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, managing populations of mosquitoes and other pests, and cleaning 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.

- 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.

- 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 - DNREC’s challenge 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. Managing and cleaning up abandoned and/or contaminated properties remains a priority for DNREC. Our Hazardous Substance Cleanup Act (HSCA) is key to our continued ability to address problem or orphaned sites.

Enhancing water supplies and water management - During the past several years 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 few years 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.

**Monitoring and controlling the occurrence of environmentally-related exposures and diseases** - DNREC has invested heavily in identifying and tracking pollutants in the environment, particularly for regulatory and ecological purposes, but only minimally in tracking exposures and the distribution of disease and its relationship to the environment. There are pollutants entering the air and water each year with suspected or known adverse effects; however, we are limited in knowing if there is a link between that pollution and diseases. The result is that there are opportunities to understand and respond to environmental health problems in Delaware that should be exploited.

**Preserving and enhancing Delaware’s green infrastructure** - DNREC is working with a number of partners to develop the appropriate tools and statewide implementation strategies that will identify and protect Delaware’s natural life support system of parks and preserves, woodlands and wildlife areas, wetlands and waterways, productive agricultural and forest land, greenways, cultural, historic and recreational sites and other natural areas all with conservation value.

**Promoting sustainable practices** - Brownfield revitalization continues to be an important Livable Delaware program considering the loss of greenfields and the need to take advantage of the services offered in our urban areas. Other sustainability efforts for DNREC in the coming year include recycling, yard waste management, energy efficiency and promotion of environmentally beneficial building practices, and communicating long term environmental needs and improvements.

**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 Involvement Advisory Council (CIAC) and DNREC’s Community Ombudsman are 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.

**Improving agency performance** - DNREC seeks to attain a highly motivated and knowledgeable workforce that is responsive to the needs of our citizens and the environment. DNREC has embarked on a management and staff training and development program designed to build increased trust and understanding within our own organization and with the customers we serve. DNREC has made significant investments in data systems and web presence and now offers a host of services and products through the internet. DNREC will continue to empower the public with more accessible information and to improve our services through process improvements developed in concert with the regulated community and the public at large.

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### Five-Year Appropriation History

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### FY 2007 Budget Highlights

**Operating Budget:**

- **Recommend $80.1 and 1.0 FTE Training Educator III for the Mispillion Facility.** This facility will act as an informational hub dedicated to the history of Delaware’s watermen and hunters and illuminate the ancestral ties between agriculture and water.
♦ Recommend $94.2 and 2.0 FTEs (Park Manager, Physical Plant Maintenance/Trades Mechanic) for Trap Pond and Killens Pond. The Park Manager will rotate between both facilities.

♦ Recommend $60.0 for the E-Government Initiative. This will complete automating license agents that issue hunting, fishing, dog licenses and boat registrations statewide.

♦ Recommend $68.4 and 2.0 FTEs (Senior Environmental Compliance Specialist, Administrative Specialist) to assist in the training of private inspectors for septic systems and support the operation/maintenance program for alternative systems.

**CAPITAL BUDGET:**

♦ Recommend $3,205.0 for the Conservation Cost Share Program. This cost share program assists landowners by providing funds for the design and installation of systems utilizing best management practices. The intent of the program is to protect water supplies and natural resources while minimizing erosion of farmland and the pollution of wildlife habitat.

♦ Recommend $3,700.0 to continue the Beach Preservation Program. These funds will be used for the cost-share of the Rehoboth/Dewey Beach, Bethany/South Bethany and Fenwick Island Projects.

♦ Recommend $4,000.0 for Park Development/Rehabilitation. These funds will be used for the possible development of newly acquired recreational areas and to maintain current facilities throughout the state.

♦ Recommend $500.0 for the Delaware Water Pollution Control Revolving Fund for grants to improve wastewater facilities statewide. These funds will also leverage $2,000.0 in federal funds.

**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**

- Increase percentage of facilities in compliance at time of inspection from Fiscal Year 2002 baseline.
- Monitor and control the occurrence of environmentally-related exposures and diseases.
- 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.
- Continue the development and implementation of e-government initiatives and the Environmental Navigator to comply with 7 Del. C. §6014 (a).
- 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.
- 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.
- Increase trust and understanding within DNREC and with the customers we serve

**BACKGROUND AND ACCOMPLISHMENTS**

The Office of Information Technology (OIT) 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 main objective of OIT is to provide information to decision makers, protect human health and environment, manage fish and wildlife and enhance recreational opportunities. In order to achieve this objective, OIT is developing an integrated information system containing facility, permitting, enforcement, ambient monitoring and natural resource data.

The Ecosystem Protection Office 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, Livable Delaware, Ecological Restoration and Protection Team, and Green Infrastructure Conservation Committee. 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 Office of Public Affairs issued approximately 400 press releases, held 15 press events and coordinated 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 Planning and Compliance Assistance Office provides pollution prevention and non-regulatory permitting and compliance assistance services for small and large businesses through the Small Business Assistance Program, Pollution Prevention Program and Regulatory Advisory Service. 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 Preliminary Land Use Service (PLUS) process and in implementing the Coastal Zone Act Regulations.

The Delaware Energy Office continues to provide energy planning assistance to state agencies and promotion of renewable energy technologies. The Energy Office is working to help meet the needs and expectations flowing from the Governor’s Energy Task Force and recent legislative changes to its mission and the expansion of the Green Energy Fund grant program.

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 the Department of Transportation. Additionally, DNREC has actively participated in the Partners for Progress Summit and has been championing required training for all employees in sexual harassment.

### FUNDING

<table>
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<tr>
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<th>FY 2007 GOV. REC.</th>
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### POSITIONS

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<td><strong>79.0</strong></td>
<td><strong>80.0</strong></td>
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### OFFICE OF THE SECRETARY

#### ACTIVITIES

- Assist the divisions to meet their human resources, financial, legislative, policy and other needs promptly and accurately.
- Provide for rational, accurate and responsive budgeting and financial management processes.
- 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.
- 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.
- 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 the public’s awareness such as the State Fair, Coast Day, Earth Day, Coastal Cleanup and Christina River Cleanup.

**PLANNING AND COMPLIANCE ASSISTANCE**

**40-01-02**

**ACTIVITIES**

• Coordinate, through the PLUS process and 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.

• Act as first point of contact for small businesses on Clean Air Act issues and assist them with permitting and compliance issues.

