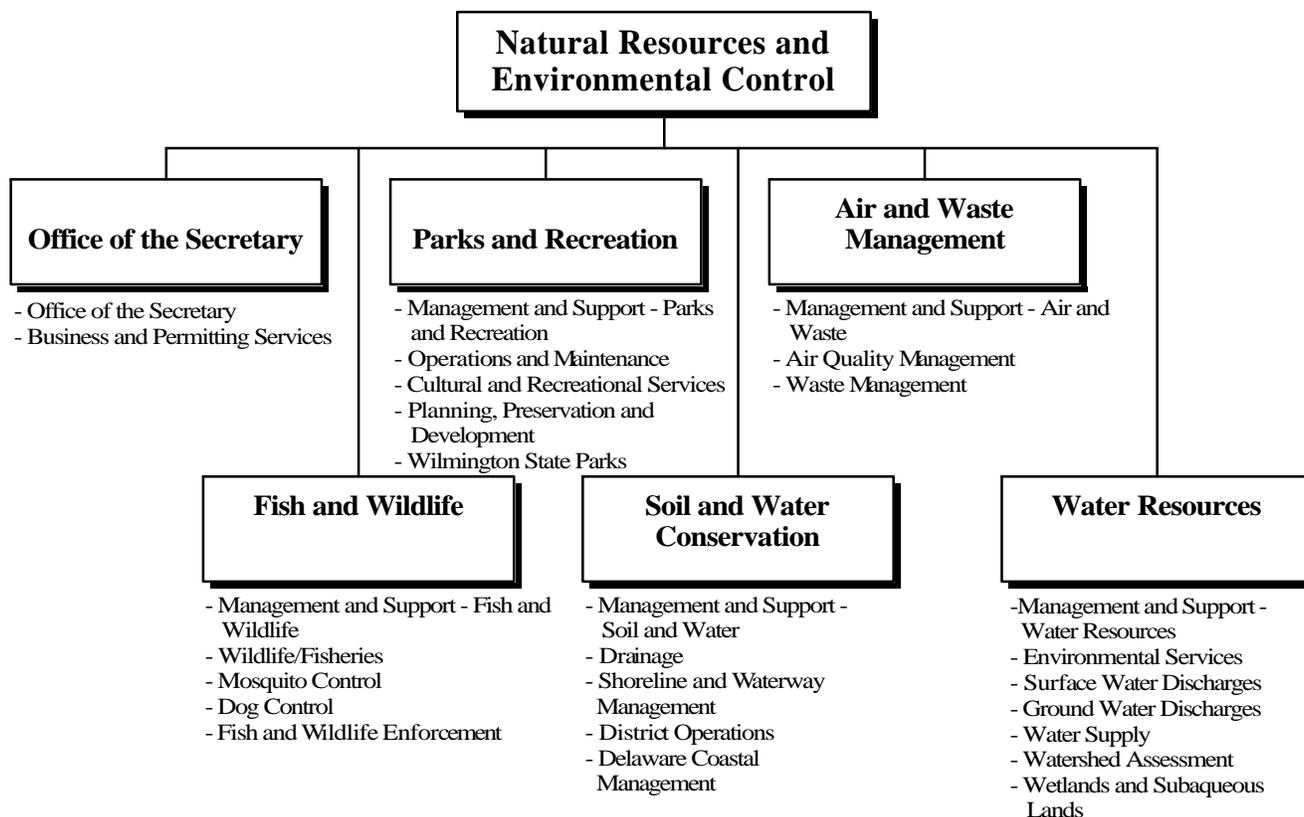


NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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MISSION

To promote, through service and education, the wise use, conservation and enhancement of the state's natural resources, protect public health and the environment, and provide quality outdoor recreation.

KEY OBJECTIVES

- **Protecting Public Health and Safety.** The protection of public health is perhaps Department of Natural Resources and Environmental Control (DNREC) most fundamental priority. In today's society, humans and other terrestrial and aquatic species are exposed to many sources of contamination that manifest themselves in varying forms.

Public health is protected from environmental stressors by striving to improve air quality, protecting the citizens against consumption of

harmful substances and exposure to toxic substances, emergency preparedness and other public health-related activities. Efforts are targeted towards avoiding the generation of the pollutants and substances that have the potential to negatively impact the public health. Where avoidance is not possible, the department seeks to reduce exposure and mitigate impacts on human health and the environment. The results of these activities are also difficult to measure, as the linkages, if any, between certain pollutants in the ambient environment and human health are only beginning to be discerned.

Goals for the Protection of Public Health and Safety

- Attainment of the ozone air quality standard
- Reducing air toxics
- Surveillance of air and attainment of all air quality standards
- Emergency preparedness and prevention
- Protection of drinking water supplies
- Protection of shellfish consumers
- Safe water for swimmers

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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- Controlling nuisance pest species
- Clean up sites with releases of hazardous substances
- Flood protection and water management
- **Protecting and Improving Water Quality.** Water quality degradation can be attributable to any number of causes or sources. It is perhaps the most prevalent problem in Delaware and impacts the entire State. The sources of water quality degradation have been fairly well studied over the past few decades and the stressors that these sources impart to both ground and surface water can be formidable obstacles to improving the quality of our water resources.

Degraded water quality impacts more than simply the water body itself. Poor water quality impacts public health and fish and wildlife habitat and can be a hindrance to future economic prosperity in Delaware. Despite the pervasiveness of sources, actions to prevent or control sources and resultant stressors can be effective, as evidenced by the vast improvement in water quality since the early 1970s.

Goals for Protection and Improvement of Water Quality

- Control point and non-point sources of pollution
- Attainment of surface water quality standards
- Reduce emissions that contribute to acid rain
- Clean up sites with releases of hazardous substances
- Ensure adequate and sound management of hazardous wastes
- Ensure sound solid waste management
- Prevent leaks from underground storage tank systems
- Ground water protection
- Preserve wetlands and subaqueous lands
- Flood protection and water management
- Implementation of a whole basin management approach
- Provide assistance to the community
- Provide laboratory services for the physical, biological and chemical characterization of surface and groundwater quality
- **Protecting and Improving Fish and Wildlife Resources.** Wildlife and fisheries resources are subjected to a variety of environmental stresses that collectively impact the health and numbers of these resources. Water quality deterioration caused by pollution negatively effects fisheries resources. Low oxygen levels due to eutrophication and

sedimentation inhibit fish from absorbing oxygen at levels that support optimum fisheries stocks. Contamination from agricultural activities and industrial wastes manifests itself in fish flesh/shellfish, with the need for increased health advisories about fish/shellfish consumption.

Changing land use patterns and conversion from open space to urban and industrial development fragments the landscape with negative effects on wildlife resources. One option that continues to offset this negative impact is an active land acquisition and/or easement program within the department. Open space preservation is one objective that has been successful in addressing this escalating problem.

Goals for Protection of Fish and Wildlife Resources

- Protect wildlife and fisheries habitats
- Stabilize and/or increase wildlife population and fisheries stocks
- Improve public awareness about wildlife and fisheries resources
- Promote habitat restoration
- **Protecting Our Valuable Lands.** One of Delaware's long-standing attractions is its unique and diverse blend of open spaces and natural areas. Expanses of forestland, meadows, wetlands and beaches can still be found in surprising abundance in a state located in the center of the densely populated northeast corridor. Today, as Delaware continues to enjoy the benefits of sustained economic growth, there is recognition among its citizens that key open spaces must be preserved consciously and conscientiously preserved; otherwise, an important element of our "quality of life" will be lost.

In 1990, the Delaware General Assembly enacted the Land Protection Act and Senate Bill 110, a funding mechanism for open space protection. Twenty State Resource Areas (SRA) comprising over 200,000 acres were targeted for protection, and approximately \$7 million per year was earmarked for this program. Funding supports the land protection efforts of the divisions of Parks and Recreation, Fish and Wildlife, Historical and Cultural Affairs, and the Forestry Section. Over 8,000 acres of land have been acquired using Open Space funds coupled with complementary assistance from local, federal and non-profit sources.

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Goals for Protection of Valuable Lands

- Protecting our coastal zone
- Revitalizing brownfields
- Maximizing and protecting open space
- Achieve sustainable development
- **Enhancing Recreational Opportunities.** Parks, recreation areas, greenways, trails and waterways are all elements of Delaware's recreational estate that impart a quality of life sought by everyone. These special areas and the activities that take place on them are essential to the physical, mental, economic, and environmental health of Delawareans and their communities.

Delaware's 18,000-acre state park system is the foundation for a state system of parks that includes the holdings of state, county, local, federal and non-profit agencies. State Parks serve over three million visitors each year. Balancing the increasing physical pressures of these visitors with the need to protect the resources that has attracted them is a distinct challenge. This is further complicated by the state parks' high level of financial self-sufficiency (75 percent in operations) that calls for an entrepreneurial management style.

Goals for the Enhancement of Recreational Opportunities

- Enhancing Delaware's State Parks
- Enhancing Safe Boating
- **Improving Effectiveness as an Organization**
Some of DNREC's highest priorities transcend the previous strategic priorities and are included here to recognize the importance that they play in attainment of DNREC's goals.
- **Information Resource Management**
Information is a key resource to empower citizens of the State and DNREC to better protect, restore, and manage our ecosystems. Thoughtful and visionary planning and utilization of collective information resources are critical to this. Information management must support efforts to streamline administrative processes, improve customer satisfaction, empower employees, and the reinvigoration of effectiveness and efficiency in many programs. DNREC has adopted a Strategic Plan for Information Resource Management (IRM) that presents a clear and concise vision for the agency.
- **Education and Outreach**
Educating the public, the customers and children on environmental issues is perhaps DNREC's most

important goal. An informed citizenry is the single most effective means of achieving environmental improvement. DNREC's efforts in teacher education, media relations and general educational activities strive to promote citizen awareness and responsible citizen action.

