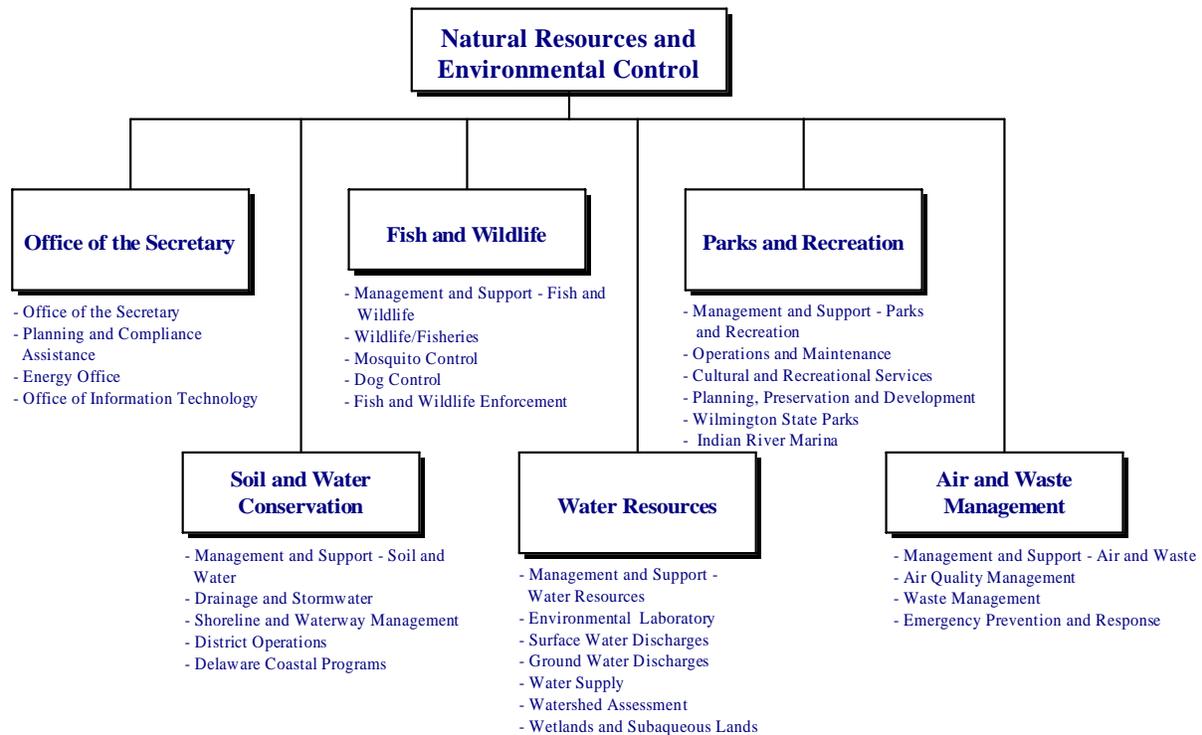


# NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00



## MISSION

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

## KEY OBJECTIVES

- Promote health and safety by maintaining and improving the quality of air, land and water resources; manage populations of mosquitoes and other pests; and clean up spills involving hazardous chemicals to enhance the health and well-being of Delaware's people, wildlife and plants.
- Conserve plant and animal resources through protection and management of species populations and their habitats. This effort involves maintenance of biodiversity, harvest allocation of species populations, protection and restoration of ecological functions and processes, and performance of educational outreach.
- 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 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. The Department strives to create a widely held ethic of stewardship that strongly encourages individuals, institutions, corporations and local governments to take responsibility for the economic, environmental and social consequences of their actions.

## PRIORITIES

**Improve regulatory compliance and environmental performance** - DNREC's challenge is to respond to the need for greater environmental stewardship with aggressive enforcement for violators and rewards for compliance. Managing and cleaning up abandoned and/or contaminated properties remains a priority for DNREC. The Hazardous Substance Cleanup Act (HSCA) is key to the Department's continued ability to address the problem of orphaned sites.

# NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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## **Enhancing water supplies and water management -**

During the past several years DNREC has been working with the Water Supply Coordinating Council and others to implement the requirements of the Water Supply Self Sufficiency Act and comprehensively address water supply concerns in northern New Castle County. The Council intends to assess and report on water supply and demand conditions south of the Chesapeake and Delaware (C&D) Canal over the next few years.

Water quality improvements necessary to meet total maximum daily loads (TMDL) will also be a focus area for the Department through pollution control strategies (PCS). PCSs provide the regulatory basis for achieving TMDLs as well as describe the voluntary best management practices to improve water quality.

## **Monitoring and controlling the occurrence of environmentally-related exposures and diseases -**

A recent national survey of registered voters found that the majority are concerned about risks to their health from pollutants in the environment, and inaccurately believe that government is adequately tracking these hazards and possible links to chronic health problems. DNREC has invested heavily to identify and track pollutants in the environment, particularly for regulatory and ecological purposes, but only minimally in tracking exposures and the distribution of disease and its relationship to the environment. There are pollutants entering our air and water each year with suspected or known adverse effects. DNREC is examining exposures related to carcinogens, particulates and microbiological hazards and has begun work to establish an inventory of contaminated sites to improve program management, increase transparency to the public and support the establishment of a long-term stewardship program.

## **Preserving and enhancing Delaware's green infrastructure -**

DNREC is working with a number of partners to develop the appropriate tools and statewide implementation strategies to 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 with conservation value. The Department will leverage the potential for cleanup and redevelopment of Brownfield sites as a preferable option to development of existing greenfield sites.

**Promoting sustainable practices -** Brownfield revitalization continues to be an important Livable Delaware program considering the loss of greenfields and the need to take advantage of the services offered in our urban areas. Other sustainability efforts for DNREC in the coming year include recycling and yard waste

management, energy efficiency and promotion of environmentally beneficial building practices, and communicating long-term environmental needs and improvements.

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

**Improving agency performance -** DNREC seeks to attain a highly motivated and knowledgeable workforce that is responsive to the needs of our citizens and the environment. DNREC has embarked on a management and staff training and development program designed to build increased trust and understanding within the organization and with the customers served by the Department. DNREC has made significant investments in data systems and web presence and now offers a host of services and products through the internet. Processes currently undergoing efficiency or quality improvement review include air permitting, Brownfields, storage tank permitting and cleanup, storm water permitting, wetlands/subaqueous lands permitting, and the public hearing process.

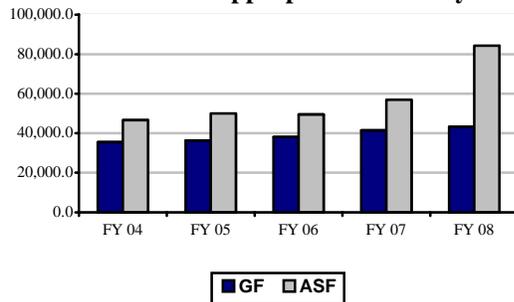
## **Enhance emergency prevention and response -**

DNREC has always maintained a strong spill prevention and response program. However, in recent years the need to enhance and expand prevention and response capabilities has increased from events such as 9/11, aging infrastructure vulnerable to natural disasters, the spread of disease, and declining federal resources all of which require a more efficient coordinated regional response. DNREC has increased its participation in interstate and regional planning and response organizations to address issues such as weapons of mass destruction, bioterrorism, oil spills, and avian flu pandemic. Ensuring that the State's dams are structurally stable and sufficient to withstand flooding is another of the Department's priorities.

# NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

**Five-Year Appropriation History**



## FUNDING

	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2009 GOV. REC.
GF	70,494.3	43,170.7	44,596.0
ASF	45,621.7	84,322.8	74,322.8
<b>TOTAL</b>	<b>116,116.0</b>	<b>127,493.5</b>	<b>118,918.8</b>

## POSITIONS

	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2009 GOV. REC.
GF	396.9	405.9	409.9
ASF	298.6	295.1	294.6
NSF	153.5	162.0	163.5
<b>TOTAL</b>	<b>849.0</b>	<b>863.0</b>	<b>868.0</b>

## FY 2009 BUDGET HIGHLIGHTS

### OPERATING BUDGET:

- ◆ Recommend \$99.0 and 2.0 FTEs in Parks and Recreation for the Auburn Heights Preserve. Recommend one-time funding of \$30.0 in the Office of Management and Budget's contingency for equipment.
- ◆ Recommend \$208.0 and 3.0 FTEs in Parks and Recreation for the Blue Ball/Alapocas Run facility. Recommend one-time funding of \$20.0 in the Office of Management and Budget's contingency for equipment.
- ◆ Recommend \$75.0 in the Office of Information Technology for technology infrastructure.

