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

**Key Objectives**

- Promote health and safety by maintaining and improving the quality of air, land, and water resources, manage populations of mosquitoes and other pests, and clean up spills involving hazardous chemicals to enhance the health and well-being of Delaware’s people, wildlife, and plants.

- Conserve plant and animal resources through protection and management of species populations and their habitats. This effort involves maintenance of biodiversity, harvest allocation of species populations, protection and restoration of ecological functions and processes, and performance of educational outreach. Achieving this objective necessitates good quality air, water and soils. Sustaining this objective requires coordination of the department to fulfill Livable Delaware goals.

- Promote and provide recreational opportunities that allow Delawareans to enjoy natural resources and open spaces that enhance quality of life and result in a more Livable Delaware. The department strives to provide recreational opportunities while balancing resource protection with resource management and use.

- Broaden the commitment to environmental protection and resource conservation by working in partnership with others to develop strategies that integrate economic development, environmental quality, and social policy making with broad public involvement.

**Priorities**

**Improve Industrial Compliance and Environmental Performance** - 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.

**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/controlling the occurrence of environmentally-related exposures and diseases** - In 2003, DNREC began a study of toxic air pollution. DNREC and Public Health will assess the carcinogenic and noncarcinogenic risks on local communities and identify improvements that may be needed for regulatory programs. DNREC has also increased the location, frequency and number of fish sampling for carcinogens and is coordinating with Public Health in the development of a broad-based public education campaign based on the findings of national studies of total exposures that may contribute to cancer incidence.

**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.

**Brownfield Revitalization** - Brownfield revitalization is an important Livable Delaware program for both DNREC and Delaware Economic Development Office (DEDO). Both agencies have invested heavily in the Brownfields initiative and worked closely with stakeholders and property owners in improving the efforts.

**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.

**Improved Information Technology and Citizen Access** – Because of significant investments made in data systems, DNREC is able to not only enhance the management of programs and the information they generate, but also present information in an understandable and readily available format through the internet including information on permitting enforcement and environmental releases.

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**Five-Year Appropriation History**

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**FY 2006 Budget Highlights**

**Operating Budget:**

- Recommend enhancement of 1.0 FTE and $34.2 in Personnel Costs, $20.7 in Contractual Services and $18.5 in Supplies and Materials for the completion of the Blue Ball Recreation Center. This center is expected to be open to the public by early summer of 2005. Spreading out over 347 acres, this historic site will feature four to five miles of trails and a 14,000 square-foot special use facility.

- Recommend enhancement of $25.0 in Contractual Services for Fisheries Shellfish and Blue Crab Monitoring. Fish habitats in Delaware’s territorial waters will be watched closely and results from this...
monitoring will be used for potential regulatory, season and limit changes.

♦ Recommend enhancement of $55.0 for the Ecological Restoration Program. This additional contribution will allow DNREC to design and implement restoration projects on a continuous basis and maintain the 2 to 1 federal/state match.

♦ Recommend enhancement of $40.0 for Harmful Algal Bloom monitoring. This program will provide monitoring and rapid response activities for potentially harmful algal species.

♦ Recommend enhancement of $1,400.0 ASF for the Beach Erosion Control Program. Work on maintaining Delaware’s shoreline is well underway and this money will be used to finish Lewes beach work, start Rehoboth/Dewey beaches in mid January, Fenwick in August and Bethany/South Bethany in 2006. Each of these projects will be maintained as federal projects with renourishment scheduled every three to four years for 50 years.

**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 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 $10,000.0 to continue the Beach Preservation Program. These funds will be used for the cost-share for the Rehoboth/Dewey Beach, Bethany/South Bethany and Fenwick Island Projects.

♦ Recommend $550.0 for improvements at the Lewes Facility formerly known as the Doxsee Site. Unused and unsafe buildings will be razed and the site will be improved to include a public boat launching facility to replace the one currently in use in downtown Lewes.

♦ Recommend $1,000.0 for the Delaware Water Pollution Control Revolving Fund. These funds allow for grants to improve wastewater facilities statewide. These funds will also be used as matching funds for $6,400.0 in federal funds.

♦ Recommend $8,000.0 for the Wastewater Management Account for loans to towns and municipalities throughout Delaware in order to control the storage and treatment of wastewater.

**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.
- Implement the chronic violator regulations in 2005 and evaluate chronic violator designations as appropriate.
- 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.
- Implement e-government initiatives and continue the development and implementation of 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.
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, to 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 department has initiated Electronic Document Management in two of its programs. This initiative will be extended to other programs within the department over the next three years. The Notification System required under Senate Bill 33, to notify the public of environmental releases in their neighborhood, has been operational since February 2002. The department has also revamped its website to an intentions-based site that includes enforcement actions, violations and environmental releases among many other items of public interest.

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

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

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 services for small and large businesses through the Clean Air Act and Regulatory Advisory Services. 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 new Preliminary Land Use Survey (PLUS) process and in implementing the Coastal Zone Act Regulations.

The Delaware Energy Office, now a component of DNREC, 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.

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 DelDOT. Additionally, DNREC has actively participated in the Partners for Progress Summit and has been championing required training for all employees in sexual harassment.
**Natural Resources and Environmental Control**

**40-00-00**

### Funding

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**OFFICE OF THE SECRETARY**

**40-01-01**

**Activities**

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

### Performance Measures

| % of facilities in compliance at time of inspection: |
|------------|-----------|-----------|
| Air quality | 89.5 *    | *         |
| Solid waste | 62.5 *    | *         |
| Hazardous waste | 78.9 *  | *         |
| Underground storage tanks | 94.1 * | *         |
| Above ground storage tanks | N/A * | *         |
| NPDES | 99.8 * | *         |
| Ground water discharges | 98.2 * | *         |
| Sediment and storm water | 99.9 * | *         |
| Accidental release | 100.0 * | *         |
| Wetlands and subaqueous | 97.8 * | *         |
| Beach preservation | 100.0 * | *         |

*FY 2005 will establish benchmark data for new performance measures.

