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Protecting and Restoring Our Environment

Annual Report 2007

Gina McCarthy
Commissioner



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Cover Photograph: Pachaug State Forest, Voluntown

Introduction

The Department of Environmental Protection (“Department”) is pleased to present its Annual Report for 2007. The leadership of Commissioner Gina McCarthy continues to set a clear agenda for the Department that is shaped by valuable input from a broad base of diverse stakeholders.

The 2007 report features accomplishments and progress within the following five major initiatives:

Connecticut Green and Growing: Landscape Stewardship

“Making Doing the Right Thing” the “Path of Least Resistance”

Clean Air and Energy/Climate Change Challenges

Clean Water: From Our Rivers to the Sound

Connecticut Great Outdoors: No Child Left Inside

A common theme among the agency initiatives are the critical linkages across the air, water, materials management, forestry, wildlife, fisheries and land acquisition programs. Whether the challenge is climate change; energy supply and demand; or sustainable development; the strategies to address those challenges will involve solutions from across the Department’s various programs.

The second section of the report features enforcement and permitting outcome and output measures. Enforcement and permitting, as well as compliance assistance, are essential tools the Department utilizes to protect and preserve the environment and the natural resources of the state.

Connecticut Green and Growing: Landscape Stewardship

Land use decisions in Connecticut are, by custom and by law, primarily made at the local level by volunteer land use boards and commissions. There are many other stakeholders in these decisions, from the developer, to the municipal finance board, to the neighbors and the local voters. Encouraging, supporting and promoting informed land use and development conversations, choices and decisions is a complex but important challenge. The Department's Landscape Stewardship Initiative is an effort to engage stakeholders, offer information and advance the statewide conversation about responsible growth.

In support of this Initiative, the Department launched a Landscape Stewardship website (www.ct.gov/dep/landscapestewardship) in the summer of 2007. The goal of the website is to improve outreach to municipal officials, developers, nonprofit organizations and others and to work towards building an informed public constituency that understands the need for and supports sound land use decisions that protect the integrity of Connecticut's diverse ecosystems. It was developed with input from the Landscape Stewardship Advisory Committee, a group of stakeholders interested in the future of Connecticut's landscape.

Responsible Growth

Governor M. Jodi Rell, continuing her efforts to promote responsible growth laid out in Executive Order 15, created an Office of Responsible Growth within the Office of Policy and Management. This office's role is to coordinate state efforts to revitalize cities, preserve the unique charm of our state and build livable, economically strong communities while protecting our natural resources for the enjoyment of future generations. The Department works closely with this office and other state agencies as a member of an interagency steering council on Responsible Growth. Department staff also support a multi-agency Responsible Growth policy committee and serve on a state agency project review team that coordinates review of large state development projects for consistency with responsible growth principles.

In furtherance of Executive Order 15, in 2007 the Department completed an update of the state *Green Plan*, (see below for more information); supported development of the State's "Green and Growing" webpage including integration with the Department's Landscape Stewardship webpage; and initiated geographic information system ("GIS") projects to

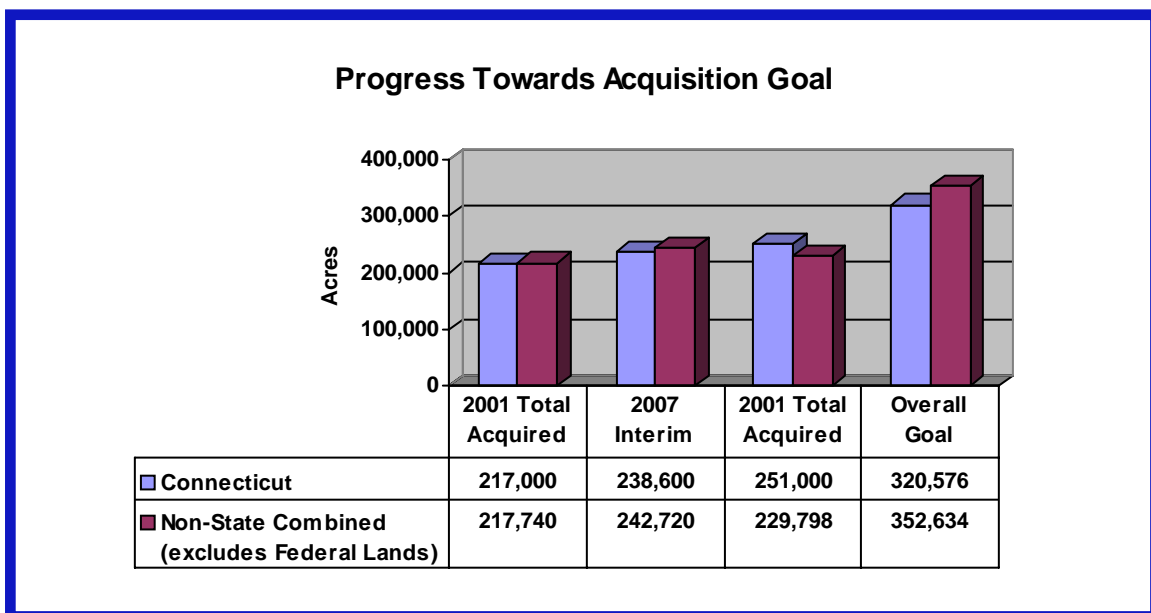
provide access to up-to-date information on sensitive ecological areas and other natural resources information.

Legislation enacted in 2007 established a Responsible Growth Task Force. As a member of that task force, the Department helped outline responsible growth principles and recommendations to the 2008 General Assembly. To review the report of the Responsible Growth Task Force see, http://www.ct.gov/opm/lib/opm/iqg/org/rqtf_report_2-4-08.pdf .

Green Plan Updated

An important component of Responsible Growth is the preservation of open space. Section 23-8 of the Connecticut General Statutes established an overall open space goal to protect twenty-one percent of the state land area, a little over 673,000 acres. The statute directs that ten percent of the state’s land shall be held by the state while the other eleven percent may be held by municipalities, water companies, or other nonprofit land conservation organizations. By the close of 2007, the state had acquired as open space 251,886 acres, 79 percent of the goal for state held lands. (See Figure 1)

Figure 1



To keep on track toward that goal, the Department has updated the state’s Green Plan to better guide our acquisition and preservation efforts. This new Plan identifies sensitive

ecological areas in order to ensure the protection of valuable open space without infringing upon economic and population growth.

The updated [Green Plan](#), sets forth a strategy for making significant land use decisions by identifying the priorities for acquisition and protection, describing the programs and funding available and outlining the preservation process. The Department is reassessing the criteria used to review potential land acquisition projects and enhancing outreach to municipalities, land trusts, water companies and private land owners regarding land protection.

The plan: 1) identifies the State's future open space goals; 2) summarizes land acquisition and protection efforts to date; 3) discusses threats and challenges to open space protection; 4) identifies priorities for acquisition and protection; 5) describes the programs and funding available; and 6) outlines the process. This document is a strategic plan for land acquisition and protection for the State of Connecticut through 2012. As such, it provides general guidance for program managers, is a tool for those who want to work with the State in preserving land, and offers a basic overview for the public of the State's land acquisition and protection program.

Grassland Habitat Conservation Initiative

The Department recently embarked on a new effort to conserve grassland habitat in order to protect critical nesting and breeding grounds for birds and other species. Grassland is a priority habitat because it provides habitat for eighty bird species in Connecticut, thirteen of which are listed as endangered species, and several mammal, herptile and invertebrate species. The Grassland Habitat Conservation Initiative strengthens efforts to protect and preserve habitats and the species that depend on these habitats. As part of the initiative, the Department has committed \$3.2 million for the acquisition of grassland habitat and \$4.5 million for future acquisitions.

The first objective of the initiative was to complete a statewide inventory to identify the location and quality of existing grassland and lands suitable to create grasslands. In 2007, the Department surveyed four counties in Connecticut for potential grassland habitat preservation sites. Numerous suitable lands were identified for potential purchase to protect grassland birds in the face of continued development. The statewide effort is also expanding throughout the entire Connecticut River Valley with the involvement of

Massachusetts, Vermont and New Hampshire. The Department anticipates making significant progress in several aspects of this initiative within the next year.

Land Revitalization and Clean-up

Hartford Landfill Closure

The Department, the city of Hartford and the Connecticut Resources Recovery Authority ("CRRA") are moving forward on plans to close the Hartford landfill in a manner that protects natural resources and the public health, benefits city residents and allows CRRA to meet its responsibilities for efficient processing of solid waste.

The Hartford Landfill is located on 100 acres north of the city near Interstate I-91 on Leibert Road. Since 1988, CRRA has used 80 acres of this site that is leased from the city to dispose of materials that cannot be processed in CRRA's Mid-Connecticut Project Trash-to-Energy Facility. CRRA also disposes of ash residue generated at that plant on the adjacent 16 acres. These facilities serve 70 cities and towns.

The closure plan ("Plan") for the Hartford landfill includes a landmark host community agreement between the city and CRRA that commits CRRA to significant retrofitting of diesel equipment to improve air quality in the city and requires CRRA to fund programs to increase recycling in Hartford. The Plan creates a citizen's advisory group to participate in decisions on future uses of the site. The Plan also includes a tandem agreement, whereby CRRA and the city agreed in partnership to seek state assistance for the closure and long-term maintenance and monitoring of the landfill. The state will be asked to provide \$15 million toward these costs, while CRRA is committed to providing \$20 million. Finally, the Department approved a modification of CRRA's permit for the landfill that includes provisions calling for an end to waste disposal at that facility by Dec. 31, 2008; installation of the latest technology synthetic cap as the final cover; and development of plans for post-closure use of the site.

Plan for Cleanup of Newhall Street Neighborhood

The Department released a plan for the cleanup of Hamden's Newhall Street Neighborhood that addresses conditions on both public and private properties and responds to comments on its previously proposed draft plan by offering alternatives to two key provisions of that proposal. The plan provides a realistic and permanent solution to issues facing this

community that is protective of public health and the environment. It also allows for the preservation of homes and the enhancement of the character of this neighborhood.

The plan released by the Department addresses issues posed by the presence of waste fill in a section of Hamden identified in a 2003 Consent Order ("CO"). The CO was entered into by the Town of Hamden, the South Central Regional Water Authority, Olin Corporation and the State of Connecticut Board of Education and approved by the Department.

The Newhall Street Neighborhood area historically consisted of wetlands and low-lying areas that were filled with industrial and household wastes from the late 1800s through the mid-1900s. Many homes and other buildings were built on top of soil containing this waste fill. Contaminants of concern most frequently detected during soil investigations within the site include heavy metals, primarily lead and arsenic and semi-volatile organic compounds.

The Department plan specifically calls for:

- Removing historic waste fill on 226 private properties to a depth of four feet and replacing it with clean soil. The plan states that excavated waste fill will be properly disposed of off-site and that properties will be backfilled with clean soil and restored. Examples of restoration activities include replacement of lawns, driveways, patios and landscaping disturbed by the excavation;
- Further evaluation of 22 properties to confirm whether waste fill is present;
- No remediation needed at 55 properties where testing has shown there is no waste fill present; and
- Placement of "environmentally secure" caps to isolate waste fill on public properties in the project area: the former Hamden Middle School and two town parks

In response to comments offered on the draft plan released in August of 2006, the plan proposes an alternative to deed restrictions – known as Environmental Land Use Restrictions– on individual private properties; and prohibits the disposal of waste fill at the site of the former Hamden Middle School.

Finally, the plan calls for establishment of a Soil Management Fund to cover the extra costs associated with properly managing waste fill excavated from depths greater than four feet on private properties. The Department and Olin Corporation – one of the responsible parties - will each contribute \$1 million to the Soil Management Fund and the Town of Hamden will administer the fund.

Making "Doing the Right Thing" The Path of Least Resistance

The Department is focused on achieving environmental results, providing flexibility and certainty in how to come into and maintain compliance, and leveling the playing field by keeping the costs of non-compliance high. By using a broad range of regulatory, permitting, assistance, and enforcement tools to maximize protection of public health and the environment and by maintaining a strong, credible enforcement presence, the Department can minimize the potential environmental impacts of regulated activities.

New Administrative Civil Penalty Regulations Adopted

In May 2007, the Department's proposed Administrative Civil Penalty Regulations, developed in accordance with section 22a-6b of the Connecticut General Statutes, were adopted. Under the new regulations, the Department is authorized to administratively assess civil penalties through the issuance of a Penalty Notice for violations of environmental requirements pertaining to tidal wetlands, structures, dredging and fill, stream channel encroachments, dam safety, water diversion and pesticide management. In developing the penalty schedule and methods incorporated by these regulations, the Department considered several factors including the economic benefit of noncompliance, potential for harm of the violation to the environment and human health and welfare, extent to which a violation deviates from the legal requirement, good faith efforts to comply, history of prior violations, and ability to pay.

