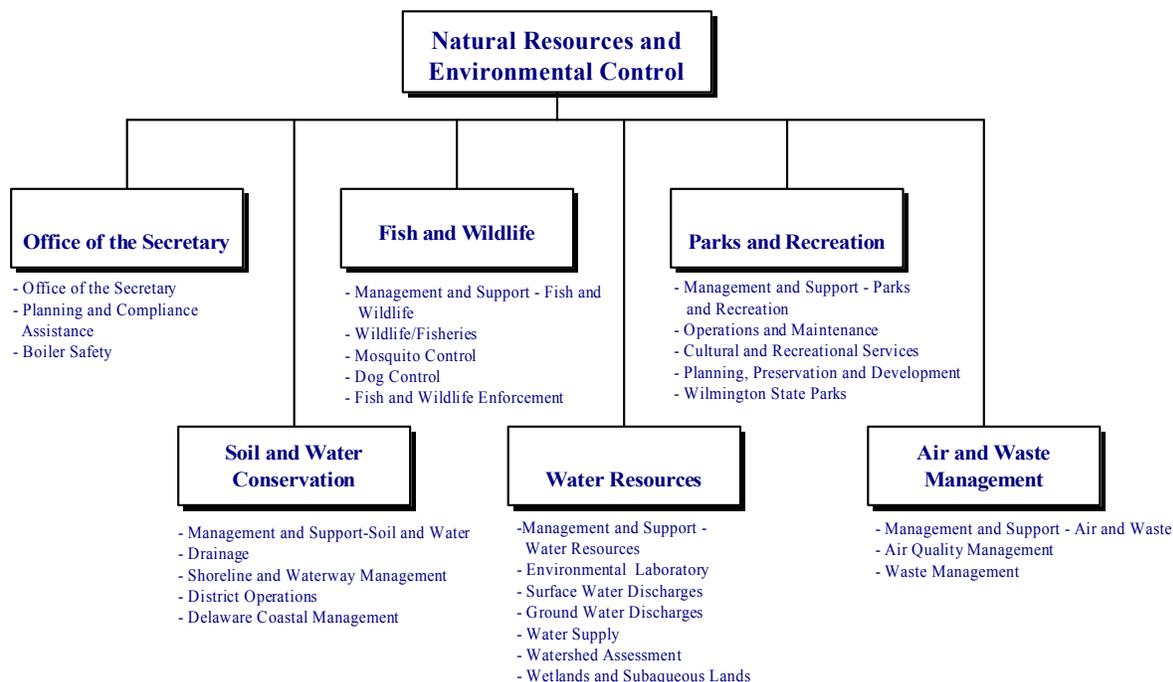


NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00



MISSION

The mission of the Department of Natural Resources and Environmental Control (DNREC) is to ensure the wise management, conservation, and enhancement of the state's natural resources, protect public health and the environment, provide quality outdoor recreation, improve the quality of life, and educate the public on historic, cultural, and natural resource use, requirements, and issues.

KEY OBJECTIVES

- Promote health and safety by maintaining and improving the quality of air, land, and water resources, manage populations of mosquitoes and other pests, and clean up spills involving hazardous chemicals to enhance the health and well-being of Delaware's people, wildlife, and plants.
- Conserve plant and animal resources through protection and management of species populations and their habitats. This effort involves maintenance of biodiversity, harvest allocation of species populations, protection and restoration of ecological functions and processes, and performance of educational outreach. Achieving this objective necessitates good quality air, water and soils. Sustaining this objective requires

coordination of the department to fulfill Livable Delaware goals.

- Promote and provide recreational opportunities that allow Delawareans to enjoy natural resources and open spaces that enhance quality of life and result in a more Livable Delaware. The department strives to provide recreational opportunities while balancing resource protection with resource management and use.
- Broaden the commitment to environmental protection and resource conservation by working in partnership with others to develop strategies that integrate economic development, environmental quality, and social policy making with broad public involvement.

PRIORITIES

Improve Industrial Compliance and Environmental Performance - The challenge over the next year and beyond is to respond to the need for greater environmental stewardship with both aggressive enforcement for the violators and rewards for compliance. There also needs to be compliance effort incentives to attract and inspire movement toward environmental stewardship and environmental excellence for all of the state's industrial facilities.

Enhancing Water Supplies and Water Management - This past summer has again highlighted the need to better address water supply capabilities, primarily in northern New Castle County. During the past several months

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DNREC has been working with the Water Supply Coordinating Council and others in development of a plan that will comprehensively address the water supply concerns. The collective goal over the next year is to have in place the decisions, projects, and action items that will address needed drought contingencies both in the short- and long-term, in a manner that is smart with the public's money and is protective of the water resources of the State.

Improved Water Quality - Over the past several years, DNREC has made great strides in development of Total Maximum Daily Loads (TMDLs) for the Inland Bays, the Murderkill River, the Appoquinimink River, the Christina River and other rivers. Funding has been provided by both the General Fund and EPA for this work. TMDLs must be achieved through development of Pollution Control Strategies (PCSs) that will address how to curtail pollution loadings and achieve TMDLs.

Preserving and Enhancing Delaware's Green Infrastructure - Green Infrastructure supports native species, maintains natural ecological processes, sustains air and water resources, protects agricultural enterprises and contributes to the health and quality of life for Delaware's communities, residents and visitors. DNREC is working with a number of partners to develop the appropriate tools and statewide implementation strategies that will identify and protect the state's biodiversity.

Improved Information Technology and Citizen Access - Over the past several years, significant investments have been made in data systems that will not only enhance the management of programs and the information they generate, but allow DNREC to present information in an understandable and readily available format through the internet including permitting and environmental violation information.

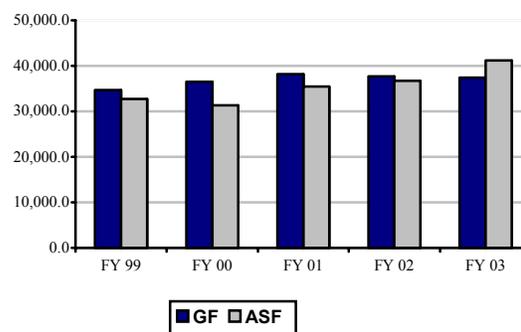
Brownfield Revitalization - Brownfield revitalization is a task for both DNREC and Delaware Economic Development Office (DEDO). Close ties have been maintained over the years in coordinating activities. That coordination must continue to improve and DNREC and DEDO must continue to work together to provide the needed incentives and assurances to the development community to overcome the stigma sometimes associated with such sites.

Reducing Risks - DNREC has invested heavily in identifying and tracking pollutants in the environment, but only minimally in tracking exposure to pollution, the distribution of disease and the relationship between health and the environment. DNREC and the Division of Public Health are working together to take advantage of new opportunities being offered by the Centers for

Disease Control and EPA to enhance efforts for tracking and improving the understanding of the environment and health.

Working with Communities - As DNREC addresses water and air quality concerns, land use and management, habitat protection and the public's right to information concerning their surroundings, working with community groups to help them understand challenges and become involved in the solutions becomes increasingly important. The Community Ombudsman is reaching out to all communities to explain DNREC's role in land use and environmental protection, to address their concerns, and to monitor for any potential disproportionate environmental impacts resulting from racial or other socio-economic conditions within communities.

Five-Year Appropriation History



FUNDING

| | FY 2002 ACTUAL | FY 2003 BUDGET | FY 2004 GOV. REC. |
|--------------|-------------------|-------------------|----------------------|
| GF | 43,574.3 | 37,456.8 | 35,567.0 |
| ASF | 24,957.4 | 41,219.5 | 41,138.2 |
| TOTAL | 68,531.7 | 78,676.3 | 76,705.2 |

POSITIONS

| | FY 2002 ACTUAL | FY 2003 BUDGET | FY 2004 GOV. REC. |
|--------------|-------------------|-------------------|----------------------|
| GF | 383.1 | 380.7 | 383.7 |
| ASF | 275.8 | 277.2 | 277.2 |
| NSF | 136.1 | 135.1 | 136.1 |
| TOTAL | 795.0 | 793.0 | 797.0 |

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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FY 2004 BUDGET HIGHLIGHTS

OPERATING BUDGET:

- ◆ Recommend structural change to transfer Boiler Safety (45-01-10) in the Department of Safety and Homeland Security to the Office of the Secretary (40-01-03). This structural change includes \$288.1 and 5.0 FTEs.
- ◆ Recommend enhancement of \$498.0 ASF to meet increased operational costs at state parks.

CAPITAL BUDGET:

- ◆ Recommend \$2,345.0 for the Conservation Cost Share Program, a tool in improving environmentally sensitive areas such as the Inland Bays. The program prevents urban and agricultural non-point source pollution from reaching surface and subsurface waters, reduces soil erosion and provides wildlife habitat.
- ◆ Recommend \$800.0 for continuation of the tax/public ditch maintenance program.
- ◆ Recommend \$1,000.0 for the ongoing beach replenishment program.
- ◆ Recommend \$1,000.0 for dam/water control structure replacement. These funds will be used to replace aging dams for Records and Chipman Ponds.
- ◆ Recommend \$280.0 for Minor Capital Improvements and Equipment.

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 programs; assist other agencies in the promotion of environmentally sound, economic development; and coordinate policy among the department's divisions.

KEY OBJECTIVES

- Publish information regarding administrative, civil and criminal enforcement actions, notices of violations and unpermitted releases to the environment in a timely manner on DNREC's Internet website.
- Institute a new enforcement tracking system to monitor cases through the process and ensure all enforcement actions are carried out in a timely manner.
- Adopt the chronic violator regulations in early 2003 and evaluate chronic violator designations as appropriate.
- Protect and enhance the natural attributes of Delaware's Coastal Zone in order to maintain and enhance fish and wildlife populations and provide recreational opportunities.
- Maintain the Environmental Navigator System which contains facility, permitting, ambient monitoring, natural resource and enforcement data, and the Environmental Notification System to notify the public by phone, fax or e-mail of releases to the environment.
- Implement an Electronic Document Management System throughout the department by June 2004.
- Implement e-Government initiatives to sell fishing and hunting permits; sell park passes; accept applications and fees for Septic and Sediment Control Structures; accept Discharge Monitoring reports and Hazardous Waste Manifests; and payment of Underground Tank fees over the Internet by June 2003.

