### **OCEAN STATE OUTDOORS:**

### **Rhode Island's Comprehensive Outdoor Recreation Plan**



### **STATE GUIDE PLAN ELEMENT 152**

Adopted 2003, Amended 2009

Rhode Island Department of Administration
Division of Planning
and
Rhode Island Department of Environmental Management

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	TABLE OF CONTENTS	
		Page
Abstract		vi
State Planning	Council	vii
Technical Com	mittee	viii
State Compreh	ensive Outdoor Recreation Plan Steering Committee	ix
Preface		хi
Executive Sum	mary	ES.1
Part 152-1 In	troduction	1.1
Part 152-2 Th	ne Context for Outdoor Recreation in Rhode Island	2.1
2-1 2-2 2-3 Part 152-3 RI	Physical Dimensions Population Trends – A Growing Diversity Rhode Island's Outdoor Recreation System 2-3-1 The Federal Role 2-3-2 The State Role 2-3-3 The Municipal Role 2-3-4 Private For-Profit Role 2-3-5 Non-Profit Organizations Role	2.1 2.6 2.10 2.11 2.13 2.19 2.20 2.20
3-1 3-2 3-3 3-4	Recreation Planning Information Base 3-1-1 Importance of Needs Analysis in Public Decision Making 3-1-2 A Multi-Level Analysis Process 3-1-3 Planning Analysis for Special Places Research for the 2009 Plan Outdoor Recreation Supply 3-3-1 Inventory of Rhode Island Recreation Facilities 3-3-2 Facility Mapping Demand for Outdoor Recreation 3-4-1 2002 Public Outdoor Recreation Demand Survey 3-4-2 Estimation of Total Demand 3-4-3 2001 Survey of Municipal and State Recreation Professionals 3-4-4 State Park and Beach User Survey Common Threads – Findings on Critical Outdoor Recreation Needs	3.1 3.1 3.2 3.3 3.4 3.4 3.6 3.8 3.11 3.11 3.14 3.14
Part 152-4 RI	node Island's Plan for Recreation, Conservation and Open Space	4.1
4-1	Vision, Goals and Policies 4-1-1 The Vision 4-1-2 Plan Mission	4.1 4.1 4.1

Appendix B	Rhode	e Island Wetlands Priority Plan	B.1
Appendix A	Recre	ation Grant Selection Process	A.1
	4-4-5	Fostering Partnerships	4.46
	4-4-4		4.44
	4-4-3		4.43
	4-4-2		4.41
	4-4-1	Accessibility for All Users	4.40
4-4		ce Management	4.39
4-4		dship and PartnershipImproving Accessibility, Operations, and	4.30
	4-3-8 4-3-9	Urban and Community Recreation Recreation and Tourism	4.35 4.38
	4-3-7	Trail Based Recreation	4.33
	4-3-6	Multi-purpose Management Areas	4.32
	4-3-5	Inland Lakes, Ponds and Streams	4.30
	4-3-4	•	4.29
	4-3-3		4.28
	4-3-2		4.27
	4-3-1	A Diverse, Balanced System	4.25
		ce Conservation	4.22
4-3		g Critical NeedsImprove Recreation Opportunities and	
		Scenic Resources	4.20
	4-2-9	Cultural Resources	4.19
	4-2-8	Fish and Wildlife	4.17
	4-2-7	Agricultural Land	4.15
	4-2-6	Forests	4.14
	4-2-5	Islands and Coastal Areas	4.12
	4-2-4	,	4.10
	4-2-3	•	4.8
	4-2-2	Natural Diversity	4.7
	4-2-1	The Greenspace Network, a Statewide System	4.3
4-2		g the Greenspace NetworkPreserve and Protect Natural and	4.2
4-2	Duildin	Space System g the Greenspace NetworkPreserve and Protect Natural and	4.2
	4-1-3	Goals of RT's Outdoor Recreation, Conservation and Open	4.0

## **List of Figures**

152-2(1) 152-2(2) 152-2(3) 152-2(4) 152-2(5)	Northeast Urban Corridor Population Density and Distance from the Shoreline Population Change 1950-2000 Percentage of Population Change by County Population Growth Rates by Community Size
152-3(1) 152-3(2) 152-3(3)	Statewide Distribution of Publicly Owned Outdoor Recreation Facilities Importance of Various Services Performed by the Rhode Island Department of Environmental Management How Well Existing Outdoor Recreation Facilities in Rhode Island Meet the Needs of Respondent Households
	List of Tables
152-2(1) 152-2(2) 152-2(3) 152-2(4) 152-2(5) 152-2(6) 152-2(7) 152-2(8) 152-2(9)	Rhode Island Population by Race/Ethnicity Population Profile by Age Group Population Change 1990-2000 by Age Group Major Federal Funding Programs Supporting Land Acquisition and Outdoor Recreation in Rhode Island Major State Facilities Managed by DEM Rhode Island's Major Bike Paths and Greenways State Investment in Local recreation Facilities and Land Acquisition 1992-2009 Major State Funding Programs Supporting Land Acquisition and Development of Recreation Facilities Percent of Municipally-Owned Facilities Operated by Schools
152-3(1) 152-3(2) 152-3(3) 152-3(4)	Rhode Island Outdoor Recreation Inventory 2002 Statewide Summary Public Outdoor Recreation Facilities 1989-2002 Estimated Outdoor Recreational Demand of Rhode Island Residents Rhode Island Outdoor Recreation Facilities Needs
152-A(1)	RI Recreation Resources Review Committee Recreation, Grant Selection Process, Priority Rating System
152-B(1) 152-B(2) 152-B(3)	Acreage of Rhode Island's Freshwater Wetlands by Watershed and Class of Ownership Acreage of Rhode Island's Freshwater Wetland Types by Watershed RIDEM Special Resource Protection Waters

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The objectives of the Program are: (1) to prepare strategic and systems plans for the state; (2) to coordinate activities of the public and private sectors within the framework of policies and programs; and (3) to advise the Governor and others concerned on physical, social, and economic topics.

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### **ABSTRACT**

TITLE: Ocean State Outdoors: Rhode Island's Comprehensive Outdoor

Recreation Plan

SUBJECT: Outdoor recreation and open space resource planning and

management

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**ABSTRACT:** This document represents the eight edition of Rhode Island's plan

for outdoor recreation, conservation, and open space. The plan establishes state goals and policies and includes a five-year

Action Agenda.

The plan was approved by the State Planning Council as an element of the State Guide Plan and by the National Park Service, as the State of Rhode Island's State Comprehensive Outdoor

Recreation Plan for the 2009-2014 period.

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ix

<sup>&</sup>lt;sup>1</sup> The State Outdoor Recreation Plan Steering Committee was formed to guide the 2003 plan update. No new Steering Committee was formed as a part of the 2009 plan update.



### PREFACE

Providing for the public's enjoyment of Rhode Island's outdoor environment is an important responsibility of state government. Increasingly, Rhode Islanders turn to the outdoors to relax, to have fun, to maintain their health and vigor, to understand their natural and cultural heritage, and to bring added meaning to their lives. Visitors to the state have also sought the pleasures of Rhode Island's natural environment in growing multitudes. Tourism contributes an estimated \$4.8 billion annually to the state's economy.

Provision of outdoor recreation is a mission of increasing scope, complexity, and expense, involving all levels of government, and a growing number and diversity of private entities. Rhode Islanders' love of the outdoors -- their land, their shoreline, their lakes and ponds -- has translated into an extensive public recreational estate. More people using the outdoors in many diverse fashions has meant more opportunities for user conflicts, greater stress on the resource base, demands for more areas and facilities--in short--added responsibilities and new problems for land managers and recreation providers. Today's recreation professionals must wear a multitude of hats: resource steward, activity scheduler, conflict mediator, educator, advocate, fund-raiser, and rule-enforcer. They must also be efficient since budgets traditionally lag behind needs.

The purpose of this document is to provide the effective planning needed to guide and direct the efforts of state, municipal, and private agencies as they grapple with the problems of protecting the resource base and providing recreational opportunities for present and future generations of Rhode Islanders and visitors to the state. Good planning brings all those with concerns relevant to outdoor recreation together to communicate their interests and perspectives of the vital issues. It sometimes uncovers new answers to longstanding problems; more often, but no less validly, reiterates longstanding ideas whose time has finally come. It also provides an important perspective for managers who must constantly focus on the present, an opportunity to think about the future, and to formulate a vision for it.

### Adoption

This plan was adopted as Element 152 of the State Guide Plan by the Rhode Island State Planning Council on June 11, 2009 following a public hearing held on May 27, 2009.

### Relation to Other Plans

The State Guide Plan is actually a collection of many individual plans that collectively present a vision for the future development of Rhode Island and strategic approaches to attaining that vision. In addition to *Ocean State Outdoors*, there are several other State Guide Plans that present important pieces of how Rhode Island should manage its precious outdoor resources. Those plans that are most directly relevant to *Ocean State Outdoors* are:

A Greener Path...Greenspace and Greenways for Rhode Island's Future Rhode Island Rivers Policy and Classification Plan Rhode Island Urban and Community Forest Plan The State Historical Preservation Plan Land Use 2025: RI State Land Use Policies and Plan Additionally, several plans, notably the *Comprehensive Conservation and Management Plan for Narragansett Bay*, the *Water Supply Plan for Rhode Island*, and the *Nonpoint Source Pollution Management Plan*, speak extensively to the protection of our water resources that are critical to the resource base for much of the outdoor recreation system.

### Acknowledgements

This plan is a product of the efforts of a number of individuals and groups. The 2003 State Comprehensive Outdoor Recreation Plan (SCORP) Steering Committee, organized by the Rhode Island Department of Environmental Management (DEM), was instrumental in defining and scoping issues addressed in the plan, and in recommending strategies for dealing with them.<sup>1</sup> Staff support and development of the plan, was preformed by:

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Contributions of time, insight, and thoughtful commentary were also made to the planning process by the forty-four respondents to the 2003 Survey of State and Local Recreation Professionals, by the public who participated in the public hearing on the final draft of the plan, and by a number of volunteers who reviewed drafts of the plan in 2003.

The preparation of this plan was financed in part through the National Park Service, Department of the Interior.

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<sup>&</sup>lt;sup>1</sup> The State Outdoor Recreation Plan Steering Committee was formed to guide the 2003 plan update. No new Steering Committee was formed as a part of the 2009 plan update.

### **EXECUTIVE SUMMARY**

Ocean State Outdoors is the State of Rhode Island's comprehensive plan for outdoor recreation, conservation and open space. The plan is one cornerstone of Rhode Island's statewide system for planning for our natural and built environment. With an increasing sense of urgency to protect the beauty and fragility of Rhode Island's natural resources and to encourage excellent community design, this plan aims to clarify our vision and the planning framework for all Rhode Islanders.

This plan, the eighth edition, reaffirms our overarching goals, reassesses the present situation, and establishes the objectives and the implementation strategies for strengthening outdoor recreation, conservation and open space in Rhode Island over the next five years.

As a Rhode Island state policy document, *Ocean State Outdoors* serves several key purposes:

**State Guide Plan** - This plan is an element of the Rhode Island State Guide Plan, and, as such, has legislated stature which requires the consistency of all publicly supported activities, both planning and project implementation. State agencies, municipalities and all public and private entities receiving public support are expected to carry out any recreation, conservation and open space activity in a way that is consistent with this element of the State Guide Plan.

**State Comprehensive Outdoor Recreation Plan (SCORP)** -- Ocean State Outdoors is also submitted by Rhode Island to meet the National Park Service's planning eligibility requirements for the federal Land and Water Conservation Fund program. This program is a valuable source of support for protecting resources and providing facilities for public recreational use.

**State Recreational Trails Plan** -- In concert with Rhode Island's Greenways Plan<sup>1</sup>, this plan addresses the requirements of the U.S. Department of Transportation -- Federal Highway Administration's National Recreational Trails Program which provides funds to develop and maintain recreational trails and trail-related facilities.

**Wetlands Priority Plan** -- This plan provides an update to the wetlands priority plan required under the federal Emergency Wetlands Conservation Act. Updates to the original 1988 plan are submitted to the National Park Service periodically as part of SCORP updates.

### The Rhode Island Planning Framework

Providing for the public's enjoyment of Rhode Island's outdoor environment is an important responsibility of state government and a cherished tradition. This document is the eighth SCORP produced since 1965. In those intervening decades, the interest and commitment of Rhode Islanders for outdoor recreation, conservation and open space protection has continually deepened.

1

<sup>&</sup>lt;sup>1</sup> A Greener Path: Greenspace and Greenways for Rhode Island's Future. R.I. Division of Planning. 1994.

At the same time, our public planning efforts have become more multi-faceted and better connected and they have been strengthened by the groundswell of the movements for environmental protection, historic preservation, public participation, growth management and quality of life. We have inherited a Rhode Island which is blessed with many special places, natural settings, historic districts and sites, and local areas which still have unique characteristics. As a state, we have assumed responsibility for protecting and enhancing these places and resources. This plan reaffirms our over-arching themes, as stated in the 2003 SCORP:

- Protecting Precious Gifts ... Open Space and Critical Resources
- Meeting Critical Needs ... Delivering Recreation and Resource Conservation
- Stewardship and Partnership ... Taking Good Care of our Outdoor Recreation System

Rhode Island has the statewide framework which connects the state agencies and the local municipalities in support of major goals and policies for public planning and implementation. We also have official, adopted plans at the state and municipal levels. Our constant mission is to reassess, redirect and refine those plans as we move forward.

As an element of the *State Guide Plan*, this updated *Ocean State Outdoors* provides guidance to all state agencies and municipalities in their plans and programs for recreation and open space. This *State Guide Plan* element establishes the state policies and implementation program with which community comprehensive plans must be consistent.

Ocean State Outdoors remains the cornerstone plan of the state's recreation, conservation and open space system. It articulates state goals and policies, guiding the municipal governments and not-for-profit groups, and, in particular, mapping out a five-year action agenda for the state agencies, led by the Department of Environmental Management. As an inter-related system, other elements of the State Guide Plan support this plan, in particular A Greener Path ... Greenspace and Greenways for Rhode Island's Future and The Urban and Community Forest Plan, and state guide plan elements for land use, transportation, economic development, water supply and others also contain important related guidance.

Reinforcing good planning practices which the state and municipal SCORP plans have promoted for several decades, the *RI Comprehensive Planning and Land Use Regulation Act (1989)* has required new and stronger interconnections and consistency between state and local plans. Most Rhode Island municipalities have a locally approved comprehensive community plan which must be updated regularly. Over the past two decades, the community plans have been formally incorporated into much of Rhode Island's planning, both policy and practice. Plan approval status and consistency with the *State Guide Plan* are often criteria for state approvals and grant funding.

### Accomplishments since the 2003 Plan

Since 2003, the State has assisted municipalities and land trusts in acquiring approximately 3,410 acres of land, totaling \$46.9 million in land value. State contributions were \$14 million in Open Space Grants and another \$900,000 in loans. The State acquired 6,900 acres of land totaling \$80.4 million in land value with State

bond expenditures in the amount of \$20 million. In addition, over \$9.5 million of State bond funds were expended for local recreational development projects. It is the hope that future open space bond issues will receive the same support that they have received in the past, resulting in a continued expansion of the open space and greenway network in Rhode Island.

### Research for this Plan Update

Funding was not available to undertake the extensive surveying that served as the foundation of the 2003 *Ocean State Outdoors* plan therefore the results of the 2003 survey remain the basis of the research for the 2009 update, however, when more recent data was available, it was incorporated into this Plan. Research conducted for the 2003 update of *Ocean State Outdoors* investigated existing conditions and the current supply and demand for recreation and natural resource protection in Rhode Island from several vantage points. The inventory of existing statewide recreation facilities was updated and three surveys obtained input from the general public and state and local recreation professionals. Analysis of the inventory, survey results and demographic data led to the following general findings on facility and land needs for outdoor recreation in Rhode Island:

### **NEEDS**

- Outdoor recreation, in its many varied forms, is a vital component of the lives of Rhode Islanders.
- The most popular outdoor activities are those that are most accessible and simplest to engage in.
- Significant needs continue for land and facilities to accommodate public demands for outdoor recreation and protect natural resources.
- Rhode island's outdoor recreation facilities are important assets for the state and its communities that require investment and operational resource levels commensurate with their heavy usage and documented asset management needs.
- Continuing improvement of the information and educational/interpretative resources available to patrons of Rhode Island's outdoor recreation system is crucial to the public's knowledge and understanding of the system's diverse resources, and can assist in balancing system usage.

Taking into the consideration the accomplishments made over the last several decades and the needs identified by our citizens and professionals, multiplied by those we will serve in the future, lead us to reaffirm the direction taken in previous plans. As such, the Plan sets forth a vision for our recreational resources together with the following goals and policies. Part Four includes a more detailed discussion of these underlying tenets that will direct the actions for Rhode Island over the next five years to achieve our vision, goals and policies.

### The Vision

A statewide system of connecting Greenspaces and Greenways, a network made up of critical natural and cultural resources, outdoor recreation facilities, public spaces, community and urban forests, public and private open spaces. The Greenspace system is to be Rhode Island's permanent green framework within which the state's communities will design and build in the 21<sup>st</sup> century.

#### Plan Goals and Policies

# Goal 1 Building the Greenspace Network...Preserve and Protect Natural and Cultural Resources

Rhode Island will strengthen and expand the statewide network of Greenspaces and Greenways, with natural and cultural resources and outdoor recreation areas as major features of the network.

#### Policies:

Aggressively pursue creation of an integrated, statewide greenspace and greenways system through coordinated state and local planning, strategic acquisition, resource protection partnerships and integration of green infrastructure in development projects.

Maintain natural diversity by preserving the integrity of the ecosystems.

Protect water resources, including rivers, lakes, ponds, streams and surrounding lands.

Protect surface and groundwater resource areas, critical watershed and aquifer recharge areas.

Protect wetlands and floodplains to maintain their natural functions and to minimize damage from floods.

Protect significant island and coastal sites.

Conserve and enhance urban and community forests for multiple uses—water supply and water quality, recreation, forest products, energy and wildlife habitat – as fundamental to high quality woodland and urban environments.

Support agricultural uses and preserve the best farmland for active agricultural purposes.

Protect and maintain fish and wildlife populations at optimum levels and provide opportunities for wildlife-based recreation.

Preserve significant historic, architectural and archeological sites, buildings and districts.

Protect scenic areas and resources including landscapes, roadways, and views of the waterfront and significant geologic features.

# Goal 2 Meeting Critical Needs...Improve Recreation Opportunities and Resource Conservation

Rhode Island will improve its system of outdoor recreation facilities and conservation areas to meet the needs of its citizens.

### Policies:

Provide a diverse, balanced system offering quality recreational opportunities that meet user needs.

Preserve and expand public access to the shoreline.

Improve and expand opportunities for recreational use of saltwater beaches.

Preserve and expand recreational boating opportunities.

Preserve and expand access to the state's rivers, lakes, ponds, streams and other inland waters for recreational use, while maintaining water quality.

Provide hunting, fishing and other extensive recreational opportunities while protecting resources and natural character of the state's management areas.

Provide hunting and fishing opportunities, where feasible, throughout the state.

Maintain and expand the state's network of trails and pedestrian paths, in natural and built areas.

Strengthen and expand opportunities for open space and outdoor recreation for urban residents.

Strengthen and expand community-based recreation facilities and open spaces to meet close-to-home needs.

Maintain and expand active and passive greenspace facilities in densely developed neighborhoods and districts throughout the state.

Coordinate regional initiatives in conservation and recreation and promote sharing of facilities to meet needs on a regional, multi-town basis.

Promote Rhode Island's open space and recreation resources to tourists, while protecting the quality and stability of the resource base.

# Goal 3 Stewardship and Partnership... Improve Accessibility, Operations and Resource Management

Rhode Island's public and private partners will join as strong stewards of the state's outdoor recreation and open space system and will protect, maintain, and improve its essential features.

### **Policies:** Insure a system that is accessible to all potential users.

Cooperatively support appropriate levels of funding for the acquisition, development and renovation of the state's open spaces and recreation facilities.

Provide sufficient resources for effective operation and maintenance of state and local parks, recreation facilities and conservation areas.

Demonstrate and promote sustainable design and building concepts in recreation projects.

Provide strong public outreach and effective information about the public recreational opportunities.

Develop and maximize opportunities for education within the greenspace system about the system and its specific resources

Strengthen the professional capacity for recreation, conservation and open space planning at all levels

Maintain a coordinated planning and implementation program for the statewide system that includes State, municipal and private agencies

Encourage information-sharing and cooperative initiatives among the state's public and private greenspace partners.

Our mission is more urgent as Rhode Island faces ever-increasing development pressures. The Plan sets aggressive goals addressing open space preservation, resource conservation, and recreation facility rehabilitation and development. While we will look to *Ocean State Outdoors* for guidance, we must also recognize that it can be a dynamic document that responds to the natural, open space and recreational needs of Rhode Island.

### **152-1 INTRODUCTION**

Enjoyment of Rhode Island's outdoors -- the waters of Narragansett Bay, the state's ocean beaches and rocky shores, its forested preserves, streams, rivers, lakes and ponds, and urban parks and playfields -- is a cherished tradition for Rhode Islanders. By attracting visitors and providing an alluring environment in which to live and work, Rhode Island's resources are also of strategic importance to our state's livelihood.

Recreation in all its forms is assuming greater importance in our increasingly complicated and stressful lives. Whether it is competition on the playfields, a healthy swim in the ocean, a relaxing paddle on a river, or the simple communion with nature of a walk in the woods, recreation releases our tensions and renews our spirit. As the pace of our lives quickens, it will be crucial that we retain and expand the opportunities available to us to step back, relax, and enjoy our outdoor heritage in our own fashion.

### A Long Tradition

This updated Recreation Guide Plan is but the latest in a long tradition of studies and documents offering a vision for the protection and use of Rhode Island's natural resources for the enjoyment, physical vitality, economic progress and spiritual renewal of its citizens. As far back as the 1890s the Public Park Association prepared a visionary plan for a system of parks serving the metropolitan Providence area. Since that beginning, numerous studies and plans have pointed the way towards reserving land for public recreational usage and protecting the land and water resource base for future Rhode Islanders.

This legacy of planning has set the stage for the remarkable progress that has been made through the decades. The "circle of life" -- a string of parks ringing the state's metropolitan area --

was realized in the 1960's through acquisition of Colt, Snake Den, Brenton Point, and Cocumscussoc State Parks under the Green Acres bond program; community recreation systems were also dramatically expanded under the Green Acres and Land and Water Programs. In the 1970s, the development of Fort Adams and Colt State Parks was accomplished, as recommended in the 1965 and 1971 recreation guide plans. First contemplated in the 1965 guide plan, assemblage of an open space system on the islands of Narragansett Bay, was actively



pursued as opportunities for land acquisition availed themselves. Coastal parks and the Narragansett Bay Estuarine Sanctuary encompassing over 2,000 acres are now protected for public use and enjoyment of what is often called "Rhode Island's greatest natural resource". Planning has also laid the groundwork for protecting the state's most threatened natural resources. Throughout the 1980s, the Natural Heritage Program inventoried and focused preservation efforts on rare and endangered species habitats and other unique natural areas. Irreplaceable resources have been preserved forever on Block Island, and in other locations around the state through the cooperation and support of state and local governments, and private groups such as the Nature Conservancy

and the Champlin Foundation. The Greenspace and Greenways Plan (1994) transformed the broad policies for protection of open space set forth in the 1992 version of the Recreation Guide Plan into a blueprint for an interconnected, statewide system of protected open space, bikeways, and trails touching every community. As documented in this update, development of the greenways system is well under way.

This update of the Plan thus continues in the tradition of its predecessor documents, blending an unfinished agenda from the past with new concepts and ideas for Rhode Island's future. This edition re-affirms the over-arching themes from the prior (1992 and 2003) editions to protect and manage the state's natural and cultural resources and the recreation system they support as an integrated entity:

- Protecting Open Space and Critical Resources
- Delivering Recreation and Resource Conservation Services
- Stewardship and Partnership ...Taking Care of our Outdoor Recreation System

In this respect, the plan is most accurately a progress report to the "stockholders" -- the citizens for whom government holds in trust Rhode Island's remarkable endowment of natural resources and for whose benefit and enjoyment the state's parks and open spaces are provided and improved.