The new Administrative Civil Penalty Regulations provide the Department with an enforcement tool that will help promote compliance with environmental standards and improve the predictability, consistency and transparency of civil penalty calculations and assessment methods for the regulated community. With these regulations the Department may issue a penalty notice either alone, in conjunction with, or in place of an administrative order or a case referral to the Attorney General for civil action. The Department believes that judicious use of a penalty notice will resolve some violations more quickly and cost effectively because penalties for noncompliance will become apparent earlier in the enforcement process and the notice can become final as early as thirty days after issuance. In the event a penalty notice is appealed, resolution of the notice will proceed within the context of an administrative proceeding and under an established timeframe.

In evaluating whether to issue a penalty notice or pursue an alternative enforcement action, the Department will need to consider the nature and complexity of each enforcement case and the maximum penalty assessments allowable under C.G.S. section 22a-6b.

Landmark Coastal Management Multi-Media Settlement With Thames Shipyard and Repair Company

The Department and the Attorney General's Office entered a settlement in January 2008 with The Thames Shipyard and Repair Company ("Thames Shipyard") to resolve numerous violations of environmental laws and regulations. Thames Shipyard is engaged in the construction, repair and maintenance of ships and ferries at 50 Farnsworth Street and 2 Ferry Street in New London. The site is an area of longstanding industrial use spanning over a hundred years.

This is a landmark coastal management, multi-media settlement that resolves a broad array of violations regarding the storage, treatment and disposal of hazardous waste; discharges to the Thames River of wastewaters and stormwater; air pollution; and maintenance of certain coastal structures such as docks and barges without proper authorization.

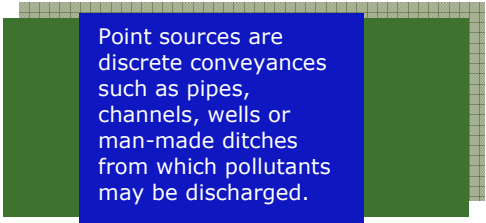
Thames Shipyard and related companies agreed to a settlement worth \$747,011. Of that, \$178,700 will be paid as a civil penalty and the remaining \$568,311 will be in the form of Supplemental Environmental Projects for the removal of derelict and abandoned structures and vessels that are beyond the regulatory obligation of Thames Shipyard to remove or remediate. Department staff worked closely with shipyard representatives to ensure improvement in shipyard operations and to resolve the outstanding violations.

The Department's inspections revealed extremely poor waste management practices, and virtually no established hazardous waste compliance program. Inspections also revealed many unpermitted wastewater and stormwater discharges to the Thames River, and numerous unpermitted and environmentally unsound structures at the site including dilapidated piers and docks in or near the Thames River in violation of state environmental laws and regulations.

The settlement also requires Thames Shipyard to conduct an investigation and remediate the effects of out-door storage of hazardous wastes, and painting and sandblasting operations conducted without sufficient controls to prevent releases directly to the ground.

Reducing Impacts on Rivers and Streams Through the NPDES Program

Water pollution degrades surface waters making them unsafe for drinking, fishing, swimming, and other activities. As authorized by the Clean Water Act, the National Pollutant Discharge Elimination System ("NPDES") permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. In Connecticut, the federal NPDES permit program is delegated to the state to implement.



Point sources are discrete conveyances such as pipes, channels, wells or man-made ditches from which pollutants may be discharged.

Industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. An NPDES permit will generally contain pollutant discharge limits, monitoring and reporting requirements, and other provisions to ensure that the discharge does not harm water quality or human health. NPDES permits ensure that a state's mandatory standards for clean water and the federal minimums are met.

In an effort to substantially improve the water quality of Connecticut's rivers and streams, the Department has made "Doing the Right Thing" the Path of Least Resistance. The Department has worked diligently with companies in Connecticut to reduce the impact of major industrial discharges and where feasible eliminate discharges to surface waters altogether. In 1973 there were 450 NPDES major industrial discharges in Connecticut. As of July 2007, 35 major industrial discharges remain. Through the use of the Department's various compliance tools either through the permitting process or the settlement of enforcement actions, companies have worked with the Department over the last several years, in some cases going beyond compliance, to reduce or eliminate direct discharges to Connecticut's rivers and streams. The following are recent highlights of successful 2007 enforcement settlements:

- *Allegheny Ludlum Corporation/Wallingford*- Through a consent order with the Department, Allegheny Ludlum has agreed to pay a \$32,000 civil penalty; spend an additional \$150,000 to install a cooling tower system to increase water reuse and eliminate cooling water discharges to the Quinnipiac River; and pay stipulated future penalties for further effluent violations.
- *Whyco Chromium/Thomaston* – Through an enforcement settlement, the company agreed to pay a \$30,000 civil penalty; spend at least \$270,000 for installation of a closed loop recycling system to eliminate process wastewater discharges to the Naugatuck River; and pay stipulated future penalties for further effluent violations.

- *Cytec Industries, Inc./Wallingford*- Entered a consent order to correct effluent limitation violations in a discharge to the Quinnipiac River and agreed to pay a \$14,000 civil penalty and pay \$42,000 to fund environmentally beneficial projects. The company is also required to investigate and mitigate the presence of a recurring pollutant in its discharge, evaluate spill prevention and control practices, and pay stipulated penalties for further effluent violations.
- *Electric Boat Corporation* - Electric Boat entered a consent order to correct effluent violations in a discharge to the Thames River. Electric Boat has agreed to pay a \$20,000 civil penalty and \$55,000 toward environmentally beneficial projects. Electric Boat is also required to pay stipulated penalties for further effluent violations and implement changes to its spill prevention and stormwater management procedures.

Over the last several years, additional efforts to reduce or eliminate direct discharges to Connecticut's rivers and streams through either the permitting process or enforcement actions include:

- *Unilever/Clinton* – Committed to implement a system to reuse treated industrial and domestic wastewaters for cooling water, eliminating discharges to Hayden Creek and thus eliminating the need for an NPDES permit. The company will also significantly reduce its need for public water supply for cooling systems.
- *Stan Chem/Berlin* – Negotiated a settlement with the Department to install a closed-loop cooling system, eliminating 500,000 gallons per day of contact cooling water to the Mattabassett River. Once completed, the NPDES and diversion permits can be eliminated.
- *New Boston Exchange/Farmington* – Negotiated a settlement with the Department to install closed-loop cooling system, eliminating discharges to an unnamed tributary of Trout Brook and eliminating the need for an NPDES permit.
- *Sikorsky/Stratford* – The company relocated industrial process wastewater discharges to the sanitary sewer, eliminating approximately 200,000 gallons per day of metal finishing wastewater to an unnamed tidal tributary to the Housatonic River. The company's multi-year efforts have resulted in reducing discharges from the facility by over 90%.
- *Pratt & Whitney/East Hartford* – Implemented an initiative to reduce NPDES discharges from its large manufacturing facility, from 290 million gallons per day in 2001 to less than 2 million gallons per day.
- *Hamilton-Sundstrand/Windsor Locks* – Through an enforcement settlement, the company agreed to install a recycling system for process wastewater discharge, eliminating metal finishing discharges to the Farmington River.

Electronic Equipment Recycling

One of the fastest growing segments of the solid waste stream is computers, televisions and other types of "e-waste". As technology advances and the cost of electronic devices continues to go down, consumers replace their televisions and computers at an accelerated rate. As a result, attics, basements, garages and waste facilities across the state are filling up with unwanted e-waste.

In July of 2007, Governor Rell signed into law Public Act 07-189. This law enables Connecticut to manage an ever-growing portion of the solid waste stream. Under the new e-waste law, residents will have convenient and free opportunities for recycling their computers, televisions and monitors. See the Public Act at <http://www.cga.ct.gov/2007/ACT/PA/2007PA-00189-R00HB-07249-PA.htm> .

This unique law places the financial burden for recycling e-waste on the manufacturers. Manufacturers of the covered electronic devices will have to register with the Department, starting in 2009, and pay an annual fee the Department will use to administer the recycling program. Registered recyclers will collect the e-waste from municipal transfer stations and other locations and submit the bill to the manufacturers. Towns currently recycling e-waste from their residents pay about \$300 per ton. Under the new program, the towns will have their e-waste picked up and recycled at no expense.

Also in 2009 cities and towns will be required to begin providing for the recycling of these electronics, including making arrangements for their collection and transportation to an approved recycler. As recently revised, the law allows recyclers to begin billing manufacturers on July 1, 2009. By 2011 these devices will be banned from solid waste facilities in Connecticut.

The new law specifically exempts certain smaller electronic devices from the recycling requirement, including cell phones, PDAs, calculators and pagers, computers or TVs that are parts of a motor vehicle or household appliance, home telephones (unless they have a video display larger than 4 inches diagonally) and devices that are part of equipment used in an industrial, commercial or medical setting.

The law required the development of regulations which the Department began drafting in July 2007. The Department established an external advisory group to assist in developing the regulations. This advisory group consisted of electronics manufacturers, municipal

representatives, electronics recyclers, and other interested stakeholders. The group convened through a series of conference calls, each one dedicated to a specific subject area. In January 2008 the stakeholders met face-to-face to discuss the department's draft regulations. The regulations are expected to be finalized by the end of 2008. The regulations:

- proposed to add printers to the list of covered electronic devices
- established a process for approving recyclers
- set standards for approved recyclers
- established a system for determining each manufacturers' share of administrative costs
- set municipal requirements for providing collection opportunities to residents.

The Department has also drafted a guidance document intended to assist municipalities in developing plans for collecting e-waste from residents. The e-waste law requires municipalities to provide residents convenient and accessible recycling opportunities for e-waste. This guidance document emphasizes permanent collection sites at municipal transfer stations. In addition, it provides useful information on standards for collections at a retailer, the need to separate household from commercial e-waste, and managing devices not covered under the law.

Monitoring Dam Safety

The Department has begun to use a new electronic, Internet-based system for monitoring dam safety. The system will give state inspectors the ability to constantly monitor the conditions of the state's 234 dams during adverse weather conditions.

Dam Watch, developed by US Engineering Solutions Corp. in Hartford, gives the Department instant access to all plans, inspection reports and records related to these dams as well as "real time access" to gauges that monitor rain fall and water levels near these dams. By building this electronic system and putting it to use, the Department can more easily make certain that state-owned dams are in sound condition and can keep close tabs on them during severe storms

While the system is currently focused on state-owned dams, it will also help the Department assess and monitor conditions at many of the more than 4,000 private dams in the state. These dams are often located close to and in the same watersheds as the state-owned dams.

Connecticut's Enforcement Programs Meet EPA Standards

In 2007, EPA conducted a review of the Department's Resource Conservation and Recovery Act ("RCRA") Subtitle C, Clean Water Act NPDES ("CWA"), and Clean Air Act Stationary Source ("CAA") Enforcement Programs for Federal Fiscal Year 2006. The EPA review was part of a national effort to review the enforcement programs of all 50 states to assure they meet minimum performance levels in providing environmental and public health protection.

To conduct the review, EPA utilized review protocols known as the State Review Framework. EPA used the Framework as a platform for analyzing enforcement data, reviewing enforcement files, and conducting a series of management discussions with states. The Framework allowed EPA to evaluate state performance to (a) provide a consistent level of environmental and public health protection across states; and (b) develop a consistent mechanism by which EPA Regions, working collaboratively with their states, can ensure that authorized state agencies meet agreed-upon performance levels. In addition, the Framework is intended to improve the consistency of EPA's oversight through a standard set of review elements and metrics to ensure a baseline level of enforcement and compliance activities that lead to a "level playing field" among states.

EPA's findings were that Connecticut's programs meet federal standards and expectations for implementing its federally delegated CAA, CWA and RCRA enforcement programs. EPA remarked that one of the strengths of the Department was that it met or exceeded its inspection commitments in each of the programs. EPA noted that the Department makes extensive use of standardized inspection checklist tools to improve the efficiency of its inspectors and that all programs complete their inspection reports quickly.

