Work Plan Progress Report
Fiscal Year 2000 and Fiscal Year 2001 Update

November 2000
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Rhode Island Department of Environmental Management Work Plan
Progress Report 2000 and Update 2001

Introduction

This is the Department's work plan progress report for the State Fiscal Year (FY) 2000 (July 1, 1999 to June 30, 2000) as well as an update of Department strategies for the remainder of FY2001 (to June 30, 2001).

In September 1999, DEM developed the first Department-wide work plan to focus on environmental priorities and results. The work plan is organized around seven broad goals: clean air, clean and plentiful water, livable communities, healthy ecosystems, viable natural-resource-based industries, abundant open space and recreation, and open and effective government. For each of the seven goals, the table herein provides detail regarding major progress to date and major changes and initiatives for FY2001. The following are some highlights.

Open Space Preservation. The Department increased the number of acres acquired by 65% - from 932 in FY1999 to 1,427 in FY 2000 - and has entered into agreements to acquire another 1,015 acres in FY2001, while negotiating on another 5,259 acres for acquisition. The Department also assisted efforts by the Governor, the General Assembly, the State’s Congressional Delegation and others to promote passage of the federal Conservation and Reinvestment Act (CARA) and the $34 Million Open Space bond issue. The availability of state and federal funds will enable the Department and its partners to keep pace with the goal of acquiring and protecting 29,000 acres by 2010.

Fisheries. Despite prior successes in rebuilding some species, such as striped bass and weak fish, further work is necessary to rebuild lobsters, winter flounder and other species in accordance with the 1996 federal Sustainable Fisheries Act requirements. This Act mandates rebuilding stocks by 2006. The Department stocked 300,000 lobsters this summer, well in advance of the December 31st deadline, as part of its program to restock 1.5 million lobsters over 5 years with funds from the North Cape Oil spill. The Department is working with the legislature, commercial fishing industry, URI, and environmental groups to address short- and long-term commercial fisheries issues - with particular focus on restructuring the State’s commercial fishing license system - in a process facilitated by the URI Coastal Institute.

Restoring Habitat and Water Quality. The Department signed a Memorandum of Understanding with the Coastal Resources Management Council, formalizing the collaborative coastal habitat restoration program approach developed by the agencies and their partners. Water quality restoration strategies for the Runnins, Barrington, and Hunt Rivers, and Fry and Scrabbletown Brooks were completed. Among those that are in development and expected to be completed by the end of September 2001 are: Narrow River, Gilbert Stuart Brook, Palmer River; Sakonnet River/Island Park Cove; Kickemuit Reservoir, Saugatucket River and Pond; Mitchell and Rocky Brooks; Ninigret and Green Hill Ponds.

To help restore freshwater wetlands, the Department collaborated with URI on a project that identifies and prioritizes wetland restoration opportunities. After an initial test of the methods in a 3.5 by 3.5-mile area in the Woonasquatucket River watershed, the initiative is expanding to the entire watershed. This will put the wetlands along the Woonasquatucket in an excellent position for restoration funding by the newly formed Rhode Island Corporate Wetlands Restoration Project.

Regulatory Streamlining. The Department achieved significant reductions in permitting, processing and complaint response backlogs. The most significant permitting backlog reductions were in the RIPDES program that regulates wastewater treatment plant operations. The backlog of major RIPDES permits declined from 19 in December of 1999 to 9 in September 2000. The Department has also nearly eliminated the 350 case backlog in wetland complaints by reassigning staff and filling a vacancy. The average time to issue ISDS permits is now 30 days. However, additional work is needed on the process for applications for variances, which take 4 to 6 months to process.
Computerization of permit tracking is also moving forward as scheduled. The Department expects to fully implement the Permit Process Tracking and Information System by June 2001. The system will enable DEM to process and track permit applications more efficiently through concurrent reviews among DEM divisions.

The Department adopted new Guidelines for Administrative Inspections describing professional standards and procedures for conducting inspections with due respect for private property rights. The Department will monitor the effectiveness of the guidelines and improve them if necessary in the coming year.

Finally, DEM began working with stakeholders on two major task forces in the last year, one for the wetlands program and one for the ISDS program. Both groups will be finalizing their recommendations this winter. As a result of these meetings, stakeholders made major recommendations to increase effectiveness of wetlands and ISDS permitting that will be implemented in early 2001.

**Asset Protection.** The Department broke new ground with the Asset Management Study (AMS) of Parks and Recreation facilities. The AMS identifies and prioritizes repair and replacement needs and costs for both the capital and operating budgets and recommends funding strategies to preserve and enhance the system. The Department is conducting another AMS as a basis for protecting facilities in the Forest Environment program. The AMS is being reviewed as a possible model for other state agencies.

**Sustainable Watersheds.** This new initiative created partnerships that include federal, state, local, and non-profit, organizations working to pull together existing programs and funding, seek new funding, and coordinate plans to optimize the use of resources in the South County Watersheds and the Woonasquatucket Watershed. A major accomplishment was the development of publications to assist local governing bodies with planning, drafting ordinances, and identifying strategies that minimize impacts to the environment and community character while planning for growth. Some of the publications developed and published are: A Rapid Site Assessment Guide, South County Design Manual, Farmland and Forestry Strategies, and a set of South County Watershed Model Ordinances. Staff provided training to local officials on the use of these resources.

