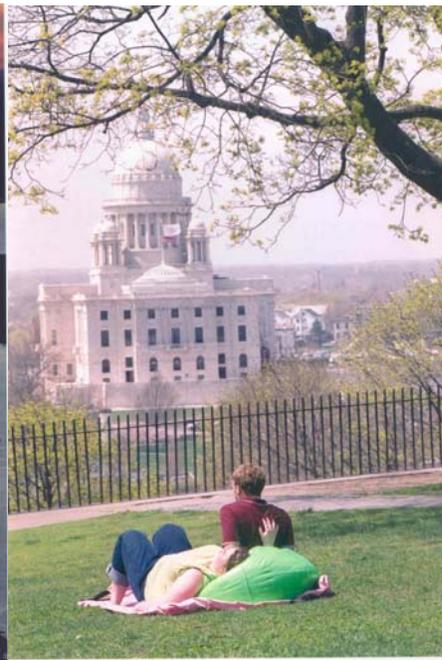




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# Strategic Work Plan Progress Report Fiscal Year 2003



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# Introduction

This is the Department's work plan progress report for the second year of DEM's second two-year Strategic Work Plan, Fiscal Year (FY) 2003, July 1, 2002 through June 30, 2003.

The progress report outlines our progress toward meeting the seven goals in our Strategic Work Plan: clean air, clean and plentiful water, livable communities, healthy ecosystems, natural resource-based industries and open and effective government.

## Highlights

Budget cuts over the last ten years, and the 9 % cut last year are reflected in the high percentage (35 %) of tasks that were delayed last year. Of the 282 tasks in the workplan, 64 % were either on track or completed. Another 1 % of the tasks were abandoned or replaced with other tasks. Lack of money or staff caused the delay of 51 % of the tasks that were delayed, while contract negotiations, purchasing delays, pending legislation and failure to reach consensus were cited as reasons for the other 49 % of tasks that were delayed.

We were not able to meet our commitment to developing and implementing 37 TMDLs between 2000 (when the TMDL program had eleven staff members) and 2002 when the staffing level was four. Every TMDL that was underway or planned to be started within the past two years was delayed.

The development of a comprehensive monitoring plan was delayed and we could not conduct assessments of waters to determine baseline conditions, conduct routine monitoring for compliance with permit limits nor to document the results of restoration projects. The Comprehensive Monitoring Strategy, which is under development, will include recommendations for funding monitoring activities.

Stormwater Phase II program that will require municipalities to develop and implement stormwater plans to help keep bacteria and excess nutrients out of the state's waters, began in 2003.

**Impact of weather** -The very hot, dry summer of 2002 resulted in a record number of days when ozone levels were high enough to affect those with respiratory problems; a drought that required DEM, US Department of Agriculture (USDA) and Farm Service Agency assistance to farmers, the first reported incidences of West Nile virus in Rhode Island; and large increase in visitors to state beaches, causing longer operating days.

**Air** – The 17 days in Rhode Island when ozone levels were considered unhealthy were due to emissions mainly from upwind sources (95%), particularly power plants in mid-western states, reacting with the sun to produce ground level ozone.

**Water** –The state's Drought Steering Committee issued a drought warning for 3 of the state's 7 drought regions (the southern half of the state and Aquidneck Island). In September the Governor issued a disaster declaration for agriculture making farmers eligible for USDA loans for irrigation ponds and wells. DEM helped farmers with expediting several dozen emergency permits for ponds.

The Department is making progress in reducing nutrients discharged from wastewater treatment facilities (WWTF) in the future. One WWTF has completed an upgrade that includes nutrient reduction and eleven other treatment plants that discharge to the Upper Bay and its tributaries will have nutrient limits in their permits within the next few years.

**Insect-borne diseases** - Eastern Equine Encephalitis, West Nile Virus (WNV) and Lyme disease are insect-borne diseases that remain threats to public health. DEM and the Department of Health continue to work with other states and the Center for Disease Control to refine prevention and response protocols with an emphasis on regular maintenance of potential breeding sites and preventing human exposure.

Table 1 shows the dramatic increase in WNV from when it was first detected in the United States in 1999. Rhode Island had two human cases in 2002 and 6 cases through October 2003, with no deaths. Also through October, seven animals tested positive for West Nile Virus in 2003, with two horses and an emu dying as a result of the infection. DEM has found a pool of a species of mosquitoes that bite humans and animals that tested positive for the virus.

YEAR	WNV Nationally		WNV in Rhode Island	
	Number of Cases	Number of Deaths	Number of Cases	Number of Deaths
1999-2001	149	18	0	0
2002	4156	284	2	0
2003 (through 10/29/03)	7718	166	6	0

There were 852 cases of Lyme disease in Rhode Island in 2002, with 394 cases occurring in Washington County. Preliminary data for 2003 show 500 reported cases through October. Eastern Equine Encephalitis (EEE) is rare, but the most dangerous of the three diseases. It has a 35% fatality rate and 35% of those who survive will have mild to severe neurologic deficits. In the past 20 years, there have been only 6 human cases of EE in Rhode Island, the last one in 1998.

*Energy/Climate Change/Greenhouse Gases* - The stakeholder group that developed the Rhode Island Greenhouse Gas Action Plan that included 49 consensus options for reducing the state's greenhouse gas emissions in 2001 progressed to Phase II in 2002 and developed the highest priority actions for implementation. The most effective and cost-efficient strategies include or build on existing air quality and energy measures (conservation, efficiency, clean and renewable fuels, control of sulfur dioxide, nitrogen oxides, and particulates and mercury emissions). The group developed legislation for a Renewable Portfolio Standard to require utilities to gradually phase in renewable energy sources to reach 15% to 20% of electricity supplied by 2020; vehicle efficiency incentives on new energy-efficient vehicles and disincentives on less efficient vehicles; and tax credits for retrofitting commercial and industrial buildings to use cleaner and more efficient fuel sources and energy-efficient measures.

*Open Space and Recreation* - In FY 2003 the state protected over 3,938 acres of land through purchase of development rights or fee title and grants to nonprofits for conservation and recreational purposes. Funding from the last bond referendum has been committed and there is a bond issue proposed to provide funding to protect more land in Rhode Island.

The State Comprehensive Outdoor Recreation Plan (SCORP) for the next five years, completed and submitted to the National Park Service in March of 2003, includes revised scoring criteria for recreation grants that award points for facilities in minority and low-income neighborhoods and underserved areas.

Despite limited funding the restoration began for the 20 acre Lonsdale Marsh, the largest freshwater wetlands system in the state, providing habitat that is not available elsewhere in an urban area.

*Marine fisheries* – DEM implemented new, short-term licensing regulations October 2002, to be superseded by overall license reform regulations by November 2003, as well as new sector fishery management plans. We worked with stakeholders on groundfish regulation to develop the Northeast Groundfish Plan Amendment 13, to go into effect in May 2004.

# Clean Air

Planned FY 2002/2003 Work Plan	Completed/Progress FY03
<p><i>Ozone and particulates</i></p> <ul style="list-style-type: none"> <li>Meet State Implementation Plan commitments for light-duty Inspection/ Maintenance (I/M) program by 7/01.</li> <li>Implement heavy-duty diesel I/M vehicle testing program by 1/02.</li> <li>Achieve commitment or enforceable mandate to reduce emissions of nitrogen oxide by 789,000 tons per year by 2003 in 22 northeast states, to reduce ozone precursor emissions upwind of Rhode Island.</li> <li>Submit a proposed ozone attainment demonstration to EPA by 11/02.</li> </ul>	<ul style="list-style-type: none"> <li>Registration denial system developed in FY 2002; Implementation delayed due to incompatible computer systems at DEM &amp; its contractor. Expected 12/03.</li> <li>DMV sticker enforcement in place.</li> <li>Failing vehicles show significant emissions improvement after repairs; final pass/fail standards &amp; higher repair cost limit implemented in FY02. Average emissions reductions after repairs in calendar year 2002: hydrocarbons 70%, carbon monoxide 82% and nitrogen oxides 63%.</li> <li>2001I/M report in review at DMV.</li> <li>2002 report 50% complete.</li> <li>On board diagnostics legislation enacted FY02.</li> <li>CMAQ funds for technician training approved by FHWA <ul style="list-style-type: none"> <li>Seminars held Fall 2002</li> <li>Training begun Spring 2003</li> </ul> </li> <li>70% complete – legislation in place</li> <li>DMV regulations promulgated 8/02.</li> <li>State Police are procuring equipment and training.</li> <li>Inspections expected to begin Spring 04.</li> <li>NOx SIP call is in place.</li> <li>Implement by 5/04.</li> <li>Submitted to EPA in 3/03.</li> <li>Approved 4/03</li> </ul>
<p><i>Alternative fueled vehicles</i></p> <ul style="list-style-type: none"> <li>75% to 90% of DEM replacement vehicles in FY02 and FY03 fleet are Alternative Fueled Vehicles (AFV) or Advanced Technology Vehicles (ATV).</li> <li>Continued increase in number of vehicles registered in RI that are AFV or ATV.</li> <li>Work with Fleet Operations to increase AFV fueling stations to 10 by 6/03.</li> <li>Propose adoption of the advanced technology provisions of the California Light Emission Vehicle II program along with other northeast states by 12/02.</li> </ul>	<p><i>Alternative fueled vehicles</i></p> <ul style="list-style-type: none"> <li>7 Fueling stations planned.</li> <li>Pontiac Ave facility complete awaiting acceptance by DOA.</li> <li>Green Airport facility contract complete; construction to start early 2004</li> <li>Delayed because no regional consensus was reached.</li> <li>Evaluating CAL LEV standards for possible adoption – recommendations due (on track) by 12/03.</li> </ul>
<p><i>Fine Particulates and air toxics</i></p> <ul style="list-style-type: none"> <li>Analyze data and determine whether Rhode Island meets fine particulate standard by 2003.</li> <li>Monitor toxic air pollutants at five metropolitan Providence sites and issue a report 3 months after data is available, about 10/02. If funded, extend monitoring to the Olneyville section of the Woonasquatucket River Watershed by 7/02.</li> <li>Promulgate Accidental Release Regulations by 12/02.</li> <li>Implement the Accidental Release Program.</li> <li>Preconstruction Permitting -</li> </ul>	<p><i>Fine Particulates and air toxics</i></p> <p>Data analysis completed 5/03. RI is in compliance with current fine particulate standard although levels on some days are high enough to be classified by EPA as unhealthy for sensitive populations.</p> <ul style="list-style-type: none"> <li>Final data from initial monitoring study has been evaluated and presented to EPA &amp; others 3/03.</li> <li>Comprehensive air toxics monitoring continues at one site.</li> <li>Chrome IV monitoring will be implemented at two sites 11/03.</li> <li>Preliminary monitoring at two sites in Olneyville was completed in summer 2003. Comprehensive monitoring at one of those sites will begin in fall 2003 for a one-year period.</li> <li>Delayed because of competing priorities - new date 4/04.</li> <li>Stakeholder process implemented 9/03.</li> <li>Will be implemented when regulations are promulgated.</li> <li><i>See Open and Effective Government</i></li> </ul>

## Clean Air (continued)

Planned FY 2002/2003 Work Plan	Completed/Progress FY03
<p><i>Energy and Greenhouse Gases</i></p> <ul style="list-style-type: none"> <li>• Work with state and regional partners to integrate and coordinate energy and environmental policy development.</li> </ul> <p>Through a stakeholder process:</p> <ul style="list-style-type: none"> <li>• Complete RI Greenhouse Gas Action Plan by 11/03.</li> </ul> <ul style="list-style-type: none"> <li>• Determine target reduction in greenhouse gas emissions by 12/02</li> <li>• Report and document trend in reduction of annual greenhouse gas emissions.</li> </ul>	<p><i>Energy and Greenhouse Gases</i></p> <ul style="list-style-type: none"> <li>• Ongoing</li> </ul> <ul style="list-style-type: none"> <li>• Action plan completed 7/02.</li> <li>• Further develop 6 high priority GHG reduction options from plan 7/20 to 5/30, including legislation to:               <ul style="list-style-type: none"> <li>• Require 20% of electricity come from renewable resources (did not pass in general assembly)</li> <li>• Allow tax credits for energy efficiency (passed by assembly)</li> <li>• Provide financial incentives for purchasing energy efficient vehicles (referred for further study by the general assembly)</li> <li>• Began planning for Phase III(9/03 – 6/04) to further refine high priority options</li> <li>• SEO developed fossil fuel retrofit for commercial, industrial, institutional facilities.</li> <li>• Statewide Planning developed TOD report.</li> </ul> </li> <li>• Adopted NEGC/EPC targets 7/02: reach 1990 levels by 2010, 10% below 1990 by 2020, 75% below 1990 for the long term.</li> <li>• Initial projected baselines completed FY02. Working on modeling methods with stakeholders.</li> </ul>

# Clean and Plentiful Water

Planned FY 2002/2003 Work Plan	Completed/Progress FY03
<p><i>Assessment and monitoring</i></p> <ul style="list-style-type: none"> <li>• Publish State of the States Waters 305B Report-Fall 2002.</li> <li>• Re-issue Impaired Waters 303d List as appropriate.</li> <li>• Update state water quality regulations, including bacteria standards for e coli and FDA's shellfish standard.</li> <li>• Complete comprehensive monitoring strategy by 6/02.</li> <li>• Expand monitoring as resources allow, e.g., increase number of lakes monitored by volunteers.</li> </ul>	<p><i>Assessment and monitoring</i></p> <ul style="list-style-type: none"> <li>• Published FY02</li> <li>• Published 3/03.</li> <li>• Delayed from 12/02 to 2/04 due to other priorities. Update to include bacteria standards for e.coli/enterococci and FDA's shellfish standard by 2/04.</li> <li>• Delayed due to contractor availability. Draft expected 11/03 with finalization by 12/03.</li> <li>• Watershed Watch volunteers monitored additional lakes.</li> </ul>
<p><i>Nutrient Reduction at WWTFs</i>  <i>For RIPDES permit backlog see Open and Effective Government</i></p>	<p>See Table 1.</p>
<p><i>Develop Water Quality Restoration Plans</i>  <i>WQRP to be completed July 2002- June 2003: # =37</i></p> <ul style="list-style-type: none"> <li>• Narrow River, Gilbert Stuart Brook, Mumford Brook (pathogens) – 12/31/01 (3).</li> <li>• Sakonnet River and Island Park Cove (pathogens) – 12/31/01 (2)</li> <li>• Kickemuit Reservoir (pathogens, nutrients/excess algae/turbidity) 12/31/01 (2)</li> <li>• Saugatucket River, Mitchell Brook, Rocky Brook, and Indian Run (pathogens) - 12/31/01; Indian Run (metals) 6/30/02; Saugatucket Pond (nutrients/noxious aquatic plants) 12/31/01(6)</li> <li>• Providence River (hypoxia/nutrients), Seekonk River (hypoxia) – 6/30/02 (2).</li> <li>• Palmer River (nutrients) – 6/30/02 (pathogens) – 12/31/01 (2)</li> <li>• Mashapaug Pond (hypoxia/nutrients) – 12/31/02 (1)</li> <li>• Crooked Brook (pathogens) – 12/31/02 (1)</li> <li>• Sands Pond (Block Island) (excess algae/taste &amp; odor/turbidity) - 6/30/02 (1)</li> <li>• Ninigret and Green Hill Ponds and Teal Brook, Factory Pond Brook (pathogens) - 6/30/02 (4)</li> <li>• Greenwich Bay, Buttonwoods Cove, Brushneck Cove, Hardig Brook (pathogens, nutrients/hypoxia); Greenwich Cove, Warwick Cove, Apponaug Cove (nutrients/hypoxia) – 6/30/02 (11)</li> <li>• Woonasquatucket River (metals, pathogens) – 12/31/02 (2)</li> <li>• Yawgoo Pond, Barber Pond, Chickasheen Brook (nutrients/hypoxia) – added to work plan TMDL in preparation; draft TMDL to EPA for preliminary approval 9/02. (+3)</li> <li>• Barrington/Runnins (pathogens)</li> </ul>	<p><i>Develop Water Quality Restoration Plans</i></p> <ul style="list-style-type: none"> <li>• Completed 16 TMDLs in FY02.</li> <li>• Completed 4 in FY03; loss of staff has delayed all TMDLs.</li> <li>• EPA approved FY 2002</li> <li>• Final TMDL submitted to EPA for approval 9/03; revised completion date 12/03</li> <li>• Revised completion date 12/03.</li> <li>• EPA approved pathogen TMDLs - 8/03.</li> <li>• Revised completion date of 6/04 for Indian Run (metals) &amp; Saugatucket Pond (nutrients).</li> <li>• Revised completion date 6/04.</li> <li>• EPA approved bacteria TMDL; nutrient TMDL to be completed 6/05</li> <li>• Revised completion date for hypoxia/nutrients &amp; pathogen TMDLs 6/04. completed 6/05.</li> <li>• EPA approved 2/03.</li> <li>• Revised completion date 6/04.</li> <li>• Revised completion date 12/03.</li> <li>• Bacteria source tracking studies conducted for Green Hill Pond FY02</li> <li>• Revised completion date for pathogen TMDLs 12/03; revised completion date for nutrient TMDLs 12/04.</li> <li>• Revised completion date 12/05</li> <li>• Completion date 12/03</li> <li>• EPA approved 9/02.</li> </ul>
<p><i>WQRP to be initiated July 2002- June 2003:</i></p> <ul style="list-style-type: none"> <li>• Blackstone River (pathogens, metals), Mill River (metals), Peters River (pathogens, metals), Valley Falls Pond (biodiversity, metals, pathogens, nutrients/hypoxia/excess algae growth).</li> <li>• Ten Mile River (Pb, biodiversity), Turner Reservoir (nutrients, metals), Slater Park Pond (pathogens, nutrients).</li> <li>• Upper Narragansett Bay (hypoxia).</li> <li>• Pawcatuck River (hypoxia, pathogens), Little Narragansett Bay (pathogens).</li> <li>• Pt. Judith Pond (pathogens).</li> <li>• Long Brook (pathogens), Burnt Swamp Brook (pathogens), Catamint Brook (pathogens), Ash Swamp Brook (pathogens).</li> </ul>	<p><i>WQRP to be initiated July 2002- June 2003:</i></p> <ul style="list-style-type: none"> <li>• Initiated in FY02/03, but significantly delayed. No progress in FY03.</li> <li>• Not initiated or included in FY04/05 work plan due to budget shortfall.</li> <li>• Suspended due to staffing constraints; not included in FY 04/05 work plan.</li> <li>• Initiated in FY 02/03, but significantly delayed.</li> <li>• Initiated in FY 02/03 (NSSP shoreline survey); suspended due to budget shortfall and staffing constraints; not included in FY04/05 work plan.</li> <li>• Not initiated or included in FY 04/05-work plan due to priority shift.</li> </ul>