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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- Create a “biodiversity indicator” and maps that target priority areas such as high value freshwater wetlands and working lands for possible preservation.
- Work with the Division of Public Health to examine the capabilities for environmental health tracking and prepare an action plan for initiation of a tracking program.
- Coordinate land use activities with other agencies, the Office of State Planning Coordination and county and municipal governments to preserve open space, and minimize impacts to habitat, air and water quality.
- Direct state funds consistent with the State Strategies for State Policies and Spending and increase efforts targeted at communities which might be suffering from disproportionate environmental impacts.
- Enhance the fairness, consistency, predictability, deterrence value and efficiency of the DNREC enforcement process.
- Engage state, federal and local government, universities, environmental and citizen groups, major private landowners, and agricultural and business communities to implement on the ground, priority actions for biodiversity conservation and ecosystem protection.

BACKGROUND AND ACCOMPLISHMENTS

Office of Information Technology is responsible for the overall management of the information resources of the department to ensure that investments in information resources are optimized in terms of benefit to the department and its constituents. The department is in the midst of a five-year project to build an integrated environmental information system that will include facility, permitting, natural resource, enforcement and ambient environmental data. In August 2002 the department released a centralized database accessible to the public via the Internet that integrates wastewater discharge, air emissions, salvage yards, hazardous waste, solid waste, underground tanks, and vapor recovery sites as well as parks, natural areas, and limited fish and wildlife information. The department has initiated Electronic Document Management in two of its programs. The Environmental Notification System required under Senate Bill 33 to notify the public of environmental releases in their neighborhood has been operational since February 2002. In August 2001 a Listserv feature was established where the public could self-select to be notified by e-mail of press releases,

enforcement actions, mosquito control spray events, ozone alerts and beach monitoring conditions. These e-Government initiatives will further be expanded to include sales over the Internet of licenses and permits by September 2003.

Ecosystem Protection increases the awareness of the importance of preserving plants, animals and natural communities that support a healthy, Livable Delaware. The office currently supports several priority initiatives (Biodiversity Conservation Partnership, Whole Basin Management, Livable Delaware, and Delmarva Conservation Corridors). These programs promote collaboration among state and federal partners and the development and implementation of tools and strategies to protect biodiversity and preserve the natural resources and working lands. The Biodiversity Conservation Partnership initiated in May 2000, is a coordinated public-private partnership dedicated to improving the status of the state’s biological diversity. The partnership has focused on several priorities to identify opportunities for biological resource protection, resource management, land management, restoration, and education and outreach activities.

Whole Basin Management is an initiative started in 1995 to develop environmental assessment reports on specific geographic areas in Delaware and furthers the watershed approach to dealing with environmental issues. These reports contain volumes of environmental data and information which are used to support a variety of programs including the Biodiversity Conservation Partnership, BioLegacy, TMDLs, land use planning, land preservation and restoration, source water protection, and the department’s Information Management effort.

The Office of Information and Education issued approximately 400 press releases, 15 press events and 1,000 responses to media inquiries over the past year to promote and explain department news, initiatives, issues, events and special projects. Publications (print, video and on-line) include press releases which are published on-line and delivered electronically to the list-serve of on-line subscribers. DNREC News, a bi-weekly news package that is distributed on-line and in print form to over 600 subscribers, includes regulatory information and a calendar of public hearings and meetings and other events. The Information and Education office also coordinates educational activities including the Annual Water Festival for seventh grade students that supplements the Watershed curriculum and the Make A Splash with Project WET event for third to seventh graders. In the last two years, more than 2,700 students and 100 teachers have attended these events. DNREC also participates in community events such as the State

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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Fair, Coast Day and the Tech Summit. In addition, with DNREC coordination, Delaware's participation in the International Coastal Cleanup has drawn approximately 2,000 volunteers each of the past two years.

The Planning and Compliance Assistance Office provides pollution prevention and non-regulatory permitting and compliance services for small and large businesses through the Clean Air Act. The land use planning staff has worked with the Office of State Planning Coordination in implementing the Livable Delaware Initiative, providing assistance to local governments and the development community through the LUPA and county advisory committee processes and in implementing the Coastal Zone Act Regulations.

The Human Resources Office (HRO) has continued its efforts in the areas of recruitment and diversity, expanding the recruitment sources to include more minority-based contacts, extending DNREC into the community with personal contacts, and continuing the effective partnership with DeIDOT. Additionally, DNREC has actively participated in the Partners for Progress Summit, seeing increased attendance by DNREC employees. In the area of diversity, the Diversity Action Committee and the Secretary have been championing required training for all employees in sexual harassment. Information sessions for employees and/or managers in the following areas were delivered: Coaching, Counseling and Disciplining, Hiring Process, Refresher Training for Managers on HR Processes, Guidelines on Disciplinary Action, more in-depth Sexual Harassment Training for selected groups and Open Enrollment Sessions on benefits for employees.

FUNDING

| | FY 2002 ACTUAL | FY 2003 BUDGET | FY 2004 GOV. REC. |
|--------------|-------------------|-------------------|----------------------|
| GF | 3,596.6 | 4,706.5 | 4,212.4 |
| ASF | 1,237.3 | 2,434.5 | 1,934.5 |
| TOTAL | 4,833.9 | 7,141.0 | 6,146.9 |

POSITIONS

| | FY 2002 ACTUAL | FY 2003 BUDGET | FY 2004 GOV. REC. |
|--------------|-------------------|-------------------|----------------------|
| GF | 35.1 | 33.7 | 37.7 |
| ASF | 21.3 | 21.3 | 21.3 |
| NSF | 2.6 | 1.0 | 1.0 |
| TOTAL | 59.0 | 56.0 | 60.0 |

OFFICE OF THE SECRETARY

40-01-01

ACTIVITIES

- Assist the divisions to meet their human resource, 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 permits or status decisions.
- Coordinate the development, maintenance, management, and usage of the department's information resources.
- Identify and support implementation of technology-enabled enhancements for service delivery such as electronic document management, data integration, e-Government, electronic reporting, public access via the Internet, etc.
- Manage the operation of a system to notify the public of un-permitted environmental releases.
- Assess the department's workforce diversity and target/develop programs to address needs.
- Develop and distribute communications products that heighten awareness of environmental issues in communities and suggest opportunities to reduce environmental impacts. These products include a citizen guide to watersheds and TMDLs, natural heritage guides on species and habitats, press releases, DNREC News, Outdoor Delaware magazine and various fact sheets, newsletters and brochures.
- Work with community organizations, homeowner associations and other groups in helping them participate in DNREC's programs and to address their environmental concerns.
- Sponsor and participate in special events designed to raise people's awareness such as the State Fair, Coast Day, Earth Day, the Coastal Cleanup and Christina River Cleanup.
- Sponsor training for educators on environmental issues and supplemental environmental education materials and curriculum including the Watershed Education unit.

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|---|-------------------|-------------------|----------------------|
| Acres of land of high biodiversity value protected* | N/A | N/A | * |
| # of users accessing the Environmental Navigator database | N/A | N/A | 3,000 |
| # of Chronic Violator designations | N/A | N/A | 1 |
| CZA permits issued | 2 | 2 | 2 |
| CZA status decisions | 4 | 4 | 4 |

*FY 2004 will establish benchmark data for new performance measures

PLANNING AND COMPLIANCE ASSISTANCE 40-01-02

ACTIVITIES

- Coordinate, through the LUPA and the county advisory committees, the preparation of site-specific recommendations concerning proposed new developments and land uses.
- Assist county and local governments with incorporating environmental and natural resource concerns into their comprehensive plans, ordinance revisions, zoning changes and policy development.
- Coordinate the department's Livable Delaware activities and provide planning assistance for biodiversity conservation.
- Provide pollution prevention assistance to industry, local governments and citizens through on-site technical assistance, pollution prevention roundtables and the publication of guides and brochures.
- Work with DNREC's regulatory programs on incorporating pollution prevention into permitting processes and compliance activities.
- Assist in the development of a recognition program for Delaware's manufacturing facilities that exhibit superior regulatory compliance and environmental stewardship.
- 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 point of contact through the Development Advisory Service.

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|--|-------------------|-------------------|----------------------|
| # of projects reported on for local land use decision makers | 189 | 200 | 200 |
| Development Advisory Service customers | 8 | 12 | 12 |
| Clean Air Act ombudsman assistance efforts | 40 | 30 | 45 |
| Pollution prevention assistance efforts | 16 | 16 | 35 |

BOILER SAFETY 40-01-03

MISSION

To promote public safety through inspection of boilers and pressure vessels, and provide education on the operation, maintenance and repair of boilers and pressure vessels in the State of Delaware.

KEY OBJECTIVES

- Distribute new edition of the division's rules and regulations to owners, users, contractors, installers, inspectors, code enforcement officers and other boiler industry personnel via training seminars, mailing lists and webpage.
- Conduct seminars on boiler safety, operation and maintenance for school district personnel, owners and users, repair companies and supply companies.
- Establish mechanism to license boiler installation contractors to ensure adherence to published Delaware and national installation standards.
- Work with consultant to enable database access via division webpage.
- Implement enhancements to electronic database to increase efficiencies.

BACKGROUND AND ACCOMPLISHMENTS

Boiler Safety is comprised of inspectors holding commissions issued by the National Board of Boiler and Pressure Vessel Inspectors. The purpose of the agency is

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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to promote increased safety for life and property by maintaining uniformity in the construction, installation, inspection and repair of boilers and pressure vessels. This assures acceptance among jurisdictional authorities responsible for the administration and enforcement of the various sections of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code. The division is responsible for inspection and oversight of insurance company inspections of boilers and pressure vessels in places of public assembly.