### CAPITAL BUDGET:

- ◆ Recommend \$3,205.0 for the Conservation Cost Share program. This cost share program assists landowners by providing funds for the design and installation of systems utilizing best management

practices. The intent of the program is to protect water supplies and natural resources while minimizing erosion of farmland and the pollution of wildlife habitat.

- ◆ Recommend \$1,400.0 for the maintenance of tax and public ditches. Program funds are also used to build structures that improve the quality of runoff water and for repairing deteriorated drainage channels in environmentally sensitive areas.
- ◆ Recommend \$2,150.0 to continue the Beach Preservation program. These funds will be used for the cost-share of the Fenwick Island project and general dune maintenance.
- ◆ Recommend \$600.0 for the Minor Capital Improvements and Equipment program to prevent deterioration of buildings and grounds, maintain a secure environment and continue to eliminate the Department's backlog of deferred maintenance.
- ◆ Recommend \$1,000.0 for the Clean Water State Grant Match program for grants to improve wastewater facilities statewide. These funds will also leverage \$5,000.0 in federal funds.

# NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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## 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.
- Monitor and control the occurrence of environmentally-related exposures and diseases.
- Implement Delaware's Coastal Zone Act and protect and enhance the natural attributes of Delaware's Coastal Zone in order to maintain and enhance fish and wildlife populations and provide recreational opportunities.
- Continue the development and implementation of e-government initiatives and the Environmental Navigator to comply with 7 Del. C. §6014(a).
- Coordinate land use activities with other state agencies 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 governments, universities, environmental and citizen groups, major private landowners, and agricultural and business communities to implement actions for biodiversity conservation and ecosystem protection.
- Integration of clean energy programs including energy efficiency and renewable energy into Delaware's energy planning activities.
- Increase trust and understanding within DNREC and with its customers.

### 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 who protect human health and environment, manage fish and wildlife, and enhance recreational opportunities. In order to achieve this objective, OIT is developing an integrated information system containing facility, permitting, enforcement, ambient monitoring and natural resource data.

**The Ecosystem Protection and Restoration Office** focuses on the Department's priorities to identify opportunities to enhance functional ecosystems, biological resource protection, resource management, land management, restoration, and education and outreach activities that increase the awareness of the importance of preserving native plants, animals and natural communities that support a healthy, Livable Delaware. The office identifies key habitats and natural communities that are of particular ecosystem-wide importance including areas essential to particular species at critical stages of the life cycle, such as spawning or nursery areas. The office supports several priority initiatives: Livable Delaware, Open Space Preservation, State Wildlife Conservation Planning (State Wildlife Action Plan), Natural Areas Preservation System, and Green Infrastructure. These programs promote collaboration among local, state and federal partners and the development and implementation of tools and strategies to protect biodiversity and preserve natural resources.

**The Office of Public Affairs** issued approximately 450 press releases; managed the content of the Department web site; managed Coastal Cleanup, the Department's participation in Coast Day and other major volunteer events; held 15 press events; and coordinated over 1,000 responses to media inquiries over the past year to promote and explain departmental news, initiatives, issues, events, and special projects. Publications include *Outdoor Delaware* (the Department's subscription-based magazine), press releases which are published online and delivered electronically to the list-serve of online subscribers, and marketing materials.

**The Planning and Compliance Assistance Office** works with the Office of Management and Budget, Budget Development, Planning and Administration to implement the Livable Delaware initiative, provide assistance to local governments and the development community through the Preliminary Land Use Service

# NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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(PLUS) process, and implement the Coastal Zone Act Regulations.

**The Delaware Energy Office** provides energy expertise, information and assistance to State agencies, the public and businesses, and promotes renewable energy technologies, efficiency and planning. The Energy Office is working with the Governor's Energy Advisory Council, Public Service Commission (PSC), and others to update the State of Delaware's energy plan, implement the Energy Answers energy efficiency campaign and establish the Sustainable Energy Utility.

**The Human Resources Office (HRO)** has continued its efforts in the areas of recruitment and diversity, expanding recruitment sources to include more minority-based contacts, extending DNREC into the community with personal contacts, and continuing the effective partnership with the Department of Transportation. Additionally, DNREC has actively participated in the Partners for Progress Summit and has been championing required training for all employees in sexual harassment.

## FUNDING

	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2009 GOV. REC.
GF	6,905.6	5,672.6	5,957.8
ASF	1,953.0	3,458.8	3,458.8
<b>TOTAL</b>	<b>8,858.6</b>	<b>9,131.4</b>	<b>9,416.6</b>

## POSITIONS

	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2009 GOV. REC.
GF	43.6	43.6	44.6
ASF	33.8	33.8	33.8
NSF	5.6	5.6	5.6
<b>TOTAL</b>	<b>83.0</b>	<b>83.0</b>	<b>84.0</b>

## OFFICE OF THE SECRETARY

40-01-01

### ACTIVITIES

- Assist the divisions to meet their human resources, financial, legislative, policy and other needs promptly and accurately.
- Provide rational, accurate and responsive budgeting and financial management processes.
- Work with the Division of Public Health to examine the capabilities for environmental health tracking and prepare an action plan for initiation of a tracking program.
- Assess the Department's workforce diversity and develop programs to address needs.

- Develop and distribute communication products that heighten awareness of environmental issues in communities and suggest opportunities to reduce environmental impacts.
- Work with community organizations, homeowner associations and other groups in helping them participate in DNREC's programs and to address their environmental concerns.
- Sponsor and participate in special events designed to raise the public's environmental awareness such as the State Fair, Coast Day, Earth Day, Coastal Cleanup and Christina River Cleanup.

## PLANNING AND COMPLIANCE ASSISTANCE

40-01-02

### ACTIVITIES

- Coordinate, through the PLUS process and county advisory committees, the preparation of recommendations concerning proposed developments and land uses.
- Assist county and local governments to incorporate 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.
- Provide first point of contact for small businesses on Clean Air Act issues and assist with permitting and compliance issues.
- Coordinate with small businesses when upcoming regulations have a small business impact and educate them on the regulations and cost-effective compliance.
- Provide assistance and information on DNREC permitting programs and a central point of contact through the Regulatory Advisory Service.

# NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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

## PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
# of projects reported on for local land use decision makers	328	360	360
# of Regulatory Advisory Service customers	5	5	6
# of Clean Air Act Ombudsman assistance efforts	62	50	60
# of pollution prevention assistance efforts	67	60	65
# of Coastal Zone Act: permits issued	2	4	4
status decisions	2	4	4

## ENERGY OFFICE 40-01-04

### ACTIVITIES

- Provide a central repository and clearinghouse for collection and dissemination of data and information on energy supply, demand, costs, projections, and the environmental impacts of energy generation and use.
- Promote alternative fuels, renewable energy sources, innovative energy technologies, and other means of addressing energy demands.
- Promote energy conservation and efficiency as a means to reduce energy consumption.
- Administer the Green Energy Fund, Energy Answers program and Business Answers program.
- Work with the Sustainable Energy Utility (SEU) Oversight Board to establish the SEU and manage the contracts required by 29 Del C. §8059.
- Coordinate with other state and federal agencies in the management of energy data, renewable energy generation, energy efficiency and conservation efforts.
- Provide a program of energy audits for State facilities and training of energy auditors.
- Assist the Cabinet Committee on Energy to develop the State Facilities Energy Management Plan.
- Provide assistance to emergency management officials to plan for energy emergencies.