## Clean and Plentiful Water (continued)

Planned FY 2002/2003 Work Plan	Completed/Progress FY03
<p><i>Groundwater</i></p> <ul style="list-style-type: none"> <li>Update Groundwater Quality Regulations for consistency with Waste Management Rules.</li> <li>Update groundwater protection strategy.</li> <li>All major groundwater suppliers will have approved protection plans by 7/03.</li> <li>Update wellhead map with refined well locations generated by Source Water Protection Program.</li> <li>Distribution of Biennial Wellhead Protection Report – 10/03.</li> <li>Revise the UIC Program regulations to focus on activities with a high potential to pollute groundwater and to streamline permitting for projects for lower risk injection sites by 9/02.</li> <li>Complete application for federal consistency review of UIC Program.</li> </ul>	<p><i>Groundwater</i></p> <ul style="list-style-type: none"> <li>Completion delayed from 9/02 to 1/04 by extensive mapping of wellhead protection areas.</li> <li>Behind schedule – delayed from 7/03 by work on ISDS regulations; new completion date 1/05.</li> <li>12 of the 15 major water suppliers have approved plans. Two others will submit plans for approval by 6/04.</li> <li>Delayed from 9/02 to 10/03. Project more complex than anticipated. Map to be included in Groundwater Regulations.</li> <li>Reporting is now combined with DOH Source Water Assessment reporting; no change in completion date. All public water supply wells have protection, but it varies.</li> <li>40% complete. Vacancy and other program priorities have caused delays. Anticipated completion delayed from 12/02 to 3/04.</li> <li>Vacancy and other program priorities caused delays, anticipated completion by 3/04.</li> </ul>
<p><i>Nonpoint Source Pollution</i></p> <ul style="list-style-type: none"> <li>Revise Non-Point Source Pollution Management Plan by 9/03.</li> <li>Fund nonpoint source abatement projects and oversee completion of up to 19 existing projects. Priority will be given to projects implementing WQRPs (TMDLS).</li> </ul>	<p><i>Nonpoint Source Pollution</i></p> <ul style="list-style-type: none"> <li>Plan delayed from 9/03 to 9/04 due to other priorities with grant management and revised stormwater manual.</li> <li>Awards to be made in fall '03. Contracting to begin fall '03.</li> <li>Issued RFP for NPS abatement projects 3/03. Received 44 applications. Awards pending approval by the director. Issue next nonpoint source abatement grant solicitation in late Spring 04.</li> </ul>
<p><i>Stormwater</i></p> <ul style="list-style-type: none"> <li>Develop general permit and application guidance for implementation of Stormwater Phase II Program by 12/02.</li> <li>Provide grants to communities to develop local stormwater plans to improve water quality.</li> <li>Develop Phase II stormwater BMP menu and update stormwater guidance to promote BMPs (funding required).</li> </ul>	<p><i>Stormwater</i></p> <ul style="list-style-type: none"> <li>Application guidance draft completed 3/03.</li> <li>Municipal Separate Storm Sewer System (MS4) General Permit to be final 10/03.</li> <li>Multi-sector Industrial General Permit to go to public notice 12/03, 20% complete. Finalize 3/04.</li> <li>Issued RFP for Stormwater Phase II plans 8/02</li> <li>Awarded grants totaling over \$1.2 million to 33 communities 8/02; overseeing projects to be completed by 3/04.</li> <li>Contracting with municipalities proceeding on schedule. Final plans from communities are pending the promulgation of the general permit for small MS4s.</li> <li>BMP menu delayed due to other priorities from 12/02 to 3/03.</li> <li>Final draft for public comment of Stormwater Design Manual delayed from 12/02 to 12/03. Project more complex than anticipated; drafting done through stakeholder process.</li> <li>Layout, graphics and printing to be completed after public comment.</li> </ul>
<p><i>Septic systems</i></p> <ul style="list-style-type: none"> <li>Continue Septic system Policy Forum and organize a WWMD workshop (2002) to facilitate policy development and exchange information.</li> <li>Implement ISDS Task Force recommendations including enhancing public outreach, as resources allow.</li> <li>Require the use of nitrogen removal systems in selected environmentally sensitive areas by 2002.</li> </ul> <p><i>Combined Sewer Overflows</i></p>	<p><i>Septic systems</i></p> <ul style="list-style-type: none"> <li>Completed workshop FY/02</li> <li>First Northeastern Onsite Wastewater Short Course held 3FY 03, with approximately 250 attendees.</li> <li>Administrative recommendations completed FY02.</li> <li>Regulatory revisions delayed from 7/03 to 3/04 due to conflicting priorities.</li> <li>To be addressed as part of regulatory revisions delayed from 7/03 to 3/04.</li> </ul> <p><i>Combined Sewer Overflows</i></p>
<ul style="list-style-type: none"> <li>Complete review of 100% design for NBC CSO Control Program, Phase I by 9/01.</li> <li>Phase I CSO Control Program implemented by 12/06 and reduce: annual biological oxygen demand (BOD) and Total Suspended Solids (TSS) loadings by 30%; fecal coliform by 40% to reduce the days Conditional Areas A and B are closed to shellfishing by 50% and 78% respectively.</li> </ul>	<ul style="list-style-type: none"> <li>Completed FY02. Last contract in Phase I design approved 8/02.</li> <li>Phase I construction initiated in 2001. Anticipated completion date for Phase I is 9/07.</li> </ul>

## Clean and Plentiful Water (continued)

Planned FY 2002/2003 Work Plan	Completed/Progress FY03
<p><i>Wetlands</i></p> <ul style="list-style-type: none"> <li>• Develop a statewide wetlands conservation plan by 9/02.</li> <li>• Develop draft streamlined application process for buffer planting projects – Spring 2002.</li> <li>• Identify and prioritize wetland restoration sites in the Woonasquatucket River watershed – complete draft 12/01.</li> <li>• Implement recommendations of the March 2001 “Options for Wetlands Mapping,” URI Natural Resources Science report. (contingent on funding).</li> </ul>	<p><i>Wetlands</i></p> <ul style="list-style-type: none"> <li>• Delayed by conflicting priorities; to be completed by 6/05; background research underway</li> <li>• Streamlined application process for buffer plantings delayed from 9/02 to 6/05 due to conflicting priorities.</li> <li>• Final report completed 11/02.</li> <li>• Website and orientation sessions completed 03/03.</li> <li>• No state funding to implement wetland mapping. EPA not funding color infrared photography since state has not made commitment to full mapping project</li> </ul>
<p><i>Outreach</i></p> <ul style="list-style-type: none"> <li>• Conduct wetlands Open House - Spring 2002.</li> <li>• Conduct two wetlands workshops – one each for consultants and municipal officials, Fall 2001</li> <li>• Update guidance and fact sheets</li> </ul>	<p><i>Outreach</i></p> <ul style="list-style-type: none"> <li>• Held in FY 02.</li> <li>• Entered a wetlands booth in RI Home Show 3/03.</li> <li>• Completed FY 02.</li> <li>• Completed 3/03.</li> </ul>
<p><i>Water Resource Management</i></p> <ul style="list-style-type: none"> <li>• Continue working with Water Use Stakeholders group for the Pawcatuck River to complete pilot study of water use and water withdrawal in the Queens River basin &amp; impacts on habitat by 2003.</li> <li>• Collaborate with the Water Resources Board and other stakeholders regarding development of a Drought Management Plan and adopt as an element of the State Guide Plan.</li> <li>• Collaborate with Water Resources Board and other watershed stakeholders on determining water needs including instream flow requirements.</li> <li>• Develop guidance for permit applicants and policies for evaluating projects.</li> </ul>	<p><i>Water Resource Management</i></p> <ul style="list-style-type: none"> <li>• Habitat Assessment study report published spring 03.</li> <li>• Hydrologic model simulation program to be completed fall 03.</li> <li>• Plan approved by State Planning Council as an element of the State Guide Plan 6/02.</li> <li>• Preliminary recommendations for state water allocation program in development, to be completed by 12/03.</li> <li>• Queens River basin study of impacts of water use and withdrawal in progress, to be completed by 6/04.</li> <li>• Preliminary recommendations of committee for stream flow standards on track to be completed 12/03.</li> <li>• Permitting guidance and policies delayed from 12/02 to 12/03 pending above report.</li> </ul>

**Table 1 - Nutrient Reductions from Wastewater Treatment Facilities**

Waterbody/Target	WWTF's Affecting Waterbody	WWTF Environmental Results <sup>1</sup>	WWTF Status/Target	Subwatershed Target
Providence/Seekonk Rivers and Upper Bay ■ Reduce nitrogen loadings from RI WWTFs by 45% and achieve acceptable levels of oxygen by 12/08. ■ TMDL due date 6/04.	NBC Bucklin Point <sup>2</sup>	Reduce seasonal WWTF nitrogen concentration by 55%, ammonia 50%. Further reductions may be necessary based on a TMDL.	Construction began 3/02, deadline for completion is 9/06.	
	NBC Fields Point		Nitrogen limits pending TMDL results	
	East Providence		Nitrogen limits pending TMDL results	
	East Greenwich	Reduce seasonal nitrogen WWTF concentration by 70%	Permit issued 9/01. Final design submitted 7/03. Comments issued 9/03. Construction to be completed 2.5 years from issuance of Order of Approval.	Greenwich Bay ■ Reduce nitrogen loading from East Greenwich WWTF 43% by May 2006 Bacteria TMDL due 12/03; Nutrient TMDL due 12/04
	Warren		Nitrogen limits awaiting results of TMDL (Palmer River).	Warren River
	Burrillville	Reduce seasonal WWTF nitrogen concentration by 65%, ammonia by 40%	Facility Plan (FP) approved 12/02. In compliance with permit limits. Final design for improvements due 1/04.	Blackstone River • Reduce seasonal ammonia loading from RI WWTFs by 65%, phosphorus by 55%
	Woonsocket	Reduce seasonal WWTF concentration of nitrogen by 50%, ammonia 90% and phosphorus by 80%. Further nitrogen reductions may be necessary based on a TMDL.	Completed 8/01.	
	Smithfield	Reduce seasonal WWTF concentration of nitrogen by 45%, ammonia 80% and phosphorus by 95%.	FP Amendment and Preliminary design submitted 5/03.	Woonasquatucket River • Reduce seasonal WWTF ammonia loading by 60% and Phosphorus by 85%
	Cranston	Reduce seasonal WWTF concentration of nitrogen by 65%, ammonia 90% and phosphorus by 70%.	FP approved 7/03. Final design delayed from 7/03 to 2/04. Complete design reviews by 10/04.	Pawtuxet River <sup>3</sup> Reduce seasonal nitrogen loading from WWTFs by 40%, ammonia 80% and phosphorous 55%, by 12/05
	Warwick <sup>4</sup>	Reduce seasonal WWTF concentration of nitrogen by 80%, ammonia 95% and phosphorus by 85%.	Construction started 4/02. Upgrade completion required by 8/04.	
West Warwick	Reduce seasonal WWTF concentration of nitrogen by 60%, ammonia 90% and phosphorus by 70%.	Final design for nutrient removal approved 4/02. Construction in progress, to be completed by 7/05.		
Little Narragansett Bay Reduce ammonia loading from Westerly WWTF by 25%.	Westerly	Reduce seasonal WWTF nitrogen discharge concentration by 15%, ammonia by 55. Further nitrogen reductions may be necessary based on a TMDL.	Final Design approved 4/02. Construction approximately 95% complete. To be completed by 10/03.	

- Notes:
1. Reduction in seasonal WWTF discharge concentrations based on average May-Oct 1995-1996 data and seasonal permit limit. Loading reductions for receiving waters based on a comparison of May-Oct 1995-1996 data (total nitrogen estimated as inorganic nitrogen + 2.0 mg/l of refractory nitrogen) against seasonal loading at full WWTF design flow and future discharge concentrations. Additional reductions are anticipated from WWTFs in MA.
  2. Bucklin Point was required to address ammonia toxicity and decided to go to denitrification to address both ammonia toxicity and nutrients. The level was determined by estimating the plant's contribution to Upper Narragansett Bay.
  3. Pawtuxet River - No TMDL planned - Waste Load Allocation was done with modeling prior to beginning TMDLs to determine levels for the 3 plants.
  4. Warwick has implemented interim measures to reduce nutrients prior to full construction.
  5. Nutrient of concern for estuaries is nitrogen. Ammonia toxicity may be a concern in all waters. Phosphorus is typically the nutrient of concern for tributaries. Tributaries may also impact downstream estuarine areas.