The division initiated cooperative efforts with code enforcement agencies in the cities of Dover and Wilmington as well as all three counties whereby the division is informed when new boilers are installed so inspection can be made prior to issuance of Certificate of Occupancy.

The division updated the boiler and pressure vessel database to allow electronic transfer of data. Inspection reports can now be completed electronically and loaded into the system, thereby decreasing paperwork and increasing efficiencies. The division is exploring the possibility of using the services of a national database provider to handle submission of reports from the insurance companies.

The division continues to conduct joint shop reviews, which consist of thorough examinations of the practices and policies of boiler and pressure vessel manufacturers and repair companies.

The division has increased the number of safety training seminars conducted, and has included school district maintenance personnel, janitorial staff, and cafeteria staff in addition to contractors, operators and code enforcement personnel.

ACTIVITIES

- Maintain data on nearly 21,000 boilers and pressure vessels.
- Inspect approximately 3,500 objects.
- Commission private insurance inspectors operating within Delaware and monitor approximately 17,500 inspections performed by them.
- Ensure quality of inspections through random on-site spot checks of inspections conducted by insurance company inspectors.
- Investigate boiler and pressure vessel accidents.
- Conduct safety-training seminars on boiler and pressure vessel operation, maintenance and repair.
- Review 22-25 manufacturers and repair companies of boiler and pressure vessels.

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|------------------------------|-------------------|-------------------|----------------------|
| # of boiler safety seminars. | C=3 S=16 | C=3 S=19 | C=3 S=19 |
| # of overdue inspections | 424 | 100 | 50 |

C= Contractor Training Seminars

S=School Training Seminars

**Prior year budget figures represent previous organizational structure when located in the Department of Public Safety (45-00-00). Boiler Safety will be reallocated to DNREC effective FY 2004.*

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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

Maintaining Tidal Fisheries Management

- Increase investigations of events in the aquatic environment that result in the loss of natural habitat, fish population changes and fish kills.
- Implement and update interstate fishery management plans and regulations for 22 species of marine fishes to remain in compliance with interstate fishery management plans.
- Develop and expand artificial habitat (reefs) to colonize benthic organisms in support of marine fisheries on 11 sites in the Delaware Bay and Atlantic Ocean.
- Re-establish a viable commercial oyster fishery with direct harvest from natural oyster beds.
- Improve public participation in marine fisheries management and improve game fish populations in tidal fresh water.

Protecting, Restoring and Enhancing Fisheries and Wildlife Habitat

- Implement the existing state-level responsibilities for achieving the goals and objectives of the North American Waterfowl Management Plan, and achieve the restoration goals identified in the Northern Delaware Wetlands Rehabilitation Plan.
- Develop one comprehensive Wildlife Area Management Plan each year that provides a basis for habitat and species management, hunting and observation opportunities, and improves the quality of the environment.
- Work with the Riverfront Development Corporation to establish and manage the Russell W. Peterson

Urban Wildlife Refuge and Wetlands Education Center in Wilmington.

- Implement the Inland Bays Water Use Plan, designed to heighten public awareness.
- Control aquatic weeds and algae in public ponds to maintain water quality, aesthetics and boating access.

Fostering Partnerships with Private Landowners

- Reduce and control nuisance animal and plant species on public and private lands and waters/wetlands in order to improve wildlife and fisheries habitats.

Expanding and Enhancing the Non-Game Program for Biodiversity

- Continue protection, recovery and management plans (federal or state) for endangered, threatened, or species of special concern on an annual basis to enhance the state's biodiversity.
- Conduct surveys and maintain information on the distribution and status of the state's flora, fauna, and natural communities, with an emphasis on rare species, and provide this information and expertise to public agencies and private organizations to enhance the state's biodiversity.

Prevent Mosquito-borne Diseases

- Continue surveillance/monitoring and control or treatment activities to prevent or lessen outbreaks of West Nile Encephalitis or Eastern Equine Encephalitis.
- Control pestiferous mosquito populations at tolerable nuisance levels, for quality-of-life factors and to lessen possible outbreaks of mosquito-borne disease.

BACKGROUND AND ACCOMPLISHMENTS

Fish and Wildlife programs are developed and administered to serve the interests of all of the residents of Delaware. The division works with all segments of constituencies to identify their needs and interests in fish and wildlife resources. 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 any species.

Fish and Wildlife has developed the following key operational priorities that support the department's strategic plan.

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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Applied Habitat Research, Management and Restoration to promote the conservation of biological diversity by avoiding the unnecessary threat to or extinction of living species.

- The division continues working with the Advisory Council and farmers to resolve deer damage issues. In 2001, 245 landowners participated in the division's Deer Damage Assistance Program impacting over 100,000 acres.
- By closing state and federal lands to harvesting in May and June, migratory shorebirds were able to feed on horseshoe crab eggs with relatively few interruptions and regain their fat content to complete their migration to their Arctic nesting grounds.
- The division continued to work with Soil and Water Conservation in Fiscal Year 2002 to establish freshwater wetland habitat on the Norman G. Wilder and Assawoman wildlife areas, to compensate for wetlands lost due to drainage project construction.

Species Research and Monitoring to provide the basis for management of fish and wildlife stocks and populations.

- The weakfish and summer flounder fisheries are recovering according to schedule and striped bass in the Delaware Estuary have been declared recovered.
- Delaware is in compliance with 23 fisheries management plans required under the Atlantic Coast Fisheries Cooperative Management Act.
- The Departments of Natural Resources and Environmental Control, Health and Social Services and Agriculture continued the West Nile Virus Working Group in order to develop and implement a statewide coordinated surveillance, monitoring and treatment program to prevent or lessen outbreaks of mosquito-borne West Nile Encephalitis.
- The Natural Heritage database of rare species and natural communities was used to conduct over 700 environmental reviews and information requests in 2001.

Enforcement to provide public safety services in the areas of boating, hunting and fishing.

- The Enforcement Section has gradually increased the number of Boating Safety Education Certifications. In Fiscal Year 2002, the section began offering on-line boating safety education courses through the BoatEd Internet site at no cost to the division.

Education and Training to provide outreach opportunities that improve the awareness, appreciation

and conservation of Delaware's natural resources by the users of this heritage.

- The Aquatic Resource Education Program continues to be an important program for young people who are interested in increasing their awareness about the importance of Delaware's aquatic habitats.

Infrastructure Maintenance and Development to provide public hunting areas and boating/fishing access sites that are environmentally sensitive, modern, safe, clean and convenient so that the state's natural resources are available to all.

- The fisheries maintenance facility at McGinnis Pond was replaced to eliminate safety issues associated with the aging facility. The division, in partnership with Kent County Parks and Recreation, completed the development of a boating access facility at Lebanon Landing.

FUNDING

| | FY 2002 ACTUAL | FY 2003 BUDGET | FY 2004 GOV. REC. |
|-------|-------------------|-------------------|----------------------|
| GF | 6,163.5 | 6,037.7 | 6,059.0 |
| ASF | 2,678.5 | 5,623.6 | 5,423.6 |
| TOTAL | 8,842.0 | 11,661.3 | 11,482.6 |

POSITIONS

| | FY 2002 ACTUAL | FY 2003 BUDGET | FY 2004 GOV. REC. |
|-------|-------------------|-------------------|----------------------|
| GF | 65.0 | 65.0 | 64.0 |
| ASF | 32.8 | 32.8 | 32.8 |
| NSF | 28.2 | 29.2 | 30.2 |
| TOTAL | 126.0 | 127.0 | 127.0 |

MANAGEMENT AND SUPPORT - FISH AND WILDLIFE

40-05-01

ACTIVITIES

- Direct, plan and coordinate the administration of total division program strategies and objectives including mosquito control, fisheries and wildlife resource 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, etc.

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|--|-------------------|-------------------|----------------------|
| Issue at least 2 editions of a division newsletter to hunters, anglers and boaters | 3 | 2 | 2 |

WILDLIFE/FISHERIES

40-05-02

ACTIVITIES

- Conduct research surveys and inventories of fish, shellfish and wildlife populations.
- Develop fish and wildlife management plans for 15 state-owned wildlife management areas, and 45 freshwater pond and marine fishing access sites, and 23 species of marine fish.
- Monitor, maintain and regulate harvestable fish and wildlife populations.
- Provide technical assistance to landowners and government agencies.
- License and monitor the users of fish and wildlife resources.
- Administer a non-game and endangered species program and hunter education training program.
- Monitor fisheries for diseases or lesions to indicate the presence of Pfiesteria and investigate fish kills as to their extent and probable cause.
- Acquire, develop, and maintain lands and waters for recreation and conservation.
- Control aquatic and non-indigenous plants and improve fish and wildlife habitat.
- Develop and implement wetland enhancement programs and coordinate and conduct fish, wildlife, acquisition, and hunter education and aquatic resource education activities.

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|---|-------------------|-------------------|----------------------|
| Increase the number of acres of actively managed wildlife habitat on public lands by 5% annually | 6,792 | 7,005 | 7,335 |
| Comply with Fisheries Management Plans (number) | 23 | 23 | 23 |
| Percent of fishing and hunting licenses sold on-line* | N/A | N/A | * |
| Increase the number of Hunter Education Certifications by a minimum of 5% per year to minimize hunter related accidents | 1,725 | 1,793 | 1,883 |

**FY 2004 will establish benchmark data for new performance measure*

MOSQUITO CONTROL

40-05-04

ACTIVITIES

- Monitor mosquito populations and levels of nuisance or disease and provide temporary controls in response to disease outbreak.
- Investigate and assess controls via Open Marsh Water Management (OMWM) / Integrated Marsh Management (IMM), impoundment management, mosquito fish stocking, woodland control and insecticides.
- Conduct research surveys and inventories of mosquitoes, fish and wildlife populations and 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.
- Coordinate with the Riverfront Development Authority to restore Dravo Marsh (Wilmington Wildlife Refuge).