- **Human Resources Management**

As in any organization, DNREC's employees are its greatest asset. Through training and other employee development services, DNREC hopes to attain a highly motivated and knowledgeable workforce that is responsive to the needs of our citizens and the environment.

- **Environmental Indicators**

Environmental indicators communicate appropriate and meaningful information about the environment, and how human activities affect it in a way that highlights emerging problems and draws attention to the effectiveness of environmental protection programs and policies. We have resolved to:

- **Service Quality**

DNREC issues more approvals and permits than any other state agency in Delaware and its permitting activities impact conceivably every Delawarean. In addition, as a large agency with a myriad of missions, there are any number of processes (administrative, fiscal, personnel, etc.) that support activities and help conduct business. In an era where governmental efficiency and customer service are key public policy goals, DNREC has identified a need to improve services and has adopted a continuous improvement philosophy aimed at not only permitting services, but the activities of the agency as a whole.

To be successful in business process re-design, DNREC must adopt quality management principles and practices at the top of the organization and apply these principles to identified processes. Both human and financial resources will be needed to analyze existing processes and implement redesigned processes.

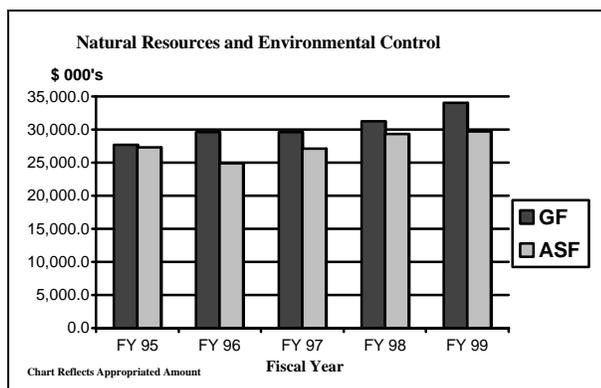
- **Fiscal Efficiencies**

DNREC will strive to further streamline and strengthen public involvement in developing the various workplans its programs develop in the course of daily operations. DNREC intends to continue its efforts to synchronize work plan development, implementation, and performance measurement (environmental indicators) for federal and state

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budgeting purposes. Common project periods for all federal funds might improve the ability to effectively integrate the collective efforts of the many diverse programs. DNREC will continue to examine the possibility of consolidating project periods for some or all federal grant programs around the state's fiscal year (July 1-June 30). Transition to a new project period must be seamless and not result in undue delays or disincentives for the State.



BUDGET

	FY 1997 ACTUAL	FY 1998 BUDGET	FY 1999 GOV. REC.
GF	33,833.8	31,301.6	34,038.4
ASF	18,491.8	29,345.8	29,783.1
TOTAL	52,325.6	60,647.4	63,821.5

POSITIONS

	FY 1997 ACTUAL	FY 1998 BUDGET	FY 1999 GOV. REC.
GF	334.0	339.2	364.2
ASF	271.0	265.0	266.3
NSF	135.0	138.8	137.5
TOTAL	740.0	743.0	768.0

FY 1999 BUDGET HIGHLIGHTS

OPERATING BUDGET:

- ◆ Recommend enhancement of \$365.8 for Whole Basin Management Program, and one-time funding of \$50.0 in the Budget Office's Contingency for an additional Whole Basin initiative focusing on Piedmont Stream protection and habitat conservation in the Office of the Secretary.
- ◆ Recommend one-time funding from the Budget Office's Technology Fund for data integration in the Office of the Secretary.

- ◆ Recommend enhancement of \$40.0 and the conversion of 1.0 NSF FTE (Community Relations Coordinator) to General Fund in the Office of the Secretary.
- ◆ Recommend enhancement of \$15.0 in the Office of the Secretary for Department-wide training plan emphasizing diversity.
- ◆ Recommend one-time funding of \$65.0 in the Budget Office's Contingency for wildlife damage control in the Office of the Secretary.
- ◆ Recommend enhancement of \$7.5 for the State of the Environment Report and volunteer coordination in the Office of the Secretary.
- ◆ Recommend enhancement of \$24.0 for the sand bypass system in Shoreline and Waterway Management.
- ◆ Recommend enhancement of \$46.1 and conversion of 1.0 ASF FTE (Analytical Chemist) to General Fund in Environmental Services.
- ◆ Recommend \$92.3 for the State Park Partnership program, which utilizes inmate labor at parks, in Operations and Maintenance.
- ◆ Recommend enhancement of \$893.2 in personnel costs, and 23.0 FTEs for Wilmington State Parks. Recommend enhancement of 1.0 ASF FTE and \$22.4 ASF for the position of Account Technician. Recommend enhancements of \$338.2 for supplies; \$4.0 for travel; \$650.0 for contractual services; and \$45.0 for energy. Recommend one-time funding of \$132.0 for capital improvements.

CAPITAL BUDGET:

- ◆ Recommend \$800.0 for the conservation cost sharing program which provides incentives to landowners or users to support the design and installation of Best Management Practices that will protect the state's natural resources and water supplies by preventing urban and agricultural non-point source pollutants from reaching surface and subsurface waters, as well as protect important farmland soils from excessive erosion and provide wildlife habitat.
- ◆ Recommend \$1,250.0 to address a backlog of deferred park rehabilitation projects.

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- ◆ Recommend \$600.0 to continue the tax/public ditch program.
- ◆ Recommend \$1,000.0 to continue the beach preservation program.
- ◆ Recommend \$1,000.0 to address infrastructure issues at the Indian River Inlet Marina within Delaware Seashore State Park.
- ◆ Recommend \$300.0 for Minor Capital Improvements and Equipment for those parks within the city of Wilmington that will be managed by the Division of Parks and Recreation commencing in FY 1998.
- ◆ Recommend \$7,000.0 from the Twenty-First Century Fund for open space acquisition in order to protect critical natural and cultural resources.
- ◆ Recommend \$15,000.0 within the Infrastructure Investment Plan for the Open Space program. These funds are to be expended over a three year period and shall be used for the purchase of land or conservation easements consistent with the State's land use policies and growth management strategies.
- ◆ Recommend \$14,000.0 within the Infrastructure Investment Plan to address water and wastewater issues statewide.

OFFICE OF THE SECRETARY

40-01-00

MISSION

To oversee the development and implementation of state environmental, natural resource and recreational policies and programs; promote employee productivity through technology and training; manage the department's financial and human resources; promote quality and continuous improvement of the programs; assist other agencies in the promotion of environmentally sound, economic development; and coordinate policy among the department's divisions.

KEY OBJECTIVES

- Increase citizen recognition and approval of department programs by 25 percent.
- Increase circulation of Outdoor Delaware magazine by 1,000 subscribers.
- Increase teacher/educator participation in environmental education activities by 20 percent.
- Increase the public's involvement in setting environmental priorities.
- Reduce time elapsed from completion of record to final hearing officer's report by 10 percent.
- Establish a solid information resource management foundation to efficiently meet the department's evolving mission and program needs.
- Implementation of paperless processes for administrative and program management functions.
- Hire, maintain, and develop the most qualified and diverse workforce.
- Improve utilization and coordination of department's resources to effectuate efficient and comprehensive ecosystem management (Whole Basin Management) through completion of first full rotation of management cycle for all basins within the State by the year 2004.
- Provide seamless, user friendly, efficient services to businesses or individuals seeking information on permits or approvals from DNREC and assist small businesses with compliance under the Clean Air Act.

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- Advance a cleaner environment resulting from reduced generation of wastes by implementing pollution prevention projects within the department, providing direct pollution prevention technical assistance to external organizations, and raising awareness of pollution prevention in the general public.
- Advance sustainable development.
- Promulgate Coastal Zone regulations by June 1, 1998.

BACKGROUND AND ACCOMPLISHMENTS

Bringing a more orchestrated approach to solving environmental challenges has been a major focus of DNREC's Whole Basin Management team. Through watershed management, DNREC staff is bringing more coordination to a variety of environmental issues facing a specific geographic area. Addressing hazardous waste sites, storm water runoff, industrial wastewater discharges, wildlife habitat and fish population issues simultaneously in a specific basin will enhance the state's ability to improve water quality and habitats in a more efficient manner. DNREC will strive to apply environmental indicators to ecosystems and watersheds recognizing that success in improving the environment will often come from multi-disciplinary initiatives in specific areas. Under the leadership of the whole basin coordinator, staff is assessing information on the state's five major watersheds and 41 sub-basins. Basin teams representing all of DNREC's divisions are addressing issues in the Piedmont area of New Castle County and the state's watersheds draining to the Chesapeake Bay. Subsequent years will focus on the Inland Bays/Atlantic Ocean, Delaware Bay Drainage and the Delaware Estuary.

The Business and Permitting Services Office (BPS) is a relatively new entity within the Office of the Secretary, designed to provide non-regulatory assistance functions for businesses and permittees within Delaware. The Office is designed around three basic program areas: pollution prevention, permitting assistance and the Clean Air Act Ombudsman. Accomplishments of the office include providing assistance to more than 20 firms with a variety of Clean Air Act issues, development of a five-year pollution prevention strategy for DNREC, initiation of Pollution Prevention Week, conducting 12 on-site waste reduction audits and reinvigoration of DNREC's Development Advisory Service and assisting more than 30 clients with

economic development projects involving DNREC. BPS staff has also continued oversight of implementation of the permitting reform effort in DNREC that has completed over 90 percent of the original recommendations.

The Human Resources Office has prepared a department-wide Human Resources Workforce Plan - a strategic and integrated plan designed to ensure that the department will have the right people, skills mix and performance culture to fulfill its mission and goals. Within this plan is a department-wide Recruitment Plan which will facilitate effective and efficient recruitment to meet the workforce demands of the department over a three year period. Both of these plans will require maintenance as the market and programs evolve.