The partners obtained grants totaling $220,000 for projects in both watersheds to identify natural and cultural resources and develop strategies to protect and restore them. The Woonasquatucket team also obtained a $67,000 grant to inventory and prioritize reforestation opportunities.
## Clean Air

### Fiscal Year 2000 Highlights/Results

#### Ozone and Particulates

**Ozone**
- Summer 1999: 8 Hour Ozone standard exceeded 18 times on 11 days.
- Promulgated new NOx allocation program regulations (to reduce ozone) September 30, 1999.
- Implemented the Vehicle Inspection & Maintenance program in January 2000.
- Drafted heavy-duty diesel testing legislation that passed during 2000 session.
- Inspected 450 gasoline recovery systems to ensure recovery systems are working properly (91% of 500 target).

**Fine Particulates**
- Installed fine particulate monitors at 6 sites in greater Providence.

### Fiscal Year 2001 Major Changes/Initiatives

#### Ozone and Particulates

**Ozone**
- Summer 2000: 8 Hour Ozone standard exceeded 11 times on 8 days, reflecting improvement from prior summer (perhaps linked to cooler weather) but underscoring the need to maintain aggressive ozone abatement efforts.
- Inspect 350 gasoline recovery systems.

**Fine Particulates**
- Use monitoring results to determine whether more action is needed in 2002.
- Begin continuous monitoring at two new sites.
- Continue intermittent monitoring at 6 sites.
- Begin to analyze for selected pollutants (carbon, sulfate, nitrate, and metals).

#### Air Toxics
- Received $500,000 from EPA to add four monitors in metropolitan Providence; improve monitor/lab in East Providence.
- Adopted medical waste incinerator regulations that will result in substantial reductions in mercury and other air toxics.
- Drafted regulations for internal review to target risk management and accidental release programs to minimize exposure of public to air pollution from large users of toxic materials.

#### Air Toxics
- Implement new medical waste regulations and work with hospitals on upgrade/closure by August 2001.
- Finalize regulations and promulgate by March 2001.

#### Greenhouse Gas
- Brown University conducted EPA funded greenhouse gas inventory for Department.

#### Greenhouse Gas
- Work with RI and regional stakeholders to develop a framework for a greenhouse gas action plan to reduce emissions and increase competitiveness through energy efficiency and alternative transportation. Target: framework April 2001, action plan April 2002.
# Clean Water

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<th>Fiscal Year 2000 Highlights/Results</th>
<th>Fiscal Year 2001 Major Changes/Initiatives</th>
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<tr>
<td><strong>Abating bacterial contamination and excess nutrient enrichment</strong></td>
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**Water quality restoration strategies- Total Maximum Daily Loads (TMDLs):** Developing TMDLs requires finding out the specific causes of water quality impairment for each water body and tailoring solutions to specific conditions. The Department is required by federal mandate to complete approximately 230 TMDLs for all impaired waters by 2014.

DEM continued development of TMDLs with stakeholder input and public meetings.
- Completed development of 5 draft TMDLs: Barrington, Runnins, and Hunt Rivers, Fry Brook, Scrabbletown Brook.
- Restoration activities continue at Stafford Pond, a drinking water supply.
  - Town of Tiverton public education efforts: fact sheets, workshops, site visits.
  - DEM awarded Tiverton a $35,000 grant to develop an on-site wastewater management plan.
  - DOT designed improvements and BMPs for storm drains entering the pond.
  - A new Watershed Watch volunteer is monitoring the pond.
- Began restoration of the Barrington/Runnins River to allow re-opening to shellfishing
  - DOT funded design for a stormwater project on the Runnins River.
  - Assisted the State of MA and Town of Seekonk in planning to address stormwater at Stream Number Two.

**Combined Sewer Overflows (CSOs)**
- Reviewed and approved 30% design plans and specifications for NBC-CSO Control Program.

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<tr>
<th><strong>TMDLs</strong></th>
<th><strong>CSOs</strong></th>
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<tr>
<td>Finalize TMDLs by December 2000: Barrington, Runnins, and Hunt Rivers, Scrabbletown Brook, and Fry Brook.</td>
<td>Begin review of 100% plans and specifications for NBC-CSO Control Program, Phase I and complete review of 100% of wet weather and advanced treatment at Bucklin Point.</td>
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<td>Finalize TMDLs by September 2001: Narrow River, Gilbert Stuart Brook, Palmer River; Sakonnet River/Island Park Cove; Kickemuit Reservoir, Saugatucket River &amp; Pond; Mitchell, &amp; Rocky Brooks; Ninigret &amp; Green Hill Ponds.</td>
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<tr>
<td>Continue development of TMDLs that will be completed beyond September 2001: Providence &amp; Seekonk Rivers, Greenwich Bay, its tributaries and coves (Hardig Brook, Buttonwoods, Brushneck, Apponaug, Warwick, and Greenwich Coves), Woonasquatucket River, Blackstone River, Mill River, Peters River, Valley Falls Pond.</td>
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<tr>
<td>Continue Restoration efforts for Barrington, Runnins Rivers</td>
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  - Install pigeon screening at an overpass (DOT). |
  - Address an overflow at a pump station prompted by a DEM Notification of Violation (NOV) (East Providence). |
  - Investigate illegal connections to storm drains (East Providence). |
  - Construct a stormwater BMP on Route 6 (DOT). |
Clean Water (Continued)