• Coordinate with small businesses when upcoming regulations have a small business impact and educate them on the regulations and cost-effective compliance.

• Provide general assistance and information on DNREC permitting programs and provide a central point of contact through the Regulatory Advisory Service.

• Administer the Coastal Zone statute and provide timely, efficient services to industries seeking permits or status decisions.

**PERFORMANCE MEASURES**

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<tr>
<th></th>
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<tr>
<td># of projects reported on for local land use decision makers</td>
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<tr>
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<td># of Clean Air Act ombudsman assistance efforts</td>
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<tr>
<td># of pollution prevention assistance efforts</td>
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<tr>
<td># of Coastal Zone Act permits issued</td>
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<tr>
<td># of Coastal Zone Act status decisions</td>
<td>4</td>
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**ENERGY OFFICE**

**40-01-04**

**ACTIVITIES**

• Act as a central repository and clearinghouse for collection and dissemination of data and information on energy supply, demand, costs, projections, and the environmental impacts of energy generation and use.

• Promote alternative fuels, renewable energy sources, innovative energy technologies, and other means of addressing energy demands.

• Promote energy conservation and efficiency as a means to reduce energy consumption.

• Administer the Green Energy Fund.

• Coordinate with other state and federal agencies in the management of energy data, renewable energy generation, energy efficiency and conservation efforts.

• Provide for a program of energy audits of state facilities and training of energy auditors.

• Assist Facilities Management in developing the state facilities energy management plan.

• Provide assistance to emergency management officials in planning for energy emergencies.

• Conduct the federally-required components of the State Energy Plan grant program awarded by the U.S. Department of Energy.

• Implement the recommendations of the Governor’s Energy Task Force.
NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
40-00-00

PERFORMANCE MEASURES

<table>
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<tr>
<th></th>
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<tr>
<td># of state facilities/schools benchmarked for Energy Star rating</td>
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OFFICE OF INFORMATION TECHNOLOGY
40-01-05

ACTIVITIES

- Maintain the network for over 850 employees in the main office and satellite offices.
- Provide help desk services to over 850 employees throughout the department.
- Ensure that all software are properly licensed and upgraded as needed.
- Maintain and upgrade existing applications.
- Continue the integration of environmental information into the Environmental Navigator and make the information available to department staff and the public.
- Further the development of e-government initiatives to allow the public to do business on-line with the department.
- Continue to implement the Electronic Document Management System in the department.

PERFORMANCE MEASURES

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Average # of public and departmental staff visiting the Navigator website daily</td>
<td>201</td>
<td>200</td>
<td>250</td>
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<tr>
<td>Average # of minutes per day spent on the website.</td>
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<td>30</td>
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<tr>
<td>Number of people subscribing to electronic notification services</td>
<td>919</td>
<td>700</td>
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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

Protect and restore an interconnected system of undeveloped lands.
- Establish an inventory of all state-owned green infrastructure and the environmental values and functions associated with each parcel.
- Develop a statewide green infrastructure conservation and management strategy based on science-based assessments and a long-term vision of the state’s conservation needs.
- Improve the effectiveness of the state’s stewardship of plants, animals and their habitats on public lands.
- In conjunction with other public and private land management organizations, undertake special programs to acquire or permanently protect lands within established state resource areas, and other lands identified as having significance according to the procedures of the Delaware Land Protection Act

Maintain 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 25 species of marine fish and shellfish 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 viable commercial oyster beds that will support a direct harvest from natural oyster beds.
• Improve public participation in marine fisheries management and improve game fish populations in tidal fresh water.

Protect, restore and enhance 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.
• Provide consistent, coordinated and increased marine law enforcement/public safety services while promoting and enhancing boating education opportunities.
• Control aquatic weeds and algae in public ponds to maintain water quality, aesthetics and boating access.
• Promote a Statewide Comprehensive Wildlife Action Plan and develop operational objectives to preserve species of concern.

Foster partnerships with private landowners.
• Develop protocols for invasive species control on public and private lands and waters/wetlands in order to improve wildlife and fisheries habitats.
• Provide technical assistance support to 50 private landowners to develop habitat for Delaware’s wildlife species of concern.

Expand and enhance 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 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 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.

Applied Habitat Research, Management and Restoration promotes 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 2005, 306 landowners participated in the division’s Deer Damage Assistance Program throughout the state.
• Complete a comprehensive deer management plan.
• All regulations concerning horseshoe crab harvests will be reviewed in 2005 to determine if additional measures are needed in 2006.

Species Research and Monitoring provides the basis for management of fish and wildlife stocks and populations.
• The summer flounder fishery is recovering according to schedule and striped bass in the Delaware Estuary have been declared recovered.
• Delaware is in compliance with 25 fisheries management plans required under the Atlantic Coast Fisheries Cooperative Management Act and seven plans administered by the Mid-Atlantic States Fishery Management Council.
• 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 397 environmental reviews and information requests in 2004.
- The division continues to monitor for the occurrence of wildlife diseases including Chronic Wasting Disease, and other animal diseases that may have the potential to impact Delaware residents.

Enforcement provides public safety services and resource protection while enforcing state hunting, fishing and boating laws.

- The Enforcement section is committed to promoting boating safety education classes and enhances the boating safety message. Working with an independent contractor, the division now has an online course available. Marine law enforcement and homeland security patrols are provided as required by national and local security alerts.

Education and Training provides 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 provides 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.

- A replacement fishing pier was completed at Woodland Beach.
- The replacement of the water control structures at Chipman and Record Ponds is on-going.

### Positions

<table>
<thead>
<tr>
<th></th>
<th>FY 2005 ACTUAL</th>
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<td>NSF</td>
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<td>128.0</td>
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### Management and Support - Fish and Wildlife

### Activities

- Direct, plan and coordinate the administration of total division program strategies and objectives including mosquito control, fish and wildlife management and enforcement to meet resource initiatives.
- Represent the division on regional organizations such as the Atlantic States Marine Fisheries Commission, Mid-Atlantic Fishery Management Council, Atlantic Flyway Council and the International Association of Fish and Wildlife agencies.
- Support the Green Infrastructure Conservation Coordinator.
- Prepare an annual report on the progress of the implementation of Executive Order 61 and the attainment of the conservation targets adopted by the Advisory Council on Planning Coordination.