The Office of Information and Education is responsible for coordinating DNREC's education and outreach efforts. Among major initiatives undertaken last year was a statewide public opinion survey conducted in conjunction with the University of Delaware Center for Applied Demography and Research. The purpose of the survey was to assess opinions about DNREC's strategic priorities, goals and objectives, DNREC's performance and communications effectiveness. The office also published DNREC's first ever State of the Environment report. The report was structured around the agency's priorities and was written to raise the reader's awareness as to the nature of problems facing Delaware's environment, why there is need for concerned and what is being done to improve the situation. The department's World Wide Web Internet site went on line in April and features access to a variety of information presented both by topic and by agency structure. Through a partnership with the Ciba Seed Project, correlations to the new state science standards have been developed for Project Wet (Water Education for Teachers), Project Wild and Project Wild Aquatic curriculum supplements. The environment continues to be a favorite theme for volunteers and DNREC is seeking to increase the number of people involved in enhancing Delaware's environment. Examples of DNREC's continued success with volunteers include the Christina River Cleanup in April when more than 1,000 people participated and the Delmarva Coastal Cleanup in September which drew more than 2,000 people who removed 30,000 pounds of debris from Delaware's coastline.

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

BUDGET

	FY 1997 ACTUAL	FY 1998 BUDGET	FY 1999 GOV. REC.
GF	3,395.9	3,548.1	3,993.6
ASF	1,028.9	1,042.7	1,040.3
TOTAL	4,424.8	4,590.8	5,033.9

POSITIONS

	FY 1997 ACTUAL	FY 1998 BUDGET	FY 1999 GOV. REC.
GF	28.7	30.7	31.7
ASF	18.3	19.3	19.3
NSF	2.0	2.0	2.0
TOTAL	49.0	52.0	53.0

OFFICE OF THE SECRETARY

40-01-01

ACTIVITIES

- Assist the divisions to meet their personnel, financial, legislative, policy and other needs promptly and accurately.
- Provide for rational, accurate, and responsive budgeting and financial management processes.
- Administer the Coastal Zone statute and provide timely, efficient services to industries seeking status decisions.
- Coordinate database and Geographical Information Systems (GIS) operations for the department.
- Guide IRM planning and decision making through the policy level Executive Steering Committee for IRM and Strategic Plan for Information Resource Management.
- Coordinate citizen volunteer activities and support at least five special events annually.
- Develop, implement and assess Whole Basin education program targeting teachers and youth leaders.
- Assess the department's workforce diversity and target/develop programs to address needs.
- Maintain a quality workforce through employee development and enhanced training opportunities.
- Ensure employees are educated regarding benefits and their rights.
- Perform a comparison study of the locations, quality and quantity of natural resources with land use activities for the purpose of establishing a baseline for natural resource protection, conservation and conversion by June 30, 1998.

- Establish ratios to track population growth versus resource consumption and develop the basis for a sustainable development index by June 30, 1999
- Enhance local government land-use planning and decision-making capabilities through coordinated DNREC participation in the Land Use Planning Act (LUPA) and Technical Advisory Committee project reviews

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
# reports to county land use advisory committees	160	180	220
# training hours provided to staff	2,262	2,500	7,500
# educators participating in environmental education activities	137	164	250
Increase citizen volunteer hours	8,400	10,000	12,250
Increase public access to environmental information (Internet users per month)	--	1,000	2,000
Increase in administrative and program management processes conducted electronically	--	6	24
Circulation of <i>Outdoor Delaware</i> magazine	5,367	6,367	7,000

BUSINESS AND PERMITTING SERVICES

40-01-02

ACTIVITIES

- Provide pollution prevention assistance to industry, local governments, and citizens.
- Work with the regulatory programs on incorporating pollution prevention into permitting processes and compliance activities.
- Facilitate quarterly Pollution Prevention Industry Roundtable meetings
- Implement mechanism to measure amounts of waste reduced by industry.
- Be a first point of contact for small businesses on Clean Air Act issues and assist them with permitting and compliance issues.
- Reach out to small businesses when upcoming regulations have a small business impact and educate them on the regulations and how to cost-effectively comply.
- Provide general assistance and information on DNREC permitting programs and provide a central

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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point of contact and coordination service for customer issues and problems.

- Operate and market the Development Advisory Service (DAS).
- Maintain momentum for permitting reform activities ongoing within DNREC.

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
Conduct on-site waste reduction assessments	12	12	12
Pollution prevention in permits	--	4	4
POTWs with pollution prevention efforts	--	3	3
Increase number of Ombudsman contacts by 50%	20	30	60
On site clean air act assistance	10	15	15
Assist potential permittees through DAS and increase general assistance efforts by 100%	30	60	90

FISH AND WILDLIFE

40-05-00

MISSION

To conserve and manage the fish and wildlife resources of the State; to provide safe and enjoyable fishing, hunting, and boating opportunities to the citizens of Delaware and its visitors; to manage and make available for public use and enjoyment the lands with which it has been entrusted; and to improve the public's understanding and interest in the state's fish and wildlife resources through information and outreach programs.

KEY OBJECTIVES

- Manage the deer herd to minimize adverse impacts on crops, shrubs and vehicles, and maximize positive impacts on farm income.
- Increase the number of acres of actively managed wildlife habitat on public lands by five percent annually.
- Eradicate 15 percent saltmarsh mosquito breeding habitat per year using Open Marsh Water Management techniques.
- Improve wildlife populations by five percent annually.
- Improve fish stocks in Delaware waters and range wide in accordance with Fishery Management Plans (FMP) approved by the Atlantic States Marine Fisheries Commission.
- Increase quail habitat by five percent per year on public lands.
- Reduce resource-related accidents by five percent annually.
- Strive for a fatality rate of zero, by increasing the number of hunter safety and boating safety students by five percent per year.
- Complete management plans for blue crab, eels, and horseshoe crabs.

BACKGROUND AND ACCOMPLISHMENTS

The division develops and administers programs designed to serve the interests of all of the people of the

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

State, and the division makes good faith efforts to work with all segments of the constituencies to identify needs and interests in fish and wildlife resources. Effective communication with the public is essential for division employees to manage the state's fish and wildlife resources in a responsible, and accountable manner that is consistent with the Performance Partnership Agreement. The division advocates the human use of fish and wildlife including observation, study, hunting, fishing and trapping, in a humane manner without threatening the continued existence of species.

The division has developed goals that support the department's Environmental Partnership Agreement with the U.S. Environmental Protection Agency.

- Applied habitat research, management and restoration initiatives, promote and practice the conservation of biological diversity by avoiding the unnecessary threat to or extinction of living species.
- Species research, monitoring and management activities promote the understanding of fish and wildlife stocks and populations through species-specific research and monitoring programs.
- Enforcement programs provide public safety services in the areas of boating, hunting and fishing, as well as protecting the state's wildlife, finfish, shellfish, non-game and endangered species.
- Education and training courses improve the awareness, appreciation and conservation of Delaware's natural resources by the users of this heritage.
- Infrastructure maintenance and development provides public areas and access sites that are environmentally sensitive, modern, safe, clean and convenient so that the states natural resources are available to all.

Recent major accomplishments of the division include:

- The division provided technical assistance to 59 private pond owners to control nuisance vegetation and improve fishing, and also provided technical assistance to more than 200 contacts with state and federal agencies in habitat considerations.
- In partnership with Safari Club International and Buckmasters, during the last four years more than 28,000 pounds of venison has been collected by volunteers of Delaware Sportsmen Against Hunger

to feed people through the Salvation Army and other charitable agencies.

- The Open Marsh Water Management Program at the Milford Neck Focus Area and East Chimney Marsh was completed, with a total reduction of insecticide treatment needed on 980 acres of salt marsh.
- The management of Delaware's abundant deer herd is a priority for the division. Deer are an important game species with almost 10,000 animals harvested by 18,000 hunters in 1996. The harvest may have stabilized the overall population for the first time.
- The division continues in the development of a management plan for northern bobwhite quail. During the past year, 90 acres were enrolled in the private landowner cost share program.
- Delaware is in compliance with 19 fisheries management plans required under the Atlantic Coast Fisheries Cooperative Management Act.
- The division, in partnership with the New Castle Conservation District, is working to improve fisheries and wildlife habitat values in degraded wetlands. This has resulted in water management on 250 acres of Augustine Creek.
- The division completed a new small boat access facility on the Nanticoke River in Seaford, Delaware.
- The division has deposited in excess of 20,000 tons of materials on 11 artificial reef sites three in the Atlantic Ocean and eight in the Delaware Bay), in an effort to enhance fisheries production and fishing opportunities.
- The division's Aquatic Resource Education Program, located at the Aquatic Resource Education (ARE) Center near Smyrna, continues to expand programs for young people in an effort to increase awareness about the importance of Delaware's aquatic habitats. The number of student and teacher contacts exceeded the projected ten percent increase in FY 1997.
- The Enforcement Section increased the number of Hunter Safety Education Certifications by 30 percent and Boating Safety Certifications by 11 percent.

BUDGET

	FY 1997 ACTUAL	FY 1998 BUDGET	FY 1999 Gov. REC.
GF	4,897.8	4,962.6	5,025.1
ASF	3,114.7	4,637.0	4,686.0
TOTAL	8,012.5	9,599.6	9,711.1

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

POSITIONS

	FY 1997 ACTUAL	FY 1998 BUDGET	FY 1999 GOV. REC.
GF	63.0	64.0	64.0
ASF	32.8	32.8	32.8
NSF	25.2	26.2	27.2
TOTAL	121.0	123.0	124.0

MANAGEMENT AND SUPPORT - FISH AND WILDLIFE

40-05-01

ACTIVITIES

- Direct, plan, and coordinate the administration of total division program strategies and objectives.
- Direct, plan and coordinate the development of mosquito control, fisheries, and wildlife resource initiatives.
- Coordinate, plan and develop state and federal budget funding strategies for division programs and initiatives.
- Represent the division on regional organizations such as the Atlantic States Marine Fisheries Commission, Atlantic Flyway Council, International Association of Fish and Wildlife Agencies.