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<th>Fiscal Year 2000 Highlights/Results</th>
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<td>Abating bacterial contamination and excess nutrient enrichment (continued)</td>
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<td>Nonpoint Source Pollution (NPS) and Stormwater</td>
<td>NPS and Stormwater</td>
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<tr>
<td>• Awarded $1.536 million to local entities for watershed restoration projects.</td>
<td>• Begin major update to NPS Plan, to be completed in FY02.</td>
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<tr>
<td>• Received final approval for the Coastal Nonpoint Source Pollution Plan in collaboration with CRMC, EPA and OCZM; this is the second such comprehensive plan in the country.</td>
<td>• Issue an RFP for a minimum of $500,000 for grant projects for watershed restoration, on-site wastewater management, and stormwater management.</td>
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<tr>
<td>Stormwater</td>
<td>• Administer grants and assist local entities to implement 19 watershed restoration projects.</td>
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<tr>
<td>• Began program with stakeholders to develop Phase II Stormwater Regulations for municipal storm drains and small construction projects.</td>
<td>• Support development of 3 local stormwater management plans in the Pawtuxet River watershed.</td>
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<tr>
<td>Septic Systems</td>
<td>Stormwater</td>
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<tr>
<td>• Approved two more nitrogen reducing septic system technologies, including technical criteria for a re-circulating sand filter.</td>
<td>• Finalize and begin to implement rules for Phase II Stormwater Permits to improve effectiveness of pollution reduction systems in municipal drainage structures and small construction projects.</td>
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<tr>
<td>Wastewater Treatment Facilities (WWTFs)</td>
<td>Septic Systems</td>
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<tr>
<td>• Issued permits with nutrient limits for 6 WWTFs: Burrillville, Cranston, Warwick, West Warwick, Smithfield and Woonsocket</td>
<td>• Revise ISDS Regulations to:</td>
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<tr>
<td>• Provided training and technical assistance to WWTF operators for voluntary achievement of interim nutrient reductions</td>
<td>• Update design standards and implement soil based siting.</td>
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<tr>
<td>• Issued final approval for modifications to Woonsocket WWTF for nutrient control</td>
<td>• Require nutrient reducing ISDSs in critical coastal areas.</td>
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<td>WWTFs –</td>
<td>WWTFs –</td>
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<tr>
<td>• Begin re-drafting 11 major permits to incorporate refined water quality based limits; 4 to include nutrient limits</td>
<td>• Review 5 submittals of WWTF upgrades that address nutrient reduction</td>
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## Fiscal Year 2000 Highlights/Results

**Abating bacterial contamination and excess nutrient enrichment (continued)**

**Public Education and Outreach**
- Developed draft outreach plan and materials targeting urban rivers and upper bay:
  - Restoring Our Urban Rivers – for children;
  - Nutrient Pollution: Choking Our Rivers – for adults;
  - Septic System Checkup, a septic system inspection manual.
- Published first statewide map of impaired waters using Geographic Information System.
- Held Wetlands open house (attended by approximately 200), developed 5 new fact sheets, and published Freshwater Wetlands Permit Handbook to assist applicants.

**Assessment and Monitoring**
- Coordinated a Bay-wide dissolved oxygen sampling effort with many partners.
- Participated with New England Interstate Water Pollution Control Commission (NEIWPCC) and NE states to develop regional nutrient criteria for all waterbody types.
- Published State of the State’s Waters Report (305b).
- Following assessment of all state waters, updated statewide listing of Impaired Waters – those that do not meet their standard (303d List).
- Began development of a strategy to reduce the percentage of unassessed waters.
- Continued collecting water quality data in rivers with USGS and URI; conducted biological monitoring at 45 river stations with Roger Williams University.
- Expanded the number of lakes monitored by URI’s Watershed Watch program through grant support.
- Provided funding to implement best management practices at 4 farms to control nutrient and bacterial pollution in coordination with USDA.

## Fiscal Year 2001 Major Changes/Initiatives

**Abating bacterial contamination and excess nutrient enrichment (continued)**

**Public Education and Outreach**
- Initiate implementation of prioritized projects outlined in draft outreach plan.
- Distribute Septic System Checkup manual.

**Assessment and Monitoring**
- Publish final report of the dissolved oxygen study of Narragansett Bay by September 2001.
- Continue to participate with NEIWPCC and NE states to develop nutrient criteria for all waterbody types.
- Conduct a campaign through public education to promote greater use of marina boat sewage pumpout stations in compliance with no-discharge regulations.
- Coordinate with EPA on Bay Monitoring Plan; seek funding for implementation.
- Expand collection of baseline water quality data as resources allow to eliminate gaps in our understanding of water quality conditions.
- Conduct mandatory triennial review of water quality standards for significant rule and criteria changes.

**Toxics**
- Revise Pretreatment Regulations to reflect changes to federal regs and incorporate incentives for pollution prevention.
Clean Water (Continued)

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<td><strong>Dredging</strong></td>
<td><strong>Dredging</strong></td>
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<td>• Review Environmental Impact Statement for the Providence River Dredge Project upon submittal of studies of Army Corps of Engineers.</td>
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<tr>
<td><strong>Abating Volatile Organic Compounds And Nitrates In Groundwater</strong></td>
<td><strong>Abating Volatile Organic Compounds And Nitrates In Groundwater</strong></td>
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<tr>
<td>• Released biennial Wellhead Protection Report, which includes updates on measures being taken to prevent groundwater contamination in public drinking water wells.</td>
<td>• Revise rules for groundwater remediation to reflect changing policies and integration of Office of Water and Office of Waste roles in groundwater remediation.</td>
</tr>
<tr>
<td>• Administered grants ranging from $4,000 to $11,000 awarded to 5 communities and 2 private water suppliers for wellhead protection projects.</td>
<td>• Begin updating 1989 groundwater protection strategy with stakeholders.</td>
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<tr>
<td>• Continued groundwater sampling for nitrates in the Pawcatuck watershed.</td>
<td>• Identify new strategies for addressing nitrate contamination and private well issues.</td>
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<td>• Begin review of federal delegation of the underground injection control (UIC) program to meet new federal requirements and maintain delegation and funding.</td>
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<td>• Revise 1984 UIC regulations to incorporate a groundwater discharge program.</td>
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<td>• Issue four new grants for wellhead protection and solicit new project proposals.</td>
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Narragansett Bay (see Healthy Ecosystems)
# Livable Communities