**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.
- Assist in the implementation of the Governor’s PRIDE program for recognition of Delaware’s manufacturing facilities that exhibit superior regulatory compliance and environmental stewardship.
- 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 how to cost-effectively comply.
• 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.

**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 energy efficiency as means to reduce energy consumption.
- Administer the Green Energy Fund.
- Coordinate with other state and federal agencies in the management of energy data and the management of 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.

**OFFICE OF INFORMATION TECHNOLOGY 40-01-05**

**ACTIVITIES**

- Maintain the network for over 850 employees in main office and satellite offices.
- Provide Helpdesk services to over 850 employees throughout the department.
- Ensure that all the 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 the department staff and public.
- Further the development of e-government initiatives to allow public do business online with the department.
- Continue to implement the Electronic Document Management system in the department.
**PERFORMANCE MEASURES**

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Average # of public and departmental staff visiting the Navigator website daily and average amount of time spent on the site.

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*FY 2005 will establish benchmark data for new performance measures.

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**FISH AND WILDLIFE**

**40-05-00**

**MISSION**

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

**KEY OBJECTIVES**

**Maintaining Tidal Fisheries Management**
- Increase investigations of events in the aquatic environment that result in the loss of natural habitat, fish population changes and fish kills.
- Implement and update interstate fishery management plans and regulations for 37 species of marine fishes and shellfish to remain in compliance with 25 interstate fishery management plans.
- Develop and expand artificial habitat (reefs) to colonize benthic organisms in support of marine fisheries on 11 sites in the Delaware Bay and Atlantic Ocean.
- Re-establish a viable commercial oyster fishery with direct harvest from natural oyster beds.
- Improve public participation in marine fisheries management and improve game fish populations in tidal fresh water.

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

• Complete a Statewide Comprehensive Wildlife Plan by 2005 as mandated by the U.S. Fish and Wildlife Service under funding provided by the State Wildlife Grants Program.

Fostering 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.

• Enhance technical assistance support to private landowners to develop habitat for Delaware’s wildlife species of concern. Technical assistance initiatives will be funded by a new federal grant from the U.S. Fish and Wildlife Service entitled “Landowner Incentive Program”.

Expanding and Enhancing the Non-Game Program for Biodiversity
• Continue protection, recovery and management plans (federal or state) for endangered, threatened, or species of special concern on an annual basis to enhance the state’s biodiversity. Funding provided by the U.S. Fish and Wildlife Service under the Wildlife Conservation and Restoration Program and State Wildlife Grants Program are being used to expand biodiversity conservation efforts in accordance with Livable Delaware precepts.

• Conduct surveys and maintain information on the distribution and status of the state’s flora, fauna, and natural communities, with an emphasis on rare species, and provide this information and expertise to public agencies and private organizations to enhance the state’s biodiversity.

Prevent Mosquito-borne Diseases
• Continue surveillance/monitoring and control or treatment activities to prevent or lessen outbreaks of West Nile Encephalitis or Eastern Equine Encephalitis.

• Control pestiferous mosquito populations at tolerable nuisance levels, for quality-of-life factors and to lessen possible outbreaks of mosquito-borne disease.

BACKGROUND AND ACCOMPLISHMENTS

Fish and Wildlife programs are developed and administered to serve the interests of all of the residents of Delaware. The division works with all segments of constituencies to identify their needs and interests in fish and wildlife resources. The division advocates the 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 2004, 254 landowners participated in the division’s Deer Damage Assistance Program throughout the State.

• The division instituted additional restrictions on horseshoe crab harvests that took effect in 2004. All regulations concerning horseshoe crab harvests have been revised.

• The division continued to work with Soil and Water Conservation in Fiscal Year 2004 to establish freshwater wetland habitat on the Norman G. Wilder wildlife area to compensate for wetlands lost due to drainage project construction.

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 over the internet. 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 new boating access site was opened in the City of Milford that includes one ramp and parking for 10 vehicle/trailer units.

Engineering and planning continues on the replacement of the water control structures at Chipman and Record Ponds.

The Natural Resources and Environmental Control (40-00-00) division operates four sections:

- **Enforcement**
- **Education and Training**
- **Infrastructure Maintenance and Development**
- **Management and Support - Fish and Wildlife**

### FUNDING

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### MANAGEMENT AND SUPPORT - FISH AND WILDLIFE (40-05-01)

#### ACTIVITIES

- Direct, plan and coordinate the administration of total division program strategies and objectives including mosquito control, fisheries and wildlife resource initiatives.
- Represent the division on regional organizations such as the Atlantic States Marine Fisheries Commission, Mid-Atlantic Fishery Management Council, Atlantic Flyway Council and the International Association of Fish and Wildlife agencies.