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
Use existing surveys in order to establish a benchmark that will be used for future improvements in customer service in existing programs	1	1	1
Implement findings of Responsive Management Survey - Issue 2 editions of a division Newsletter to Hunters, Anglers and Boaters.	0	2	2

WILDLIFE/FISHERIES

40-05-02

ACTIVITIES

Manage, protect and conserve fish, wildlife and their habitats by:

- conducting research surveys and inventories of fish, shellfish, and wildlife populations;

- developing fish and wildlife management plans for: 13 state-owned wildlife management areas, 44 freshwater pond and marine fishing access sites, and 14 species of marine fish;
- monitoring, maintaining and regulating harvestable fish and wildlife populations;
- conducting integrated fish and wildlife management programs to promote the health of biological communities;
- providing technical assistance to landowners and government agencies;
- monitoring the users of fish and wildlife resources;
- administering a non-game and endangered species program;
- operating firearm/archery training facilities to promote safety; and,
- monitoring fisheries for diseases or lesions to indicate the presence of Pfiesteria.

Provide safe, high-quality opportunities for public enjoyment of fish and wildlife by:

- acquiring lands and waters for recreation and conservation;
- developing and maintaining public facilities;
- controlling aquatic and terrestrial weeds;
- improving fish and wildlife habitat;
- developing and implementing wetland enhancement initiatives; and,
- coordinating and conducting fish, wildlife, acquisition, and hunter safety and aquatic resource education activities.

Provide coordination, fiscal and accounting services for the division.

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
Increase # acres of actively managed wildlife habitat on public lands by 10% annually.	4,092	4,290	4,504
Restore 15 % of degraded wetlands under the Northern Delaware Wetlands Rehabilitation Program.	0	964	632
Improve public awareness for Delaware's aquatic resources by increasing # of teachers and student contacts in Aquatic Resource Education Program by 10% from the 1994 base level	4,857	4,903	5,393

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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MOSQUITO CONTROL

40-05-04

ACTIVITIES

- Monitor mosquito populations and levels of nuisance or disease.
- Investigate and assess controls via Open Marsh Water Management (OMWM)/Integrated Marsh Management (IMM), impoundment management, mosquito fish stocking, woodland control and insecticides.
- Provide temporary controls in response to disease outbreaks or rising nuisance levels through the use of chemical controls.
- Conduct research surveys and inventories of mosquitoes, fish and wildlife populations.
- Continue with the implementation and installation of OMWM systems within Delaware's wetlands.
- Continue the implementation of wetland rehabilitation within the Christina/Delaware River Corridor.
- Administer education programs as they relate to wetland restoration mosquito control problems and Integrated Marsh Management needs.

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
Eradicate 15% of saltmarsh mosquito breeding acreage habitat per year using Open Marsh Water Management techniques.	323	600	600
Achieve and maintain a 5% increase in nuisance free nights	68	73	73

DOG CONTROL

40-05-05

ACTIVITIES

- Administer a statewide dog control program through contracts with the Delaware and Kent County SPCA.
- Service complaints about dog law violations.
- Monitor dog law compliance and control unwanted dogs.

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
Reduce # of free-roaming dog complaints by 5% through programs designed to increase # of dog control agents and changes in dog fine statutes.	13,580	12,901	12,255

FISH AND WILDLIFE ENFORCEMENT

40-05-06

ACTIVITIES

- Enforce state and federal wildlife, finfish, shellfish, boating laws, both recreational and commercial.
- Encourage the reporting and continue the investigation of reportable boating accidents.
- Conduct statewide Boating Education Safety Programs in an effort to decrease natural resource type accidents.
- Conduct marine search and rescue operations, and conduct statewide marine rescue training for coastal fire companies.
- Manage and supervise a state vessel registration program.

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
Improve compliance with boating safety and resource laws by increasing enforcement boating, hunting and fisheries contacts as measured by a 5% reduction in contacts per violation using FY 1995 as a base for comparison	1,520	1,444	1,457

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

PARKS AND RECREATION 40-06-00

MISSION

To provide state parks, facilities and programs for outdoor recreational use; to protect natural resources in parks, nature preserves and greenways; to provide technical, financial and planning assistance to the public for park, recreation and conservation areas; and to make available natural and cultural interpretive and educational services.

KEY OBJECTIVES

- Complete transfer and implement operations and maintenance at three new Wilmington Parks
- Establish a transferable annual permit
- Have 40 percent of exhibits meet section standards
- Increase the recreation facility unit days by ten percent
- Increase the number of people participating in park programs by 2.6 percent
- Reduce the backlog of park facility and infrastructure projects by five percent, thus permitting staff to concentrate on more preventive maintenance
- Complete two park master plans in the next fiscal year
- Protect 2,000 acres, meeting the criteria for the Land Protection Act during the next fiscal year

BACKGROUND AND ACCOMPLISHMENTS

The division contains five administrative sections to carry out this mission:

- Management and Support
- Operation and Maintenance
- Cultural and Recreational Services
- Planning, Preservation and Development
- Wilmington State Parks

Ten field offices statewide are responsible for overseeing the operation of 18,000 acres in 13 state parks, ten nature preserves and four other sites. In addition, the division oversees 1,148 acres through six private nature

preserves and 36 conservation easements protecting 925 acres.

The division operates units containing a variety of landscape and natural resource features from rolling terrain in the uppermost regions of New Castle to lands and inland ponds throughout the State to coastal beaches in Sussex. Cultural and historic resources are protected and interpreted while a wide variety of recreational facilities are provided for Delawareans and out-of-state visitors.

BUDGET

	FY 1997 ACTUAL	FY 1998 BUDGET	FY 1999 Gov. Rec.
GF	6,460.7	6,112.2	8,324.4
ASF	5,583.3	6,732.6	7,173.9
TOTAL	12,044.0	12,844.8	15,498.3

POSITIONS

	FY 1997 ACTUAL	FY 1998 BUDGET	FY 1999 Gov. Rec.
GF	75.5	76.5	99.5
ASF	60.5	59.5	60.5
NSF	1.0	1.0	1.0
TOTAL	137.0	137.0	161.0

MANAGEMENT AND SUPPORT - PARKS AND RECREATION 40-06-01

ACTIVITIES

- Policy implementation and coordination
- Fiscal control
- Overall guidance in the development of CIP program
- Personnel - recruitment, hiring and training
- Volunteer recruitment and placement
- Inter/intra agency coordinator for the division
- Coordination of services for five citizen advisory councils
- Coordination of state park friends organizations
- Mini/micro computer support for the division
- Management of 21st Century Park Endowment and all State Park Trust Funds

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
Increase # of volunteer hours by 2%	20,966	26,000	21,380

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

OPERATIONS AND MAINTENANCE 40-06-02

ACTIVITIES

- Conduct building and grounds maintenance.
- Enforce State Park rules and regulations.
- Provide for site and visitor safety and security.
- Provide visitor services and assistance.
- Collect revenue and administer concession.
- Conduct marketing and promotion.

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
Maintain 92% customer service rating of state park visitors	92	92	92
Increase park revenue by 3%	\$5,343,000	\$5,503,000	\$5,478,000
Implement campground reservation at 5 state parks facilities	--	5	5

CULTURAL AND RECREATIONAL SERVICES 40-06-03

ACTIVITIES

- Plan and administer recreation activities, programs and events.
- Provide environmental education.
- Provide natural and cultural resource interpretative programs and exhibits.
- Conduct historic and prehistoric archeological surveys and preservation management plans.
- Provide folk life conservation and interpretation.
- Administer the Delaware Conservation Corps Program.
- Plan and develop state park trail system.

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
% exhibits meeting section standards	31	48	40
# people participating in park programs	160,000	161,000	168,000

PLANNING, PRESERVATION AND DEVELOPMENT 40-06-04

ACTIVITIES

- Plan, design, engineer and construct facilities and infrastructure within the state park system.
- Coordinate land protection activities, including acquisition, easements and donations, under the auspices of the Land Protection Act.
- Administer the Natural Areas program through the Land Preservation Office as defined by law.
- Administer state and federal grants and provide technical assistance to county and local governments for land acquisition, outdoor recreation facility and greenway development.
- Assess statewide outdoor recreation facility needs and issues.
- Coordinate and oversee the Council on Greenways and Trails, Natural Areas Council, and the Open Space Council.
- Coordinate a Geographic Information System (GIS) that supports the mission to protect resources and provide recreation opportunities.
- Provide staff and administrative support for the Open Space Council.

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
Reduce backlog of park building and infrastructure and rehabilitation by 5% (Expressed in thousands of dollars)	1,250,000	3,190,000	3,615,000
Protect 10,000 acres that meet the criteria of the Land Protection Act	--	--	2,000
Complete 2 master plans for state parks	2	2	2

WILMINGTON STATE PARKS 40-06-05

ACTIVITIES

- Implement a comprehensive maintenance and capital improvement plan to upgrade standards.
- Establish an enforcement safety program.
- Manage the Brandywine Zoo.

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- Provide public interpretive programming.
- Coordinate special events and facilities.
- Provide pedestrian links between the various park units and acquire remaining land in holdings at Alapocas Parks.