- Conduct the federally-required components of the State Energy Plan grant program awarded by the U.S. Department of Energy.
- Implement the recommendations of the Governor's Energy Task Force.

## PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
# of projects funded through Green Energy Fund (GEF)	108	50	75
# of energy related workshops/seminars held	17	10	12
# of energy audits conducted	9	12	10

## OFFICE OF INFORMATION TECHNOLOGY 40-01-05

### ACTIVITIES

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

## PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
Average # of public and staff visiting the Navigator website daily	105*	300	300
# of people subscribing to electronic notification services	1,112	900	900

\*Domain name changed in Fiscal Year 2007 and complete data is not available.

# NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

## FISH AND WILDLIFE

40-05-00

### MISSION

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

### KEY OBJECTIVES

#### **Protect and restore an interconnected system of undeveloped lands.**

- Improve the effectiveness of the State's stewardship of plants, animals and their habitats on public lands.
- In conjunction with other public and private land management organizations, undertake special programs to acquire or permanently protect lands within established state resource areas, and other lands identified as having significance according to the procedures of the Delaware Land Protection Act.

#### **Maintain tidal fisheries management.**

- Increase investigations of events in the aquatic environment that result in the loss of natural habitat, fish population changes and fish kills.
- Implement and update interstate fishery management plans and regulations for 25 species of marine fish and shellfish to remain in compliance with interstate fishery management plans.
- Develop and expand artificial habitat (reefs) to colonize benthic organisms in support of marine fisheries on 16 sites in the Delaware Bay and Atlantic Ocean.
- Re-establish viable commercial oyster beds that will support a direct harvest from natural oyster beds.
- Improve public participation in marine fisheries management and improve game fish populations in tidal fresh water.

#### **Protect, restore and enhance fisheries and wildlife habitat.**

- Implement the existing state-level responsibilities for achieving the goals and objectives of the North American Waterfowl Management Plan, and achieve the restoration goals identified in the Northern Delaware Wetlands Rehabilitation Plan.

- Implement the State's Comprehensive Wildlife Area Management Plan. This plan will provide a basis for habitat and species management, wildlife and observation opportunities, and improvement in the quality of the environment.
- Manage the marsh for species diversity at the Russell W. Peterson Urban Wildlife Refuge.
- Assist the Riverfront Development Corporation regarding the design and construction of the new Wetland Education Center, trails and boardwalk.
- Provide consistent, coordinated and increased marine law enforcement and public safety services to promote and enhance boating education opportunities.
- Control aquatic weeds and algae in public ponds to maintain water quality, aesthetics and boating access.
- Implement the Statewide Comprehensive Wildlife Action Plan to preserve species of concern.

#### **Foster partnerships with private landowners.**

- Develop protocols for invasive species control on public and private lands and waters/wetlands in order to improve wildlife and fisheries habitats.
- Provide technical assistance support to 150 private landowners to develop habitat for Delaware's wildlife species of concern.

#### **Expand and enhance the non-game program for biodiversity.**

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

#### **Prevent mosquito-borne diseases.**

- Continue surveillance and monitoring with control and treatment activities to prevent or lessen outbreaks of West Nile Virus 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.

# NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

## BACKGROUND AND ACCOMPLISHMENTS

Fish and Wildlife programs are developed and administered to serve the interests of all 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.

The Division 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.

- Continue working with the Advisory Council on Game and Fish and farmers to resolve deer damage issues. In 2006, 282 landowners participated in the Division's Deer Damage Assistance program.
- Complete a comprehensive deer management plan.

**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 to develop and implement a statewide coordinated surveillance, monitoring and treatment program to prevent or lessen outbreaks of the mosquito-borne West Nile Virus.
- The Natural Heritage database of rare species and natural communities was used to conduct 740 environmental reviews and information requests in 2006.
- The Division continues to monitor for the occurrence of wildlife diseases including Chronic Wasting Disease, and other animal diseases that may have a potential to impact Delaware residents.

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

- The Enforcement section promotes boating safety education classes and enhances the boating safety message. An online boating safety education course is now available. Marine law enforcement and homeland security patrols are provided as required by national and local security alerts.

**Education and training** provides outreach opportunities that improve the awareness, appreciation and conservation of Delaware's natural resources.

- 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.

- Planning and development of the new Lewes boating access facility is ongoing with construction estimated to be completed during the summer of 2008.
- The new Mispillion Harbor Marine Interpretive Center is open to increase public awareness of horseshoe crabs and shorebirds.

## FUNDING

	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2009 GOV. REC.
GF	9,476.5	7,773.5	7,861.0
ASF	2,802.0	6,633.9	6,633.9
<b>TOTAL</b>	<b>12,278.5</b>	<b>14,407.4</b>	<b>14,494.9</b>

## POSITIONS

	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2009 GOV. REC.
GF	63.4	63.4	63.4
ASF	35.4	37.4	37.4
NSF	31.2	31.2	31.2
<b>TOTAL</b>	<b>130.0</b>	<b>132.0</b>	<b>132.0</b>

# NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

## **MANAGEMENT AND SUPPORT - FISH AND WILDLIFE** **40-05-01**

### **ACTIVITIES**

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

## **WILDLIFE/FISHERIES** **40-05-02**

### **ACTIVITIES**

- Conduct research surveys and inventories of fish, shellfish and wildlife populations.
- Develop fish and wildlife management plans for 15 wildlife management areas, manage 54 freshwater pond and marine fishing access sites, and comply with management plans for 25 species of marine fish and shellfish.
- Monitor, maintain and regulate harvestable fish and wildlife populations.
- Provide technical assistance to landowners and government agencies.
- Administer non-game, endangered species and hunter education training programs.
- License and monitor the users of fish and wildlife resources.
- Monitor fish for diseases and investigate fish kills as to extent and probable cause.
- Obtain fish for contaminate testing and inform the public of fish consumption advisories.
- Acquire, develop and maintain lands and waters for recreation and conservation.
- Control aquatic and non-indigenous plants, and improve fish and wildlife habitat.

- Develop and implement wetland enhancement programs and coordinate and conduct fish, wildlife, acquisition, and hunter education and aquatic resource education activities.
- Conduct a trout stocking program in all three counties.

### **PERFORMANCE MEASURES**

	<b>FY 2007 Actual</b>	<b>FY 2008 Budget</b>	<b>FY 2009 Gov. Rec.</b>
# of acres of actively managed wildlife habitat on public lands	8,500	8,374	8,793
# of fisheries management plans complied with	25	25	25
# of hunter education certifications	1,753	1,736	1,823

## **MOSQUITO CONTROL** **40-05-04**

### **ACTIVITIES**

- Monitor mosquito populations and extent of quality-of-life/nuisance problems or mosquito-borne diseases (focus on West Nile Virus and Eastern Equine Encephalitis), and undertake control actions in response to intolerable infestations, disease outbreaks or adverse economic impacts.
- Respond to citizen complaints about excessive numbers of biting mosquitoes, or concerns about actual or suspect mosquito breeding areas.
- Investigate and assess mosquito control efficacy and non-target impacts associated with Open Marsh Water Management (OMWM), impoundment management, mosquito fish stocking, or insecticide use (larvicides and adulticides).
- Conduct research surveys and inventories of mosquitoes, fish and wildlife populations.
- Continue implementation of wetland restoration and enhancement projects within the Christina/Delaware River Corridor (Northern Delaware Wetlands Rehabilitation program).
- Interact with the U.S. Fish and Wildlife Service to ensure effective and practicable mosquito control on Delaware's two national wildlife refuges.
- Conduct public education and outreach programs on mosquito control problems and wetlands restoration and management.
- Coordinate with the Riverfront Development Corporation (RDC) to restore and manage wetlands at the Russell W. Peterson Urban Wildlife Refuge.

# NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

## 40-00-00

- Work with the American Mosquito Control Association (AMCA) to help resolve national mosquito control issues having local impacts.

### PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
# of acres of coastal marsh mosquito breeding habitat using source reduction techniques	210	300	300
% of nuisance-free nights (June-August)	81	75	75
# of acres of degraded wetlands under the Northern Delaware Wetlands Rehabilitation program restored	280	100	100

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### ***DOG CONTROL***

#### ***40-05-05***

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#### ACTIVITIES

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

### PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
# of dogs to shelters statewide	7,594	6,790	7,130
# of complaint services	8,634	18,555	18,555

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### ***FISH AND WILDLIFE ENFORCEMENT***

#### ***40-05-06***

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#### ACTIVITIES

- Prevent, investigate and prosecute illegal natural resource activity within the State of Delaware.
- Provide environmental education opportunities through Boating Safety and Hunter Safety education programs.
- Conduct marine search and rescue operations and statewide marine rescue training for coastal fire departments.
- Manage and administer the State vessel registration program.
- Assist the Department of Safety and Homeland Security with activities in the prevention of terrorism.

### PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
# of boating safety presentations delivered to the public	51	53	55
# of recreational boating accidents	23	22	21

# NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

## 40-00-00

### PARKS AND RECREATION 40-06-00

#### MISSION

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

#### KEY OBJECTIVES

- Maintain a system for determining the existence and location of state resource areas, their degree of endangerment, an evaluation of their importance, and information related to their natural, historic or open space values.
- Improve the effectiveness of the State's stewardship of plants, animals and their habitats on public lands.
- In conjunction with other public and private land management organizations, undertake special programs to acquire or otherwise permanently protect lands within established state resource areas and other lands identified as having significance according to the procedures of the Delaware Land Protection Act.
- Annually protect 2,000 acres of land through the Open Space program, through purchase, donation and conservation easements, for parks, wildlife areas, forests, cultural sites and greenways.
- Assist in the addition of park land and outdoor recreation facilities at municipal and county levels through grant assistance.
- Increase preventive maintenance to reduce major rehabilitation expenditures and curb facility deterioration.
- Locate and identify prehistoric and historic cultural resources on DNREC landholdings, and develop cultural resource management plans for parks, nature preserves and wildlife areas.
- Continue creative partnerships with profit and non-profit organizations to provide park services and raise funds.

#### BACKGROUND AND ACCOMPLISHMENTS

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

- Management and Support;
- Operation and Maintenance;
- Cultural and Recreational Services;
- Planning, Preservation and Development;
- Wilmington State Parks; and
- Indian River Marina.

Eleven field offices statewide are responsible for overseeing the operation of 20,328 acres in 16 state parks, the Brandywine Zoo and Baynard Stadium. The Division also manages ten nature preserves (3,041 acres) and 13 other sites (2,271 acres) outside of the parks, and monitors 65 conservation easements which protect an additional 2,994 acres.

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

#### FUNDING

	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2009 GOV. REC.
GF	19,258.8	10,072.7	10,813.4
ASF	9,547.4	10,926.5	10,926.5
<b>TOTAL</b>	<b>28,806.2</b>	<b>20,999.2</b>	<b>21,739.9</b>

#### POSITIONS

	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2009 GOV. REC.
GF	111.0	117.0	122.0
ASF	70.0	64.0	64.0
NSF	1.0	11.0	11.0
<b>TOTAL</b>	<b>182.0</b>	<b>192.0</b>	<b>197.0</b>

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

#### ACTIVITIES

- Oversee administrative functions: budget, personnel, legislation, fiscal control, and volunteer administration.

# NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

**40-00-00**

- Provide guidance in the development of the Capital Improvement Plan.
- Coordinate services for five citizen advisory councils.
- Manage Twenty-First Century Park Endowment funds and all state park trusts.

## PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
% increase of volunteer hours	10	5	5

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## *OPERATIONS AND MAINTENANCE*

**40-06-02**

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### ACTIVITIES

- Manage daily operations of 16 state parks including special revenue generating facilities (Biden Environmental Center, Killen's Pond Water Park, Cauffiel Estate, Judge Morris, Bellevue Hall).
- Enforce state park rules and regulations, and provide for site and visitor safety and security, including a Water Safety program.
- Manage the retail sales program including gift shops, campground stores, vending and food concession operations.
- Administer a central reservation system for camping and other visitor services.

## PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
% increase in park and facility revenue	9	3	3

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## *CULTURAL AND RECREATIONAL SERVICES*

**40-06-03**

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### ACTIVITIES

- Plan and administer programs and special events for the public including day camps, natural and cultural resource interpretive programs and exhibits, and folklife interpretation.
- Conduct special events for the public.
- Provide environmental education programs that meet Delaware standards and performance indicators.
- Conduct historic and prehistoric archaeological surveys and preservation management plans.

- Manage publication and information services including research, editing and digital design for all commercially-printed state park publications.

## PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
% increase of people participating in park programs	7.5	5.0	5.0
# of produced or revised wayside exhibits	25	12	12

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## *PLANNING, PRESERVATION AND DEVELOPMENT*

**40-06-04**

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### ACTIVITIES

- Update state resource area maps, in consultation with county governments.
- Assist counties or municipalities with inclusion of state resource areas in the conservation element of their respective comprehensive plans.
- Maximize the use of funds and protection methods other than fee simple acquisition, to permanently protect statewide priority projects through utilization of open space criteria and the ranking system adopted by the Department.
- Plan, design, engineer and construct facilities and infrastructure within the park system.
- Administer the 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 the park trail system.
- Coordinate and oversee the Council on Greenways and Trails, Natural Areas Council and Open Space Council.

# NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

## 40-00-00

### PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
# of acres that meet the criteria of the Land Protection Act	879	2,000	2,000
# of miles of multi-use trails in state parks*	7.9	6.0	6.0
# of conservation easements that meet the criteria of the Land Protection Act	3	2	2

\*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.
- Upgrade standards through comprehensive maintenance and capital improvement plans.
- Provide public interpretive programming and coordinate special events.
- Develop relationships with surrounding neighborhood associations and City of Wilmington officials.
- Manage the Blue Ball Barn and surrounding athletic facilities.

### PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
% increase of visitors to Brandywine Zoo	0	5	2
# of stadium field events	24	25	25
# of new park program offerings	7	4	4
# of historic monuments/statues restored	1	1	1

### INDIAN RIVER MARINA 40-06-06

#### ACTIVITIES

- Manage and operate the Indian River Marina, including 274 wet slips, 24 transient slips, 156 unit dry stack storage building, full service marine fuel dock, ships store and winter storage services.
- Manage a 12 unit cottage complex; each duplex offers 900 square feet of living space with full amenities overlooking the Indian River Inlet.
- Manage concession operations that include a full service bait and tackle, fish cleaning and head boat operations.

### PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
% occupancy of wet slips	95	91	95
% occupancy of dry storage	77	100	100

# NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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## SOIL AND WATER CONSERVATION

40-07-00

### MISSION

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

### KEY OBJECTIVES

- Restore natural functions of streams degraded by development.
- Assist the Nutrient Management Commission in managing and regulating the generation and application of nutrients to meet load reduction targets established by approved TMDLs and meet or exceed surface water quality standards for nutrients.
- Manage storm-water runoff and fully implement the EPA National Pollutant Discharge Elimination System (NPDES) Phase II Stormwater program for new construction activity.
- Provide water management technical assistance through the construction of drainage, flood control and water management systems.
- Ensure the protection of human life, property and environment through the development and implementation of a comprehensive dam safety program.
- Reduce wetland and other environmental impacts during planning and construction of new tax/public ditch projects and for maintenance of existing tax/public ditch projects.
- Achieve no net loss of recreational and protective beaches and dunes along the publicly accessible, developed portions of the Delaware Bay shore and Atlantic Ocean coast as measured on a three to seven year re-nourishment cycle.
- Reduce impact 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.
- Initiate and complete dredging projects in publicly accessible areas statewide, including small boat navigation channels, lakes/ponds or boat launching/marina facilities
- Implement a regional sediment management strategy for Rehoboth Bay and Indian River Bay that will identify sediment sources and patterns of sediment movement within these water bodies and their tributaries.
- Remove abandoned vessels and derelict structures (e.g. piers, docks) as needed within the Inland Bays.