EPA found that enforcement response is strong in all programs and commented that the Air, Water and Waste Programs are identifying significant violators at a rate higher than the national average. EPA determined that when the Department identifies significant violations, it addresses them with an appropriate enforcement response and successfully returns violators to compliance

As part of the review, the Department submitted extensive information to EPA concerning the many innovations the Department has initiated in recent years. Many of these efforts relate to core enforcement programs. The submission included sections on cross-media

efforts, Air, Water and Waste Programs, and Innovations and Compliance Assistance, and Pollution Prevention Initiatives. EPA made special note of the Department's Enforcement Desk Reference, an electronic tool accessible by staff through the intranet. It provides staff in all programs with enforcement-related guidance materials, policies, protocols, checklists and sample documents. EPA included the Enforcement Desk Reference in a national report of "best practices" by states in implementing compliance and enforcement programs.

For a snapshot of enforcement activities for Federal Fiscal Year 2007, see the charts in Section II of this report, *Measuring Progress*.

Clean Air and Energy/Climate Change Challenges

The Department continues to strive for clean healthy air for Connecticut's citizens and recognizes that multi-pollutant strategies are best suited to address interrelated air quality challenges. Particulate matter pollution, including diesel emissions and other fine particulates (PM_{2.5}), as well as ozone, climate change, regional haze and air toxics are among the challenges for which the Department is working towards identifying and implementing effective solutions. Connecticut's actions to address rising energy prices and energy shortfalls will also impact the state's clean air and climate change goals.

Multi-Pollutant Reduction Strategies

The Department is evaluating a combination of regulations and incentives to achieve multi-pollutant reductions from the universe of fossil fuel-fired boilers in Connecticut. This includes industrial, commercial & institutional boilers as well as residential boilers.

Program elements will include:

- Best management practices (efficiency/maintenance/tune-ups);
- New or revised regulations (standards/emissions controls, peak day constraints, clean/low-carbon fuel standards);
- Boiler replacement (consider Combined Heat and Power where appropriate);
- Enhanced efficiency; and
- Financial incentive package (loans, loan guarantees, grants, and rebates for the purchase of new, efficient furnaces. The Department will collaborate with numerous stakeholder groups including trade organizations, vendors, environmental groups and other governmental agencies.

Ozone Attainment Strategies

Connecticut has made considerable progress in reducing air pollution under the Federal Clean Air Act ("CAA"). Over the past 25 years, there has been tremendous progress in improving air quality resulting from emission reductions by Connecticut and other upwind states. Connecticut has successfully reached attainment with the National Ambient Air Quality Standards ("NAAQS") for carbon monoxide, lead, nitrogen dioxide, coarse particulate matter (PM₁₀) and sulfur dioxide. This attainment designation signifies that all regions of the state are in compliance with all the health-based standards for the particular pollutant.

With regard to ozone attainment, the strong downward trend in 8-hour ozone design values as shown in Figure 2 indicates a significant improvement in reducing ozone. However,

monitored levels continue to exceed the NAAQS for 8-hour ozone. This pervasive pollutant is responsible for serious health and ecological impacts. Both ozone and PM_{2.5} can adversely affect human health, especially children and people with asthma or heart disease.

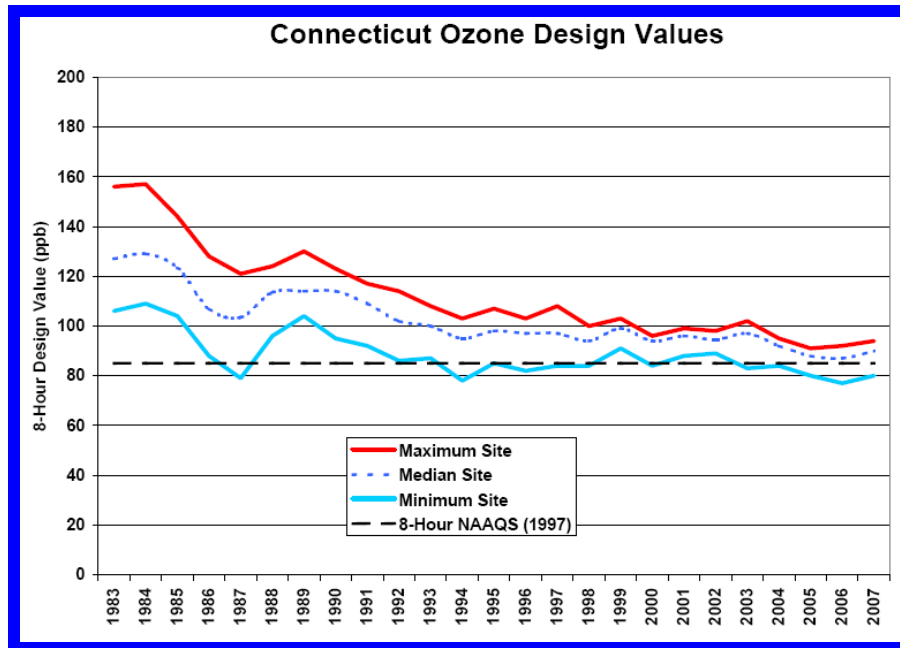
Connecticut is in non-attainment for ozone and daily PM_{2.5} for portions of the state. The designation of non-attainment for an air pollutant means that one or more of the standards for the pollutant have been violated for one or more regions of the state.

During the summer months, Connecticut typically experiences 10 to 20 days when ozone levels exceed federal standards. These exceedences continue to occur despite the wide range of clean air strategies that Connecticut has implemented. New requirements have reduced emissions from large electric generating units, manufacturing facilities, gasoline stations and other commercial operations. Most recently, the Department has been developing plans for attaining the NAAQS for ozone and fine particulate matter and for reducing regional haze. These plans will include new approaches to addressing emerging challenges such as the reduction of emissions on high electric demand days.

Although Connecticut continues to experience air quality levels that exceed the 8-hour ozone health standard of 85 parts per billion ("ppb") on many of the hottest days during the summer months, control programs continue to gradually reduce emissions. Figure 2 shows that improvements in Connecticut's peak ozone levels have been dramatic over the past 25 years, with the highest measured ozone design values¹ decreasing from nearly 160 ppb in 1983 to just over 90 ppb in 2007 (compared to the health standard of 85 ppb).

¹ The ozone design value at a given monitoring site is calculated as the 3-year average of the fourth highest daily 8-hour value each year.

Figure 2



In 2007, as required by the CAA, the Department prepared a plan for attaining the 8-hour ozone NAAQS by 2010. Part of this plan includes the adoption of control strategies for reducing emissions of the ozone precursors, volatile organic compounds (“VOC”) and nitrogen oxides (NO_x). As shown in Figures 3 and 4, these control programs reduced emissions of VOC and NO_x by 19% and 25%, respectively, between 2002 and 2007. The Department projects significant emission reductions and ozone concentration improvements in Connecticut from these control programs through 2012 and beyond. However, due to prevailing winds and Connecticut’s location relative to high polluting regions in other states, ozone attainment will be largely dependent on securing deeper emission reductions from upwind areas. Over the next several years, the Department will be developing new plans to attain the more protective ozone NAAQS adopted by the U.S. Environmental Protection Agency (“EPA”) in 2008.

Figure 3

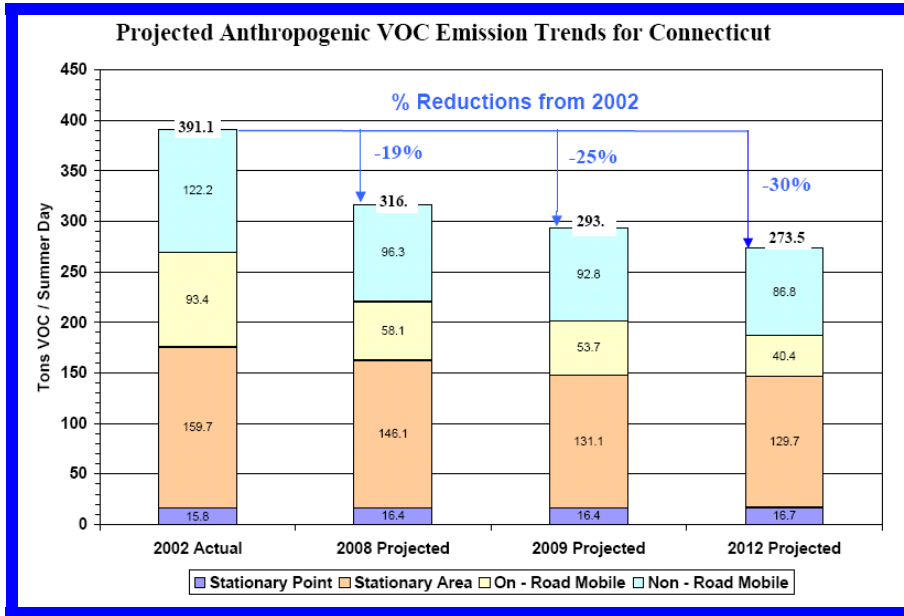
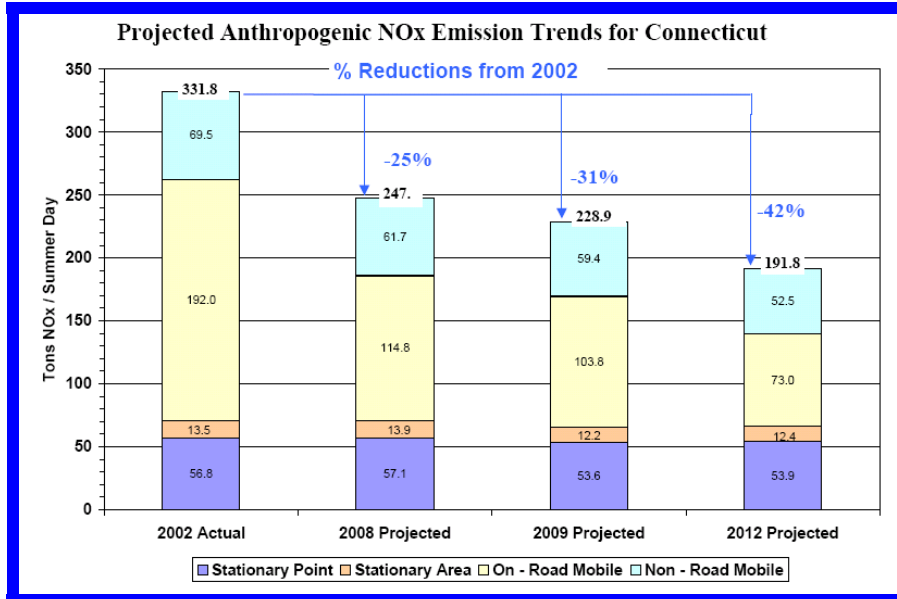


Figure 4



Successful Midwestern Power Plant Litigation

Connecticut's air quality is substantially impacted by NO_x emissions from out-of-state upwind sources of emissions. While out-of-state upwind emissions have decreased in recent years, they continue to dwarf any NO_x emissions from sources within Connecticut. A successful Clean Air Act case settled in 2007 was United States et al v. American Electric Power ("AEP") filed in federal court in the District of Ohio. The settlement included significant emission reductions and financial penalties. The settlement requires the Ohio company to reduce its eastern system emissions of NO_x to 72,000 tons per year by 2016, a total reduction of 248,900 tons annually and to reduce its sulfur dioxide (SO₂) emissions to 174,000 tons per year by 2019, a total reduction of 759,800 tons annually. The settlement also provides for the plaintiff states to receive a shared total of \$24 Million for environmental benefit projects in their respective states. Each state that brought the suit, including Connecticut, receives a negotiated share based primarily on population and relative harm.

The Significance of "High Electric Demand Days"

Addressing emissions that occur during high electric demand days ("HEDD") will be critical for Connecticut to attain the 8-hour ozone standard. HEDD emissions typically occur on hot summer days when energy demand is high and air quality is unhealthy. The Department and the Ozone Transport Commission ("OTC") continue to search for strategies to reduce ozone precursor emissions such as NO_x emissions on high electric demand days. In March 2007, six OTC states, including Connecticut, signed a Memorandum of Understanding ("MOU") incorporating emission reduction strategies into ozone attainment planning goals. The MOU contains state-specific NO_x reduction targets for HEDD. The Department has recently initiated a stakeholder process with representatives from industry, EPA, the New England Independent System Operator ("ISO-NE"), environmental groups and other interested parties in order to obtain feedback on a program for Connecticut. This program must consider reduction requirements for existing, high-emitting units while taking into account new, clean generation in Connecticut, and potential emission reductions from upcoming energy efficiency programs. The Department plans to have a draft HEDD regulation proposal in the fall of 2008.