Despite the progress made, the job is not yet complete, and the period ahead promises to be a challenging time for recreation, conservation, and open space. The difficult economic

circumstances likely to face state and local governments over the next several years, coupled with a diminished federal presence, will constrain efforts to offer citizens the level of recreational services they have previously enjoyed. investment made in recreation capital over the last decade will have to be paid (through debt service) over the generation. At the same time, facilities built and expanded in the past must be maintained. Demands for recreation and leisure activities, particularly for accessible, close-to-home opportunities will likely continue



to increase, as will regional tourism. The threats to the land and water resource base are increasing, and time is running out for the protection of irreplaceable open space. All of these challenges confront Rhode Island as it looks ahead at recreation, conservation and open space issues and needs.

### Purpose of this Plan

Ocean State Outdoors is the Recreation, Conservation, and Open Space Element of the State Guide Plan – Rhode Island's plan for improving its outdoor recreation system and protecting the natural and cultural resources on which that system depends. It articulates state recreation and conservation goals and policies, and maps out a five year action agenda for the Department of Environmental Management, other state agencies, municipalities and not-for-profit groups. It establishes the state goals and policies for outdoor recreation, conservation and open space with which community comprehensive plans must be consistent. Its purpose, in the broadest sense, is to report on progress the state has made, assess the current situation, and set future directions for outdoor recreation and conservation. Its primary audience is state and local officials who are responsible for Rhode Island's recreation and open space systems and programs, but its themes must also be embraced by the diverse array of public and private organizations which play roles in outdoor recreation, conservation, and open space, and supported by a broad cross-section of Rhode Islanders if its initiatives are to be realized.

### Ocean State Outdoors serves several key purposes:

State Guide Plan -- Through its adoption by the State Planning Council as an element of Rhode Island's State Guide Plan, this plan has legislated stature that requires the comprehensive plans prepared by the state's municipalities be consistent with its goals and policies. Publicly-supported projects of several specified state agencies are also required to be consistent with the Guide Plan. Other elements of the State Guide Plan are integrated with and support this plan, in particular A Greener Path...Greenspace and Greenways for Rhode Island's Future and the Rhode Island Urban and Community Forest Plan. Inclusion of recreation and conservation goals and policies in the Guide Plan also helps insure that these concerns are properly coordinated with other functional areas covered by the Guide Plan; elements covering land use, transportation, economic development, water supply and other functions contain important related guidance.

State Comprehensive Outdoor Recreation Plan (SCORP) -- Ocean State Outdoors is also submitted by Rhode Island to meet the National Park Service's planning eligibility requirements for the federal Land and Water Conservation Fund program. While resources of this program have diminished, it remains a valuable source of support for protecting resources and providing facilities for public recreational use.

State Recreational Trails Plan -- In concert with Rhode Island's Greenways Plan<sup>1</sup>, this plan addresses the requirements of the U.S. Department of Transportation -- Federal Highway Administration's National Recreational Trails Program that provides funds to develop and maintain recreational trails and trail-related facilities.

Wetlands Priority Plan -- This plan provides an update to the wetlands priority plan required under the federal Emergency Wetlands Conservation Act. Updates to the original 1988 plan are submitted to the National Park Service periodically as part of SCORP updates.

### **Rhode Island's Planning Framework**

Rhode Island is blessed with many special natural settings, historic districts and sites, and unique local areas, and providing for the public's enjoyment of Rhode Island's outdoor environment is an important responsibility of state and local governments. In the decades since

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<sup>&</sup>lt;sup>1</sup> <u>A Greener Path: Greenspace and Greenways for Rhode Island's Future</u>. State Guide Plan Element 155. R.I. Division of Planning. 1994.

the first Recreation Guide Plan in 1965, the interest and commitment of Rhode Islanders for outdoor recreation, conservation and open space protection has grown. Planning efforts have become more multi-faceted and better connected and have been strengthened by the groundswell of the movements for environmental protection, historic preservation, public participation, growth management and quality of life.

Rhode Island's framework for coordinating state agency and municipal activities in support of major goals and policies consists of the State Guide Plan and the local comprehensive plans prepared by Rhode Island's municipalities. Rhode Island's Comprehensive Planning and Land Use Regulation Act (1989) requires strong connections and consistency between state and local plans. As of this writing, all 39 Rhode Island municipalities have locally-adopted Comprehensive Community Plans, 37 of the plans received state certification indicating consistency between state and local policies and 13 of these certifications have expired and require 5-year updates to be submitted at this time to restore the State Certification.

Local plans are required to be updated regularly. Over the past decade, the community plans have been formally incorporated into much of Rhode Island's planning, policy and practice. Plan approval status and consistency with the State Guide Plan are increasingly criteria for state project approvals and grant funding.

Complimenting the State Guide Plan are efforts to promote regional planning cooperation. The three communities of Aquidneck Island and the nine communities of Washington County have formed regional planning commissions to facilitate coordination, and efforts promoting watershed-based planning are supported by the Department of Environmental Management and the RI Rivers Council.

Rhode Island's comprehensive and integrated planning and implementation system is more urgent as Rhode Island and its communities face problems such as increasing development pressures, changing population characteristics, and growing demands for services in an era of scarce resources.



### 152-2 THE CONTEXT FOR OUTDOOR RECREATION IN RHODE ISLAND

This part of the plan describes the broad context of physical, social and institutional parameters within which outdoor recreation takes place. Chief among these are the physical and social dimensions of Rhode Island -- the important characteristics of the land and its people that figure prominently in outdoor recreation matters. The significant resources of Rhode Island's public recreation system -- land, water and facilities devoted to public enjoyment of the outdoors -- are also summarized.

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#### 2-1 **Physical Dimensions**

The most striking physical characteristic of Rhode Island's geography is its small size. Covering only 1,214 square miles, the state is the smallest in the Despite its small size, nation. Rhode Island is heavily populated. having second the highest population density of any state (over 900 persons per square mile). As shown in Figure 152-2(1), Rhode Island is located within the heavily urbanized Northeast Over 50 million people Corridor. live within a one-day drive of the state.

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Figure 152-2 (1)

NEW YORK

PHILADELPHIA

Narragansett Bay is the state's chief geographic feature,

and Rhode Island's streams, rivers, and ponds occupy about twenty-five percent of the state's total area. The spectacular views and healthful air of the 420 miles of shoreline bordering Narragansett Bay and the Atlantic Ocean fostered resort communities with public and private

extending twenty-eight miles into the interior of Rhode Island from the Atlantic Ocean. The bay parks and other outdoor recreation areas.

Rhode Island's location at the interface between land and sea has blessed the state with a great diversity of landforms. The state's varied topography has helped shape land use patterns over nearly four centuries since European settlement. Early maritime settlements (Newport, Providence, Bristol, Warwick) exploited easy access to the bay and the ocean. In the nineteenth century entrepreneurs built water-powered mills and industrial villages that grew into larger manufacturing centers along the rapidly falling inland waterways that empty into Narragansett Bay and Rhode Island Sound.

The majority of Rhode Island lies in the Seaboard Lowland physiographic region. The Narragansett Basin, a dominant feature, includes much of the eastern part of the state and a low-lying strip bordering the west shore of Narragansett Bay. To the west of the bay and adjoining the Atlantic Ocean are coastal lowlands with relief generally lower than 200 feet above sea level. Moving away from the bay, the land surface rises gradually toward the hilly upland section in the northwestern part of the state, where the state's highest point, Jerimoth Hill (812'), is located.

The modern Rhode Island landscape is a complex mosaic of natural environments, historical remnants, and contemporary development. Moving around the state, a traveler still encounters a surprising number of small villages nestled in stream valleys, farms and old fields, and back roads lined with stone walls and crowned with overhanging trees. Yet, such vestiges of the past, and the sense of ruralness and small-town character they convey, are increasingly juxtaposed with elements of the contemporary landscape--large scale commercial, industrial and residential development, which too often respect neither the natural lay of the land nor the rural semblance of the communities they occupy. Refer to Land Use 2025 Rhode Island State Land Use and Policies Plan, State Guide Plan Element 121, for further information regarding state land use policies.

Highway improvements have made daily commutation between all points in the state feasible, facilitating a dispersal of the population into formerly isolated areas. At the same time, improvements in communications and electronics have spurred the decentralization of commercial, institutional, service, and industrial functions once limited to urbanized areas. These centrifugal forces have brought both the benefits and detriments of growth to rural communities, and effected permanent changes to the face of Rhode Island. Yet, the natural face of Rhode Island, while subdued in some places, remains distinct in others; many, many locales remain compellingly beautiful and alluring for outdoor recreation. Rhode Island's geographic diversity is echoed in its landscape.

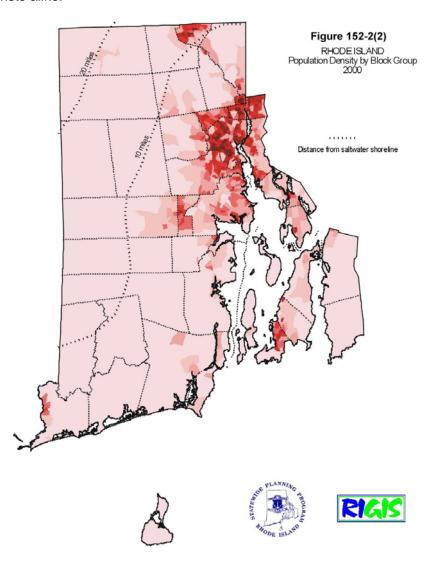
Barrier beaches, heavily utilized for summer recreation, separate land from sea along much of the state's southern shoreline. Just inland, a recessional moraine -- a remnant of the state's last glaciation -- meanders across the ocean-fronting communities of Washington (or "South") County, creating a variety of environments and habitats. Beyond the moraine to the north lie extensive wetland systems of the Wood - Pawcatuck River system, the most pristine river system in the state. The river and wetlands offer valuable wildlife habitat and canoeing, fishing and hunting, and other recreational opportunities. While retaining a distinctively rural flavor, the Wood-Pawcatuck basin, and the entire South County area, faces growing development pressures.

Many visitors to Rhode Island encounter only Block Island, a summer tourist mecca eight miles off the south coast that is also the home of the some of the state's rarest ecosystems and most valuable natural habitats.

Communities along the state's western boundary with Connecticut are distinctively rural in flavor -- dominated by gently rolling forested uplands, broken by stream valleys, small lakes and ponds and wetlands. The State's extensive multi-purpose management areas encompass nearly 25,000 acres in the western corridor, and offer a diversity of recreational opportunities, including trail use, hunting, fishing, camping, swimming, and picnicking. Mill villages and farmscapes remain discernable, although recent development has made in-roads in some places. Just west of the Providence urban area, the 13,000 acre Scituate Reservoir is the source of drinking water for more than half the state's one million inhabitants.

Stretching 19 miles northwest from Providence to the Massachusetts border in Woonsocket, the Blackstone River has a proud history as a birthplace of the nation's industrial revolution. The eleven valley communities in Rhode Island have been designated as the John H. Chafee Blackstone River Valley National Heritage Corridor, created by Congress in 1987 in recognition of the region's significance in the nation's industrial and cultural heritage.

Rhode Island's close association with the ocean also has a pervasive influence on its outdoor recreational participation. Rhode Island has approximately 420 miles of salt water coastline along its southern shore, islands, and along Narragansett Bay, an estuary extending 28 miles inland from the open ocean. As shown in Figure 152-2(2), the state's geography and small size allows all Rhode Islanders to live within 25 miles of the coastline. The darkest areas on the figure represent the highest population densities. The Bay and ocean and their shoreline are, consequently, Rhode Island's most cherished natural features, and offer opportunities for swimming, boating, fishing, wildlife observation and other passive recreational pursuits enjoyed by residents and tourists alike.



Lying at the confluence of three rivers at the head of the Bay, Providence, the state's capital, is home to major commercial, industrial, cultural, medical and educational complexes, as well as racially and ethnically rich residential neighborhoods. Surrounding Providence, urban and suburban communities line the shorelines of upper Narragansett Bay. On the bay's west side, a string of mill villages and small coastal settlements has grown into a densely-settled suburban mosaic of post World War II residential, commercial and industrial developments. The intensity and character of the upper bay's development, water quality problems and lack of public access to

the shoreline have limited the recreational usage of the estuary; however, a number of remedial measures are underway to restore these lost values for the many Rhode Islanders who live in the upper bay communities.

Aquidneck, Prudence, Conanicut and several smaller islands dominate the center of Narragansett Bay. Newport, at the mouth of the Bay, grew from a colonial seaport to become a major east coast naval fleet port. Today, this nautical heritage is preserved and celebrated in the shops, restaurants, and boutiques that line the historic wharfs and quays for the benefit of the thousands of tourists who visit the city each year. The State's Bay Islands Park System and Narragansett Bay Estuarine Sanctuary, constitute a 2,000 + acre open space system for visitors seeking recreation, conservation, environmental education and research opportunities. East of the Bay five communities, originally a part of Massachusetts, retain many historical structures and sites -- remnants of their nautical and colonial heritage.

### Natural Resources

Rhode Island's natural endowment of land and water remains as central to the state's destiny in the 21st Century, as it was in past eras. Recreation, the focus of this plan, is but one of the many functions dependent upon the state's natural resources.

**Waterbodies and Wetlands:** Rhode Island's 420 miles of saltwater coastline provides opportunities for boating, swimming, fishing and shellfishing, waterskiing, windsurfing and more. The long, sandy ocean beaches of the southern shore draw over 1.9 million visitors each year, including many out of state visitors. There are hundreds of public access sites to the Rhode Island coast.

Rhode Island's freshwater swamps, marshes, bogs, ponds, lakes, reservoirs, and 1,498 miles of rivers and streams attract kayakers, canoeists, swimmers and fishers as well as motor boaters and jet skiers. They also support aquatic habitats that provide food, fishing and hunting opportunities.

In addition to providing recreation, open space, and educational and scientific research

opportunities, wetlands also perform critical functions including flood and storm water control; erosion and sedimentation control; water quality maintenance; recharge of groundwater supplies; discharge of groundwater; fish and wildlife habitat; nutrient production and cycling. <sup>1</sup>

**Forests:** According to the RIGIS 2003-2004 land use/land cover data, there are over 400,000 acres of forested land in Rhode Island. This number includes those land areas that were classified as deciduous, soft forest and mixed in the land use codes. In addition to providing recreational opportunities, forests provide a number of important benefits to Rhode Island including



<sup>&</sup>lt;sup>1</sup> RIDEM, 2002 State of the State's Waters Report (305b)

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water supply protection, wildlife habitat, timber products, firewood, and non-timber forest products such as witch hazel and floral greenery. Rural and urban residents also appreciate the scenery and open space that forests provide.

The State manages several extensive forested tracts including the 3,200 acre George Washington and 12,000 acre Arcadia Management Areas in western Rhode Island, and continues to acquire significant forestland parcels as resources and opportunities consistent with State land protection plans become available. Municipalities, water suppliers, and non-profit groups such as the Audubon Society and The Nature Conservancy, and land trusts also manage significant forested tracts.

**Farmland:** Rhode Island's farms, while not a recreational resource, are an important component of Rhode Island's landscape, and are attracting more visitors with farm stands, pick your own fields and orchards, farmers' markets, and attractions such as corn mazes and hayrides. According to the USDA Economic Research Service, in 2007, there were 850 farms in Rhode Island occupying approximately 60,000 acres (of which 20,000 acres was cropland). Rhode Island agriculture is generally healthy, and is ranked fourth nationally in net farm income per acre. Through the Agricultural Land Preservation Program, the State has purchased the development rights to over 6,300 acres of farmland.

Wildlife: Rhode Island, despite being a heavily urbanized state, hosts a great diversity of wildlife. Some 45 species of mammals, 165 nesting bird species, and 36 species of native freshwater fish are commonly found in the state. Migrating and wintering neo-tropical waterfowl, migrants, dragonflies, fish, and rare plants attract residents and eco-tourists to five US Fish and Wildlife Service wildlife refuges, six State Management Areas, and ten Audubon Society of Rhode Island wildlife refuges for wildlife observation opportunities. State Management Areas also provide fishing and hunting opportunities. Wildlife resources also figure in environmental education and interpretation offered by a number of agencies, including the Blackstone Valley Tourism Council in the Blackstone Valley National Heritage Corridor, and the Audubon Society's Environmental Education Center in Bristol. Save The Bay, a non-profit environmental group, operates a Narragansett Bay educational center from its headquarters on the Providence waterfront.



**Coastal Islands:** Coastal Islands provide a variety of shorelines including, sand, cobble and boulders, rocky shores, cliffs, and salt ponds. They provide important bird nesting sites and are valued for fishing and sailing. The Bay Islands Park System provides wildlife observation and other extensive recreation. The Learning Center of the Narragansett Bay Estuarine Research Reserve on Prudence Island is a joint project of the National Oceanic and Atmospheric Administration, DEM and the Audubon Society of Rhode Island.

Climate Change: Climate is the long-term weather average observed within a geographic region, and climate change refers to fluctuations in the Earth's climate system as a

result of both natural and anthropogenic causes. The Rhode Island Coastal Resources Management Program (RICRMP) currently sees the long term climate change trend as evidenced by rising global temperatures, increasing extremes within the hydrologic cycle resulting in more frequent floods and droughts, and rising sea level.

Sea level rise refers to the change in mean sea level over time in response to global climate and local tectonic changes. Sea level is the height of the sea with respect to a horizontal control point, or benchmark. Sea level rise is a direct consequence of global climate change. Greenhouse gas emissions to the atmosphere increase surface warming, which in turn increases the volume of ocean waters due to thermal expansion, and accelerates the melting of glacial ice. Atmospheric greenhouse gas concentrations are already higher than levels at the last interglacial period, when sea levels were 13 to 19 feet (4 to 6 meters) higher than at present (Overpeck et al., 2006). Greenhouse gas concentrations are expected to continue to increase through 2100. The Rhode Island Coastal Resources Management Council (RICRMC) has accepted estimates that suggest that by 2100 sea level in Rhode Island could rise approximately 2 to 5 feet (65 to 155 cm).

Climate change will result in wide scale systematic changes in the terrestrial and marine environments. These changes will result in ecosystem shifts that will challenge natural resource managers' efforts to cope and adapt to the new regime. Future increases in relative sea level will displace coastal populations, threaten infrastructure, intensify coastal flooding and ultimately lead to the loss of recreation areas, public space, and coastal wetlands. Therefore as climate change influences sea level rise, recreational opportunities may become compromised and the need to plan for mitigated recreational opportunities is critical. Open space protection plans need to provide opportunities for ecosystem and species migration as sea level rises and as ecosystems and species adjust to changing temperatures.

### **Historical/Cultural Resources**

Rhode Island has one of the densest concentrations of historical buildings and sites in the nation, offering residents and visitors to the state a means to incorporate appreciation of past events and traditions with contemporary leisure activities. Rhode Island's 39 cites and towns are host to over 16,000 historic structures and sites listed on the National Register of Historic Places maintained by the National Park Service. Major historic/cultural resources include pre-revolution era homes and churches in Newport, Providence, Bristol and Warren, early forts around Narragansett Bay, and important Industrial Revolution mills and homes throughout the state, particularly in the Blackstone, Pawtuxet, Woonasquatucket and Moshassuck valleys. Newport is famous for its "Gilded Age" mansions. Many elegant 19<sup>th</sup> century commercial and residential buildings can also be seen throughout the state.

Some of Rhode Island State parks are unique in their historical heritage. Fort Adams State Park in Newport contains Fort Adams, the largest coastal fortification in the United States, dating from 1824. Colt State Park, in Bristol, retains the air of the elegant private estate created by Samuel Colt, yet it includes modern-day facilities such as multiple use fields, a fishing pier and boat launch, picnicking areas, and adjoins an historic working farm.

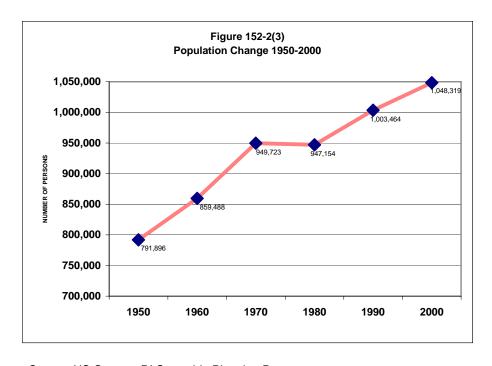
### 2-2 Population Trends -- A Growing Diversity

Rhode Island's people are as diverse and distinctive as its landforms. Throughout its history the state has welcomed wave after wave of newcomers; each group adding to the richness and breadth of its cultural tapestry. Recent increases in Hispanic and non-white

groups continued to broaden the diversity of the state's population. The 2000 census found that Hispanics make up 8.7 percent of Rhode Island's population, and were the largest and fastest growing ethnic group in the state from 1990 to 2000. This sharp growth contributed to large population gains in central cities such as Providence and Central Falls. Table 152-2(1) shows Rhode Island's population by race/ethnicity in 2000.

Table 152-2 (1) Rhode Island Population by Race/Ethnicity		
Race/Ethnicity	% of Total Population	
White	85.0%	
Black/African American	4.5%	
American Indian/Alaska Native	0.5%	
Asian	2.3%	
Native Hawaiian/Pacific Islander	0.1%	
Other	5.0%	
Two or More Races	2.7%	
Hispanic 8.7%		
Source: U.S. Census Bureau		

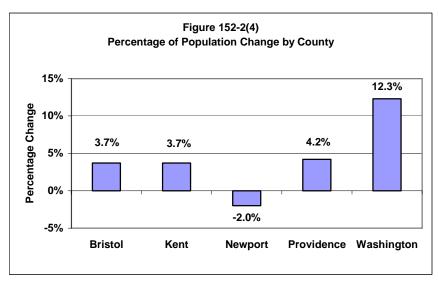
In aggregate, Rhode Island's population increased 4.5% (from 1,003,464 to 1,048,319 inhabitants) during the 1990s. This growth rate was modest compared to the national growth of 13.1%, and was lower than the 5.9% Rhode Island experienced between 1980 and 1990. Figure 152-2(3) shows Rhode Island's population growth since 1950.



Source: US Census, RI Statewide Planning Program

As can be seen in the Figure 152-2(4), the largest percentage increases since 1990 have taken place in Washington County in the southern part of the state, which is host to salt water beaches and the largest state management areas.

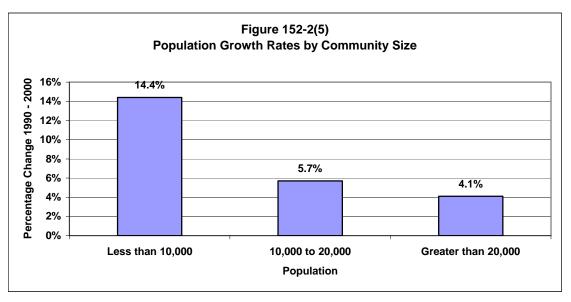
The geographic decentralization of population throughout the 1980's and 1990's was a major dynamic affecting the open space and recreation resource base.



Source: US Census, RI Statewide Planning Program

The population growth rate for rural small towns (those with under 10,000 people as of 1990) rose by more than three times the rate of growth for larger towns (those with populations over 10,000 as of 1990.)

Figure 152-2(5) illustrates the relative rates of population growth for different size communities. Four of five leading communities in terms of 1990-2000 population growth rates (percentage change) were rural: West Greenwich (45.6 %), Richmond (35.0 %), Charlestown (21.3 %), and New Shoreham (20.8 %). The fifth was the suburban town of Lincoln (15.8 %). In terms of absolute increase, Providence (12,890), Cranston (3,209), South Kingstown (3,290), Lincoln (2,853), and Cumberland (2,802) were the five fastest growing communities in the '90's.



Source: U.S. Census RI Statewide Planning Program

Rhode Island's median age is slightly higher than the nation's (36.7 years vs. 35.3 years). Fourteen and one-half percent of the population was age 65 and older in 2000, a slight decrease from fifteen percent in 1990. Despite the decrease, the percent of population over 65 ranks third highest in nation. The 2000 census shows that over half the population is in the 25 to 64 year age group. Table 152-2(2) illustrates population distribution by age class.

Table 152-2(2) Population Profile by Age Group – 2000 Census			
Age Group	Population	Percent	
Under 18 years	247,822	23.6	
18 to 24 years	106,607	10.2	
25 to 44 years	310,636	29.6	
45 to 64 years	230,852	22.0	
65 years and older	152,402	14.5	
TOTAL	1,048,319	99.9	

Source: U.S. Census Bureau

Table 152-2(3) presents 1990 and 2000 national and state populations by various age groups. The largest segment of the population continues to be represented by the Baby Boomer generation, predominantly identified in the 45 to 64 age group. While Rhode Island's elderly population (65+) grew at a lower rate (4.5%) than the national average (13.2%), this group represents a larger percentage of the total population in Rhode Island (14.5%) than it does nationally (12.4%). Contrary to a national trend, the 18 to 44 age group in Rhode Island decreased 14.7 percent. Nationally, this age group increased 6.8 percent.