#### PERFORMANCE MEASURES

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<td>Maintain Internet List Serve capabilities in order to keep the public informed about division programs</td>
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### WILDLIFE/FISHERIES (40-05-02)

#### ACTIVITIES

- Conduct research surveys and inventories of fish, shellfish and wildlife populations.
- Develop fish and wildlife management plans for 15 state-owned wildlife management areas, manage 53 freshwater pond and marine fishing access sites, and comply with management plans for 37 species of marine fish and shellfish.
- Monitor, maintain and regulate harvestable fish and wildlife populations.
- Provide technical assistance to landowners and government agencies.
NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
40-00-00

- Administer a non-game and endangered species program and hunter education training program.
- License and monitor the users of fish and wildlife resources.
- Monitor fishes for diseases and investigate fish kills as to their extent and probable cause.
- Acquire, develop, and maintain lands and waters for recreation and conservation.
- Control aquatic and non-indigenous plants and improve fish and wildlife habitat.
- Develop and implement wetland enhancement programs and coordinate and conduct fish, wildlife, acquisition, and hunter education and aquatic resource education activities.
- Conduct a trout stocking program in all three counties.

**PERFORMANCE MEASURES**

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<td>Increase the number of acres of actively managed wildlife habitat on public lands by 5% annually</td>
<td>6,910</td>
<td>7,700</td>
<td>8,085</td>
</tr>
<tr>
<td>Comply with Fisheries Management Plans (number)</td>
<td>25</td>
<td>23</td>
<td>25</td>
</tr>
<tr>
<td>Increase the number of Hunter Education Certifications by a minimum of 5% per year to minimize hunter related accidents</td>
<td>1,566</td>
<td>1,977</td>
<td>2,076</td>
</tr>
</tbody>
</table>

**MOSQUITO CONTROL**
40-05-04

**ACTIVITIES**

- Monitor mosquito populations and levels of nuisance or disease and provide temporary controls in response to disease outbreak.
- Investigate and assess controls via Open Marsh Water Management (OMWM) / Integrated Marsh Management (IMM), impoundment management, mosquito fish stocking, woodland control and insecticides.
- Conduct research surveys and inventories of mosquitoes, fish and wildlife populations and continue the implementation of wetland rehabilitation within the Christina/Delaware River Corridor.
- Administer education programs as they relate to wetland restoration mosquito control problems and Integrated Marsh Management needs.

**PERFORMANCE MEASURES**

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>On a statewide basis, continue to treat 300 acres of salt marsh mosquito breeding habitat per year using source reduction marsh management techniques, including Open Marsh Water Management and impoundment habitat modifications</td>
<td>222</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>On a statewide basis from June through August, continue to achieve a 75% or greater nuisance free nights</td>
<td>53.3</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>Based on targets of opportunity and available resources, annually restore at least 100 acres of degraded wetlands under the Northern Delaware Wetlands Rehabilitation Program</td>
<td>140</td>
<td>&gt;100</td>
<td>&gt;100</td>
</tr>
</tbody>
</table>

**DOG CONTROL**
40-05-05

**ACTIVITIES**

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

**PERFORMANCE MEASURES**

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Increase # animals to shelters statewide by 5%/year</td>
<td>22,838</td>
<td>12,121</td>
<td>12,727</td>
</tr>
<tr>
<td># of complaint services</td>
<td>19,608</td>
<td>17,672</td>
<td>18,555</td>
</tr>
</tbody>
</table>

**FISH AND WILDLIFE ENFORCEMENT**
40-05-06

**ACTIVITIES**

- Prevent, investigate, and prosecute illegal natural resource activity within the State of Delaware.
- Provide environmental education opportunities through Boating Safety and Hunter Safety education programs.
NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
40-00-00

- Conduct marine search and rescue operations and conduct statewide marine rescue training for coastal fire departments.
- Manage and administer the state vessel registration program.

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Increase boating safety certifications by a minimum of 5% per year in order to reduce boating related accidents</td>
<td>1,887</td>
<td>1,691</td>
<td>1,776</td>
</tr>
<tr>
<td>Reduce boating safety accidents by 5% per year</td>
<td>16</td>
<td>21</td>
<td>20</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

- 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 not-for-profit organizations to provide park services and raise funds.

BACKGROUND AND ACCOMPLISHMENTS

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

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

Eleven field offices statewide are responsible for overseeing the operation of 20,310 acres in 14 state parks, the Brandywine Zoo and Baynard Stadium. The division also manages seven nature preserves (507

...
NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
40-00-00

acres), 12 other sites (3,220 acres) outside of the parks and 60 conservation easements protecting an additional 2,331 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 Delawarans and out-of-state visitors.

FUNDING

<table>
<thead>
<tr>
<th></th>
<th>FY 2004</th>
<th>FY 2005</th>
<th>FY 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>GF</td>
<td>8,998.9</td>
<td>8,323.4</td>
<td>8,795.5</td>
</tr>
<tr>
<td>ASF</td>
<td>6,707.5</td>
<td>12,315.3</td>
<td>9,422.6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>15,706.4</td>
<td>20,638.7</td>
<td>18,218.1</td>
</tr>
</tbody>
</table>

POSITIONS

<table>
<thead>
<tr>
<th></th>
<th>FY 2004</th>
<th>FY 2005</th>
<th>FY 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>GF</td>
<td>101.0</td>
<td>105.0</td>
<td>106.0</td>
</tr>
<tr>
<td>ASF</td>
<td>64.0</td>
<td>64.0</td>
<td>67.0</td>
</tr>
<tr>
<td>NSF</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>166.0</td>
<td>170.0</td>
<td>174.0</td>
</tr>
</tbody>
</table>

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

ACTIVITIES

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

OPERATIONS AND MAINTENANCE
40-06-02

ACTIVITIES

- Manage daily operations of 14 state parks including special revenue generating facilities (Biden Environmental Center, Killen’s Pond Water Park, Cauffiel Estate, Judge Morris, Bellevue Hall, Indian River Marina).
- 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 park and facility revenue by 3% annually</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

CULTURAL AND RECREATIONAL SERVICES
40-06-03

ACTIVITIES

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

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<tr>
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<tbody>
<tr>
<td>Increase the % of people participating in park programs</td>
<td>35</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Produce or revise 12 wayside exhibits annually</td>
<td>38</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>
PLANNING, PRESERVATION AND DEVELOPMENT
40-06-04

ACTIVITIES

- 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.
- 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 the Open Space Council.