As noted in Figure 5, peak electric demand continues to rise, exceeding the state's gross product. In addition, energy to meet the peak is often the most expensive. The Department is currently engaged in a stakeholder process to develop a model rule that will achieve cost-effective emission reductions on the peak. Energy conservation, efficiency and new technology measures reduce both the base and peak loads in Connecticut and the region and are key strategies to improve system reliability and reduce emissions. According to the Energy Conservation Management Board ("ECMB"), to achieve the level of reductions necessary to meet the state's climate change goals, the state will need to invest more than three times the current level of funding into energy efficiency programs.

Figure 5

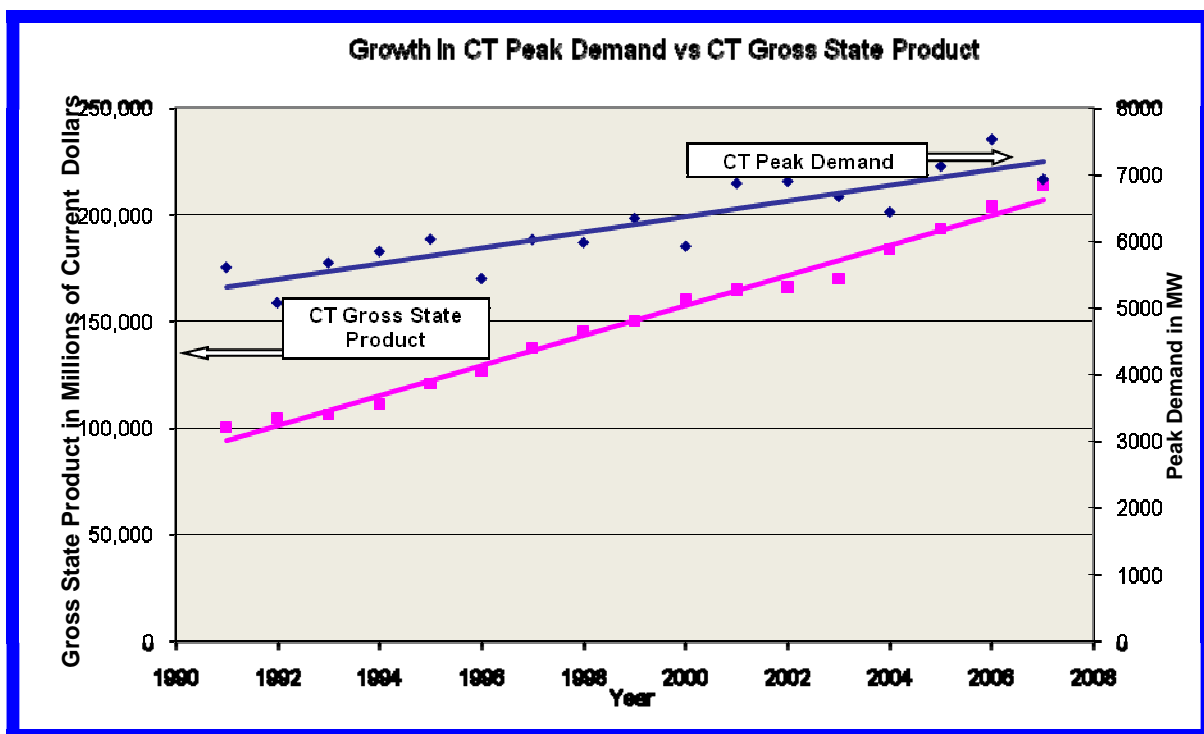
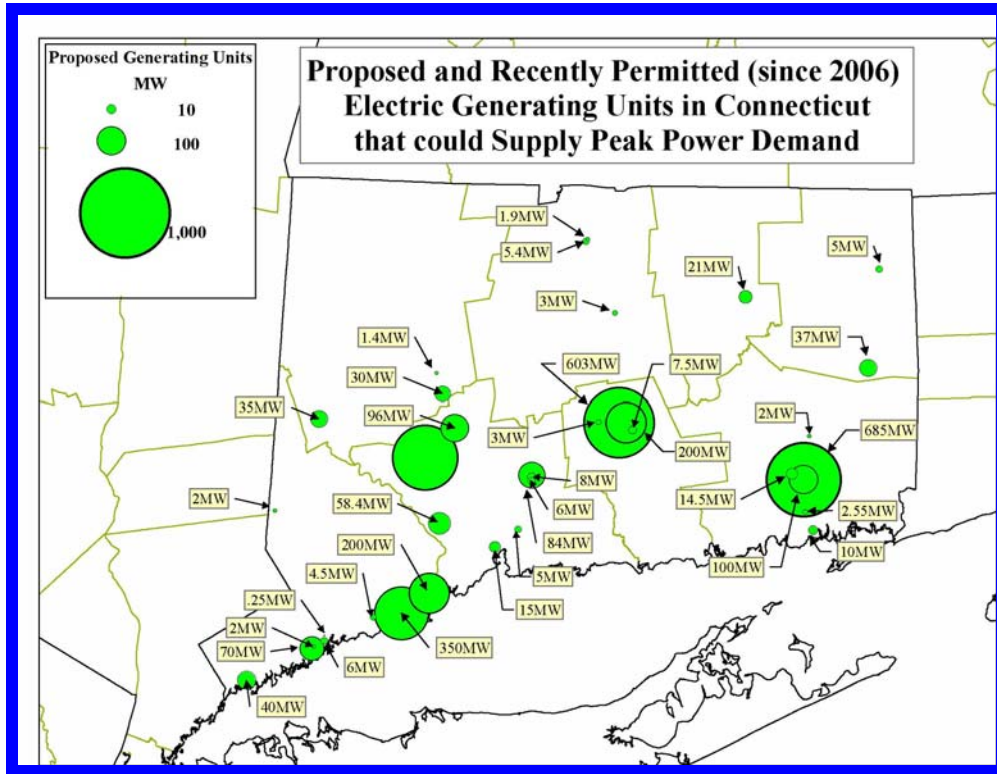


Figure 6 shows the proposed and recently permitted electric generating units in Connecticut that could satisfy some of the power demand on HEDD, especially quick start peaking capacity. The facilities range from smaller generating units for universities and health care facilities to larger electric generating units that could supply up to 685 MW to the electric grid in Connecticut.

Figure 6



The Connecticut Energy Act of 2007, Public Act 07-242, Section 102, required the Department to develop a new general permit to provide an expedited permit process for new or existing emergency engines and distributed generation resources that generate no more than two megawatts of electricity and are approved by the Department of Public Utility Control ("DPUC") to participate in markets administered by the ISO-NE. The statute allowed the Commissioner to include requirements in the general permit such as operation time limits and emission controls for these units.

The Department issued a new general permit for certain new or existing emergency generators and distributed generators. With this new general permit, Connecticut joined California in becoming the second state to provide for emission controls on stationary diesel engines. Emissions of both NO_x and PM will be controlled under these permits.

Development of "Greener" Consumer Products

In July 2007, Connecticut adopted a regulation to require manufacturers of consumer products to limit the amount of VOCs and other toxic compounds in over 90 consumer

product categories. The regulated consumer products include cleaning, health & beauty, lawn care, and automotive products that people use in their homes and yards.

The regulation requires that only products that meet the VOC content limits and toxic compound prohibitions be sold in the state. Manufacturers are responsible for developing and distributing products that comply with the new regulation for sale at the retail and wholesale level. As a result, consumers may easily reduce their “environmental footprint” simply by purchasing customary personal and household products. Because many other states in the region and other parts of the country have adopted or are in the process of adopting similar regulations, consumers are not expected to see prices increase as a result of this regulation.

Compliance with the consumer product regulation has two phases. The first phase, compliance assistance, consists of informing manufacturers and distributors of the new requirements so that they can develop reformulated products and have them available by the 2009 compliance deadline. Because the regulation addresses so many different types of products, industry associations have been helpful partners in this educational phase. The Department has also developed fact sheets that are distributed through the Department’s website. The second phase, enforcement, will involve inspections of stores that sell regulated products, including grocery, drugstore, hardware, lawn & garden and do-it-yourself stores, and product testing to ensure that products meeting the regulation’s requirements are on store shelves. Following these initial phases of compliance activities, the Department will carry out routine inspections and testing and respond to citizen complaints.

Control of Toxic Emissions

EPA’s most recent National Air Toxics Assessment revealed that 64% of the air toxics emissions in Connecticut were from mobile sources, with 38% of these emissions originating from on-road vehicles and 26% from non-road emissions. The remaining emissions were from stationary and area sources. While these chemicals are classified as air toxics, many also are classified as ozone precursors and significantly contribute to the concerns for both ozone formation and particulate matter pollution.

Mobile Source Pollution

Mobile sources, including cars, trucks and buses and off-road construction equipment contribute significantly to Connecticut's air pollution. Connecticut's [Clean Diesel Plan](#) outlines the Department's strategy to reduce health risks from diesel air pollution and greenhouse gases consistent with Connecticut's [Climate Change Action Plan](#). The Diesel Plan focuses on reducing exhaust emissions from transit buses, school buses, construction equipment and on-road fleets. Idle reduction and the use of clean fuels are also recommended. The following summarizes the diesel retrofit projects that have been completed or are underway in Connecticut.

- **Construction Equipment:** Diesel construction equipment accounts for approximately 3% of the PM_{2.5} being emitted in Connecticut annually, but 43% of the PM_{2.5} emitted from mobile source diesel engines. The following projects are making an impact in reducing construction emissions.
 - The Connecticut Clean Air Construction Initiative has retrofitted over 100 pieces of diesel equipment using construction contract specifications at the Quinnipiac River Project (Q Bridge) in New Haven. A pilot project has also been initiated to retrofit four pieces of construction equipment with enhanced emission controls; contractors were selected in 2007 and the retrofitted equipment will be on the Q Bridge construction site in the spring of 2008.
 - The new Indirect Source Permit regulation, RCSA 22a-174-100, offers an alternate compliance mechanism of retrofitting construction equipment for any transportation project in lieu of applying for an indirect source permit. One project in Southeastern Connecticut went forward with the alternative compliance under this new regulation in 2007.
 - The Department has entered into a Community Host Agreement with the Connecticut Resource Recovery Agency ("CRRA") that allowed CRRA to continue to operate and expand its landfill in Hartford until December 30, 2008, in return for retrofitting the 16 pieces of non-road construction equipment used at the landfill and up to 21 pieces of equipment and vehicles used to collect waste.
- **Transit Buses:** Transit buses in New Haven and Hartford are being retrofitted in 2007 and 2008 to reduce particulate emissions, as recommended in the Connecticut Clean Diesel Plan. They will join the Stamford fleet, which was retrofitted in 2001.
- **Idle Reduction:** In 2007, a 116-space electrified truck stop was installed along I-95 outside of North Stonington. When fully operational in 2008, it will reduce diesel emissions from tractor-trailers that would otherwise be idling to maintain cab comfort while parking for rest periods. A second facility is being planned along I-91

in Greater Hartford. In addition, the Department has been developing an education and outreach campaign to encourage idle reduction for diesel fleets in the state.

- **School Buses:** Approximately 500 school buses have been retrofitted with technologies that reduce tailpipe emissions. In 2007, school buses were retrofitted in Bridgeport, Haddam, Fairfield and Lyme/Old Lyme. Mansfield and Newtown won EPA Clean School Bus USA Grants in 2007 and will be retrofitting their fleets in 2008; and the Department is currently coordinating with Hartford officials for school bus replacement or retrofits in 2008.

Mercury Emissions Controlled Despite Overturn of Federal Rule

The federal Clean Air Mercury rule ("CAMR") was promulgated in May 2005, establishing performance standards and an emissions trading program to limit mercury emissions from coal-fired electric generating units ("EGUs"). CAMR required each State to take specific actions to control mercury emissions from coal-fired EGUs. On February 8, 2008, a federal court struck down CAMR on legal grounds and required the EPA to promulgate a new national rule. While court's actions will likely delay a national rule until 2014, Connecticut's CAMR units are subject to state statutory and regulatory limitations on mercury emissions as of July 1, 2008, and those requirements are likely to be at least as strict as the future federal requirements.

There are three existing CAMR units in Connecticut. The Department implemented mercury emissions limitations and imposed monitoring, recordkeeping and reporting requirements necessary to satisfy CAMR and state law through the New Source Review air quality permitting program. The unit owners are moving rapidly towards compliance. In one unit, for example, Connecticut's strict limits have resulted in the installation of a state-of-the-art activated carbon injection system and fabric filter bag house to control mercury emissions. As a result, Connecticut will move closer to the ultimate goal of virtual elimination of mercury emissions, furthering the health of the environment and our citizens.