Table 152-2(3) Population Change 1990 to 2000 by Age Group				
United States Age	1990	2000	Numeric Change	Percentage Change
<18	63,604,432	72,293,812	8,689,380	13.7%
18-24	26,737,766	27,143,454	405,688	1.5%
25-44	80,754,835	85,040,251	4,285,416	5.3%
45-64	46,371,009	61,952,636	15,581,627	33.6%
65+	31,241,831	34,991,753	3,749,922	12.0%
Total	248,709,873	281,421,906	32,712,033	13.2%
Rhode Island			Numeric	Percentage
Age	1990	2000	Change	Change
<18	225,690	247,822	22,132	9.8%
18-24	120,358	106,607	-13,751	-11.4%
25-44	321,241	310,636	-10,605	-3.3%
45-64	185,628	230,852	45,224	24.4%
65+	150,547	152,402	1,855	1.2%
Total	1,003,464	1,048,319	44,855	4.5%

Source: U.S. Census Bureau

The median family income in Rhode Island increased 26.9 percent during the decade from 1990 to 2000, from \$41,600 to \$52,781. The percentage of families with incomes less than \$50,000 decreased during the ten year period. Conversely, the percentage of families with

incomes over \$50,000 increased substantially, with the largest increase reported for families with incomes between \$75,000 and \$100,000. The percentage of families with incomes over \$100,000 remained relatively constant.

The 2000 millennium census reported that 32.6 percent of the Rhode Island population 25 years old and older possessed a college degree. This represents a significant increase over the 27.6 percent recorded in 1990. There was a corresponding decrease in the percentage of the state's population that had less than a high school education, from 28 percent in 1990 to 22 percent in 2000.

The changes to population, both composition and distribution, in Rhode Island present both challenges and opportunities in the development and management of recreational resources. Population growth may lead to increased demand for new facilities, both in rural towns experiencing growth and in urban communities, such as Providence, which grew as a result of in-migration between 1990 and 2000. More urban neighborhood facilities, as well as linkages or transportation services to facilities outside the city, may be required.

The changing age distribution correlates with the strong demand seen for paved walking and biking trails. Needs for beaches, picnic areas, and natural areas and similar passive recreation opportunities may also increase along with the aging of the population. Attention to the layout and design of new development, as well as efforts to improve the walkability of existing neighborhoods is needed to enhance the opportunities for all residents to be physically active as part of their daily routines.

At the same time, facilities such as basketball and volleyball courts, playgrounds, and various types of playing fields will be needed to provide more activities for youth. Changes in ethnic diversity require modification in how we operate facilities (e.g. increase bi-lingual signage and staff) as well how we allocate resources in the recreation grant selection project (e.g. encourage projects that directly benefit minority communities).

### 2-3 Rhode Island's Outdoor Recreation System:

### **Sector Roles and Responsibilities**

Rhode Island's network of natural places and developed recreational facilities offers a diverse array of outdoor recreational opportunities to its residents and visitors. Given a system that ranges from primitive hiking trails through large undeveloped tracks of land, to exquisitely maintained golf courses, to local ball fields and playgrounds, it is not surprising that a partnership of federal, state, and local agencies, as well as private for-profit and non-profit entities are needed in order to maintain the state's outdoor recreation system. Resource conservation and provision of high quality opportunities for the public's understanding and enjoyment of the state's outdoors are the common themes that help unify the disparate missions and singular purposes of the multiple jurisdictions, agencies, and personnel involved in the management of outdoor recreation, conservation, and open space areas in Rhode Island. Only with the proper understanding and integration of the roles and responsibilities of these partners can the state's outdoor recreation system work effectively and efficiently in providing an adequate system of conservation areas, parks, developed facilities, and other recreation opportunities while avoiding both duplication of effort and gaps in the spectrum of recreational facilities and areas.

### 2-3-1 The Federal Role

Federal agencies have both an operational and supporting role in Rhode Island's outdoor recreation system. The major operational aspect of the federal role consists of the US Fish and Wildlife Service's management of five conservation and wildlife refuges totaling over 2,460 acres along the Rhode Island coast. They are the:

Sachuest Point National Wildlife Refuge in Middletown
Trustom Pond National Wildlife Refuge in South Kingstown
Ninigret National Wildlife Refuge in Charlestown
John H. Chafee National Wildlife Refuge at Pettaquamscut Cove in Narragansett
Block Island National Wildlife Refuge in New Shoreham

Additionally, the National Park Service (NPS) operates the 4.5 acre Roger Williams National Memorial in Providence and is the major federal partner in the Blackstone River Valley National Heritage Corridor (BVNHC). Encompassing portions of both Rhode Island and Massachusetts, the BVNHC was created by Congress in 1986 as an "affiliated area" of the National Park System for the purpose of preserving and interpreting the significant contributions to our national heritage of the lands, waterways, and structures. The NPS offers expertise in park management, historic and natural resource preservation, and interpretation and education.

Perhaps even more important than the direct operation of the above mentioned facilities is the critical supporting role that federal agencies provide to Rhode Island's recreation system through substantial funding. Federal agencies involved in outdoor recreation include the National Park Service, the US Fish and Wildlife Service, the Federal Highway Administration, and the US Department of Agriculture. Federal funding is made available to both state and local agencies. Additionally, many federal agencies offer technical assistance programs. Table 152-2(4) lists major federal funding programs; funding amounts vary from year to year.



### **Table 152-2(4)**

# Major Federal Funding Programs Supporting Land Acquisition and Outdoor Recreation in RI

Agency/Program	Purposes		
Federal Highway Administration:			
Surface Transportation Program & National Highway System Program	Design and construction of bike paths and trails.		
Transportation Enhancements Program	Development and improvement of transportation-related scenic and historic resources.		
Recreational Trails Program	Development and improvement of new and existing multi-user trails.		
Congestion Mitigation/Air Quality Program	Bicycle and pedestrian facilities to improve air quality/reduce congestion		
US Department of the Interior.			
Land & Water Conservation Fund	Acquisition and development of outdoor recreation lands and facilities.		
North American Wetlands Conservation Program	Acquisition of easements or fee title to protect waterfowl habitat.		
Urban Parks and Recreation Recovery Program	Rehabilitation of existing indoor and outdoor recreational facilities in urban areas.		
US Fish & Wildlife Service:			
Sport Fish and Wildlife Restoration	Enhance, protect, and manage fish and their habitats; restore and improve wildlife habitat.		
North American Coastal Wetlands Conservation Grants	Conservation of lands, water, and water quality.		
US Department of Agriculture:			
Forest Legacy Program	Acquisition of easements or fee title to protect forest resources.		
Farmland Protection Program	Acquisition of development rights to agricultural land.		

Source: RIDEM 2003

#### 2-3-2 The State Role

The State's overarching responsibility in outdoor recreation is to assure that an adequate system of conservation areas, parks, developed facilities, and other recreation opportunities are available to residents and visitors. This is accomplished through planning, direct operation of facilities, and financial and technical assistance to municipalities.

The State sets overall goals and policies for outdoor recreation, conservation and open space directly through the State Guide Plan and indirectly through the approval of Community Comprehensive Plans. This Plan and the Greenspace and Greenways Plan (both elements of the State Guide Plan) are the primary recreational planning documents for the State but other State Guide Plan elements such as Land Use, Transportation, Rivers Plan, etc. contain policies related to recreation. Additionally, State agencies, notably the Department of Environmental Management (DEM) produce agency specific plans directly pertaining to outdoor recreation. The Coastal and Estuarine Land Conservation Program (CELCP) was also established for the purpose of protecting important coastal and estuarine areas that have significant conservation, recreation, ecological, historical, or aesthetic values, or that are threatened by conversion from their natural or recreational state to other uses. The program, administered by the Rhode Island Coastal Resources Management Council (RICRMC), gives priority to lands that can be effectively managed and protected and that have significant ecological value. The focus of the CELCP is to assess Rhode Island's priority land conservation needs and provide clear guidance to applicants for nominating and selecting land conservation projects within the state. A National Oceanic and Atmospheric Administration-approved CELCP will allow Rhode Island to compete for federal funds from the program for acquisition of worthy coastal and estuarine properties.

The State is a major provider of outdoor recreation areas and facilities. The primary operational role for the State is to provide facilities that offer statewide or regional benefits available to all Rhode Island residents or visitors, such as major parks, bikeways, beaches, and management areas. Several State agencies are involved in the development and operation of recreational facilities.

The DEM is the primary State provider and manager of state-owned recreational resources. DEM also provides financial and technical assistance to municipalities and other governmental agencies.

The Department controls twenty-three management areas that encompass approximately 45,000 acres that are predominately forest but include water bodies and open fields. Management areas are multi-purpose, providing fish and wildlife habitat. Additionally, DEM manages approximately 15,000 acres of State parks and beaches, trails, and bike paths. Table 152-2(5) identifies beaches, parks and other major facilities managed by DEM. These facilities attract more than six million visitors each year, including many out-of-state visitors who support Rhode Island's tourism sector – which contributed \$1.7 billion dollars annually to Rhode Island's economy.



**Table 152-2(5)** Major State Facilities Managed by DEM

#### **Beaches**

Charlestown Breachway - Camp Area Salty Brine State Beach

East Beach - Camp Area - Barrier Beach Permit Scarborough North & South Beaches

East Matunuck State Beach Roger C. Wheeler State Beach Misquamicut State Beach

### **Parks and Other Major Recreational Facilities**

Arcadia Management Area Fort Adam's State Park

Beach Pond Fort Wetherill State Park

Beavertail State Park George Washington Management Area

Goddard Memorial State Park Black Hut Management Area Blackstone River Bikeway Great Swamp Management Area Haines Memorial State Park Brenton Point State Park

Buck Hill Management Area Killinaly Pond

**Burlingame State Park** Lincoln Woods State Park

Burlingame State Campground Nicholas Farm Carolina Management Area Pulaski State Park

Colt State Park Sapowet Management Area

Simmons Pond **Durfee Hill Management Area** 

East Bay Bike Path Snake Den State Park

Fisherman's Memorial State Park & Campground Wickaboxet Management Area Woody Hill Management Area

World War II Memorial State Park

Source: RIDEM For more information about these facilities and a map go to http://204.139.0.188/website/maps

DEM's Parks and Recreation Division is exclusively devoted to operating and maintaining public recreational facilities. The principal roles of the Divisions of Fish and Wildlife and Forest Environment are as stewards of natural resources but both also have significant involvement in operating recreational facilities or supporting public recreational activities. The Planning and Development section of DEM operates the land acquisition program that works with various partners to acquire land, development rights to land, and conservation easements.

The Division also provides planning, design, and oversight of consultants in the development of recreational facilities.

DEM and Rhode Island Department of Transportation (DOT) have formed a major partnership to advance construction of bikeways. What began in the 1980's as several unconnected bike paths, is now beginning to coalesce into an integrated, statewide system of connecting natural greenways, bike paths and trails, as recommended in the (1994) State Greenspace and Greenways Plan. Today the vision of a statewide greenway network is well underway with more than 50 miles of bikeways and greenways open to the public, and another 43 miles in design and planning. Table 152-2(6) lists major bike paths and greenways completed or under development in Rhode Island. In addition to the bikeway and greenway projects led by DOT and DEM, the Aquidneck Island Planning Commission initiated a study in 2007 to investigate the feasibility of constructing a 4.7 mile dedicated multi-use path from the Naval Station in Newport to the Melville neighborhood in Portsmouth. This proposed route is known as the "Burma Road Segment" of the Aquidneck Island Bike Path.

DEM, DOT, and municipalities share responsibility for state bikeways. DEM and DOT jointly design bike trails; DOT constructs them with FHWA funding. DEM or host municipalities are responsible for operating and maintaining the bikeways.



Table 152-2(6) Rhode Island's Major Bike Paths & Greenways

Name	Mileage	Status
East Bay Bike Path East Bay - Colt State Connector	14.5 4.1	Open Design and Planning
Blackstone River Bikeway	11.2 4.5 0.9	Open Design and Planning Under Construction
Cranston Bike Path	5.5	Open
Woonasquatucket River Bikeway	5.1 4.7	Open Design and Planning
Ten Mile River Bikeway	2.0 0.85	Open Design and Planning
Warwick/West Warwick Greenway	4.4	Open
South County Bicycle Path	5.6 3.7	Open Design and Planning
Coventry Greenway	2.7 1.6	Open Design and Planning
Trestle Trail	10	Under design
Jamestown Verazzano Bridge Bicycle/Pedestrian Access	5.5	Design and Planning
Aquidneck Island Bike Path	8.6	Design and Planning
Tiverton Bike Path	2.6	Design and Planning
Davisville Bike Path	2.5	Design and Planning

Source: RIDOT, Statewide Bicycle System, 2009.

In addition to the previously mentioned parks and management areas, the Rhode Island Water Resources Board owns and maintains the 8,600 acre Big River Management Area in the towns of West Greenwich, East Greenwich, Coventry, and Exeter. Largely undeveloped, the land was condemned for water supply purposes, and the Water Resources Board is conducting groundwater investigations and development activities in the area. In 1993, the Rhode Island General Assembly also designated the area as "open space" for use by the residents of Rhode Island until necessary for water supply purposes thus allowing limited recreational usage (hunting, fishing, hiking, canoeing, horseback riding) that does not compromise water supply objectives.

While not their primary responsibility, other State agencies have programs that provide or support outdoor recreation. Examples include:

- The Rhode Island Public Transit Authority (RIPTA) provides transportation to many recreational venues, including summer beach bus routes as well as a Rack N' Ride program for cyclists. Most RIPTA buses are equipped with bike racks.
- The Agricultural Land Preservation Commission purchases the development rights to agricultural land. Preservation of open space, habitat, historic features, and scenic views are all part of the Commission's evaluation criteria.
- The Rhode Island Department of Health provides technical assistance to local communities to maintain the Path to Health program. The Path to Health program has mapped walking routes in 9 RI communities. The routes are marked with signage that includes maps of the trail and mileage markers. The Department's Initiative for a Healthy Weight provides mini-grants to communities to improve access to low-cost recreation through park improvements, trail maintenance, community programming and gardening programs.
- The State's university and college system has extensive recreational facilities that are available for limited public usage.



Finally, the State has a major role in providing financial assistance to municipalities for the acquisition and development of outdoor recreational facilities. Tables 152-2(7) and 152-2(8) display the amount and sources of State-supported local recreation and open space projects since 1992.

Table 152-2(7) State Investment in Local Recreation Facilities & Land Acquisition 1992-2009