### BACKGROUND AND ACCOMPLISHMENTS

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

**Drainage and Stormwater** - In the past 13 years, the Division has administered 1,564 Resource Conservation and Development projects, including a variety of flood abatement and drainage projects that were funded with \$71.9 million from the Twenty-First Century Fund. During Fiscal Year 2007, the Department received 449 requests for drainage assistance of which 86 percent have been resolved.

Last year the Department established the Delaware Dam Safety program with progress toward the State dam inventory and regulations. Both will be completed in Fiscal Year 2008.

The Sediment and Stormwater Management program has successfully designed and coordinated training for the regulated community throughout the State. To date over 6,700 people have participated in the training.

**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

# NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

40-00-00

improve protection to shorefront homes, businesses, roads and utilities, and enhance the basis of the State's coastal recreation and tourism industry. The Department is the local sponsor of cost shared coastal studies and projects with the federal government (Corps of Engineers). The Bethany Beach/South Bethany federal shore protection project began in the fall of 2007. Federal shore protection projects scheduled for subsequent years include Rehoboth Beach/Dewey Beach in 2008 and Fenwick Island in 2009. Delaware Bay beaches are nourished through contracted work with private dredges. Currently scheduled projects include Kitts Hummock and Bowers Beach in 2008. A comprehensive beach maintenance plan for Delaware Bay beaches is being developed and will determine nourishment needs for the next ten years.

Projects currently in progress for the State Dredge program include the Assawoman Canal, Garrison Lake and Indian River near Millsboro. Projects planned for future implementation include Pepper Creek, Love Creek, the Lewes-Rehoboth Canal, as well as ongoing maintenance work in Massey's Ditch and Indian River downstream, Augustine Beach boat launching facility and the Indian River Inlet Marina. The Division will continue to share the responsibility with the U. S. Coast Guard for placing and maintaining aids to navigation in the Inland Bays. The Division will also continue to respond to nuisance build-ups of deteriorating macroalgae in the Inland Bays.

The regional sediment management strategy for Rehoboth Bay will be completed in 2007. The goal of the management strategy is to improve planning for future dredging needs as well as to reduce the dependency on dredging in the inland waterways. It is envisioned that the hydrodynamic model, which was developed as part of this strategy, will be extended to include Indian River Bay in 2008. This will ultimately lead to the development of a comprehensive five year plan to have all channels that the State currently maintains in these bays open to safe navigation.

**District Operations** - This section assists the conservation districts in tailoring 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. The District Operations programs target Delaware's top two non-point source pollutants, excess sediment and nutrients.

The Division, in conjunction with the Natural Resources Conservation Service (NRCS) and Farm Service Agency (FSA), applied for and received \$8.2 million in federal funds

for the Conservation Reserve Enhancement Program (CREP) to create more than 10,000 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.

The District Operations section has responsibility for the Buried Wood Debris Remediation program. Since 1987, 256 debris pits have been remediated and 31 test pits and 287 investigations have been completed.

**Delaware Coastal Programs (DCP)** - DCP is in the third year of a four year project to address environmental and economic improvements in south Wilmington. Revitalization 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 to improve coastal and natural resource management at the local level.

The DCP will undertake several additional projects related to improving the Delaware River and Bay. This year the program will be expanded to include Delaware River and Bay habitat restoration. The DCP will coordinate with the U.S. Army Corps of Engineers to begin baseline monitoring and construction design of habitat restoration alternatives at the Mispillion Inlet in Kent County based upon the coastal engineering assessment completed last year. Finally, under the DCP's Delaware Bay Benthic Mapping project, the program will continue work on a multi-year effort to map the bottom substrate for the entire Delaware River and Bay.

The DCP will begin to collect existing information and initial model development to develop a sea level rise adaptation plan.

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 has completed a master plan for the ecological restoration and facility use of four properties in the Blackbird Creek Reserve and is developing a canoe/kayak access area for public use. The DNERR Research program conducts meteorological and water quality monitoring through the System Wide Monitoring program (SWMP). It is also

# NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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involved with research projects relating to horseshoe crab and shorebird habitat restoration, benthic mapping, and water quality monitoring of development pressures.

## FUNDING

	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2009 GOV. REC.
GF	20,574.4	6,340.6	6,456.9
ASF	4,857.9	9,695.9	9,695.9
<b>TOTAL</b>	<b>25,432.3</b>	<b>16,036.5</b>	<b>16,152.8</b>

## POSITIONS

	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2009 GOV. REC.
GF	49.6	49.6	49.6
ASF	3.5	4.0	4.0
NSF	23.9	23.4	23.4
<b>TOTAL</b>	<b>77.0</b>	<b>77.0</b>	<b>77.0</b>

### **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.
- Serve as liaison among local, county, state and federal governmental legislators, officials and agencies.
- Promote communication and collaboration within DNREC and among ecological restoration partners.
- Support a multi-disciplinary ecological restoration team of experts that provides project-specific technical assistance.

### **DRAINAGE AND STORMWATER** **40-07-02**

#### ACTIVITIES

- Conduct environmentally sensitive tax and public ditch planning, and provide technical assistance to landowners on surface water management issues.
- Ensure implementation of the State's no-net-loss of wetlands policy in water management projects and continue the development of wetland and stream restoration techniques and concepts in support of DNREC's Ecological Restoration initiative.
- Provide technical assistance to local soil and water conservation districts.

- Provide education and outreach to agricultural and environmental communities to demonstrate the working relationship of drainage, agriculture and wetlands.
- Encourage the establishment of riparian corridors along tax ditch rights-of-way to support the Department's Whole Basin initiative, CREP and the implementation of TMDL PCS.
- 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 Twenty-First Century Fund.
- Provide comprehensive Erosion and Sedimentation (E&S) and Stormwater Management training to the land development community, in partnership with other agencies and members of the regulated community.
- Provide financial, technical and compliance assistance to delegated agencies for plan review and field inspection of land development projects.
- Provide sediment and stormwater management field inspection on federal and state funded, non-Department of Transportation construction activities.
- Implement NPDES Phase II requirements for stormwater management.
- Provide technical and administrative support to the Delaware Clean Water Council.

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**40-00-00**

## PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
# of acres of agricultural and residential land receiving drainage, flood protection and water management	450,000	450,635	454,420
# of acres of wetland restoration developed and constructed in marginal agricultural fields and/or adjacent to streams and tax ditches	7	15	25
# of feet of stream restoration projects developed and constructed	2,550	1,500	1,500
# of tons of soil and sediment reduced to Delaware's waterways	653,000	400,160	500,000
% of total recommendations of the Governor's Surface Water Management Task Force implemented	60	85	100
% of high and significant hazard dams that have received a field verification and inspection analysis	30	100	100

## ***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 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 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 a sand bypass facility at Indian River Inlet.
- Conduct repair and maintenance program of publicly-owned coastal dunes.
- Improve and maintain navigational channels statewide.
- Implement a regional sediment management strategy for Rehoboth and Indian River bays to determine where sedimentation will occur and with what frequency, to improve planning for future dredging and channel marking needs within state maintained waterways.
- Restore the environmental integrity of state-owned lakes and ponds.
- Monitor erosion rates of beaches and dunes through a comprehensive surveying program.
- Mechanically harvest nuisance marine macroalgae in the Inland Bays to maintain water quality, aesthetics and boating access.
- Remove abandoned vessels and derelict structures from the Inland Bays.

## PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
# of constituent complaints concerning improperly marked navigational channels	2	0	0
# of feet in width of a dry sand Atlantic facing beach that is present for summer recreational use, seaward of dunes and structures	100	100	100
# of structures that suffer damage from storms to the parts of the structure that are essential to use for occupation or enterprise	0	0	0
% achievement of eliminating shoals in all authorized channels and maintaining channels for safe navigation	10	15	20
# of tons of macroalgae harvested from the Inland Bays	520	540	550

## ***DISTRICT OPERATIONS*** **40-07-04**

### ACTIVITIES

- Direct and administer Clean Water Act Section 319 grant funds for priority water quality assessment and implementation of best management projects.
- Provide technical assistance to other agencies, engineers and consultants, farmers and animal

# NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

## 40-00-00

producers, contractors and developers, educators, college professors and university officials.