Challenge of Climate Change

Energy and climate change policy are closely linked because most of the energy for electricity, heating and cooling, manufacturing, and transportation comes from the combustion of fossil fuels. The combustion of fossil fuels is adding more carbon dioxide

(CO₂) to the atmosphere than can be readily absorbed through the earth's natural carbon sinks (i.e., the ocean, plants). This excess of CO₂ and other greenhouse gases traps heat within the atmosphere, causing increases in global mean average temperature. Public policies and actions that result in cleaner energy generation and more efficient energy use benefit both our energy system and reduce greenhouse gas emissions that cause climate change.

The 2007 Connecticut General Assembly overwhelmingly passed ground breaking energy legislation that:

- Requires energy efficiency to be treated as a resource of first choice in the new process created to procure electricity supply, in lieu of traditional supply from large fossil-fuel burning plants;
- Increases the amount of clean energy in the electric grid – the state's Renewable Portfolio Standard was increased to 20% clean energy by the year 2020;
- Creates a home heating oil efficiency program;
- Expands appliance efficiency standards to additional products;
- Directs the Department to adopt regulations to implement the Regional Greenhouse Gas Initiative ("RGGI") in Connecticut, distributing Connecticut CO₂ allowances via auction;
- Requires decoupling of revenue from sales of electricity and gas;
- Provides energy efficiency tax incentives - compact fluorescent bulbs and energy efficient home weatherization products are permanently sales tax exempt;
- Provides rebates for the replacement of highly efficient boilers and furnaces; and
- Sets high performance building standards for new and renovated state-funded buildings, LEED silver for new construction over \$5 million and renovations over \$2 million.

The Governor's Steering Committee on Climate Change ("GSC") received funding from the Emily Hall Tremain Foundation to integrate climate change into Governor Rell's OneThing™ campaign. Governor Rell's OneThing™ campaign is aimed at encouraging individuals to find ways that are comfortable and easy for them to reduce energy use. With the recent funding, the GSC will develop an energy and climate savings multiplier on the OneThing™ website to enable individuals to see the impacts of specific OneThing™ actions, the multiplied impacts of many people doing one thing, and provide feedback to the public on the overall impact of many one things. In addition, the GSC will weave OneThing™ branding and messaging into outreach materials and programs to implement the Climate Change Action Plan.

Climate Change Adaptation

Beyond the Department's efforts to support the mandates of the 2007 Connecticut Energy Act, the Department is also interested in integrating Climate Change Adaptation planning across a number of its programs. The Department is drafting a series of Climate Change

Adaptation Briefs to discuss the challenges posed by and the actions necessary to deal with a changing climate in Connecticut. Topics will range from fish and wildlife management to regulation of Connecticut's built environment.

The Department's Coastal Management Program has increased efforts to plan for coastal hazards. Coastal hazards include shoreline erosion, surge and long-term inundation from global warming (i.e., accelerated sea level rise). The Department has identified Coastal Hazards category as a high priority, proposed the development of a state coastal hazards plan and incorporated accelerated sea level rise as a component hazard. In 2007 the National Oceanic Atmospheric Administration ("NOAA") Coastal Services Center accepted a proposal from the Department for a 2-year coastal fellow to develop a Coastal Hazards website and provide for internet delivery of various products that towns and the public can use to assess coastal hazards. The Department is partnering with the United States Geological Survey ("USGS") and University of Connecticut to assist in the production of planning tools (e.g., refined surge models, inundation scenarios from sea level rise).

The Department persuaded FEMA to acquire detailed topography for the coastal floodplain. Recent LIDAR² flight data made available in 2007 will provide detailed topography of the coastal flood plain. The elevation data are essential to coastal hazards planning at both the state and municipal level. Such data can be used to better model the impacts of surge and long-term inundation from accelerated sea level rise.

The LIDAR data will be used to identify strategic lands along the coast. There is a concern that sea level rise threatens to adversely impact tidal marshes. Prioritizing the restoration of marsh habitat that is at a higher elevation may become a more significant consideration in coastal hazards and tidal marsh restoration planning.

The Department is a member of a new federal-state partnership called Northeast Regional Ocean Council ("NROC"). One of the council's action plan priorities is to render New England a coastal hazard ready region. Connecticut will be the state chair for NROC in 2008. NROC recognizes that storms and global warming inundation can threaten existing infrastructure such as roads, rails, sewage treatment plants, ports which sustain and support the economy of New England. NROC will strive to identify key infrastructure at risk and to acquire data and models to prepare New England for coastal hazards.

² LIDAR – light detection and ranging uses lasers to record elevation measurements.

Charting Progress in Long Island Sound

It would be difficult to overstate the importance of Long Island Sound (“LIS”) to Connecticut’s environment, economy and quality of life. Over 20 million people live within 50 miles of the Sound, they benefit from the more than \$5.5 billion it contributes to the regional economy from fishing, boating, recreation, seafood, transportation, and, less quantifiable in dollars, geographical and cultural identity. Few other estuaries on this continent rival Long Island Sound’s combination of natural resources, environmental significance, recreational and commercial value, and proximity to a vast and diverse population of users.

The Department strives to preserve, protect and restore a healthy and productive LIS for Connecticut residents. The health and condition of the Sound can be illustrated through a suite of indicators that express trends in water quality, for example, (low dissolved oxygen, or hypoxia; and beach closures due to bacterial indicators), fisheries production (biomass in trawl surveys), and habitat health (eelgrass distribution and abundance).

Water Quality

Overall Water Quality

Through a legally defined public process, the Department establishes water quality classifications for all the State’s waters. Classifications for Long Island Sound may range from SA (excellent) to SD (severely impaired). The water quality classification is based on designated uses that include the protection and propagation of fish, shellfish and wildlife and recreational use in and on the water. When designated uses are not met, e.g., shellfish harvesting for direct human consumption is not supported, a lower classification may be assigned with a goal of meeting all designated

Class SA

Designated Uses: marine fish, shellfish and wildlife habitat, shell fish harvesting for direct human consumption, recreation and all other legitimate uses including navigation.

Class SB

Designated Uses: marine fish, shellfish and wildlife habitat, shell fish harvesting for transfer to approved areas for purification prior to human consumption, recreation, industrial and other legitimate uses including navigation.

Class SC or SD

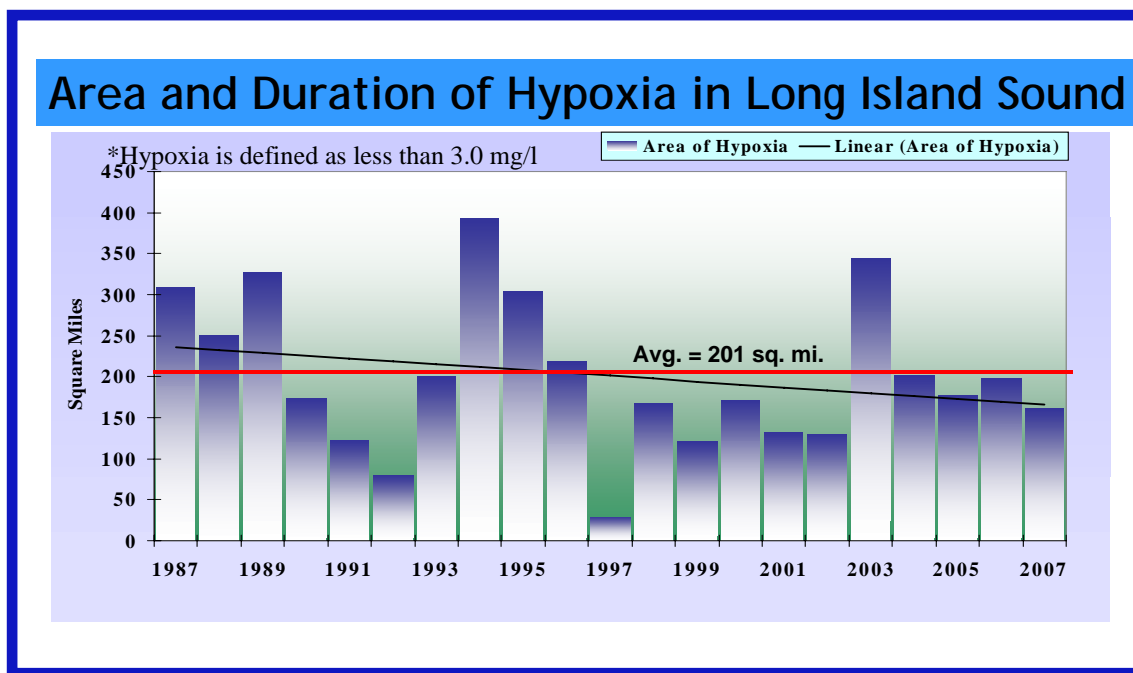
Indicates unacceptable quality, the goal is Class SB or Class SA.

uses. Current LIS classifications range from SA to SC/SB (currently classified SC with a goal of supporting SB uses). For all waters, the current classification or goal is SA or SB.

On a biennial basis, the Department assesses all waters and reports to the U.S. Environmental Protection Agency ("EPA") on whether designated uses are being met based on defined numeric criteria. The next evaluation will be completed in 2008. While a water body may be classified as SA, for example, it may still have identified impairments. Assessments of marine aquatic life use and recreation are among the use categories generally relied upon to quantify the condition of Long Island Sound relative to meeting designated uses. Marine aquatic life use support, based on water quality condition such as dissolved oxygen concentration, was not attained in 39% of the 613 mi² of waters and rose to 47% in 2006, primarily because of adjustments in segmentation of the Sound. Recreational Use non-support was 4% in 2004 and 3% in 2006 for 613 mi² of waters, although only 154 mi² of waters are assessed for recreational use (swimming), i.e., beach areas.

Figure 7

Square Miles of LIS with Unacceptable Hypoxia Levels



Hypoxia, the condition of low levels of dissolved oxygen, impacts up to half of the Sound's bottom waters each summer. The primary cause is excess nitrogen, which enters the sound

through a variety of sources. Primary sources of nitrogen include sewage treatment plants, nonpoint sources (e.g., from lawns, septic systems and farms), atmospheric deposition of nitrogen oxides from automobiles and power plants to our west, and stormwater runoff from urbanized areas. Nitrogen is also found as a natural component of the Sound's physical environment, but human sources have greatly enriched the load of nitrogen to the Sound.

Although other nonpoint, stormwater and atmospheric sources will need to be reduced to completely remedy the amount of excess nitrogen, of special concern are the 105 sewage treatment plants ("STPs") in CT and NY that discharge the largest amount of nitrogen into the Sound or its tributaries. Biological nutrient removal ("BNR"), which uses a biological process to remove nitrogen, is being implemented at many STPs in both states. Since 1990, 43 projects have been completed that include BNR at varying levels (retrofit, interim and full denitrification projects are implemented), affecting 37 municipalities. Figure 7 illustrates how the trend towards decreasing nitrogen discharges from both point and nonpoint sources has resulted in less area affected by hypoxia over time.

Number of Beach Closings

There are 240 monitored bathing beaches along Long Island Sound (131 in Connecticut and 109 in New York) that provide valued recreational opportunities. Bathing beaches are closed when either 1) the results of water quality monitoring exceed an established safe level; or 2) an administrative closure shuts down a beach after significant rainfall events because of combined sewer overflows and/or stormwater runoff. Yearly variations in closures are a product of rainfall patterns and incidents such as sewer-line ruptures. As shown in Figure 8, in 2007 CT experienced 108 closure days, the lowest since 2002. This represents less than 1 % of the total available user days in CT (14,400 user days are available for CT's 131 public beaches). NY closure data for 2007 are not yet available.