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
# of visitors to Brandywine Zoo	--	--	70,000
# of enforcement incidents per 1,000 visitors	--	--	1
# of park visitors	--	--	445,000
# of stadium uses per annum	--	--	75
# of park programs/events and attendance	--	--	75/160,000

SOIL AND WATER CONSERVATION 40-07-00

MISSION

To preserve and protect the state's soil, water and coastal resources by managing the state's shoreline, coastal zone and navigable waterways; regulate coastal and urban land use and construction activities; promote wise agricultural and urban land management practices; promote wise water management practices to preserve local agricultural interests, protect urban communities and provide for public safety; and ensure that federal activities, permits and licenses, Outer Continental Shelf plans and grants-in-aid are consistent with economic and environmental policies.

KEY OBJECTIVES

- Prevent increases and strive to reduce nutrients, sediments, and toxic substances in the Piedmont Basin, Chesapeake Basin, Inland Bays Basin, and Delaware River Basin by 2005.
- Reduce potential adverse wetland impacts by 25 percent during planning and construction of new tax/public ditch organizations.
- Incorporate innovative techniques for dredge material disposal into DNREC's statewide habitat enhancement program.
- Expand drainage, flood protection, and water management for an additional 6000 acres of agricultural and residential land.
- Manage storm water runoff from new development to the pre-development rate for the 2, 10, and (100 year in New Castle County) 24-hour rainfall event.
- Reduce long term annual loss of recreational and protective beach area from publicly accessible municipal beaches by 100 percent (i.e. no net loss as measured on a three to seven year re-nourishment cycle).
- Protect critical natural areas from ill-advised development.
- Educate the public on the importance of Delaware's Coastal Zone through education programs provided at the Delaware Estuarine Research Reserve Site.

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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- Remove approximately 94,000 cubic yards of undesirable accumulated sediment from lakes, ponds harbors, marinas and navigable waterways.
- Reduce imperviousness of new development by 20 percent by the year 2005.

BACKGROUND AND ACCOMPLISHMENTS

Drainage. The establishment and maintenance of public drainage facilities (tax/public ditches) provides public benefits that include: stabilizing agricultural production; more efficient nutrient utilization; reducing excess nutrient transport; decreasing road maintenance; trapping erosion and sediment; storm water management for urban and rural flooding; establishing a future maintenance program funded by tax ditch landowners; and establishing a firm base for the installation of agricultural Best Management Practices (BMP).

During FY 1997 there were 31 public ditches constructed. An additional 145 projects received technical assistance and many are to be constructed during FY 1998. There were 572 requests for drainage assistance and 55 percent of these have been resolved. The Pratt Farm and Sussex Tech. Wetland/Drainage Demonstration Projects were planned and designed and will be constructed in FY 1998, and 22 additional wetland related projects were either constructed or planned and designed. The Jordan Non-Ag and Black Stallion Army Corp. of Engineers required mitigation projects were completed. Also, 25.1 miles of tax ditch was constructed, 79 tax ditch meetings were attended, updates on Sussex County tax ditch assessments were initiated, 24 historical and cultural reviews were performed for various projects, and 44 permits or notifications were sent to the Army Corps. of Engineers.

Shoreline and Waterway Management. The beaches are considered to be the major attraction for tourism in the State. Tourism generated an estimated \$250 million in coastal Sussex County in 1990. There are approximately 13,900 residential units along Delaware's oceanfront, with a reported total value of \$3.4 billion. Threatening the resource are rising sea level, storms and permanent construction that interferes with the natural landward migration of beaches and dunes. These problems underscore the need to improve state management strategies regarding coastal storm hazards and beach erosion.

Shoreline and Waterway Management dredges removed over 40,000 cubic yards of accumulated sediment from Quillen's Point, the Augustine Beach Boat Ramp, the University of Delaware/College of Marine Studies Harbor and the Rehoboth Bay Sailing Association Marina. Over 60,000 cubic yards of sand were placed in completing beach replenishment projects at Broadkill Beach and Kitts Hummock. Ongoing projects include cooperating with the Army Corps of Engineers on the sixth year of the effort to develop a comprehensive shoreline stabilization plan for Delaware's beaches, and a cooperative effort by the Shoreline and Waterway Management Section and the District Operations Section to research beneficial uses of composted sea lettuce (ulva).

District Operations. District Operations assists the Conservation Districts in tailoring their programs to meet the needs of their diverse constituents, oversees the statewide implementation of the state's sediment control and storm water management program, and coordinates statewide non point source pollution control programs. District Operations programs combine research and education, technical assistance, financial incentives, and regulation with interagency and private partnerships. All programs target Delaware's top two non point pollutants, excess sediment and nutrients, and address the state's strategic priorities described in the FY 1998 Environmental Partnership Agreement and [Delaware's NPS Management Plan](#).

Post FY 1993 accomplishments include leveraging \$3,171,000 of Section 319/NPS Program Grant funds into \$5,156,000 worth of programs and projects throughout the State, funding 60 percent of the costs of mapping drinking water recharge areas in Kent and Sussex counties; providing over 4000 hours of sediment control and storm water management training and technical instruction for 3300 developers, contractors, surveyors and engineers; funding an interstate/interagency Piedmont Basin storm water monitoring program to measure non point pollutant loads in Pennsylvania and Delaware; directing the start-up of a new statewide environmental education program for high school students; administering the development of updated nutrient management plans on over 40,000 acres on 486 farms; and working with USDA-NRCS to secure \$673,000 of Environmental Quality Incentive Program funds.

Coastal Management. In 1997, the DCMP prepared an assessment of eight important coastal resources and developed a multi-year strategy to focus on three priority

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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areas: special area management, cumulative and secondary impacts and coastal wetlands. The Special Area Management Plan for Pea Patch Island will identify implementation actions to protect the Heronry, document and publish the process used, and evaluate existing authorities to manage, protect and restore coastal ecosystems. DCMP is also responsible for determining if federal activities, permits and licenses, OCS plans and grants-in aid are consistent with its economic and environmental policies. The Delaware National Estuarine Research Reserve will serve to bring education and research about coastal management to all Delawareans.

Accomplishments include preparation of a Special Area Management Plan for Pea Patch Island, protecting wetlands from cumulative impacts of non-water dependent uses by denying Nationwide Permit 29, coordinating environmental evaluation of the largest dredging project in Delaware (the deepening of the main channel of the Delaware River and Bay), public distribution of a CD-ROM with most DNREC data sets important for land use decisions, and advancement of education opportunities for sound coastal management decisions by starting construction of the DNERR educational and research center.

BUDGET

	FY 1997 ACTUAL	FY 1998 BUDGET	FY 1999 GOV. REC.
GF	7,107.7	4,672.6	4,695.1
ASF	548.8	3,054.6	2,979.6
TOTAL	7,656.5	7,727.2	7,674.7

POSITIONS

	FY 1997 ACTUAL	FY 1998 BUDGET	FY 1999 GOV. REC.
GF	47.5	46.7	46.7
ASF	--	--	--
NSF	12.5	15.3	15.3
TOTAL	60.0	62.0	62.0

MANAGEMENT AND SUPPORT - SOIL AND WATER

40-07-01

ACTIVITIES

- Provide administrative direction and supportive professional and technical services to all divisional programs and projects.
- Provide program planning, coordination, engineering, fiscal support and clerical services.
- Provide liaison among local, county, state and federal governmental legislators, officials and agencies.

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
Meet 100% deadlines for official requests from the department's Office of the Secretary	100	100	100

DRAINAGE

40-07-02

ACTIVITIES

- Conduct environmentally sensitive tax ditch planning and public ditch planning.
- Assist counties with legally mandated updates to tax ditch property owner files for all tax ditch properties.
- Provide tax ditch technical assistance (surveying, engineering, environmental evaluations, permit applications) for tax ditch formation and construction.
- Provide tax ditch technical assistance to all existing tax ditches for operations and maintenance.
- Provide tax ditch construction funding.
- Maintain, implement and expand Best Management Practices (BMP) for tax ditch planning and construction that incorporate water management for water dependent resources within the watershed.
- Provide technical assistance to conservation districts.
- Install and protect highway culverts to expedite tax ditch construction.

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- Cooperate and assist the Department of Transportation with emergency bridge replacement as needed.
- Investigate and resolve drainage complaints from landowners, public officials and agencies.
- Provide education outreach to agricultural and environmental communities to demonstrate the working relationship of drainage, agriculture and wetlands.

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
Increase acres of agricultural and residential land receiving drainage, flood protection and water management	413,000	419,000	425,000
Resolve 75% drainage problem requests	75	75	75
% response to drainage problem requests	100	100	100
Reduce potential adverse wetland impacts by 25% during planning and construction of new tax/public ditch organizations	25	25	25

SHORELINE AND WATERWAY MANAGEMENT 40-07-03

ACTIVITIES

- Develop and carry out beach preservation projects to protect and preserve Delaware's coastline.
- Administer coastal construction regulatory program.
- Improve storm hazard preparedness and mitigation.
- Reduce natural hazard losses through cooperation with FEMA and DEMA in state natural hazard mitigation programs.
- Operate and maintain sand bypass facility at Indian River Inlet.
- Conduct repair and maintenance program of publicly owned coastal dunes.
- Improve and maintain navigational channels statewide.
- Restore the environmental integrity of state-owned lakes and ponds.
- Monitor erosion rates of beaches and dunes through a comprehensive surveying program.

