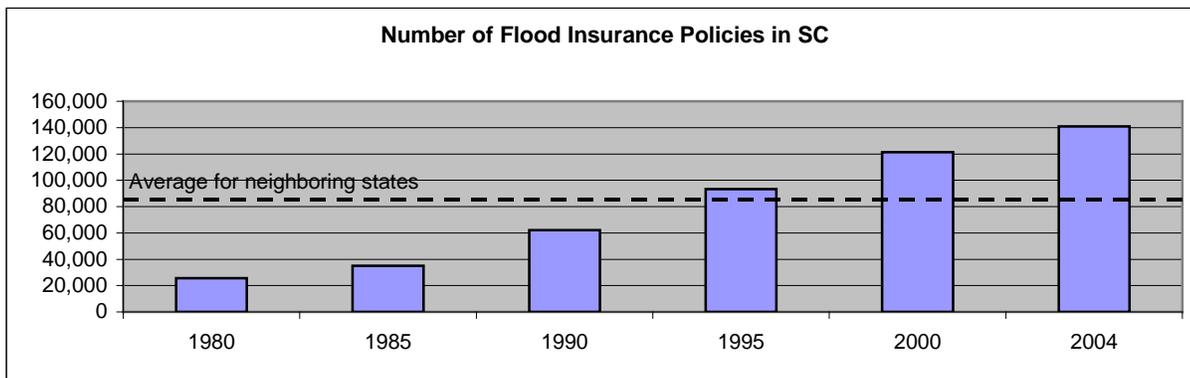
(Figure 7.37)

Technology Development Program

The Division established the Technology Development Section (formerly the Natural Resource Information Management and Analysis Section) to provide a holistic, integrated approach to systems, database, and information management. The administrative services computing group of the agency was merged into the Technology Development Section in 2002. This combined all information technology support into a single program to address short and long-term technology needs. This Section 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 Swide 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 operational priorities and goals of the technology section are established through an evaluation of scientific and administrative staff needs and adherence to professional information management standards, procedures, and protocols.   Customer satisfaction is measured by efficient staff access to current software and data, with minimal system and network interruption. In-house staff provides most of the information management services, although critical natural resource data are jointly funded and developed with appropriate federal mapping agencies. This provides cost share opportunities and ensures compliance with accepted national mapping standards. In addition, data developed by the program are provided to other government agencies, public organizations, and citizens through the GIS data clearinghouse via the Internet.

The primary concern over the past year was to consolidate and improve the computing environment throughout the agency. Several critical components were completed. The communications network was upgraded to provide standardized high-speed file transfer and data access to all agency staff. Elimination of older network technology reduced maintenance costs by 50% while increasing data access capabilities. The communications network also was reconfigured to consolidate services in the Columbia office. This eliminated two costly primary connections. Similarly, expensive frame relay connections to several remote field stations were replaced by high-speed, more cost effective communications frameworks. In addition, the numerous email systems maintained by the agency were combined into a single system with centralized management and standardization of addressing schemes.

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A consultant was retained in early 2004 to assess the information technology needs of the agency. Their study clearly supported the need to upgrade the financial, human resources, procurement, licensing, titling, and other critical operations programs of the agency. The plan recommended a combination of commercial software packages that are supported on a wide range of hardware platforms complemented by open source computing resources where feasible. This approach will eliminate the reliance on proprietary mainframe systems and the need for in-house software maintenance. It also will provide a more efficient interface to the statewide enterprise architecture under development by the State Chief Information Office. An open-systems, Linux-based server was installed to initiate the conversion of mainframe programs to more cost-effective, user-friendly applications implementing Oracle relational data base management systems technology.

DNR has maintained several key natural resource GIS data layers, such as soils, wetlands, stream networks and elevations, since the mid-1990s. These data are used by staff to better manage the state's natural resources. They also are provided at no cost to other state and federal agencies, local governments and the public through the Internet. This system provides substantial data base development, processing, and file transfer cost savings. Access to the data is accomplished by downloading specific data layers stored as 7.5 minute quadrangle data files. In the past two years, DNR initiated the development of a new system that would provide Internet mapping services through the agency web site. When completed, this will provide for enhanced Internet-based visualization and query of various natural resources data layers without requiring special software on the web site visitor's computer. The IMS server was installed and the data clearinghouse was 75% converted to the new system before key staff departure delayed its completion. 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 152,000 GIS files were downloaded, which is, down significantly from the previous year. (See Figure 7.38) This is primarily attributed to the lack of current Digital Orthophoto Quarter Quadrangle data. The standard cycle of imagery data update was scheduled for winter 2004 but lack of funding caused DNR to cancel the project.
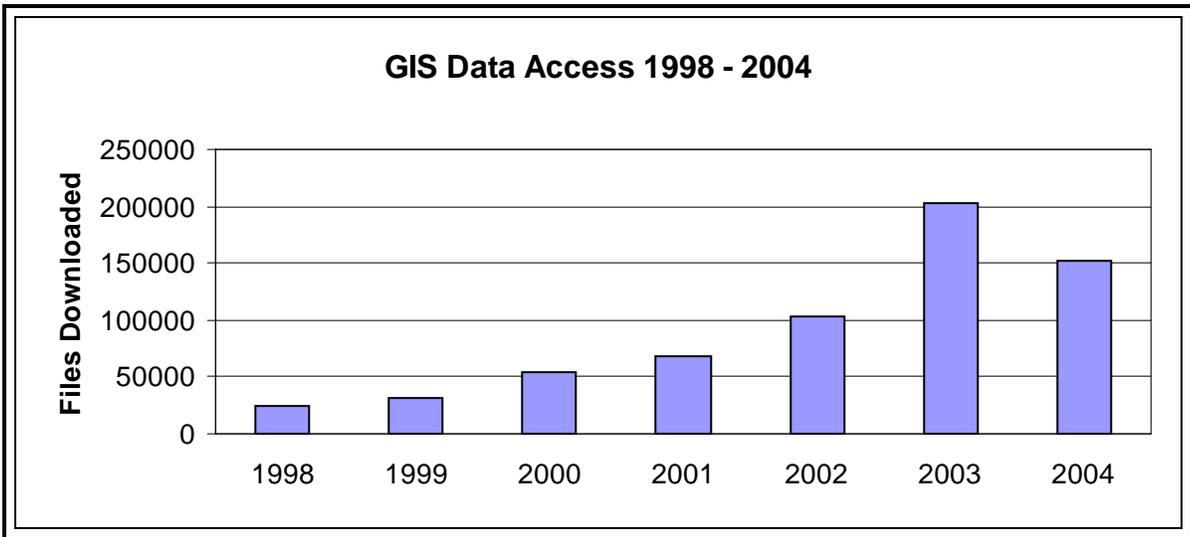
(Figure 7.38)

DNR's website was created in 1994. It contains organizational and administrative information such as job postings, procurement solicitations and awards, hunting and fishing rules and regulations, and various research or fisheries and wildlife management initiatives of the Department. In addition, DNR's website includes several sources of primary data including river and lake levels, precipitation and temperature

station histories, and a series of GIS natural resources layers. There are numerous methods of measuring customer satisfaction and website effectiveness. DNR maintains several on-line forums, facts pages and email opportunities for user feedback. The GIS data clearinghouse provides a mechanism for users to comment on the effectiveness of the site. Of seventy-eight comments received in 2003-2004 on the clearinghouse, most were positive. The only negative items were concerned the absence of metadata for some data and inquiries regarding DNR plans to update the DOQQs and complete the wetlands data. The absence of current data for these two layers results from a lack of funding. Several of the comments were questions regarding user identification revalidation and technical access issues.