PERFORMANCE MEASURES

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Protect 2,000 acres that meet the criteria of the Land Protection Act</td>
<td>1,383</td>
<td>2,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Increase miles of multi-use trails in state parks*</td>
<td>8</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td># of new areas or additions to existing natural areas or state resource areas</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td># of conservation easements that meet the criteria of the Land Protection Act</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

*Reflects annual miles of trails and not cumulative miles.

WILMINGTON STATE PARKS
40-06-05

ACTIVITIES

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

PERFORMANCE MEASURES

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Increase % visitors to Brandywine Zoo</td>
<td>-20</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Maintain number of stadium events at 40 per year</td>
<td>40</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Maintain number of stadium field events at 25 or less to protect turf</td>
<td>20</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Increase number of new park programs offering</td>
<td>4</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Restore two historic monuments/statues annually</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

**FY 2005 will establish benchmark data for new performance measures.**
SOIL AND WATER CONSERVATION
40-07-00

MISSION

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

KEY OBJECTIVES

- Assist the Nutrient Management Commission in managing and regulating the generation and application of nutrients in order to meet load reduction targets established by approved Total Maximum Daily Loads (TMDLs) and meet or exceed surface water quality standards for nutrients by 2007.
- Manage storm-water runoff and fully implement the EPA National Pollutant Discharge Elimination System (NPDES) Phase II Stormwater Program for new construction activity.
- Protect 2,000 additional acres of land through the construction of drainage, flood control and water management systems.
- Ensure the protection of human life, property and the environment through the development and implementation of a comprehensive dam safety program.
- Reduce wetland impacts by 25 percent during planning and construction of new tax/public ditch projects and by ten percent for maintenance of existing tax/public ditch projects.
- Achieve no net loss of recreational and protective 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 re-nourishment cycle.

- 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

Drainage - In the past ten years, the division has administered 1,093 Rural Conservation and Development projects, including a variety of flood abatement and drainage projects that were funded with $56.9 million from the Twenty-First Century Fund. During Fiscal Year 2004, the department received 899 requests for drainage assistance of which 83 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 is requesting to move 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 public is better served by a closer coordination of efforts and operating efficiency that would be accomplished by this organizational change.

The Sediment and Stormwater Management program has successfully designed and coordinated training and implementation projects throughout the state. To date, over 5,000 people have participated in the training. The program will also be implementing the EPA National Pollutant Discharge Elimination System (NPDES) Phase II for construction activities that 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 2.6 million cubic yards of sand have been placed on Delaware beaches. The division/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 involves the placement of sand and the creation of a dune at both beach areas and
periodic nourishment every three years to ensure the integrity of the design, is scheduled to begin in Fiscal Year 2005. The Fenwick Island Federal shore protection project is scheduled to begin in August 2005 and the Bethany Beach/South Bethany Federal shore protection project in 2006.

Since its inception in 1970, the State Dredge Program has completed over 145 projects in a variety of marine environments, including small boat navigation channels, state-owned lakes and ponds, boat launching and marina facilities and beach nourishment along the Delaware Bay coastline. Projects completed during the last two years include navigational channel projects in Massey’s Ditch and the downstream portion of Indian River, maintenance dredging of the Augustine Beach boat launching facility, Delaware City Mooring Basin and Branch Canal and the University of Delaware College of Marine Studies Harbor in Lewes, and Phase I of the Indian River Inlet Marina restoration project. Phase II of the Indian River Inlet Marina project is currently in progress. Projects planned for future implementation include the Assawoman Canal, Garrisons Lake, Love Creek, Dirickson Creek, the Lewes-Rehoboth Canal, as well as ongoing maintenance work in Indian River, Massey’s Ditch, the Augustine Beach boat launching facility and Delaware City Mooring Basin and Branch Canal. 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 - District Operations 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 Air and Waste Management. Since then 31 debris pits have been remediated and eight test pits and 78 investigations have been completed.

Coastal Management Programs – The Delaware Coastal Programs (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 ecology, benthic mapping, and water quality monitoring of development pressures.

**FUNDING**

<table>
<thead>
<tr>
<th></th>
<th>FY 2004 ACTUAL</th>
<th>FY 2005 BUDGET</th>
<th>FY 2006 GOV. REC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GF</td>
<td>8,831.9</td>
<td>4,907.5</td>
<td>5,398.3</td>
</tr>
<tr>
<td>ASF</td>
<td>715.4</td>
<td>8,022.6</td>
<td>9,422.6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>9,547.3</td>
<td>12,930.1</td>
<td>14,820.9</td>
</tr>
</tbody>
</table>

**POSITIONS**

<table>
<thead>
<tr>
<th></th>
<th>FY 2004 ACTUAL</th>
<th>FY 2005 BUDGET</th>
<th>FY 2006 GOV. REC.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GF</td>
<td>45.7</td>
<td>45.7</td>
<td>45.7</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>15.8</td>
<td>15.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>64.0</td>
<td>64.0</td>
<td>64.0</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.