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<td><strong>Watersheds</strong></td>
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<tr>
<td>• Initiated watershed partnerships in South County and Woonasquatucket watersheds.</td>
<td>• Develop Action Plans for South County and Woonasquatucket pilot watersheds by June 2001. Incorporate Action Plans into Department and other agencies’ (EPA, etc) FY2002 work plans.</td>
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<tr>
<td>• Established and coordinated South County and Woonasquatucket Watershed teams.</td>
<td>• Develop sustainable watershed website by July 2001.</td>
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<td>• Developed integrated projects and work plans within DEM and other partners.</td>
<td>• Develop RI Grant Guide by July 2001 to identify funding sources for watershed organizations and continue to explore options to build capacity of local watershed organizations.</td>
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<tr>
<td>• Organized the RI Watershed Partnership Coordinating Council, with approximately 30 members from state and federal agencies and non-profit organizations.</td>
<td>• Coordinate integration of the Watershed Coordinating Council and Rivers Council.</td>
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<tr>
<td>• Received $67,000 Woonasquatucket Riparian Buffer Zone Grant to inventory and prioritize reforestation opportunities along the Woonasquatucket.</td>
<td>• Coordinate Watershed Educational Campaign in DEM parks.</td>
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<td>• Initiate the Woonasquatucket River Riparian Buffer Zone Project: establish priorities and select site to implement by July 2001. Integrate into URI/DEM and the U. S. EPA wetland restoration efforts.</td>
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<td>• Received $100,000 Woonasquatucket Greenspace Project grant for watershed communities to identify important natural and cultural resources along the Woonasquatucket and to develop strategy to protect and restore these resources.</td>
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<td>• Implement the Woonasquatucket Greenspace Project: develop priority natural, cultural, and recreational map overlays for each community. Assist communities in developing updated comprehensive greenspace coverage.</td>
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<td></td>
<td>• Initiated the $120,000 South County Greenspace Project for South County watershed communities to identify important natural, cultural, and recreational resources and to develop an implementation strategy to protect these resources.</td>
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<td>• Complete South County Greenspace Strategy and work with local governments for adoption by September 2001.</td>
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<td><strong>Smart growth – sustainable development</strong></td>
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<tr>
<td>• Developed land use ordinances and manual to minimize impacts to the environment and community character for stakeholder-selected sites in South County; provided training to local officials.</td>
<td>• Add creative model ordinances and training materials developed from projects initiated in FY2000 to sustainable Watershed website.</td>
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<tr>
<td>• Began developing goals and expectations for Governor’s Growth Planning Council (GGPC).</td>
<td>• Assist with Grow Smart's GIS Community Capacity project.</td>
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<td>• Began South County Greenspace Plan (see above).</td>
<td>• Help GGPC establish a Planning Institute.</td>
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## Livable Communities (Continued)

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<td><strong>Environmental Equity</strong></td>
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<tr>
<td>Department developed draft environmental equity policy framework to ensure that all Rhode Islanders have equal access to environmental benefits and no citizens bear a disproportionate share of the risks and consequences of environmental pollution.</td>
<td>Finalize environmental equity policy by January 2001.</td>
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<tr>
<th><strong>Statewide Health &amp; Safety Issues</strong></th>
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<tr>
<td><strong>West Nile Virus (WNV)</strong></td>
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<tr>
<td>• Initiated statewide response plan, involving mosquito and bird surveillance, technical and resources assistance to community officials, public education and information, and larvicide and site specific adulticide programs for mosquito control with DOH.</td>
<td>• Will assess effectiveness of response and develop strategy for next year with stakeholders.</td>
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**Dams**

- Increased efforts to ensure safety of private, municipal and state-owned dams in RI, including:
  - Pursuant to Executive Order 00-6, convened the 18-member Dam Safety and Maintenance Task Force to revamp dam safety program.
  - Inspected: 14 of 16 high hazard dams, 32 of 41 significant hazard dams; certain dams along the Woonasquatucket River, and six low hazard dams at the request of owners/interested parties.
  - Obtained $46,000 grant from the Federal Emergency Management Agency to re-assess the classification of up to 75 dams (expect to receive similar awards over the next 2 years).

**Dams**

- Dam Safety and Maintenance Task Force will finalize report by January 2001. Recommendations include:
  - Create a funding assistance program for dam repair and maintenance.
  - Update the dam classification system.
  - Statutory and regulatory changes (the Department will submit recommendations this legislative session).
  - Establish registration and permitting requirements.
  - Develop inspection criteria for the various dam classifications.
  - Develop a map/booklet identifying classifications and access points for all dams.
  - Begin re-assessment of the classification for up to 75 dams with FEMA grant award.
### Livable Communities (Continued)

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<td><strong>Pollution Prevention (P2)</strong></td>
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<tr>
<td>• Continued to integrate P2 into Department programs by training staff in Air and Compliance and Inspection Divisions. Compliance and Inspection refers all non-compliers to P2 program for assistance.</td>
<td>• Will conduct P2 integration training for Waste and Water permitting and compliance personnel by December 31, 2000</td>
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<tr>
<td>• Continued to help industry generate less pollution:</td>
<td>• Continue work with auto body stakeholder group to finalize/implement program in 2002.</td>
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<tr>
<td>• Began development of auto body self-certification program to reduce health threats posed by this industry. Formed stakeholder group to guide process</td>
<td>• Explore opportunities to advance the Small Business Pollution Prevention Assistance Program, including establishing an advisory panel and developing outreach materials</td>
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<td>• Helped 3 area hospitals to reduce mercury emissions with the goal of completely eliminating mercury emissions by 2003</td>
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<td>• Conducted 17 site visits and provided guidelines and options for P2</td>
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<td>• Published newsletter for small businesses (9,600 copies distributed)</td>
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<td>• Issued $138,000 in grant awards for 10 research, education and demonstration projects for integrated pest management activities.</td>
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<td>• With EDC, URI and other partners, submitted $10 Million grant proposal to the National Science Foundation to establish a self-sustaining, multidisciplinary “Center for Cleaner Production and Environmental Health” at the University of RI.</td>
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# Healthy Ecosystems