Foster		Recreation	Land Acquisition	Loans for Land	Tatal
Bristol	Dorrington			Acquisition	
Burrillville					
Central Falls         \$1,248,743.00         \$0.00         \$11,248,743.6           Charlestown         \$215,000.00         \$557,125.00         \$772,125.0           Coventry         \$641,735.00         \$617,750.00         \$1,259,485.6           Cranston         \$365,000.00         \$19,125.00         \$3384,125.6           Cumberland         \$1,130,490.00         \$1,432,764.00         \$2,563,254.6           East Greenwich         \$572,500.00         \$600,000.00         \$100,000.00         \$1,172,500.0           East Providence         \$1,436,112.50         \$400,000.00         \$200,000.00         \$1,172,500.0           East Providence         \$1,436,112.50         \$400,000.00         \$200,000.00         \$1,171,900.0           Foster         \$25,000.00         \$1,076,900.00         \$1,101,900.0         \$660,750.0           Foster         \$315,000.00         \$345,750.00         \$660,750.0           Glocester         \$660,750.0         \$1,844,296.5         \$1,184,084.00         \$1,844,296.5           Hopkinton         \$308,668.00         \$255,000.00         \$173,383.00         \$347,219.0           Jamestown         \$190,000.00         \$157,219.00         \$173,383.00         \$347,219.0           Lincoln         \$166,175.00         \$1,056,374.					
Charlestown         \$215,000.00         \$557,125.00         \$772,125.0           Coventry         \$641,735.00         \$617,750.00         \$1,259,485.0           Cranston         \$365,000.00         \$19,125.00         \$384,125.0           Cumberland         \$1,130,490.00         \$1,432,764.00         \$2,563,254.0           East Greenwich         \$572,500.00         \$600,000.00         \$100,000.00         \$1,172,500.0           East Providence         \$1,436,112.50         \$400,000.00         \$200,000.00         \$1,101,900.0           Exeter         \$25,000.00         \$1,076,900.00         \$1,010,900.0         \$1,101,900.0           Foster         \$315,000.00         \$345,750.00         \$660,750.0           Glocester         \$660,212.75         \$1,184,084.00         \$1,844,296.7           Hopkinton         \$308,668.00         \$225,000.00         \$333,668.1           Jamestown         \$190,000.00         \$157,219.00         \$173,383.00         \$366,000.0           Lincoln         \$166,175.00         \$1,056,374.00         \$1,222,549.0         \$1,222,549.0           Little Compton         \$190,000.00         \$1,750,000.00         \$1,833,485.0         \$1,833,485.0           New Shoreham         \$612,000.00         \$250,000.00         \$1,83			·		
Coventry         \$641,735.00         \$617,750.00         \$1,259,485.6           Cranston         \$365,000.00         \$19,125.00         \$384,125.0           Cumberland         \$1,130,490.00         \$1,432,764.00         \$2,563,254.6           East Greenwich         \$572,500.00         \$600,000.00         \$100,000.00         \$1,722,500.0           East Providence         \$1,436,112.50         \$400,000.00         \$200,000.00         \$1,101,900.0           Exeter         \$25,000.00         \$1,076,900.00         \$1,101,900.0           Foster         \$315,000.00         \$345,750.00         \$660,750.0           Glocester         \$660,212.75         \$1,184,084.00         \$1,844,296.7           Hopkinton         \$308,668.00         \$225,000.00         \$533,668.0           Jamestown         \$190,000.00         \$157,219.00         \$173,383.00         \$347,219.0           Johnston         \$656,000.00         \$0.00         \$656,000.0         \$1,222,549.0           Little Compton         \$190,000.00         \$1,750,000.00         \$1,940,000.0           Midletown         \$1,013,485.00         \$820,000.00         \$1,833,485.0           New Shoreham         \$6612,000.00         \$400,000.00         \$1,787,800.0           New Shoreham			·		
Cranston         \$365,000.00         \$19,125.00         \$384,125.0           Cumberland         \$1,130,490.00         \$1,432,764.00         \$2,563,254.0           East Greenwich         \$572,500.00         \$600,000.00         \$100,000.00         \$1,725.00.0           East Providence         \$1,436,112.50         \$400,000.00         \$200,000.00         \$1,366,112.50           Exeter         \$25,000.00         \$1,076,900.00         \$200,000.00         \$1,101,900.0           Foster         \$315,000.00         \$345,750.00         \$660,750.0           Glocester         \$660,212.75         \$1,184,084.00         \$1,844,296.7           Hopkinton         \$308,668.00         \$225,000.00         \$533,668.0           Jamestown         \$190,000.00         \$157,219.00         \$173,383.00         \$347,219.0           Johnston         \$656,000.00         \$0.00         \$656,000.0         \$656,000.0           Lincoln         \$166,175.00         \$1,056,374.00         \$1,222,549.0           Little Compton         \$190,000.00         \$1,750,000.00         \$1,430,000.00           Middletown         \$1,013,485.00         \$820,000.00         \$13,833,485.0           Narragansett         \$485,600.00         \$250,000.00         \$1,012,000.0					
Cumberland         \$1,130,490.00         \$1,432,764.00         \$2,563,254.6           East Greenwich         \$572,500.00         \$600,000.00         \$100,000.00         \$1,172,500.0           East Providence         \$1,436,112.50         \$400,000.00         \$200,000.00         \$1,836,112.5           Exeter         \$25,000.00         \$1,076,900.00         \$1,019.00           Foster         \$315,000.00         \$345,750.00         \$660,750.0           Glocester         \$660,212.75         \$1,184,084.00         \$1,844,296.7           Hopkinton         \$308,668.00         \$225,000.00         \$533,668.0           Jamestown         \$190,000.00         \$157,219.00         \$173,383.00         \$347,219.0           Johnston         \$656,000.00         \$1,056,374.00         \$1,222,549.0         \$1,222,549.0           Lircoln         \$166,175.00         \$1,056,374.00         \$12,222,549.0         \$1,222,549.0           Little Compton         \$190,000.00         \$1,750,000.00         \$101,000.00         \$1422,2549.0           Middletown         \$1,013,485.00         \$820,000.00         \$101,000.00         \$1,840,000.0           New Shoreham         \$612,000.00         \$400,000.00         \$150,000.00         \$1,833,485.0           New Shoreham					
East Greenwich         \$572,500.00         \$600,000.00         \$100,000.00         \$1,172,500.0           East Providence         \$1,436,112.50         \$400,000.00         \$200,000.00         \$1,836,112.5           Exeter         \$25,000.00         \$1,076,900.00         \$1,101,900.0           Foster         \$315,000.00         \$345,750.00         \$660,750.0           Glocester         \$660,212.75         \$1,184,084.00         \$1,844,296.7           Hopkinton         \$308,668.00         \$225,000.00         \$533,668.0           Jamestown         \$190,000.00         \$157,219.00         \$173,383.00         \$347,219.0           Johnston         \$656,000.00         \$0.00         \$656,000.00         \$656,000.00         \$656,000.00         \$656,000.00         \$656,000.00         \$656,000.00         \$1,222,549.0					
East Providence         \$1,436,112.50         \$400,000.00         \$200,000.00         \$1,836,112.5           Exeter         \$25,000.00         \$1,076,900.00         \$1,101,900.0           Foster         \$315,000.00         \$345,750.00         \$660,750.0           Glocester         \$660,212.75         \$1,184,084.00         \$1,844,296.7           Hopkinton         \$308,668.00         \$225,000.00         \$533,668.0           Jamestown         \$190,000.00         \$157,219.00         \$173,383.00         \$347,219.0           Johnston         \$656,000.00         \$0.00         \$656,000.0         \$1,222,549.0           Little Compton         \$190,000.00         \$1,750,000.00         \$1,222,549.0           Little Compton         \$190,000.00         \$1,750,000.00         \$1,833,485.0           Narragansett         \$485,600.00         \$250,000.00         \$133,485.0           New Shoreham         \$612,000.00         \$400,000.00         \$1,383,485.0           Newport         \$1,430,000.00         \$400,000.00         \$1,830,000.0           North Kingstown         \$787,820.00         \$1,000,000.00         \$1,787,820.0           North Smithfield         \$509,528.00         \$295,147.00         \$804,675.0           Pawtucket         \$2,307,386.				<b>^</b> /	
Exeter					
Foster			· ·	\$200,000.00	
Glocester         \$660,212.75         \$1,184,084.00         \$1,844,296.7           Hopkinton         \$308,668.00         \$225,000.00         \$533,668.0           Jamestown         \$190,000.00         \$157,219.00         \$173,383.00         \$347,219.0           Johnston         \$656,000.00         \$0.00         \$656,000.0         \$656,000.0           Lincoln         \$166,175.00         \$1,056,374.00         \$1,222,549.0           Little Compton         \$190,000.00         \$1,750,000.00         \$101,000.00         \$1,940,000.0           Middletown         \$1,013,485.00         \$820,000.00         \$1,833,485.0         \$1,833,485.0           Narragansett         \$485,600.00         \$250,000.00         \$150,000.00         \$1,012,000.0           New Shoreham         \$612,000.00         \$400,000.00         \$150,000.00         \$1,012,000.0           Newport         \$1,430,000.00         \$400,000.00         \$1,830,000.0           North Kingstown         \$787,820.00         \$1,000,000.00         \$1,787,820.0           North Providence         \$439,350.00         \$295,147.00         \$804,675.0           Pawtucket         \$2,307,386.00         \$77,500.00         \$888,752.0           Providence         \$1,835,875.00         \$175,585.00         \$2					\$1,101,900.00
Hopkinton					\$660,750.00
Jamestown         \$190,000.00         \$157,219.00         \$173,383.00         \$347,219.00           Johnston         \$656,000.00         \$0.00         \$656,000.0           Lincoln         \$166,175.00         \$1,056,374.00         \$1,222,549.0           Little Compton         \$190,000.00         \$1,750,000.00         \$101,000.00         \$1,940,000.0           Middletown         \$1,013,485.00         \$820,000.00         \$1333,485.0           Narragansett         \$485,600.00         \$250,000.00         \$735,600.0           New Shoreham         \$612,000.00         \$400,000.00         \$1,50,000.00           Newport         \$1,430,000.00         \$400,000.00         \$1,830,000.0           North Kingstown         \$787,820.00         \$1,000,000.00         \$1,787,820.0           North Providence         \$439,350.00         \$0.00         \$439,350.0           North Smithfield         \$509,528.00         \$295,147.00         \$804,675.0           Pawtucket         \$2,307,386.00         \$77,500.00         \$2,384,886.0           Portsmouth         \$213,752.00         \$675,000.00         \$888,752.0           Providence         \$1,885,875.00         \$175,585.00         \$2,061,460.0           Richmond         \$100,000.00         \$250,000.00					
Johnston         \$656,000.00         \$0.00         \$656,000.00           Lincoln         \$166,175.00         \$1,056,374.00         \$1,222,549.0           Little Compton         \$190,000.00         \$1,750,000.00         \$101,000.00         \$1,940,000.0           Middletown         \$1,013,485.00         \$820,000.00         \$1,833,485.0           Narragansett         \$485,600.00         \$250,000.00         \$735,600.0           New Shoreham         \$612,000.00         \$4400,000.00         \$150,000.00         \$1,012,000.0           Newport         \$1,430,000.00         \$4400,000.00         \$1,787,820.0         \$1,000,000.00         \$1,787,820.0           North Kingstown         \$787,820.00         \$1,000,000.00         \$439,350.0         \$439,350.00         \$439,350.0           North Smithfield         \$509,528.00         \$295,147.00         \$804,675.0           Pawtucket         \$2,307,386.00         \$77,500.00         \$2,384,886.0           Portsmouth         \$213,752.00         \$675,000.00         \$888,500.00         \$2,361,460.0           Richmond         \$100,000.00         \$250,000.00         \$88,500.00         \$350,000.0           Scituate         \$621,000.00         \$330,000.00         \$96,000.00         \$350,000.0           Smith	-				\$533,668.00
Lincoln         \$166,175.00         \$1,056,374.00         \$1,222,549.0           Little Compton         \$190,000.00         \$1,750,000.00         \$101,000.00         \$1,940,000.0           Middletown         \$1,013,485.00         \$820,000.00         \$1,833,485.0           Narragansett         \$485,600.00         \$250,000.00         \$735,600.0           New Shoreham         \$612,000.00         \$400,000.00         \$150,000.00         \$1,012,000.0           Newport         \$1,430,000.00         \$400,000.00         \$1,50,000.00         \$1,787,820.0           North Kingstown         \$787,820.00         \$1,000,000.00         \$1,787,820.0           North Providence         \$439,350.00         \$0.00         \$439,350.0           North Smithfield         \$509,528.00         \$295,147.00         \$804,675.0           Pawtucket         \$2,307,386.00         \$77,500.00         \$2,384,886.0           Portsmouth         \$213,752.00         \$675,000.00         \$888,752.0           Providence         \$1,885,875.00         \$175,585.00         \$2,661,460.0           Richmond         \$100,000.00         \$250,000.00         \$88,500.00         \$350,000.0           Scituate         \$621,000.00         \$300,000.00         \$96,000.00         \$1,310,650.0				\$173,383.00	\$347,219.00
Little Compton         \$190,000.00         \$1,750,000.00         \$101,000.00         \$1,940,000.00           Middletown         \$1,013,485.00         \$820,000.00         \$1,833,485.0           Narragansett         \$485,600.00         \$250,000.00         \$735,600.0           New Shoreham         \$612,000.00         \$400,000.00         \$150,000.00         \$1,012,000.0           Newport         \$1,430,000.00         \$400,000.00         \$1,500,000.00         \$1,830,000.0           North Kingstown         \$787,820.00         \$1,000,000.00         \$1,787,820.0           North Providence         \$439,350.00         \$0.00         \$439,350.0           North Smithfield         \$509,528.00         \$295,147.00         \$804,675.0           Pawtucket         \$2,307,386.00         \$77,500.00         \$2,384,886.0           Portsmouth         \$213,752.00         \$675,000.00         \$888,752.0           Providence         \$1,885,875.00         \$175,585.00         \$2,061,460.0           Richmond         \$100,000.00         \$300,000.00         \$350,000.0           Scituate         \$621,000.00         \$835,650.00         \$96,000.00         \$1,310,650.0           Smithfield         \$475,000.00         \$338,000.00         \$37,92,267.0           Tiv	Johnston	\$656,000.00	·		\$656,000.00
Middletown         \$1,013,485.00         \$820,000.00         \$1,833,485.0           Narragansett         \$485,600.00         \$250,000.00         \$735,600.0           New Shoreham         \$612,000.00         \$400,000.00         \$150,000.00         \$1,012,000.0           Newport         \$1,430,000.00         \$400,000.00         \$1,830,000.0           North Kingstown         \$787,820.00         \$1,000,000.00         \$1,787,820.0           North Providence         \$439,350.00         \$0.00         \$439,350.0           North Smithfield         \$509,528.00         \$295,147.00         \$804,675.0           Pawtucket         \$2,307,386.00         \$77,500.00         \$2,384,886.0           Portsmouth         \$213,752.00         \$675,000.00         \$888,752.0           Providence         \$1,885,875.00         \$175,585.00         \$2,061,460.0           Richmond         \$100,000.00         \$300,000.00         \$350,000.0           Scituate         \$621,000.00         \$835,650.00         \$96,000.00         \$3792,267.0           Smithfield         \$475,000.00         \$835,650.00         \$96,000.00         \$3,792,267.0           Tiverton         \$290,599.00         \$1,815,000.00         \$250,000.00         \$2,105,599.0           Warren	Lincoln	\$166,175.00	\$1,056,374.00		\$1,222,549.00
Narragansett         \$485,600.00         \$250,000.00         \$735,600.0           New Shoreham         \$612,000.00         \$400,000.00         \$150,000.00         \$1,012,000.0           Newport         \$1,430,000.00         \$400,000.00         \$1,830,000.0           North Kingstown         \$787,820.00         \$1,000,000.00         \$1,787,820.0           North Providence         \$439,350.00         \$0.00         \$439,350.0           North Smithfield         \$509,528.00         \$295,147.00         \$804,675.0           Pawtucket         \$2,307,386.00         \$77,500.00         \$2,384,886.0           Portsmouth         \$213,752.00         \$675,000.00         \$888,752.0           Providence         \$1,885,875.00         \$175,585.00         \$2,061,460.0           Richmond         \$100,000.00         \$250,000.00         \$350,000.0           Scituate         \$621,000.00         \$300,000.00         \$96,000.00         \$1,310,650.0           Smithfield         \$475,000.00         \$2,277,169.00         \$308,000.00         \$3,792,267.0           Tiverton         \$290,599.00         \$1,815,000.00         \$250,000.00         \$617,948.0           Warren         \$367,948.00         \$250,000.00         \$1,257,400.0           West Greenwich <td>Little Compton</td> <td>\$190,000.00</td> <td>\$1,750,000.00</td> <td>\$101,000.00</td> <td>\$1,940,000.00</td>	Little Compton	\$190,000.00	\$1,750,000.00	\$101,000.00	\$1,940,000.00
New Shoreham         \$612,000.00         \$400,000.00         \$150,000.00         \$1,012,000.00           Newport         \$1,430,000.00         \$400,000.00         \$1,830,000.00           North Kingstown         \$787,820.00         \$1,000,000.00         \$1,787,820.0           North Providence         \$439,350.00         \$0.00         \$439,350.0           North Smithfield         \$509,528.00         \$295,147.00         \$804,675.0           Pawtucket         \$2,307,386.00         \$77,500.00         \$2,384,886.0           Portsmouth         \$213,752.00         \$675,000.00         \$888,752.0           Providence         \$1,885,875.00         \$175,585.00         \$2,061,460.0           Richmond         \$100,000.00         \$250,000.00         \$350,000.0           Scituate         \$621,000.00         \$300,000.00         \$96,000.00         \$1,310,650.0           Smithfield         \$475,000.00         \$835,650.00         \$96,000.00         \$3,792,267.0           South Kingstown         \$1,515,098.00         \$2,277,169.00         \$308,000.00         \$3,792,267.0           Warren         \$367,948.00         \$250,000.00         \$250,000.00         \$617,948.0           Warwick         \$1,075,900.00         \$181,500.00         \$1,063,992.0	Middletown	\$1,013,485.00	\$820,000.00		\$1,833,485.00
Newport         \$1,430,000.00         \$400,000.00         \$1,830,000.0           North Kingstown         \$787,820.00         \$1,000,000.00         \$1,787,820.0           North Providence         \$439,350.00         \$0.00         \$439,350.0           North Smithfield         \$509,528.00         \$295,147.00         \$804,675.0           Pawtucket         \$2,307,386.00         \$77,500.00         \$2,384,886.0           Portsmouth         \$213,752.00         \$675,000.00         \$888,752.0           Providence         \$1,885,875.00         \$175,585.00         \$2,061,460.0           Richmond         \$100,000.00         \$250,000.00         \$88,500.00         \$350,000.0           Scituate         \$621,000.00         \$300,000.00         \$96,000.00         \$1,310,650.0           Smithfield         \$475,000.00         \$835,650.00         \$96,000.00         \$1,310,650.0           South Kingstown         \$1,515,098.00         \$2,277,169.00         \$308,000.00         \$3,792,267.0           Tiverton         \$290,599.00         \$1,815,000.00         \$250,000.00         \$2,105,599.0           Warren         \$367,948.00         \$250,000.00         \$1,257,400.0           West Greenwich         \$300,000.00         \$763,992.00         \$1,063,992.0	Narragansett	\$485,600.00	\$250,000.00		\$735,600.00
North Kingstown         \$787,820.00         \$1,000,000.00         \$1,787,820.0           North Providence         \$439,350.00         \$0.00         \$439,350.0           North Smithfield         \$509,528.00         \$295,147.00         \$804,675.0           Pawtucket         \$2,307,386.00         \$77,500.00         \$2,384,886.0           Portsmouth         \$213,752.00         \$675,000.00         \$888,752.0           Providence         \$1,885,875.00         \$175,585.00         \$2,061,460.0           Richmond         \$100,000.00         \$250,000.00         \$350,000.0           Scituate         \$621,000.00         \$300,000.00         \$96,000.00         \$1,310,650.0           Smithfield         \$475,000.00         \$835,650.00         \$96,000.00         \$1,310,650.0           South Kingstown         \$1,515,098.00         \$2,277,169.00         \$308,000.00         \$3,792,267.0           Tiverton         \$290,599.00         \$1,815,000.00         \$250,000.00         \$2,105,599.0           Warren         \$367,948.00         \$250,000.00         \$1,257,400.0           West Greenwich         \$300,000.00         \$181,500.00         \$1,063,992.0           West Warwick         \$707,000.00         \$1,453,872.00         \$3,066,372.0           Wes	New Shoreham		\$400,000.00	\$150,000.00	\$1,012,000.00
North Providence         \$439,350.00         \$0.00         \$439,350.0           North Smithfield         \$509,528.00         \$295,147.00         \$804,675.0           Pawtucket         \$2,307,386.00         \$77,500.00         \$2,384,886.0           Portsmouth         \$213,752.00         \$675,000.00         \$888,752.0           Providence         \$1,885,875.00         \$175,585.00         \$2,061,460.0           Richmond         \$100,000.00         \$250,000.00         \$88,500.00         \$350,000.0           Scituate         \$621,000.00         \$300,000.00         \$96,000.00         \$1,310,650.0           Smithfield         \$475,000.00         \$835,650.00         \$96,000.00         \$1,310,650.0           South Kingstown         \$1,515,098.00         \$2,277,169.00         \$308,000.00         \$3,792,267.0           Tiverton         \$290,599.00         \$1,815,000.00         \$250,000.00         \$617,948.0           Warrier         \$367,948.00         \$250,000.00         \$1,257,400.0           West Greenwich         \$300,000.00         \$763,992.00         \$1,063,992.0           West Warwick         \$707,000.00         \$151,875.00         \$3,066,372.0           Westerly         \$1,612,500.00         \$1,453,872.00         \$3,066,372.0 <td>Newport</td> <td>\$1,430,000.00</td> <td>\$400,000.00</td> <td></td> <td>\$1,830,000.00</td>	Newport	\$1,430,000.00	\$400,000.00		\$1,830,000.00
North Smithfield         \$509,528.00         \$295,147.00         \$804,675.0           Pawtucket         \$2,307,386.00         \$77,500.00         \$2,384,886.0           Portsmouth         \$213,752.00         \$675,000.00         \$2,061,460.0           Providence         \$1,885,875.00         \$175,585.00         \$2,061,460.0           Richmond         \$100,000.00         \$250,000.00         \$388,500.00         \$350,000.0           Scituate         \$621,000.00         \$300,000.00         \$96,000.00         \$1,310,650.0           Smithfield         \$475,000.00         \$835,650.00         \$96,000.00         \$1,310,650.0           South Kingstown         \$1,515,098.00         \$2,277,169.00         \$308,000.00         \$3,792,267.0           Tiverton         \$290,599.00         \$1,815,000.00         \$250,000.00         \$2,105,599.0           Warren         \$367,948.00         \$250,000.00         \$1,257,400.0           West Greenwich         \$300,000.00         \$181,500.00         \$1,063,992.0           West Warwick         \$707,000.00         \$1,51,875.00         \$3,066,372.0           Westerly         \$1,612,500.00         \$1,453,872.00         \$3,066,372.0	North Kingstown	\$787,820.00	\$1,000,000.00		\$1,787,820.00
Pawtucket         \$2,307,386.00         \$77,500.00         \$2,384,886.0           Portsmouth         \$213,752.00         \$675,000.00         \$888,752.0           Providence         \$1,885,875.00         \$175,585.00         \$2,061,460.0           Richmond         \$100,000.00         \$250,000.00         \$88,500.00         \$350,000.0           Scituate         \$621,000.00         \$300,000.00         \$96,000.00         \$921,000.0           Smithfield         \$475,000.00         \$835,650.00         \$96,000.00         \$1,310,650.0           South Kingstown         \$1,515,098.00         \$2,277,169.00         \$308,000.00         \$3,792,267.0           Tiverton         \$290,599.00         \$1,815,000.00         \$250,000.00         \$2,105,599.0           Warren         \$367,948.00         \$250,000.00         \$1,257,400.0           West Greenwich         \$300,000.00         \$763,992.00         \$1,063,992.0           West Warwick         \$707,000.00         \$1,51,875.00         \$858,875.0           Westerly         \$1,612,500.00         \$1,453,872.00         \$3,066,372.0	North Providence	\$439,350.00	\$0.00		\$439,350.00
Portsmouth         \$213,752.00         \$675,000.00         \$888,752.00           Providence         \$1,885,875.00         \$175,585.00         \$2,061,460.00           Richmond         \$100,000.00         \$250,000.00         \$88,500.00         \$350,000.00           Scituate         \$621,000.00         \$300,000.00         \$96,000.00         \$1,310,650.00           Smithfield         \$475,000.00         \$835,650.00         \$96,000.00         \$1,310,650.00           South Kingstown         \$1,515,098.00         \$2,277,169.00         \$308,000.00         \$3,792,267.00           Tiverton         \$290,599.00         \$1,815,000.00         \$250,000.00         \$2,105,599.00           Warren         \$367,948.00         \$250,000.00         \$1,257,400.00           West Greenwich         \$300,000.00         \$763,992.00         \$1,063,992.00           West Warwick         \$707,000.00         \$151,875.00         \$858,875.00           Westerly         \$1,612,500.00         \$1,453,872.00         \$3,066,372.00	North Smithfield	\$509,528.00	\$295,147.00		\$804,675.00
Providence         \$1,885,875.00         \$175,585.00         \$2,061,460.00           Richmond         \$100,000.00         \$250,000.00         \$88,500.00         \$350,000.00           Scituate         \$621,000.00         \$300,000.00         \$96,000.00         \$1,310,650.00           Smithfield         \$475,000.00         \$835,650.00         \$96,000.00         \$1,310,650.00           South Kingstown         \$1,515,098.00         \$2,277,169.00         \$308,000.00         \$3,792,267.00           Tiverton         \$290,599.00         \$1,815,000.00         \$250,000.00         \$2,105,599.00           Warren         \$367,948.00         \$250,000.00         \$617,948.00           West Greenwich         \$300,000.00         \$763,992.00         \$1,063,992.00           West Warwick         \$707,000.00         \$151,875.00         \$858,875.00           Westerly         \$1,612,500.00         \$1,453,872.00         \$3,066,372.00	Pawtucket	\$2,307,386.00	\$77,500.00		\$2,384,886.00
Richmond         \$100,000.00         \$250,000.00         \$88,500.00         \$350,000.00           Scituate         \$621,000.00         \$300,000.00         \$921,000.00           Smithfield         \$475,000.00         \$835,650.00         \$96,000.00         \$1,310,650.00           South Kingstown         \$1,515,098.00         \$2,277,169.00         \$308,000.00         \$3,792,267.00           Tiverton         \$290,599.00         \$1,815,000.00         \$250,000.00         \$2,105,599.00           Warren         \$367,948.00         \$250,000.00         \$617,948.00           Warwick         \$1,075,900.00         \$181,500.00         \$1,257,400.00           West Greenwich         \$300,000.00         \$763,992.00         \$1,063,992.00           West Warwick         \$707,000.00         \$151,875.00         \$858,875.00           Westerly         \$1,612,500.00         \$1,453,872.00         \$3,066,372.00	Portsmouth	\$213,752.00	\$675,000.00		\$888,752.00
Scituate         \$621,000.00         \$300,000.00         \$921,000.00           Smithfield         \$475,000.00         \$835,650.00         \$96,000.00         \$1,310,650.0           South Kingstown         \$1,515,098.00         \$2,277,169.00         \$308,000.00         \$3,792,267.0           Tiverton         \$290,599.00         \$1,815,000.00         \$250,000.00         \$2,105,599.0           Warren         \$367,948.00         \$250,000.00         \$617,948.0           Warwick         \$1,075,900.00         \$181,500.00         \$1,257,400.0           West Greenwich         \$300,000.00         \$763,992.00         \$1,063,992.0           West Warwick         \$707,000.00         \$151,875.00         \$858,875.0           Westerly         \$1,612,500.00         \$1,453,872.00         \$3,066,372.0	Providence	\$1,885,875.00	\$175,585.00		\$2,061,460.00
Smithfield         \$475,000.00         \$835,650.00         \$96,000.00         \$1,310,650.0           South Kingstown         \$1,515,098.00         \$2,277,169.00         \$308,000.00         \$3,792,267.0           Tiverton         \$290,599.00         \$1,815,000.00         \$250,000.00         \$2,105,599.0           Warren         \$367,948.00         \$250,000.00         \$617,948.0           Warwick         \$1,075,900.00         \$181,500.00         \$1,257,400.0           West Greenwich         \$300,000.00         \$763,992.00         \$1,063,992.0           West Warwick         \$707,000.00         \$151,875.00         \$858,875.0           Westerly         \$1,612,500.00         \$1,453,872.00         \$3,066,372.0	Richmond	\$100,000.00	\$250,000.00	\$88,500.00	\$350,000.00
Smithfield         \$475,000.00         \$835,650.00         \$96,000.00         \$1,310,650.0           South Kingstown         \$1,515,098.00         \$2,277,169.00         \$308,000.00         \$3,792,267.0           Tiverton         \$290,599.00         \$1,815,000.00         \$250,000.00         \$2,105,599.0           Warren         \$367,948.00         \$250,000.00         \$617,948.0           Warwick         \$1,075,900.00         \$181,500.00         \$1,257,400.0           West Greenwich         \$300,000.00         \$763,992.00         \$1,063,992.0           West Warwick         \$707,000.00         \$151,875.00         \$858,875.0           Westerly         \$1,612,500.00         \$1,453,872.00         \$3,066,372.0	Scituate	\$621,000.00	\$300,000.00		\$921,000.00
Tiverton         \$290,599.00         \$1,815,000.00         \$250,000.00         \$2,105,599.00           Warren         \$367,948.00         \$250,000.00         \$617,948.0           Warwick         \$1,075,900.00         \$181,500.00         \$1,257,400.0           West Greenwich         \$300,000.00         \$763,992.00         \$1,063,992.0           West Warwick         \$707,000.00         \$151,875.00         \$858,875.0           Westerly         \$1,612,500.00         \$1,453,872.00         \$3,066,372.0	Smithfield	\$475,000.00	\$835,650.00	\$96,000.00	\$1,310,650.00
Tiverton         \$290,599.00         \$1,815,000.00         \$250,000.00         \$2,105,599.00           Warren         \$367,948.00         \$250,000.00         \$617,948.0           Warwick         \$1,075,900.00         \$181,500.00         \$1,257,400.0           West Greenwich         \$300,000.00         \$763,992.00         \$1,063,992.0           West Warwick         \$707,000.00         \$151,875.00         \$858,875.0           Westerly         \$1,612,500.00         \$1,453,872.00         \$3,066,372.0	South Kingstown		\$2,277,169.00		\$3,792,267.00
Warren         \$367,948.00         \$250,000.00         \$617,948.0           Warwick         \$1,075,900.00         \$181,500.00         \$1,257,400.0           West Greenwich         \$300,000.00         \$763,992.00         \$1,063,992.0           West Warwick         \$707,000.00         \$151,875.00         \$858,875.0           Westerly         \$1,612,500.00         \$1,453,872.00         \$3,066,372.0	•				\$2,105,599.00
Warwick         \$1,075,900.00         \$181,500.00         \$1,257,400.0           West Greenwich         \$300,000.00         \$763,992.00         \$1,063,992.0           West Warwick         \$707,000.00         \$151,875.00         \$858,875.0           Westerly         \$1,612,500.00         \$1,453,872.00         \$3,066,372.0				•	\$617,948.00
West Greenwich         \$300,000.00         \$763,992.00         \$1,063,992.0           West Warwick         \$707,000.00         \$151,875.00         \$858,875.0           Westerly         \$1,612,500.00         \$1,453,872.00         \$3,066,372.0	Warwick	\$1,075,900.00			\$1,257,400.00
West Warwick         \$707,000.00         \$151,875.00         \$858,875.0           Westerly         \$1,612,500.00         \$1,453,872.00         \$3,066,372.0					\$1,063,992.00
Westerly \$1,612,500.00 \$1,453,872.00 \$3,066,372.0		· · · · · · · · · · · · · · · · · · ·			\$858,875.00
					\$3,066,372.00
T // T T T T T T T T T T T T T T T	·				\$1,535,000.00
\$29,262,933.25   \$23,764,156.00   \$1,466,883.00   \$53,027,089.2				\$1,466,883.00	\$53,027,089.25

Source: RIDEM 2009

Table 152-2(8)  Major State Funding Programs Supporting Land Acquisition  and Development of Recreation Facilities			
Program	Purpose		
DEM Land Acquisition Program	State open space preservation Local open space preservation		
Agricultural Land Preservation Program	Agricultural land protection through purchase of development rights		
Greenways Development Program	Regional and local linear open space acquisition and development		
Distressed Communities Grants	Park land acquisition and development in urban areas		
DEM Fish and Wildlife	Land acquisition and capital improvements, fishing and hunting access, and match for federal Fish and Wildlife funds		
Natural Heritage /Open Space	No-interest loans for land acquisition		
Rhode Island Water Resources Board - Surcharge for Watershed Protection	Acquisition of land or interests in land that protect surface and ground water.		
DOT- Bike Paths	Design and build bike paths		

Source: RIDEM 2003

### 2-3-3 The Municipal Role

Local governments are responsible for planning and providing facilities and programming that primarily benefit the residents of the sponsoring municipality. Rhode Island law authorizes municipal governments to establish public recreation systems and requires each community to develop a community comprehensive plan that includes an open space and recreation element and a natural resources element that are consistent with State plans. Neighborhood parks, playgrounds, basketball and tennis courts, and fields for team sports (e.g. baseball, soccer, football) are typically emphasized at the local level. Many facilities are associated with schools. Several municipalities do possess special facilities of regional or statewide significance; the most notable example of these being Roger Williams Park and Zoo, operated by the City of Providence.