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
Increase removal of undesirable accumulated sediment by 5% (cu. yards)	40,000	77,500	94,000

DISTRICT OPERATIONS 40-07-04

ACTIVITIES

- Develop 80 percent of the staffing, technical and financial resources necessary to operate and maintain every storm water management facility in Delaware by the year 2000.
- Provide comprehensive Erosion & Sedimentation (E&S) and Storm Water Management Training to 30 percent of the land development community, in partnership with other agencies and members of the regulated community.
- Provide financial, technical and compliance assistance to delegated agencies for plan review and field inspection services on 2,000 acres of development and construction projects.
- Provide sediment and storm water management field inspection on federal and state funded non-DelDOT construction activities.
- Direct and administer Clean Water Act Section 319 grant funds for priority water quality assessment and implementation of best management projects.
- Provide extensive training programs for contractors, developers, animal producers, and agency personnel.
- Provide technical assistance to other agencies, engineers and consultants, farmers and animal producers, contractors and developers, and educators, college professors, and university officials.
- Provide funding and staff support for DNREC's Total Maximum Daily Load effort by performing related assessment and implementation activities in the Piedmont and Chesapeake Basins.
- Implement and assess environmental effectiveness of nonstructural sediment and storm water management practices as a pilot project in Kent County.
- Revise Chapter 40 and related regulations to accommodate the new Erosion and Sediment Control Handbook of Standards and Specifications and non-structural/alternative sediment and

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

stormwater management best management practices.

- Assist New Castle County in developing a financial mechanism for countywide storm water utility.
- Develop and support a statewide construction project database system and a District Operations-Conservation District based, geographic information system that allows for nutrient loading estimates at the sub-watershed level.
- Administer the Conservation Cost Share Program and agricultural component of the State Revolving Loan Fund Program in coordination with federal Farm Bill programs.
- Explore the expansion of E&S/Storm Water Management training to include all other department related programs into a coordinated training effort. (e.g. Groundwater and Surface Water programs, Wetlands and Subaqueous Programs).
- Develop an SRF program for storm water Maintenance activities.
- Provide lead staff support and funding for the Delaware Envirothon.

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
Increase # acres of construction sites achieving "substantial compliance"	2,128	2,000	2,200
Maintain 3% reduction nitrogen loadings in the Nanticoke and Inland Bays watersheds	3.0	3.0	3.0

DELAWARE COASTAL MANAGEMENT

40-07-05

ACTIVITIES

- Administer NOAA's grant award to DNREC for coastal management and DNERR.
- Provide grant funding to improve responsiveness to coastal management issues including coastal storm related damage reduction, near-coastal water pollution abatement, habitat improvement, oil pollution prevention and response, coastal access and pollution prevention.
- Administer the federal consistency provisions of the Coastal Zone Management Act for Delaware.

- Provide conflict resolution between multi-users of coastal resources.
- Promote sustainable development in Delaware's Coastal Zone.
- Protect coastal hazard areas from damage through newly developed policies.
- Implement actions to protect and enhance the Pea Patch Island Region in accordance with the Special Area Management Plan.
- Implement enhancement plan approved by NOAA for cumulative and secondary impacts avoidance and coastal wetland protection.
- Implement educational programs for the public, schools, resource users and decision-makers addressing coastal resource issues.

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
# grants awarded to local governments	2	2	3
% nationwide permits issued by U.S. Army Corps of Engineers	10	25	50
% expansion of school programs at Reserve	30	38	40

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

WATER RESOURCES

40-08-00

MISSION

To protect and enhance the quality and adequacy of Delaware's surface water, ground water, underwater, and wetland resources by professionally and enthusiastically serving every customer at all times with integrity. The division will value, train, and nurture its employees as its greatest asset to assure that integrity and excellent performance are maintained. To be successful, every employee will play a vital role in achieving the division's vision.

KEY OBJECTIVES

- Improve and maintain quality customer service to better protect water resources.
- Help customers meet water quality requirements.
- Expand educational assistance to schools and communities.
- Achieve a 25 percent reduction in water use during drought.
- Avoid the installation of drinking water wells into groundwater with known contamination exceeding state drinking water standards.
- Maintain incidences of shellfish borne diseases at no greater than current levels.
- Maintain incidence of swimming related disease at no greater than current levels.
- Foster beneficial reuse of biosolids and wastewaters.
- Eliminate surface water impairments from point sources.
- Increase number of stream miles meeting designated uses.
- Review criteria designed to protect water uses and values every three years.
- Minimize the potential for groundwater contamination.
- Establish baseline freshwater wetlands loss rate and reduce the rate 10 percent by the year 2000.

- Increase the percentage of shoreline that is protected from erosion by vegetation and/or rock rather than by bulkhead.
- Improve wastewater treatment and animal waste management capabilities by providing responsive and innovative water pollution control financing and technical assistance services.
- Achieve exceptional results in all laboratory performance results.
- Expand and market laboratory services.
- Reduce permit-processing times in the well and septic programs by 50 percent through implementation of Phase III of the business process redesign.
- Implement management actions that protect the public from Pfiesteria-related toxic events.
- Complete Total Maximum Daily Loads (TMDL) and Pollution Control Strategies (PCS) for watersheds.

BACKGROUND AND ACCOMPLISHMENTS

Water Resources has long recognized that conservation of Delaware's surface water, wetland and groundwater resources can be best achieved through helping its many customers work cooperatively with the division to achieve clean water. Fostering such cooperation through improved operational efficiency and customer service delivery, consistent with the division's environmental, compliance, conservation and management responsibilities of maintaining and enhancing Delaware's water resources for the public benefit, continues to be a main theme for the division.

The division's environmental responsibilities involve implementation of various regulatory programs; providing technical assistance, laboratory services, and educational services; performing applied research; and helping finance certain water pollution control measures. These responsibilities result in interaction with over 15,000 individual water resource users annually.

The division continues to serve its individual water resource customers, while also protecting the interests of Delaware's 700,000 residents by implementing the division's operating motto of "working for you to provide clean water for today and tomorrow".

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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Accomplishments during the past fiscal year:

- Achieved “excellent” customer satisfaction rating from 89 percent of respondents.
- Continued support to the Wastewater Facilities Advisory Council and assured Twenty-First Century Fund money was and will be properly allocated for wastewater.
- Administered and expanded water pollution control loans to communities, farmers (including dairy), underground tank owners through the State Revolving Loan Fund; developed improved septic loan program.
- Continued implementation of the highly streamlined well/septic permitting system that requires further technological and training investments to complete.
- Support the state’s efforts to prepare for future Northern New Castle County infrastructure needs.
- Adopted water well construction regulations revisions.
- Continued developing innovative technologies for wastewater disposal and shoreline stabilization.
- Carried out whole basin management in the Inland Bays, Nanticoke and Christina River basins.
- Continued implementation of the Environmental Services Section (laboratory) improvement plan
- Assisted several communities seeking central wastewater infrastructure facilities.
- Coordination and implementation of the Delaware Estuary Comprehensive Conservation and Management Plan and implementation of the Inland Bays Comprehensive Conservation and Management Plan.

BUDGET

	FY 1997 ACTUAL	FY 1998 BUDGET	FY 1999 GOV. REC.
GF	8,532.6	8,468.7	8,374.6
ASF	2,152.4	2,592.4	2,782.5
TOTAL	10,685.0	11,061.1	11,157.1

POSITIONS

	FY 1997 ACTUAL	FY 1998 BUDGET	FY 1999 GOV. REC.
GF	69.3	68.3	69.3
ASF	67.0	64.0	63.0
NSF	31.7	31.7	30.7
TOTAL	168.0	164.0	163.0

MANAGEMENT AND SUPPORT - WATER

RESOURCES

40-08-01

ACTIVITIES

- Improve and maintain quality services to division of Water Resources customers to better protect water resources.
- Continued implementation of Delaware Estuary CCMP action items through competitive grants within DNREC.
- Implement Inland Bays CCMP action items in coordination with the Executive Director of the Center for the Inland Bays.
- Wastewater engineering/financing planning assistance to communities.
- Provide water pollution control loans/grants to communities, homeowners, and agricultural producers.
- Provide staff support to the Wastewater Facilities Advisory Council.
- Provide input to local governments on projects and policies affecting wetlands and other resources.
- Provide land use/land cover information for priority basins.
- Develop a comprehensive water resource educational outreach plan, and pursue implementation funds.
- Produce maps from the geographic information system in support of multiple programs.

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
Expand measurement of division-wide customer satisfaction; achieve at least 90% in excellent ratings	90%	89%	90%
Implement an additional 5% of Delaware Estuary CCMP action items where DNREC is the lead	5%	5%	5%
Implement an additional 5% of Inland Bays CCMP action items where DNREC is the lead	5%	5%	5%
Provide wastewater engineering/financing planning services to communities/facilities	10	11	12
Maintain expanded use SRF loan application approval rates	75%	75%	75%

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

ENVIRONMENTAL SERVICES 40-08-02

ACTIVITIES

- Monitor the state of natural resources through biological assessments and chemical analyses to enhance the quality of life for Delaware's citizens.
- Implement International Organization for Standardization (ISO) 9000 standards and pursue registration.
- Identify new market opportunities, anticipate and satisfy clients' changing needs by expanding laboratory analytical capabilities to incorporate the best available technology.
- Embark on a new multifaceted monitoring and assessment program that targets the identification, the frequency of occurrence, and the magnitude of the Dinoflagellate *Pfiesteria piscicida*.
- Enhance staff capabilities, skills and knowledge through training and cross training.
- Provide educational initiatives for youth in schools, colleges, and universities and utilize skills of senior citizens through Project Seed, Science Alliance, job shadowing, internships, mentoring, tours, and volunteer programs.
- Implement pollution prevention strategies in selection of methods, equipment, and supplies to minimize waste generation.

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
Increase productivity in terms of efficiency by 4% per year for the next three fiscal years	--	4	8
Increase productivity in terms of effectiveness (market capture) by 2% per year for the next three fiscal years	--	2	4
Improve product delivery times to increase 4% per year for the next three fiscal years	--	4	8
% time in training to increase annually by 3% for the next three fiscal years	--	3	6
% completion for implementing ISO 9000 standards and pursuing registration	--	30	50

SURFACE WATER DISCHARGES 40-08-04

ACTIVITIES

- Equalize annual permit production and align permit issuance on a watershed basis to eliminate permit backlog by 1999.
- Issue NPDES permits that contain the necessary requirements and conditions, i.e., toxic controls, pretreatment requirements, storm water, CSO and sludge requirements.
- Issue licenses for wastewater treatment operators.
- Review plans and issue permits for construction of wastewater collection and treatment facilities.
- Issue permits for beneficial reuse of biosolids.
- Initiate timely and appropriate enforcement action.
- Conduct compliance inspections for NPDES facilities.
- Periodically review and update program regulations for point sources.