## Fiscal Year 2000 Highlights/Results

### Habitat Protection & Restoration
- Worked with URI to develop method for prioritization of freshwater wetlands restoration sites.
- Tested wetlands restoration method in Woonasquatucket River Watershed
- Vernal Pools - Worked with URI to survey amphibians and vegetation in 125 ponds in RI
- Restored 5.8 acres of wetland and 7.7 acres of perimeter and riverbank wetland in 1999 through the compliance program.
- Issued 314 wetlands permits in 1999 with required avoidance and minimization of impacts to wetlands.
- Loss of biological wetlands was limited (.28 acres across five sites).
- With partners, published first statewide map and inventory of coastal habitat areas to be used in development of a Statewide Habitat Restoration Strategy
- Established collaborative habitat restoration program with CRMC and others that resulted in a list of restoration projects, priorities, and an interagency Memorandum of Understanding (MOU).
- Obtained $270,000 grant to develop GIS-based coastal habitat restoration plan for the World Wide Web.

### Invasive Species
- Convened Invasive Species Council through URI Cooperative Extension.

## Fiscal Year 2001 Major Changes/Initiatives

### Habitat Protection & Restoration
- Develop restoration plan for the Woonasquatucket Watershed including feasibility study of selected sites with URI.
- Develop plan to restore riparian forest buffers along the mainstem of the Woonasquatucket; restore one site.
- Promulgate rules with reduced application fees for wildlife habitat and water quality improvement projects.
- Develop new permitting procedure for restoration planting projects.
- Develop wetlands conservation plan for Tiverton & Little Compton with The Nature Conservancy.
- Complete research & framework for statewide freshwater wetlands conservation plan.
- Publish atlas of coastal habitat areas.
- Work with CRMC & Save the Bay to refine habitat restoration priorities; implement statewide habitat restoration strategy & restoration projects for coastal habitats & fisheries:
  - Allins Cove, Barrington
  - Ten Mile River feasibility study, East Providence
  - Blackstone River fisheries restoration plan
  - Mill Pond ecological assessment, Bristol
  - Town Pond restoration plan, Portsmouth.

### Fresh and Saltwater Wetlands - Linked to National Corporate Wetlands Restoration Project
- Initiate public/private partnership to fund and implement restoration of degraded fresh and saltwater wetlands and other aquatic habitat.

### Invasive Species
- Assess the extent and types of invasive species statewide.
### Fiscal Year 2000 Highlights/Results

#### Coastal Watershed Planning & Policy
- Conducted Bay Summit 2000.
- Created the Partnership for Narragansett Bay (PNB) at the URI Coastal Institute. The PNB is a stakeholder planning & action process to implement Summit recommendations and CCMP actions.
- Sought to pass coastal habitat bill to provide state match for federal habitat restoration funds.
- Conducting Coastal 2000, a 2-year bay monitoring project with EPA and Roger Williams University. Monitored 35 of 70 sites summer 2000.
- Took aerial photos to map south shore coastal ponds and eelgrass beds.

#### Surveys and Management Plans
- Completed final report of RI’s Living Legacy: survey of the state's natural heritage.
- Conducted population assessments and prepared 36 management plans (regulations) including Narragansett Bay Quahog Management Plan (October 1999).

#### Low Flows And Drought Response
- The Pawcatuck Watershed Partnership Water Use Stakeholder group completed the second year of a water use study to assess the interaction between aquatic habitat and flow in the Usquepaug watershed, and drafted an action strategy for voluntary water use management.

#### Total Maximum Daily Loads (TMDLs)
- See Clean Water – Water Quality Restoration Plans

### Fiscal Year 2001 Major Changes/Initiatives

#### Coastal Watershed Planning & Policy
- Complete analyses of coastal wetlands restoration and coastal wetland loss.
- Publish Bay Summit Report
- PNB will develop planning process to identify priorities for Bay & watershed that will include:
  - Visioning/planning process through public workshops.
  - Issues forums
  - Habitat restoration projects
  - Capacity-building grant program
  - Monitoring/indicators workshops

#### Surveys and Management Plans
- Publish RI’s Living Legacy winter 2000.
- Blue crab – status of resource review to be presented to the Marine Fisheries Council in November; revise limits.
- American eel – enact a bag limit of 50 to comply with ASMFC limit.
- Horseshoe crab – research-landing data to determine catch limits.

#### Low Flows And Drought Response
- The Pawcatuck Watershed Partnership Water Use Stakeholder group will implement the voluntary water use management strategy.
- Blackstone River – Continue to participate on the Blackstone River National Heritage Corridor Commission’s Stream Flow Task Force, which includes hydropower operators, to reduce river flow fluctuations.
## Viable Natural-Resource-Based Industries

### Fiscal Year 2000 Highlights/Results

#### Fisheries
- Department implemented species management plans or amendments for 25 species in conjunction with federal partners. Reduced mortality on 12 over-fished stocks. Instituted rebuilding programs for 6 stocks. Results have been very successful for some species such as striped bass & weakfish, which have been rebuilt. Additional restrictions are still required for lobster, winter flounder, and other species.
- Department officials worked with other states and regional authorities to implement a strategy to streamline regulations by consolidating regulatory changes into two sets of regional hearings and filings instead of 25 individual hearings and filings.
- Lobster Restoration Plan – DEM worked with the industry and the General Assembly to pass a lobster trap tag bill to enforce trap limits required by federal law.
- DEM oversaw a direct replacement program funded by the North Cape Settlement in which 300,000 v-notched lobsters were stocked during summer of 2000, well in advance of the December 2000 deadline.
- Began anadromous (marine fish species that spawn in freshwater) Fish Restoration Strategic Plan.