### Wildlife/Fisheries

### 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, manage 53 freshwater pond and marine fishing access sites, and comply with management plans for 25 species of marine fish and shellfish.
- Monitor, maintain and regulate harvestable fish and wildlife populations.
- Provide technical assistance to landowners and government agencies.
- Administer non-game, endangered species and hunter education training programs.
- License and monitor the users of fish and wildlife resources.
- Monitor fish for diseases and investigate fish kills as to their extent and probable cause.
- Obtain fish for contaminate testing and inform the public of fish consumption advisories.
- 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.
- Conduct a trout stocking program in all three counties.

### Performance Measures

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<th>FY 2005</th>
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<td>25</td>
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<tr>
<td># of Hunter Education Certifications</td>
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**Mosquito Control**

### Activities

- Monitor mosquito populations and extent of quality-of-life/nuisance problems or mosquito-borne diseases (focus on West Nile and Eastern Equine Encephalitis), and undertake control actions in response to intolerable infestations, disease outbreaks, or adverse economic impacts.
- Respond to citizen complaints about excessive numbers of biting mosquitoes, or concerns about actual or suspect mosquito breeding areas.
- Investigate and assess mosquito control efficacy and non-target impacts associated with Open Marsh Water Management (OMWM), impoundment management, mosquito fish stocking, or insecticide use (larvicides and adulticides).
- Conduct research surveys and inventories of mosquitoes, fish and wildlife populations.
- Continue implementation of wetland restoration and enhancement projects within the Christina/Delaware River Corridor (Northern Delaware Wetlands Rehabilitation Program).

### Performance Measures

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<thead>
<tr>
<th>FY 2005</th>
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<tbody>
<tr>
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<td>% of nuisance-free nights (June-August)</td>
<td>77</td>
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<td># of acres of degraded wetlands under the Northern Delaware Wetlands Rehabilitation Program restored</td>
<td>35</td>
<td>&gt;100</td>
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**Dog Control**

### Activities

- Administer and monitor a statewide dog contract program providing contract oversight and compliance with both the Delaware and Kent County SPCA.

### Performance Measures

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<th>FY 2007</th>
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</tr>
<tr>
<td># of complaint services</td>
<td>14,608</td>
<td>18,555</td>
</tr>
</tbody>
</table>

**Fish and Wildlife Enforcement**

### Activities

- Prevent, investigate and prosecute illegal natural resource activity within the State of Delaware.
NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
40-00-00

- 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.
- Assist the Department of Safety and Homeland Security with homeland security activities in the prevention of terrorism on U.S. land.

PERFORMANCE MEASURES

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<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td># of boating safety certifications</td>
<td>1,890</td>
<td>1,776</td>
<td>1,864</td>
</tr>
<tr>
<td># of boating safety accidents</td>
<td>21</td>
<td>20</td>
<td>19</td>
</tr>
</tbody>
</table>

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

- Maintain a system for determining the existence and location of state resource areas their degree of endangerment an evaluation of their importance; and information related to their natural, historic or open space values.
- Improve the effectiveness of the state’s stewardship of plants, animals and their habitats on public lands.
- In conjunction with other public and private land management organizations, undertake special programs to acquire or otherwise permanently protect lands within established state resource areas and other lands identified as having state significance according to the procedures of the Delaware Land Protection Act.
- 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 park land 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 non-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; and
- Wilmington State Parks.

Eleven field offices statewide are responsible for overseeing the operation of 20,270 acres in 14 state parks, the Brandywine Zoo and Baynard Stadium. The division also manages eight nature preserves (935 acres), 12 other sites (3,219 acres) outside of the parks and 74 conservation easements protecting an additional 2,609 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.

<table>
<thead>
<tr>
<th>MANAGEMENT AND SUPPORT - PARKS AND RECREATION</th>
</tr>
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<tbody>
<tr>
<td>40-06-01</td>
</tr>
</tbody>
</table>

**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.

**PERFORMANCE MEASURES**

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>% increase of volunteer hours</td>
<td>32</td>
<td>5</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>OPERATIONS AND MAINTENANCE</th>
</tr>
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<tbody>
<tr>
<td>40-06-02</td>
</tr>
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</table>

**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).
- Enforce state park rules and regulations, and provide for site and visitor safety and security, including a water safety program.
- Establish and manage a retail sales program including gift shops, vending and camping supplies.
- Administer a central reservation system for camping and other visitor services.

**PERFORMANCE MEASURES**

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<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>% increase in park and facility revenue</td>
<td>5.5</td>
<td>3</td>
</tr>
</tbody>
</table>
Cultural and Recreational Services

**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.
- 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**

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>% of people participating in park programs</td>
<td>18.3</td>
<td>5</td>
</tr>
<tr>
<td># of produced or revised wayside exhibits</td>
<td>17</td>
<td>12</td>
</tr>
</tbody>
</table>

Planning, Preservation and Development

**Activities**

- Update state resource area maps, in consultation with county governments, at least every 5 years.
- Assist counties or municipalities with inclusion of state resource areas in the conservation element of their respective comprehensive plans.
- Maximize the use of funds, and use of protection methods other than fee simple acquisition to permanently protect statewide priority projects through utilization of open space criteria and the ranking system adopted by the department.
- Plan, design, engineer and construct facilities and infrastructure within the state park system.
- Administer Open Space Program for the acquisition of public natural resource lands.
- Coordinate conservation easement protection efforts on private lands.
- Coordinate all real estate issues including utility easements, use agreements and agriculture easements.

**Activities**

- Administer the Natural Areas Program through the Land Preservation Office as defined by law.
- Develop and implement comprehensive natural resource management plans, including wildlife and invasive species issues.
- Administer state and federal grants and provide technical assistance to county and local governments for land acquisition, outdoor recreation facility and greenway development.
- Plan and develop state park trail system.
- Coordinate and oversee the Council on Greenways and Trails, Natural Areas Council, and Open Space Council.

**Performance Measures**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td># of acres that meet the criteria of the Land Protection Act</td>
<td>2,720</td>
<td>2,000</td>
</tr>
<tr>
<td># of miles of multi-use trails in state parks*</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td># of new areas or additions to existing natural or state resource areas</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td># of conservation easements that meet the criteria of the Land Protection Act</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

*Reflects annual miles of trails and not cumulative miles.