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|---|-------------------|-------------------|----------------------|
| On a statewide basis, continue to treat 300 acres of salt marsh mosquito breeding habitat per year using Open Marsh Water Management techniques | 235 | 300 | 300 |
| On a statewide basis from June through August, continue to achieve a 75% or greater nuisance free nights | 86 | 75 | 75 |
| Based on targets of opportunity and available resources, annually restore at least 100 acres of degraded wetlands under the Northern Delaware Wetlands Rehabilitation Program | >100 | >100 | >100 |

DOG CONTROL

40-05-05

ACTIVITIES

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

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|---|-------------------|-------------------|----------------------|
| Increase # animals to shelters statewide by 5%/year | 20,679 | 10,994 | 11,544 |
| # of complaint services | 17,578 | 17,672 | 17,672 |

FISH AND WILDLIFE ENFORCEMENT

40-05-06

ACTIVITIES

- Prevent, investigate, and prosecute illegal natural resource activity within the State of Delaware.
- Provide environmental education opportunities through Boating Safety and Hunter Safety education programs.
- Conduct marine search and rescue operations and conduct statewide marine rescue training for coastal fire departments.
- Manage and administer the state vessel registration program.

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|---|-------------------|-------------------|----------------------|
| Increase boating safety certifications by a minimum of 5% per year in order to reduce boating related accidents | 1,462 | 1,535 | 1,611 |
| Reduce boating safety accidents by 5% per year | 25 | 24 | 23 |

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

- Annually protect 2,000 acres of land through the Open Space Program, through purchase, donation and conservation easements, for parks, wildlife areas, state forests, cultural sites and greenways.
- Assist in the addition of parkland and outdoor recreation facilities at municipal and county levels through grant assistance.
- Reduce major rehabilitation expenditure and curb facility deterioration by increasing preventive maintenance.
- Locate and identify prehistoric and historic cultural resources on DNREC landholdings, and develop cultural resources management plans for state parks, nature preserves and wildlife areas.
- Reduce visitor and employee accidents in state parks.
- Continue creative partnerships with profit and not-for-profit organizations to provide park services and raise funds.

BACKGROUND AND ACCOMPLISHMENTS

Parks and Recreation has five administrative sections to carry out its mission:

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

Eleven field offices statewide are responsible for overseeing the operation of 22,000 acres in 14 state parks, the Brandywine Zoo and Baynard Stadium. The

division also manages seven nature preserves (507 acres), eight other sites (746 acres) outside of the parks and 50 conservation easements protecting an additional 1,463 acres.

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

FUNDING

| | FY 2002 ACTUAL | FY 2003 BUDGET | FY 2004 GOV. REC. |
|--------------|-------------------|-------------------|----------------------|
| GF | 10,780.4 | 8,874.0 | 8,292.4 |
| ASF | 8,002.7 | 8,579.9 | 9,152.9 |
| TOTAL | 18,783.1 | 17,453.9 | 17,445.3 |

POSITIONS

| | FY 2002 ACTUAL | FY 2003 BUDGET | FY 2004 GOV. REC. |
|--------------|-------------------|-------------------|----------------------|
| GF | 105.5 | 105.5 | 105.5 |
| ASF | 62.5 | 62.5 | 62.5 |
| NSF | 1.0 | 1.0 | 1.0 |
| TOTAL | 169.0 | 169.0 | 169.0 |

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

ACTIVITIES

- Oversee administrative functions: budget, personnel, legislation, fiscal control, and volunteer administration.
- Provide guidance in the development of the Capital Improvement Plan.
- Coordinate services for five citizen advisory councils.
- Manage Twenty-First Century Park Endowment funds and all state park trusts.

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|---|-------------------|-------------------|----------------------|
| Increase # of volunteer hours by 2% | 61,000 | 45,881 | 62,220 |
| Decrease the number of lines of coding in the accounting section through a number of operating efficiencies by 5% | 49,278 | 47,155 | 46,519 |

OPERATIONS AND MAINTENANCE

40-06-02

ACTIVITIES

- Manage daily operations of 14 state parks including special revenue generating facilities (Biden Environmental Center, Killen's Pond Water Park, Cauffiel Estate, Judge Morris, Bellevue Hall, Indian River Marina, etc.).
- Enforce state park rules and regulations, and provide for site and visitor safety and security, including a water safety program.
- Establish and manage retail sales program including gift shops, vending and camping supplies.
- Administer central reservation system for camping and other visitor services.

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|---|--------------------|-------------------|----------------------|
| Increase park and facility revenue by 3% annually to offset ASF operating costs | 8,264,000 +7.4% | 8,162,873 | 8,511,920 |
| Reduce the number of visitor and employee accidents | 169 | 95 | 95 |
| Percentage of reservations made through the State Park | 19 | 20 | 20 |

CULTURAL AND RECREATIONAL SERVICES

40-06-03

ACTIVITIES

- Plan and administer programs and special events for the public including day camps, natural and cultural resource interpretive programs and exhibits, and folklife interpretation.
- Conduct special events for the public (i.e., Howard Pyle Pirate Festival, Garrison Weekend at Fort Delaware, concerts, etc.)

- Provide environmental education programs that meet Delaware state standards and performance indicators.
- Conduct historic and prehistoric archaeological surveys and preservation management plans.
- Manage publication and information services including research, editing and digital design for all commercially printed state park publications.

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|--|-------------------|-------------------|----------------------|
| Increase # people participating in park programs by 2.5% | 111,785 | 96,095 | 114,579 |
| Produce or revise 12 wayside exhibits annually. (New measure)* | N/A | N/A | 12 |

**New performance measure for Fiscal Year 2004.*

PLANNING, PRESERVATION AND DEVELOPMENT

40-06-04

ACTIVITIES

- Plan, design, engineer and construct facilities and infrastructure within the state park system, and coordinate land protection activities.
- Update and customize wildlife management plans at each state park.
- 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.
- Coordinate and oversee the Council on Greenways and Trails, Natural Areas Council, and the Open Space Council.
- Plan and develop state park trail system.
- Develop and implement comprehensive management and nature preserve plans.

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|---|-------------------|-------------------|----------------------|
| Protect 2,000 acres that meet the criteria of the Land Protection Act | 4,478 | 2,000 | 2,000 |
| Increase miles of multi-use trails in state parks* | 5 | 7 | 8 |
| Increase the number of management areas with visitor information maps | 13** | 14** | N/A |

* Reflects annual miles of trails and not cumulative miles.

**Performance measure completed

WILMINGTON STATE PARKS

40-06-05

ACTIVITIES

- Manage the Brandywine Zoo and Baynard Stadium including upgrade of facilities.
- Continue to upgrade standards through comprehensive maintenance and Capital Improvement Plans.
- Provide public interpretive programming and coordinate special events and facilities incorporating division rules and regulations.
- Provide pedestrian links between the various parks and acquire remaining land in holdings at Alapocas Woods.
- Continue to develop relationships with surrounding neighborhood associations and City of Wilmington officials.
- Develop Blue Ball property (building restoration, trail development and other infrastructure improvements).

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|---|-------------------|-------------------|----------------------|
| Increase number of visitors to Brandywine Zoo by 5% | 85,539 | 83,391 | 89,815 |
| Maintain number of stadium events at 40 per year | 22 | 40 | 40 |
| Maintain number of stadium field events at 25 or less to protect turf | 21 | 25 | 25 |
| Increase number of park program offerings | 8 | 8 | 8 |
| Restore two historic monuments/statues annually | 2 | 2 | 2 |

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

- Assist the Nutrient Management Commission in managing and regulating the generation and application of nutrients in order to meet load reduction targets established by approved Total Maximum Daily Loads (TMDLs) and meet or exceed surface water quality standards for nutrients by 2007; establish a Nutrient Management Planning Program; and formulate a systematic and economically viable Nutrient Management Program that maintains profitability and improves water quality.
- Manage stormwater runoff and fully implement the EPA National Pollutant Discharge Elimination System (NPDES) Phase II Stormwater Program for new construction activity.
- Protect 2,000 additional acres of land through the construction of drainage, flood control and water management systems.
- Ensure the protection of the human life, property and the environment through the development and implementation of a comprehensive dam safety program.
- Reduce wetland impacts by 25 percent during planning and construction of new tax/public ditch projects and by ten percent for maintenance of existing tax/public ditch projects.
- Achieve no net loss of recreational and protective beach area along the publicly accessible, developed portions of the Delaware Bay Shore and Atlantic Ocean coast as measured on a three to seven year re-nourishment cycle.

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

- Install and maintain aids to navigation in public waterways within the Inland Bays.
- Complete two dredging projects in publicly accessible areas statewide, including small boat navigation channels, lakes/ponds, boat launching/marina facilities or Delaware Bay beach areas.

BACKGROUND AND ACCOMPLISHMENTS

Drainage - Stabilizing agricultural production; more efficient nutrient utilization; reducing excess nutrient transport; decreasing road maintenance; trapping erosion and sediment; stormwater 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 (BMPs) are the main goals of the Drainage Section.

In the past eight years, the division has administered 839 Rural Conservation and Development projects, including a variety of flood abatement and drainage projects that were funded with \$43.7 million from the Twenty-First Century Fund. Approximately 56.5 percent of the jobs in the first seven fiscal years have been completed. Approximately 7.5 percent of the projects will not be completed primarily due to right-of-way problems. This brings the total projects finished to 64 percent. During Fiscal Year 2002, the department received 207 requests for drainage assistance of which 78 percent have been resolved. The remainder have been investigated and are pending due to rights-of-way, permits and/or funding.

Shoreline and Waterway Management - Since 1994, over 2.6 million cubic yards of sand were placed on Delaware beaches. The extensive damage to the dunes and beach from the severe northeasters in January and February of 1998 were repaired. The division conducted, in cooperation with local governments, an economic analysis of the value of beaches to the state that was called for by the Beach Replenishment Task Force. The analysis estimated severe economic losses over the next five years if the ocean beaches were no longer replenished.