DRAINAGE  
40-07-02

ACTIVITIES

- Conduct environmentally-sensitive tax ditch planning and public ditch planning, assist counties with mandates to property owner file, and provide technical assistance.
- Ensure the implementation of the state’s “no-net-loss of wetlands” policy in water management projects and continue the development of wetland and stream restoration techniques and concepts in support of DNREC’s Ecological Restoration Initiative.
- Provide technical assistance to county conservation districts.
- Cooperate and assist Transportation with emergency bridge replacement as needed.
- Provide education outreach to agricultural and environmental communities to demonstrate the working relationship of drainage, agriculture and wetlands.
- Encourage the establishment of riparian corridors along tax ditch rights-of-way to support the department’s Whole Basin Initiative, Conservation Reserve Easement Program (CREP), and the implementation of Total Maximum Daily Load Pollution Control Strategies.
- 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 services on 6,000 acres of development and construction projects.
- Provide sediment and stormwater management field inspection on federal and state funded, non-Department of Transportation construction activities.
- Implement National Pollutant Discharge Elimination System (NPDES) Phase II requirements for stormwater management.

PERFORMANCE MEASURES

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Increase acres of agricultural and residential land receiving drainage, flood protection and water management</td>
<td>443,372</td>
<td>445,372</td>
<td>447,372</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>34</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td># of ft. of stream restoration projects developed and constructed</td>
<td>1,400</td>
<td>1,500</td>
<td>1,500</td>
</tr>
<tr>
<td>Reduction in # of tons of soil and sediment delivered to Delaware’s waterways through the efforts of the Sediment and Stormwater Program compliance</td>
<td>500,000</td>
<td>375,000</td>
<td>375,000</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.
• 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.

**Performance Measures**

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>% response to legislative/constituent requests for marking navigable channels in Inland Bays</td>
<td>100</td>
<td>100</td>
<td>100</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>50-100</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**

**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 and BMPs through the work of eight conservation district planners in the Delaware Bay, Chesapeake Bay and Inland Bays watersheds.
• Provide staff support for DNREC’s Total Maximum Daily Load effort by performing related assessment and implementation activities in the Piedmont, Chesapeake, Inland Bays and Delaware Bay Basins.
• Administer the Conservation Cost Share Program and agricultural component of the State Revolving Loan Fund Program in coordination with federal Farm Bill programs.
• Direct the state’s efforts and funding for the U.S. Department of Agriculture (USDA) Conservation Reserve Enhancement Program (CREP).
• Administer the Buried Wood Debris Remediation Program.

**Performance Measures**

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Maintain 3% reduction nitrogen loadings in the Chesapeake, Delaware Bay and Inland Bays watersheds</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td># of debris pits remediated</td>
<td>31</td>
<td>75</td>
<td>75</td>
</tr>
</tbody>
</table>

**Delaware Coastal Management**

**Activities**

• Administer National Oceanic and Atmospheric Administration’s (NOAA’s) grant awards to DNREC for coastal management and Delaware National Estuarine Research Reserve (DNERR).
• Provide grant funding to improve responsiveness to coastal management issues including coastal storm-related damage reduction, near-coastal water...
pollution abatement, habitat improvement, oil pollution prevention and response, coastal access, and pollution prevention.

- Administer the federal consistency provisions of the Coastal Zone Management Act for Delaware.
- Team up with Air and Waste Management (DAWM) on a project to improve Brownfield redevelopment in Delaware coastal areas.
- Implement an enhancement plan approved by NOAA for cumulative and secondary impact avoidance and coastal wetland protection.
- Implement educational programs for 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.

**PERFORMANCE MEASURES**

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td># of public programs hosted by the DNERR *</td>
<td>41</td>
<td>40</td>
<td>N/A</td>
</tr>
<tr>
<td># of coastal decision-maker workshops hosted by the DNERR *</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td># of school children attending the DNERR education programs</td>
<td>2,420</td>
<td>4,000</td>
<td>3,000</td>
</tr>
<tr>
<td># of meetings participants hosted by the DNERR conference facility</td>
<td>1,848</td>
<td>1,200</td>
<td>1,300</td>
</tr>
<tr>
<td># of grants awarded to local governments</td>
<td>10</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>% of potential SWMP data submitted to the Central Data Management Office*</td>
<td>96</td>
<td>85</td>
<td>85</td>
</tr>
</tbody>
</table>

* Public programs are being replaced by decision maker workshops. FY2006 will establish benchmark data for new performance measure.

**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 Basin, Chesapeake Basin, Inland Bays Basin, and Delaware River Basin by 2006.
- Ensure that all ground waters and surface waters used for drinking water are protected by 2008 to meet the long-term goal of the Drinking Water Standards.
- 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 the Soil and Water Conservation’s 319 and 6217 grants.
- Establish requirements to replace standard on-site wastewater systems with systems capable of enhanced nutrient removal in nutrient impaired watersheds.
- Provide for the equitable and adequate allocation of safe and sound surface and ground water supplies.
- Increase by five percent the number of waterways meeting standards for fishable and swimmable by 2004, using the 2000 305(b) Report as a baseline.
- 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 Agriculture by participating in commission meetings and fulfilling commitments established in the DDA-DNREC Memorandum of Understanding for Confined Animal Feeding Operation (CAFO) by assisting in the drafting of a draft General Permit for CAFOs.

• 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 web.

• 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 Natural Resources Conservation Service (NRCS) to cost share projects that utilize environmentally compatible techniques for stabilizing eroding shorelines.