Wilmington State Parks

**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 and manage Blue Ball property.
**NATURAL RESOURCES AND ENVIRONMENTAL CONTROL**

**PERFORMANCE MEASURES**

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<thead>
<tr>
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<tbody>
<tr>
<td>% increase of visitors to Brandywine Zoo</td>
<td>6.4</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td># of stadium field events (maintain at 25 or less to protect turf)</td>
<td>24</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td># of new park program offerings</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td># of historic monuments/statues restored</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

**INDIAN RIVER MARINA**

**40-06-06**

**ACTIVITIES**

- Manage and operate the Indian River Marina, including 274 wet slips, 24 transient slips and 156 unit dry stack storage building and staging for 60 vessels.
- Provide private restroom facilities for slip holders, laundry, wireless internet and restrooms for the general public.

**PERFORMANCE MEASURES**

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<tr>
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<tbody>
<tr>
<td>% of occupancy for all slips</td>
<td>*</td>
<td>*</td>
<td>90</td>
</tr>
</tbody>
</table>

*New division for Fiscal Year 2007.

**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**

- Restore natural functions of streams degraded by development.
- 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.
- Manage storm-water runoff and fully implement the EPA National Pollutant Discharge Elimination System (NPDES) Phase II Stormwater Program for new construction activity.
- Provide water management technical assistance through the construction of drainage, flood control and water management systems.
- Ensure the protection of human life, property and the environment through the development and implementation of a comprehensive dam safety program.
- Reduce wetland and other environmental impacts during planning and construction of new tax/public ditch projects and for maintenance of existing tax/public ditch projects.
- Achieve no net loss of recreational and protective beaches and dunes along the publicly accessible, developed portions of the Delaware Bay shore and Atlantic Ocean coast as measured on a three to seven year renourishment cycle.
Natural Resources and Environmental Control
40-00-00

- Reduce impacts from coastal storms on buildings and infrastructure built adjacent to the Atlantic Ocean and Delaware Bay.
- 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 or boat launching/marina facilities.

**BACKGROUND AND ACCOMPLISHMENTS**

**Ecological Restoration** - The Ecological Restoration and Protection team restores function and value of streams, drainage ditches, wetlands and riparian corridors. The team was established to focus expertise and resources on restoration projects to re-establish biological diversity. The team is implementing techniques that accelerate the ecological processes resulting in projects which replicate natural functioning ecosystems. The efforts of the team yield positive environmental results that support priority initiatives such as: Livable Delaware, Biodiversity Conservation Partnership, BioLegacy, State Wildlife Conservation Planning, TMDLs, land use planning, land preservation, state resource areas and source water protection.

**Drainage and Stormwater** - In the past eleven years, the division has administered 1,317 Resource Conservation and Development projects, including a variety of flood abatement and drainage projects that were funded with $62.4 million from the Twenty-First Century Fund. During Fiscal Year 2005, the department received 968 requests for drainage assistance of which 86 percent have been resolved. The remainder have been investigated and are pending due to rights-of-way, permits and/or funding.

This year the department approved moving the Sediment and Stormwater Program (SSP) from the District Operations section to the Drainage section. The SSP shares many of the technically-related disciplines and is more functionally aligned with the Drainage Program.

The Sediment and Stormwater Management program has successfully designed and coordinated training for the regulated community throughout the state. To date over 5,550 people have participated in the training. The program also implements the EPA NPDES Phase II for construction activities that became effective in March 2003.

**Shoreline and Waterway Management** - Initiatives such as beach nourishment projects, structural erosion control measures, public dune maintenance and emergency storm repair and cleanup are carried out to improve protection to shorefront homes, businesses, roads and utilities and enhance the basis of the state’s coastal recreation and tourism industry. Since 1994, over six million cubic yards of sand have been placed on Delaware beaches. The department is the local sponsor of cost shared coastal studies and projects with the federal government (Corps of Engineers). Initial construction of the federal shore protection project at Roosevelt Inlet/Lewes Beach began in Fiscal Year 2004 and was completed in Fiscal Year 2005. The federal shore protection project at Rehoboth Beach and Dewey Beach, which involved the placement of 1.9 million cubic yards of sand and the creation of a dune at both beach areas, was completed in Fiscal Year 2006. Periodic renourishment will be carried out every three years to ensure the integrity of this project. The Fenwick Island federal shore protection project began in August 2005 and the Bethany Beach/South Bethany federal shore protection project is expected to begin in September 2006.

The State Dredge Program has completed dredging of the Indian River Inlet Marina basin and the Delaware City Mooring Basin and Branch Canal during the last two years. Redredging of the Delaware City Mooring Basin and Branch Canal is currently in progress. Projects planned for future implementation include the Assawoman Canal, Garrisons Lake, Pepper Creek, Love Creek, Dirickson Creek, Lewes-Rehoboth Canal, as well as on-going maintenance work in Indian River, Massey’s Ditch and Augustine Beach boat launching facility. The division will continue to share the responsibility with the U. S. Coast Guard for placing and maintaining channel markers in Rehoboth Bay and the federal channels in Massey’s Ditch and downstream Indian River.

**District Operations** - This section assists the conservation districts in tailoring the programs to meet the needs of diverse constituents, 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.

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 assists agricultural producers in complying with the Nutrient Management Planning requirement established by the Delaware Nutrient Management Law.
In November of Fiscal Year 2004, the District Operations section assumed responsibility for the Buried Wood Debris Remediation Program from the Division of Air and Waste Management. Since then 44 debris pits have been remediated, and eight test pits and 78 investigations have been completed.

**Delaware Coastal Programs (DCP)** - DCP has begun a three-year project to address environmental and economic improvements in South Wilmington. Revitalizations of the South Wilmington area will be addressed through the development of a special area management plan. The DCP will continue its efforts to assist local governments to plan for and manage secondary and cumulative effects of development by providing seed money and technical assistance for the specific purpose of improving coastal and natural resource management at the local level.

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 DNERR is also conducting a needs assessment and market analysis for the green infrastructure education component of Livable Delaware. The DNERR Research Program conducts meteorological and water quality monitoring through the System Wide Monitoring Program (SWMP). It is also involved with research projects relating to horseshoe crab and shorebird habitat restoration, benthic mapping, and water quality monitoring of development pressures.