Figure 8

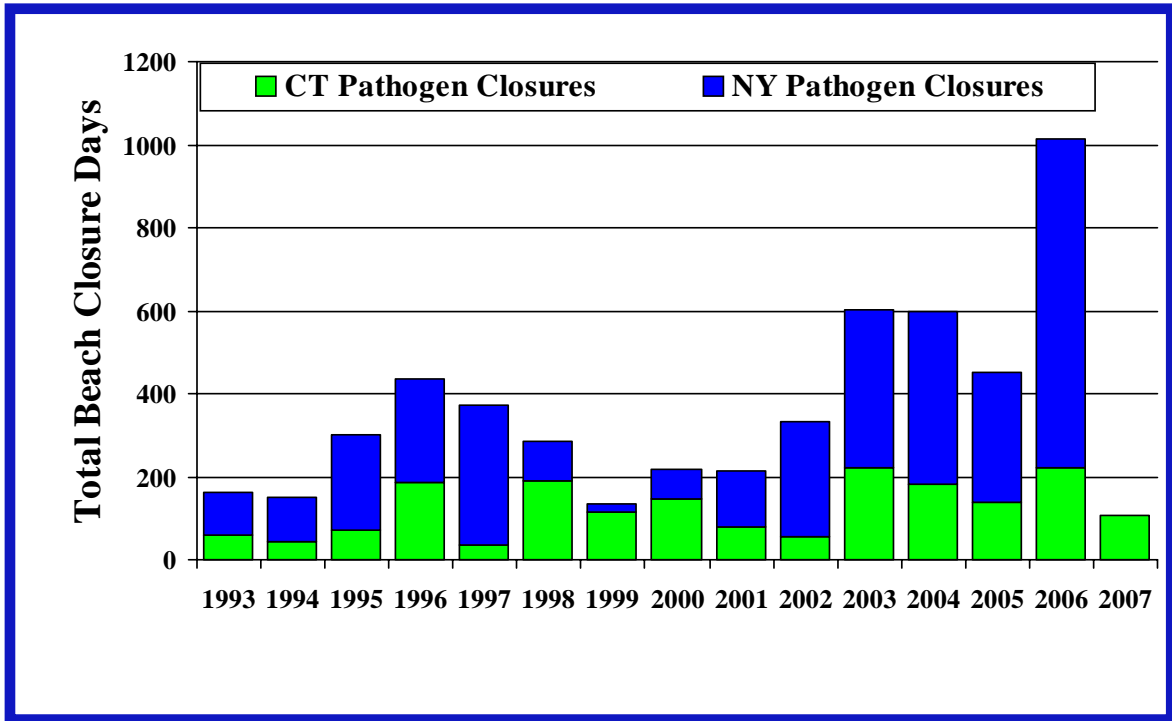
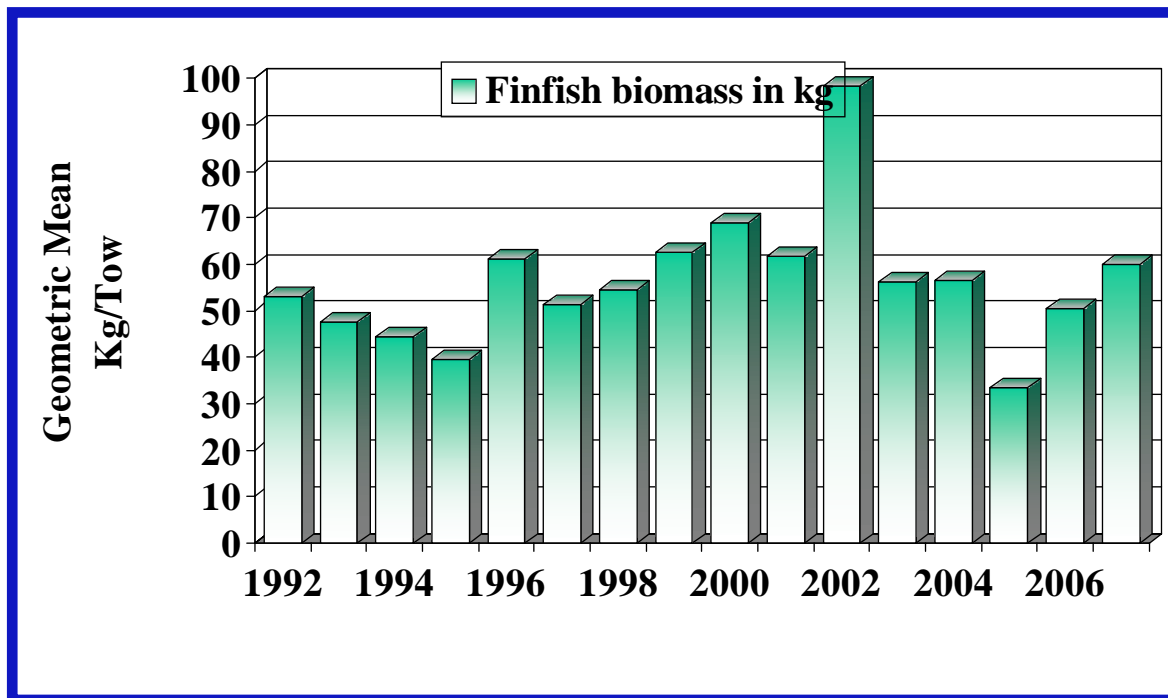


Figure 9

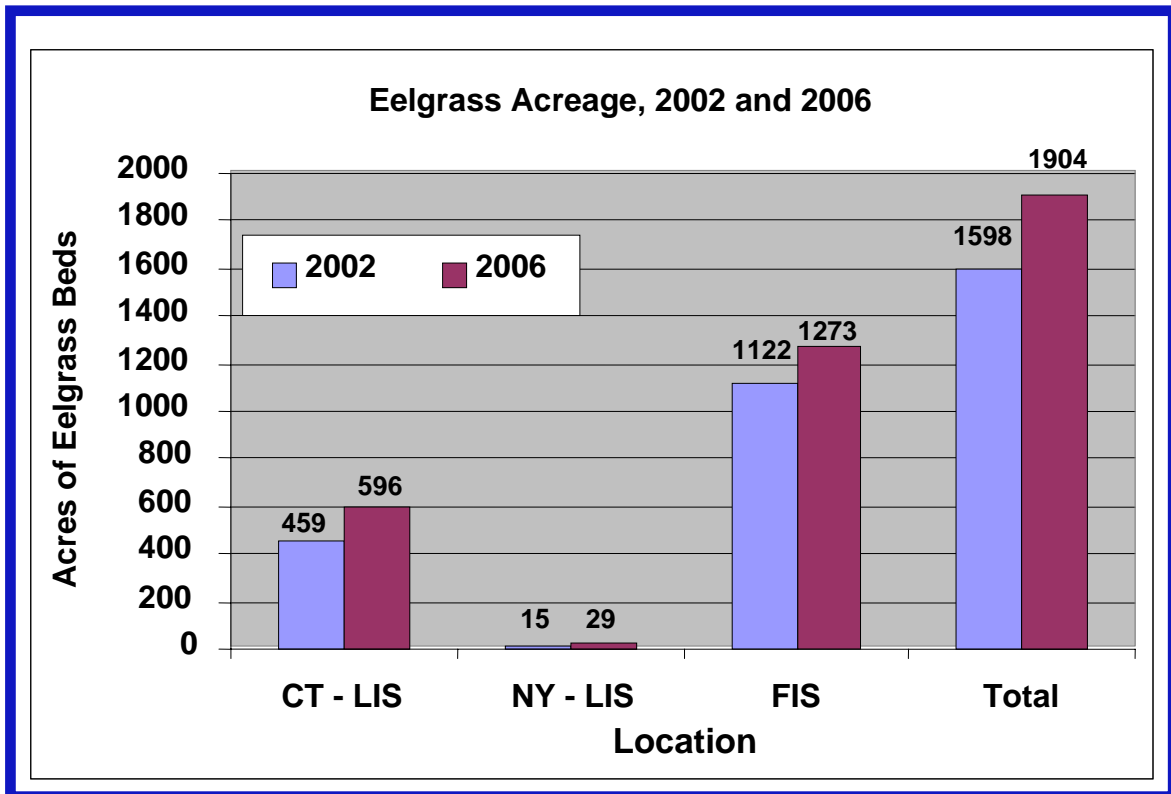
Living Resources: Fish Biomass Index



Each year the Department conducts spring and fall trawl surveys throughout Long Island Sound. These surveys count the number of species and number of fish collected by a 46-foot otter trawl. The finfish biomass index is the average overall weight of fish caught in a trawl. The Department’s trawl survey has collected data over the last ten years showing an overall biomass increase in recent years largely due to increases in the number of scup collected. There are several reasons for this trend, including the response of some species to fisheries management measures, specifically black seabass, scup, summer flounder, striped bass, and weakfish. The increase in some other species is believed to be related to warming temperatures that allows them to expand their range northward, including hickory shad, menhaden, moonfish, northern searobin, smallmouth flounder, spotted hake, and striped searobin. The 50 kg of biomass per tow observed in 2006 is slightly below the long-term average, but well above the 30 kg/tow observed in 2005. In 2007, 60 kg/tow were collected, the highest level since 2002, indicating a fairly steady level for this index over the last fifteen years in the Sound.

Figure 10

Habitat Quality: Eelgrass beds



Eelgrass is a type of submerged aquatic vegetation ("SAV") that provides nursery habitat for shellfish and finfish and is a valuable indicator of impaired water quality and the health of LIS. Although earlier, 1993/94 mapping, was conducted, systematically mapping the full extent of all eelgrass beds did not begin until 2002. While the database is limited with only two years of areal mapping to date, comparing the three broad geographic areas surveyed in 2002 and 2006, i.e., Connecticut portions of LIS, New York portions of LIS (North Shore of Long Island), and Fisher's Island Sound, there appears to be a slight trend upward in all three areas. About one-third of the total gain is attributable to an increase in eelgrass acreage in Niantic Bay. While favorable weather conditions over the past few years may have been responsible for the Niantic Bay increase, more years' data are necessary to determine if this trend will continue. While eelgrass beds were not quantitatively mapped in the 1980's, it is apparent from descriptive information that significant declines have occurred. This decline may be related to nitrogen enrichment as the mapping data indicate that eelgrass beds are more successful in open and well-flushed waters as opposed to embayments or coves where nitrogen or other pollutants are typically retained for longer periods. Examples of embayments with significant long-term declines include Clinton Harbor, Niantic River, Poquonnock River, Mystic Harbor, Stonington Harbor and Little Narragansett Bay. In Fisher's Island Sound embayments with discharges from sewage treatment plants (Mystic Harbor, Stonington Harbor and Little Narragansett Bay) eelgrass beds are virtually absent.

Strategies to improve the health of LIS

Some of the efforts needed to continue improvements to LIS over the next two years include:

- Continue to reduce nitrogen loading to the Sound from both point and nonpoint source ("NPS") discharges:
 - Improve management practices to minimize nitrogen input from runoff of fertilizers and consider improved regulatory controls on their use
 - Work with municipalities in urban areas to fully implement the Small Municipal Separate Storm Sewer System ("MS4") permitting program to reduce bacteria and other pollutants
 - Promote land management practices including responsible growth/low impact development ("LID") techniques that maintain and restore the pollutant treatment capacity of the landscape
 - Provide incentives and a predictable funding stream through the CT Clean Water Fund to upgrade sewage treatment plants to reduce nitrogen loading

- Revise the CT-NY Long Island Sound Total Maximum Daily Load Analysis to update nitrogen reduction targets, including out-of-state sources
- Continue to separate combine sewer overflows (“CSOs”)
- Reduce NPS bacteria inputs through improved management practices for stormwater and septic systems
- Manage coastal development in a sustainable manner
- Address global warming and prepare for impacts associated with potential sea level rise and adaptation:
 - Implement the Regional Greenhouse Gas Initiative (“RGGI”) and reduce nitrogen deposition from air pollution
- Continue to increase public awareness of their role in promoting landscape management of nonpoint and stormwater pollutant sources, including LID practices.

Connecticut Water Quality Trading Program Awarded First EPA “Blue Ribbon” Award

In 2007, an innovative program to reduce nitrogen discharges into the Long Island Sound resulted in the State of Connecticut winning EPA’s first Blue Ribbon Water Quality Trading Award.

The Connecticut program was selected over other finalists from across the country. The EPA award highlights programs which have achieved environmental and economic benefits as well as to showcase programs that align well with EPA’s Water Quality Trading Policy.

Every summer, the bottom waters of the western half of Long Island Sound experience hypoxia, or very low levels of dissolved oxygen. Extensive monitoring of Long Island Sound has identified the excess discharge of nitrogen from human activities as the primary pollutant causing hypoxia.

In 2001, EPA along with both the States of Connecticut and New York, set aggressive new targets to significantly reduce the amount of nitrogen that can be discharged to Long Island Sound without impairing the health of the Sound. Through 2006, the point source nitrogen load to the Sound (from 106 sewage treatment plants in NY and CT) was reduced by nearly 25 percent.

One of Connecticut’s management strategies to reduce nitrogen loading was to develop an innovative nitrogen-trading program among the 79 sewage treatment plants located

throughout the state. Through the Nitrogen Credit Exchange, established in 2002, the Connecticut program has reduced nitrogen discharges, meeting or exceeding the reduction goal of 58.5 percent by 2014.

Trading provides significant cost savings compared to the state issuing a permit to each facility individually. Trading also provides municipalities with flexibility to make decisions about whether to upgrade and market any credits they earn or to buy credits to meet their permit limit. Nitrogen trading has accelerated the State's schedule to meet the nitrogen targets.

The use of geographically-based trading ratios provides an economic incentive, encouraging action toward the most cost effective and environmentally beneficial projects.