Municipalities manage over 13,000 acres of recreational facilities with nearly 2,000 parks and beaches. They have also joined with local partners to protect more than 30,000 acres of open space, ranging from extensive water supply watersheds to small neighborhood conservation areas. Local recreation facilities include mostly multi-purpose parks, playgrounds, community centers, and sports fields and courts. Municipalities also offer a wide variety of recreational programming from team sports, individual sports, summer recreation programs and camps for youth, instructional classes, concerts and cultural events, and special programs for seniors or people with disabilities.

While the major sources of funding for constructing municipal outdoor facilities come from state and local bonds and the National Park Service's Land and Water Conservation Fund, local taxes provide the funds to operate and maintain local facilities.

% Operated

by Schools

68%

58%

52%

45%

37%

35%

34%

34%

23%

Table 152-2(9)
Percent of Municipally-Owned

**Facilities Operated by Schools** 

Type of Facility

Football Fields

Running Tracks

Multi-Use Fields

Outdoor Basketball

Tennis Courts

Soccer Fields

Playgrounds

Softball Fields

Baseball Fields

Courts

#### 2-3-4 Private For-Profit Role

Although the SCORP does not include data on private facilities, it is important to note the private sector plays a significant role in outdoor recreation in Rhode Island, providing facilities such as golf courses, marinas, beaches, campgrounds, and many types of tourist attractions. The distinction between private and public facilities can never be clear-cut; both the public and private sectors offer many of the same types of facilities. There is an important distinction nonetheless. The private sector can offer recreational facilities that are more specialized, are of more limited interest, or offer additional amenities than can be justified by the public sector. The private sector can simply be more flexible in providing recreational facilities since it is not limited in imposing fees or restricting membership.

To the extent that private and public facilities do overlap, there are still benefits to both. Private providers have the opportunity to make a profit. Without this additional supply, the public sector, both State and municipal would face the potential of either overcrowding or

Schools often work with municipal recreation departments to provide recreational programs. In many cases, a school will provide the facility, and the parks and recreation department provides the staffing and administration of a program or vice versa.

Source: RIDEM, 2003

municipal, would face the potential of either overcrowding or finding additional supplies.

The private sector also provides services and/or facilities at state parks on a short-term or seasonal basis. This includes operation of concession stands, providing sailboat lessons and rentals, and offering special events such as the Jazz Festival at Fort Adams State Park.

#### 2-3-5 Non-Profit Organizations Role

Rhode Island has a vibrant non-profit sector that includes environmental organizations, land trusts, youth organizations, historical societies, and philanthropic foundations that provide programs, facilities, and/or resources connected to outdoor recreation. The role of each organization is guided by their individual missions but, collectively, the non-profit sector provides significant additional land, facilities, resources, and programs that serve to supplement the public sector's commitment to outdoor recreation and conservation. Non-profit organizations frequently have the expertise to advise government decision-makers and promote public participation and support.

Private non-profit organizations and local land trusts are playing an increasingly important role as partners in recreation and land protection. Rhode Island's land trusts have blossomed in the last ten years from fifteen to forty-three. Notable partners include The Nature Conservancy Rhode Island Field Office (TNC), which has provided support to local land trusts and works closely with DEM on land preservation, and The Audubon Society of Rhode Island (ASRI), which owns or protects over 9,000 acres of property in and around the state. Many Nature Conservancy and Audubon properties are open to the public for hiking and observing nature. Through refuge acquisition and maintenance, ASRI and TNC play an important role in the preservation of diverse habitats. Non-profit organizations have also played a pivotal role in open space and recreation by advocating for state bond funding, laws, and regulations.

## 152-3 RHODE ISLAND'S OUTDOOR RECREATION NEEDS

## 3-1 Recreation Planning Information Base

The foundation of this eighth edition of Rhode Island's outdoor recreation, conservation, and open space plan has been built over decades -- this 2009 edition of Ocean State Outdoors stands on the "tall shoulders" of the work of many plans, special reports and research projects done in the field over decades. Into this context, it synthesizes and incorporates the results of several new research efforts conducted for this update into a well-established information base on statewide supply and demand for recreation, conservation and open space. Major sources within the state's established information base are the State Guide Plan, and the Community Comprehensive Plans, which summarize broad-based information in their planning approach, and the state's Geographic Information System (RIGIS).

At the state level, under the direction of the State Planning Council, the extensive planning efforts of many agencies are consolidated in a system of State Guide Plans. These plans contain the major state goals and policies for Rhode Island's extended partnership of state, municipal, public and not-for-profit agencies that participate in publicly funded activities. Ocean State Outdoors, as State Guide Plan 152, is the framework plan for recreation, conservation and open space and contains the over-arching statewide goals and policies for these areas of land use.

At the municipal level, since the 1989 adoption of the Rhode Island Comprehensive Planning and Land Use Regulation Act, all of the state's 39 cities and towns have the responsibility, under state law, to inventory, assess and plan for recreation, open space and natural resources in their municipality, within the context of Community Comprehensive Plans. These locally prepared and adopted plans are developed according to detailed requirements and the plans must be updated regularly. The Community Comprehensive Plans contain the local goals and policies and the framework for community-based initiatives in planning, conservation, land use and public project development.



#### 3-1-1 Importance of Needs Analysis in Public Decision-making

Effective analysis of needs and establishment of priorities are crucial in decision-making and resource allocation. Clear identification of public priorities and needs is basic to all good public decision-making and this strongly applies to choices in conserving natural environments and high quality community design. Recreation, conservation and open space are very popular issues,

traditionally well supported by the general public in Rhode Island. Nonetheless, needs analysis for our greenspace system must be done against the backdrop of an always changing social and economic scene. Priorities do shift and interests change somewhat over time and generations. Changes in the make-up and life-styles of our communities, families and households lead to needs for some adjustments in facilities and their support systems. Market-driven threats to critical natural resources, such as fragile habitat and community open space opportunities, increase the urgency for conservation projects in key locations.

Managing, improving and expanding the recreation and natural resource system is always extremely challenging. The challenge is certain to become increasingly complicated as Rhode Island faces mounting pressures of land development, increasing property values and constrained state and municipal budgets. Setting priorities, making effective choices and maximizing resource use depend upon good information systems and sound analysis.

### 3-1-2 A Multi-Level Analysis Process

Rhode Island has, in place, an inter-connected state and local planning system to provide guidance in planning and policy decisions for recreation, conservation and open space at the state and local level. The State Guide Plan – Community Comprehensive Plan system is intended to provide guidance to the multi-faceted public and private partnerships working to further recreation and natural resource protection efforts throughout the state. Consistency with the goals and policies of this planning system are, in fact, required for all publicly funded projects, whether public or private.

The greenspace system, which this Ocean State Outdoors plan supports, is vast and composed of many layers and elements. While there is consensus on our overall vision and the statewide goals and policies, built into this system must also be an appreciation that Rhode Island's communities, neighborhoods and resource areas are quite diverse. Often the richness of the environments is due, in part to fragile and complex combinations, often mixtures of natural and built resources. We celebrate this diversity and want to accommodate and support it in our planning. This requires excellent information, and skilled analysis, policy making and project planning. Fortunately, Rhode Island is very capable and, indeed, invested in this kind of multi-level planning. It should be noted that the Recreation Grant Selection Process established in this plan (Appendix A) requires such a multi-level needs analysis approach in its priority rating system.

As we guide our greenspace system into a challenging future we must make our decisions carefully and manage extremely efficiently. All proposed publicly-funded recreation, conservation and open space projects should all be scrutinized to make certain they are consistent with the established goals and policies and that they meet identified priority needs of the state and community level systems. We need a sophisticated approach in analyzing needs if we are to achieve the desired balance of insuring the quality of the larger systems and also allowing the flexibility to add excellent individual projects and components --and in the appropriate locations. Thus, this plan recommends needs analysis be a three level process, as further described below.

Proposed individual projects must be consistent with the following two official plans:

- 1. State Guide Plan (multiple elements) for statewide goals and policies
- 2. Community Comprehensive Plan for municipal goals and policies, short and long-term objectives and strategies (action items)

Both of these planning documents are updated regularly and they also provide information and guidance on the current needs of the populations and jurisdictions which they serve.

State Guide Plans and Community Comprehensive Plans are required to be consistent with each other in terms of goals and policies but will obviously differ in focus and level of detail.

## 3. Individual Projects

All individual projects, whether construction of a new recreation facility or acquisition of a key natural resource parcel, are located on specific sites and must be studied in terms of their locale. Each individual project must be evaluated for consistency with the overarching goals and policies of the state and municipality. Each must also be scrutinized individually with regards to the particular site's suitability for inclusion as a natural or built element in the greenspace system. Beyond consistency with greenspace goals and policies, thorough site-specific and project-specific documentation of existing conditions, and the proposed use or design must present a convincing argument about the public value of the proposed project.

Proposals for all publicly-funded projects should include clear written documentation as to the importance of the project as an addition or an improvement to the state and community systems, a statement as to the priority public needs which will be served by the project, a description of how the project will connect with its immediate surroundings and also how the project will relate to the other elements of the greenspace system.

#### 3-1-3 Planning Analysis for Special Places

Good project documentation and needs analysis is also critical in making the case for proposed projects or sites which may be unique, or atypical, because of their value as resources, unusual uses or special design qualities. Projects that may capitalize on important, unusual opportunities, serve special populations or address multi-community, regional needs should be encouraged.

In fact, the most precious of Rhode Island's physical resources are its special places, our great natural and built landscapes, all unique places and defined by their individual characteristics. Stewardship of our greenspace system of natural and cultural resources requires a planning and project management approach which enhances the unique character of each special place within the system and recognizes the intricacies involved in designing, developing and preserving excellent environments.

#### 3-2 Research for the 2009 Plan

Funding was not available to undertake the extensive surveying that served as the foundation of the 2003 Ocean State Outdoors plan therefore the results of the 2003 survey remain the basis of the research for the 2009 update, however, when more recent data was available, it was incorporated into this Plan. The facility inventory and the surveys undertaken as background to the Ocean State Outdoors 2003 Plan edition supplied information on the existing system and the public's opinions about its various aspects for this amended Plan. The surveys reported on a very wide range of recreation activities, involving both recreation facilities and natural resource protection. While many of the long-standing, most important needs and demands of Rhode Islanders remained similar to what was reported in past surveys, certain shifts and patterns are discernable in the popularity of activities, frequency of participation and support for some public endeavors. The 2003 research also documented and reinforced information about some emerging and growing uses, trends and management issues which still are very valid today.

## 3-3 Outdoor Recreation Supply

## 3-3-1 Inventory of Rhode Island Outdoor Recreation Facilities

In 2001 the Department of Environmental Management surveyed State and municipal recreation system managers to update its database of **publicly owned** outdoor recreation facilities in the state. Thirty-eight of the state's 39 municipalities and the four DEM divisions that operate park and recreation facilities provided updated information. Privately owned facilities were not included in the update.



Table 153-3(1) summarizes the statewide inventory of publicly owned outdoor recreation facility sites which collectively occupy a total of nearly 70,000 acres located throughout the state. Six of 1,063 sites in the inventory are federally owned, 123 are State-owned and 934 are owned by the municipalities, or are State-owned but managed locally. The inventory reports the total number of municipally owned park and recreation facilities, including those managed by local and regional school systems (see Table 152-2 (9) Percent of Facilities Operated by Schools).

Table 152-3(1)
RI Outdoor Recreation Inventory 2002 Statewide Summary

	Jurisdiction			
	Federal	State	Local	Total
Number of Sites	6	123	934	1063
Acreage	1528	56752	12942	71223
Game Fields (number)	0	41	544	585
Tennis Courts (number)	0	33	405	438
Salt Beach (linear footage)	0	30800	37880	68680
Fresh Beach (linear footage)	0	2065	2255	4320
Public Pools (number)	0	0	11	11
Boat Ramps (number)	0	47	32	79
Campsites (number)	0	1293	249	1542
Picnic Tables (number)	0	1373	717	2090
Bicycle Trails (miles)	0	21	25	46

Source: RIDEM, 2003

The inventory records statistics on selected publicly owned recreation features, by federal, state and municipal ownership. Reported features include number of game fields, tennis courts, public pools, boat ramps, campsites, picnic table, miles of bicycle trails and linear footage of salt and freshwater beaches.

Table 153-3(2) shows the change in public outdoor recreation facilities between 1989 (the last comprehensive inventory) and 2002. It compares the numbers of publicly owned recreation facilities by major category for 1989 and for 2002 and reports the percentage change over 13 years. This table reports considerable growth in the number of facilities in 14 of 19 categories. Among the major newly - constructed facilities were 33 miles of bike trails and 33 running tracks, a 242% and 165% increase, respectively. These new facilities serve the growing numbers of Rhode Islanders of all ages, who like their counterparts throughout the nation, are walking, biking, and jogging, and large numbers of students involved in track and field events. Two new inventory categories report six outdoor ice rinks and nine skate parks for skateboarding and BMX biking, categories in which Rhode Island had no such facilities in 1989.

Table 152-3(2)
Public Outdoor Recreation Facilities 1989-2002

Outdoor	2002 Inventory	1989 Inventory	Difference	% Change
Amenities				
Baseball Fields	504	447	57	13%
Basketball Courts	384	340	44	13%
Bike Trails (miles)	46	13.5	33	242%
Boat Ramps	79	76	3	4%
Football Fields	77	100	(23)	-23%
Freshwater Beaches	20	22	(2)	-9%
Ice Rinks	6	0	6	600%
Multi-Use Fields	204	65	139	214%
Picnic Areas	224	137	87	64%
Playgrounds	387	290	97	33%
Public Camp Sites	1293	1314	(21)	-2%
Public Pools	17	13	4	31%
Running Tracks	53	20	33	165%
Saltwater Beaches	43	42	1	2%
Skate Parks	9	0	9	900%
Soccer Fields	141	No Data	-	-
Tennis Courts	488	430	58	13%
Volleyball Courts	38	No Data	-	-

Source: RIDEM, 2003

Of particular note is the large (214%) increase in the number of multi-purpose fields. For more than a decade it has been the policy of the State and the Recreation Resources Review Committee to promote, and to give bonus points in grant funding, to facilities which serve multiple purposes. At the municipal level, in most cities and towns there is great demand for fields at certain peak periods of the week, particularly after school and on Saturdays. Developing fields that accommodate different sports is very advantageous, and probably becoming a practical necessity for most publicly owned facilities. It is likely that the demand for multi-purpose fields will continue considering the current trends of large numbers of participants in both scholastic and league soccer for both males and females of all ages, and growing popularity of other field sports such as lacrosse and field hockey. The data indicate a loss of 23 football fields, but it is known that many fields are now used for soccer and football as well as track and field events, and it is presumed that a number of fields formerly counted as football fields, were considered "multi-purpose" fields in the updated inventory.

In terms of support systems and design issues relating to the state's recreation facilities, the inventory also provided information on public transportation and handicap access as follows:

- Thirty-seven percent of publicly owned facilities within the state are within an eighth of a mile of a RIPTA bus route.
- Roughly half of the facilities in the inventory (551 sites) report some type of handicap access, equipment or programming. To review the most recent outdoor recreation inventory go to http://204.139.0.188/website/maps

#### 3-3-2 Facility Mapping

The Department of Environmental Management mapped selected categories of publicly owned outdoor recreation facilities as part of the 2003 Plan update. The Department compiled a series of analysis maps to serve as background to the plan and for future project proposal evaluation. These maps, which were published separately on the RIDEM website, include:

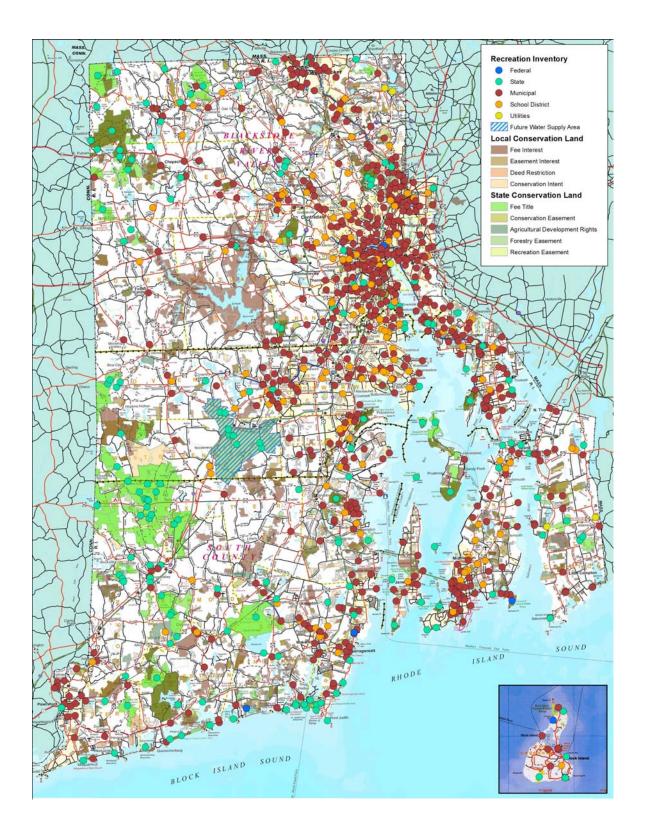
Distribution Maps that identify the locations for 18 types of outdoor recreation facilities throughout the state. Figure 152-3(1) illustrates the statewide distribution of all facility types. For the most recent information and to determine what recreational facilities are near your location visit: http://204.139.0.188/website/maps

Reference Maps which show generalized, statewide information for Rhode Island including population density, watershed regions, major open space areas, areas having concentrations of minority and/or low-income residents, and the proximity of recreation facilities to Rhode Island Public Transit Authority (RIPTA) bus routes.

Facility Deficit Maps that identify areas (census tracts or towns) as below, meeting or exceeding outdoor recreation standards of the National Recreational and Parks Association measuring the number of facilities per person. These maps were prepared for study purposes and they depict just one of several standards used in recreation capacity analysis.

Municipal Maps that identify the location of outdoor recreation facilities in each municipality.

Figure 152-3 (1) – Statewide Distribution of Publicly Owned Recreation Facilities



Source: RIDEM, 2009. See also http://204.139.0.188/website/maps

#### 3-4 Demand for Outdoor Recreation

## 3-4-1 2002 Public Outdoor Recreation Demand Survey

The Rhode Island Department of Environmental Management undertook a statewide attitude and interest survey from August through October of 2002 to help determine citizen usage, satisfaction, needs and priorities for outdoor recreation in the State of Rhode Island. The private research firm Leisure Vision conducted the survey, which was designed to obtain statistically valid results from households throughout the state. Responses were received from 1,408 households. Major findings of the survey research include:

**DEM** services are valued: The following services which the Department of Environmental Management performs are considered "very important" by significant majorities (73% --88%) of respondents: protecting Narragansett Bay, providing public beaches, watershed protection, operating state park areas and providing natural habitats. See Figure 152-3(2).

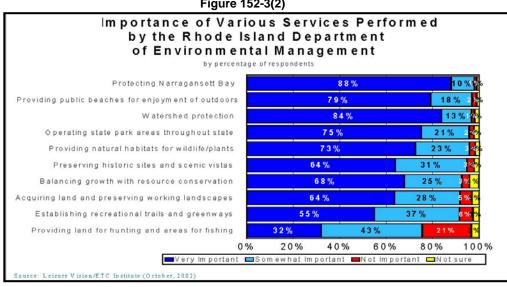


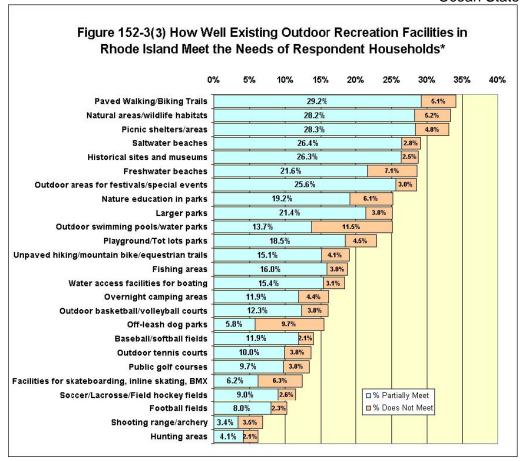
Figure 152-3(2)

- State system visitation higher than national average: Eighty-percent (80%) of respondents had visited state parks, coastal beaches or woodland management areas operated by the DEM during the past twelve months. (The national average for park visitation is 70 percent.) When respondents were asked what keeps them from using state parks more often, 22 percent indicated that over-crowding was a factor. Local parks are used by 72 percent of the respondents, which is comparable to the national average.
- State parks rated highly by most: Although 79 percent of Rhode Islanders consider the overall condition of Rhode Island state parks excellent or good, 20 percent (slightly higher than national averages) rated them as only fair or poor.
- Salt water beaches, walking and biking trails, historical sites, picnic areas, festival sites, and natural areas cited as needed by more than 50% of households:

Saltwater beaches was the outdoor recreational facility (out of 26 facility types) that the highest percentage of households (70%) indicated that they "have a need for". Five other outdoor recreation facilities that over half of respondent households indicated that they "have a need for" included paved walking and biking trails (63%); historical sites and museums (63%); picnic shelters/areas (60%)' outdoor areas for festivals/special events (60%); and natural areas/wildlife habitats (58%).

- Current system leaves some needs partially met, or unmet. Using the same list of 26 facilities, respondents were asked how well existing facilities in Rhode Island meet their household's needs. Figure 152-3(3) shows the number of households whose "needs are being partially met" or "not being met at all" based on 408,424 households across the State of Rhode Island.
- Public perceives connection between active lifestyle and individual health: Over half of respondents (56 percent) indicated that participating in outdoor activities was very important to their health, and an additional 29 percent indicated it was important.
- Funding priority is to support maintenance and improvement of existing facilities: When asked how they would allocate \$100, respondents indicated they would allocate \$37 to the improvement/maintenance of existing state parks, beaches, and outdoor follows; facilities. The remaining \$63 were allocated recreation as acquisition/development of walking, jogging and biking trails (\$17); acquisition/development of new parkland and open space (\$15); development of new coastal beaches (\$12); construction of new game fields (\$9); and development of special facilities (\$8). The remaining \$4 was allocated to "other".





\*Figures are based upon number of households expressing unmet needs as percentage of total Rhode Island households. Source: RIDEM

- Dedication of system revenues to system needs supported: More than three-fourths (78%) indicated they would be either very supportive (43%) or somewhat supportive (35%) of establishing a dedicated funding source made up of park-generated revenue and tax revenues which could only be used to pay for the maintenance and operation of State of Rhode Island state parks, coastal beaches, trails and outdoor recreation areas.
- Outdoor water park likely to be used if built at Snake Den Park: Just over half (51 percent) of all respondents indicated they be either very likely (31%) or somewhat likely (20%) to visit an outdoor family water park if built at Snake Den State Park.
- Local system facilities also heavily used: Nearly three-fourths (72%) of respondents indicated they had used parks, trails or outdoor recreation and sports facilities provided by their city or town during the past 12 months.
- Walking and biking trails cited as most heavily used and most needed local facilities: Walking and biking trails (51%) was the outdoor park and recreational facility that the highest percentage of respondent households indicated they had used within their municipality in the past two years. Walking and biking trails (33%) had the most respondents rate it in the top four of the most needed outdoor recreational facilities in their city or town. Other local facilities among the top five indicated as "most needed" by the Public Survey included neighborhood parks, playgrounds for children, picnic facilities and saltwater beaches.

#### 3-4-2 Estimation of Total Demand

Two statistics from the survey: the participation rates, or percentage of the population that engage in each of the various activities, and the average participation frequency, the mean number of occasions per year each activity is engaged are used, along with population data to estimate total annual demand for each activity, and provide ranking of overall popularity for the surveyed activities. Table 152-3(3) shows total estimated annual outdoor recreational demand of Rhode Islanders, and may be used as an indication of the rank or popularity of different outdoor activities among Rhode Islanders. Estimates of both current demand and future demand (based upon preliminary population projections by the Statewide Planning Program) are provided.

### 3-4-3 2001 Survey of Municipal and State Recreation Professionals

RIDEM's Office of Strategic Planning and Policy conducted a survey of outdoor recreational professionals to obtain their perspectives on the status of the state and local recreation systems and on the public's needs for outdoor recreation. State personnel manage 45 major and minor parks and beaches. State facilities focus on beaches, and the picnicking and camping facilities are larger and accommodate more people than municipal facilities. The 39 municipal professionals manage more than 900 parks, beaches and other areas. Municipal recreation areas typically focus on league sports but also include local beaches and other facilities.