### FUNDING

<table>
<thead>
<tr>
<th></th>
<th>FY 2005 ACTUAL</th>
<th>FY 2006 BUDGET</th>
<th>FY 2007 GOV. REC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GF</td>
<td>10,937.1</td>
<td>5,555.5</td>
<td>5,799.0</td>
</tr>
<tr>
<td>ASF</td>
<td>6,359.4</td>
<td>9,422.6</td>
<td>9,589.6</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>17,296.5</strong></td>
<td><strong>14,978.1</strong></td>
<td><strong>15,388.6</strong></td>
</tr>
</tbody>
</table>

### POSITIONS

<table>
<thead>
<tr>
<th></th>
<th>FY 2005 ACTUAL</th>
<th>FY 2006 BUDGET</th>
<th>FY 2007 GOV. REC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GF</td>
<td>45.7</td>
<td>48.7</td>
<td>48.6</td>
</tr>
<tr>
<td>ASF</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>NSF</td>
<td>15.8</td>
<td>16.8</td>
<td>22.9</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>64.0</strong></td>
<td><strong>68.0</strong></td>
<td><strong>74.0</strong></td>
</tr>
</tbody>
</table>

**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.
- Promote communication and collaboration within DNREC and among ecological restoration partners.
- Support a multi-disciplinary ecological restoration team of experts that provides project-specific technical assistance.

**DRAINAGE AND STORMWATER**

**40-07-02**

**ACTIVITIES**

- Conduct environmentally sensitive tax and public ditch planning, and provide technical assistance to landowners on surface water management issues.
- 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 in support of DNREC’s Ecological Restoration Initiative.
- Provide technical assistance to local soil and water conservation districts.
- Provide education and 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 TMDL Pollution Control Strategies.
- 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.
• 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 of land development projects.
• Provide sediment and stormwater management field inspection on federal and state funded, non-Department of Transportation construction activities.
• Implement NPDES Phase II requirements for stormwater management.
• Provide technical and administrative support to the Wastewater Facilities and Surface Water Management Advisory Council.

**PERFORMANCE MEASURES**

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<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td># of acres of agricultural and residential land receiving drainage, flood protection and water management</td>
<td>444,515</td>
<td>445,515</td>
<td>446,815</td>
</tr>
<tr>
<td># of acres of wetland restoration developed and constructed in marginal agricultural fields and/or adjacent to streams and tax ditches</td>
<td>26</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Feet of stream restoration projects developed and constructed</td>
<td>5,000</td>
<td>1,500</td>
<td>1,500</td>
</tr>
<tr>
<td># of tons of soil and sediment delivered to Delaware’s waterways through the efforts of the Sediment and Stormwater Program compliance</td>
<td>493,000</td>
<td>375,000</td>
<td>375,000</td>
</tr>
<tr>
<td>% of total recommendations of the Governor’s Surface Water Management Task Force that have been implemented</td>
<td>N/A</td>
<td>65</td>
<td>85</td>
</tr>
<tr>
<td>% of high and significant hazard dams that have received a field verification and inspection analysis</td>
<td>N/A</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

**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.
• Sustain the primary dune and beach system through a regulatory control program that keeps construction off of the dunes and beach.
• 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.
• Identify sufficient sand sources for beach nourishment work for a ten year maintenance period.
• 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.
• Conduct repair and maintenance program of publicly-owned coastal dunes.
• Improve and maintain navigational channels statewide.
• Develop and implement a regional sediment management strategy for the Inland Bays to determine where sedimentation will occur in channels and with what frequency to improve planning for future dredging and channel marking needs in state maintained waterways.
• Restore the environmental integrity of state-owned lakes and ponds.
• Monitor erosion rates of beaches and dunes through a comprehensive surveying program.
• 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.
NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
40-00-00

**PERFORMANCE MEASURES**

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<tr>
<th></th>
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<tbody>
<tr>
<td>% response to</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>legislative/constituent requests for marking navigable channels in Inland Bays</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width in feet of a dry sand Atlantic facing beach that is present for summer recreational use, seaward of dunes and structures</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td># of structures that suffer damage from storms to the parts of the structure that are essential to use for occupation or enterprise</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td># of publicly accessible small boat navigation channels restored to authorized dimensions</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

**DISTRICT OPERATIONS 40-07-04**

**ACTIVITIES**

- 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 plans through the work of eight conservation district planners in the Delaware Bay, Chesapeake Bay and Inland Bays watersheds.
- Provide staff support for DNREC’s TMDL 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) CREP.
- Administer the Buried Wood Debris Remediation Program.

**DELAWARE COASTAL PROGRAMS 40-07-05**

**ACTIVITIES**

- Administer National Oceanic and Atmospheric Administration’s (NOAA) grant awards to DNREC for coastal management and DNERR.
- Provide grant funding to improve responsiveness to coastal management issues including coastal storm-related damage reduction, near-coastal water pollution abatement, habitat improvement, oil pollution prevention and response, coastal access, and pollution prevention.
- Administer the federal consistency provisions of the Coastal Zone Management Act for Delaware.
- Implement educational programs for the public, schools, resource users and decision-makers addressing coastal resource issues.
- Implement the National System Wide Monitoring Program (SWMP) for water quality, nutrients and biological parameters.
- Implement the Environmental Cooperative Science Center Program with Delaware State University.

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<tr>
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<tbody>
<tr>
<td>% of reduction nitrogen loadings in the Chesapeake, Delaware Bay and Inland Bays watersheds</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td># of debris pits remediated</td>
<td>63</td>
<td>33</td>
<td>30</td>
</tr>
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**PERFORMANCE MEASURES**

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<tr>
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<tbody>
<tr>
<td># of coastal decision-maker workshops hosted by DNERR</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td># of school children attending DNERR education programs</td>
<td>2,250</td>
<td>3,000</td>
<td>3,000</td>
</tr>
<tr>
<td># of meeting participants hosted by the DNERR conference facility</td>
<td>2,000</td>
<td>1,300</td>
<td>2,000</td>
</tr>
<tr>
<td># of grants awarded to local governments</td>
<td>10</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>
# WATER RESOURCES

## 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, Chesapeake, Inland Bays and Delaware River basins by 2006.
- Ensure that all ground and surface waters used for drinking water are protected by 2008 to meet the long-term goal of the Drinking Water Standards.
- 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 2000 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 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.
- Provide for the equitable and adequate allocation of safe and sound surface and ground water supplies.
- Reduce exposure to hazardous substances, including carcinogenic substances in the ambient environment.
- Improve the function and value of coastal and freshwater streams and wetlands for habitat, flood control and water quality enhancements.