## Livable Communities

Planned FY 2002/2003 Work Plan	Completed/Progress FY03
<p><i>Sustainable Watersheds</i></p> <ul style="list-style-type: none"> <li>South County Watersheds and Woonasquatucket River Watershed Action Plans implemented by 6/03.</li> <li>Expand the watershed approach to the Blackstone watershed. Complete Action Plan by 6/03.</li> </ul>	<p><i>Sustainable Watersheds</i></p> <ul style="list-style-type: none"> <li>Approximately 75% of over 100 action items such as restoration, planning efforts and land acquisitions in progress/completed in the two watersheds. Implementation ongoing.</li> <li>Blackstone Watershed Draft Action Plan completed 12/02.</li> <li>Finalized 6/03.</li> <li>Implementation initiated.</li> </ul>
<p><i>Planning for Growth/Local Capacity</i></p> <ul style="list-style-type: none"> <li><b>NEW</b> - Complete Conservation Development Guidance Manual</li> <li>Work with urban planners, developers and other stakeholders to develop an urban environmental design manual by 9/03. Distribute manual to all major cities and watershed groups by 10/03.</li> <li>Assist the Governor's Growth Planning Council by developing recommendations for priority funding for state infrastructure investments by 2002 and a Planning Institute by 9/02.</li> </ul>	<p><i>Planning for Growth/Local Capacity</i></p> <ul style="list-style-type: none"> <li>Final Conservation Development Guidance Manual completed 6/03.</li> <li>Manual delayed due to grant/purchasing issues, scheduled for 6/04. 25% complete</li> <li>Growth Center Report completed FY02.</li> <li>Governor signed Executive Order identifying priorities to initiate implementation of growth center concept FY03.</li> <li>Growth Centers initiated FY03. Some pilot sites pending but growth centers must be initiated at the local level.</li> </ul>
<p><i>Environmental Equity (EE)</i></p> <ul style="list-style-type: none"> <li>Train 75% of DEM employees by 1/02</li> <li>Determine to the extent possible locations and populations that may be exposed to disproportionate environmental impacts. Report preliminary research results on cumulative exposures by 12/02.</li> <li>Determine populations or areas that lack access to or enjoyment of natural resources &amp; target these areas in development of the State Comprehensive Outdoor &amp; Recreation Plan (SCORP). Complete SCORP analysis by 9/02 and target funding to the areas identified as in most need <ul style="list-style-type: none"> <li>Adopt SCORP as element of State Guide Plan by 12/02.</li> </ul> </li> </ul> <p>Environmental Equity Reporting</p> <ul style="list-style-type: none"> <li>Prepare report with specific recommendations on improving EE in each Bureau &amp; division by 3/02.</li> <li>Annual report on progress of EE strategies and measures.</li> <li>Convene an Environmental Equity Advisory Council by 1/02.</li> <li>Complete report on accessibility, formats and multi-lingual strategies by 9/01.</li> </ul>	<p><i>Environmental Equity (EE)</i></p> <ul style="list-style-type: none"> <li>Training delayed – lack of staff in SPP. New target - train 50% of DEM staff on EE issues by 9/05.</li> <li>Completed FY02</li> <li>Completed; new scoring criteria for Recreation grants includes award of points for facilities in minority and low-income neighborhoods and underserved areas. <ul style="list-style-type: none"> <li>SCORP adopted into State Guide Plan 6/03.</li> </ul> </li> </ul> <p>Environmental Equity Reporting</p> <ul style="list-style-type: none"> <li>Completed FY02.</li> <li>Not done in FY03 due to lack of staffing</li> <li>Project dropped due to loss of staff.</li> <li>Research on translation services conducted. Report Completed 1/03. Implementation of recommendations pending funding.</li> </ul>
<p><i>Solid and Hazardous Waste</i></p> <ul style="list-style-type: none"> <li>Evaluate and process approximately 2500 permit applications for hazardous, medical, and septage waste transporters.</li> <li>Evaluate 3 temporary hazardous waste storage and/or transfer area applications.</li> <li>Inspect 100 solid waste facilities annually.</li> <li>Inspect &amp; audit a percentage of hazardous waste transporters permitted.</li> </ul>	<p><i>Solid and Hazardous Waste</i></p> <ul style="list-style-type: none"> <li>639 received in FY02.</li> <li>3071 permits processed in FY 03' with the bulk of renewals in June/July 2002.</li> <li>3 applications evaluated and approved.</li> <li>297 inspections completed in FY 03'.</li> <li>6 vehicles inspected, and 100% compliant.</li> </ul>
<p><i>Underground Storage Tanks (UST)</i></p> <p>Ensure that underground storage tank systems are properly installed, operated, and maintained to protect groundwater.</p> <ul style="list-style-type: none"> <li>Conduct 100 underground storage tank (UST) compliance inspections.</li> </ul>	<p><i>Underground Storage Tanks (UST)</i></p> <ul style="list-style-type: none"> <li>Completed 116 facility inspections in FY 2002.</li> <li>Completed 126 UST facility inspections in FY 2003.</li> </ul>

## Livable Communities (continued)

Planned FY 2002/2003 Work Plan	Completed/Progress FY03
<p><i>Underground Storage Tanks (UST) (cont.)</i></p> <ul style="list-style-type: none"> <li>Inspect USTs for compliance with corrosion protection and spill containment, and overflow protection requirements.</li> <li>Percent of UST facilities in significant operational compliance with the UST leak detection regulation.</li> </ul>	<p><i>Underground Storage Tanks (UST) (cont.)</i></p> <ul style="list-style-type: none"> <li>94 of 116 – 81% of facilities inspected in compliance in FY 2002.</li> <li>110 of 126 – 87.3% of facilities inspected in compliance in FY 2003.</li> <li>34 of 116 – 29.3% of facilities inspected in compliance with leak detection regulation in FY 2002.</li> <li>39 of 126 – 30.9% of facilities inspected in compliance with leak detection regulation in FY 2003.</li> </ul> <p>More than 95% of facilities had leak detection equipment in place. Non-compliance with leak detection requirements mainly involved a failure to inspect or test leak detection system components. Slight increase in leak detection compliance for FY 2003.</p>
<p><i>Leaking Underground Storage Tanks (LUST)</i></p> <p>Ensure that leaking underground storage tank (LUST) sites are investigated and cleaned up.</p> <ul style="list-style-type: none"> <li>Pascoag MTBE Clean up</li> <li>Percent of known contaminated sites fully investigated. (LUST)</li> <li>Percent of known contaminated sites now in compliance with applicable clean up standards. (LUST)</li> </ul>	<p><i>Leaking Underground Storage Tanks (LUST)</i></p> <ul style="list-style-type: none"> <li>Prepared for bio-reactive remediation for Pascoag Utility District/Main Street Mobil contamination problem to be implemented by 7/03.</li> </ul> <p>Eighty-six percent of sites were fully investigated in FY03.</p> <ul style="list-style-type: none"> <li>56 LUST sites closed in FY 03.</li> <li>1216/1548 = 78.6% (not including those in long term monitoring)</li> <li>1326/1548 = 86% (NFA [No Further Action] and in long term monitoring).</li> </ul>
<p><i>Persistent Bioaccumulative Toxins (PBTs)</i></p> <p><i>Lead</i></p> <ul style="list-style-type: none"> <li>With EPA, DOH, RIHMFAC, municipalities, private &amp; non-profit sectors &amp; the legislature develop comprehensive policy by July 2003.</li> <li>Form a task force/committee to coordinate and focus efforts on eliminating lead poisoning by January 2003.</li> <li>Clearly define DEM's role to address lead enforcement and coordinate efforts with other agencies and organizations by 9/01.</li> </ul>	<p><i>Persistent Bioaccumulative Toxins (PBTs)</i></p> <p><i>Lead</i></p> <ul style="list-style-type: none"> <li>Completed the Lead Comprehensive Plan 5/03 as required by Lead Hazard Mitigation Act of 2002.</li> <li>Developed Lead comprehensive plan 5/03</li> <li>Mitigation standards 5/03</li> <li>Lead Awareness Educational campaign 5/03</li> <li>Enforcement is included in the Lead Comprehensive Plan.</li> </ul>
<p><i>Mercury</i></p> <ul style="list-style-type: none"> <li>Develop a comprehensive implementation plan for mercury reduction and education by 8/01.</li> <li>Mercury thermometers are reduced or eliminated from RI households through implementation of a thermometer take-back program (contingent on funding).</li> </ul> <ul style="list-style-type: none"> <li><b>NEW</b> – Work with Department of Administration (DOA) to procure low/non-mercury items for state contracts</li> <li><b>NEW</b> - Safe Schools</li> </ul>	<p><i>Mercury</i></p> <ul style="list-style-type: none"> <li>DEM drafted Regulations. Legislative changes in 6/03 necessitated another revision. Revised regulations to be completed and implemented by 3/04.</li> <li>Three mercury thermometer take-back events held, 281 thermometers, 14 thermostats, and 13 other mercury-containing items were collected.</li> <li>Staff resigned – no staff available</li> </ul> <p>Note: An average home thermometer has 1.59 grams of Mercury.</p> <ul style="list-style-type: none"> <li>Provided training to state buyers on legal requirements.</li> <li>Developed specifications for state contracts for TVs, VCRs, plumbing, HVAC and automobiles; implementation will proceed as contracts expire, none expired in FY03.</li> <li>Trained approximately 150 science teachers/school officials on lab safety using Lab Safety, A Resource Guide, developed in FY02 by Brown University</li> <li>Continue to identify non-mercury products for use in schools.</li> <li>Worked with stakeholders to amend DOEd/DOH School health regulations to ban many chemicals in schools.</li> <li>Regulations approved 9/03, to be implemented in 2005.</li> </ul>

## Livable Communities (continued)

Planned FY 2002/2003 Work Plan	Completed/Progress FY03
<p><i>Closed/Abandoned Landfills</i></p> <ul style="list-style-type: none"> <li>Review remedial investigation for the closed Cranston Sanitary Landfill.</li> <li>Complete design of remedy at Rose Hill Landfill by 9/02.</li> <li>Select contractor for implementation of remedy at Rose Hill Landfill by 3/03.</li> <li>Implement program to assess impacts from closed or abandoned municipal landfills by 12/01.</li> <li>Draft agreement with responsible parties for capping and investigation of the West Kingston/URI landfills by 6/02.</li> </ul>	<p><i>Closed/Abandoned Landfills</i></p> <ul style="list-style-type: none"> <li>Supplemental work investigation proposed FY03.</li> <li>Awaiting work to be performed.</li> <li>Draft remedial investigation by 9/04, final by 6/05</li> <li>Final RD for Rose Hill in development, to be completed by December 31, 2003. Delayed due to negotiations</li> <li>Awaiting completion of design due 12/03.</li> <li>11 of 52 eligible landfills participating.</li> <li>7 of 11 under investigation</li> <li>4 of 11 investigations complete</li> <li>Investigation work plan approved, investigation initiated in 10/02.</li> <li>Investigation underway.</li> </ul>
<p><i>Dam Safety</i></p> <p>Implement a comprehensive dam safety strategy including:</p> <ul style="list-style-type: none"> <li>Seeking funding for private and municipally owned dams (pending legislative approval).</li> <li>Developing comprehensive dam safety regulations.</li> <li>Establishing baseline conditions for regulated dams; track repairs, as part of a comprehensive dam safety strategy.</li> </ul> <p><b>NEW:</b> above changed to: Analyze dams to update dam hazard classifications.</p> <ul style="list-style-type: none"> <li>Developing and implementing a repair schedule for state-owned dams.</li> <li>Streamline permitting of dam repairs consistent with new rules and policies of Governor's Dam Safety Task Force Fall 2001.</li> </ul>	<p><i>Dam Safety</i></p> <ul style="list-style-type: none"> <li>Was to be done through legislation, which did not pass.</li> <li>Regulations developed; to be issued for public comment by 9/03.</li> <li>Project changed due to failure of legislation. DEM screening dams to verify classification, referring dams with questionable classifications to contractor for full evaluation and re-classification. <ul style="list-style-type: none"> <li>Contractor evaluated 68 dams (including high and significant hazard) in FY 2002 through National Dam Safety Program Act State Financial Assistance grant for Fiscal years 2003 through 2005.</li> <li>Contracted for 38 more evaluations in progress to be completed in FY04.</li> </ul> </li> <li>DEM inspected additional 125 dams, classified as low-hazard.</li> <li>Schedule completed for 5 DEM-owned dams 12/02. <ul style="list-style-type: none"> <li>Bowdish Dam repaired FY 2002.</li> <li>Stillwater Dam to be repaired in FYs 2004 and 2005. 2 dams in Curran State Park to be repaired in FY 2006.</li> </ul> </li> <li>Phase 2 rules revised, will go to public comment, projected completion date 3/04.</li> </ul>
<p><i>Forest Fires</i></p> <p>Coordinate training and equipment supply with local fire departments to aggressively fight forest fires.</p> <ul style="list-style-type: none"> <li>No homes lost to forest fires.</li> <li>Average forest fire size less than 2 acres.</li> </ul>	<p>There were 104 fires that burned 100 acres during the Fiscal year, 77,400 feet of forestry hose serviced and returned to municipal fire departments.</p> <ul style="list-style-type: none"> <li>No homes lost to wildland fire.</li> <li>Average fire size was .96 acres, one half of the target.</li> </ul>
<p><i>Tire Piles</i></p> <ul style="list-style-type: none"> <li>Provide oversight for Old Kent Rd. and Malodosian tire pile removal. Provide technical support and expertise for the Attorney General's Office in the event additional court action is needed to compel removal.</li> </ul>	<p><i>Tire Piles</i></p> <ul style="list-style-type: none"> <li>Completed FY02</li> </ul>
<p><i>West Nile Virus</i></p> <ul style="list-style-type: none"> <li>No human cases of WNV in Rhode Island</li> <li>Limit spraying to areas where EEE and WNV is found in mosquitoes</li> </ul>	<p><i>West Nile Virus</i></p> <ul style="list-style-type: none"> <li>No human cases. <sup>1</sup></li> <li>Continued West Nile Virus monitoring and prevention efforts with DOH.</li> </ul>
<p><i>Pesticides</i></p> <ul style="list-style-type: none"> <li>Seek funding to develop plan for a pesticide disposal program that addresses old, unused pesticides at farms and commercial facilities by June 2002.</li> </ul>	<p><i>Pesticides</i></p> <ul style="list-style-type: none"> <li>Project depends on state funding. Funding not available.</li> </ul>

<sup>1</sup>No human cases in FY03, which ended June 30, 2003.