• Provided technical and financial support during development of Total Maximum Daily Loads 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 National Pollutant Discharge Elimination (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 2004</th>
<th>FY 2005</th>
<th>FY 2006</th>
</tr>
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<tr>
<td>GF</td>
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<tr>
<td>Actual</td>
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<td>7,681.7</td>
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<td>ASF</td>
<td>3,264.7</td>
<td>4,028.2</td>
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<td>11,709.9</td>
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POSITIONS

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<tr>
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<tr>
<td>ASF</td>
<td>62.7</td>
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<td>NSF</td>
<td>29.3</td>
<td>28.1</td>
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<td>TOTAL</td>
<td>160.0</td>
<td>160.0</td>
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MANAGEMENT AND SUPPORT - WATER RESOURCES
40-08-01

ACTIVITIES

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

PERFORMANCE MEASURES

<table>
<thead>
<tr>
<th></th>
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<tr>
<td>$ low interest loans and grants for wastewater projects that enhance water quality or contribute to achieving TMDLs</td>
<td>21,320,000</td>
<td>34,720,594</td>
<td>35,000,000</td>
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<tr>
<td>$ low interest loans for eligible nonpoint source expanded use activities</td>
<td>542,996</td>
<td>1,500,000</td>
<td>1,500,000</td>
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</table>

ENVIRONMENTAL LABORATORY
40-08-02

ACTIVITIES

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

PERFORMANCE MEASURES

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<tr>
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<tbody>
<tr>
<td>% improvement of laboratory testing cycle times by decreasing average turnaround time per test</td>
<td>3.0</td>
<td>3.0</td>
<td>2.7</td>
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</table>
**SURFACE WATER DISCHARGES**

**40-08-04**

**ACTIVITIES**

- Equalize annual permit production and align permit issuance on a watershed basis to eliminate permit backlog by Fiscal Year 2005.
- Use National Pollutant Discharge Elimination System (NPDES) permits to implement pollution control strategies for Total Maximum Daily Loads.
- Issue NPDES permits that contain the necessary requirements and conditions (i.e., toxic controls, pretreatment requirements, stormwater, CSO, sludge requirements, etc.).
- Issue licenses for wastewater treatment operators, and review plans and issue permits for construction of wastewater collection and treatment facilities.
- Conduct compliance inspections for NPDES facilities and CSO systems.
- Work with the City of Wilmington and EPA in implementing their CSO Control Plan.
- Periodically review and update program regulations for point source dischargers.

**PERFORMANCE MEASURES**

<table>
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<tr>
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<tbody>
<tr>
<td>% decrease in number of NPDES permit violations (%)</td>
<td>5</td>
<td>10</td>
<td>10</td>
</tr>
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</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 100 percent of all large on-site wastewater systems and 75 percent of all small systems.
- Issue large septic permits and spray permits in compliance with all applicable regulations.
- Issue replacement/repair permits for all known malfunctioning subsurface systems.
- Issue Underground Injection Control (UIC) permits/authorizations in compliance with all applicable regulations.
- Locate and inventory all unauthorized UIC wells, perform inspections and prevent non-compliance.

**PERFORMANCE MEASURES**

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>% of construction inspections on on-site wastewater systems that discharge less than 2,500 gallons per day</td>
<td>48</td>
<td>50</td>
<td>75</td>
</tr>
<tr>
<td>% alternative on-site treatment systems inspected for operational compliance</td>
<td>85**</td>
<td>80</td>
<td>90</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>
<td>100</td>
</tr>
<tr>
<td>% of compliance inspections on on-site wastewater systems that discharge more than 2,500 gallons per day</td>
<td>95</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>
<td>100</td>
</tr>
<tr>
<td># of compliance inspections of small individual on-site waste water systems in the Inland Bays Watershed initiated by the 319 and 6217 Federal Grant</td>
<td>124</td>
<td>150</td>
<td>150</td>
</tr>
</tbody>
</table>

**WATER SUPPLY**

**40-08-06**

**ACTIVITIES**

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

**Performance Measures**

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>% 1-day turnaround time for domestic well applications</td>
<td>95</td>
<td>95</td>
</tr>
<tr>
<td># water allocation permits issued to reduce backlog of un-permitted projects</td>
<td>21</td>
<td>30</td>
</tr>
<tr>
<td>% 5-day turnaround provided for drinking water wells located near contaminated sites</td>
<td>37</td>
<td>90</td>
</tr>
<tr>
<td>% well permit data entered within 5 days of receipt of information</td>
<td>80</td>
<td>80</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 (PCSs) to meet pollutant load reduction goals established by TMDLs for the Inland Bays, Nanticoke River, Broad Creek, Appoquinimink River and the Murderkill River watersheds.

**Performance Measures**

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>% waters attaining water quality standards for healthy aquatic life</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Acres of watersheds with nutrient TMDLs in place</td>
<td>658,925</td>
<td>668,121</td>
</tr>
<tr>
<td>Acres of watersheds with Pollution Control Strategies in place</td>
<td>N/A</td>
<td>206,433</td>
</tr>
<tr>
<td>Enhance swimmer protection at natural bathing beaches and maintain incidence of water-borne disease at no greater than current levels (# illnesses)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td># of incidences of water-borne disease (swimmer illness)</td>
<td>1</td>
<td>3</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

| % of shoreline stabilized with soil bioengineering and rip-rap vs. bulkheading | FY 2004 Actual | FY 2005 Budget | FY 2006 Gov. Rec. |
| % of marinas with approved operations and maintenance plans | 30 | 30 | 40 |
| 20 | 20 | 20 |