## 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 for 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 water supply plan for northern New Castle County.
- Assisted the Nutrient Management Commission and the Department of Agriculture by participating in commission meetings and fulfilling commitments established in the memorandum of understanding for Confined Animal Feeding Operation (CAFO) by assisting in the drafting of a draft General Permit for CAFOs.
- Developed and implemented a compliance inspection program for small on-site wastewater systems located in the inland bays watershed.
- Developed protocol for testing an Aquifer Storage and Recovery (ASR) well in New Castle County which will assist efforts to address future droughts.
- Developed e-government link to renew on-site wastewater licenses via the department’s website.
Continued department review of the U.S. Army Corps of Engineers’ permit application to deepen the shipping channel in the Delaware River.

Secured funding from NRCS to cost share projects that utilize environmentally compatible techniques for stabilizing eroding shorelines.

Provided technical and financial support during development of TMDL for Christina River, Delaware Estuary, Murderkill River, and Little Assawoman Bay.

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 NPDES permits for Delaware City Power Plant, Formosa, Winterthur, SPI Pharma, and Uniqema/Avecia. Issued NPDES permits to Schiff Farms, Newark (MS4) and DelDOT-Kent County (MS4). Eliminated NPDES permits for FMC, DuPont Chestnut Run, Kuhne (Chloramone), Seawatch, Southwood Acres, and Shadybrook Farms.

Worked with EPA, New Jersey, Pennsylvania, and New York to establish a program office and director position for the Delaware Estuary Program.

**FUNDING**

<table>
<thead>
<tr>
<th></th>
<th>FY 2005 ACTUAL</th>
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<th>FY 2007 GOV. REC.</th>
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**POSITIONS**

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<tr>
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<td>65.6</td>
<td>62.6</td>
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<td>NSF</td>
<td>28.1</td>
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<td>TOTAL</td>
<td>160.0</td>
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</tr>
</tbody>
</table>

**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 Partnership for the Delaware Estuary by supporting implementation actions such as TMDL development, combined sewer overflow (CSO) and storm drain signing, and wetland habitat assessment.
- Support the Center for the Inland Bays by assisting in the 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 Appalachian States Low-Level Radioactive Waste Commission by serving on the commissions and supporting their various committees and sharing information.
**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 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), NPDES, fish tissue testing for toxics in fish, air surveillance, and Shellfish and Recreation Waters programs.

- 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 and anticipate and satisfy clients’ changing needs by expanding laboratory analytical capabilities to incorporate the best available technology.

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**PERFORMANCE MEASURES**

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<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>$ low interest loans and grants for wastewater projects that enhance water quality or contribute to achieving TMDLs (millions)</td>
<td>34.8</td>
<td>35.0</td>
<td>21.5</td>
</tr>
<tr>
<td>$ low interest loans for eligible nonpoint source expanded use activities (millions)</td>
<td>1.0</td>
<td>1.5</td>
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---

**SURFACE WATER DISCHARGES 40-08-04**

**ACTIVITIES**

- Utilize NPDES permits to implement pollution control strategies for TMDLs.

- 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**

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<tr>
<th></th>
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<tbody>
<tr>
<td>% decrease in number of NPDES permit violations</td>
<td>11</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

---

**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 all large on-site wastewater systems and 75 percent of all small systems.

- Issue large septic 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.
• Implementation of pollution control strategies for TMDL watersheds once regulations are promulgated. Inland Bay’s Watershed Regulation adoption date anticipated spring of Fiscal Year 2006.

**Performance Measures**

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>% alternative on-site treatment systems inspected for operational compliance</td>
<td>85</td>
<td>90</td>
</tr>
<tr>
<td>% of construction inspections on on-site wastewater systems that discharge less than 2,500 gallons per day</td>
<td>38</td>
<td>75</td>
</tr>
<tr>
<td>% of construction inspections on on-site wastewater systems that discharge more than 2,500 gallons per day</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>% of compliance inspections on Holding Tanks in the Inland Bays Watershed</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

**Watershed Assessment**

**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 and implement Pollution Control Strategies (PCs) to meet pollutant load reduction goals established by TMDLs for the Inland Bays, Nanticoke River, Broad Creek, Appoquinimink River and Murderkill River watersheds.
• Establish TMDLs for Army Creek, Blackbird Creek, Broadkill River, Cedar Creek, Dragon Run, Leipsic River, Little River, Mispillion River, Red Lion Creek, Smyrna River and St. Jones River.
Develop wetland profiles to quantify and qualify their water quality and habitat functions in the Nanticoke River and Inland Bays Watershed. These profiles will be used to assist in future wetland restoration, sitting and development activities.

- 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 TMDLs for toxic pollutants for the Delaware Estuary.
- Develop bacteria TMDLs using new genetic techniques.

**PERFORMANCE MEASURES**

<table>
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<tr>
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<tbody>
<tr>
<td>% of waters attaining water quality standards for healthy aquatic life</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td># of acres of watersheds with nutrient TMDLs in place</td>
<td>658,925</td>
<td>839,516</td>
</tr>
<tr>
<td># of acres of watersheds with Pollution Control Strategies in place</td>
<td>0</td>
<td>528,113</td>
</tr>
<tr>
<td># of incidences of water-borne disease (swimmer illness)</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

**WETLANDS AND SUBAQUEOUS LANDS**

**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.
- Support efforts to reestablish fees for docks and piers on public subaqueous lands.

**PERFORMANCE MEASURES**

<table>
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<tr>
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<tbody>
<tr>
<td>% of shoreline stabilized with soil bioengineering and rip-rap versus bulkheading</td>
<td>85</td>
<td>95</td>
</tr>
<tr>
<td>% of marinas with approved operations and maintenance plans</td>
<td>25</td>
<td>30</td>
</tr>
</tbody>
</table>

**AIR AND WASTE MANAGEMENT**

**MISSION**

To optimize the air resources and waste management practices within Delaware with a combination of ensuring strict compliance with laws to protect Delaware’s precious resources and by working cooperatively with the citizens and businesses of Delaware to protect public health, welfare and the environment.