The third year of the Nitrogen Credit Exchange resulted in 28 sewage treatment plants discharging below their assigned permit limits, enabling them to sell nitrogen credits valued at \$1.31 million to sewage treatment plants in the State that are not upgrading or otherwise require purchasing credits.

All Connecticut Coastal Waters Are Part of "No Discharge Area"

In 2007, the U.S. EPA approved the Department's application to designate as a 'No Discharge Area' the final portion of Long Island Sound – from the eastern border of Branford to the western border of Greenwich. This is a major milestone because it extends this protection to all of the waters off Connecticut's coast. All of Connecticut's waters in Long Island Sound are now part of a "No Discharge Area," making it illegal for boaters to discharge sewage from their vessels anywhere in the state's portion of the Sound.

A "No Discharge Area" is a designated body of water in which the discharge of treated – as well as untreated – boat sewage is prohibited. Boaters in "No Discharge Areas" are required to use pumpout facilities or pumpout boats to dispose of any waste.

Connecticut's first "No Discharge Area" was approved by EPA and designated in the Stonington area in 2003, followed by the Mystic/Groton area in 2004 and the Groton to Guilford area in 2006. Connecticut is now one of only three states in the U.S. to designate their entire coastline a no discharge area, and that's a big step toward improved water quality. Eliminating sewage discharges from boats means cleaner beaches, cleaner shellfish beds and cleaner boating.

To qualify as a "No Discharge Area," an area must have enough pump-out facilities where boaters can get their holding tanks pumped out. In its application for the Branford to Greenwich portion of the Sound, the Department identified a total of 43 available pumpout facilities including 31 fixed shore-based facilities, five portable facilities, and seven pumpout boats.

For more information on Connecticut's "No Discharge Area" program, please access the project website at: www.ct.gov/dep/cwp/view.asp?a=2705&q=323816&depNav_GID=1711

Lobster Stock Restoration Program

In October 2007, the Department, the University of Connecticut's College of Agriculture and Natural Resources, three high schools with marine vocational or aquaculture programs, and several lobstermen's groups initiated the "Lobster Stock Restoration Program" also known as the "V-Notch Program." Based on 2006 legislation, the lobster restoration program was developed by the Lobster Restoration Advisory Committee with \$1.0 million appropriated by the Connecticut General Assembly. The program involves commercial lobstermen's associations and schools working to develop a legislatively funded program aimed at restoring the state's lobster population.

From 1998 to 2002, the lobster resource in Long Island Sound suffered a 'die-off,' a mortality event of enormous magnitude. In some areas, lobster abundance declined by 75-90%. In the years since, the resource has not recovered. Commercial lobster landings in 2006 were about 80% below the maximum observed in 1998 and about 60% below the long-term average. A new evaluation of the condition of the lobster resource scheduled for completion in late 2008 will become the basis for any new or revised requirements to conserve the southern New England lobster stock.

Lobstermen and others interested in rebuilding the lobster stock in Long Island Sound have been working to establish a program that would also be an effective, science-based alternative to an increase in the minimum length. In August 2007, the Atlantic States Marine Fisheries Commission approved Connecticut's plan as having conservation value equivalent to the required increase in minimum length. As long as the target number of lobsters is notched over a two year period, the minimum length will not be increased during that period.

The v-notch program is designed to place student teams (two students per team) from the three schools aboard the vessels of cooperating lobstermen to mark one of the tail flippers of mature female lobsters with a "v" shaped notch and then release the lobsters back to the Sound. Under current state and federal law, possession of v-notched lobsters is prohibited.



Participating lobstermen will carry the student notching teams and will be compensated at the market rate for lobsters released on the day that they are notched. In this way, lobstermen, who are fully invested in seeing the lobster resource make a comeback, are full partners in a venture that protects lobsters and also provides them economic assistance

Connecticut Great Outdoors: No Child Left Inside

The Great Park Pursuit 2007

No Child Left Inside, a major state initiative coordinated by the Department, is designed to reconnect families with the outdoors, build the next generation of environmental stewards and showcase Connecticut's beautiful state parks and forests.



The Great Park Pursuit: The Connecticut State Parks Family Adventure.

In May 2007, the official kick-off of *The Great Park Pursuit 2007* was held at Beardsley Park in Bridgeport. More than 750 families from across the state began a seven-week adventure that took them on an interactive tour of Connecticut State Parks, Forests and Recreation Areas. The game is part of the statewide No Child Left Inside initiative introduced in 2006 by Governor M. Jodi Rell and aimed at getting children and families to take time away from their computer and television sets to get back outside and rediscover the beauty and importance of the state's natural resources.

After visiting six different parks and forests throughout the state as part of *The Great Park Pursuit* adventure over 150 families converged at Hopeville Pond State Park in Griswold in June 2007 to partake in the seventh and final event in the multi-week game. Three families emerged as grand prize winners, receiving valuable outdoor equipment packages provided by North Cove Outfitters of Old Saybrook and Ski Market, with stores throughout Connecticut. All teams in attendance received parting gifts.

At Hopeville Pond State Park, the semi-finalists were required to take a short quiz on *The Great Park Pursuit 2007*, which tested teams on the parks they had visited. The top scorers then moved on to a final slingshot competition, where teams launched objects towards a target - the objects being rolls of toilet paper and the target being an outhouse. The three teams landing closest to the target were deemed the 2007 grand prize winners. All families attending the final event received parting gifts as mementos of their participation.

The Brackett family of Naugatuck ("Team Picnic") walked away as the top prize winners, taking home the "outdoor excursion" package complete with a tent, sleeping bags, telescope, GPS device, snow shoes and various additional gadgets and equipment to use at State Parks and Forests throughout the year. Runners up included the Gray-Linden family of New Britain ("Linden Family 3+2"), who took home a kayak package, and the Young family of Monroe ("Young Explorers"), who won a bicycle package.



Commissioner Gina McCarthy (*left*) with Department staff and the Brackett family

During *The Great Park Pursuit 2007*, Connecticut families decoded clues and journeyed to different State Parks, Forests and Recreation Areas over a seven-week period. At each location, teams were asked to complete various activities such as scavenger hunts, hikes, fishing contests and more. At the end of each task, families received a clue to the following week's park or forest.

The *No Child Left Inside* campaign was created by the Department to raise awareness for the recreational activities available at the state's 137 State Parks and Forests, attract families to the parks and build enthusiasm for the outdoors among children. *The Great Park Pursuit 2007*. The Connecticut State Parks Family Adventure was executed by the Department with support from the Friends of Connecticut State Parks, Connecticut Forest and Park Association, WFSB-TV/3, North Cove Outfitters, Ski Market, Bank of America, New Britain Rock Cats, Aquarion Water Company, Anthem Blue Cross and Blue Shield, Dermatone Laboratories and Subway. For more information and an update on current year activities, visit www.nochildleftinside.org.

No Child Left Inside is comprised of many additional initiatives, including the following:

- *Swimming Lessons and Water Safety* – the Department is partnering with the YMCA and CT Department of Children and Families to provide free swimming lessons at state beaches
- *Great Farm Adventure* – together with the CT Department of Agriculture helping families discover where their food comes from, healthy choices and how important it is to buy locally

- *Across the Generations* - working with the Connecticut Department of Social Services to involve grandparents and older care givers to experience the outdoors with the children
- *Biking for Health & Happiness* – joining forces with the Childhood Obesity Council to discover the benefits of going outdoors for a safe ride on state park and forest trails
- *Park and Forest Interpreters* - helping visitors to learn more about the great outdoors and history of Connecticut
- *State Park Passes at Libraries* – all 169 Connecticut towns and cities receive a state park pass to be borrowed by library patrons
- *Park Passes for Foster Families* – the Bank of America helped provide foster and adoptive families free state park passes
- *Urban Fishing Program* – enhancing fishing opportunities in the more populated areas of the state.

Promotion of Safe and Clean Boating for Children and Families

The Department's Boating Division encouraged the participation of children in safe and clean boating activities at numerous venues throughout the 2007 season. Boating staff were on hand at boat shows and safety fairs to answer questions about fitting children with appropriately sized life jackets. Games, educational materials, coloring books, and promotional items for children were made available. Hand painting and nautical flag stamps for spelling kids names provided an opportunity to talk to parents and children about safe and clean boating practices.

New for 2007 was the use of a Boating Safety Trailer that was brightly wrapped with boating safety messages. The trailer attracted mostly teens during which time, safe boat operation and the dangers of boating under the influence of alcohol were stressed. A popular activity offered was a boating simulator which provided a virtual experience for operating and docking a boat. The teens were given information aimed at keeping them safe while either a passenger or operator of a boat. Throughout the year the trailer made its debut at the Clinton Harbor Boat Show, Connecticut Marine Trades Association Boat and Fishing Show, Dodge Truck Fishing and Hunting Show, Great Park Pursuit, Chester Fair, Riverfront Recapture's Sporting Chance for Youth, DEP Paddle Safety Day, Hebron Harvest Fair, Channel 61 Kids Fair, and other safety demo days including Cabela's Sporting Store, Lyme/Old Lyme Middle School Annual Outdoor Safety Day and the Marine Science Day at Avery Point.

For the third year, the Boating Division sponsored a No Child Left Inside event to promote the appreciation of nature, water, boating and art by featuring children's art on the cover of the Connecticut Boater's Guide. One hundred-twenty thousand Guides are printed annually

to provide information regarding boating laws, trailered access, boating safety and clean boating tips. Children in K –8 competed for the honor of having their artwork on the cover of the Guide or for a slot on a calendar printed by the Department. The Department partnered



with Riverfront Recapture, the Hartford and the Capitol Region Education Council ("CREC") to implement the initiative. Over 500 pieces of artwork, celebrating the Connecticut River and safe boating, were submitted. The event culminated in an Award Ceremony in which one hundred-fifty pieces of art were displayed and over 150 children and their parents attended as the Commissioner recognized two winners for the cover of the 2008 Boater's Guide. Twelve others were recognized for having artwork selected and 40 honorable mentions were recognized.

Connecticut Conservation Education/Firearms Safety Program

In 2007, the Connecticut Conservation Education/Firearms Safety ("CE/FS") Program marked its 25th year. The CE/FS program is administered by the Department's Wildlife Division and involves a dedicated corps of more than 300 volunteer certified instructors throughout the state. Since inception of the program in 1982, volunteers have contributed more than 360,000 hours teaching 115,000 students of all ages and backgrounds.

The mission of the CE/FS program is to create safe, knowledgeable and responsible hunters and trappers. In addition to basic firearms safety and handling, the comprehensive course of instruction also includes topics such as laws and regulations, wildlife management and identification, ethics and responsibility, first aid and survival techniques. Successful completion of courses offered in firearms, bowhunting and trapping are prerequisites for all first time hunting and trapping license holders.

Connecticut has offered hunter safety training since 1955. The current training program and standards meet national standards and recommendations adopted by the International Hunter Education Association. The formal course of instruction for certification now includes a minimum 16 hours of instruction for firearms courses. Recent program enhancements to supplement the traditional classroom courses have included an on-line version of the

firearms course that is completed prior to participating in an intensive 8-hour field training day.

National Archery in the Schools Program

The Department, with the support of the Department of Education, embarked on a new program which promotes education through the participation in the National Archery in the Schools Program. As part of the physical education curriculum, the Department provided ten high schools with training and archery equipment which is valued at more than \$30,000.

This program promotes education through student participation in the life-long sport of archery. The program's focus is to teach target archery in a safe, educational setting with a curriculum designed and written by teachers to meet national physical education standards, and includes sections on: safe use of equipment, archery technique; and archery history; along with information on mental concentration and self-improvement. A section on teaching students with disabilities is also included. The National Archery in the Schools Program offers all students, regardless of ability, the opportunity to participate in a sport that helps build self-esteem.

Compliance Rates

The Department's strategic planning process includes an analysis of compliance patterns and rates and environmental data. The analysis helps the Department identify the environmental problems or areas of noncompliance that need to be addressed. Available permitting, compliance assistance and enforcement tools are then evaluated to determine the appropriate application and integration of tools necessary to resolve the problem.

The compliance rates for Federal Fiscal Year 2007 indicate that major sources of air pollution, water pollution and large quantity generators of hazardous waste ("LQGs") have high, steady rates of compliance with environmental regulations. These encouraging compliance rates are a result of a combination of factors. The factors include the Department's commitment to a strong enforcement presence through regularly scheduled inspections of those facilities and follow-up on violations found at those facilities, as well as effective permits and compliance assistance efforts. Another important factor is the commitment on the part of the regulated community to comply with environmental regulations.