- Assist the Nutrient Management Commission with the implementation of Nutrient Management Regulations and plans.
- Perform assessment and implementation of TMDL activities in the Piedmont, Chesapeake and 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 CREP.
- Administer the Buried Wood Debris Remediation program.

### PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
% reduction of nitrogen loadings in the Chesapeake, Delaware and Inland bays watersheds	6	6	6
# of debris pits remediated	39	27	25

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### *DELAWARE COASTAL PROGRAMS*

#### *40-07-05*

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### ACTIVITIES

- Administer National Oceanic and Atmospheric Administration's (NOAA) grant awards to DNREC for coastal management and DNERR.
- Provide grant funding to improve responsiveness to coastal management issues.
- Administer the federal consistency provisions of the Coastal Zone Management Act for Delaware.
- Conduct benthic bottom mapping of the Delaware River and Bay.
- Implement the first phase of the master plan for the ecological restoration and facility use of the Blackbird Creek Reserve properties.
- Implement educational programs for public, schools, resource users and decision-makers addressing coastal resource issues.
- Implement the national SWMP for water quality, nutrients and biological parameters.
- Implement the Environmental Cooperative Science Center program with Delaware State University.

### PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
# of coastal decision-maker workshops hosted by DNERR	4	3	3
# of school children attending DNERR education programs	2,331	2,000	2,000
# of meeting participants hosted by the DNERR conference facility	1,951	2,000	2,000
# of grants awarded	9	5	5

# NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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## WATER RESOURCES

40-08-00

### MISSION

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

### KEY OBJECTIVES

- Ensure a safe, reliable water supply for Delaware by providing technical and policy support to the Water Supply Coordinating Council.
- Coordinate the implementation of water supply projects in northern New Castle County, with the assistance of the Water Supply Coordinating Council, water purveyors and local governments.
- Reduce nutrients, bacteria and toxic substances entering the State's waterways through the implementation of PCS and TMDLs.
- Ensure that all ground and source waters used for drinking water are protected pursuant to the Source Water Protection requirements.
- Increase the percentage of waterways meeting water quality standards for swimming and healthy aquatic life.
- Support and enhance the efforts of the Nutrient Management Commission.
- Develop and implement an on-site wastewater compliance inspection program in the Inland Bays watershed using a variety of funding sources.
- Establish requirements to replace standard on-site wastewater systems with systems capable of enhanced nutrient removal in nutrient impaired watersheds.
- Provide the equitable and adequate allocation of safe surface and ground water supplies.
- Reduce exposure to hazardous substances, including carcinogenic substances in the ambient environment.
- Improve the function and value of coastal and freshwater streams and wetlands for habitat, flood control and water quality enhancements.
- Identify and assess the causes and factors contributing to the sudden dieback of tidal wetland habitats in the Inland Bays watershed.

### 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 implements its various regulatory programs; provides technical skills to programs, laboratory services, inspections and educational services; performs applied research; and helps 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".

- Promulgated TMDLs throughout Delaware in compliance with the federal consent decree schedule.
- Issued updated fish consumption advisories in cooperation with the Division of Public Health.
- Expanded and administered water pollution control loans to communities, poultry and dairy farmers, on-site wastewater system and underground tank owners through the State Revolving Fund (SRF).
- Performed educational and outreach efforts with numerous agricultural groups on water management and water allocation permitting programs.
- Coordinated with the Water Resources Agency and Delaware Geological Survey to develop an updated water supply plan for southern New Castle County.
- Completed the ground water modeling study of New Castle County with the U.S. Army Corps of Engineers, Delaware Geological Survey, Delaware River Basin Commission, and water utilities of northern New Castle County.
- Continued Department review of the U.S. Army Corps of Engineers' permit application to deepen the shipping channel in the Delaware River.
- Performed compliance inspections on wastewater holding tanks in the Inland Bays watershed.
- Developed draft PCS for the Inland Bays, Appoquinimink River, Nanticoke River, Murderkill River, Broadkill River, Christina Basin, St. Jones River, Choptank River and Chester River Watersheds.
- Met NPDES individual permit re-issuance goals for the year.

# NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

## 40-00-00

### FUNDING

	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2009 GOV. REC.
GF	8,964.0	7,956.6	8,066.8
ASF	3,732.1	4,858.7	4,858.7
<b>TOTAL</b>	<b>12,696.1</b>	<b>12,815.3</b>	<b>12,925.5</b>

### POSITIONS

	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2009 GOV. REC.
GF	71.0	74.0	73.0
ASF	63.6	61.6	61.1
NSF	27.4	26.4	27.9
<b>TOTAL</b>	<b>162.0</b>	<b>162.0</b>	<b>162.0</b>

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### *MANAGEMENT AND SUPPORT - WATER RESOURCES*

#### *40-08-01*

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#### ACTIVITIES

- Improve the levels of technical support, education and regulatory services to the citizens of the State to better protect the State's water resources.
- Support the Delaware Estuary program and Partnership for the Delaware Estuary by supporting implementation actions such as TMDL development, combined sewer overflow (CSO) and storm drain signing, and wetland habitat assessment.
- Assist the Center for the Inland Bays to implement 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 Clean Water Advisory Council and provide wastewater engineering and financial planning assistance to communities.
- Provide low-interest water pollution control loans to communities, homeowners and agricultural producers.
- Provide grants to water pollution control loan recipients to make projects affordable as defined by the Clean Water Advisory Council.
- Provide technical support to Delaware Technical and Community College for the development of an on-site wastewater training center.
- Provide support to the Delaware River Basin Commission for basin-wide water management activities.

- Serve on the Appalachian States Low-Level Radioactive Waste Commission, support their various committees and share information.

### PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
\$ of low interest loans and grants for wastewater projects that enhance water quality or contribute to achieving TMDLs (millions)	1.4	20.4	10.0
\$ of low interest loans for eligible nonpoint source expanded use activities (millions)	1.5	1.5	1.5

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### *ENVIRONMENTAL LABORATORY*

#### *40-08-02*

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#### 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.
- Perform microbial source tracking techniques for DNA fingerprint identification of bacteria, protozoa and other organisms in support of the development and implementation of TMDLs, PCS, permit allocations, and regulatory and enforcement actions.
- Operate the Laboratory Information Management System (LIMS) to enhance quality and productivity and facilitate information sharing throughout the Department.
- Work towards implementing a balanced scorecard performance measure pilot for the 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, improve laboratory efficiencies and analytical capabilities to identify and implement cost-effective technologies.

### PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
Average turnaround time to complete for each test (days)	4.9	4.7	4.7

# NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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

### **ACTIVITIES**

- Utilize NPDES permits to implement PCS for TMDLs.
- Issue NPDES permits that contain the necessary requirements and conditions (i.e., toxic controls, pretreatment requirements, stormwater, CSO and sludge requirements).
- Issue licenses for wastewater treatment operators; review plans and issue permits for construction of wastewater collection and treatment facilities.
- Conduct compliance inspections for NPDES facilities and CSO systems.
- Assist the Nutrient Management Commission to implement a regulatory program for large animal producing operations.
- Review and approve central wastewater systems for new development.
- Work with the City of Wilmington and EPA to implement their CSO Control Plan.
- Periodically review and update program regulations for point source dischargers.

### **PERFORMANCE MEASURES**

	<b>FY 2007 Actual</b>	<b>FY 2008 Budget</b>	<b>FY 2009 Gov. Rec.</b>
% change in NPDES permit violations	14	(10)	(10)

## ***GROUND WATER DISCHARGES*** **40-08-05**

### **ACTIVITIES**

- Encourage designers and applicants to incorporate land treatment systems into their wastewater management plans.
- Perform construction and compliance inspections on all large on-site wastewater systems and 75 percent of all small systems.
- Issue large septic and spray permits in compliance with all applicable regulations.
- Issue replacement and repair permits for all known malfunctioning subsurface systems.
- Issue Underground Injection Control (UIC) permits and authorizations in compliance with all applicable regulations.
- Locate and inventory all unauthorized UIC wells, perform inspections and prevent non-compliance.