## Livable Communities (continued)

Planned FY 2002/2003 Work Plan	Completed/Progress FY03
<p><i>Pesticides (cont.)</i></p> <ul style="list-style-type: none"> <li>Establish components of pesticide disposal program by 7/02 (contingent on funding)</li> </ul>	<p><i>Pesticides (cont.)</i></p> <ul style="list-style-type: none"> <li>Survey not done. Its purpose would be to determine disposal volumes for the above project, which will not be done until funding is available.</li> </ul>
<p><i>Pollution Prevention</i></p> <ul style="list-style-type: none"> <li>Assess and recommend strategies for implementing Integrated Pest Management (IPM) practices into Parks and Recreation operational procedures by 3/02.</li> <li>Implementation of IPM into Parks and Recreation facilities by 3/03.</li> <li>Inform regulated entities about voluntary ways to decrease pollutant generation.</li> </ul> <ul style="list-style-type: none"> <li>Number of facilities and businesses receiving DEM assistance in reducing pollution.</li> </ul>	<p><i>Pollution Prevention</i></p> <ul style="list-style-type: none"> <li>Delayed by other priorities. Limited use of pesticides in parks. Evaluating potential use of IPM in parks, to be completed by 3/04.</li> <li>Too soon.</li> <li>Attended 3 conferences in FY03.</li> </ul> <p><i>URI assisted approximately 15 companies in FY03.</i></p> <ul style="list-style-type: none"> <li>Provided field assistance regarding site-specific pollution problems.</li> <li>Published and distributed P2 newsletter to 3,000 RI businesses. Staff no longer available to publish and distribute newsletter.</li> <li>25 visits for site assessments</li> <li>10 visits (DEM, OTCA)</li> <li>40 Autobody ERP baseline audits</li> <li>100-150 phone consultations/ office meetings for compliance/ general assistance.</li> </ul>
<p><i>Brownfields</i></p> <ul style="list-style-type: none"> <li>Work closely with Economic Development Corporation and other stakeholders to develop and publicize financial incentives.</li> <li>Participated with legislative Brownfields task force – ‘01-’02.</li> <li>Participated in 2 EPA “brainstorming sessions” on implementation strategies for new federal brownfield guidance under development.</li> <li>Sixty acres of contaminated land remediated or otherwise reused as a result of Brownfields settlement agreements by 7/03.</li> <li>Enter into 18 Brownfields settlement agreements by 7/03.</li> <li>Brownfields Economic benefit: total assessed value (\$), taxes assessed (\$), estimated # of new jobs, estimated annual income tax (\$).</li> </ul> <ul style="list-style-type: none"> <li>Promote the Brownfields revolving loan fund.</li> </ul> <ul style="list-style-type: none"> <li>Develop Brownfields outreach materials by 7/02, including an informational website by 9/01.</li> </ul>	<p><i>Brownfields</i></p> <ul style="list-style-type: none"> <li>Applied for \$871k in new EPA programmatic funding support.</li> <li>Meetings ongoing with municipalities and non-profits on available funding.</li> <li>Insurance Report issued 12/03.</li> <li>Study on use of licensed professionals issued 12/03.</li> <li>EPA Guidance completed Spring 2003 with state input.</li> </ul> <ul style="list-style-type: none"> <li>Revised target to 200 acres in FY2002 and 2003</li> <li>Remediated 294 acres over last 2 fiscal years.</li> </ul> <ul style="list-style-type: none"> <li>Entered into 26 agreements over last 2 fiscal years.</li> <li>Running total since the beginning of the project in 1996.</li> <li>Total assessed value = \$72.8 million total.</li> <li>Taxes assessed = 2.2 million total.</li> <li>961 new jobs.</li> <li>Estimated annual state income tax = \$ 4.3 million.</li> <li>3 revolving loan applications reviewed.</li> <li>Supported EDC request for additional \$3 million in new revolving loan monies.</li> <li>Completed FY02.</li> <li>Updated as needed in FY03.</li> </ul>
<p>Economic benefits of Brownfields –</p> <p>1) There is lag time (sometimes a couple of years or more) between cleanup, construction and reuse (hiring, etc)</p> <p>2) Some Brownfields projects have no direct economic benefit (parks, bikepaths, open space)</p>	
<p><i>Emergency Response</i></p> <ul style="list-style-type: none"> <li>In concert with the Federal and State partners; revise the Area Contingency Plan.</li> <li><b>NEW</b> – Develop an All Hazard Response Plan to include fisheries Closure/Opening plan, Scientific Response Plan, and GIS Response Plan by 6/04.</li> <li><b>NEW</b> - Chair the state Emergency Support Functions workgroup</li> <li><b>NEW</b> – Develop multi vendor training MPA to better prepare DEM for response to oil spills and Hazmat emergencies.</li> </ul>	<p><i>Emergency Response</i></p> <ul style="list-style-type: none"> <li>Completed FY02</li> <li>First Draft Completed 6/03; finalize by 6/04.</li> <li>Continuing - Individual plans in development for the 17 individual function groups</li> <li>Completed 7/03.</li> </ul>

## Livable Communities (continued)

Planned FY 2002/2003 Work Plan	Completed/Progress FY03
<ul style="list-style-type: none"> <li>NEW - Respond to the Bouchard-120 Oil Spill In Buzzards Bay of April 27, 2003</li> </ul>	<ul style="list-style-type: none"> <li>Provided personnel and equipment to help Massachusetts and U.S. Coast guard with cleanup and monitoring 4/03 through 5/03.</li> <li>Natural Resource Damage Assessment continues, activities include shoreline assessment and bird impacts continuing.</li> </ul>
<p><i>Domestic Preparedness</i></p> <ul style="list-style-type: none"> <li>Through Department of Justice Grant, purchase new personnel safety and detection equipment to respond to Weapons of Mass Destruction (WMD) events.</li> <li>Prepare to identify potential terrorist activities.</li> <li>Collaborate with local, state and federal agencies to prepare to respond to environmental emergencies.</li> <li>Participate in Department of Homeland Security Training and in drills with other agencies.</li> <li>Respond to suspected terrorist threats.</li> </ul>	<p><i>Domestic Preparedness</i></p> <ul style="list-style-type: none"> <li>Continues; obtained Hazmat response trailer and an Infrared Spectrometer for determining the identity of unknown chemical compounds</li> <li>Continued terrorism evidence screening center established with Fire Marshall's Office in FY02.</li> <li>Continue to on Rhode Island Emergency Management Advisory Council, Domestic Preparedness subcommittee, Hazmat Working Group, Regional Response Team, Area Committee, and Port Safety and Security working Groups.</li> <li>Continue to participate in Domestic Preparedness drills and training for biological, chemical and radiological incidents. Training included: <ul style="list-style-type: none"> <li>Response to Terrorist Bombing, 10/02</li> <li>WMD Incident Management, 11//02</li> <li>Bioterrorism Response, 4/03</li> <li>RI Airport Corporation Table top Exercise, airport emergency response drill, 5/03</li> <li>DEM lead ICS training, 6/03</li> <li>DEM was lead agency for Foot and Mouth diseases exercise, 10/02</li> <li>Conducted radio protocol training for emergency response activities, 1/03</li> </ul> </li> <li>FY03: responded to 55 white powder threats throughout the state.</li> </ul>

## Healthy Ecosystems

Planned FY2002/2003 Work plan	Completed/Progress FY03
<p><i>Habitat Restoration</i></p> <ul style="list-style-type: none"> <li>• Begin Town Pond/Boyd's Marsh salt marsh restoration – 2001, complete 2004.</li> <li>• Ten Mile river anadromous fish run – complete feasibility study for installation of fish passageways – 2005.</li> <li>• Potter's Cove (Prudence Island) Salt Marsh restoration – Fall 2001.</li> <li>• Prudence Island – restore dry coastal meadow.</li> <li>• Establish Blackstone river stakeholder process for fish run restoration – 1st Phase identify technical solutions for fish passages compatible with existing uses – 2003.</li> <li>• Finalize and publish study of historic fisheries on the Blackstone river to help set restoration goals –2002.</li> <li>• Lonsdale Drive-In freshwater wetland restoration – Start restoration – Start restoration Spring 2002</li> </ul>	<ul style="list-style-type: none"> <li>• Feasibility study and design completed FY 2003. Restoration pending funding; may begin in 04 to be completed in 06. Overall project cost estimate \$2.8 million. Current non-federal match shortfall = \$190,000.</li> <li>• Feasibility study completed in FY 2002. Restoration pending funding. Overall project cost estimate \$1 million. Phase I restoration construction scheduled for FY2005. Current non-federal match shortfall \$500,000.</li> <li>• Completed 4/03; began ecological monitoring to document effectiveness of restoration.</li> <li>• Population of yellow thistle, which grows in dry coastal meadows and has been found in only one other place in RI, tripled in the restoration project completed in FY02.</li> <li>• Stakeholder project to develop Blackstone River Fisheries Restoration Plan completed 1/02. Blackstone Valley National Heritage Corridor Commission preliminary fish passage design on hold pending US ACOE 206 study to be completed in fall of 2003. Working with USFW and FERC license holders to identify funds for fisheries restoration; Slater Mill interested in restoring a sluiceway for fish passage. Requested ACOE to develop engineering plans, construction will depend on funding.</li> <li>• Report finalized and published 1/02.</li> <li>• Restoration of 20 acres completed 9/03. This is the largest freshwater marsh system in the state and is unique, providing vital habitat that is not available elsewhere in an urban area.</li> </ul>
<p><b>NEW - Identify riparian buffer restoration sites in Woonasquatucket Watershed</b></p>	<ul style="list-style-type: none"> <li>• Final report completed 11/02.</li> <li>• Restoration in progress at 4 sites (Smithfield and Providence) planning in progress at 1 site in Providence.</li> </ul>
<ul style="list-style-type: none"> <li>• Assist smaller restoration projects (Allin's Cove, Duck Cove) – dependent on funding –2003.</li> <li>• Submit grant proposal to the EPA Watershed Initiative grant program for the Bay Watershed.</li> <li>• With New England NEPs, submit grant proposal to NOAA Restoration Partnership to fund habitat restoration projects, 4/02.</li> <li>• With partners continue to develop Statewide Coastal Habitat Restoration Plan.</li> <li>• Complete NOAA grant for web-based tools for prioritizing restoration areas – 2002 (draft web portal done).</li> <li>• Mapping – Complete interpretation of aerial photos, mapping, restoration analysis, and wetlands loss trends for South Shore, Little Compton, and Block Island – 2003 (contingent on funding)</li> </ul>	<ul style="list-style-type: none"> <li>• Provided technical assistance and scoping for: <ul style="list-style-type: none"> <li>• Duck Cove completed in FY2002.</li> <li>• Allin's Cove and Woonasquatucket fish passages depend on funding.</li> <li>• Pawtuxet River Fish Passage: Total project cost estimate \$300,000. Current shortfall is \$167,000.</li> <li>• Woonasquatucket River fish passage.</li> <li>• Wood-Pawcatuck Fish Passage - Total project cost estimate is \$50,000 to rehabilitate Bradford Dam fish passage. Current non-federal shortfall is \$32,500.</li> </ul> </li> <li>• Received \$800,000 grant for fish passage and water quality restoration projects in the Narragansett Bay Watershed. RI received \$355,000 and Mass. received \$445,000. RI has committed its funding to 2 fish passages and an eelgrass restoration project. Needs 25% non-federal match</li> <li>• Deferred due to potential national application through the Association of National Estuary Programs in 2004.</li> <li>• Coastal Wetland Restoration Analysis in development, to be published by 12/03.</li> <li>• Planning for public workshops to be held 5/03 through 10/03.</li> <li>• Narragansett Bay Atlas of Coastal Habitats published 2/03.</li> <li>• Southern Rhode Island Coastal Habitat Atlas to be published by 12/04.</li> <li>• Received federal funds to complete GIS mapping of South Shore habitats.</li> <li>• Seeking funding to complete Southern RI Atlas.</li> </ul>

## Healthy Ecosystems (continued)

Planned FY2002/2003 Work plan	Completed/Progress FY03
<p><i>Habitat Protection</i></p> <ul style="list-style-type: none"> <li>Permanently protect habitat by purchase and conservation easements. Target: 3,000 acres per year total through federal, state, local, and private land acquisition.</li> </ul> <p>* see Open Space and Recreation Goal for more detail</p>	<p><i>Habitat Protection</i></p> <ul style="list-style-type: none"> <li>2,246 acres protected in FY02.</li> <li>3,938.21 acres - total land protected by all groups in FY03.</li> </ul>
<p><i>Wildlife Management</i></p> <ul style="list-style-type: none"> <li>Work with local land use authorities to encourage establishment of buffers between wildlife management areas and development to avoid or minimize conflicts relating to wildlife, hunting, recreation, and residential uses.</li> </ul>	<p><i>Wildlife Management</i></p> <ul style="list-style-type: none"> <li>Worked with local authorities and landowners on as needed basis to help resolve conflicts. Some species have reached nuisance status as a result of human expansion.</li> </ul> <p><i>See Resource Based Industries for more on wildlife management.</i></p>
<p><i>Wildlife Surveys and Population Assessments and Management Plans</i></p> <p>Conduct research to assess the status of wildlife populations, and develop and implement management plans. Sample 8 ponds and 20 stream locations for types and numbers of fish in state's watersheds to establish baseline information.</p> <ul style="list-style-type: none"> <li>Radio tag 40 ruffed grouse to determine movement and mortality.</li> <li>Continue monitoring: waterfowl breeding activities; population dynamics for upland game bird, big game, and furbearers.</li> </ul> <ul style="list-style-type: none"> <li>Collect and analyze information to set hunting limits and seasons.</li> <li>Continue to monitor all nesting sites of Piping Plover.</li> </ul> <ul style="list-style-type: none"> <li>Restore (cut brush) 10 acres/year of habitat for American Burying Beetle.</li> <li>Survey 65 colony nesting bird sites.</li> </ul> <ul style="list-style-type: none"> <li>Publish RI's Living Legacy: Identifying and Preserving the State's Biodiversity.</li> </ul>	<p><i>Wildlife Surveys and Population Assessments and Management Plans</i></p> <ul style="list-style-type: none"> <li>FY02: Surveyed 10 ponds and 35 stream locations.</li> <li>FY03: Surveyed 4 ponds and 14 stream location. Report pending.</li> <li>Job completed. Preliminary analysis indicates avian predation (owls and hawks) accounts for 58% of mortality.</li> <li>Continued collection of population of index information on wild turkey, ruffed grouse, waterfowl, woodcock and dove w/ federal and state partners. Trends differ with each species, e.g. wild turkeys were successfully re-introduced while woodcocks are declining.</li> <li>Banding in RI for Atlantic Flyway study ended in FY02. Population monitoring continues and population increases.</li> <li>Completed mute swan study report on mute swan populations and effect on submerged aquatic vegetation published in Northeastern Naturalist 10/03.</li> <li>Continued egg addling program. Completed Management Plan for R.I. Despite 20 years of population control, the swan population continues to grow and a national strategy for mute swan control is needed.</li> <li>Surveyed 460 wood duck boxes: <ul style="list-style-type: none"> <li>Discontinued 10 unproductive sites.</li> <li>Added 12 new sites and 30 new boxes.</li> <li>Partnered with Smithfield Conservation Commission and initiated habitat selection.</li> </ul> </li> <li>Completed survey of 89 osprey nests. Initiated attribute table for GIS coverage.</li> <li>Ongoing cooperative study with EPA of environmental contaminants in mink and fisher - results vary site to site.</li> <li>Ongoing, enhanced deer computer models with biological and GIS data to assess population for FY03.</li> <li>Completed for 2003. Although nesting pairs were up to 70 in FY03 from 58 in FY02, there were 72 young in FY03 compared 113 in FY02 due to predation</li> <li>Completed for 2003.</li> <li>Completed for 2003. The Great Black-backed and herring gull numbers were stable, while double-crested cormorant, glossy ibis, great egret and snowy egret numbers were down, and least terns and black-crowned night herons increased slightly.</li> <li>Delayed pending funding; publish by 6/04 with National Park Service funding.</li> </ul>
<p><i>Anadromous fish restoration</i></p> <ul style="list-style-type: none"> <li>Restore anadromous fish populations in coastal streams.</li> <li>Stock 500,000 Atlantic Salmon fry &amp; 15,000 smolts</li> </ul> <ul style="list-style-type: none"> <li>Monitor spring returns at selected streams.</li> </ul>	<p><i>Anadromous fish restoration</i></p> <ul style="list-style-type: none"> <li>Monitored 2003 returns. Results: 1 adult return. Consistent with other New England states. Nearly all wild salmon in the western Atlantic spawn in Canadian rivers. the U.S. population is down to a few hundred spawners in Maine rivers.</li> <li>Monitored 2003 return. Report pending.</li> </ul>