Since its inception in 1970, the State Dredge Program has completed over 140 projects in a variety of marine environments, including small boat navigation channels, state owned lakes/ponds and boat launching/marina facilities, and beach nourishment along the Delaware Bay coastline. Projects completed during the last two years include navigational channel projects in White Creek, Indian River near Millsboro, Massey's Ditch and the downstream portion of Indian River. A maintenance dredging project in the College of Marine Studies Harbor in Lewes was also completed. In addition, a beach nourishment project was completed at Pickering Beach.

Projects planned for future implementation include the Assawoman Canal, Garrisons Lake, Love Creek, the Lewes-Rehoboth Canal, the Indian River Inlet Marina, as well as on-going maintenance work in Indian River and Massey's Ditch. In an effort to improve on the ability to properly manage waterways, the division entered into a cooperative agreement with the U. S. Coast Guard in 2001 to establish aids to navigation (i.e., channel markers) in the state's Inland Bays in areas that the Coast Guard does not mark. Under the purview of this agreement, channel markers have been established in sections of Herring Creek and the upstream portions of Indian River and White Creek. Improvements have also been made to previously established markers in the Little Assawoman Bay and Roy Creek. In 2002, the Coast Guard requested and the division agreed to assume the responsibility for placing and maintaining channel markers in Rehoboth Bay and the federal channel in Massey's Ditch.

District Operations - District Operations assists the conservation districts in tailoring the programs to meet the needs of diverse constituents, oversees the statewide implementation of the state's Sediment and Stormwater 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 source pollutants: excess sediment and nutrients.

The Sediment and Stormwater Management program has successfully designed and coordinated training and implementation projects throughout the state. To date, over 5,000 people have participated in the training. The program will also be implementing the EPA National Pollutant Discharge Elimination System (NPDES) Phase II for construction activities that take effect in March of 2003. In efforts to better manage nutrients from animal operations, the division, in conjunction with the Natural Resources Conservation Service (NRCS) and Farm Service Agency (FSA), has applied for and received \$8.2 million in federal Conservation Reserve Enhancement Program (CREP) funding to create more than 6,000 acres of filter strips, buffers and wetlands. The District Operations Section through the Conservation Districts has been assisting agriculture producers in complying with the Nutrient Management Planning requirement established by the Delaware Nutrient Management Law.

Coastal Management Programs - The Coastal Programs worked closely with the U.S. Army Corps of Engineers and DNREC divisions on the re-issuance of nationwide permits so that significant ecological areas would be protected from unnecessary impacts. A Geographic Information System (GIS) tool for project

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

reviews is in place to improve agency coordination and has resulted in a better protection mechanism for Delaware's biodiversity.

In March of 2002, Delaware became the ninth state to receive approval from NOAA and EPA for its Coastal Nonpoint Program. Delaware Coastal Management Programs also geared up its assistance to local governments to help with Biodiversity and Livable Delaware. Each county and three municipalities received funding to help improve habitat and natural resource planning, management and protection of local government and community lands.

The Delaware National Estuarine Research Reserve (DNERR) Education Program is aimed at increasing environmental ethics among natural and coastal resource users. By translating research into a format usable to coastal decision-makers and other users, it provides a critical and often absent link between research, management, and education. The Coastal Training Program (CTP) and Coastal Decision-Maker Workshops (CDMWs) are the two aspects of the education program that are essential to providing current environmental information to those who make decisions affecting coastal resources. The CDMWs have proven to be an effective way to pass along scientific information regarding various environmental "high priority concerns" to elected government officials, policy-makers, and the public. The CTP is a new program that will build upon and expand this successful program. It will significantly increase the DNERR's ability to provide coastal resource management guidance to those who can use it most effectively for protecting Delaware's fragile resources.

FUNDING

| | FY 2002 ACTUAL | FY 2003 BUDGET | FY 2004 GOV. REC. |
|--------------|-------------------|-------------------|----------------------|
| GF | 8,473.8 | 4,822.3 | 4,647.5 |
| ASF | 272.6 | 7,999.7 | 7,999.7 |
| TOTAL | 8,746.4 | 12,822.0 | 12,647.2 |

POSITIONS

| | FY 2002 ACTUAL | FY 2003 BUDGET | FY 2004 GOV. REC. |
|--------------|-------------------|-------------------|----------------------|
| GF | 47.7 | 47.7 | 47.7 |
| ASF | 2.0 | 2.0 | 2.0 |
| NSF | 15.3 | 15.3 | 15.3 |
| TOTAL | 65.0 | 65.0 | 65.0 |

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 liaison among local, county, state and federal governmental legislators, officials and agencies.

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|---|-------------------|-------------------|----------------------|
| % fiscal documents received, reviewed and processed within five business days * | N/A | N/A | 95 |

*FY 2004 will establish benchmark data for new performance measures

DRAINAGE

40-07-02

ACTIVITIES

- Conduct environmentally sensitive tax ditch planning and public ditch planning, assist counties with mandates to property owner file, and provide technical assistance.
- Ensure the implementation of the state's "no-net-loss of wetlands" policy in water management projects and continue the development of wetland and stream restoration techniques and concepts.
- Provide technical assistance to county conservation districts.
- Cooperate and assist the Department of Transportation with emergency bridge replacement as needed.
- Provide education outreach to agricultural and environmental communities to demonstrate the working relationship of drainage, agriculture and wetlands.
- Encourage the establishment of riparian corridors along tax ditch rights-of-way to support the department's Whole Basin Initiative, Conservation Reserve Easement Program (CREP), and the implementation of Total Maximum Daily Load Pollution Control Strategies.

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

- Develop and implement dam safety regulations and dam inspection standards, provide emergency action plans, and provide assistance to private dam owners.
- Investigate and implement solutions to the Resource Conservation and Development Projects funded through the Capital Improvement Act and the Twenty-First Century Fund.

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|---|-------------------|-------------------|----------------------|
| Increase acres of agricultural and residential land receiving drainage, flood protection and water management | 439,998 | 438,998 | 440,998 |

SHORELINE AND WATERWAY MANAGEMENT 40-07-03

ACTIVITIES

- Develop and carry out beach preservation projects to enhance, protect and preserve the recreational and storm protection values of Delaware's beaches and dune systems.
- Improve coastal storm hazard preparedness and mitigation.
- Reduce natural hazard losses through cooperation with the Federal Emergency Management Agency and the Delaware Emergency Management Agency in state natural hazard mitigation programs.
- Provide technical assistance to local governments and homeowners to improve beach and dune management.
- Provide assistance to property owners, elected officials at all levels, and the media in understanding the complex physical dynamics of beach erosion and storm impacts to aid in pre- and post-coastal storm impact reduction and recovery.
- Operate and maintain sand bypass facility at Indian River Inlet.
- Improve and maintain navigational channels statewide.
- Mechanically harvest nuisance marine macroalgae in the Inland Bays to maintain water quality, aesthetics and boating access.
- Establish and maintain inland waterway navigational channels for the boating public.
- Cooperate with the federal government to initiate construction of a federal shore protection project at Dewey and Rehoboth Beaches.

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|---|-------------------|-------------------|----------------------|
| Meet 100% response to legislative/constituent requests for marking navigable channels in Inland Bays* | - | 100 | 100 |
| Width in feet of a dry sand Atlantic facing beach that is present for summer recreational use, seaward of dunes and structures* | - | 100 | 100 |
| Number of structures that suffer damage from storms to the parts of the structure that are essential to use for occupation or enterprise* | - | 0 | 0 |
| Number of publicly accessible small boat navigation channels restored to authorized dimensions | 3 | 2 | 2 |

**FY 2003 established benchmark data for new performance measures.*

DISTRICT OPERATIONS

40-07-04

ACTIVITIES

- Provide comprehensive Erosion and Sedimentation (E&S) and Stormwater Management Training to 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 6,000 acres of development and construction projects.
- Provide sediment and stormwater management field inspection on federal and state funded, non-Department of Transportation construction activities.
- Implement National Pollutant Discharge Elimination System (NPDES) Phase II requirements for stormwater management.
- Direct and administer Clean Water Act Section 319 grant funds for priority water quality assessment and implementation of best management projects.
- Provide technical assistance to other agencies, engineers and consultants, farmers and animal producers, contractors and developers, educators, college professors and university officials.
- Assist the Nutrient Management Commission with the development of Nutrient Management Regulations and implement nutrient management

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

plans and BMPs through the work of eight conservation district planners in the Delaware Bay, Chesapeake Bay and Inland Bays watersheds.

- Provide staff support for DNREC's Total Maximum Daily Load effort by performing related assessment and implementation activities in the Piedmont, Chesapeake, Inland Bays and Delaware Bay Basins.
- Administer the Conservation Cost Share Program and agricultural component of the State Revolving Loan Fund Program in coordination with federal Farm Bill programs.
- Direct the state's efforts and funding for the U.S. Department of Agriculture (USDA) Conservation Reserve Enhancement Program (CREP).

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|--|-------------------|-------------------|----------------------|
| Reduction in # of tons of soil and sediment delivered to Delaware's waterways through the efforts of the Sediment and Stormwater Program compliance* | - | 350,000 | 375,000 |
| Maintain 3% reduction nitrogen loadings in the Chesapeake, Delaware Bay and Inland Bays watersheds | 3 | 3 | 3 |

**FY 2003 established benchmark data for new performance measure*

DELAWARE COASTAL MANAGEMENT

40-07-05

ACTIVITIES

- Administer National Oceanic and Atmospheric Administration's (NOAA's) grant awards to DNREC for coastal management and Delaware National Estuarine Research Reserve (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.
- 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 impact avoidance and coastal wetland protection.

- Implement educational programs for the public, schools, resource users and decision-makers addressing coastal resource issues.
- Provide a small grants program to local governments to improve environmental management in their land use decision making process.