- Perform statewide compliance inspections of holding tanks.
- Provide technical and staff support to Delaware Technical and Community College for the construction and operation of an on-site wastewater training center in Georgetown.
- Implement aspects of approved PCSs for TMDL watersheds.

### **PERFORMANCE MEASURES**

	<b>FY 2007 Actual</b>	<b>FY 2008 Budget</b>	<b>FY 2009 Gov. Rec.</b>
% of alternative on-site treatment systems inspected for operational compliance	90	100	100
% of construction inspections for on-site wastewater systems that discharge:			
< 2,500 gallons/day	54	75	75
> 2,500 gallons/day	100	100	100
% of compliance inspections for on-site wastewater systems that discharge more than 2,500 gallons per day	100	100	100
% of statewide compliance inspections on holding tanks	100	100	100

## ***WATER SUPPLY*** **40-08-06**

### **ACTIVITIES**

- Provide technical and policy support to the Water Supply Coordinating Council.
- Review and approve allocation and water well permits for public and environmental protection.
- Conduct research and monitor 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) including long-term protection strategies for public drinking water supply sources.
- Promote water conservation, wellhead protection and source water protection with public education and cooperative agreements with stakeholders.
- Perform ground water reviews for non-hazardous waste sites.

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### PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
% of one day turnaround time for domestic well applications	95	95	95
# of water allocation permits issued to reduce backlog of unpermitted projects	8	30	30
% of well permit data entered within 5 days of receipt of information	95	95	95
% of public water systems with source water protection strategies in place	100	100	100
% of public water systems with source water protection strategies substantially implemented	22	70	100

### **WATERSHED ASSESSMENT** 40-08-07

#### ACTIVITIES

- Implement the water quality monitoring and assessment program.
- Monitor and assess shellfish harvesting area water quality and inspect shellfish distribution and processing facilities for 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 PCSs to meet pollutant load reduction goals established by TMDLs.
- Develop wetland profiles to quantify and qualify their water quality and habitat functions in the Nanticoke River and Inland Bays Watershed.
- Implement management actions that will protect the public from hazardous algae bloom related events.
- Cooperate with Delaware River Basin Commission, Pennsylvania and New Jersey in developing TMDLs for toxic pollutants for the Delaware Estuary.
- Utilize genetic techniques to identify the sources of bacteria in the State's waterways.
- Serve as lead for fish contamination assessments and coordinate at state and inter-state levels.

### PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
% of waters attaining water quality standards for healthy aquatic life	36	36	36
# of acres of watersheds with PCSs in place	528,113	528,113	528,113
# of incidences of water-borne disease (swimmer illness)	0	5	5

### **WETLANDS AND SUBAQUEOUS LANDS** 40-08-08

#### ACTIVITIES

- Maintain an inventory of tidal wetlands, issue wetland permits and issue subaqueous lands permits and leases.
- Review and issue marina construction permits.
- Issue Water Quality Certifications for federal permits.
- Promote stream channel and riparian restoration.
- Administer a cost-share program to assist waterfront landowners with shoreline stabilization projects using vegetation and other environmentally friendly techniques.
- Support efforts to reestablish fees for commercial and industrial docks and piers on public subaqueous lands.

### PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
% requests of shoreline stabilized with soil bioengineering and rip-rap versus bulkheading	100	95	98
% of marinas with approved operations and maintenance plans	33	35	40

# NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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## AIR AND WASTE MANAGEMENT

40-09-00

### MISSION

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

### KEY OBJECTIVES

- Reduce exposure to hazardous substances, including carcinogenic substances, in the ambient environment.
- Prevent exceedences of air quality standards for particulate matter, sulfur dioxide, carbon monoxide, nitrogen dioxide and one-hour ozone.
- Reduce hazardous air pollutants by adopting the EPA's National Emission Standards for Hazardous Air Pollutants for Source Categories.
- Attain eight-hour ozone standard statewide and PM2.5 standard in New Castle County by 2010.
- Maintain an air quality network to provide representative and accurate data for ambient concentrations of ozone, particulate matter, sulfur dioxide, carbon monoxide and nitrogen oxides.
- Promote effective and sustainable cleanup and reutilization of Brownfields in conjunction with community land use plans.
- Increase municipal solid waste recycling to 51 percent pursuant to Executive Order 90.
- 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.
- Protect public health and safety by conducting hazardous materials emergency planning and accidental release prevention and by maintaining emergency response capability.
- Provide outreach and educational opportunities on the Division's mission, programs and decisions.

### BACKGROUND AND ACCOMPLISHMENTS

**Air Quality Management (AQM)** - Since the passage of the 1990 Clean Air Act amendments, the Department has made unprecedented progress in its efforts toward providing clean air to all citizens.

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

**Brownfield Revitalization** - Brownfield redevelopment seeks to direct future development to targeted growth areas where new services and needs can be provided at the least cost while simultaneously cleaning up the environment. The Department has worked with DEDO to improve and streamline the Brownfield grant process. This is a cooperative effort that involves partnering with both private and public agencies to create greater opportunities for redevelopment, as well as to address the cleanup of suspected contamination at these properties. Over 70 brownfield sites have been processed as Certified Brownfields for grant and mixed funding opportunities under the Hazardous Substance Cleanup Act (HSCA) and DEDO.

**Site Investigation and Restoration** - The branch has a major role in investigating and cleaning up hazardous substance release sites that pose a threat to public health, welfare and the environment. The Department's focus is on sites not listed on the federal National Priorities List (NPL) by the U.S. Environmental Protection Agency, although the State is obligated to provide a 10 percent match to NPL site funding and 100 percent of perpetual operations and maintenance costs.

The branch has investigation and cleanup work ongoing at 526 HSCA, Voluntary Cleanup program (VCP) and Brownfield sites. Of these sites, 78 have been cleaned up for reuse and require no further action.

**Enforcement** - The Enforcement section is responsible for responding to and investigating environmental emergencies and citizens' complaints on a 24-hour basis. The section focuses its efforts on the criminal enforcement of federal and state laws and regulations. Enforcement officers provide investigative and

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prosecutorial services to three of the five divisions within DNREC including, Air and Waste Management, Water Resources, and Soil and Water Conservation. The Enforcement section also operates the DNREC Industrial Notification System and the Delaware Environmental Release Notification System.

In Fiscal Year 2007, the section provided professional response services to the community; proactive operations targeting waste management, water quality and air pollution issues; public and professional outreach programs designed to enhance environmental awareness; identified community environmental issues; maintained training in both environmental response and law enforcement; attended and provided training on homeland security response and preparedness; and policy development.

**Tank Management** - Delaware's Underground Storage Tank (UST) program was created in 1985 and currently has 2,378 tanks registered at 791 facilities. Delaware's Aboveground Storage Tank (AST) program was created when the Jeffrey Davis AST Act was signed into law on July 8, 2002. To date 953 facilities have registered 3,636 ASTs with the Department.

Delaware's UST and AST programs regulate the installation, operation, removal and remediation of tanks storing petroleum and hazardous substances. The primary objectives of the UST and AST tank programs are the prevention of tank releases and early detection and expedited cleanup of releases that occur. Release prevention is attained through an active tank inspection and compliance enforcement program. The tank program objectives are implemented pursuant to the UST and AST regulations which establish technical requirements for the installation, daily operation and maintenance, and cleanup of tank sites.

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

**Emergency Prevention and Response** - The Emergency Prevention and Response programs provide comprehensive planning and prevention of, and 24-hour response to, time-critical emergency and non-emergency environmental and hazardous materials incidents for the protection of human life, health, safety and the environment.

In Fiscal Year 2007, Emergency Response staff responded to 344 incidents; over half of the total number of incidents occurred in New Castle County, involved no other state emergency response agency but DNREC, and were petroleum-related incidents. The Emergency Response staff continues to manage and support the DNREC Emergency Response Team to maintain a fully functional statewide 24 hour, 7 day-a-week hazardous materials response capability.