## Healthy Ecosystems (continued)

Planned FY2002/2003 Work plan	Completed/Progress FY03
<p><i>Invasive Species</i></p> <ul style="list-style-type: none"> <li>• Conduct population assessments, prepare and implement management plans for non-native species.</li> <li>• Draft DEM policy on the use of non-native plants in land management and enforcement actions based on list developed by the RI Invasive Species Council by Summer 2001.</li> <li>• Conduct a regional Invasive Species Workshop with New England National Estuary Programs, RI Invasive Species Council, The Nature Conservancy, NEIWPC, and US F&amp;W winter 2001-2002.</li> <li>• With New England National Estuary Programs (NEPs), conduct follow up Rapid Assessment Surveys (RAS) at 20 sites in New England estuaries (3 sites in Narragansett Bay).</li> </ul>	<p><i>Invasive Species</i></p> <ul style="list-style-type: none"> <li>• Continued to serve on advisory committee for the NRCS Wildlife Habitat Incentive Program (WHIP), awards grants to individuals, organizations, and the state for habitat improvement. Some projects control invasive species.</li> <li>• Implemented management plans to control invasives on small scale (areas less than 1 acre) as a management option to protect rare plant populations at two sites on state land (Beavertail and Matunuck).</li> <li>• Invasive Species Council has not yet adopted the Connecticut policy; has not met for more than 1 year.</li> <li>• Develop and implement a public relations campaign to educate public on what not to use in plantings by 6/05.</li> <li>• NEP invasive species workshop held 11/02 in Boston, Mass.</li> <li>• Completed RAS 7/03; final report pending.</li> </ul>
<p><i>Water Resource Management</i></p> <p>Collaborate with the Water Resources Board and other watershed stakeholders regarding the development of a Drought Management Plan and adopt as an element of the State Guide Plan</p>	<p><i>Water Resource Management</i></p> <ul style="list-style-type: none"> <li>• Plan completed and adopted FY02.</li> <li>• Assisted 50 farmers with wetlands permitting</li> <li>• Provided assistance to approximately 50 farmers relating to pond construction or maintenance.</li> <li>• Coordinated a federal agricultural disaster declaration with USDA due to drought in summer 2002.</li> </ul>
<p><i>Narragansett Bay</i></p> <ul style="list-style-type: none"> <li>• Provide administrative and technical support for Partnership for Narragansett Bay (PNB).</li> <li>• Develop a process for revising the Narragansett Bay Comprehensive Conservation and Management Plan – 9/02.</li> <li>• Produce major Bay environmental festival, Fall 2002.</li> <li>• Develop PNB Bay Journal – 2002.</li> <li>• Support the statewide fisheries management dialogue process at the Coastal Institute.</li> <li>• Develop proposal for EPA NEP Futures Grant program to conduct public survey and develop outreach on growth issues in Blackstone River watersheds in partnership with RISD, the Bryant College Environmental Marketing Program, and private sector by 2002.</li> <li>• With MA and EPA, implement bi-state Watershed Action Grant program to support Bay Summit goals by Winter 2002/2003.</li> <li>• Coordinate research and monitoring activities through the PNB.</li> </ul>	<p><i>Narragansett Bay</i></p> <ul style="list-style-type: none"> <li>• Ongoing.</li> <li>• Governor's Office is developing a Narragansett Bay and Watershed Commission. Framework for planning and action to be completed by 3/04 will be consistent with the Commission's findings. HUD/Chafee \$100,000 grant funded projects completed 9/03 – three studies and draft vision/goals statement for bay and watershed. See the Narragansett Bay Journal for reports.</li> <li>• Delayed due to lack of funding. Present to Governor's Narragansett Bay &amp; Watershed Planning Commission as an option for expanding Bay Day.</li> <li>• 5 issues published quarterly Summer 2002 through Summer 2003; Fall/Winter 2003 to be published by 10/03; distributed to over 130,000 watershed residents.</li> <li>• Process completed 8/02.</li> <li>• Partnership for Narragansett Bay HUD grant projects for vision/goals for Narragansett Bay and watershed replaced this project.</li> <li>• BAYWAG projects in implementation phase; developing second year RFP to be released 11/03. Projects included fish passages, eelgrass riverbank and salt marsh restoration, environmental education, environmental resource mapping for 3 communities, analysis and mapping of Bay and coastal ponds sediment pollution data, studies of habitat health and fish populations, and creation of website.</li> <li>• Ongoing. Applied for grants to support monitoring and to compile and analyze data that exists in different formats.</li> </ul>

## Healthy Ecosystems (continued)

Planned FY2002/2003 Work plan	Completed/Progress FY03
<p><i>Narragansett Bay (cont.)</i></p> <ul style="list-style-type: none"> <li>• Continue to coordinate and expand, as funding allows, the Bay Window monitoring and cooperative research on Narragansett Bay fisheries and water quality.</li> <li>• Continue Bay Window system of data sampling buoys in Narragansett Bay to obtain more complete information on bay conditions.</li> <li>• Complete year 2 of National Coastal Assessment program with Roger Williams University and EPA (35 stations in the Bay) – 10/01.</li> <li>• Continue to co-manage R.I. Habitat Restoration Team with CRMC and Save the Bay.</li> <li>• Conduct fifth annual Dissolved Oxygen Survey of Upper Narragansett Bay, - summer 2003</li> <li>• Conduct benthic sampling in 5 NE estuaries Spring 2003.</li> <li>• Conduct monitoring at the Narragansett Bay Estuarine Research Reserve.</li> <li>• Develop Indicators Index by 10/02.</li> </ul>	<p><i>Narragansett Bay (cont.)</i></p> <ul style="list-style-type: none"> <li>• Ongoing participation in Bay Window monitoring project with dissolved oxygen, fish tissues, fish populations, benthic, and water quality sampling components.</li> <li>• No funding received in FY 2003; potential funding of \$1 million for next federal fiscal year (Sen. Chafee submitted to Sen. Appropriations for FY 2004 but not final). The money would be split 50/50 between lobstermen for buyouts and monitoring.</li> <li>• Completed 2<sup>nd</sup> year in 10/01; identified stations and parameters Program extended by 3 years to FY 2006. Project used as a model for the Statewide Monitoring Strategy.</li> <li>• Restoration projects funded in FY02, not funded in FY03, but preparing for potential for funding in FY04 through State Coastal Habitat Trust administered by CRMC.</li> <li>• Completed 8/03; last year of 5-year volunteer effort to build dissolved oxygen baseline data for Narragansett Bay. Funding needed to continue. Need to integrate DO studies into the Statewide Monitoring Strategy.</li> <li>• Project changed, sampling conducted at 2 sites per estuary 7/03 as a follow-up to the 2000 Rapid Assessment Survey (RAS).</li> <li>• Conducted water quality monitoring at 6 sites around the island every half hour 24/7 for: temperature, salinity, ph, DO, chlorophyll, and turbidity.</li> <li>• Supported a graduate research fellow conducting research in the reserve on the effects of hypoxia on benthic communities and the marine life that prey on them.</li> <li>• Supported visiting researchers with a laboratory and overnight facilities or up to 10 at a time.</li> <li>• Held 2-day workshop to finalize indicators 5/03.</li> <li>• Project delayed due to funding delays, final report on Bay indicators completed 9/03.</li> </ul>
<p><b>NEW – Biodiversity</b> added for FY 2003.</p> <ul style="list-style-type: none"> <li>• Evaluate emulating the Massachusetts BioMap Project, dependent on funding.</li> </ul>	<ul style="list-style-type: none"> <li>• Not yet initiated; lack of funding.</li> </ul>

## Resource-Based Industries

Planned FY 2002/2003 Work Plan	Completed/Progress FY03
<p><i>Fisheries Management</i> Reinvent the State's fisheries management system to ensure sustainability of the fisheries resource and fisheries through:</p> <ul style="list-style-type: none"> <li>• Implementing short-term recommendations of the general assembly to improve licensing procedure Spring 2002.</li> <li>• Developing long-term strategies and implement when approved by stakeholders.</li> <li>• Introducing a statewide data collection system for all fisheries this calendar year to improve quality of catch and effort statistics used to manage our fisheries.</li>   <li>• Promulgating regulations for the possession and handling of shellfish by licensed shellfish harvesters by Spring 2002.</li> <li>• Developing programs and proposals to address:               <ul style="list-style-type: none"> <li>• Electronic license and data collection system by 1/03.</li> <li>• Principles to guide fisheries management by 10/ 2001.</li> <li>• Options for commercial fishing license reform by 1/02.</li> <li>• License system for recreational marine fishing by 4/03.</li> </ul> </li> <li>• Commercial aquaculture by 1/02.</li> <li>• Overall license restructuring by 1/02.</li> <li>• Implementing lobster management program; 40 trips to collect data on lobster population.</li> <li>• Monthly Fisheries Samplings:               <ul style="list-style-type: none"> <li>• 12 trawl stations; Bi-monthly: 26 trawl stations.</li> <li>• 4 coastal ponds.</li> <li>• 18 shore seine stations in Narragansett Bay.</li> <li>• Fixed stations in Narragansett Bay with gillnets.</li> <li>• Increased trout and large mouth bass angling opportunities through acquisition of access areas, 10% annual increase in hatcheries production.</li> <li>• Continuing to participate and provide research support to: the New England Marine Fisheries Council and Atlantic States Marine Fisheries Commission, adopting regulatory changes as needed.</li> <li>• Conducting port and sea sampling and water quality studies.</li> </ul> </li>   <li>• Annual sampling: shellfish samples for 60 Narragansett Bay sites.</li> <li>• Continuing marine recreational fishing survey (MRFSS) to characterize the catch and value of the marine recreational fishery in RI.</li> <li>• Strengthening and restructuring citizen's advisory panels that advise the Marine Fisheries Council.</li> <li>• Forming a partnership with NMFS to study fisheries problems in Narragansett Bay.</li> <li>• Conducting marine fisheries surveys at trawl stations and coastal ponds; collect shellfish samples; collect lobster population data.</li> </ul>	<p><i>Fisheries Management</i></p> <ul style="list-style-type: none"> <li>• Implemented new licensing regulation, 10/02.</li>   <li>• Implemented sector fishery management plans by rule 11/02.</li> <li>• Continuing discussions with stakeholders.</li> <li>• Charter and party boat captains began participating in weekly random sampling to gather data on number of trips, number of anglers, targeted species, area fished, and number of fish caught to begin building database to get accurate estimate of fishing effort and catch. Data analysis not complete.</li> </ul> <p>Regulations implemented 6/02.</p> <ul style="list-style-type: none"> <li>• Seafood dealer electronic data reporting initiated 1/03.</li> <li>• Several major dealers on line as of 6/03.</li> <li>• Completed FY02.</li> <li>• License reform regulations adopted 11/03.</li> <li>• Recreational fishing community adamantly opposed to licensing, initiative abandoned.</li> <li>• Implemented regulations 6/02.</li> <li>• License reform regulations in place 11/03.</li> <li>• Conducted lobster sampling FY02 and FY03. Lobster considered over fished.</li> </ul> <ul style="list-style-type: none"> <li>• Ongoing during FYs 02 and 03 surveys end October, with exception of trawl stations; data analysis reports due 4/04. Generally, bottom fish such as winter flounder and tautog numbers are down, while pelagic (mid-water) fish such as scup, herring, mackerel, bluefish, and striped bass are up.</li>   <li>• Monthly trawl survey and fall seasonal survey.</li> <li>• Monthly seine surveys in coastal ponds</li> <li>• Monthly seine surveys in Narragansett Bay.</li> <li>• Monthly sampling in Narragansett Bay.</li> <li>• Toste Farm pond stocked with trout 3/03.</li>   <li>• Hatchery production objective met for FYs 02 and 03.</li> <li>• Ongoing as needed</li>   <li>• 2002 water quality work completed.</li> <li>• 2003 port sampling to characterize commercial landings of scup, black sea bass, striped bass, tautog and bluefish ongoing.</li> <li>• 2002 completed; 2003 survey complete, data being analyzed.</li>   <li>• Marine recreational fishery survey done by 2 month sampling wave annually; 2003 data being analyzed</li>   <li>• Ongoing in cooperation with Marine Fisheries Council.</li>   <li>• Initiated in FY02 - funds suspended 2003. Soliciting new grant to continue effort.</li> <li>• All surveys continued in 2003.</li> </ul>

## Resource-Based Industries (continued)

Planned FY 2002/2003 Work Plan	Completed/Progress FY03
<p><i>Facilities</i></p> <ul style="list-style-type: none"> <li>Port renovations: provide upgraded port facilities for the commercial fishing fleet at Galilee and Newport by 4/03 and complete major renovations to marine fisheries laboratory facility at Fort Wetherill by 4/02.</li> </ul>	<p><i>Facilities</i></p> <ul style="list-style-type: none"> <li>Ft. Wetherill restoration completed FY02.</li> <li>New bulkhead in Galilee deferred from 5/03; to be completed by 12/04.</li> <li>Pier 9 construction completed FY02.</li> <li>Construction of Pier E to be completed by 12/03.</li> <li>Parking at Galilee – New parking plan successful – no vehicle with sticker was turned away even at busiest weekends. Both town councils pleased with results.</li> </ul>
<p><i>Forest and Agriculture stewardship</i></p> <p>Develop and implement programs with local agricultural growers and organizations, forestland owners, and the Rural Lands Coalition to:</p> <ul style="list-style-type: none"> <li>Provide technical assistance to 250 forestland owners by 6/02 and another 250 by 7/03.</li> <li>Establish farmers market at Fisherman’s Memorial State Park, Haines State Park by 7/01.</li> <li>Provide information on alternative forest businesses to assist forestland owners.</li> <li>Maintain or minimize loss of total acres in cultivation.</li> <li>Through marketing assistance, maintain high gross return per acre.</li> <li>Through marketing assistance help maintain high income from farmer’s markets and roadside stands.</li> <li>Increase the number of farmers participating in farmer’s markets.</li> <li>Increase the number of farmer’s markets.</li> <li>Work with the Agricultural Land Preservation Commission, Forest Legacy Program, cities and land trusts to leverage \$5 million of bond money to buy development rights of working farms over the next five years.</li> <li>Help farmers to mitigate effects of drought conditions and protect water quality by using best management practices.</li> <li>Finalize agricultural water withdrawal management plans by 8/01.</li> <li>Maintain readiness to implement protocol to respond to hoof and mouth disease.</li> </ul>	<p><i>Forest and Agriculture stewardship</i></p> <ul style="list-style-type: none"> <li>Assisted over 500 landowners in FY2002 and FY2003 to develop management plans for approximately 7,600 acres.</li> <li>Established market in Fisherman’s Memorial State Park in FY02.</li> <li>Established market Haines State Park 5/03.</li> <li>Held two workshops with landowner groups discussing silviculture and alternative forest products.</li> <li>35,000 acres in cultivation, no change from 1999 to 2000, most recent year statistics available.</li> <li>DEM does not track gross return per acre. However, USDA reports an increase in gross return from 1999 to 2000, and the value of WIC coupons redeemed at farmers markets was over \$165,000 for 2002.</li> <li>Maintained highest direct income per farm from direct marketing (farmers markets and roadside stands) in the country. RCRD Report December 2001.</li> <li>FY02: average number of farmers at each market increased from between 12 and 20 to between 15 and 20.</li> <li>FY03: average number of farmers at each market increased from 15 plus to 20.</li> <li>Total farmers markets in FY03 are 19, up from 17 in FY02.</li> <li>Five farms protected in FY2003.</li> <li>See Abundant Open Space and Recreation for more information.</li> <li>Expanded monitoring agricultural products and ground and surface waters to evaluate for water quality impacts after implementation of BMP’s on farms. Initiated in 2001, needs 3 years of data, still in data gathering phase</li> <li>Completed – delayed by stakeholder process that was more involved than anticipated (1st quarter of 2002).</li> <li>Plans incorporated into larger efforts for foreign animal prevention and response (plant pest detection and animal disease prevention)</li> </ul>
<p><i>Wildlife Management</i></p> <p>Manage wildlife to balance ecosystem needs, public uses, and public safety.</p> <ul style="list-style-type: none"> <li>Develop proposals and programs to address hunting and trapping as management tools to control excessive wildlife populations (deer, geese, beaver, coyote).</li> </ul>	<p><i>Wildlife Management</i></p> <ul style="list-style-type: none"> <li>Bird depredation bill passed to authorize DEM to issue permits to control nuisance birds FY02.</li> <li>Managed deer herd on Prudence Island to protect ecological diversity and public health. <ul style="list-style-type: none"> <li>Met with property owners and abutters to increase access for deer hunting.</li> </ul> </li> <li>Provided technical assistance to landowners who have problems with coyotes.</li> <li>Provided assistance to Portsmouth Community with reported bear family; despite many hours invested, could not substantiate.</li> </ul>

## Resource-Based Industries (continued)

Planned FY 2002/2003 Work Plan	Completed/Progress FY03
<p><i>Wildlife Management (cont.)</i></p> <ul style="list-style-type: none"> <li>• Develop programs to increase hunting opportunities.</li> </ul>	<p><i>Wildlife Management (cont.)</i></p> <ul style="list-style-type: none"> <li>• Prepared for upcoming deer and small game and waterfowl seasons.</li> <li>• Developed youth hunt for wild turkey for the spring 2003 hunt.</li> <li>• Acquired 450 new public management area; open 450 acres for hunters for fall 2003 season.</li> <li>• Initiated new pheasant permit tagging system to provide more opportunity and revenue for small game hunt season beginning 7/03.</li> <li>• Prepared woodchuck and squirrels educational pamphlet to enhance wildlife series.</li> </ul>