AIR AND WASTE MANAGEMENT

MISSION

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

KEY OBJECTIVES

- Reduce exposure to hazardous substances, including carcinogenic substances, in the ambient environment.
- Attain one-hour ozone standard by 2005 in New Castle and Kent counties.
- Prevent exceedences of air quality standards for particulate matter, sulfur dioxide, carbon monoxide and nitrogen dioxide, and reduce hazardous air pollutants by adopting EPA’s “National Emission Standards for Hazardous Air Pollutants for Source Categories.”
- Maintain an air quality network, which provides reliable and accurate data for ambient concentrations of ozone, particulate matter, sulfur dioxide, carbon monoxide and nitrogen oxides.
- Promote greater reutilization of Brownfields through enhancement and marketing of the Brownfields inventory. Redesign and streamline the Brownfields regulatory process in Fiscal Year 2005 for greater efficiency in redeveloping Brownfields sites.
- Develop ability to respond to high profile, public/private partnership development projects sited on Brownfields.
- Increase residential solid waste recycling to 30 percent by December 2005.
- 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

Enforcement - The Air and Waste Management Enforcement Section is responsible for responding to and investigating environmental emergencies and citizens’ complaints on a 24-hour basis. The section
focuses its efforts on the criminal enforcement of federal, state, and department laws and regulations. Air and Waste Management Enforcement Officers provide investigative and prosecutorial services to three of the five divisions within DNREC including Air and Waste Management, Water Resources, and Soil and Water Conservation. The Air and Waste Management Enforcement Section also operates the DNREC Industrial Notification System, and the Delaware Environmental Release Notification System. In Fiscal Year 2004, 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 enhance environmental awareness, identification of community environmental issues, maintaining training in both environmental response and law enforcement, enhancements to the public notification system, and initiating cost saving measures.

**Air Quality Management** - Since the passage of the 1990 Clean Air Act Amendments, the department has made unprecedented progress in its efforts toward providing clean air to all its citizens. In 2003 the Air Quality Management (AQM) Section, in conjunction with EPA Region III, embarked on the full implementation of the Delaware Air Toxics Assessment Study (DATAS). DATAS is a two-year project established to quantify actual, monitored emissions of hazardous air pollutants in relation to modeled projections. Multiple monitoring sites are operating throughout the state, using existing monitoring resources. Air Quality Management has continued to move forward with our Title V Operating Permit Program that includes issuance of required permits, developing a Compliance Assurance Program, and has begun completing Title V Permit Renewals. To facilitate permit issuance, a permit tracking system is being developed that will improve issuance efficiency thus reducing any permitting backlog. The Small Business Technical Assistance Program continues to provide technical advice and assistance to small businesses to aid them in complying with regulations.

**Waste Management Site Investigation and Restoration** - With the passage of the Delaware HSCA in 1990, the branch has assumed a major role in investigating and cleaning up non-NPL sites which pose a threat to public health, welfare and the environment. In 1993, the branch initiated the Voluntary Cleanup Program (VCP) under which a party can come forward and remediate a contaminated site and make it available for reuse. This program was formalized and expanded to include Brownfields sites through amendments to HSCA in 1995, 2000, 2003 and 2004.

The branch has investigation and cleanup ongoing at 195 HSCA/VCP/Brownfield sites. One hundred forty-six sites 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 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. The branch will continue to implement the recommended actions of this study in Fiscal Year 2005.

**Brownfield Revitalization** - A major component of revitalization and 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 that can be provided at the least cost while simultaneously cleaning up the environment. DNREC 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 35 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 almost full time attention by a department project manager until site remediation is completed.

**Tank Management** - Delaware’s Underground Storage Tank (UST) Program regulates petroleum and hazardous substance tanks through their life cycle. The program has two main goals. One is to identify and clean up leaks that have occurred. The second goal is to prevent future leaks that could lead to contamination of Delaware’s water supplies or the accumulation of explosive vapors in residences, businesses or utility conduits.

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 Act required the department to develop regulations for the installation, operation, maintenance, leak detection and corrective action for ASTs. The Delaware Regulations Governing Aboveground Storage Tanks became effective June 11, 2004. In an effort to develop a set of regulations with public participation, an advisory committee was formed to assist the department. In addition, AST owners were required to register their tanks by September 6, 2002.
To date, 817 facilities registered over 3,400 ASTs. The information collected is being entered into a database to provide information and to be the basis for billing facilities for their fees.

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.

Solid and Hazardous Waste Management - The Solid and Hazardous Waste Management 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 that reflects what needs to occur in order for Delaware to increase its residential solid waste diversion rate.

Emergency Prevention and Response - This section was created in July 2004. It combined the division's Environmental Response Branch, Emergency Planning and Community Right-to-Know Act (EPCRA) group, and the Accidental Release Program (ARP) group. The Environmental Response Branch (ERB) staff provides a comprehensive response to time-critical emergency and non-emergency environmental incidents around-the-clock for the protection of human life, health, safety and the environment. In Fiscal Year 2004, the Emergency Response staff responded to 337 incidents: 60 percent of the total number of incidents occurred in New Castle County, 60 percent of the total number of incidents involved no other state emergency response agencies but DNREC, and 60 percent of the total number of incidents was petroleum-related. The ERB also established the Emergency Response Team to assist with responding to incidents after hours and on weekends. The EPCRA group continued to provide support to the State Emergency Response Commission (SERC) and Local Emergency Planning Committees (LEPCs), and manage the EPCRA reporting requirements. In Fiscal Year 2004 the ARP conducted 43 inspections on facilities with extremely hazardous substances to ensure proper control plans and operations to prevent disasters. The ARP also assisted with planning at the Metachem facility as part of the removal action.