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
Increase % biosolids beneficially used.	95	96	97
Increase # stream miles meeting designated uses that contain point source discharges.	64	67	70

GROUND WATER DISCHARGES 40-08-05

ACTIVITIES

- Encourage designers and applicants to incorporate land treatment systems into their wastewater management plans.
- Perform construction and compliance inspections on 100 percent of all large on-site wastewater systems and 70 percent of all small systems.
- Issue large septic permits and spray permits in compliance with all applicable regulations.
- Issue replacement and repair permits for all malfunctioning subsurface systems.
- Issue Underground Injection Control permits and authorizations in compliance with all applicable regulations.

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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- Locate and inventory all unauthorized Underground Injection Control wells.
- Perform inspections on UIC wells.
- Prevent non-complying UIC systems from polluting ground water.
- Create virtual office in well and septic program by July 1998.

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
% inspected systems constructed properly	100	100	100
% alternative on-site treatment systems in operational compliance	25	40	35
Increase % facilities inspected	10	35	25

WATER SUPPLY

40-08-06

ACTIVITIES

- Review and approve allocation permits for ecological and public health protection.
- Review and approve water well permits for proper placement and construction.
- Maintain Water well and Allocation Data Management (DWUDS) database in TEPP.
- Establish long-term protection strategies for public drinking water supply areas upon community request.
- Provide assistance to NCC for requirements of NCC WRPA Ordinance.
- Provide public education specific to water conservation, wellhead protection and source water protection.
- Conduct research and monitoring of ground water resources.
- Perform groundwater reviews for non-hazardous waste sites.
- Provide for source water protection program development under the Federal 1996 Safe Drinking Water Act Amendments (joint cooperation with DHSS and PSC).
- Participate in comprehensive State Ground-Water Protection Program Development, under Whole Basin Management and Performance Partnership Agreement.

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
% 1-day turn-around time for domestic well applications	95	95	95
% well violations referred for formal enforcement	10	10	10
% 2-day average turn-around on DWUDS data query requests	90	60	90
% well permit data entered within 5 days of receipt of information	90	90	80
% hydrogeologic reviews provided within 20 days for sites requiring ground-water monitoring	80	80	95
% 2-day turnaround provided for drinking water wells located near contaminated sites	95	95	10
Provide for the delineation of wellhead protection areas for 10 systems per year	10	10	15

WATERSHED ASSESSMENT

40-08-07

ACTIVITIES

- Monitor and accurately assess water quality and shellfish distribution and processing facilities relative to NSSP specifications.
- Issue advisories as appropriate to ensure safety of water for swimmers.
- Complete bi-annual water quality inventory (305b).
- Develop Total Maximum Daily Loads (TMDL) and Pollution Control Strategies (PCS) for priority watersheds.
- Review and revise, as necessary, Delaware's Surface Water Quality Standards.
- Develop an aerial mapping method to determine future wetlands trends by basin.
- Determine recent wetlands trends (losses/gains) by basin, wetland type, and causative factors.
- Implement management actions that will protect the public from Pfiesteria related toxic events.

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
% waters attaining designated uses	22	22	22
Maintain incidence of shellfish-borne disease at no greater than current levels, # illnesses	5	5	5
Maintain incidence of water-borne disease at no greater than current levels, # illnesses	10	10	>10
Maintain approved shellfish growing acreage at current levels			194,637
Enhance swimmer protection and public natural bathing beaches by increasing number of monitored areas by 5%	85	90	95
Protect water contact users by maintaining the incidence of Pfiesteria-borne illness at zero.	0	0	0

WETLANDS AND SUBAQUEOUS LANDS

40-08-08

ACTIVITIES

- Maintain an inventory of tidal wetlands.
- Determine wetland change (gain/loss) on a five-year basis.
- Issue wetlands permits.
- Issue subaqueous lands permits and leases.
- Improve marina operations in state waters.
- Review and issue marina construction permits.

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
% annual increase linear feet of shoreline stabilized with rip-rap or vegetation vs. bulkhead by	30	20	20
% increase in the # approved marina operation and maintenance plans	0	10	10

AIR AND WASTE MANAGEMENT

40-09-00

MISSION

To optimize the air resources and waste management practices within Delaware by working cooperatively with the citizens and businesses of Delaware to protect public health, welfare and the environment.

KEY OBJECTIVES

- Attain the one-hour ozone standard by 2005 and the eight-hour ozone standard by 2012.
- Assess status with fine particulate matter standard and attain or maintain the standard as appropriate.
- Achieve 100 percent compliance with regulations.
- Reduce emissions with a permitting program that fosters least-cost compliance flexibility and is responsive to changing market conditions.
- Reduce TRI emissions by 30 percent by 2000 from 1995 levels and avoid catastrophic incidents at facilities producing or using extremely hazardous substances.
- Ensure no exceedences of the air quality standards for sulfur dioxide, carbon monoxide and nitrogen dioxide.
- Reduce acid rain impacts by decreasing the SO₂ emissions by 6,770 tons/year by 2000.
- Remediate 40 percent of the high priority sites currently on the inventory under the Delaware Hazardous Substance Cleanup Act (as of September 1, 1995) by FY 2001.
- Decrease generator/TSD non-compliance with hazardous waste laws and regulations by having 50 percent compliance at time of first inspection.
- Reduce quantity of waste generated by 20 percent (over 1995 levels) by the year 2000.
- Protect groundwater resources by increasing operating UST system compliance rates to 80 percent and reducing the percentage of LUST sites impacting groundwater to 15 percent by 2005.
- Clean up eight sites during FY 1999 and make them available for reuse.

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- Monitor permitted solid waste sites to identify any contaminant releases to the environment.
- Require, oversee and approve corrective actions to remedy any significant adverse impacts resulting from contaminant releases.
- Maintain high quality air conditions and surface water in close proximity to and high quality groundwater beneath Delaware's Sanitary, Industrial and Dry Waste Landfills.

BACKGROUND AND ACCOMPLISHMENTS

Air Management

Emergency Response. Environmental response staff provides a rapid, comprehensive response to time-critical emergency and non-emergency environmental incidents around the clock for the protection of human health, safety and the environment. In FY 1997, the Emergency Response staff responded to 412 incidents, 249 of which were related to petrochemical incidents, eight were SERT Level 1 incidents, and 1 SERT Level 3 incident. A majority of the incidents (66 percent) were located in New Castle County.

Enforcement. The growing number of citizen complaints to the Enforcement Branch has shown that the citizens of Delaware have found Enforcement Officers to be responsive to their problems. In Fiscal Year 1997, the Enforcement Branch initiated the Environmental Crimes Awareness Training Program (ECAT), which was developed to make patrol officers more aware of potential environmental violations and the statutes governing the activity – from asbestos to hazardous waste. Also during FY 1997, the Community Policing Officer coordinated work with towns, cities, county police departments and State Police in Delaware to achieve a mutual enforcement goal; the Building Inspection/Code Enforcement personnel conducted presentations to demonstrate the impact which permitted activity has on existing DNREC laws and regulations; Enforcement Officers gave 15 presentations on the Environmental Crimes Awareness Training Program; and Enforcement Officers assisted with the coordination and worked with acquiring services and goods for three community clean-up projects.

Air Quality Management. Since the passage of the 1990 Clean Air Act Amendments, the department has made unprecedented progress in its efforts toward providing clean air to all its citizens. Delaware, as a result of past efforts, has attained and maintained the air

Quality Standards for all pollutants except for ozone. By fully adopting and initiating implementation of a 15 percent VOC reduction plan and by developing a plan for additional control measures through 1999, the State has taken a major step in its efforts to attain the ozone standard. As part of this planning effort, Delaware has fully supported, participated in and will be the beneficiary of the efforts of the Ozone Transport Commission and the Ozone Transport Assessment Group (OTAG) to determine the magnitude of ozone transport and to develop control programs to reduce that transport. During 1997, OTAG completed its duties and made a series of recommendations to EPA for reducing transported ozone pollution.

The Clean Air Act requires the U.S. EPA to establish standards for sources of 189 toxic chemicals. As these standards are established, DNREC adopts those that are applicable to Delaware sources. During FY 1997 Delaware continued to develop standards for chrome electroplating, decreasing using halogenated solvents, dry cleaning, benzene waste water treatment, hazardous organic chemical industry, and cooling tower, and incorporated the standards into selected permits.

During 1997 the department enhanced its permitting process by reviewing source applications for the Title V program. This program will assure that major facilities come into compliance and stay in compliance by consolidating into a single document all of a facility's air permits, compliance schedule and monitoring and reporting requirements. To assure that permitting and compliance activities are as efficient as possible the department, working with affected industries, completed a number of permitting reforms and developed an emission trading and banking system.

During FY 1997, DNREC implemented the Small Business Technical Assistance Program coordinated by an Ombudsman. This program provides technical advice and assistance to small businesses to aid them in complying with regulations.

Waste Management

Site Investigation & Restoration (formerly known as the Superfund Branch). The Branch has identified over-370 hazardous substance release sites in Delaware, of which 17 are National Priority List (NPL) sites managed by the EPA. With the passage of the Delaware Hazardous Substance Cleanup Act (HSCA) in 1990, the Branch has assumed a major role in investigating and cleaning up over 120 of the non-NPL sites which pose a

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threat to public health, welfare and the environment. In 1993, the branch initiated the Voluntary Cleanup Program (VCP) under which a party can come forward and remediate a contaminated site and make it available for reuse. This program was formalized through amendments to HSCA in July 1995.