## Abundant Open Space and Recreational Opportunities

Planned FY 2002/2003 Work Plan	Completed/Progress FY03
<p><i>Open Space Preservation</i></p> <ul style="list-style-type: none"> <li>• Work with the Legislature, local governments, nonprofits, and state and federal partners to accelerate land preservation efforts through:</li> <li>• State acquisition of land. <ul style="list-style-type: none"> <li>• Protect priority farms through purchase of development rights.</li> </ul> </li> <li>• Acquire 300- 400 Forest Legacy acres FY 2002/03.</li> <li>• Accelerate land preservation efforts by leveraging state dollars to buy and protect land. Acquire/protect 3000 acres of land per year (state, local, private and federal land acquisition).</li> <li>• Providing financial and technical aid for local land acquisition.</li> <li>• Complete SCORP prioritization criterion, the Open Project Selection Process (OPSP), for land acquisition and recreational facilities by December 2002, implementation to start January 2003.</li> <li>• Provide GIS map of land prospects for conservation and continually update existing maps of preserved areas as land is acquired.</li> </ul>	<p><i>Open Space Preservation</i></p> <ul style="list-style-type: none"> <li>• Acquired 4 acres of land for development of Snake Den Park in FY02.</li> <li>• Acquired development rights to six farms in FY02.</li> <li>• Acquired development rights to four farms in FY03 and fee title to one. <ul style="list-style-type: none"> <li>• Knight Farm in Cranston, 74.87 acres.</li> <li>• Boesch Farm in east Greenwich, 36.57 acres.</li> <li>• Holscher – Good Earth Farm in Cranston, 20.34 acres.</li> <li>• Rocky Meadows Farm in S. Kingstown, 17.5 acres.</li> <li>• Ringrose Farm in Cranston, 51.67 acres, fee title.</li> <li>• Acquired 543 acres of forestland easements in Hopkinton and Coventry.</li> </ul> </li> <li>• FY03: Local Land Trusts: 1,304 acres</li> <li>• Non-profits: 576 acres</li> <li>• DEM: 1,694.83 acres</li> <li>• Farmland: 149.28 acres</li> <li>• Federal: 214.1 acres</li> <li>• Total acres protected: FY 2003 = 3,938.21</li> <li>• FY 2003 grant round in progress, awards to be made in 10/03.</li> <li>• OPSP Completed 12/02.</li> <li>• Identified properties to fill in gaps in management areas and to connect these areas.</li> </ul>
<p><i>Greenways, Bike Paths, Trails</i></p> <p>Increase number of recreational opportunities and improve current recreational facilities:</p> <ul style="list-style-type: none"> <li>• Complete Blackstone Bike Path &amp; Trestle Trail over the next three-four years.</li> <li>• Complete Snake Den Park by 6/06.</li> <li>• Repair the state-owned causeway to the breakwater in Salters Grove by 2003.</li> <li>• Design for universal access projects including Black Point Trail completed by end of FY04</li> <li>• Incorporate development of parking facilities and trails at Rome Point into budget request for FY03.</li> <li>• Complete construction of horse barns at Goddard and Lincoln Woods State Parks</li> <li>• Rebuild Table Rock Road bridge.</li> <li>• Pulaski State Park; construct bathhouse</li> </ul>	<p><i>Greenways, Bike Paths, Trails</i></p> <ul style="list-style-type: none"> <li>• Blackstone bike Path - 23 miles completed (completed design for 4 more miles 7/03).</li> <li>• Trestle Trail – completed 10% design for the 10-mile trail 6/03.</li> <li>• Conceptual design delayed from FY02 to 12/03 due to budget cutbacks, to be completed by 10/03.</li> <li>• Established a design committee, working with ACOE, CRMC, Warwick and neighborhood group to develop plan for construction by 8/04. Delay due to determining whether to provide for a fully flushed cove or enhance the existing wetland.</li> <li>• Delayed by lack of funding. Construction to begin in FY04.</li> </ul> <p>Not included in FY03 budget due to other priorities; survey for parking area completed; continuing planning and design.</p> <ul style="list-style-type: none"> <li>• Development pending funding.</li> <li>• Construction completed: <ul style="list-style-type: none"> <li>• Lincoln Woods, FY02.</li> <li>• Goddard Park, 8/03.</li> </ul> </li> <li>• Install electrical and fire alarm systems by 12/03.</li> <li>• Design completed 6/03; construction to be completed by 6/04.</li> <li>• Completed FY02.</li> </ul>

## Abundant Open Space and Recreational Opportunities (cont.)

Planned FY 2002/2003 Work Plan	Completed/Progress FY03
<ul style="list-style-type: none"> <li>Award grants of \$3.4 million to municipalities, including Distressed Community grants for park construction and renovation by 11/01.</li> <li></li> <li>Work with RIDOT &amp; State Greenways Council for expanded state funding to match federal funding for bikeway, equestrian, &amp; recreational trail projects over next three years. Target: \$7 million additional state funding over the next 3 years.</li> <li>Work with local sponsors to complete \$2 million worth of grant funded projects to match federal funding through technical oversight and reimbursement for projects, 6/02.</li> </ul>	<ul style="list-style-type: none"> <li>Completed FY02.</li> <li>FY03: Prepared for \$3 million grant round to be issued 4/03 delayed due to updating of the SCORP and revisions to Recreation Grant Selection process. To be awarded 4/04.</li> <li>FY02: Transportation Advisory Committee recommended \$12.5 million over the next 3 years for recreational trails.               <ul style="list-style-type: none"> <li>FY03: Prepared grant round for 10/03 to award \$390,000 to municipalities and nonprofits.</li> </ul> </li> <li>Issued RFP, evaluated projects for \$2.5 million in grants to be awarded 10/03.</li> </ul>
<p><i>Increase Public Safety &amp; Public Access</i></p> <ul style="list-style-type: none"> <li>Increase public safety &amp; access through construction of boat ramps and acquisition of shore fishing sites.</li> </ul>	<p><i>Increase Public Safety &amp; Public Access</i></p> <ul style="list-style-type: none"> <li>Boat ramps - Construction of Ft. Adams dock, Gaspee boat ramp, and Coventry shore fishing access have been delayed due to permitting. No construction during 2003.</li> </ul>
<ul style="list-style-type: none"> <li>Complete the South County Greenspace project to assist communities to identify and map their important natural, cultural, and recreational resources. Develop community audits to explain how towns can more effectively preserve open space via conservation development</li> </ul>	<ul style="list-style-type: none"> <li>Final Project Report completed 4/03</li> </ul>
<ul style="list-style-type: none"> <li>Replicate the South County Greenspace project in the Woonasquatucket watershed.</li> </ul>	<ul style="list-style-type: none"> <li>Woonasquatucket greenspace project initiated. Project 70% complete. Expected completion by 5/04.</li> </ul>
<p><i>Events</i></p> <ul style="list-style-type: none"> <li>Schedule 6 – 10 events per year including Bay Day, the Jazz and Folk Festivals at Fort Adams, road races, charitable events, and the New England Championship Regatta.</li> </ul>	<p><i>Events</i></p> <p>DEM hosted the:</p> <ul style="list-style-type: none"> <li>Governor’s Bay Day on July 27, 2002 at Colt State Park and Roger Wheeler State Beach.</li> <li>R.I. Historical Preservation &amp; Heritage Commission Pow-Wow at Colt State Park August 23 and 24, 2002.</li> <li>RI Bike Safety Day on July 24, 2002 at Goddard Park.</li> <li>Folk Festival at Fort Adams 8/3 and 8/4, 2002.</li> <li>Jazz Festival at Fort Adams 8/10, 8/11, 2002.</li> <li>Annual Autumnfest Celebration at World War II State Park over Columbus Day weekend October 11-14, 2002.</li> <li>Participated in the R.I. Spring Flower and Garden Show at the R.I. Convention Center February 20-23 in 2003. Display represented the diversity of the state's public recreational resources and contained DEM’s new 16-foot Pacific Yurt - a large domed tent. DEM considering acquiring several yurts to rent to groups.</li> </ul>

## Open and Effective Government

Planned FY2002/2003 Work plan	Completed/Progress FY03
<p><i>Work Plans</i></p> <ul style="list-style-type: none"> <li>Strategic Work Plan for FY2002 and 2003 Completed 7/01</li> <li>Annual reports with progress indicators and performance measures published by 2/02 and 2/03.</li> </ul>	<p><i>Work Plans</i></p> <ul style="list-style-type: none"> <li>Update to FY02/03 Work Plan completed 7/03.</li> <li>New FY 04/05 Strategic Work Plan drafted, to be completed 11/03.</li> <li>2002 Annual report published March 2003.</li> </ul>
<p><i>Efficient Operations</i></p> <p>Continue to improve efficiency of internal operations:</p> <ul style="list-style-type: none"> <li>Implement Online Timecard System 9/02</li> <li>Implement improved cost allocation system to track program/project expenditures by 12/02.</li> <li>Work with the joint labor/management committee as established by contract negotiations to expand Professional Development Reviews to union staff in FY 2003 to ensure work plan objectives are met.</li> <li>Develop plan to address projected turnover rate in the next 5 years at DEM by 6/02.</li> <li>By 2003, complete review of job specifications &amp; salary levels to ensure that responsibilities &amp; authorities are clearly defined and meet program objectives.</li> <li><b>NEW</b> - Develop record handling policy to enhance DEM's response to public information requests</li> <li>Provide diversity training to Department staff (contingent on funding).</li> </ul>	<p><i>Efficient Operations</i></p> <ul style="list-style-type: none"> <li>Began implementation 9/02, delay in getting all staff on due to funding and technical issues. Pilot Parks &amp; Recreation 11/03.</li> <li>Delayed due to staffing and technical issues, will be implemented by 11/03</li> <li>Delayed due to contract negotiations. DEM will propose performance reviews for unionized staff as part of mini-contract negotiations with Local 2881 in 2004.</li> <li>Developed system to prioritize program needs and related workforce needs 7/02.</li> <li>Compiled monthly vacancy reports and hiring priorities using the system.</li> <li>Continuous review of job specifications continuing for all offices, some delay due to Fiscal Fitness project.</li> <li>Policy completed 6/03.</li> <li>Held contingent on funding.</li> </ul>
<p><i>Public Outreach &amp; Participation</i></p> <ul style="list-style-type: none"> <li>By 7/03, develop a coordinated Public Outreach and Public Participation Plan that determines DEM outreach and public participation needs, identifies outreach and public participation opportunities, coordinates materials, and engages DEM employees on outreach and public participation activities.</li> <li>Enhance DEM website as a resource for environmental information by 7/03.</li> <li>Working with RI Resource Recovery Corporation and Dept. of Health, publish and distribute quarterly reports to stakeholders, on implementation of the Central Landfill Action Committee recommendations.</li> <li>Explore potential for URI assistance in translating source water assessments (SWAPs) into strategies for drinking water outreach.</li> </ul>	<p><i>Public Outreach &amp; Participation</i></p> <ul style="list-style-type: none"> <li>Draft plan developed, implement by 1/04.</li> <li>The Watershed Notification System was implemented in 2002.</li> <li>Environmental education resource information was posted on the DEM website under Topics in 9/02.</li> <li>No updates received from RIRRC.</li> <li>Central Landfill Action Committee met its charge to develop recommendations and has been disbanded.</li> <li>Health Department funding URI to conduct workshop for municipalities to revise land use policies.</li> </ul>
<p><i>Assess the need for multi-lingual services</i></p> <p>Determine need for multi-lingual information dissemination to serve our increasingly diverse constituency.</p> <ul style="list-style-type: none"> <li>Develop brochures that benefit non-English speaking communities.</li> <li>Work with the Metropolitan School in translating the brochures</li> </ul>	<ul style="list-style-type: none"> <li>Grant awarded to DEM/DOH to assist the Asian community in alerting to the dangers of PCB and mercury in fish. (10/03)</li> <li>Working on translating brochures into Spanish. Con track for completion 12/03.</li> </ul>
<ul style="list-style-type: none"> <li>Supervisory Skills Development – Within 2 years of implementation of supervisor training course planned for 2002, 25 supervisors will have completed the curriculum (contingent on funding).</li> </ul>	<ul style="list-style-type: none"> <li>The Dept. of Administration, developing Management Development Institute and the Principles of Management course, has requested we delay our program. To further Supervisory Skills Development, DEM will conduct Supervisor Labor Relations Training Class with the Federal Mediation and Conciliation Service in 2004.</li> </ul>
<p>Continue to develop customer service orientation among management and line staff:</p> <ul style="list-style-type: none"> <li>Develop a department-wide policy and system to solicit customer feedback by 7/02.</li> </ul>	<ul style="list-style-type: none"> <li>Dropped due to loss of staff.</li> <li>Finalized an environmental permitting customer satisfaction survey and plan in FY02.</li> </ul>

## Open and Effective Government (continued)

Planned FY2002/2003 Work plan	Completed/Progress FY03
<p><i>Partnerships</i> Continue to work with stakeholder groups, including Greenhouse Gas, Marine Fisheries Task Force, Waste Task Force, and watershed, agriculture; forestry, and land trust organizations. Initiate environmental equity advisory group.</p>	<p><i>Partnerships</i> All ongoing, with exception of environmental equity advisory group, which is delayed.</p>
<p><i>Research and data management</i></p> <ul style="list-style-type: none"> <li>• Develop more effective and coordinated use of databases, current and historic with other state agencies and federal partners. Two examples: AIRS and STORET.</li> </ul>	<p><i>Research and data management</i></p> <ul style="list-style-type: none"> <li>• EPA analyzing compatibility of DEM databases and Storet fields, metadata issues, identifying hardware and software needs by 6/04.</li> <li>• Hydrologic mapping of rivers will improve integration of other databases.</li> </ul>
<p><i>E-Government</i> Continuously improve E-government services and technology:</p> <ul style="list-style-type: none"> <li>• Work with DOA and legislature to gain ability to accept credit card payments to offer on-line boating and fishing and hunting licenses.</li> <li>• Provide the public with the ability to view the status of permits and compliance agreements by 12/01.</li> <li>• Develop capability to allow submissions of selected permits electronically.</li> </ul>	<p><i>E-Government</i></p> <ul style="list-style-type: none"> <li>• Ongoing. DEM accepts credit card payments for some licenses through contractor; cannot yet accept direct credit card payments.</li> <li>• ISDS Permit Status Application launched 8/02; technical and administrative issue delayed integration into the state online system.</li> <li>• Portal activities halted 1/03 to 8/03 while new Governor's administration and the Fiscal Fitness Team renegotiated contract with NEI, the www.RI.gov manager. Will begin assessing the feasibility of accepting applications electronically.</li> </ul>
<p><i>Innovative Technologies</i> Develop a policy/position paper on using and promoting innovative technologies and information and management exchange by 6/02.</p>	<p><i>Innovative Technologies</i> Completed June 2002.</p>
<p><i>Staff Development</i> Develop program to improve and reinforce decision-making skills by focusing on problem solving, multi-program communication, and team building.</p> <ul style="list-style-type: none"> <li>• Develop a training curriculum for improving and reinforcing decision-making skills by 10/01.</li> <li>• Implement the first round of training on improving and reinforcing decision-making skills by 1/02.</li> <li>• Offer training on improving and reinforcing decision-making skills to all staff in Bureau of Environmental Protection by 12/02.</li> </ul>	<p><i>Staff Development</i></p> <ul style="list-style-type: none"> <li>• DOA has requested we wait until they complete their statewide mandatory Management Development Institute Training so DEM course will complement and not conflict with DOA's. They are close to finalizing their curriculum.</li> <li>• Not completed and on hold (see above).</li> <li>• Not completed and on hold (see above).</li> </ul>
<p><i>Permit Streamlining</i> Continue to Streamline Permit Processes</p> <ul style="list-style-type: none"> <li>• Conduct a survey of sources/facilities that have applied for DEM permits, approvals etc. to determine the need for additional Streamlining Task Forces.</li> <li>• Implement regulatory changes of the Site Remediation Permit Streamlining Task Force to the Arsenic standard.</li> <li>• <b>NEW</b> - Coordinate the Hazardous Waste Generation Fee Task Force to review DEM's fee structure and recommend ways to raise fees to support the program.</li> </ul>	<p><i>Permit Streamlining</i></p> <ul style="list-style-type: none"> <li>• The 2002 survey indicated that service improvements were needed in the ISDS and Wetlands permitting process.</li> <li>• The 2003 Customer Satisfaction Survey was mailed out 6/03. Results by 12/03.</li> <li>• Completed regulatory changes 6/03.</li> <li>• Regulations promulgated 1/03.</li> </ul>
<ul style="list-style-type: none"> <li>• Complete implementation of the Permit Process Tracking and Information System (PPTIS), a computer infrastructure to process and track permit applications more efficiently and allow for concurrent review among divisions by Fall 2001.</li> <li>• Continue to streamline permit processes, develop and implement a module within PPTIS to track the receipt and response to citizen complaints (One Stop Grant) by 12/03.</li> </ul>	<ul style="list-style-type: none"> <li>• PPTIS continues to be implemented and enhanced for Air Resources and Waste Management, full system implementation is delayed due to inadequate resources and insufficient funding. DEM is attempting to hire a consultant to evaluate methods to improve the system and reduce the operating costs and system maintenance burden. Target date to complete study is 3rd quarter FY04.</li> <li>• Activities associated with the One Stop Grant are dependant upon PPTIS implementation. Target: develop scope of work and request for proposals (RFP) by 12/03 with design work to begin third quarter FY2004.</li> </ul>