### FUNDING

<table>
<thead>
<tr>
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<th>FY 2005 BUDGET</th>
<th>FY 2006 GOV. REC.</th>
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<td>GF</td>
<td>4,237.9</td>
<td>4,482.9</td>
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<td>ASF</td>
<td>12,398.5</td>
<td>16,814.2</td>
<td>16,814.2</td>
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<tr>
<td>TOTAL</td>
<td>16,636.4</td>
<td>21,297.1</td>
<td>21,548.2</td>
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### POSITIONS

<table>
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<th>FY 2006 GOV. REC.</th>
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<td>58.3</td>
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<td>ASF</td>
<td>94.7</td>
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<tr>
<td>NSP</td>
<td>57.0</td>
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<tr>
<td>TOTAL</td>
<td>205.0</td>
<td>216.0</td>
<td>216.0</td>
</tr>
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</table>

### 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.
- Conduct background investigations on corporations and individuals seeking environmental permits.
- 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.

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<tbody>
<tr>
<td># of environmental release notification to the public</td>
<td>617</td>
<td>600</td>
<td>600</td>
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<tr>
<td># of notifications to dept. of spills etc.</td>
<td>538</td>
<td>500</td>
<td>500</td>
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<tr>
<td># of complaints</td>
<td>5,111</td>
<td>5,000</td>
<td>5,000</td>
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AIR QUALITY MANAGEMENT
40-09-02

ACTIVITIES

• Participate actively in Ozone Transport Commission (OTC), State and Territorial Air Pollution Control Administrators (STAPPA), and Mid-Atlantic Regional Air Management Association (MARAMA) activities to take advantage of combined expertise and foster regional and national strategies.
• Direct the State Implementation Plan (SIP) revisions as required by the Clean Air Act Amendments (CAA) of 1990.
• Promulgate new air regulations required by the CAAA, the 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 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 longer 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 (OBD) Tests, and evaluate data.
• Continue to implement the advanced audit procedures for the inspection and maintenance at the high-tech, special purpose inspection lane.

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<tbody>
<tr>
<td># of exceedences of Ozone, PM, CO, NO2 and SO2 standards</td>
<td>*</td>
<td>0</td>
<td>0</td>
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<tr>
<td># of ambient air samples collected</td>
<td>1,100</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>900</td>
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* FY 2005 will establish benchmark data for new performance measures.

Note: Statewide, there were 0 exceedances of the 1-hour ozone standard and 5 exceedances of the 8-hour ozone NAAQS to-date in 2004.

WASTE MANAGEMENT
40-09-03

ACTIVITIES

Site Investigation and Restoration

• Oversee 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 can be put to productive use.
• Promote field screening procedures to reduce the number of analytical samples sent to the laboratory for full analysis.
• Work with communities so they better understand the 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 2005.
• Enhance and implement the Brownfields inventory and a ranking system that would address redevelopment potential and the degree of contamination.
• Continue to screen shallow public drinking water supplies for contaminants as recommended by Delaware’s task force on cancer incidence and mortality.

**Tank Management**

• Identify unregistered Underground Storage Tanks (USTs); and conduct UST facility, UST removal or abandonment, and new UST installation compliance inspections.
• Identify unreported releases from USTs.
• Reduce the amount of time from identification to closure of Leaking Underground Storage Tanks (LUST) sites.
• Continue implementation of risk-based corrective action closure procedures at LUST sites.
• Reach 100 percent compliance with the 1998 deadline requirements for all regulated petroleum underground storage tanks through enforcement.
• Continue permitting and enforcement of Stage II requirements in Sussex County.
• 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 22-25 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.
• Work with Water Resources on best management practices for salvage yards.

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<tbody>
<tr>
<td># of leaking storage tanks</td>
<td>136</td>
<td>75</td>
<td>65</td>
</tr>
<tr>
<td>% reduction of Persistent Bioaccumulative Toxics over 1991 generation rates</td>
<td>+7*</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>% of Brownfields projects that meet or exceed negotiated project deadlines</td>
<td>N/A</td>
<td>80</td>
<td>90</td>
</tr>
<tr>
<td>% of residential solid waste recycled</td>
<td>20</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td># of boiler safety seminars: Contractor Training</td>
<td>8</td>
<td>22</td>
<td>6</td>
</tr>
<tr>
<td># of boiler safety seminars: School Training</td>
<td>20</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td># of overdue inspections</td>
<td>524</td>
<td>50</td>
<td>400</td>
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* Percentage increase is due to compounds being added to the list and because 1991 was a lower than normal generation year.

**EMERGENCY PREVENTION AND RESPONSE 40-09-04**

**ACTIVITIES**

• Investigate citizens’ complaints and environmental incidents/emergencies on a 24-hour basis.
• Participate with federal, state and local emergency responders and planning agencies.
• Upgrade response capabilities and coordinate and plan response activities through the State Emergency Response Commission (SERC).
• Improve ability to respond to suspected acts of terrorism by acquiring training and equipment.
• Continue implementation of the Emergency Planning and Community Right-to-Know Program components, including compiling and distributing the annual hazardous chemical inventory and toxics release inventory data, and ensuring compliance.
• Continue implementation of the Emergency Planning and Community Right-to-Know Program components.
• Continue effective compliance inspections pursuant to the Extremely Hazardous Substances Regulation.

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<tbody>
<tr>
<td># of emergency responses to incidents</td>
<td>337</td>
<td>340</td>
<td>340</td>
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