**KEY OBJECTIVES**

- Reduce exposure to hazardous substances, including carcinogenic substances, in the ambient environment.
- Prevent exceedences of air quality standards for particulate matter, sulfur dioxide, carbon monoxide, nitrogen dioxide, and one-hour ozone and reduce hazardous air pollutants by adopting the EPA’s National Emission Standards for Hazardous Air Pollutants for Source Categories.
- Attain eight-hour ozone standard statewide and PM2.5 standard in New Castle County by 2010.
- Maintain an air quality network adequate for providing representative and accurate data for ambient concentrations of ozone, particulate matter, sulfur dioxide, carbon monoxide and nitrogen oxides.
- Promote effective and sustainable cleanup and reutilization of Brownfields in conjunction with community land use plans.
- Increase residential solid waste recycling to 30 percent by June 2006.
- 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**

Air Quality Management (AQM) - 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. The AQM section recently completed and released the results of the
ambient monitoring that was performed as part of the Delaware Air Toxics Assessment Study. Additionally, AQM has embarked on the full implementation of source apportionment activities in 2005 to include real-time aerosol characterization at the Martin Luther King Boulevard monitoring location in Wilmington.

AQM has continued to move forward with the Title V Operating Permit Program that includes issuance of required permits, developing a Compliance Assurance Program, and issuance of Title V permit renewals. AQM has employed Value Stream Mapping with the help of the Delaware Economic Development Office (DEDO) to improve the minor source permitting process. As part of the improved process, AQM established a goal of issuing most minor source construction permits within 90 days. The Small Business Technical Assistance Program continues to provide technical advice and assistance to small businesses to aid them in complying with regulations.

**Brownfield Revitalization** - A major component of the revitalization and the Volunteer Cleanup Program (VCP) success is DNREC’s new Brownfields Development Program. Brownfield redevelopment seeks to direct future development to targeted growth areas where new services and needs can be provided at the least cost while simultaneously cleaning up the environment. The department has worked with DEDO to improve and streamline the Brownfield grant process. This is a cooperative effort that involves partnering with both private and public agencies to create greater opportunities for redevelopment, as well as to address the cleanup of suspected contamination at these properties. Over 38 brownfield sites have been processed as Certified Brownfields for grant and mixed funding opportunities under HSCA and DEDO. In addition, the department has become involved in several, high priority public/private partnership development sites on Brownfield sites. Development on these sites occurs at least twice as fast as traditional Brownfields sites, requiring more time on the part of the department. The department is contracting for analysis of these high profile Brownfield sites and the overall Brownfields Program to improve the process for developers while protecting public health and the environment.

**Site Investigation and Restoration** - The branch has a major role in investigating and cleaning up non-NPL sites which pose a threat to public health, welfare and the environment.

The branch has investigation and cleanup work on-going at 195 HSCA/VCP/Brownfield sites. There are 146 sites that are currently undergoing cleanup, and 49 sites have been cleaned up for reuse or require no further action. In addition, the branch, with cooperation from the Division of Public Health, is completing the recommendations of a study done to monitor possible movement of contamination from hazardous waste sites to public drinking water systems.

**Enforcement** - The 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. Enforcement officers provide investigative and prosecutorial services to three of the five divisions within DNREC including, Air and Waste Management, Water Resources, and Soil and Water Conservation. The Enforcement section also operates the DNREC Industrial Notification System and the Delaware Environmental Release Notification System. In Fiscal Year 2005, section activities included providing professional response services to the community; proactive operations targeting waste management, water quality, and air pollution issues; public and professional outreach programs designed to enhance environmental awareness; identification of community environmental issues; maintaining training in both environmental response and law enforcement; attending and providing training on homeland security response and preparedness; operation of the Delaware Environmental Release Notification System; and policy development.

**Tank Management** - Delaware’s Underground Storage Tank (UST) Program regulates petroleum and hazardous substance tanks including their installation, operation and removal. The program has two main goals. The first is to prevent releases from happening by working with owners and operators of tank systems to ensure compliance with Delaware’s Regulations Governing Underground Storage Tank Systems. The second is to detect releases from tank systems and expedite the cleanup to mitigate harm to the environment.

Delaware’s Aboveground Storage Tank program was created when the Jeffrey Davis Aboveground Storage Tank (AST) Act was signed into law on July 8, 2002. The department has established regulations that govern the installation, operation, maintenance, and corrective action for ASTs. To date, 817 facilities have been registered with the department totaling over 3,400 ASTs. This past year tank owners had to submit financial assurance to cover their liability for taking corrective actions and for third-party liability claims in the event that a release occurs.

In Fiscal Year 2005, Boiler Safety was incorporated into the Tank Management branch. Boiler Safety is comprised of inspectors holding commissions issued by the National Board of Boiler and Pressure Vessel...
Inspectors. The purpose of the program is to promote increased safety for life and property by maintaining uniformity in the construction, installation, inspection and repair of boilers and pressure vessels.

**Emergency Prevention and Response** - This section was created in Fiscal Year 2005 by combining the division's Environmental Response branch, Emergency Planning and Community Right-to-Know Act (EPCRA) group and Accidental Release Program (ARP) group. The Emergency Response branch (ERB) staff provides 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 2005, the Emergency Response staff responded to 338 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 numbers of incidents were petroleum-related incidents. The ERB continues to manage and support the Emergency Response Team to maintain a fully functional statewide 24 hour/7 day-a-week response capability. The EPCRA group continued to provide support to the State Emergency Response Commission and Local Emergency Planning Committees, and manage the EPCRA reporting requirements. During Fiscal Year 2005, the EPCRA Group issued the Toxics Release Inventory report and developed a software application for emergency responders to use to identify hazardous chemicals stored in facilities throughout the state. In Fiscal Year 2005, the ARP group conducted 43 inspections at facilities with extremely hazardous substances to ensure proper control plans and operations to prevent disasters. The ARP Group provided compliance monitoring and technical oversight of the Motiva/Premcor Mechanical Integrity Order and Consent Decree.

**Solid and Hazardous Waste Management** - The program is responsible for ensuring Delaware’s wastes are managed 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. 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 and draft legislation that reflects what needs to occur in order for Delaware to increase its residential solid waste diversion rate.