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|---|-------------------|-------------------|----------------------|
| # of environmental indicators developed** | - | 7 | 7 |
| # of public programs hosted by the DNREC* | - | 12 | 30 |
| # of school children attending the DNERR education programs* | - | 4,000 | 4,000 |
| # of meetings participants hosted by the DNERR conference facility* | - | 800 | 1,000 |
| # of grants awarded to local governments** | - | - | 4 |
| # strategies implemented at Pea Patch Island *** | 15 | 10 | - |

** FY 2003 established benchmark data for new performance measure*

***FY 2004 will establish benchmark data for new performance measure*

**** Performance measure eliminated for FY 2004*

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

WATER RESOURCES

40-08-00

MISSION

To protect and enhance the quality and quantity of Delaware's waters and wetlands.

KEY OBJECTIVES

- Ensure a safe, reliable water supply for New Castle County by providing technical and policy support to the Water Supply Coordinating Council.
- Implement, with the assistance of the coordinating council, water purveyors and local governments, the new "A List" of water supply projects in northern New Castle County.
- 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.
- Ensure that all ground waters and surface waters used for drinking water are protected by 2008 to meet the long-term goal of the Drinking Water Standards.
- By the year 2004, fully implement a no net loss policy for the unavoidable losses of wetlands and for the unavoidable physical alteration of streams by requiring mitigation in wetland and subaqueous land permits.
- Increase the percentage of waterways meeting water quality standards for swimming and aquatic life (formerly referred to as fishable and swimmable goals) at the levels reported in the 1998 Watershed Assessment Report.
- Support efforts of the Nutrient Management Commission.
- Develop and implement an on-site wastewater compliance inspection program in the Inland Bays watershed using funding from the Soil and Water Conservation's 319 and 6217 grants.
- Establish requirements to replace standard on-site wastewater systems with systems capable of enhanced nutrient removal in nutrient impaired watersheds.
- Support and implement the recommendations, if funding allows, of the Advisory Council on Cancer Control.

BACKGROUND AND ACCOMPLISHMENTS

Water Resources recognizes that protecting and enhancing the quality and quantity of Delaware's waters and wetlands is best achieved through the cooperative efforts between the division and its constituents.

Water Resources fulfills its responsibilities by implementing its various regulatory programs; providing technical skills to programs; laboratory services; educational services; performing applied research; and helping finance water pollution control and drinking water projects.

The division continues to protect the interests of Delaware's residents by following its operating motto of "clean water today and tomorrow."

Accomplishments

- Assisted the Governor's Office on mitigation of the new drought of record experienced in 2002. As a result of these efforts, northern New Castle County had no disruptions in the interconnected water supply systems and less than 10 percent of emergency water storage in Hoopes Reservoir was required to meet demands.
- Expanded and administered water pollution control loans to communities, poultry and dairy farmers and underground tank owners through the State Revolving Loan Fund (SRF).
- Performed educational/outreach efforts with numerous agricultural groups on water management and water allocation permitting program.
- Coordinated with Water Resources Agency and Delaware Geological Survey to develop an updated waster supply plan for northern NCC.
- Assisted the Nutrient Management Commission and the Department of Agriculture by participating in commission meetings and fulfilling commitments established in the DDA-DNREC Memorandum of Understanding for Confined Animal Feeding Operation (CAFO) by assisting in the drafting of a draft General Permit for CAFOs.
- Expanded the Septic Loan Program to include matching grants for qualified homeowners with low to moderate incomes.
- Developing a Drinking Water Well Program for low to moderate income homeowners.

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

- Coordinated department review of the U.S. Army Corps of Engineers' permit application to deepen the shipping channel in the Delaware River. Staff conducted a public hearing utilizing a contractual hearing officer and oversaw the completion of a cost-benefit analysis utilizing a team of independent, expert economists.
- Provided technical and financial support during development of Total Maximum Daily Loads for Christine River, Delaware Estuary, and Murderkill River.
- Coordinated TMDL development via participation on the Piedmont, Chesapeake, Inland Bays and Delaware Bay Drainage Whole Basin Management teams.
- Assisted Tributary Action Teams in developing Pollution Control Strategies for the Inland Bays, Nanticoke River, Broad Creek, Murderkill River and Appoquinimink River Watersheds.
- Performed compliance inspections on wastewater holding tanks in the Inland Bays watershed.
- Reissued National Pollutant Discharge Elimination System (NPDES) permits for Seaford, Vlasic, Bridgeville, Bayshore, Mobile Gardens and SAW. Issued NPDES permits for New Castle County and DelDOT for the Municipal Separate Storm Sewer System in New Castle County.
- Implemented a large-scale urban stream restoration project in Little Mill Creek in New Castle County that will be used to demonstrate the techniques and ecological benefits of these restoration projects.
- Worked with EPA, New Jersey, Pennsylvania, and New York to establish a Program Office and Director position for the Delaware Estuary Program.

FUNDING

| | FY 2002 ACTUAL | FY 2003 BUDGET | FY 2004 GOV. REC. |
|--------------|-------------------|-------------------|----------------------|
| GF | 10,235.5 | 8,953.2 | 8,183.9 |
| ASF | 3,279.5 | 3,790.5 | 3,836.2 |
| TOTAL | 13,515.0 | 12,743.7 | 12,020.1 |

POSITIONS

| | FY 2002 ACTUAL | FY 2003 BUDGET | FY 2004 GOV. REC. |
|--------------|-------------------|-------------------|----------------------|
| GF | 74.3 | 74.3 | 74.3 |
| ASF | 61.4 | 62.8 | 62.8 |
| NSF | 30.3 | 29.9 | 29.9 |
| TOTAL | 166.0 | 167.0 | 167.0 |

MANAGEMENT AND SUPPORT - WATER RESOURCES 40-08-01

ACTIVITIES

- Improve the levels of technical support, education, and regulatory services to the citizens of the state to better protect the state's water resources.
- Support the Delaware Estuary Program and the Partnership for the Delaware Estuary by supporting implementation actions such as Total Maximum Daily Load (TMDL) development, combined sewer overflow (CSO) and storm drain signing, and wetland habitat assessment.
- Support the Center for the Inland Bays by assisting in implementation of the Inland Bays Comprehensive Conservation and Management Plan (CCMP).
- Provide technical support and strategic input to local governments that maintain projects that affect wetlands.
- Provide staff support to the Wastewater Facilities Advisory Council and provide wastewater engineering/financial planning assistance to three communities.
- Provide low-interest water pollution control loans to communities, homeowners, and agricultural producers.
- Provide technical support to Delaware Technical Community College for the development of an on-site wastewater training center.
- Actively assist the Delaware River Basin Commission and the Appalachian States Low-Level Radioactive Waste Commission by serving on the commission and supporting their various committees and sharing information.

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|---|-------------------|-------------------|----------------------|
| Implement Inland Bays CCMP action items | 5 | 5 | 5 |
| Provide wastewater engineering/ financing planning services to communities/facilities | 5 | 3 | 4 |

NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

ENVIRONMENTAL LABORATORY

40-08-02

ACTIVITIES

- Perform biological assessments and chemical analyses to ensure the wise management, conservation, and enhancement of the state's natural resources and protect public health and the environment. Analyses will support Total Maximum Daily Load (TMDL) and Water Quality Standards programs, State Superfund and Brownfields, site investigation and remediation, emergency response (fish kills, Pfiesteria and harmful algal surveillance, chemical spills), National Pollution Discharge Elimination System (NPDES), fish tissue testing for toxics in fish, air surveillance, and Shellfish and Recreation Waters Programs.
- Established a lab unit that will use genetic techniques in conjunction with the Watershed Assessment Section. These techniques will be used for DNA fingerprint identification of bacteria, protozoa and other organisms. When operational this unit will also be used for tracking source(s) of bacteria in support of the development and implementation of TMDLs, Pollution Control Strategies, permit allocations, and regulatory/enforcement actions.
- Install and operate the Laboratory Information Management System (LIMS) to enhance quality and productivity and to facilitate information sharing throughout the division and department.
- Provide educational initiatives for teachers and youth in schools, colleges, and universities and utilize skills of senior citizens through job shadowing, internships, mentoring, tours, and volunteer programs.
- Identify new market opportunities, anticipate and satisfy clients' changing needs by expanding laboratory analytical capabilities to incorporate the best available technology.

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|--|-------------------|-------------------|----------------------|
| % improvement of laboratory testing cycle times by decreasing average turnaround time per test | 7 | 4 | 3 |

SURFACE WATER DISCHARGES

40-08-04

ACTIVITIES

- Equalize annual permit production and align permit issuance on a watershed basis to eliminate permit backlog by Fiscal Year 2004.
- Use National Pollutant Discharge Elimination System (NPDES) permits to implement Pollution Control Strategies for Total Maximum Daily Loads.
- Issue NPDES permits that contain the necessary requirements and conditions (i.e., toxic controls, pretreatment requirements, stormwater, CSO, sludge requirements, etc.).
- Issue licenses for wastewater treatment operators, and review plans and issue permits for construction of wastewater collection and treatment facilities.
- Conduct compliance inspections for NPDES facilities and CSO systems.
- Work with the City of Wilmington and EPA in implementing their CSO Control Plan.
- Periodically review and update program regulations for point source dischargers.

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|---|-------------------|-------------------|----------------------|
| Decrease in number of NPDES permit violations (%) | (45)* | 10 | 10 |

*FY 2002 recognized 45% increase in permit violations

GROUND WATER DISCHARGES

40-08-05

ACTIVITIES

- Encourage designers/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 75 percent of all small systems.

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- Issue large septic permits and spray permits in compliance with all applicable regulations.
- Issue replacement/repair permits for all known malfunctioning subsurface systems.
- Issue Underground Injection Control (UIC) permits/authorizations in compliance with all applicable regulations.
- Locate and inventory all unauthorized UIC wells, perform inspections and prevent non-compliance.
- Perform compliance inspections of holding tanks in the Inland Bays of Sussex County.
- Perform compliance inspections of small individual on-site wastewater systems in the Inland Bays Watershed.
- Provide technical support to Delaware Technical Community College for the development of an on-site wastewater training center.