The mail survey included responses from 38 out of 39 municipal recreation directors and 6 out of 7 state recreation managers. The survey design was based on a similar survey performed for the 1992 SCORP with additional questions on trails, transportation availability, funding levels and internet use. The main survey themes of facility supply, funding, planning and management remained unchanged.



	Juluooi Meerealie	onal Demand of Rho	2002 Total	2020
			2002 Total Demand**	Z020 Estin
SURVEYED ACTIVITIES:	Participation	Mean Annual	(Activity Days)	Demand*** (Ac
	Rate (%)*	Activity Days*		` [
Walking	66	140.5	97,210,621	102,21
Pleasure driving	39	65.8	26,901,962	28,28
Visiting coastal areas	61	41.9	26,793,985	28,17
Nature watching	31	67.9	22,066,067	23,20
Bicycling	35	58.8	21,574,405	22,68
Visiting beaches	64	31.5	21,134,111	22,22
Jogging/running	19	94.7	18,862,404	19,83
Playground activities	26	58.9	16,053,957	16,88
Salt-water swimming	47	21.4	10,543,993	11,08
Festivals/special events	50	17.5	9,172,791	9,64
Basketball (outdoor)	14	58.2	8,541,703	8,98
Fishing	22	35.5	8,187,371	8,60
Picnicking	42	17.6	7,749,174	8,14
Fresh-water swimming	27	25.6	7,245,981	7,61
Visiting historical sites	43	15.0	6,761,658	7,10
Baseball	11	55.5	6,399,987	6,72
Golf (any type)	18	33.1	6,245,885	6,56
Fresh-water fishing	17	30.9	5,506,820	5,79
Soccer	9	52.2	4,925,003	5,17
Softball	8	51.2	4,293,915	4,51
Motor boating	16	25.2	4,226,822	4,44
Football	8	47.5	3,983,612	4,18
Salt-water fishing	18	19.0	3,585,251	3,76
Tennis	10	30.1	3,155,440	3,31
Sailboating	11	27.1	3,125,039	3,28
In-line skating/BMX	6	46.6	2,931,100	3,08
Camping	17	15.3	2,726,678	2,86
Off road vehicle driving	4	63.6	2,666,924	2,80
All day hikes	14	16.9	2,480,323	2,60
Skeet or target shooting	3	65.1	2,047,367	2,15
Horseback riding	5	36.3	1,902,699	2,00
Canoeing/kayaking	15	12.0	1,886,974	1,98
Ice skating / hockey	8	20.0	1,677,310	1,76
Downhill skiing	7	19.3	1,416,279	1,48
Jet skiing	4	32.8	1,375,395	1,44
Water skiing	3	34.4	1,081,865	1,13
Hunting	3	21.4	673,021	70
Scuba diving/snorkeling	5	11.9	623,750	65
Surfing	3	13.9	437,149	45
Rock Climbing	5	7.0	366,912	38
Cross country skiing	3	10.7	336,510	35
Snowmobiling	1	11.6	121,605	12
Rugby, Lacrosse	1	7.9	82,817	8
Windsurfing	1	4.7	49,271	5

<sup>\*</sup> Participation rate & activity days derived from RIDEM--Leisure Vision/ETC Institute Public Outdoor Recreation Demand Survey, 2003. \*\* Total estimated annual demand of Rhode Islanders, based on 2000 US Census total population of 1,048,319. \*\*\* Total estimated annual demand of Rhode Islanders, based on preliminary R.I. Statewide Planning Program 2020 population projection of 1,102,277, and assumes no change in recreational preferences. **Note: Due to survey design, estimates include Rhode Island resident demand satisfied outside RI, but exclude demand of non-residents on RI areas.** Source: RIDEM, 2003

- Similar issues at both level of jurisdiction: State and local recreation professionals report similar challenges regarding funding of staff and maintenance, accommodating competing user groups, and satisfying the demand for new outdoor recreation facilities. A need for additional support facilities (restrooms, shelters, parking) was cited by managers in both sectors.
- Public preferences for local outdoor recreation activities are changeable, especially in urban areas: Thirty-four percent of municipal directors report a decrease in popularity for at least one of the outdoor recreational activities traditionally provided in their community. To varying extents, decreases in baseball, softball, tennis and football were reported. Sixty percent of the directors in urban areas reported a decline in activities traditionally supported by municipal recreation facilities. Recreation directors in urban areas reported they must respond to changes in preferences for outdoor recreation activities more often than did those in suburban or rural areas. State facility managers did not report a significant decrease in their traditional activities.
- Increases in certain activities expected: Local recreation directors expect soccer, skateboarding, rollerblading, lacrosse, baseball/softball, walking and cycling/biking and roller-skating to rise in popularity in their community. State managers indicate trends towards increased bicycling and horseback riding.
- User conflicts remain an issue: Managers at both state and local levels report that participants in outdoor recreation activities often disagree on how facilities should be used. Managers reported competition occurring for court and field time, and negative interactions taking place on beaches and trails. Examples of conflicts included horse riders complaining that mountain bikers startled their horses, and families complaining that teenage groups at beaches were too loud. Sixty-one percent of recreation directors reported field use (scheduling) conflicts among school sporting teams, leagues and other field user groups.
- Local open space priorities vary: Municipalities vary in the type of open space they acquire. While some focus more on the preservation of watersheds, farmlands, and greenway linkages, others mentioned utilizing open space for sporting fields and running tracks.
- Universal Design principles becoming common: Fifty-eight percent of recreation directors and all State recreation managers report using Universal Design principles to design new or renovated facilities in order that parks and beaches will be more accessible to all outdoor enthusiasts (persons with disabilities, seniors, children, etc).
- Uptake on internet as information resource: Managers report increasing use of the internet to provide information on outdoor recreation facilities and activities. While fewer than half of the local managers surveyed currently post outdoor recreation information on the internet, another 11 towns have plans to do so.

Among the recommendations of the recreation professionals for action items were:

- Encourage development of more multi-use fields to increase flexibility and maximize use of facilities.
- Increase public transportation to all outdoor recreation facilities, especially to underserved communities and populations.
- Build more skate parks and pools.
- Promote acquisition and development of facilities that serve a region as opposed to a single town or area.

 Facilities that are not used to maximum capacity should be converted to promote maximum use.

### 3-4-4 State Park and Beach User Survey

The Rhode Island Department of Environmental Management surveyed more than 1,800 State park and beach users in August and September of 2001 to identify the level of satisfaction and important concerns in the State park and beach system. Major findings include:

**High levels of user satisfaction:** More then 90 percent of respondents indicated they were very satisfied or satisfied with eight of the nine performance indicators. Restroom cleanliness scored lower with only 70 percent of users indicating satisfaction. The mean response of participants revealed slightly less satisfaction on weekends as opposed to weekdays, presumably as a result of more crowded conditions.

**Heavy dependency on automobile access**: Rhode Island State park and beach patrons rely heavily on private automobiles to travel to and from State parks and beaches. Eighty-four percent (84 percent) of respondents arrived at the park or beach in a motor vehicle on the day they participated in the survey, seven percent walked, four percent biked, two percent used public transportation and two percent arrived by boat.

**High repeat patronage:** Over 70 percent of respondents reported that they visit State parks and beaches five or more times per year.

Low use of internet for park information: Only 27 percent of respondents reported they used the internet to find information about the parks. This coincided with a finding in the public demand survey that word of mouth was the most frequent way that respondents learned about recreation areas.



#### 3-5 Common Threads – Findings on Critical Outdoor Recreation Needs

The following findings and general conclusions on facility and land needs for outdoor recreation are drawn based upon consideration of the three diverse data sources described in sections 3-1 and 3-2 above. When considered together, these sources of information suggest the following general conclusions:

#### **Outdoor recreation is Vital to Rhode Islanders**

FINDING: Outdoor recreation in its many varied forms is a vital component of the lives of Rhode Islanders.

A consistently woven "thread" running through all three approaches used in the needs assessment is the magnitude and intensity of the public's enjoyment of the outdoors. Rhode Islanders clearly love the outdoors, and "use" it on an astoundingly frequent basis to engage in a wide diversity of recreational activities. The 2002 Public Survey data indicate that the average Rhode Islander engages in some type of outdoor recreational activity, broadly-defined, over three hundred and sixty times per year, essentially on a daily basis. This finding was reinforced by the reports of activity popularity and high facility usage from the State and Local Managers Survey, the statistic on repeat usage from the State Park and Beach Users Survey, and by the heavier than (national) average usage of State park and beach system units reported in the 2002 Public Survey.

Moreover, the data suggest that Rhode Islanders define "outdoor recreation" broadly, encompassing activities as traditional as the team sports of football and baseball, to pursuits such as walking that can be casual and solitary or done with a group, to more individualistic and novel passions such as rock climbing. As diverse as the universe of activities is, however, the common thread is access and utilization of the land and water resource base for relaxation, fulfillment, and enjoyment.

These conclusions -- together with the Survey response suggesting that more than half of Rhode Islanders recognize recreation as important to their physical well-being -- all point to the conclusion that Rhode Islanders have integrated use and enjoyment of the outdoors deeply into their individual lifestyles, a finding having profound social, economic and public policy implications.



#### **Simple Recreation Most Popular**

FINDING: The most popular outdoor activities are those that are most accessible and simplest to engage in.

Rhode Islanders participate in a wide range of outdoor recreational activities ranging from

walking and visiting coastal areas to traditional team sports and hunting and fishing. As diverse as the universe of activities is one common thread in the findings is that the most popular outdoor activities are those that are most accessible and simplest to engage in. The Public Survey found the five top activities, in terms of total demand, are walking, pleasure driving, visiting coastal areas, nature watching, and bicycling. Together, these five activities account for over fifty percent of the estimated total annual recreational participation of Rhode Islanders.

This continues a well-established pattern seen in previous recreation plans in Rhode Island and elsewhere in the country. When it comes to recreation, most people engage in outdoor physical activities that are readily available to them. Non-facility/equipment-dependent activities that are accessible to the broadest cross-section of the population appear at or near the top of most lists of activity popularity. The 2002 Outdoor Recreation Demand Survey found the top three activities in terms of total demand to be walking, visiting coastal areas and beaches and attending outdoor festivals and special events. This finding has important implications concerning the interrelationships between community design, outdoor activities, and healthy lifestyles. State and local community design and development practices should seek maximum integration of opportunities for simple, easily engaged-in outdoor activities, such as walking and bicycling, within the fabric of community structure to promote healthy lifestyles and reinforce public health goals.

## **Continuing Need for Land and Facilities**

FINDING: Significant needs continue for land and facilities to accommodate public demands for outdoor recreation and protect natural resources.

A third common thread is the continuing need for investments in land and facilities. All three indicators of need--the State and Local Managers Survey, the 2002 Public Survey, and the State Park and Beach Users Survey -- suggest that continued action is necessary to expand and improve the resource base and facilities available for outdoor recreation. Despite the significant addition of open space land and the addition and refurbishment of recreational facilities supported by the State and local investments of the past decade, the public continues to say their need for various activities and facilities are not fully met, and system managers continue to report user and scheduling conflicts, and constrained resources. These indicators point to a need for additional recreational facilities and to the public's desire for broadened opportunities to engage in outdoor recreation pursuits of various types. In most cases, expanding recreation opportunities and adding facilities will require additional land. The need for additional land for recreation facilities and conservation is also documented (and quantified, to a degree) by the recreation and open space elements of community comprehensive plans prepared by Rhode Island's local governments.

The high levels of importance accorded by respondents in the Public Survey to DEM's efforts in areas such as "providing public beaches", "watershed protection", "providing natural habitats", and preserving historic sites and scenic vistas" is indicative of support for continued resource protection efforts. The public-at-large appears to agree that the need (cited by environmental and land use professionals throughout the state) for permanently protecting significant natural resource areas and community open spaces is highly important and of growing urgency. This support, coupled with the growing consumption of land by development in a burgeoning real estate market, suggest that the State's land protection targets set in the Greenspace and Greenways Plan and State budget documents should be re-assessed soon.

A need for additional recreation facilities was also indicated by local system managers in the survey. Municipal recreation directors reported organized sports to be highly popular among younger Rhode Islanders. The top three sports were soccer, baseball/softball and basketball. This finding should be interpreted within the context of the organized activities which local recreation systems provide, and does not conflict with a broader conclusion that readily accessible, easily

engaged-in pursuits are most popular among Rhode Islanders as a whole. In fact walking is the most popular outdoor recreation activity reported by the municipal recreation professionals as well.

Recreation professionals who manage the facilities and schedule events report high such as outdoor pools and skating facilities. The 2002 inventory shows significant investment in recreation facilities throughout the state since 1989. The inventory also reports a major increase (214%) in the number of multipurpose fields. This coincides with the recreation professionals who said they try to accommodate emerging trends by converting old facilities, among other techniques. There appears to be a trend toward greater sharing of facilities, staff and administration between municipal school departments and recreation departments.

Among the facilities noted as the top "unmet needs" in the survey of the general public are walking and biking trails, natural areas/wildlife habitats, picnic shelters and areas, and saltwater beaches.

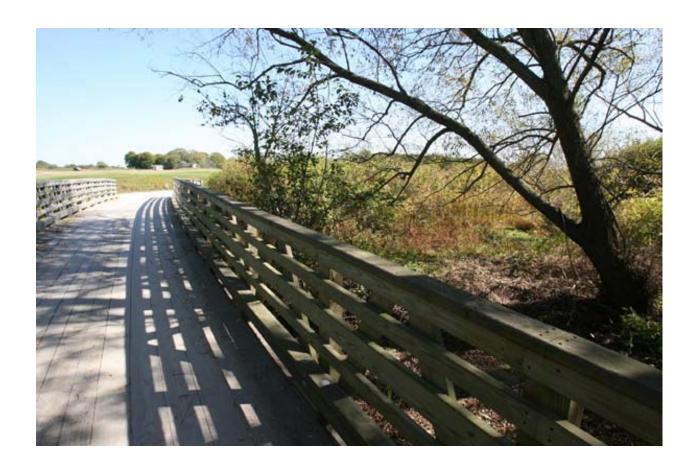


Table 152-3(4) compares the perspectives of the recreation professional (state and municipal) with those of the general public regarding needed recreation facilities. The 25 to 27 recreation facilities are listed in order, based upon the magnitude of response reported in the respective surveys.

Table 152-3(4) Rhode Island Outdoor Recreation Facilities Needs				
	Needs as defined in			
Rank	Survey of Local Park & Recreation Directors	Public Outdoor Recreation Demand Survey		
1	Skate/BMX/Inline Park	Walking/Biking Trails		
2	Soccer/Lacrosse Fields	Natural Areas/Wildlife Habitats		
3	Pool/Swimming Facility	Picnic Shelters/Areas		
4	Multi-Use Fields	Saltwater Beaches		
5	Trails	Historical Sites and Museums		
6	Playgrounds	Freshwater Beaches		
7	Ice/Hockey Rink	Outdoor areas for Special Events		
8	Exercise/Running Track	Nature Education Centers in Parks		
9	Baseball	Larger Parks		
10	Basketball	Outdoor Swimming Pools/Water Parks		
11	Tennis Court	Playgrounds/Tot Lots/Parks		
12	Softball	Unpaved Hiking/Mountain Bike/Equestrian Trails		
13	Biking Trails	Fishing Areas		
14	Recreation Center	Water Access Facilities for Boating		
15	Football Field	Overnight Camping Areas		
16	Athletic Fields	Outdoor Basket/Volleyball Courts		
17	Teen Center	Off-leash Dog Parks		
18	Picnic Shelters	Baseball/Softball Fields		
19	Senior Center	Outdoor Tennis Courts		
20	Ropes Course	Public Golf Courses		
21	Public Boat Ramp	Facilities for Skateboarding/Inline Skating/BMX		
22	Passive Rec Facilities	Soccer/Lacrosse/Field Hockey Fields		
23	Outdoor Festival Area	Football Fields		
24	Open Space	Shooting Range/Archery		
25	Fishing	Hunting Areas		
26	Dog Park			
27	Camp Sites			

Source: RIDEM. 2003

## **Urban Needs**

A particular sub-set of need relates to the state's urban areas. Urban residents cited overcrowding and distance as two of the top three reasons that keep them from using State parks and beaches. Two of the State's major urban parks – Lincoln Woods and Goddard Memorial State Parks – are frequently over capacity during peak periods, and beaches at these facilities have had to be closed on occasions during peak season due to water quality concerns.

#### Universal Access Needs

While the State has made considerable progress in improving handicap accessibility, only half of inventoried facilities report some type of handicap access, equipment or programming and only 58 percent of recreation managers report using universal design in recreation projects.

## **Asset Management Necessary to Sustain System**

FINDING:

Rhode Island's outdoor recreation facilities are important assets for the state and its communities that require investment and operational resource levels commensurate with their heavy usage and documented asset management needs.

Several statistics from the 2002 Rhode Island Public Outdoor Recreation Demand Survey combined with the reports from the Park and Recreation Managers' Survey, indicate that Rhode Island's outdoor recreation system's assets are straining under heavy usage. The public survey found that Rhode Islanders visit state parks and beaches in greater numbers (80%) than the national average (70%), and that system users felt that there was room to improve the condition of facilities (75% rated facilities as "fair" or "good", 21% as "excellent", 3% as "poor"). These data, combined with DEM figures reporting a 29 percent increase in attendance at state parks and beaches over the last five years, are indications that heavy usage may be taking a toll of "wear and tear" on state system facilities.

This possibility is reinforced by the findings of Asset Management Plans prepared by DEM in 2001 covering the state beaches, parks and forests it manages. These plans found that Rhode Island State parks and beaches have the highest visitation (on a per acre basis) in the country, and identified \$6 million, and found that staffing levels had fallen approximately 40% over the prior ten years, while assets managed had remained largely unchanged.

In the State and Local System Managers' survey, both jurisdictions reported concerns that investment levels were not sufficient to sustain recreation facilities under their control. Thirty-six out of 38 local managers replying felt that their maintenance efforts were under-funded; and 27 of the 38 felt that staffing was under-funded. All six State system managers surveyed felt that both maintenance and staffing were under-funded.

The DEM Asset Management recommended a number of options for increasing resources available for maintaining State parks, beaches and forests: including establishing dedicated sources of funding, derived in part from user fees. Seventy-eight percent of respondents in the public survey indicated they were either "very supportive" or "somewhat supportive" of dedicated funding for State parks and beaches derived from user fees and state revenues. The strategic importance of Rhode Island's outdoor recreation system's assets argues for adequate and timely investments to sustain their integrity and quality.



## **Public Information and Interpretation Needed**

FINDING:

Continuing improvement of the information and educational/interpretative resources available to patrons of Rhode Island's outdoor recreation system is crucial to the public's knowledge and understanding of the system's diverse resources, and can assist in balancing system usage.

The Public and System Managers' Surveys indicate an opportunity to enhance the information available to the public on the outdoor recreation system's resources. Although not the biggest barrier cited, lack of knowledge about "what is available" was identified by nineteen percent of respondents in the Public Survey as constraining their usage of State parks and beaches. Lack of knowledge about the locations of trails, and about the locations of parks was cited as a constraint on greater usage by 17 percent and 14 percent of respondents, respectively. Inadequate information can also constrain use of less well known areas and lead to overuse or overcrowding at other, more generally recognized areas.

A related issue is the limited educational/interpretative programs. Fewer than seven percent of recreation managers reported the availability of educational programs at facilities they manage. More education and interpretation programs at key facilities, such as naturalists in State parks and beaches, would foster greater appreciation of Rhode Island's environmental resources.



# 152-4 RHODE ISLAND'S PLAN FOR RECREATION, CONSERVATION AND OPEN SPACE

Part Three of this plan documented available outdoor recreation resources, and catalogued important needs of Rhode Island's public outdoor recreation system as identified in the surveys and research conducted for the 2003 update. This part of the plan is the "meat" of the plan – it identifies ways in which the public's recreational needs and desires can be actualized. Beginning with the exposition of a broad vision for the future growth and development of an integrated system, and identification of a mission for this plan; it then reiterates three enduring goals from prior editions of this Guide Plan – protecting resources, meeting system development needs, and ensuring proper stewardship of the system — to guide future action. Following these broad goals, are analyses of individual issues that examine more specific needs associated with particular recreational venues or categories of recreational experiences. Policies are established to guide the actions of the State and local governments and private sector partners in addressing the specific topics and recreational issues described.

This Part also comprises the Plan's five year Action Program. Within each specific issue addressed, an Action Agenda presents strategies the State proposes to pursue during the timeframe of this edition of the plan. Actions proposed encompass planning and coordination activities, legislative initiatives, programmatic modifications, regulatory needs, and capital investment measures (land acquisition and facility development). They reflect the best judgment of the planning process as to how specific problems can be addressed, and progress made towards the plan's broader vision and goals.

#### 4-1 Vision, Goals and Policies

#### 4-1-1 The Vision

A statewide system of connecting greenspaces and greenways, a network made up of critical natural and cultural resources, outdoor recreation facilities, public spaces, community and urban forests, public and private open spaces. The greenspace system is to be Rhode Island's permanent green framework within which the state's communities will design and build in the 21st century.

#### 4-1-2 Plan Mission

Strengthen and expand Rhode Island's greenspace and outdoor recreation system. Continue an aggressive program for open space preservation and greenway development. Strengthen relationships between state agencies and municipalities, land trusts, and non-profit conservation organizations.

# 4-1-3 Goals for Rhode Island's Outdoor Recreation, Conservation and Open Space System

# Goal 1: Build the Greenspace Network...Preserve and Protect Natural and Cultural Resources

Rhode Island will strengthen and expand the statewide network of greenspaces and greenways, with natural, and cultural resources and outdoor recreation areas as major features of the network.

## Goal 2: Meeting Critical Needs...Improve Recreation Opportunities and Resource Conservation

Rhode Island will improve its system of outdoor recreation facilities and conservation areas to meet the needs of its residents and visitors.

# Goal 3: Stewardship and Partnership...Improve Accessibility, Operations and Resource Management

Rhode Island's public and private partners will join as strong stewards of the state's outdoor recreation and open space system and will protect, maintain, and improve its essential features.

## 4-2 Building the Greenspace Network...Preserve and Protect Natural and Cultural Resources

Goal 1: Rhode Island will strengthen and expand its statewide network of greenspaces and greenways, with critical natural resources and outdoor recreation areas as major features of the network. The Greenspace Network, a Statewide System.

Greenspace and the resources it shelters are, literally and figuratively, the foundation of life in Rhode Island. The state's magnificent bay and its rivers are its lifeblood; the forests, its lungs; and the special places treasured and visited by generations of inhabitants, perhaps as close to an eternal soul as any geopolitical entity can attain. <sup>1</sup>

Greenspace is, and must continue to be a major component of Rhode Island's landscape. The greenspace network of large open tracts and outdoor recreation areas linked by the greenways must create the "green infrastructure" framework around and within which our future communities are designed and built.

Rhode Island's primary open space preservation and outdoor recreation goal is to continue to assemble and develop, through the concerted efforts of all levels of governments and with support from both public and private interests, the greenspace network as an integrated, statewide system. The system is conceived as multi-faceted and multi-jurisdictional. In its broadest sense, its purpose is in furtherance of the public's

<sup>&</sup>lt;sup>1</sup> A Greener Path...Green spaces and Greenways for Rhode Island's Future State Guide Plan Element 155, 1994.

rights cited in the Article 1, section 17 of the State's Constitution; namely, that the public "shall be secure in their rights to the use and enjoyment of the natural resources of the state with due regard for the preservation of their values."

#### 4-2-1 The Greenspace Network, a Statewide System

The greenspace network thus consists of land and water that is dedicated to, or otherwise encumbered in furtherance of, the public interest in resource conservation and prudent usage. It encompasses both vast tracts of wooded open space and intimate "pocket" parks. It comprises areas, such as beaches and ball fields that are heavily utilized by the public; but it also embraces water supply watersheds and protected farmland, where the public interest is best served by limiting access. It also includes blueways, which are water based trails developed with launch points, camping locations and points of interest for canoeists and kayakers.

We must protect the high value open space areas which includes the key outdoor recreation facilities. We must continue to assemble a network of protected natural areas linked with the built areas via greenways along rivers, shorelines, trails, bikeways, roadways, pedestrian paths and scenic byways. We must maintain and where possible, increase, public access to our rivers, lakes and ponds.