The Emergency Planning and Community Right-to-Know Act (EPCRA) group continued to provide support to the State Emergency Response Commission and local emergency planning committees, and manage the EPCRA Tier II and Toxics Release Inventory (TRI) reporting requirements. During Fiscal Year 2007, the EPCRA group issued the TRI report and managed the software application for facilities to electronically submit their Tier II hazardous chemical reports. Emergency responders use the Tier II data to identify hazardous chemicals stored in facilities throughout the State.

In the past year, the Accidental Release Prevention (ARP) program group conducted 26 inspections at facilities with extremely hazardous substances to ensure adequate emergency response and risk management plans and operations are in place to prevent disasters.

**Solid and Hazardous Waste Management** - The program is responsible for ensuring Delaware's wastes are managed in a manner that is protective of human health and the environment. The program ensures proper management through a permitting and compliance monitoring program and also through encouragement of waste reduction, re-use and 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 awarded \$50,000 in limited recycling grant assistance funds and assisted the RPAC in completion of an annual report and draft legislation. In addition, the branch has begun implementation of the Scrap Tire program.

	FUNDING		
	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2009 GOV. REC.
GF	5,315.0	5,354.7	5,440.1
ASF	22,729.3	48,749.0	38,749.0
<b>TOTAL</b>	<b>28,044.3</b>	<b>54,103.7</b>	<b>44,189.1</b>

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### POSITIONS

	FY 2007 ACTUAL	FY 2008 BUDGET	FY 2009 GOV. REC.
GF	58.3	58.3	57.3
ASF	92.3	94.3	94.3
NSF	64.4	64.4	64.4
<b>TOTAL</b>	<b>215.0</b>	<b>217.0</b>	<b>216.0</b>

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

#### ACTIVITIES

- Perform outreach to areas affected by air and waste management issues to improve the Division's ability to communicate with the citizens of Delaware.
- 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 and emergencies on a 24-hour basis.
- Participate with federal, state and local emergency responders and planning agencies.
- 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 with the DNREC webpage.
- Maintain and develop policies, practices and procedures to prevent responder injury and govern enforcement and response activities.
- Improve ability to respond to suspected acts of terrorism by acquiring training and equipment.

#### PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
# of pro-active operations conducted	19	22	20
# of public outreach/training sessions conducted	37	40	40
# of complaints	4,511	4,800	4,800

### **AIR QUALITY MANAGEMENT 40-09-02**

#### ACTIVITIES

- Monitor or track air quality for all pollutants, especially ozone and fine particulate matter to assess attainment status.
- Continue compliance inspections and permitting air contaminant sources pursuant to the Title V permitting program.
- Develop State Implementation Plan revisions as required by the Clean Air Act amendments (CAAA) of 1990.
- Provide air toxics monitoring at a minimum of three sites in Delaware.
- Implement value stream mapping recommendations for minor source permitting program to reduce permit issuance time to 90 days.
- Implement audit procedures for the Inspection and Maintenance program two-speed idle test and on-board diagnostics tests, and evaluate data.
- Initiate planning and implementation efforts to address long-term ozone, fine particulates and regional haze problems.
- Oversee existing motor vehicle exhaust pressure and anti-tampering tests.
- Implement advanced audit procedures for the inspection and maintenance at the high-tech, special purpose inspection lane.
- Work with public and private entities to develop or implement transportation and voluntary control programs such as Ozone Action Day.
- Implement new procedures and protocol to expedite major enforcement cases.
- Participate in Ozone Transport Commission (OTC), State and Territorial Air Pollution Control Administrators, and Mid-Atlantic Regional Air Management Association activities to take advantage of combined expertise and foster regional and national strategies.
- Promulgate new air regulations required by the CAAA, OTC and state needs, and annually track point source emission inventories consistent with the CAAA.

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## PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
# of exceedences of Ozone, PM, CO, NO2 and SO2 standards	6	0	0
# of ambient air samples collected	1,150	978	979
# of air samples for air toxics*	240	1,480	3,700

\*DNREC received a grant from EPA to collect VOC samples at 6 sites starting in January 2008.

## WASTE MANAGEMENT

40-09-03

### ACTIVITIES

#### Site Investigation and Restoration.

- Oversee remedial investigation, feasibility study, remedial design and action at HSCA, VCP and Brownfield sites.
- Provide oversight for the investigation, study, design and clean up of VCP and Brownfield sites consistent with HSCA.
- Assist in facilitating grants, loans and tax credits at Brownfield sites so that such sites are reused in a productive manner.
- Promote field screening procedures to reduce the number of analytical samples sent to the laboratory for full analysis.
- Work with communities to enhance understanding of the Site Investigation and Remediation branch (SIRB) programs and the risks posed by SIRB sites.
- Perform eight Brownfield assessments or inspections at sites targeted for redevelopment.
- Enhance and implement the Brownfield inventory and a ranking system to address redevelopment potential and the degree of contamination.
- Screen shallow public drinking water supplies for contaminants as recommended by the Delaware's Advisory Council on Cancer Incidence and Mortality.

#### Tank Management.

- Conduct UST and AST facility compliance assessments, oversee removals and closures, approve design plans and supervise the installation of new systems.
- Administer contracts for sites utilizing state funding to remove orphan USTs and complete site remediation.

- Implement cost savings for sites through pay for performance contracting.
- Review vapor recovery (VR) permit applications and oversee testing of VR systems to ensure compliance with the Gasoline VR Regulations.
- Reduce the amount of time from identification to closure of Leaking Underground Storage Tank (LUST) sites.
- Continue implementation of risk-based corrective action closure procedures at LUST sites.
- Continue implementation of the Federal 2005 Energy Bill including increasing tank inspection frequency, creating a training program for tank owners and operators and establishing a delivery prohibition program.
- Implement requirements of the revised UST Regulations, scheduled to become effective in early 2008, including increased outreach and inspection activities to educate the regulated community including tank owners, operators, contractors and consultants.
- Commission private insurance inspectors operating within Delaware and monitor their inspections.
- Investigate boiler and pressure vessel accidents.
- Conduct safety-training seminars on boiler and pressure vessel operation, maintenance and repair.

#### Solid and Hazardous Waste Management.

- Regulate the disposal of waste generated in Delaware to prevent adverse impacts to the 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 hazardous waste generators on the reduction of hazardous waste.
- Complete solid and hazardous waste compliance assessments and permitting and implement a multi-media approach where possible.
- Implement the hazardous waste corrective action process.
- Oversee the scrap tire cleanup program.
- Coordinate the activities of RPAC.

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### PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
# of LUST sites cleaned up: regulated tanks	70	70	60
unregulated tanks	53	40	40
% of UST facilities in compliance following inspection activities	76	80	80
# of boiler safety seminars/training - contractor training school	3	10	10
% of Brownfield projects that meet or exceed negotiated project deadlines	92	93	93
Average # of months to complete a Brownfield project	19	13	13
% of municipal solid waste recycled	23	51	51
# of scrap tire pile owners registered	0	20	25

### PERFORMANCE MEASURES

	FY 2007 Actual	FY 2008 Budget	FY 2009 Gov. Rec.
# of emergency responses to incidents	344	350	350
# of Accidental Release program inspections	26	30	30
% of EPCRA electronic reporting	85	88	90

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### *EMERGENCY PREVENTION AND RESPONSE*

#### *40-09-04*

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#### ACTIVITIES

- Investigate and respond to as necessary, citizens' complaints and environmental incidents and emergencies as soon as possible and not later than 24 hours.
  - Respond to hazardous materials incidents as part of the State emergency response team and the Delaware Emergency Operations Plan.
  - Participate in emergency planning with federal, state and local emergency management and response agencies.
  - Provide emergency response and hazardous materials training to State agencies.
  - Ensure compliance with annual hazardous chemical inventory and TRI data reporting pursuant to EPCRA.
  - Support State Emergency Response Commission (SERC) operations through collection of EPCRA Tier II hazardous chemical reporting fees.
  - Analyze TRI data and report data trends.
  - Upgrade and maintain response capabilities and activities through the SERC.
  - Ensure effective risk management programs at extremely hazardous substance facilities by continuing to conduct compliance inspections, review risk management plans, and investigate releases pursuant to the Accidental Release Prevention Regulation.
-