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|--|-------------------|-------------------|----------------------|
| % of construction inspections on on-site wastewater systems that discharge less than 2,500 gallons per day | 65 | 75 | 75 |
| % alternative on-site treatment systems inspected for operational compliance | 60 | 100 | 100 |
| % of construction inspections on on-site wastewater systems that discharge more than 2,500 gallons per day | 100 | 100 | 100 |
| % of compliance inspections on on-site wastewater systems that discharge more than 2,500 gallons per day | 100 | 100 | 100 |
| % of compliance inspections on Holding Tanks in the Inland Bays Watershed | 100 | 100 | 100 |
| # of compliance inspections of small individual on-site waste waster systems in the Inland Bays Watershed initiated by the 319 and 6217 Federal Grant* | N/A | 100 | 100 |

* FY 2003 established benchmark data for new performance measure

WATER SUPPLY

40-08-06

ACTIVITIES

- Assist in Governor's mandate to ensure a safe, reliable water supply for New Castle County by providing technical and policy support to the Water Supply Coordinating Council.
- Review and approve allocation permits for public and environmental protection and water well permits for public and environmental protection.
- Conduct research and monitoring of ground water resources.
- Provide assistance to New Castle County for requirements of New Castle County Water Resource Protection Area Ordinance.
- Implement Source Water Assessment and Protection Program under the federal 1996 Safe Drinking Water Act Amendments (joint cooperation with the Department of Health and Social Services and the Public Service Commission) including long-term protection strategies for public drinking water supply sources.
- Promote water conservation, wellhead protection and source water protection via public education and cooperative agreements with stakeholders.
- Perform ground water reviews for non-hazardous waste sites.
- Maintain Water Well and Water Allocation Data Management (DWUDS) database.

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|--|-------------------|-------------------|----------------------|
| % 1-day turnaround time for domestic well applications | 95 | 95 | 95 |
| # water allocation permits issued to reduce backlog of un-permitted projects | 25 | 30 | 30 |
| % 2-day turnaround provided for drinking water wells located near contaminated sites | 90 | 90 | 90 |
| % well permit data entered within 5 days of receipt of information | 80 | 85 | 80 |

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WATERSHED ASSESSMENT 40-08-07

ACTIVITIES

- Monitor and assess shellfish harvesting area water quality and inspect shellfish distribution and processing facilities in compliance with National Shellfish Sanitation Program (NSSP) specifications.
- Implement the federal Beaches Environmental Assessment and Coastal Health Act by monitoring guarded beaches and issuing advisories when unacceptable water quality conditions exist.
- Develop Total Maximum Daily Loads (TMDLs) in accordance with the department's TMDL schedule for the Delaware River (2002), the non-tidal portions of the Inland Bays (2003), Buntings Branch (2003), and Little Assawoman Bay (2003).
- Develop and implement Pollution Control Strategies (PCSs) to meet pollutant load reduction goals established by TMDLs for the Inland Bays, Nanticoke River, Broad Creek, Appoquinimink River, and the Murderkill River Watersheds.
- Develop wetland profiles to quantify and qualify their water quality and habitat functions in the Nanticoke River Watershed. These profiles will be transferable to other watersheds to assist in future wetland restoration, siting and development.
- Implement management actions that will protect the public from hazardous algae bloom related events.
- Cooperate with Delaware River Basin Commission, Pennsylvania and New Jersey in developing a Delaware Estuary TMDL by the end of 2003.
- Begin development of bacteria TMDL's using new genetic techniques.

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|---|-------------------|-------------------|----------------------|
| % waters attaining water quality standards for swimming | 4 | 1 | 1 |
| % waters attaining water quality standards for healthy aquatic life | 29 | 36 | 36 |
| Acres of watersheds with nutrient TMDLs in place | 628,860 | 628,860 | 658,925 |
| Acres of watersheds with Pollution Control Strategies in place* | 0 | 206,433 | 528,113 |
| Enhance swimmer protection at natural bathing beaches and maintain incidence of water-borne disease at no greater than current levels (# illnesses) | 5 | 5 | 5 |

*FY 2003 established benchmark data for new performance measures.

WETLANDS AND SUBAQUEOUS LANDS 40-08-08

ACTIVITIES

- Maintain an inventory of tidal wetlands, issue wetland permits, and issue subaqueous lands permits and leases.
- Review and issue marina construction permits.
- Issue Water Quality Certifications for federal permits.
- Promote stream channel and riparian restoration.
- Conduct a stream restoration project at Three Little Bakers in Wilmington, Delaware as part of the Pike Creek Watershed.
- Examine options for protecting most valuable freshwater wetlands.
- Support efforts to reestablish fees for docks and piers on public subaqueous lands.

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|--|-------------------|-------------------|----------------------|
| % of shoreline stabilized with soil bioengineering and rip-rap vs. bulkheading | 20 | 25 | 40 |
| % of marinas with approved operations and maintenance plans | 15 | 20 | 20 |

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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

- Implement incentives for Delaware industries to achieve superior compliance.
- Attain one-hour ozone standard by 2005 in New Castle and Kent counties.
- Require that 100 percent of facilities inspected annually are generally compliant with air quality regulations at time of inspection.
- Prevent exceedences of air quality standards for particulate matter, sulfur dioxide, carbon monoxide and nitrogen dioxide, and reduce hazardous air pollutants by adopting EPA's "National Emission Standards for Hazardous Air Pollutants for Source Categories."
- Adopt federal "New Source Performance Standards."
- Significantly reduce public health risks from toxic air pollutants through full implementation of the federal Integrated Urban Air Toxins Strategy.
- Maintain an air quality network which provides reliable and accurate data for ambient concentrations of ozone, particulate matter, sulfur dioxide, carbon monoxide and nitrogen oxides.
- Ensure 100 percent compliance with permit requirements for contaminant discharges from solid waste transfer and disposal facilities.
- Reduce the percentage of active Leaking Underground Storage Tanks (LUST) sites impacting drinking water to less than 15 percent by 2005.
- Achieve an 80 percent compliance rate for operating Underground Storage Tanks (USTs) by 2005.
- Require improved management of aboveground storage tank systems and the clean up of any releases from aboveground storage tank systems.

- Minimize impacts of salvage yards on water quality and public health by 2005.
- Reduce generation of Persistent Bioaccumulative Toxin (PBT) compounds by 50 percent over 1991 generation rates by 2005.
- Clean up and make available for reuse 30 sites via the Voluntary Cleanup Program during Fiscal Year 2004.
- Remediate seven sites currently listed as high priority sites on the inventory under the Hazardous Substance Cleanup Act during Fiscal Year 2003 as fund lead or responsible party using Hazardous Substance Cleanup Act (HSCA) enforcement authority.
- Test public drinking water systems that are both susceptible and vulnerable to contamination.
- Promote increased recycling of industrial solid waste and municipal solid waste and achieve a residential recycling rate of 30 percent by 2003.
- Eliminate the threat of methane gas generation, subsidence and property damage from buried debris in residential areas.
- Provide timely and appropriate response on a 24-hour basis to citizen complaints and environmental emergencies and enforce compliance for other health and safety objectives.

BACKGROUND AND ACCOMPLISHMENTS

Environmental Response—Environmental Response Branch (ERB) staff provide a comprehensive response to time-critical emergency and non-emergency environmental incidents around-the-clock for the protection of human life, health, safety and the environment. In Fiscal Year 2002, the Emergency Response staff responded to 316 incidents; 60 percent of the total number of incidents occurred in New Castle County, 60 percent of the total number of incidents involved no other state emergency response agencies but DNREC, and 60 percent of the total number of incidents were petroleum-related.

Enforcement—The Air and Waste Management Enforcement Section is responsible for responding to and investigating environmental emergencies and citizens' complaints on a 24-hour basis. The section focuses its efforts on the criminal enforcement of federal, state, and department laws and regulations. Air and Waste Management Enforcement Officers provide investigative and prosecutorial services to three of the five divisions

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within DNREC including the Air and Waste Management, Water Resources, and Soil and Water Conservation. Additionally, the section has trained all personnel as Hazardous Materials Technicians, who respond to spills and environmental releases for the purpose of stabilizing and investigating the incidents. In Fiscal Year 2002 and 2003, the section implemented a project designed to place wireless data terminals in vehicles to enhance public notification of environmental incidents, became the lead responding agency to incidents of suspected bio-terrorism.

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. During 2002 the Air Quality Management (AQM) Section, in conjunction with EPA Region III, successfully completed the planning and funding portions of the Delaware Air Toxics Assessment Study (DATAS). DATAS implementation will begin in 2003, and is a two-year project established to quantify actual, monitored emissions of hazardous air pollutants in relation to modeled projections. Multiple monitoring sites have been established throughout the state, using existing monitoring resources. Monitoring is to begin in early 2003. Air Quality Management has continued to move forward with our Title V Operating Permit Program that includes issuance of required permits, developing a Compliance Assurance Program, and has begun completing Title V Permit Renewals. The Small Business Technical Assistance Program continues to provide technical advice and assistance to small businesses to aid them in complying with regulations. Delaware continuously monitored the ambient concentrations of sulfur dioxide, nitrogen oxides, carbon monoxide, particulate matter and ozone at nine stations statewide, and made the data available on a near real-time basis on the AQM website.

Waste Management Site Investigation and Restoration - With the passage of the Delaware HSCA in 1990, the branch has assumed a major role in investigating and cleaning up non-NPL sites which pose a 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 154 VCP/Brownfield sites. Ninety-nine sites are currently undergoing cleanup, and 55 sites have been cleaned up for reuse. Further, in 2001 (Fiscal Year 2002), the branch initiated a study to monitor possible movement of

contamination from hazardous waste sites to public drinking water systems. The branch will continue with this study in Fiscal Year 2003 and Fiscal Year 2004.

Brownfield Revitalization - A major component of revitalization and VCP success is DNREC's Brownfield Initiative. Brownfield redevelopment seeks to direct future development to targeted growth areas where new services and needs that can be provided at the least cost while simultaneously cleaning the environment. Within the next 18 months, DNREC will work with DEDO to streamline the Brownfield process and in the development of a ranking system that will address both redevelopment potential and the degree of contamination.