### Fiscal Year 2001 Major Changes/Initiatives

#### Fisheries
- The Department will continue to work with federal partners to review/revise fisheries management programs to rebuild overfished stocks.
- As a follow-up to the one-year moratorium on commercial fishing licenses instituted by the General Assembly, DEM will work with the legislature, the commercial fishing industry, URI, and environmental groups to address short-and long-term fisheries issues in a process facilitated by the URI Coastal Institute. Issues include restructuring the state’s commercial fishing licensing system.
- Initiate monitoring program for pelagic (open water) gamefish in Narragansett Bay.

### Port Upgrade Plan

#### Construction Projects were delayed due to higher than anticipated bids.

**Newport:**
- Built:
  - Secondary containment wall around waste oil collection tank.
  - Floats for 100' floating dock.
- Designed and awarded $2.9 Million construction bid:
  - Bulkhead & other site improvements.
  - Storm water treatment system.

**Galilee ($3.5 Million contract):**
- Began building bulkhead & parking lot improvements
- Designed new bulkhead in North Basin.
- Installed stormwater treatment system.

#### Newport (construction scheduled to begin November 2000 and take approximately 2 years to complete):
- Install floating dock; replace broken pilings.
- Build bulkhead, stormwater treatment system, and other site improvements.

**Galilee:**
- Complete bulkhead & parking lot improvements by April 2001.
- Replace Piers E, G & H. Piers G & H complete by February 2001. Pier E pending CRMC approval for major design changes requested by lessee.
### Viable Natural-Resource-Based Industries (Continued)

<table>
<thead>
<tr>
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<tr>
<td><strong>Port Upgrade Plan (Continued)</strong></td>
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<tr>
<td><em>Galilee: Working with Galilee Port Advisory Committee (GPAC) and Town of Narragansett</em></td>
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</tr>
<tr>
<td>• The Department developed a constructive relationship with the town and GPAC; and began discussion of parking issues.</td>
<td>• DEM &amp; GPAC will develop a comprehensive plan for the port:</td>
</tr>
<tr>
<td></td>
<td>• Convene stakeholders &amp; state agencies to work on solutions to parking problem.</td>
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<tr>
<td></td>
<td>• Schedule public workshops for input on solutions identified by stakeholders.</td>
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<td>• Prepare recommendations, budget, and schedule for consideration by implementing authorities.</td>
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#### Fishing and Hunting

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<tr>
<th>Hunting</th>
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<tbody>
<tr>
<td>• Provided handicap accessible hunting at Fort Greene in collaboration with the Dept. of the Army.</td>
<td>• Develop an internal working committee to identify the recreational and commercial value of the fish and wildlife resources in RI.</td>
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#### Forestlands

<table>
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<tr>
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<tr>
<td><strong>Aid to Forestland Owners</strong></td>
<td><strong>Aid to Forestland Owners</strong></td>
</tr>
<tr>
<td>• Established land-use strategies to encourage continuation of forestry as a resource-based industry.</td>
<td>• Assist landowners and develop forest management plans (target 250).</td>
</tr>
<tr>
<td>• Assisted landowners and developed forest management plans (250 owners assisted).</td>
<td>• Publish remaining 13 brochures for alternative forest businesses.</td>
</tr>
<tr>
<td>• Developed program to promote alternative business uses for forestlands with RI Rural Lands Coalition.</td>
<td>• Success of alternate forest businesses led Southern New England Forest Consortium to assign a full-time staff and DEM to assign a part-time staff to promote alternative forest businesses. Similar approaches will be included in farm assistance programs.</td>
</tr>
<tr>
<td>• At least 6 alternative businesses were started, surpassing target of establishing 5.</td>
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<tr>
<td>• Published 3 of 16 planned publications.</td>
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<tr>
<td>• Held 3 workshops with 130 participants.</td>
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<tr>
<td>• Established alternative forest business web site.</td>
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#### Sustainable Agriculture

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<thead>
<tr>
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<tr>
<td><strong>Farm Viability</strong></td>
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<tr>
<td>• Helped an estimated 90 farmers during drought with emergency ponds and wells via expedited permit reviews.</td>
<td>• Work with the Water Resources Board on a 2-year project to develop a long term Drought Management Plan as a State Guide Plan element.</td>
</tr>
<tr>
<td>• Working with the Water Resources Board, developed an Interim Drought Management Plan to respond to the 1999 drought.</td>
<td>• Prepare draft Farm Viability Program and funding proposal.</td>
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### Farmland Preservation

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<thead>
<tr>
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<tbody>
<tr>
<td>• Established land use strategies to encourage continuation of farming as a resource-based industry.</td>
<td>• Award grants for acquisition of development rights through the Agricultural Land Commission on an average of 5 working farms totaling over 400 acres per year using one million dollars in capital funding over five years.</td>
</tr>
<tr>
<td>• Increased conservation easement coverage by 44 farms and 3374 acres</td>
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<tr>
<td>• Completed final resource-based tax assessment method for farmland &amp; developed technical assistance material for Purchase of Development Rights Program</td>
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### Viable Natural-Resource-Based Industries (Continued)