## Open and Effective Government (continued)

Planned FY2002/2003 Work plan	Completed/Progress FY03
<p><i>Permit Streamlining (cont.)</i></p> <ul style="list-style-type: none"> <li>With stakeholders, complete evaluations of all major permit programs where problems exist to recommend legislative, regulatory, policy and administrative changes to improve them and implement recommendations, in efforts to continue to streamline permit process.</li> <li>Reduce permit backlogs and improve predictability of permit decisions and time frames. See Division Work Plan for details.</li> </ul> <ul style="list-style-type: none"> <li><u>Wetlands</u>: Average decision time (PDs) improved from 126 days (for the month of 1/01) to 82 days (for the 2<sup>nd</sup> quarter '02). Progress slowed recently due to increased workload (more applications) and investment in outreach and training efforts (3) workshops between 12/02/01 and 5/30/02.</li> <li>Implement recommendations of the Wetlands Task Force including regulatory reforms to clarify rules and create new application tiers to support streamlining.</li> <li>Implement recommendations of the ISDS Task Force (to be determined).</li> <li>Implement recommendations of the Site Remediation Permit Streamlining Task Force including regulatory changes to change the Arsenic standard and permitting of marginal risk sites and other changes that were recommended to streamline the process.</li> <li>Develop and coordinate further training with Rhode Island Society of Environmental Professionals (RISEP).</li> <li>Preconstruction Permitting – Implement recommendations of Air Permit Streamlining Task Force including regulatory and administrative changes that were recommended that will streamline the process.</li> <li>Provide timely decision-making on applications for dredging, dewatering, and beneficial use and disposal of dredge materials. <ul style="list-style-type: none"> <li>Adopt criteria by policy to identify types of suitable areas for the beneficial reuse of dredge materials by 7/02.</li> <li>Work with CRMC to develop joint protocols and guidelines for coordinating dredging applications, 10/01.</li> <li>Develop integrated regulations for dredge material management and dredging, 1/02</li> </ul> </li> <li>Establish a dry cleaning self-certification program modeled on the autobody program by 6/03.</li> </ul>	<p><i>Permit Streamlining (cont.)</i></p> <ul style="list-style-type: none"> <li>Freshwater Wetlands Task Force Report completed in FY 2001.</li> <li>Site Remediation Task Force Report completed in FY 2002.</li> <li>ISDS Permit Streamlining Task force Report completed in 3/02.</li> </ul> <ul style="list-style-type: none"> <li><u>RIPDES</u> - reducing major permit backlog on track. <ul style="list-style-type: none"> <li>Goal reduce to 12% by 12/01, achieved 12/01</li> <li>Achieved 8% - 2/03.</li> <li>Westerly issued 6/02.</li> <li>Blount delayed by other priorities from 9/02 to 2/03.</li> <li>Goal reduce to 10% by 9/02 – goal revised to 4% by 9/03</li> <li>Goal not met due to other priorities.</li> <li>Warren issued 9/02.</li> <li>Goal revised 4% by 2/04 (Newport)</li> <li>Goal revised to 0% by 12/04 (Manchester St.).</li> </ul> </li> <li>Measure has been changed from measuring average days from application to preliminary determination to average days from application to final decision. In FY 02 it took 74 days and in FY 03 it took 94 days due to lack of staff (maternity leave and extended sick leave).</li> <li>CRMC and Wetland Task Force review of Phase 2 (and partial 3) rules to begin 10/03.</li> <li>Delayed. Draft Final Report completed FY02. Draft finalized rules to be completed 3/04; public workshops to be held 6/04 and promulgation of rules 12/04.</li> <li>Marginal Risk Policy finalized/implemented fall 2001.</li> <li>Marginal Risk Policy training session conducted Feb. 2002 with RI Society of Environmental Professionals (RISEP).</li> <li>Complete Site Remediation regulatory changes by June 2003.</li> <li>Arsenic regulatory revisions drafted 6/03.</li> <li>Public notice completed</li> <li>Held training session for RISEP members on new Hazardous Waste Regulations xx date.</li> <li>Deferred planned mutual training on basic site remediation due to lack of staff.</li> <li>Delayed – Pending Air Toxics Regulation revision to be complete March 04.</li> <li>Air Toxics Pilot Program began in July 02 and remains in effect.</li> <li>Promulgation of final program to be included with other rule changes.</li> <li>Criteria part of Dredge Regulations, implemented 2/03.</li> <li>Developed joint public hearing and application process, implemented 2/03.</li> <li>Solid Waste Regulations Appendix B promulgated FY02, recognizing dredge material is not solid waste.</li> <li>Dredge Regulations promulgated 2/03.</li> <li>Held planning meeting 7/02 to review compliance status of dry cleaners.</li> <li>Dry cleaning regulations to be completed by 10/03.</li> <li>Develop dry cleaner self-certification program by 9/04.</li> <li>Workbook and checklist in development for dry cleaners to be completed by 12/03.</li> </ul>

## Open and Effective Government (continued)

Planned FY2002/2003 Work plan	Completed/Progress FY03
<p><i>Permit Streamlining (cont.)</i></p> <ul style="list-style-type: none"> <li>•</li> <li>• Establish a self-certification process for lead paint contractors modeled on the autobody program by 12/03.</li> <li>• Establish a self-certification program for USTs modeled on the autody program by 1/04.</li> <li>• Complete Environmental Business Practice Indicators (EBPIs) in development for above 3 sectors by 3/04 and 6/04.</li> </ul>	<p><i>Permit Streamlining (cont.)</i></p> <ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>• Workbook and checklist in development for lead paint contractors to be completed by 12/03.</li> <li>• On track for 1/04.</li> <li>• Delayed due to lack of staff</li> <li>• On track for completion by due dates.</li> </ul>
<p>Coordination with other agencies</p>	<p>DEM and DOH evaluated consolidation and determined no redundancies exist and that current coordination process is working well.</p>
<p><i>Environmental Leadership Program (ELP)</i></p> <ul style="list-style-type: none"> <li>• Complete study of feasibility of establishing an Environmental Leadership Program (ELP) to encourage regulated entities to make environmental improvements exceeding compliance requirement and make recommendations for ELP elements by 9/01.</li> </ul>	<p><i>Environmental Leadership Program (ELP)</i></p> <ul style="list-style-type: none"> <li>• Completed September 2001.</li> </ul>
<p><i>Compliance Assistance</i></p> <ul style="list-style-type: none"> <li>• Complete autobody certification (ABC) program by 12/02, with 80-100% industry participation by 6/03.</li> </ul>	<p><i>Compliance Assistance</i></p> <ul style="list-style-type: none"> <li>• 65% complete – expected completion date 12/04 – biannual program</li> <li>• Developed wastewater and stormwater management policy for autobody shops. 5/03.</li> </ul>
<p><i>Fair and Effective Enforcement</i></p> <ul style="list-style-type: none"> <li>• Finalize an enforcement response policy to standardize enforcement principles, practices and procedures, 3/02.</li> <li>• Recommend changes to the Assessment of Administrative Penalty regulations to ensure that fines are appropriate for the non-compliant actions, by 6/02.</li> <li>• Issue timely and appropriate enforcement actions in response to significant noncompliance with environmental statutes and regulations. <ul style="list-style-type: none"> <li>• Target for FY03 to issue formal enforcement actions following identification of significant non-compliance was 180 days.</li> </ul> </li> <li>• Develop comprehensive policy to triage air complaints including visible emissions, fugitive dust, and odor to address the most urgent complaints immediately by 9/01.</li> <li>• Increase permit compliance inspections for wetlands permits and RIPDES minor permits.</li> <li>• Review complaints for possible criminal violations and work with Attorney General’s office on prosecution as appropriate. <ul style="list-style-type: none"> <li>• Focus on investigations of illegal solid waste and construction and demolition operations.</li> </ul> </li> <li>• Respond effectively to instances of significant non-compliance.</li> <li>• Training.</li> </ul>	<p><i>Fair and Effective Enforcement</i></p> <ul style="list-style-type: none"> <li>• Awaiting preliminary draft from Assistant Director. (FY02)</li> <li>• Revisions were put on hold, as no changes in the legislation were forthcoming. The last revision to the Assessment of Administrative Penalties was promulgated in 2000.</li> <li>• Meeting the target in some programs but not in others. - average days to issue formal enforcement in septic systems and UST cases in 114 and 154 respectively, however, average days to issue penalty actions in Air and Hazardous Waste is 229 and 240 respectively.</li> <li>• Draft policy in effect since 11/01. The most urgent complaints are handled on a priority basis.</li> <li>• Inspected 1 facility in Woonasquatucket Watershed FY01.</li> <li>• Completed inspections of 3 significant non-compliers 9/02</li> <li>• Completed inspections of 8 facilities by 6/03.</li> <li>• Conducted over 200 compliance inspections FY02.</li> <li>• Conducted 133 inspections in FY 2003 – due to staffing losses and focusing more on permit streamlining v. compliance.</li> <li>• Reviewed 2600 complaints, investigated 83 cases, brought 67 criminal charges.</li> <li>• Patriot Disposal/Hauling Company: court ordered closure of 2 sites, 5-year probation and \$125,000 fine.</li> <li>• NEED: 5 facilities closed down, license revoked, charges pending.</li> <li>• Metals Recycling LLC: Charges pending for illegal storage, transportation and operation of unlicensed hazardous waste and solid waste facility.</li> <li>• “Midnight dumper” for illegal disposal of a 55 gallon drum of highly flammable material: 3-year suspended sentence and 3-year probation.</li> <li>• Trained 98 officers at the RI Municipal Police Academy in environmental crimes awareness.</li> <li>• Distributed Environmental Crimes Detection, Investigation, and Prosecution booklet.</li> </ul>

## DEM/EPA Joint Targets for State Fiscal Years 2002-2003

DEM	EPA
<b>GOAL: Clean Air</b>	<b>GOAL: Clean and Healthy Air</b>
Objectives: <ul style="list-style-type: none"> <li>• Balanced and sustainable energy policy that reduces greenhouse gas emissions and criteria air pollutants</li> <li>• Meet ozone air quality standards by 2007</li> <li>• Maintain compliance with NAAQS: CO, NO<sub>2</sub>, SO<sub>2</sub>, Pb, PM<sub>10</sub></li> <li>• No source of air toxics shall pose an unreasonable risk to public health</li> </ul>	Objectives: <ul style="list-style-type: none"> <li>• Reduce Greenhouse gas</li> <li>• Reduce ozone exceedances</li> <li>• Reduce PM levels</li> <li>• Maintain compliance with NAAQS: CO, NO<sub>2</sub>, SO<sub>2</sub>, Pb</li> <li>• Reduce exposure to ambient air toxics</li> <li>• Reduce acid rain, mercury deposition</li> </ul>
DEM/EPA	
Targets: <ul style="list-style-type: none"> <li>• Determine with stakeholders target reduction in greenhouse gas emissions by December 2002               <ul style="list-style-type: none"> <li>• <i>Adopted NEGC/EPC targets 7/02: reach 1990 levels by 2010, 10% below 1990 by 2020, 75% below 1990 for the long term.</i></li> </ul> </li> <li>• Rhode Island meets the one-hour ozone standard by 2007.               <ul style="list-style-type: none"> <li>• <i>Attainment demonstration finalized and submitted to EPA in March 2003.</i></li> </ul> </li> <li>• Rhode Island determines attainment status for PM<sub>2.5</sub> air quality standards by July 2003               <ul style="list-style-type: none"> <li>• <i>Data analysis completed. RI is in compliance with current fine particulate standard (pm 2.5) although levels on some days are high enough to be classified by EPA as unhealthy for sensitive populations. EPA is considering modifying the standard.</i></li> </ul> </li> <li>• Rhode Island continues to meet all air quality standards for CO, SO<sub>2</sub>, NO<sub>2</sub>, Pb.               <ul style="list-style-type: none"> <li>• <i>RI meets all standards for CO, SO<sub>2</sub>, NO<sub>2</sub>, Pb.</i></li> </ul> </li> <li>• Rhode Island reduces levels of air toxics.               <ul style="list-style-type: none"> <li>• <i>Developed chrome monitoring – to be implemented at National Air Toxics Trends site and one other site by 11/03.</i></li> <li>• <i>Data from initial monitoring study has been evaluated. Comprehensive air toxics monitoring continues at one site.</i></li> <li>• <i>Installed Olneyville monitor in July 2002.</i></li> <li>• <i>Preliminary monitoring at two sites in Olneyville was completed in summer 2003. Comprehensive monitoring at one of those sites will begin in fall 2003 for a one-year period.</i></li> </ul> </li> <li>• Communicate results of toxics monitoring to the public by October 2002.               <ul style="list-style-type: none"> <li>• <i>Presented results to Urban League and EPA meetings. Additional outreach to be developed.</i></li> </ul> </li> <li>• Inspect 25 air pollution sources in Olneyville or other Woonasquatucket River Watershed areas.               <ul style="list-style-type: none"> <li>• <i>Completed FY02.</i></li> </ul> </li> <li>• Ensure carbon monoxide impacts from Transportation Improvement Projects (TIP) will be below air quality standards.               <ul style="list-style-type: none"> <li>• <i>Applied a mobile model for on-road emission factors to TIP projects to ensure that transportation projects will not exceed air quality standards.</i></li> </ul> </li> <li>• Reduce mercury emission from in-state sources to near zero by July 2003.               <ul style="list-style-type: none"> <li>• <i>Established Mercury Advisory Working Group FY02. Drafted regulations, delayed due to legislative changes in 6/03.</i></li> <li>• <i>Held three mercury thermometer take-back events have been held. Staff resigned, cannot replace.</i></li> <li>• <i>Established specifications for low &amp; non-mercury items to be purchased by the State Department of Administration; trained state buyers on legal requirements and implementation of new contract specs</i></li> <li>• <i>Trained school personnel; project led to DOH/Dept. of Education school chemical ban literature.</i></li> </ul> </li> </ul> Targets: <ul style="list-style-type: none"> <li>• With regional partners, achieve commitment or enforceable mandate to reduce to reduce emissions of nitrogen oxides by 789,000 tons per year by 2003 in 22 northeast states.               <ul style="list-style-type: none"> <li>• <i>NOx SIP call is in place. Implementation delayed until May 2004 by federal court action.</i></li> </ul> </li> </ul>	
Indicators: <ul style="list-style-type: none"> <li>• Trends in energy use per person, trend in energy use by sector since 1990, and vehicle miles traveled</li> <li>• Trends in meeting air quality standards               <ul style="list-style-type: none"> <li>• <i>Initial projected baselines completed FY02. Working on modeling methods with stakeholders.</i></li> </ul> </li> <li>• Emissions of selected chlorinated solvents</li> <li>• Ambient concentration of benzene, formaldehyde, and 1,3 butadiene</li> <li>• Emissions of mercury</li> <li>• Trends in transportation-related emissions</li> </ul>	