While the Department is interested in maintaining the encouraging trend of compliance of major sources of pollution, these compliance rates inform the Department that there may be other areas of high noncompliance or environmental problems that need to be addressed. Specifically, the Department recognizes that smaller sources of pollution also need attention. Additional enforcement tools may need to be developed or adjusted to address these different entities.

Federal Fiscal Year ("FFY") 2007 Compliance Rates

The following tables show more detailed compliance rates for FFY2007 for particular industry sectors in the following Department media programs: Hazardous and Solid Wastes, Wastewater Discharges, Air Emissions, Pesticides, PCBs and Underground Storage Tanks. (The Federal Fiscal Year runs from October 1 through September 30.)

Unless otherwise noted the compliance rate for each category was calculated as follows:

$$\% \text{ Compliance} = 100 - \frac{\# \text{ of enforcement cases initiated}}{\# \text{ facilities inspected}} \times 100$$

Hazardous and Solid Wastes

Inspection Category	Inspection Projected FFY 07	Inspections Conducted FFY 07	Total # Facilities by category	# of NOV's FFY 07 (1)	# of inspections with SNC (1)	% of SNC Non-compliance	% inspected facilities in compliance
Treatment Storage Facility	13 (2)	11	8	0	0	0	100%
Large Quantity Generator	63	84	269	24	6	7%	71%
Small Quantity Generator	35	41	1676	25	10	24%	40%
Transporter	10	9	211	1	1	11%	89%
Volume Reduction Facility	N/A	4	30	0	0	0%	100%
Resource Recovery Facility	N/A	1	7	0	0	0% (3)	100%
Transfer Station	N/A	1	143	1	1	100% (3)	0%
Landfill	N/A	1	34	0	1	100% (3)	0%

- (1) Does not include 15 SW NOV's resulting from complaint investigations.
 Does not include 25 HW CESQG NOV's issued to CESQGs
 Does not include 4 SW formal actions resulting from complaint investigations
 Does not include 11 HW formal CESQG actions

SNC (Significant Non-compliance) – The violator/violation is significant enough to require formal enforcement response.

- (2) 2 Commercial TSDs has multiple Waste Analysis Plan inspections
 (3) Not statistically valid due to small sample size

Wastewater Discharges

Inspection Category	# of Facilities	Annual Compliance Inspections Projected FFY07	Actual Inspections FFY07	%Facilities in Compliance based on inspections*	%Facilities in Compliance based on DMR review (not in SNC)
NPDES Industrial Majors	37	37	37	86%*	95%**
NPDES Sewage Treatment Plant (STP) - Majors	67	67	46	98%*	85%**
Pretreatment SIU-Significant Industrial Users	207	167	170	78%*	Not available
NPDES Industrial-Minors	43	5	27	81%*	Not available
NPDES- STP- Minors	31	3	16	100%*	Not available
Stormwater	N/A	N/A	83	63%	Not applicable

* Based on whether a NOV was issued from the annual compliance inspection.

** Only NPDES majors are entered in PCS-SNC numbers can only be generated for these categories.

Pesticides

Inspection Category	Inspections Projected FFY 07	Inspections Conducted FFY 07	# of Enforcement Cases Initiated in FFY 07	% Inspected Facilities in Compliance
Agricultural Use & Complaint Follow-Up	22	19	12	37%
Non-Agricultural Complaint/Concern Follow-Up & Use Investigation	60	72	56	22%
Producer Establishment	5	6	0	100%
Market Place	75	102	22	78%
Certified Applicator Records	100	105	32	70%
Restricted Use Dealers	10	14	1	93%

PCBs

Inspection Category	Inspections Projected FFY 07	Inspections Conducted FFY 07	# of Enforcement Cases Initiated in FFY 07	% Inspected Facilities in Compliance
Referrals	8-13	11	2	81%
Complaints	12-17	17	4	76%
Clean-up Sites	10-15	20	3	85%
Other Neutral Scheme	10-15	6	0	100%

Underground Storage Tanks

Inspection Category-98 Deadline Target List	Inspections Conducted FFY 07	# of Enforcement Cases Initiated in FFY 07	% Inspected Facilities in Compliance
Operational/Structural*	753	10	71%

***Operational inspection**- assessment of compliance with release detection and maintenance requirements

Structural inspection- assessment of tank and line construction, and corrosion protection

Air Emissions

The Compliance & Field Operations Division conducts source surveillance using various techniques, including on-site inspections report reviews and record requests. The following table depicts compliance monitoring activity and compliance rates tracked by the Bureau of Air Management for key facility categories or industry sectors. Unless otherwise noted below, non-compliance means that an enforcement action (e.g., an NOV, Consent Order, Unilateral Order or AG referral) was taken at a facility during Federal Fiscal Year (FFY) 2007.

Compliance Monitoring Activity – Federal Fiscal Year 2007

Facility/ Inspection Category	Reports Reviewed FFY 07 ¹	Inspections Projected FFY 07	Inspections Conducted FFY 07	# of Facilities in Category	# of Facilities w/ Non- Compliance	Compliance Rate ⁵	# of Facilities w/ Significant Non-Compliance (SNC) ⁶	SNC Rate
Title V Sources	207	46	51 FCE	91 ²	12	87%	1	1%
General Permit to Limit Potential to Emit	319	54	42FCE	270 ²	5	98%	0	0%
Minor Sources	35	150	119 FCE	1500	30	98%	0	0%
Stage II		1400	1897	1560	496 ⁴	69%		
Complaints		500	653					
Other (Enforcement follow-up inspections, routine investigations)		100	564					

Footnotes:

1. Includes quarterly Continuous Emissions Monitoring reports, semi-annual monitoring reports and compliance certifications.
2. Number of facilities in category means both those who have applied and those who have received permits under the applicable program.
3. Summation of Department of Consumer Protection (DCP) and DEP inspections.
4. Violations comprise DCP red tags, DCP repair orders (multiple repair orders issued to the same station on the same day are counted as a single violation), and NOV's.
5. Compliance Rate Calculation:

$$\text{Compliance Rate} = \left[\frac{\# \text{ of facilities in category} - \# \text{ of facilities w/ non-compliance}}{\# \text{ of facilities in category}} \right] \times 100$$

6. SNC is defined as follows:

- (a) For Title V, General Permit to Limit Potential to Emit and Minor Sources, SNC means the facility was either a State of Connecticut Definitive High Priority Violation ("HPV") or Federal HPV during FFY 2007.
- (b) For Stage II facilities, SNC means there was either an actual failure of the vapor recovery equipment or a failure to demonstrate that the facility was maintaining a properly operating vapor recovery system.

SNC is calculated as follows:

$$\text{Non-Compliance Rate} = \left[\frac{\# \text{ of facilities w/ SNC}}{\# \text{ of facilities in category}} \right] \times 100$$

Enforcement and Permitting Outputs

The Department maintains a strong enforcement presence by conducting compliance inspections, taking appropriate enforcement action and enforcing strict permit conditions. This combination enables the Department to assure that compliance with environmental requirements is achieved and maintained by the regulated community.

The following are the FFY07 enforcement statistics for the Bureaus of Air Management; Materials Management and Compliance Assurance and Water Protection and Land Reuse as well as the five-year Department-wide average. Also included is the Department's report on permitting efforts as required by CGS 22a-6r.

Overall, 2007 enforcement statistics reflect a continued commitment to enforcement to achieve the cleanest, safest environment possible for Connecticut's citizens. As previously discussed and illustrated in this report, the compliance rates for major sources of pollution remain high and when serious violations are encountered, the Department takes aggressive formal action as demonstrated by the cases highlighted in this report and EPA's 2006 review of Connecticut's enforcement programs. In FFY07 the Department conducted 6,910 inspections and collected over \$2.6 million (up from \$1.3 million in FFY2006) in combined administrative penalties and supplemental environmental project funds.

This continued maintenance of a strong field inspection presence and the commitment to enforce against significant violators are vital elements of the Department's enforcement program. Although the deterrent effect is difficult to measure, the message is clear—"Doing the Right Thing" is the "Path of Least Resistance".

**Department-wide Federal Fiscal Year 2007 Enforcement Statistics
(10/01/06-9/30/07)**

Action Type	Bureau of Air Management	Bureau of Water Protection and Land Reuse	Bureau of Materials Management and Compliance Assurance	Total
Notice of Violation	199	74	370	643
Consent Order	20	16	57	93
<i>Administrative Penalties Assessed</i>	\$65,492(11)	\$12,250(5)	\$1,731,570 (45)	\$1,809,312
<i>Supplemental Environmental Projects</i>	\$0	\$35,000(2)	\$815,930 (17)	\$850,930
Unilateral Order	1	3	7	11
Attorney General Referral	3	2	11	16
<i>Judicial Settlement Penalties</i>	\$500,000	\$75,000	\$681,500	\$1,256,500
<i>SEPs</i>	\$0.00	\$0.00	\$0.00	\$0.00
Chief State's Attorney Referral	0	0	1	1
Referral to EPA	0	0	6	6
Inspections Conducted	4089*	544	2277	6,910

*1,542 inspections conducted by Consumer Protection

**Department-Wide Five Year Average
Federal Fiscal Years 2003-2007**

Activity	2003	2004	2005	2006	2007	Five Year Average
Referrals (AG/EPA/CSA)	45	41	28	36	23	35
Orders	236	160	140	103	104	149
Notices of Violation	782	778	657	631	643	698
Total Enforcement Actions	1063	979	825	770	770	881
Inspections	7015	7345	6420	6791	6910	6896

Federal Fiscal Year 07 Permitting Statistics

Bureau	Permit Type	Applications Received	Permits Issued	Applications Closed ¹	Applications Pending (as of 9/30/07)
Air	General Permits	12	28	39	4
	Individual	138	123	158	154
	Short Process	72	67	75	9
Office of Long Island Sound Programs	General Permits	34	20	29	19
	Individual	142	98	121	317
	COP ²	213	177	202	36
Water - Inland Water Resources	General Permits	155	114	130	86
	Individual	134	117	156	178
Waste	General Permits	51	37	39	39
	Individual	58	44	52	116
	Short Process	721	644	651	181
Water - Permitting & Enforcement	General Permits	773	615	693	352
	Individual	134	66	102	484
All DEP	General Permits	1025	814	930	500
	Individual	606	448	589	1249
	Short Process	1006	888	928	226
	Totals All Apps	2637	2150	2447	1975

1 Applications Closed represents the total number of applications that were closed including: permits issued; applications which are withdrawn, rejected for insufficiency, or denied on the technical merits of the application; and applications which were received but no permit is required.

2 COP = Certificate of Permission

Average Processing Times

Average Time in Days							
Bureau	Sufficiency Decision	Sufficiency After Notice of Insufficiency	Tentative Determination (N.B. this statistic only includes individual permit applications)	Issue Permit	Issue Permit Total Time	Close Application DEP Time	Close Application Total Time
Air	172	4	148	82	108	120	184
OLISP	87	21	118	55	78	84	119
IWRD	202	31	101	190	204	261	304
Waste	107	7	690	75	90	87	106
Water Discharges	43	153	454	67	74	130	157
All DEP ³	77	32	228	79	93	118	150

Timeliness

Bureau	On Schedule (vs. Plan)	On Schedule (vs. Revised)
Air	61.21%	83.19%
OLISP	57.69%	72.44%
Inland Water Resources	76.04%	76.50%
Waste	90.52%	97.57%
Water - Permitting & Enforcement	93.79%	98.41%
All DEP	82.50%	90.78%

³ All DEP averages are weighted averages.

Permit Related Revenue Information

CGS Section 22a-6r states the Commissioner to identify: revenues received from permit application fees and any revenues derived from the processing of such applications as set forth in Chapter 439 of the General Statutes; the Department’s appropriation from the general fund for permitting activities; and the number and amount of permit application fees refunded.

Revenues Received from Permit Application Fees and Any Revenues Derived from the Processing of Such Applications*	
10/1/06 - 9/30/07	\$2,292,800

* These figures represent application fees due on submittal and permit issuance fees. They do not include annual fees and other registration fees such as medical and industrial X-ray, pesticide registrations, UST’s, property transfer, LEP, etc.

General Fund Appropriation*	
7/1/06 - 6/30/07	\$1,282,500

* There is no specific state budget appropriation for department permit programs. This figure reflects actual expenses, drawn from the general fund, for air, water, and waste permitting and enforcement staff.

Amount of Permit Application Fees Refunded* (7/1/06 - 6/30/07)
Application Fees Refunded for a Total of \$29,136

* Refunds reflect withdrawn applications, duplicate fees, etc.