<table>
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<tr>
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<tbody>
<tr>
<td><strong>Sustainable Agriculture (Continued)</strong></td>
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<tr>
<td><strong>Marketing</strong></td>
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<tr>
<td>• A feasibility study of a statewide central market concluded that continuing regional markets was more cost effective.</td>
<td></td>
</tr>
<tr>
<td>• Established a farmers market at Colt State Park, bringing the total number of farmers market locations statewide to 14.</td>
<td></td>
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<tr>
<td><strong>Aquaculture</strong></td>
<td><strong>Aquaculture</strong></td>
</tr>
<tr>
<td>• Developed partnership with EDC and CRMC to develop marketing proposal.</td>
<td>• Complete aquaculture marketing project by December 2000.</td>
</tr>
<tr>
<td><strong>Provide Facilities &amp; Activities to Support Tourism</strong></td>
<td><strong>Provide Facilities &amp; Activities to Support Tourism</strong></td>
</tr>
<tr>
<td>• Continue design and construction of Blackstone River Bike Path:</td>
<td>• Blackstone River Bike Path:</td>
</tr>
<tr>
<td>• With DOT, continued development of Segment 6, P &amp; W Railroad in Cumberland and Lincoln (3 mi.) and began construction.</td>
<td>• Complete Blackstone Bike Path Segment 6 by Fall of 2001.</td>
</tr>
<tr>
<td><strong>Boating Safety</strong></td>
<td><strong>Boating Safety</strong></td>
</tr>
<tr>
<td>• Promote boating safety</td>
<td>• Distribute division logo lifesavers and boating jackets to 2100 children.</td>
</tr>
<tr>
<td>• Distributed division logo lifesavers and boating jackets to 1800 children.</td>
<td>• Complete database of individuals completing the boating safety course by February 2001.</td>
</tr>
<tr>
<td>• Provided 18 boating safety courses; certified 622 people.</td>
<td>• Support passage of mandatory boating education legislation.</td>
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<tr>
<td>• Prepared and provided support for a mandatory boating education bill.</td>
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<tr>
<td>• Maintained 20 patrols directed at boating under the influence to reduce number boating accidents caused by impaired boat drivers.</td>
<td></td>
</tr>
<tr>
<td><strong>Increase Public Safety And Public Access Areas, Parks, Management Areas And Fishing Access</strong></td>
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</tr>
<tr>
<td>• Built parking at Colt State Park.</td>
<td>• Complete state parks facility improvement projects by June 2001.</td>
</tr>
<tr>
<td>• Built boat ramp in Westerly.</td>
<td>• Build boat ramps:</td>
</tr>
<tr>
<td>• Built handicap access docks: Little Round Top &amp; Carolina Trout Ponds.</td>
<td>• Stone Bridge, Tiverton (Spring 2001).</td>
</tr>
<tr>
<td>• Continued partnerships for 9 special events.</td>
<td>• New sites: Barberville Dam, Wood River, and Black Point (Fall 2000).</td>
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<td></td>
<td>• Construct handicap accessible dock for shore fishing at Carbuncle Pond (Spring 2000).</td>
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<tr>
<td></td>
<td>• Boat ramp and dock at Haines State Park (Spring 2001).</td>
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<td>• Publish guides by June 2001 and coordinate with EDC to promote RI natural areas.</td>
</tr>
</tbody>
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## Abundant Open Space and Recreational Opportunities

<table>
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<td><strong>Open Space Preservation</strong></td>
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</tr>
<tr>
<td>• Worked with the legislature, local governments and land conservation groups to promote $34 million open space bond issue.</td>
<td>• Agreements are in place to purchase an additional 1,015 acres and negotiations are underway for another 5,259 acres.</td>
</tr>
</tbody>
</table>
| • State acquisitions – acquired 1,427 acres of land for preservation  
  Including expanded management areas:  
  • 325 acres in Arcadia.  
  • 66 acres in Great Swamp.  
  • 235 acres in South Shore  
  • Completed 6 open space grants (50/50 match) to local entities totaling over $1.2 million protecting over 500 acres valued at $5.76 million. | • Award 25 new local grants totaling $5.4 million for land acquisition and trail and greenway infrastructure development.  
• Close out 6 remaining open space grants to local entities totaling $1.7 million, protecting an additional 416 acres valued at $5.3 million. |
| **Forestlands**                     | **Forestlands**                           |
| • Purchased development rights to forested land, targeting habitat to foster biodiversity – 241.5 Forest Legacy acres acquired  
• 8 Forest Legacy applications filed with US Forest Service. | • Purchase development rights to forested land, targeting habitat to foster biodiversity; continue negotiations on 856 Forest Legacy acres.  
• Submit 7 Forest Legacy applications. |
| **Asset Management and Protection** | **Asset Management and Protection**       |
| • Drafted Asset Management Plan (AMP) for Park & Beach system that identified high priority needs for vehicle equipment replacement, staffing, and facility repair/replacement; and also recommended establishing a dedicated fund to finance repairs and enhancements.  
• Designed and bid major capital improvements to be funded by $28.5 million from the Rhode Island Capital Fund and $5 million in state bond funds over the next 5 years (construction bids continued to come in 30-40% higher than engineering estimates).  
• Major construction projects completed or underway include:  
  • Galilee Bulkhead - $1.2 million  
  • World War II - $670,000  
  • Misquamicut Parking Lot & Drainage - $735,000 | • Implement the AMP for state park system including $700K in vehicle and equipment replacement.  
• Seek appropriation of $3.6 million for Capital Asset Management projects.  
• Prepare AMP for Division of Forest Environment.  
• Major construction projects planned include:  
  • Aquatic Research Center at Fort Wetherill, scheduled for completion in September 2002 ($4.2 million).  
  • Bowdish Dam Repairs scheduled for completion in November 2001 ($854,000).  
  • Pulaski Park scheduled for completion in June 2002 ($504,000).  
  • Kelly House Museum scheduled for completion in October 2001 ($300,000). |
| **Bikeways, Greenways and Trails**  | **Bikeways, Greenways and Trails**        |
| • Developed 3.5 additional miles of the Blackstone Valley Bikeway and completed design for 7 more miles.  
• Designed 10 miles of the Trestle Trail Greenway. | • Administer 13 local greenway grants and 20 local trail grants. |
| **Other**                           | **Other**                                 |
| • Received the Annual Dept. of Interior Civil Rights Award for outstanding accomplishments in providing handicap access. | • Complete 24 grant projects totaling $3.2 million to develop local recreational areas. Total value of projects is $7.5 million. |
### Accountability
- Developed Department-wide work plans to focus efforts on environmental priorities and implemented quarterly reviews to measure results.
- Executed a two-year, flexible Performance Partnership Agreement/Performance Partnership Grant with EPA.
- Created an ombudsman position to resolve customer problems and conduct independent investigations.
- Professional Development Reviews (PDR) - began with non-union staff to develop staff capacity to carry out new challenges in work plan.
- Adopted Guidelines for Field Inspections that establish standards and procedures for inspections undertaken by DEM on private property.