The branch has investigation and cleanup ongoing at more than 95 sites: 19 using HSCA funds, 28 under HSCA enforcement, 37 under VCP and nine under the federal program. Work has been completed to date at 11 NPL sites, 27 HSCA sites and 22 VCP sites.

Underground Storage Tank. Delaware's Underground Storage Tank (UST) Program regulates petroleum and hazardous substance tanks through their life cycle. The program has two main goals. One goal is to identify and clean up leaks that have occurred. The second goal is to prevent future leaks that could lead to contamination of Delaware's water supplies or the accumulation of explosive vapors in residences, businesses or utility conduits. Currently, Delaware has 9,600 registered USTs and has identified over 2,200 leaking underground storage tank sites and remediated over 1500 of those sites. In 1997 the UST program in coordination with the Delaware Economic Development Office and the State Revolving Fund announced a new loan program for UST sites. The program named PLUS will assist owners with upgrading, removing and remediating UST sites.

Solid Waste Management. In FY 1997, the Solid Waste Management Branch negotiated, permitted and oversaw the design and construction of landfill leachate and gas collection systems, and landfill capping systems at each of the three municipal solid landfills to minimize the production of leachate, and more effectively capture landfill leachate and gas for adequate treatment for the disposal of the 800,000 tons of municipal solid waste generated in Delaware. The branch also negotiated, permitted and oversaw the design and construction of a new coke ash settling facility to protect ground water at the Star refinery. The branch also administered the Solid Waste Transporter program which permits approximately 800 haulers of municipal, industrial, dry, special, and infectious solid waste in and through Delaware and tracks the management of infectious waste from approximately 1200 waste generators in Delaware.

Hazardous Waste Management. The Hazardous Waste Management Program is responsible for

protecting public health and the environment by ensuring that the approximately 18,816 tons of hazardous waste generated in Delaware during 1996 is safely managed. The program continues to emphasize pollution prevention, which is defined as reducing the amount and toxicity of hazardous waste generated at its source. In the event preventative measures fail and a release does occur, the program maintains the capability to perform the site investigation and clean-up activities needed to remediate the release. The Hazardous Waste Management program met or exceeded all proposed accountability measures in the measurement year. In addition to realizing a reduction in hazardous waste generation, participation in hazardous waste management educational opportunities exceeded the goal of 150 participants, with 185 in attendance. In partnership with EPA, the Hazardous Waste Management program continued its involvement in the Hazardous Waste Corrective Action program at hazardous waste treatment, storage and disposal sites in Delaware.

BUDGET

	FY 1997 ACTUAL	FY 1998 BUDGET	FY 1999 GOV. REC.
GF	3,436.1	3,537.4	3,625.6
ASF	6,060.1	11,286.5	11,120.8
TOTAL	9,496.2	14,823.9	14,746.4

POSITIONS

	FY 1997 ACTUAL	FY 1998 BUDGET	FY 1999 GOV. REC.
GF	50.0	53.0	53.0
ASF	92.4	89.4	90.7
NSF	62.6	62.6	61.3
TOTAL	205.0	205.0	205.0

MANAGEMENT AND SUPPORT - AIR AND WASTE 40-09-01

ACTIVITIES

- Develop and implement policies and procedures.
- Oversee administrative functions: grants, budget, personnel, legislation and fiscal control.
- Coordinate division efforts in teacher education and general educational activities to strive to promote citizen awareness and responsible citizen action.
- Coordinate division IRM needs and facilitate data integration within the division and between the division and the department to support

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comprehensive environmental protection and public access to environmental information.

- Coordinate grant work plan development, implementation and performance measurement for federal and state budgeting purposes.
- Provide enforcement support for the divisions of Air and Waste Management, Water Resources, and Soil and Water Conservation.
- Participate with federal, state and local emergency responders and planning agencies.
- Administer the state Criminal Investigation/ Background Unit Law.
- Participate in and evaluate multi-media inspections and permitting.
- Oversee the response to Freedom of Information Act (FOIA) requests received by the division.
- Provide and coordinate legal assistance for the division.
- Upgrade response capabilities through planning, training and conducting exercises.
- Coordinate and plan response activities through the State Emergency Response Commission (SERC).
- Expand or modify use of current response resources and technologies, including increasing the utilization and capabilities of computer-related response support.
- Maintain and develop policies, practices and procedures to prevent responder injury rates and improve effectiveness.
- Maintain a Community Policing Unit within the department.
- Maintain the Environmental Crimes Awareness Training Program.

PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
Maintain zero responder injury record	0	0	0
# emergency responses to incidents	500	500	500
# of citizen complaints	6,644	7,305	8,035
# notifications to department of spills	3,633	5,135	200
# FOIA requests received and responded	1,200	1,529	1,529

AIR QUALITY MANAGEMENT

40-09-02

ACTIVITIES

- Participate actively in Ozone Transport Commission (OTC), State and Territorial Air Pollution Control Administrators (STAPPA), and Mid-Atlantic Regional Air Management Association (MARAMA) activities.
- Direct the State Implementation Plan (SIP) revisions as required by the Clean Air Act Amendments (CAAA) OF 1990.
- Promulgate new air regulations mandated by the CAAA.
- Develop and submit emission inventories consistent with the CAAA.
- Track air quality status, especially ozone attainment status, and implement monitoring program for fine particulate matter.
- Oversee existing motor vehicle exhaust emission testing program.
- Conduct inspections and continue permitting air contaminant sources pursuant to the new and more complex Title V permitting program.
- Expand the stack-testing program in support of the enhanced permitting program.
- Continue to implement the CAAA Section 112(r) Accidental Release Program.
- Continue implementation of the Emergency Planning and Community Right-to-Know (EPCRA) Program components.
- Implement the Small Business Technical Assistance Program.
- Administer and update the asbestos abatement program.
- Work with other public and private entities to develop or implement transportation and voluntary control programs such as Ozone Action Day.
- Evaluate and take appropriate actions based on emission reduction needs and the cost and benefits of a low emission vehicle program in Delaware.
- Continue enforcement activities to identify and bring significant violators and non-notifiers into compliance.
- Enter directly into the national Aerometric Information Retrieval System (AIRS) emissions information on most Delaware facilities, and for Title V Sources, enforcement activities, continuous monitoring system inspections and compliance schedules.

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PERFORMANCE MEASURES

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
By 12/99, reduce oxides of nitrogen (NO _x) emissions by 24.0 tons/day via the Ozone Transport Commission (OTC) MOU	10% (2.4 tpd)	30% (7.2 tpd)	60% (14.4 tpd)
By 1/99, issue all Title V operating permits	--	40% (37)	100% (93)
By 12/02, fine particulate monitoring network in place.(6 sites total)	--	--	50% (3)
By 9/99, develop a plan to reduce ozone transport (% completion)	--	10%	100%

WASTE MANAGEMENT

40-09-03

ACTIVITIES

Site Investigation & Restoration

- Identify sites and prioritize them using the Delaware Hazard Ranking Model.
- Oversee Remedial Investigation, Feasibility Study, Remedial Design and Remedial Action at HSCA sites.
- Review applications of volunteers for acceptance into the Voluntary Cleanup Program (VCP).
- Provide oversight for the investigation, study, design and cleanup of VCP sites consistent with HSCA.
- Assist the volunteers in obtaining grants, loans and tax credits at brownfield sites so that such sites can be put to productive use.
- Develop and promote field-screening procedures to reduce the number of analytical samples sent to the laboratory for full analysis.
- Provide a Voluntary Cleanup option under the enforcement program to cut down the duration of negotiation of agreements

Underground Storage Tank

- Identify unregistered Underground Storage Tanks (UST).
- Identify the number of sites in compliance with financial responsibility and leak detection regulations.
- Conduct UST facility, UST removal or abandonment, and new UST installation compliance inspections.
- Conduct new UST installation plan reviews.

- Identify unreported releases from UST.
- Reduce the amount of time from identification to closure of Leaking Underground Storage Tanks (LUST) sites.
- Continue implementation of risk based corrective action closure procedures at LUST sites.

Solid Waste Management

- Regulate the disposal of non-hazardous solid waste to prevent any significant adverse impacts to Delawareans or Delaware's environment.
- Monitor permitted solid waste sites to identify any contaminant releases to the environment. Require, oversee and approve corrective actions to remedy any significant adverse impacts resulting from contaminant releases.
- Pursue closure and remediation of unauthorized, illegal or environmentally unacceptable solid waste disposal sites.
- Encourage and facilitate the recycling and reuse of solid waste materials for beneficial purposes, reduced environmental impact potential, and conservation of waste disposal space.
- Track the transport and disposal of solid waste to ensure compliance with environmental regulations.

Hazardous Waste Management

- Communicate and encourage targeted hazardous waste generators on the reduction of hazardous waste
- Complete hazardous waste compliance assessments and permitting while implementing a multi-media approach where possible.
- Implement the hazardous waste corrective action process.
- Provide educational opportunities to the hazardous waste facility universe and public

PERFORMANCE MEASURES

Underground Storage Tanks

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
Increase % of leaking underground storage tank sites that do not impact ground water/drinking water	92	81	82
Increase % of facilities in compliance with technical standards:			
Total tank universe	83	60	60
Active tanks	45		

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Hazardous Waste Management

	FY 1997 Actual	FY 1998 Budget	FY 1999 Gov. Rec.
Hazardous waste Generation (tons)	18,816	22,034	20,932
% of facilities assessed returning to compliance within 180 days	99	100	100
% of facilities in compliance at time of first assessment	60	55	60
# of participants in educational opportunities	185	175	175
# of high priority sites remediated	4	6	8