**FUNDING**

<table>
<thead>
<tr>
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<th>FY 2005 ACTUAL</th>
<th>FY 2006 BUDGET</th>
<th>FY 2007 GOV. REC.</th>
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<td>15,094.0</td>
<td>17,564.2</td>
<td>22,878.0</td>
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<td><strong>TOTAL</strong></td>
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<td><strong>22,298.2</strong></td>
<td><strong>27,913.0</strong></td>
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**POSITIONS**

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<tr>
<td>NSF</td>
<td>65.4</td>
<td>65.4</td>
<td>64.4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>216.0</strong></td>
<td><strong>215.0</strong></td>
<td><strong>214.0</strong></td>
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**MANAGEMENT AND SUPPORT - AIR AND WASTE 40-09-01**

**ACTIVITIES**

- Implement the new chronic violator regulations in cooperation with other DNREC divisions.
- 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.
- Oversee the response to Freedom of Information Act (FOIA) requests received by the division.
- 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.
**AIR QUALITY MANAGEMENT**

**ACTIVITIES**

- Participate actively in Ozone Transport Commission (OTC), State and Territorial Air Pollution Control Administrators, and Mid-Atlantic Regional Air Management Association activities to take advantage of combined expertise and foster regional and national strategies.
- Direct the State Implementation Plan revisions as required by the Clean Air Act Amendments (CAA) of 1990.
- Promulgate new air regulations required by the CAAA, OTC and state needs, and annually track point source emission inventories consistent with the CAAA.
- Oversee existing motor vehicle exhaust pressure and anti-tampering tests.
- Track air quality status for all pollutants, especially ozone and fine particulate matter attainment status.
- Continue effective compliance inspections and continue permitting air contaminant sources pursuant to the new and more complex Title V permitting program.
- Implement value stream mapping recommendations for minor source permitting program to reduce permit issuance time to 90 days.
- Implement new procedures and a protocol to expedite major enforcement cases.
- 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 long-term ozone, fine particulates and regional haze problems.
- Continue air toxics monitoring at a minimum of three sites in Delaware.
- Continue to implement audit procedures for the Inspection and Maintenance Program Two-Speed Idle Test and On-Board Diagnostics tests, and evaluate data.

**PERFORMANCE MEASURES**

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<tr>
<th></th>
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<tbody>
<tr>
<td># of environmental release notifications to the public</td>
<td>509</td>
<td>600</td>
<td>500</td>
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<tr>
<td># of notifications to DNREC of spills, etc.</td>
<td>523</td>
<td>500</td>
<td>500</td>
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<tr>
<td># of complaints</td>
<td>4,598</td>
<td>5,000</td>
<td>4,800</td>
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**PERFORMANCE MEASURES**

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<tr>
<th></th>
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<tbody>
<tr>
<td># of exceedences of Ozone, PM, CO, NO2 and SO2 standards</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td># of ambient air samples collected</td>
<td>1,669</td>
<td>1,100</td>
<td>1,100</td>
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<tr>
<td># of air samples for air toxics</td>
<td>900</td>
<td>900</td>
<td>180</td>
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</table>

**WASTE MANAGEMENT**

**ACTIVITIES**

- Site investigation and restoration.
  - Overseer remedial investigation, feasibility study, remedial design and remedial action at HSCA, VCP and Brownfield sites.
  - Review applications for acceptance into the VCP and Brownfield programs.
  - Provide oversight for the investigation, study, design and clean up of VCP/Brownfield sites consistent with HSCA.
  - Assist in facilitating grants, loans and tax credits at Brownfield sites so that such sites are reused in a productive manner.
  - 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 Site Investigation and Remediation Branch (SIRB) programs and the risks posed by SIRB sites.
  - Perform eight Targeted Brownfields Assessments or site inspections at sites targeted for redevelopment during Fiscal Year 2006.
  - Enhance and implement the Brownfields inventory and a ranking system to address redevelopment potential and the degree of contamination.
  - Continue to screen shallow public drinking water supplies for contaminants as recommended by Delaware’s Advisory Council on Cancer Incidence and Mortality.

- Tank management.
  - Identify unregistered USTs, conduct UST facility compliance assessments, oversee UST removals and abandonments, approve and supervise the installation of new UST installations.
  - Identify unreported releases from USTs.
• 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.
• Implement requirements of the Federal 2005 Energy Bill including creation of a tank operator training program, increased tank inspection frequency, lock-out delivery prevention program and more stringent new tank installation requirements.
• Continue permitting and enforcement of Stage II requirements in Sussex County.
• Implement the Aboveground Storage Tank Program for the state.
• Maintain data on nearly 21,000 boilers and pressure vessels.
• Inspect approximately 3,500 boilers and pressure vessels.
• Commission private insurance inspectors operating within Delaware and monitor approximately 17,500 inspections performed by them.
• Investigate boiler and pressure vessel accidents.
• Conduct safety-training seminars on boiler and pressure vessel operation, maintenance and repair.
• Review 16 manufacturers and repair companies of boiler and pressure vessels.

Solid and hazardous waste management.
• Regulate the disposal of waste generated in Delaware 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.

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<thead>
<tr>
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<tbody>
<tr>
<td># of leaking storage tanks</td>
<td>112</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>% reduction of Persistent Bioaccumulative Toxics over 1991 generation rates</td>
<td>15</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>% of Brownfields projects that meet or exceed negotiated project deadlines</td>
<td>80</td>
<td>90</td>
<td>92</td>
</tr>
<tr>
<td>% of residential solid waste recycled</td>
<td>20</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td># of boiler safety seminars/training - contractor training school</td>
<td>20</td>
<td>6</td>
<td>10</td>
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<tr>
<td># of overdue inspections</td>
<td>94</td>
<td>400</td>
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</tbody>
</table>

Emergency Prevention and Response

<table>
<thead>
<tr>
<th>Activities</th>
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<tbody>
<tr>
<td>Investigate citizens’ complaints and environmental incidents/emergencies within 24 hours.</td>
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<tr>
<td>Respond to hazardous materials incidents as part of the state emergency response team and the Delaware Emergency Operations Plan.</td>
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<tr>
<td>Participate in emergency planning with federal, state and local emergency management and response agencies.</td>
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<tr>
<td>Provide hazardous materials and environmental emergency response training to other agencies within the state.</td>
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<tr>
<td>Upgrade response capabilities and coordinate and plan response activities through the State Emergency Response Commission (SERC).</td>
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<tr>
<td>Continue implementation of the Emergency Planning and Community Right-to-Know Act, including ensuring compliance with annual hazardous chemical inventory and toxics release inventory data reporting.</td>
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<tr>
<td>Assure effective risk management programs at extremely hazardous substance facilities by continuing to conduct compliance inspections and risk management plan reviews pursuant to the Extremely Hazardous Substances Regulation.</td>
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</thead>
<tbody>
<tr>
<td># of emergency responses to incidents</td>
<td>338</td>
<td>340</td>
<td>350</td>
</tr>
<tr>
<td># of Accidental Release Program inspections</td>
<td>15</td>
<td>25</td>
<td>35</td>
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</tbody>
</table>