### Fiscal Year 2001 Major Changes/Initiatives
- Develop a new 2-year Performance Partnership Agreement and Performance Partnership Grant with EPA.
- Explore the expansion of PDR to union staff in 2001 (proposal submitted to Department of Administration for master contract negotiations).
- Finalize Department enforcement policies by September 2001:
  - Monitor the effectiveness of and improve Guidelines for Administrative Inspections.
  - Finalize Critical Enforcement Timelines.

### Accessibility and Responsiveness
- Continued to expand work with stakeholders on issues ranging from landfill management to wetland regulation to watersheds.
- Convened quarterly Environmental Roundtables and Business Roundtables to improve communication and information exchange with stakeholders.
- Re-assigned and hired personnel in customer assistance call center, enabling it to handle a 63% increase in calls (11,698 calls) and a 100% increase in the number of walk-ins (2,176 walk-ins).
- Expanded website to include information such as the Open Space 2000 campaign, ombudsman information and final enforcement decisions.
- Formed an Information Management Unit (IMU) to improve development and management of information systems and to optimize the use of information technology.

### Fiscal Year 2000 Highlights/Results
- Convene an Agricultural Roundtable.
- Improve design, content, consistency, and user-friendliness of DEM website(s) by January 31, 2001.
- Improve public education and outreach by installing information kiosks at 10 wildlife management areas.

### Permit/Regulatory Streamlining
- Completed the design of a Permit Process Tracking and Information System (PPTIS), a computer infrastructure that will enable DEM to process and track permit applications more efficiently and allow for concurrent review among divisions.
- Received a $500,000 One Stop Grant from EPA to integrate environmental monitoring and compliance data with permitting.

### Fiscal Year 2001 Major Changes/Initiatives
- Phase-in PPTIS starting in Fall of 2000 with final implementation by June 2001. Additional PPTIS initiatives include:
  - Evaluate cost-effective alternatives to integrate GIS.
  - Develop policy to address public access to documents on PPTIS.
  - Develop policy on data entry quality control
  - Develop proposal for regulatory deadlines in all permitting programs.
## Fiscal Year 2000 Highlights/Results

### Permit/Regulatory Streamlining (Continued)
- With stakeholders, evaluated permitting processes for major programs to identify regulatory, administrative, policy, or statutory changes that will increase efficiency of the permitting process. Completed initial draft reports for ISDS and Wetlands.
- Continued to reduce permit backlogs:
  - Reduced RIPDES permit backlog from 76% in December 1999 to 36% by September 2000.

### Improving Enforcement
- Resumed mediation program for ISDS & Wetland enforcement cases & created a brochure to publicize the program. The mediation program allows DEM to resolve violations in a manner that is less costly and facilitates better environmental results.
- Issued timely enforcement responses to violations
  - Met target of 60 days from date of violation to issue informal enforcement letters in most programs (with the exception of wetlands due to staff vacancies).
  - Met target (60 days for high priority violations; 120 days for lower priority) for issuing Notices of Violations on formal enforcement actions in the air program.
  - Reduced wetlands complaint backlog by approximately 66% (from 350 to approximately 120) by reassigning staff and filling one vacancy.
  - Provided timely feedback to complainants – progress in program areas including water, septic systems, solid waste, and RCRA. Air feedback to complainants was low (50%) due to staffing shortages.
  - Drafted an amendment to the Supplemental Environmental Project (SEP) policy to establish a list of eligible projects (SEP bank) to provide greater flexibility and environmental benefits in enforcement actions.

## Fiscal Year 2001 Major Changes/Initiatives

### Permit/Regulatory Streamlining (Continued)
- EPA One Stop Grant – Complete and submit detailed work plan (120-Day Plan) by April 2001.
- Continue to reduce permit backlogs:
  - RIPDES backlog: by December 2000 – 20%; by December 2001 – 0%.
  - Continue tracking permit times to document progress and problems.

### Improving Enforcement
- Expand mediation program to include waste and underground storage tank programs.
- Reduced wetlands program complaint backlog from 120+ days to current incoming complaints in first 3 months of new fiscal year. Respond to all complaints within a few days.
- Reduce backlog of approximately 950 unresolved ISDS complaints by performing 150 follow-up inspections and formal enforcement actions.
- Fill 2 vacancies in January 2001 to meet the increasing number of complaints.