Tank Management - Delaware's Underground Storage Tank (UST) Program regulates petroleum and hazardous substance tanks through their life cycle. The program has two main goals. One 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. A program milestone was achieved on September 27, 1996, when Delaware's UST program received program delegation from EPA Region III. Delaware's UST program is now authorized to operate in lieu of the federal UST program. 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 assists owners with upgrading, removing and remediating UST sites. Another milestone was reached on December 22, 1998, when the final upgrade deadline for active underground storage tank systems passed. As of this date, all tanks must meet the corrosion protection standards as well as leak detection, spill and overfill protection requirements.

Delaware's Aboveground Storage Tank program was created when the Aboveground Storage Tank (AST) Act was signed into law on July 8, 2002. The Act requires the department to develop regulations for the installation, operation, maintenance, leak detection and corrective action for ASTs. This process must be completed by July 8, 2004. In an effort to develop a set of regulations with public participation, an advisory committee has been formed to assist the department. In addition, AST owners were required to register their tanks by September 6, 2002. To date, almost 500 facilities have sent in registration forms. The information collected is being entered into a database to provide information and to be the basis for billing facilities for their fees.

Solid and Hazardous Waste Management - The Solid and Hazardous Waste Management program is responsible for ensuring Delaware's wastes are managed

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in a manner that is protective of human health and the environment. The program ensures proper management through a permitting and compliance monitoring program and also through encouragement of waste reduction, waste re-use and waste recycling activities. In the past year, the Solid and Hazardous Waste programs effectively monitored and when necessary, amended permits for existing landfills, transfer stations, and waste storage and treatment operations at a variety of Delaware businesses. In addition, during its second year of existence, the Debris Pit Remediation Program completed its 76th site remediation. The recycling program continued to work with the Recycling Public Advisory Council (RPAC). The branch implemented the recycling grant assistance program and assisted the RPAC in completion of an annual report that reflects what needs to occur in order for Delaware to increase its residential solid waste diversion rate.

FUNDING

| | FY 2002 ACTUAL | FY 2003 BUDGET | FY 2004 GOV. REC. |
|--------------|-------------------|-------------------|----------------------|
| GF | 4,323.0 | 4,063.1 | 4,171.8 |
| ASF | 9,485.3 | 12,791.3 | 12,791.3 |
| TOTAL | 13,808.3 | 16,854.4 | 16,963.1 |

POSITIONS

| | FY 2002 ACTUAL | FY 2003 BUDGET | FY 2004 GOV. REC. |
|--------------|-------------------|-------------------|----------------------|
| GF | 55.5 | 54.5 | 54.5 |
| ASF | 95.8 | 95.8 | 95.8 |
| NSF | 58.7 | 58.7 | 58.7 |
| TOTAL | 210.0 | 209.0 | 209.0 |

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

ACTIVITIES

- Implement the new chronic violator regulations in cooperation with other DNREC divisions.
- Increase inspections of facilities or regulated parties that have had recent problems maintaining compliance and those determined to be chronic violators.
- Promote the use of community advisory panels, environmental stewardship awards, Environmental Management System incentives, and International Organization for Standardization Certification to improve industry performance.

- Coordinate division efforts in teacher education and general educational activities to strive to promote citizen awareness and responsible citizen action.
- Enforce federal, state, and DNREC laws and regulations for Air and Waste Management, Water Resources and Soil and Water Conservation.
- Investigate citizens' complaints and environmental incidents/emergencies on a 24-hour basis.
- Participate with federal, state and local emergency responders and planning agencies.
- Conduct background investigations on corporations and individuals seeking environmental permits.
- Oversee the response to Freedom of Information Act (FOIA) requests received by the division.
- Upgrade response capabilities through planning, training and conducting exercises, and coordinate and plan response activities through the State Emergency Response Commission (SERC).
- Maintain a database of complaint and incident arrest history received from the DNREC 24-hour complaint line.
- Provide environmental enforcement training to other police agencies within the state.
- Utilize wireless computer technology to improve emergency response capabilities, and expedite public notification of incidents via the DNREC webpage.
- Maintain and develop policies, practices and procedures to prevent responder injury and govern enforcement and response activities.
- Continue community policing programs and public outreach activities.
- Improve ability to respond to suspected acts of terrorism by acquiring training and equipment.

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|---|-------------------|-------------------|----------------------|
| Increase percentage of facilities in compliance at time of inspection from the FY2002 baseline. | 84 | 86 | 88 |
| Maintain zero responder injury record | 0 | 0 | 0 |
| Number of emergency responses to incidents | 316 | 515 | 400 |
| # of notifications to dept. of spills etc. | 510 | 450 | 500 |
| # of complaints | 6,224 | 6,500 | 6,500 |
| # of outreach/training programs conducted | 77 | 90 | 90 |
| # of FOIA requests received and responded | 471 | 600 | 500 |

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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 to take advantage of combined expertise and foster regional and national strategies.
- Direct the State Implementation Plan (SIP) revisions as required by the Clean Air Act Amendments (CAAA) of 1990.
- Promulgate new air regulations required by the CAAA, the OTC and state needs and develop and submit emission inventories consistent with the CAAA.
- Oversee existing motor vehicle exhaust emission pressure and anti-tampering tests.
- Track air quality status, especially ozone attainment status, and implement monitoring program for fine particulate matter.
- Continue effective compliance inspections and continue permitting air contaminant sources pursuant to the new and more complex Title V permitting program.
- Continue implementation of the Emergency Planning and Community Right-to-Know Program components.
- Continue implementation of Air Quality Management's portion of the Small Business Technical Assistance Program (SBTAP), that is, providing technical assistance to the Ombudsman as requested, and reviewing reports and progress made by the Ombudsman in accomplishing the overall goals of the SBTAP.
- Work with other public and private entities to develop or implement transportation and voluntary control programs such as Ozone Action Day.
- Initiate planning and implementation efforts to address longer term ozone, fine particulates and regional haze problems.
- Continue air toxics monitoring at the Wilmington air monitoring site, which commenced in 2000.
- Continue to implement audit procedures for the Inspection and Maintenance Program Two Speed Idle Test and On-Board Diagnostics (OBD) Tests, and evaluate data.
- Develop and implement audit procedures for the voluntary inspection and maintenance at the high-

tech, special purpose inspection lane located at the Wilmington motor vehicle inspection lanes.

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|--|-------------------|-------------------|----------------------|
| Reduction in TRI emissions by 5% by the FY 2002 baseline | N/A | N/A | 7,887,739 |
| By FY 2003, reduce % oxides of nitrogen (NOx) emissions by 32.0 tons/day via the OTC MOU | 75 | 100 | N/A |

WASTE MANAGEMENT **40-09-03**

ACTIVITIES

Site Investigation and Restoration

- Identify sites and prioritize 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 clean up 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.
- Promote field screening procedures to reduce the number of analytical samples sent to the laboratory for full analysis.
- Work with communities so they better understand the program and the risks posed by SIRB sites.
- Perform eight Brownfield preliminary assessments/site inspections at sites targeted for redevelopment during Fiscal Year 2003.
- Develop and implement a ranking system for Brownfields that would address redevelopment potential and the degree of contamination.
- Continue to screen shallow public drinking water supplies for contaminants as recommended by Delaware's task force on cancer incidence and mortality.

Tank Management

- Identify unregistered Underground Storage Tanks (USTs); and conduct UST facility, UST removal or abandonment, and new UST installation compliance inspections.
- Identify unreported releases from USTs.

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- 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.
- Reach 100 percent compliance with the 1998 deadline requirements for all regulated petroleum underground storage tanks through enforcement.
- Continue permitting and enforcement of Stage II requirements in Sussex County.
- Develop an Aboveground Storage Tank Program for the state.

Solid and Hazardous Waste Management

- Regulate the disposal of waste generated in Delaware so as to prevent any significant adverse impacts to Delawareans or Delaware's environment.
- Monitor permitted solid and hazardous 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 and hazardous waste disposal sites.
- Track the transport and disposal of solid and hazardous waste to ensure compliance with environmental regulations.
- Communicate and encourage targeted hazardous waste generators on the reduction of hazardous waste and complete solid and hazardous waste compliance assessments and permitting while implementing a multi-media approach where possible.
- Implement the hazardous waste corrective action process.
- Work with Water Resources on best management practices for salvage yards.
- Continue implementation of strategies to reduce persistent bioaccumulative and toxic (PBT) chemicals.

PERFORMANCE MEASURES

| | FY 2002 Actual | FY 2003 Budget | FY 2004 Gov. Rec. |
|---|-------------------|-------------------|----------------------|
| Increase % of leaking underground storage tank sites that do not impact ground water/drinking water | 90 | 70 | 75 |
| Increase % of facilities in compliance with technical standards | 95 | 96 | 97 |
| # of ASTs registered* | N/A | N/A | 1,500 |
| % of ASTs inspected** | N/A | N/A | N/A |
| Increase residential solid waste recycling to 30% by 12/2003 | 14 | 20 | 22 |
| # of debris pits remediated | 76 | 114 | 120 |
| Remediate sites currently listed as high priority sites on the inventory under the Delaware Hazardous Substance Cleanup Act | 3 | 7 | 7 |
| Clean up and make available for reuse sites via the Voluntary Cleanup program | 14 | 30 | 20 |
| Perform Brownfield preliminary assessments at sites targeted for redevelopment | 4 | 8 | 4 |
| Facilitate 10 Prospective Purchaser Agreements annually* | N/A | N/A | 10 |
| Test public drinking systems that are both susceptible and vulnerable to contamination* | N/A | N/A | 3 |
| Work with local governments, property owners, developers, and community groups to certify property as brownfields* | N/A | N/A | 20 |

**New performance measure established in FY 2004*

*** New performance measure based on registration statistics collected during FY 2003*