The greenspace network is the environmental backdrop against which quality communities are developed. It must extend into established urban centers and neighborhoods in the form of parkland and recreation facilities, landscaped public spaces, green streetscape networks, and access to our blueway network of rivers and streams. Greenspace must also be an essential component of private development of all kinds. Integration of useful, effective, connected greenspace must be a design criterion in all of Rhode Island's physical development, and redevelopment – whether in urban, suburban, rural communities, inland or coastal settings.

The greenspace network will serve multiple objectives of state environmental and development policy. Preserved greenspaces constitute an environmental safety net protecting the state's irreplaceable legacy of natural and cultural resources. The network will be a nucleus for the growth development and rejuvenation of diverse, high quality living and working communities. Greenways accommodate and foster health-promoting transportation alternatives, such as bicycling, paddling and walking. Finally, the greenspace network is available for public use and provides access to, enjoyment and understanding of the outdoor environment for all.

Over time Rhode Island's efforts to preserve and manage its statewide greenspace system and the recreation system which it contains have achieved some great successes and have grown better connected and stronger. They have also matured and become somewhat institutionalized as have the associated movements for environmental protection, historic preservation, public participation in government, growth management and quality of life.

At the same time pressures causing the loss of open space, and diminution of natural and cultural resources have continued unabated, in many cases, the stakes are much higher and the pace is fast. Fragile resource areas are particularly threatened because they are in great demand for both new residential and new commercial development. An additional threat is that of climate change and predicted sea level rise.

Strategic decision-making on new acquisitions and facility development as well as operations and maintenance for the greenspace system is crucial in light of these prospective pressures.

Poorly designed, large scale, and fragmented development threatens each of the individual resources identified in this plan and the value of greenspace as a connected system. Less recognized as a direct threat to the greenspace system is the effect of deterioration of our traditional centers and neighborhoods. Urban greenspace offers residents, workers, shoppers and visitors in our cities and town centers access to both natural resources and recreation. Urban greenspace highlights key natural resources and enlivens the built environment. The incorporation of high quality and abundant greenspace, including a variety of beautiful public spaces, is a key ingredient in all good city planning and successful revitalization, a point superbly illustrated by Providence's nationally-recognized Riverwalk and Waterplace Park. A network of significant greenways lining our waterfronts, rivers, highways and streets is the single best public design approach to connect the traditional centers with the country.

We must move quickly to protect the remaining open space and to revitalize urban centers. We must continue an aggressive program for open space preservation and greenway development. To do so effectively, we must further strengthen the already growing relationships between state agencies, municipalities, land trusts and non-profit conservation organizations.

The Department of Environmental Management (DEM) is the lead state agency for much of the functional management of the greenspace system, both for state-owned recreational and open space resources and by providing financial and technical assistance to municipalities and other government agencies. The Department's implementation and project management efforts in greenspace development are guided by *Protecting our Land Resources, A Land Acquisition and Protection Plan for the Rhode Island Department of Environmental Management (May, 1996)*—a strategic plan that reflects the goals and objectives of the two major State Guide Plans concerning the greenspace system: *Ocean State Outdoors, 2009* (this Plan) and *A Greener Path...Greenspace and Greenways for Rhode Island's Future,* adopted in 1994.

Protecting Our Land Resources describes the Departmental priorities, strategies, and criteria for greenspace protection. The Department is in the process of amending and updating this document. In light of the rapid growth of the past few years and the continuing loss of greenspace, the State should reexamine the goals set in the Greenspace and Greenways Plan, and the annual targets guiding DEM's strategic plan when setting open space conservation goals as part of the process for updating this plan.

Capital budgets have been a relative bright spot -- with \$34 million devoted to land acquisition in 2000, \$14 million for Heritage projects in 2002, \$70 million for Open Space, Recreation, Bay and Watershed Protection in 2004 and \$2.5 million for Open Space and Recreation Development in 2008. In 2009, however, uncertainty over public budget revenue shortfalls and the unsettled state of the national economy loom as potential constraints for the near-future development, maintenance and staffing of the greenspace system. However, funding for greenspace protection and recreation has been historically very well-supported by Rhode Islanders. Dating back to the 1930s, many of the great public spaces and resource lands we enjoy today have been

assembled by the courage of political leaders, and the foresight of the public to invest in the future, even while they grappled with difficult economic circumstances.

**Policy RCOS-1:** Aggressively pursue the creation of an integrated, statewide greenspace and greenways system through coordinated state and local planning, strategic acquisitions, resource protection partnerships, and integration of green infrastructure in development projects.

### Action Agenda 2009-2014

- Continue strategic land acquisitions consistent with the Greenspace and Greenways Plan and DEM's Land Acquisition and Protection Plan.
- Work to secure funding to continue state and local land protection programs. Propose a State open space bond referendum for consideration for the 2010 and 2012 election. Study establishment of a self-perpetuating trust fund for open space acquisition, that could also provide funding for contingent acquisition of storm or flood damaged properties in coastal areas and along rivers.
- Resist the avoidable conversion of dedicated greenspace system land to other uses. Subject proposals to convert system land to the highest scrutiny (see Section 4-4-3).
- Prepare coordinated guidance for municipalities and not-for-profit organizations to effectively complement the State's land protection programs. Work cooperatively to develop aspects of the greenspace system each sector's authority, mandates and missions.
- Coordinate continued development and maintenance of a statewide database including all categories of protected greenspace, both public and private.
- Cooperate with and build on the efforts of the Nature Conservancy, the Audubon Society and local land trusts to identify and preserve key open space areas.
- Expand and enhance the greenspace system through complementary state agency efforts, particularly through inclusion of greenspace in the design of state-supported environmental, transportation, housing and economic development projects. Ensure that greenspace is integral to major state land use initiatives.
- Update, as necessary, and re-publish the State's greenspace and greenways plan: A Greener Path...Greenspace and Greenways for Rhode Island's Future (1994), State Guide Plan, Element 155.
- Coordinate with the Rhode Island Land Trust Council to maintain an updated central registry of land trusts and develop an information clearinghouse of technical assistance resources and land trust activities.

- Prepare annual reports assessing progress towards the Greenspace and Greenways Plan's goals, and status of the integrated, statewide greenspace network.
- Convene a major annual meeting to report on status and progress of statewide greenspace system development and to coordinate priorities and efforts of the public-private partnership.
- Periodically review and update standards for community comprehensive plans to include guidance on strengthening the greenspace system within the natural and built areas of communities. Specify appropriate criteria for community-wide inventory, analysis and planning for greenspace requirements as part of updates of community comprehensive plans.
- Encourage communities to develop a future open space network/greenspace network map within their comprehensive plans that identifies the existing recreation, conservation and open space properties and greenways, the generalized location of key proposed areas and proposed greenway connections, and establishes priorities for future land protection efforts.
- Encourage communities to involve local staff of involved departments -planning, engineering, recreation, public works, education, key commissions such as Planning and Conservation, representatives from active land trusts and environmental groups and members the general public – in the Comprehensive Community Plan process to develop support for implementation of community greenspace plans.
- Provide planning guidelines and technical assistance for municipalities and not-for- profit groups to enhance the greenspace system within existing built environments -- especially urban and town centers. Include techniques for integrating key natural resources, greenways, parks, public spaces and landscaped streets, and networks of pedestrian paths. Include adequate safe landscaped sidewalks to encourage walking.
- Develop guidelines and technical assistance for municipalities in local regulation and capital budgeting. Incorporate provisions to improve the municipal systems for outdoor recreation, conservation and open space particularly through zoning, land development and subdivision regulations and through the capital improvement budget.
- Encourage communities to explore innovative techniques for expanding local greenspace networks, such as land banking priority parcels for future public use, transferring development rights from significant open space areas to areas better suited for development, and devoting the local share of the real estate transfer tax, and impact fees to fund the improvement of community open space systems.
- Encourage voluntary preservation of open space by landowners through financial incentives such as special taxing programs, conservation easements and donation of land to land trusts.

- Promote the effective use of conservation/open space subdivisions development techniques and evaluate current regulations for effectiveness in achieving the quantity, quality and configuration of open space intended by the community comprehensive plans. Use the local planning and development review processes to connect protected greenspace areas to create a greenway network. Encourage developers to connect private dedicated open space to nearby natural space. Trails for recreation, access to transit and to other protected open space on nearby lands should also be encouraged.
- Encourage communities and state regulatory agencies to require streetscape improvements (e.g. sidewalks, pedestrian paths, trees, etc.) in public rightsof-ways constructed or improved as part of development and subdivision projects to contribute to development of community wide greenspacestreetscape networks or as greenways along the shore and to connect to other parts of the local system.
- Incorporate greenspace design in all publicly-funded local programs and projects, e.g. neighborhood and urban center revitalization, improvements to all public properties, both town and school facilities, road and right-of-way improvements.
- Encourage communities to foster regional approaches to greenspace and connect municipal greenspace with that of neighboring communities.
- Partner with the Rhode Island Blueways Alliance to develop and publish a statewide blueways map identifying existing access points, sites for future access and camping and blue trail routes including portage routes around dams.

#### 4-2-2 Natural Diversity

A key component of the state's greenspace system is protecting biodiversity through regulation and acquisition, as well as habitat and species management. A particular concern is managing invasive species. The DEM has drafted a plan for protecting natural diversity, *Rhode Island's Living Legacy*. Over the past ten years, the DEM has undertaken projects to restore both coastal and inland habitats and fisheries. The Rhode Island Habitat Team includes the University of Rhode Island, the Coastal Resources Management Council (CRMC), the US Environmental Protection Agency, DEM, the Army Corps of Engineers and not-for- profit organizations.

**Policy RCOS-2:** Maintain natural diversity by preserving the integrity of Rhode Island's ecosystems.

#### Action Agenda 2009-2014

• Continue to emphasize ecosystems, animal habitat value and recreational hunting and fishing in the State's land protection program.

- Continue to work with municipalities, local land trusts, and other nonprofits to protect important natural areas.
- Continue to support the Natural Heritage Program to identify and document important natural areas and features for protection.
- Incorporate the protection of important natural areas and habitats in management plans for public lands.
- Increase high quality habitat through protecting and restoring fresh and saltwater wetlands, fish runs, sea grass beds, river shorelines, forests and other natural areas, and by acquiring land for habitat protection.
- Continue to advocate for state and federal government funding for monitoring and habitat restoration.
- Identify critical natural habitat areas in community comprehensive plans.
- Coordinate with Natural Heritage staff to insure that critical natural habitats are identified and appropriately protected through the subdivision and development review process.

#### 4-2-3 Water Resources

Issues surrounding the protection of water quality and quantity have steadily risen to the top of the list of public concerns. Eighty-four percent of respondents said watershed protection was a very important service for the Department of Environmental Management second only to protecting Narragansett Bay (at 88%). Drinking water quality is of utmost concern. In a broad public survey on Growth and Land Use Issues, conducted for the Statewide Planning Program in 2000, respondents identified "protecting sources of drinking water" as their highest concern

Surface water supply reservoirs provide clean, safe, drinking water for over 750,000 Rhode Islanders. About one-quarter of the state obtains drinking water from groundwater sources. Ninety percent of all state residents purchase water from a public water supply system. The balance of the population provides their own water, usually from a well drilled on their property. The potential for contamination of these irreplaceable drinking water sources from land development, hazardous waste sites and leaking fuel tanks is a very real threat.

A number of state agencies have responsibility for various aspects of water resource management and protection in Rhode Island. These include the Rhode Island Water Resources Board (WRB), the Departments of Health and Environmental Management, and CRMC. Public water supply operators (private and municipal), and municipalities also have significant responsibilities for planning and management to ensure the protection, conservation, and prudent use of the state's water resources.

The past several decades have also seen increased involvement of local "grassroots" organizations and citizens in water quality protection. The RI Rivers Council, established in 1991, was created to classify rivers for desired usage and to

designate local watershed organizations. The University of Rhode Island Watershed Watch program enlists and assists volunteers in monitoring the water quality of lakes, ponds, streams, and estuaries throughout the state. There are now 10 watershed councils designated by the Rivers Council and numerous other citizen groups monitoring local watershed issues.

Most land surrounding surface and groundwater resources is privately held and therefore vulnerable to development and contamination. Land protection via acquisition and state and local development controls are the primary means of protecting drinking water. The Rhode Island Water Resources Board Corporate uses a surcharge on water delivered by larger suppliers to finance acquisition of land or interests in land that protect surface and groundwater. Since inception of the program, over 2,550 acres have been protected. Communities have addressed watershed and aquifer protection through various techniques. Some have enacted local regulations such as aquifer overlay or wellhead protection zones or established special districts such as watershed or groundwater protection districts. All communities have completed Source Water Assessment Plans that identifying threats to public drinking water supplies. Over time, local protection measures should be strengthened, as ordinances are updated to include techniques to limit impervious surfaces, limit density, and prohibit contamination-threatening land uses within watershed and groundwater protection zones.

Increasingly, water quantity has become a serious question, particularly in certain rapidly developing areas of the state. Drought conditions in 2001-2002 led to development of a new State Guide Plan, the *Rhode Island Drought Management Plan*, adopted June 2002. Maintaining water quality and sufficient flow in streams to support aquatic life is a major concern in the allocation of available water during low flow periods.

**Policy RCOS - 3**: Protect water resources, including rivers, lakes, ponds, streams, and surrounding lands.

**Policy RCOS - 4:** Protect surface and groundwater resource areas, critical watersheds and aquifer recharge areas.

## Action Agenda 2009-2014

- DEM and partners continue to implement the RI Surface Water Monitoring Strategy.
- Continue coordination between DEM and the WRB on the acquisition and protection of public water supplies and to identify and encourage acquisitions that meet multiple land protection goals to the greatest degree possible.
- Use the Water Supply System Management Planning and the local comprehensive planning processes to continue to improve coordination between major water suppliers and municipalities regarding water supply facilities and watershed land management practices, including appropriate land uses for drinking water resource supplies (groundwater aquifers and surface reservoir watersheds).
- Define acceptable recreational uses of watersheds that will safeguard public water supply quality.

- Monitor implementation of the water supply management plans for all public water suppliers.
- Conduct an evaluation of the effectiveness of local land use regulations in protecting water resources.
- Continue the development of a water allocation program providing a means to balance water usage and water demand issues, including minimum streamflow requirements.
- Work to enforce the Federal Energy Regulatory Commission (FERC) run-ofthe-river policy to protect aquatic resources, particularly through reviews of hydropower projects.
- Continue the work of the Rhode Island Rivers Council and support to local watershed councils in protecting and restoring the state's rivers.
- Continue the restoration of urban waterways and strategies to improve water quality, protect habitat and encourage active and passive recreation use of waterways.
- Support the University of Rhode Island's Watershed Watch program.

### 4-2-4 Wetlands and Floodplains

Coastal and freshwater wetlands play a critical role in providing wildlife habitat, flood storage, purifying and maintaining groundwater supplies, and, under certain circumstances, can provide substantial recreational opportunities. These socially-valuable functions have been recognized in Rhode Island and federal law through regulatory programs and other measures designed to provide protection for wetlands. Despite efforts to protect them, the loss and degradation of wetlands continues to be an environmental issue of national and state significance, witnessed by continuing controversies surrounding initiatives to modify federal regulations. Additionally, climate change and sea level rise are real threats to the current critical role of these natural resources.

Congress passed the Emergency Wetlands Resources Act (EWRA) of 1986, which authorized revenue sources to fund federal wetland acquisition programs (including the Land and Water Conservation Fund), and directed the federal Fish and Wildlife Service and each state to prepare Wetlands Priority Plans (as amendments to their State Comprehensive Outdoor Recreation Plans). These plans identify wetland types or areas to be given priority for protection through acquisition programs at both the national and state levels. Rhode Island's Wetlands Priority Plan was adopted and given approval by the National Park Service in 1988. It is updated and summarized in Appendix B of this edition of the Plan.

Rhode Island's wetlands protection regulations are administered by the DEM and the CRMC and remain the primary vehicle for wetlands protection in the state.

Floodplains of rivers, streams, lakes, and the coastline absorb run-off and wave impacts, and buffer inland areas from storm and flood damage. Floodplain zones, however, have historically been prime commercial, industrial, residential and recreational development areas. Floodplain development is exposed to flood risks, and it reduces the natural ability of floodplains to store water, increasing the severity of flooding downstream, even in areas where the flood plains are intact.

Floodplain development should be discouraged through regulatory channels and zoning. Floodplain acquisitions related to linear parks and greenways should continue to occur, and limited, nonstructural recreational development of floodplains should be considered if no alternatives exist.

**Policy RCOS - 5**: Protect wetlands and floodplains to maintain their natural functions and to minimize damage from floods.

## Action Agenda 2009-2014

- Continue to coordinate with and report on the wetland protection efforts of DEM's Fish and Wildlife Division, CRMC, the Natural Heritage Program, Land Acquisition Program, Wetlands Regulatory Program, municipalities and nonprofit conservation organizations.
- Continue to provide both the freshwater and coastal wetland regulatory processes with adequate resources and professional staff to execute their protection mandates.
- Continue to provide technical assistance and educational outreach to the development community, and other interested parties on wetland avoidance and minimize development impacts in compliance with coastal and freshwater wetlands regulations.
- Encourage communities to adopt land management regulations for their floodplains that exceed the minimum requirements of the National Flood Insurance Program.
- Continue to protect floodplains through acquisition of linear parks and greenways.
- Continue to support wetland and habitat restoration by coordinating the DEM Wetland and Water Quality Restoration Team.
- Continue to implement the RI Freshwater Wetland Monitoring and Assessment Plan (2006) and the RI Coastal and Estuarine Habitat Restoration Fund.
- Verify and map vernal pool wetlands in the Wood-Pawcatuck River watershed and explore initiating similar mapping efforts in other areas of the State.

### 4-2-5 Islands and Coastal Areas

For the past half century Rhode Island's coast has received more popular attention and been under greater pressure than any other area of the state. Residential (including second homes), commercial and recreational development has grown more rapidly within the coastal zone than in other areas of the state. In a dramatic change, the traditional summer colonies along the Rhode Island coast have become year-round neighborhoods. Although these areas still have significant numbers of second homes which are occupied seasonally and on weekends, and some of the commercial uses are open in the summer months only, in fact, these areas are now active to a considerable extent year round. With high demand for rental and student housing, many of the seasonal houses are also occupied.

Development of the tourist industry has also supported some major building in Rhode Island's coastal districts as old facilities were expanded and upgraded and new commercial facilities were built to accommodate the state's visitors, who also increasingly visit on a year-round basis.

Unfortunate characteristics of much of the new construction as compared to the original buildings and features in the coastal areas are the larger scale, and the size and materials used for public improvements. Winterizing the houses in these areas has sometimes required (and created a public demand for) significantly upgraded public infrastructure in the form of wider, paved roads, seawalls and bulkheads, and extension of public water and sewer service to serve these new permanent neighborhoods. Also, in keeping with the property values in the coastal areas and widespread trends in construction, new and renovated residential and commercial properties in these areas have gotten larger and more elaborate.

Rhode Island's waterfront colonies and coast areas are admired and cherished for their special places and known for their beautiful and fragile natural resources and historic building character. However, in spite of valiant efforts and some great success in conservation and historic preservation, overall, the balance between the natural and built environments in these coastal areas is precarious. The design and building of new features must be limited, of better quality and discretely located. Every effort must be made to protect the fragile natural resources from the impacts of overdevelopment and seasonal over-use. In addition, the impacts of climate change and sea level rise must also be integrated into natural resource planning and development in the coastal areas.

Rhode Island's islands are prized for the open space they provide, the recreational opportunities hey offer and the diversity of wildlife they harbor. Our larger islands attract people desiring to live, work and play. Aquidneck, Conanicut (Jamestown), and New Shoreham (Block Island) all have experienced increased development and recreational visitation over the past decade. While growth has helped island economies, it has intensified the pressure on their limited natural resources, and threatens the characteristics that make the islands attractive in the first place. Even during slower economic times, the pressure to use and enjoy our coastal resources will remain strong.

While many of Rhode Island's coastal areas shelter plant and animal species whose habitat protection requires limiting public access, some areas continue to offer untapped recreational potential. Accommodating existing and new recreational usage of

Rhode Island's island and coastal areas should continue, with the careful development of new public use opportunities, such as the recently-acquired Rome Point site on the West passage of Narragansett Bay. Balancing public use and safety, and resource protection is particularly important along the coast, and continuing efforts to maintain proper stewardship and protection standards is necessary. Opportunities to acquire coastal and island sites that are suitable for public access and recreational usage should be pursued by state and local agencies as consistent with applicable plans. Islands and coastal areas are especially vulnerable to development, coastal storms and sea level rise.

**Policy RCOS - 6:** Protect significant island and coastal sites.

## Action Agenda 2009-2014

- Continue coordinating efforts of CRMC, the Narragansett Bay Estuary Program, and partners through the "State Estuary and Coastal Habitat Restoration Program Strategy" (Adopted 2002, Revised 2008).
- Continue to pursue shoreline and coastal land protection projects as opportunities arise which are consistent with the State Guide Plan, DEM's Land Acquisition Plan, the Coastal and Estuarine Land Conservation Program (CELCP), CRMC's Urban Coastal Greenways Policy and the Coastal Resources Management Program.
- Continue to emphasize the importance of local coastal acquisitions via the Open Space Project Selection process.
- Establish contingent priorities and procedures for the acquisition of storm damaged coastal properties as part of hurricane preparedness planning. Establish a dedicated accrual account for the purchase of storm-damaged properties, particularly barrier beaches and other flood prone areas.
- Assess the impacts associated with sea level rise and support data acquisition to support accurate coastal elevation maps to address these impacts in permitting and project design decisions through the Coastal Resources Management Program.
- Continue the restoration and maintenance of historic Fort Adams as a tourism and recreational resource.
- Expand public opportunities for small craft access, dockage, and camping along the coast, especially in Narragansett Bay, where appropriate.
- Provide technical assistance to municipalities in preparing and updating local comprehensive plans, and in developing regulations that provide for the scale and design of development which is appropriate to the character of the natural and built environment and consistent with visions stated in comprehensive community plans.

### 4-2-6 Forests

Rhode Island's 400,000 acres of forests cover some 60% of the state, playing a significant role in its economy, environmental health, and lifestyle of its citizens. In the coming years, the role of forests in protecting water supplies, as places to recreate, and as components of urban environments will be increasingly important. The state's forests, however, have been in decline, a result of development, infrastructure improvements, land clearing, and pest infestations. The state's forests are also becoming more fragmented over time. Seventy-five percent of the state's forestland is privately owned, and, as land values and taxation increase, traditionally-held large tracts are being divided into more numerous, smaller parcels. Infestations have also taken a toll. During the past 100 years, gypsy moth, chestnut blight, Dutch elm diseases, and more recently, hemlock woolly adelgid have attacked Rhode Island forests. Rhode Island forests, especially those in public ownership, are also under increasing pressure from those seeking dispersed outdoor recreational opportunities closer to home. Increased use combined with residential development within or on forest edges makes forest fire prevention and suppression increasingly important to protect property, even though controlled burning may benefit forest resources.

Two other State Guide Plan Elements directly and comprehensively address woodland and urban forest concerns. The (2005) *Rhode Island Forest Resources Management Plan (FRMP)* deals with many of these forest issues, and is a comprehensive plan addressing appropriate management and use of the state's extensive and productive forested areas. *The Rhode Island Urban and Community Forest Plan* (1999) complements the FRMP by providing policies and guidance on how forest resources can be effectively managed and enhanced as integral parts of the built environment.

Natural resource-based recreation opportunities such as hunting, snowmobiling, field trials, hiking, and camping are a traditional and important aspect of Rhode Island's out-of-doors life. The western forest lands and the extensive state-owned Management Areas provide year-round opportunities to enjoy a variety of recreational pursuits. The character these areas offer is as near to an unaltered forest environment as can be found in Rhode Island, and for some residents, perhaps the only exposure to "wilderness" they will encounter in their lives. The recreational experiences these forested areas accommodate are special, and care must be taken to insure that they are not diminished by the insidious threats of overuse, resource degradation and pollution, and conflicting uses on lands surrounding the public estate.

The reactivated R.I. Trails Advisory Committee coordinates recreation activities related to trails. The Arcadia and Northwest Management Councils coordinate recreational special use permits to minimize conflicts between user groups.

**Policy RCOS -7:** Conserve and enhance urban and community forests for multiple uses - water supply and water quality, recreation, forest products, energy, and wildlife habitat – as fundamental to high quality woodland and urban environments.