DEM	EPA
<b>Clean and Plentiful Water:</b>	<b>Clean and Healthy Water:</b>
Objectives: <ul style="list-style-type: none"> <li>• Protect and restore surface and groundwater to meet Water quality standards and support use for drinking water, shellfishing, fishing, swimming and other recreation, and commerce and industry</li> </ul>	Objectives: <ul style="list-style-type: none"> <li>• Protect public drinking water from pollution, including both surface and groundwater supplies</li> <li>• Maintain or restore groundwater for future use in other than source water areas</li> <li>• Restore WQ in impaired waters</li> <li>• Maintain surface water quality</li> <li>• Maintain effective monitoring programs</li> </ul>
<b>DEM/EPA</b>	
<p>Targets: <i>(For additional water quality targets, see Healthy Ecosystems)</i></p> <ul style="list-style-type: none"> <li>• Approve wellhead protection plans for all major groundwater suppliers by July 2003.           <ul style="list-style-type: none"> <li>• <i>12 of 15 major groundwater suppliers have approved plans. Within the next year 2 of the 3 are expected to have plans approved.</i></li> </ul> </li> <li>• Assess potential impacts to groundwater of 10 inactive landfills by July 2003.           <ul style="list-style-type: none"> <li>• <i>Completed investigations at 4 landfills.</i></li> </ul> </li> <li>• Close out 10 LUST sites with 5 years or more of monitoring showing groundwater meets standards.           <ul style="list-style-type: none"> <li>• <i>56 LUST sites closed in FY 03.</i></li> </ul> </li> <li>• Determine costs and operating requirements for a comprehensive pesticide monitoring program ofr water quality by December 2002.           <ul style="list-style-type: none"> <li>• <i>Program developed, budget for monitoring would be in excess of \$58,000 per year and there is no funding available.</i></li> </ul> </li> <li>• Implement Phase I CSO control program by Dec 2006 resulting in fewer days shellfish beds in the Providence River are closed.           <ul style="list-style-type: none"> <li>• <i>100% design review completed FY02. Last contract in Phase I design approved 8/02.</i></li> </ul> </li> <li>• Complete 37 Water Quality Restoration Plans (WQRPs) by July 2003.           <ul style="list-style-type: none"> <li>• <i>16 completed in FY02; loss of staff and funding has affected ability to complete remaining TMDLs.</i></li> </ul> </li> <li>• Initiate implementation of Phase II stormwater management plans by March 2003.           <ul style="list-style-type: none"> <li>• <i>Application guidance draft completed and undergoing internal review; on track for 12/02.</i></li> <li>• <i>MS4 General Permit to be final 10/03.</i></li> <li>• <i>Multi-sector Industrial General Permit to go to public notice 12/03, 20% complete. Finalize 3/04.</i></li> <li>• <i>Developing individual stormwater permits to be issued in FYS 04 and 05: TF Green Airport by 11/03, Warwick Mall by 6/04, RI Mall by 9/04.</i></li> <li>• <i>Issued RFP for Stormwater Phase II plans 8/02.</i></li> <li>• <i>Awarded grants to 33 communities 8/02; overseeing projects to be completed by 3/04. Contracting with municipalities proceeding on schedule. Final plans from communities are pending the promulgation of the general permit for small MS4s.</i></li> </ul> </li> <li>• Conduct inspections at 10 facilities that have RIPDES Minor permits by July 2003.           <ul style="list-style-type: none"> <li>• <i>FY 02 - Inspect 1 facility in Woonasquatucket Watershed – completed.</i></li> <li>• <i>FY 02 - Inspected 3 significant non-compliers.</i></li> <li>• <i>FY 03 - Inspected 8 facilities associated with permit re-issuance by 6/03.</i></li> </ul> </li> <li>• Reduce permit backlog for RIPDES major by December 2002 to zero.           <ul style="list-style-type: none"> <li>• <i>Goal 12% by 12/01, achieved 12/01.</i></li> <li>• <i>8% by 6/02, Achieved 8% - 2/03.</i></li> </ul> </li> <li>• Adopt comprehensive strategy for baseline monitoring, including fish tissue monitoring and funding needs by June 2002.           <ul style="list-style-type: none"> <li>• <i>Contractor delayed. Draft expected 11/03 with finalization by end of 12/03.</i></li> </ul> </li> <li>• Reduce nutrient loadings from WWTFs and raise DO levels in urban rivers and upper Bay by December 2008.           <ul style="list-style-type: none"> <li>• <i>Woonasquatucket WWTF - Approximately 60% reduction in Nitrogen discharged.</i></li> </ul> </li> <li>• Raise dissolved oxygen levels and reduce algae growth in the Pawtuxet river by reducing ammonia and nutrient loadings by December 2004.           <ul style="list-style-type: none"> <li>• <i>Warwick has implemented interim measures to reduce nutrients.</i></li> </ul> </li> <li>• Establish a pilot composting facility for animal waste for the South County area by 2006 to reduce nutrient discharges to water.           <ul style="list-style-type: none"> <li>• <i>Project not implemented due to lack of funding.</i></li> </ul> </li> </ul>	

## DEM/EPA

- Assess nitrate inputs with turf growers and determine target reductions by December 2002.
  - *In FY02 and FY03 conducted groundwater monitoring at 18 stations monthly. Beginning October 2003 monitoring will be bi-monthly due to cut in federal funding.*
- Conduct inspections of 110 UST facilities to ensure compliance with operating and leak detection requirements.
  - *Inspected 116 facilities in FY02 and 126 in FY03.*

### Indicators:

- Presence of contamination in public water supply wells
- Groundwater quality
- Number of days of shellfish closures due to CSO overflows
- Surface water quality improved for designated uses (drinking water supply, fish and shellfish consumption, recreation, swimming and aquatic life and habitat.
- Number of RIPDES Minor facilities in compliance with permits
- River miles, stream segments, and lake and estuary acres assessed
- Nitrogen loading from WWTF and DO levels in the Pawtuxet and Providence/Seekonk Rivers and Upper Bay meet standards
- Nutrient levels in water in agricultural areas
- DO levels adequate to support marine/estuarine aquatic life

<b>DEM</b>	<b>EPA</b>
Livable Communities:	Healthy Communities:
<p>Objectives:</p> <ul style="list-style-type: none"> <li>• Increase community capacity to handle growth and watershed planning</li> <li>• Expand the watershed approach to two more watersheds by 6/03</li> <li>• Ensure environmental equity for all Rhode Islanders</li> <li>• Protect public from fires, floods, animal and insect-borne diseases</li> <li>• Minimize or eliminate impacts and risks from hazardous waste, lead, and PBTs such as mercury</li> <li>• Develop a policy that defines DEM's role in the fight against lead poisoning in children in RI and how DEM works with other agencies</li> <li>• Restore contaminated sites to levels protective of human health and the environment</li> </ul>	<p>Objectives:</p> <ul style="list-style-type: none"> <li>• Protect children from environmental health threats by improving quality of environments where children spend their time at school, at home, and outdoors</li> <li>• Restore, revitalize, and protect urban environments and reduce sprawl into suburban and rural areas</li> <li>• Restore previously polluted sites for community, ecological, or economic re-use</li> <li>• Reduce exposure of RI citizens to pesticides and toxic substances</li> <li>• Reduce pollution across media through increased compliance, sustainable performance, and behavior change</li> <li>• Enforce lead disclosure law (406b)</li> <li>• Provide education and outreach materials directed to homeowners who may do lead paint removal</li> <li>• Provide facilitation for multi-agency process to develop a comprehensive lead strategy</li> </ul>
<b>DEM/EPA</b>	
<p>Targets:</p> <ul style="list-style-type: none"> <li>• At least one South County community adopts principles from the Planning Assistance Project, including the South County design manual into local regulations by June 2002. <ul style="list-style-type: none"> <li>• <i>Exeter and Richmond have adopted planning principles from the project.</i></li> </ul> </li> <li>• Publish a RI urban design manual by July 2003 and develop strategy for integrating it into the permitting process. <ul style="list-style-type: none"> <li>• <i>Project delayed due to coordinating funding from several sources, to be completed 6/04.</i></li> </ul> </li> <li>• Enter into 18 settlement agreements for Brownfield sites by July 2003. <ul style="list-style-type: none"> <li>• <i>Entered into 26 agreements over last 2 fiscal years.</i></li> </ul> </li> <li>• Remediate/reuse 60 acres of contaminated land by July 2003. <ul style="list-style-type: none"> <li>• <i>Remediated 294 acres over last 2 fiscal years.</i></li> </ul> </li> <li>• Develop Watershed Action Plans for the Blackstone River watershed by July 2003. <ul style="list-style-type: none"> <li>• <i>Blackstone Watershed Draft Action Plan completed 12/02; finalized 6/03; implementation initiated.</i></li> </ul> </li> <li>• Develop understanding on populations at disproportionate risk for cumulative exposures by December 2002. <ul style="list-style-type: none"> <li>• <i>Preliminary report completed December 2001. Expanded report completed May 2002.</i></li> <li>• <i>Through coordinated efforts of federal, state, local, partners, develop comprehensive policy so that by 2010 no children will have blood lead levels above 10 micrograms per deciliter.</i></li> <li>• <i>State completed Comprehensive Lead Plan Spring 2003 with a goal to decrease the proportion of new cases of school children with a blood lead of 10 micrograms per deciliter or more, to less than 5% in all RI communities by 2010.</i></li> </ul> </li> <li>• Conduct 80 inspections of exterior lead paint removal projects by July 2003. <ul style="list-style-type: none"> <li>• <i>Conducted 225 inspections in FY03.</i></li> </ul> </li> <li>• Focus most of the 40 planned inspections for small quantity generators in the dry cleaning industry. <ul style="list-style-type: none"> <li>• <i>Compliance and Inspection completed 25 inspections of dry cleaners in calendar year 2002; calendar year 2003 report not yet complete. In addition, Air Resources completed 87 inspections of dry cleaners (sources that used perchloroethylene) in FFY01 (10/1/00-9/30/01).</i></li> </ul> </li> <li>• Complete the Autobody Certification Program with 80 – 100% industry participation. <ul style="list-style-type: none"> <li>• <i>65% complete – expected completion date 12/04 – biannual program.</i></li> <li>• <i>Developed wastewater and stormwater management policy for autobody shops 5/03.</i></li> </ul> </li> </ul>	

## DEM/EPA

### Targets:

- Initiate new self-certification program for dry cleaning industry by July 2003.
  - *Draft Program Guidebook produced by Tufts University 5/01; developed database of 82 dry cleaning companies; dry cleaning regulations to be completed by 10/03.*
  - *Workbook and checklist in development for dry cleaners and lead paint contractors to be completed by 12/03, delayed due to loss of staff.*
- Complete compliance monitoring inspections on 25 large quantity generators of federally regulated hazardous waste.
  - *Inspected 27 large quantity generators in FY03.*

### Indicators:

- Use of Urban Design Manual by state and local agencies
- Rate of productive re-use of urban vacant lots, brownfields and contaminated sites
- Actions from South County and Woonasquatucket Watershed Action Plans implemented
- Preliminary report on environmental equity issues by 2002; DEM policies and regulations amended to incorporate environmental equity considerations by 2003
- Number of lead-poisoned children
- Number of small quantity generators in compliance with hazardous waste regulations
- Number of businesses participating in self-certification programs

DEM	EPA
<p>Healthy Ecosystems:</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Increase high quality habitat through restoring and protecting fresh and saltwater wetlands, fish runs, seagrass beds, river shorelines, forests, and other natural areas, and through acquiring land for habitat protection</li> <li>• Increase understanding of ecosystems, threats to their health, and ways to protect and restore them</li> <li>• Build capacity to monitor environmental conditions, assess and report on ecosystem health, develop resource management strategies, evaluate effectiveness of strategies</li> <li>• Determine current and future water use requirements to develop and implement plans to ensure adequate quantities for drinking water, recreation, agriculture, fish and wildlife, habitat, commerce and industry</li> <li>• Manage, protect, and restore living resources for sustainable use and ecosystem integrity</li> </ul>	<p>Healthy Ecosystems:</p> <p>Objectives:</p> <ul style="list-style-type: none"> <li>• Increase quantity and quality of RI's aquatic ecosystems, including wetlands, fresh water and marine habitats, including eelgrass beds</li> <li>• Implement approaches to permanently protect habitat, including promoting ecologically sensitive development of unprotected land</li> <li>• Protect RI's marine and coastal habitats, and minimize adverse impact from marine dredging and disposal of materials</li> </ul>
<b>DEM/EPA</b>	
<p>Targets:</p> <ul style="list-style-type: none"> <li>• Permanently protect 200 acres per year of wetlands through purchase or conservation easements. <ul style="list-style-type: none"> <li>• <i>FY02 - 2977 total acres protected; 613 wetland.</i></li> <li>• <i>FY03 - 1554 total acres protected; 308 wetland.</i></li> </ul> </li> <li>• With other partners, complete restoration of Boyd's Marsh/Town Pond, Allin's Cove, Potters Cove, and Lonsdale Drive-in site by 2005, returning use of 500 acres of habitat <ul style="list-style-type: none"> <li>• <i>Boyd's Marsh/Town Pond - Feasibility study and design completed FY 2003. Restoration pending funding</i></li> <li>• <i>Allin's Cove fish passage depends on funding.</i></li> <li>• <i>Potters Cove Completed 4/03.</i></li> <li>• <i>Lonsdale Marsh restoration completed 9/03.</i></li> </ul> </li> <li>• Complete statewide freshwater wetland conservation plan by September 2002 and complete mapping and analysis to prioritize coastal habitat restoration by July 2003 <ul style="list-style-type: none"> <li>• <i>Delayed due to conflicting priorities. Background research underway, to be completed in 6/05.</i></li> </ul> </li> <li>• Conduct 240 inspections of permitted wetland sites by July 2003. <ul style="list-style-type: none"> <li>• <i>Conducted over 360 wetlands compliance inspections FY02.</i></li> </ul> </li> <li>• Remove barriers to anadromous fish in the Kickemuit, Blackstone, and 10-Mile Rivers by 2005. <ul style="list-style-type: none"> <li>• <i>Feasibility study completed in FY 2002. Restoration pending funding. Overall project cost estimate \$1 million. Phase I restoration construction scheduled for FY2005. Current non-federal match shortfall \$500,000.</i></li> <li>• <i>Stakeholder project to develop Blackstone River Fisheries Restoration Plan completed 1/02. Blackstone Valley National Heritage Corridor Commission preliminary fish passage design on hold pending US ACOE 206 study to be completed in fall of 2003. Working with USFW and FERC license holders to identify funds for fisheries restoration; Slater Mill interested in restoring a sluiceway for fish passage. Requested ACOE to develop engineering plans, construction will depend on funding.</i></li> </ul> </li> <li>• Complete a pilot study of water use and water withdrawal in the Queens River basin and impacts on habitat by July 2003. <ul style="list-style-type: none"> <li>• <i>Habitat Assessment study report (USGS) published Spring 2002; completion of HSPF model development anticipated Fall 2003.</i></li> </ul> </li> <li>• Develop index of indicators for sustainable Narragansett Bay and watershed by October 2002 <ul style="list-style-type: none"> <li>• <i>Held 2-day workshop to finalize indicators 5/03.</i></li> <li>• <i>Project delayed due to funding delays, final report on Bay indicators completed 9/03.</i></li> </ul> </li> </ul>	
<p>Indicators:</p> <ul style="list-style-type: none"> <li>• Quantity of wetlands and other habitat protected and restored</li> <li>• Acreage of freshwater wetlands, coastal wetlands, salt marsh, or SAV lost and restored each year</li> <li>• Number of wetland projects in compliance with permits</li> <li>• Rate of greenfields development</li> <li>• Viable anadromous fish runs in the Kickemuit, Blackstone, and 10-Mile Rivers</li> <li>• Sufficient water for all uses including ecosystem health</li> </ul>	