## Action Agenda 2009-2014

- Continue to educate the public and landowners regarding sound forest management.
- Continue to work with landowners to maintain/expand markets for timber and non-timber products.
- Continue to actively pursue the acquisition of fee title or conservation easements of large contiguous forested tracts, primarily those tracts in the western forested corridor, consistent with the State Guide Plan and DEM's Land Protection Plan.
- Maintain coordination through the State Conservation Committee to ensure that local tax structures for forest land recognize the reduced burden on local services by forest land and forestry and treat forest land equitably.
- DEM should continue to encourage forest management practices which facilitate economic returns for forest products without diminishing forest resources.
- Encourage and support the work of the R.I. Tree Council, R.I. Rural Lands Coalition, and the R.I. Forest Landowners Association to promote research and education programs that encourage the long-term protection and enhancement of Rhode Island urban and community forest resources.

# 4-2-7 Agricultural Land

According to USDA Economic Research Service, as of 2007, farming in Rhode Island was an over \$100 million business. Its future is dependent upon available and affordable farmland with high quality agricultural soil. Although Rhode Island farms enjoy the fourth highest return per acre of any agricultural land in the nation, the State continues to lose farmland acres, a trend seen throughout New England. From 1964 to 1997, Rhode Island lost nearly half of its farmland, a decline from 103,800 to 55,300 acres. Between 1988 and 1995, the state lost approximately 1,500 acres of farmland. Between 1986 and 2003, the number of Rhode Island dairy farms was cut by more than half, from 58 to 22. Rhode Island's small dairy farm sector continues under severe economic pressures from large-scale competitors elsewhere in the nation, and low federal milk price supports. In an effort to remain viable, in 2005, five dairy farmers pooled their milk into the Rhody Fresh Cooperative, which is now available through both small and large grocery stores.

High quality agricultural soils are distributed throughout the state, however, the majority of commercially productive agriculture occurs in Washington, Newport, and Providence Counties, where turf, nursery stock and dairy products are the principal commodities. Vegetable and market farms are located closer to the metropolitan Providence region. Commercial orchards are located primarily in the northern part of the state, and dairy farms are distributed throughout the state.

Farmland provides a number of important benefits in addition to its contribution to the state's economy. It enhances, and affords Rhode Island residents the opportunity to

purchase fresh, locally-grown produce. The traditional architecture and scenic character of our farmscapes provide variety and an aesthetic character for their communities and add to the quality of life. Moreover, land retained in farmland costs communities far less in community services than land developed for new residential use. Agricultural land preserved in proximity to other large protected areas stimulates a naturally occurring patchwork of woods and meadows to strengthen the state's natural diversity. Community gardens and volunteer-run community farms, such as one in Jamestown, provide opportunities for urban and suburban residents to experience the rigors of farming, while contributing to their food security. Some farmers are supplementing or replacing traditional farming activities by offering agricultural— related tours and activities on their arms. These include such things as cutting Christmas trees, picking apples and berries, hayrides, wine-tasting as well as participating in educational programs in the downtime between crops. Some farms also increase revenue by renting land and buildings for boarding and riding horses and communal gardens.

The time is long past when Rhode Island can take the continued existence of its farms for granted. As valuable as agricultural production is to the State's economy, farmers cannot afford to pay taxes based on the residential and commercial development value of their land. The economics of farming simply will not support those higher land values. If farming is to continue as a significant feature of the Rhode Island landscape, it will be the result of positive actions that identify and protect agricultural soils, encourage agricultural production and treat the Rhode Island farmer as a critical state resource.

Among agencies cooperating to keeping working farms alive are DEM, the Agricultural Lands Preservation Commission, The US Department of Agriculture, and the RI Farm Bureau. Programs range from land preservation through purchase of development rights, web based and classroom education programs, farmers markets and alternative forest businesses. The Agricultural Lands Preservation Commission works with DEM to preserve agricultural lands through purchase of development rights.

**Policy RCOS- 8:** Support agricultural uses and preserve the best farmland for active agricultural purposes.

### Action Agenda: 2009-2014

- The Agricultural Lands Preservation Commission should continue to protect farmland with legal and technical staff support from the Department of Environmental Management. The Purchase of Development Rights Program should focus on farms that are economically viable and comprised of the best agricultural soils.
- Continue funding support for the Agricultural Lands Preservation Commission's Purchase of Development Rights Program through periodic State bond referenda, federal grants, or other means.
- The State Conservation Committee and DEM should continue to encourage and cooperate with local officials in implementing a property tax structure for qualified agricultural lands that recognizes the reduced burden on local services by farms and farming and that treats the taxation of agricultural land equitably.

- The Agricultural Land Preservation Commission and DEM should promote the concept of community-supported agriculture as a way to involved the public in agricultural land protection, and to maintain the continuity of agricultural operations where family members are not interested in farming and a successor commercial operator cannot be found.
- Continue to work with the Agricultural Land Preservation Commission to maintain and expand protection of working farms through purchase of development rights and the Farm Viability Program.
- Work with the U. S. Department of Agriculture and the Rhode Island Center for Commercial Agriculture to develop and implement an agricultural web page for Rhode Island.
- Work with the Rhode Island Farm Bureau to assist the Agriculture in the Classroom program to educate schoolchildren on the importance of agriculture.
- Explore the feasibility of a permanent, year-round farmers market in Rhode Island.
- Explore opportunities to develop and promote community-supported agriculture/community gardening in urban areas.

#### 4-2-8 Fish and Wildlife

Rhode Island's woodlands, fields, lakes, streams, marshes, and coastal waters harbor over 435 species of birds, mammals, fish, reptiles, and amphibians. The state's wildlife provides a variety of ecological, recreational, economic, and aesthetic benefits.

Hunting remains a popular recreational activity of Rhode Islanders. Game species have traditionally been managed through state and federally-funded research, habitat acquisition and improvement and species reintroductions. These programs should continue. Fishing and shell fishing also are important to many residents and visitors, and efforts to reduce development impacts and non-point source pollution of our waters and wetlands must continue.

The status of fish and wildlife resources is mixed. On the one hand, populations of species such as turkey beaver, fisher, and osprey have increased to sustainable numbers. Problems continue with overabundant species such as mute swans, geese, and white tail deer despite management efforts.

The populations of some marine fish species are up, while others are down. A sharp decline in bottom-dwelling fish and a steep increase in off-bottom species and lobster may be reversing. In general, shellfish and crab abundance have risen, but quahogs have declined. Over-fishing and habitat alteration have done significant harm to important commercial and recreational species such as winter flounder that spend their entire life cycle in Narragansett Bay. In addition to regulating fishing levels, DEM is examining whether habitat can be improved to increase winter flounder and other resident species. The state is continuing efforts to restore anadromous fisheries such as

Atlantic Salmon and herring through construction of fish ways and stocking. Freshwater fish stocking programs support a "put and take" fishery that provides the public with recreational enjoyment and a source of fish that is not contaminated, important in some urban streams where elevated mercury levels in native fish are a concern.

Rhode Island must continue to use a multi-faceted approach to protect and maintain the state's fish and wildlife populations at optimum levels. These include ongoing research, management and education efforts, habitat protection and improvement and the prevention or mitigation of activities which have a significant negative impact upon fish and wildlife.

**Policy RCOS - 9:** Protect and maintain fish and wildlife populations at optimum levels and provide opportunities for wildlife-based recreation.

### Action Agenda 2009-2014

- Through DEM's Division of Fish and Wildlife, continue education programs to foster awareness and appreciation of the state's wildlife resources.
- Continue to maintain and expand, where feasible, areas and facilities providing opportunities for fishing, hunting and other wildlife-based recreational pursuits.
- Develop a wildlife center with improved office, lab and classroom facilities at the Great Swamp Management Area.
- Install fishways on the priority rivers to restore anadromous fisheries.
   Consider portage facilities in the planning of fishways where possible.
- Continue mink/mercury sampling and expand program to include other fisheating species such as river otter, fisher and osprey.
- Continue surveillance and control initiatives for Chronic Wasting Disease (neurological disease of deer and elk).
- Control the population of Canada Geese through extending the seasons for hunting permits and control populations of Mute Swans through egg addling.
- Continue study of amphibian species to develop stronger conservation recommendations.
- Continue monitoring selected avian species such as Piping Plover, Least Tern, Osprey, Snowy and Little Blue Egrets, Ibis, Common Tern, Double-Crested Cormorants, and others to assess population levels.
- Continue monitoring and efforts to protect and expand population levels of Federal Endangered Species such as the American Burying Beetle and Sandplain Gerardia.

### 4-2-9 Cultural Resources

Rhode Island has a remarkable legacy of sites and buildings of historic, architectural or archeological importance; in fact, we may have the greatest concentration of these resources in the country. More than 16,000 Rhode Island properties are listed on the National Register of Historic Places as individual sites and districts which are recognized as having local, state or national significance. The Rhode Island Historical Preservation and Heritage Commission (RIHPHC), a state agency, orchestrates statewide identification and protection efforts.

Historic resources are integral to Rhode Islanders' daily living and working experiences, as well as to outdoor recreation. The character and context of many of our neighborhoods, city and village urban centers, as well as our rural and waterfront areas are created by historic features. Many of our state and local parks contain historic features and historic areas are among our favorite places to visit for our most popular outdoor activities -- walking, riding a bike or sightseeing in a car, as well as visiting historic museums and participating at public festivals.

Many state and municipally-owned properties are historic, associated with the most important persons and events of our past public life. They are also architecturally important, beautiful landmarks in prime locations and real centerpieces in the life of our state and communities. Some of the most significant historic buildings and sites in Rhode Island are owned and maintained by historic societies, churches, and other not-for-profit and preservation groups. However, the vast majority are privately-owned and maintained.

Historic preservationists have effectively joined forces with others concerned with environmental protection and community design. Together they are focusing on whole areas of important resources, historic complexes such as mill complexes and villages, the buildings and landscapes of our great estates, and historic districts in cities and villages.

Three particularly endangered categories that are receiving current attention are historic landscapes, farms and shipwrecks in state waters. Also, Rhode Island has many outstanding examples of restoration and re-use of historic mill buildings undertaken in conjunction with brownfield remediation projects. Mill-built housing and working-class neighborhoods of historic three-deckers have increasingly been restored under publicly-directed affordable housing programs using tax credits. Rhode Island has enacted some of the strongest tax incentives for historic preservation in the country and the State Building Code was amended in 2002 to address specialized issues of renovation within historic commercial structures.

Restoration and maintenance of the historic building stock is an enormous challenge. Funding for protection, conservation, curation, and interpretation remains a patchwork at best with many sources and a far greater need than supply. The character of our special places depends upon our continuing with this work.

Groups such as Grow Smart Rhode Island have brought public attention to development issues, reinforcing efforts that began with the comprehensive revision of local planning, subdivision and zoning legislation in the early 1990s, to preserve and enhance community character by encouraging new development to be more compact,

located in traditional centers, and compatible with sensitive features and the character of the community

**Policy RCOS - 10:** Preserve significant historic, architectural and archeological sites, buildings and districts.

## **Action Agenda 2009-2014:**

- Approximately 4,000 properties have been identified as potentially eligible for listing on the National Register (16,000 have been documented and nominated) but these need to be researched and nominated. The RIHPHC offers several grant programs to fund the local preparation of National Register Nominations.
- Investigate the feasibility of establishing an underwater trail with an historic shipwreck in an easily-accessible and monitored area.
- Adopt legislation for additional funding to the Historic Preservation Revolving Fund to maintain an adequate loan reserve, and provide grant funding for projects where loans are not appropriate.
- Initiate a state matching grant-in-aid program based on regular appropriations for work on endangered historic properties.
- Integrate provisions for funding the restoration/maintenance of publiclyowned historic properties into regular state and local budget mechanisms.
- Reinstate a revised historic tax credit program to encourage the restoration and reuse of historic properties.
- Integrate the use of CRMC's CELCP to identify and prioritize properties historical and cultural value for acquisition.

#### 4-2-10 Scenic Resources

Rhode Island retains a remarkable legacy of unique natural landscapes, seascapes and scenic roads despite losses and degradation of the visual character from new development and highway construction over the years. The State's Scenic Roadway Board has officially designated limited stretches of eight roads as scenic roads, helping to preserve their character through recognition and through review procedures to avoid publicly-funded improvements which would be detrimental. However, the Scenic Highways Board does not provide funds for road improvements which are designed to preserve scenic elements.

There is a growing awareness of the importance to a community of visual access to important vistas from the public rights of way (usually public roads). However, visual access through easements or land use regulation is generally rare in Rhode Island. It has been used in the design of private communities in the region but is not yet included in municipal land use regulations. The siting, mass and design of new building within important built and natural environments and in proximity to important vistas, is critical in

the preservation – and the enhancement—of the area's character and the public's enjoyment of the resources.

Greenspace and greenways along our major roads needs to be recognized for the importance of aesthetic and functional roles. For example, although it is taken for granted, the parkway character of Route 1 along the coast in South County, enjoyed by countless residents and tourists on their journeys, is largely due to small, state-owned, wooded parcels – vestiges of past highway alignments -- which still line the corridor. The importance of such seemingly insignificant greenspace to the character of public places that are major parts of our everyday experience can be easily under-estimated, until it is gone.

Similarly, the value of breath-taking views of beautiful landscapes and seascapes can not be calculated and is an important experience for all of us to be able to continue to enjoy. Identification of these important public resources – critical greenspace and views—are appropriate, in fact, essential aspects of state and local planning and land use controls. They are worthy subjects for special studies as part of the community comprehensive plans, analysis of special district analysis and, after appropriate documentation, for inclusion in urban design and zoning regulations. Most local land use planning and zoning does not adequately address the impacts of development on aesthetic or historical resources. As local comprehensive plans and revised zoning codes are prepared, communities should be encouraged to consider actions aimed at maintaining and enhancing their scenic character and landscapes.

**Policy RCOS – 11:** Protect scenic areas and resources including landscapes, roadways, and views of the waterfront and significant geologic features.

## **Action Agenda 2009-2014:**

- State and municipal planners should coordinate efforts to identify and permanently protect key publicly owned property, including undeveloped greenspace or important built features which contribute scenic and aesthetic value to state and municipal roadways. The impact upon scenic values and community character should be fully considered prior to disposal or re-use of publicly-owned greenspace adjoining public roads.
- A scenic and design aesthetic should be the goal for all public right-of-ways, and especially for roads possessing scenic character. Context sensitive design principles should apply to ensure that new and re-built highways and roadways fit with their surrounding communities. A design treatment of highways as parkways and major streets as boulevards, with significant vegetated buffers and parallel tracks for pedestrians and bicycles, wherever feasible, should be considered.
- Local land-use regulations should provide for appropriate setbacks for construction and limit defoliation within scenic roadway corridors. Strong signage controls, including efforts to eradicate billboards should be implemented. Displays of equipment, signage and location of buildings immediately adjacent to the road right-of-way line should be prohibited, or at least discouraged, through combined state and local efforts.

- The Scenic Roadways Board should explore the possibility of providing funding for acquiring easements to maintain the key elements of scenic roadway corridors.
- Municipal planners should be encouraged to consider scenic vista protection, especially of important water views from public vantage points. Efforts should include identification of key vistas and greenspace resources in public plans, consideration of size and siting of new buildings, and adoption of zoning or special district regulations to control for appropriate new design.
- Encourage and assist municipal planners in scenic landscape protection. Use techniques such as three-dimensional build-out analysis of their current zoning to assess the potential impact of current dimensional requirements on important views, landscapes and other resources.
- Encourage landowners to maintain scenic views across their private land via the use of a registry program and visual access easements.
- Provide funding to the RIHPHC to list eligible landscapes on the State and National Registers of Historic Places, and expand the easement program to provide protection for qualifying landscapes, as well as to conduct historical and archaeological surveys, protect, conserve, curate and interpret resources.

# 4-3 Meeting Critical Needs...Improve Recreation Opportunities and Resource Conservation

# Goal 2: Rhode Island will improve its system of outdoor recreation facilities and conservation areas to meet the needs of its residents and visitors.

While provision of outdoor recreation is not explicitly cited as a purpose for our federal government, most contemporary interpretations of the social contract support governmental action to address the public's need and desires for enjoyment of the outdoor environment as part of its "promotion of the general welfare". In Rhode Island the directive is even clearer: Article 37 of the State Constitution states that... "The people shall... be secure in their rights to the use and enjoyment of the natural resources of the state..." Clearly, this plan sees the ability to access and enjoy the outdoors and engage in recreational pursuits as an essential aspect of community life which Rhode Island governments have a legitimate and continuing responsibility to provide.

The following general principles are recommended to guide the actions outlined later in this section for meeting specific outdoor recreational needs:

1) Provision of sufficient land and adequate facilities for public outdoor recreation must remain a **constant** objective of state and local governments.

A "green as we grow" concept must apply to the maintenance and expansion of Rhode Island's greenspace and recreational system capital (land and facilities) if the outdoor recreation needs of present and future Rhode Islanders and visitors to the state are to be successfully met. The neglect of recreation system investments during the late 1970s and early 1980s contributed directly to an "open space crisis" experienced in the

mid-80s, as development burgeoned throughout the state, and led to costly remedial programs in the late 1980s. Such a scenario was avoided during the development boom of the late 90s through the regular, prudent investments made in the system during the 90s. A reoccurrence should be avoided in the future by a scheduled program of investments in improved and expanded recreational facilities and open space areas.

This advice is particularly directed to rural and lesser-developed suburban communities that face growth pressures now and in the future. More than any other area of the state, their development strategies can benefit from the **"green as you grow"** approach, linking reservation of important open spaces and provision of adequate recreation facilities to population growth and land development. Such communities should be striving to provide a balanced active and passive recreation/open space system that meets, *or preferably exceeds*, national and state standards as they grow.

This recommendation also implies that the State should continue its partnership with localities in recreational system expansion and development. The State's recreation and open space grant-in-aid programs supported by bond referenda in 1987, 1989, 1997, 2000, 2004 and 2008 have been instrumental in meeting outdoor recreation needs in virtually all the state's municipalities. Moreover, the 50/50 cost-sharing arrangement has stimulated local governments to meet their responsibility for their recreation capital investments as well. Continuation of this investment program, on a sustainable basis should be an important goal.

2) Highest priority for State recreation system investments should be given to areas and facilities which allow the greatest number of Rhode Islanders to access enjoy and understand the outdoor environment.

State investments in recreation should strive to improve the accessibility of recreation to the public, particularly to residents of urban areas having the fewest existing opportunities; provide the facilities desired by the public; and build towards an interconnected network of recreation areas and open spaces.

Proximity of facilities to heavily populated areas should be given significant consideration, given the proclivity for close-to-home recreation and the distributional differences observable in facility/population ratios. Investments which improve the availability of recreational opportunities to urban residents, and improve the distributional equity of the overall facility inventory should be given high priority.

As stressed earlier, greenways and similar linear recreation facilities can weave recreational opportunities and open space into the fabric of populated communities, and play an important role in improving the accessibility of recreation. Riverways, bikeways, and other greenways link isolated sites together and make them greater than the sum of their parts. Facilities such as the Blackstone River Park and the East Bay Bikeway are already demonstrating the potential of this approach, and high priority should be given to replicating their success in other areas of the state, as is recommended by the Greenspace and Greenways system goal stated earlier.

Public demands for different types of recreation and the severity of facility deficits for different activities should be an additional factor in investment priorities. In terms of total demand, estimated from the 2002 Public Survey, the five top activities are: walking,

pleasure driving, visiting coastal areas, nature watching, and bicycling. These are largely consonant with the top five "needs" expressed in the statewide public survey, which were for walking and biking trails, natural areas, picnic facilities, saltwater beaches, and historical sites and museums. Provision or enhancement of facilities addressing these high demand and high desire activities, should be accorded priority via direct State projects, and via the State's recreation grant program, when a need relative to supply is demonstrated. Similarly, local projects that address the top needs identified by local managers for neighborhood and community-based activities -- namely skate parks/BMX, soccer/lacrosse, pools/swimming facilities, multi-use fields, and trails -- should also receive priority provided that, taking account of available supply, a local need is well-documented. The public sector, however, can not and should not assume responsibility for meeting all facility needs. The private sector has a significant role to play in meeting deficits for a number of activities, including golf, horseback riding, and boating.

Finally, State-provided areas and facilities should, in general, be kept as minimal and simple as possible; both to respect the natural features of their (often fragile) sites, and to minimize maintenance and operation costs. This goal can be accomplished in most instances by providing only basic user support facilities such as parking, restrooms, trails and walkways, interpretative centers and signage, and multi-purpose fields. Single-purpose, or highly specialized recreation facilities should, in general, be avoided in State parks.

3) Rhode Island must capture every opportunity to realize the recreation and open space opportunities inherent in public and private investment projects which structure the environment.

It is not only prudent planning to incorporate open space and recreation into the "built environment" as it is being created; it is also much easier and more cost-effective than remedial approaches. The recreation demand data tell us that most Rhode Islanders manage to weave growing amounts of recreation and leisure activities into their complicated mix of work, home, and social responsibilities. The high level of public demand for such basic recreation as walking and bicycling is indicative of this phenomenon, in that these activities are readily accessible and combinable with other functions of daily life, such as going to the store. This argues for a public policy which consciously integrates opportunities for enjoyment of the outdoors in all projects which create or structure our everyday living and working environment.

Development projects, both public and private, create opportunities for integrating recreation and open space opportunities close to the locales where we live and work. Facilities such as commercial centers, office plazas, industrial parks, and our transportation systems consume vast quantities of land, and are places where we spend significant portions of our lives but are too often designed and built without careful consideration of how they should relate to the landscape, or of the leisure and recreation opportunities they could offer to the community. A simple example would be designing storm water detention facilities so that they constitute environmental amenities, offering a pastoral setting for recreation and ice-skating in winter, rather than being single-purpose, riprap-lined, nuisances which often are fenced-in. CRMC's Urban Coastal Greenways program is a good example of regulations in practice of this objective.

In like vein, our communities can be designed either to require further dependency upon the automobile, or to entice us to select the healthier alternatives of

walking or bicycling whenever possible. Goal 1 of this plan offers a vision of the benefits that a statewide network of greenspace and greenways could offer. An intricate network of protected open space would do more than tie together parks and preserves. Cutting across town lines, and connecting widely separate resource and recreation areas, such a system would reinforce the links between the city and the countryside, unite and revitalize communities, and guide growth away from fragile habitats, scenic areas, and floodplains. Through inclusion of bikepaths and trails, the greenway network would offer a supplemental transportation system offering alternatives to reduce reliance upon auto travel, increase walking and bicycling, and bolster healthier lifestyles. The huge popularity and success of the Blackstone, East Bay, South County, and Washington Bikepaths offers just a hint of how beneficial a fully implemented and interconnected statewide greenway/bikeway system could be for Rhode Island's future, serving recreation and transportation needs alike.

Such ideas, while imminently sensible and well received in concept, are often difficult in execution. However, they are worth the time and effort to pursue. For if, through inattention to design, or for "economy", we allow our neighborhoods, public places, and roadways to be built or rebuilt as unaesthetic and uninviting places to walk, to sit, to bicycle; we will face the added, unnecessary task and expense of buying and building alternative sites and facilities with which to satisfy the public's demand for outdoor activities. Outdoor recreation requires a setting in which to occur. The setting can consist of natural resources, man-built environments and facilities, or both. Settings are important, however, because the parameters of each recreational setting--its characteristics, capabilities and capacity-- often are the sole determinants of whether the recreational experience will be rewarding or disappointing for participants. Anyone who has driven to the beach on the hottest day in July only to find no parking available understands the fundamentals of this dependency upon setting. The needs, problems and issues associated with Rhode Island's major recreational settings and with the activities which commonly occur within them are examined in this section of Part Four.

### 4-3-1 A Diverse, Balanced System

The current system supplies a wide variety of publicly-accessible opportunities for recreation within the natural and built environments of Rhode Island. This is a public system and we must strive to insure that it includes some opportunities for everyone. As keepers of this public system, it is our responsibility, furthermore, to press for opportunities and improvements especially for those for who access to the system may be more difficult.

The need for the system to offer diversity in facilities and services to meet the needs of a growing and ever-changing population is constant. More than 50% of households surveyed in 2002 expressed a need for paved paths for biking and walking, natural areas/wildlife habitats, picnic shelters/areas, salt water beaches, historical sites and museums, and outdoor areas for festival/special events, but only slightly lower percentages (in the 40s) indicated they also used freshwater beaches, nature education centers, larger parks, and playgrounds as well, indicating that a variety of facility choices need to be provided.

Yet, for nearly 20 years the top activities in terms of total demand have basically stayed the same – walking and bicycling, pleasure driving, picnicking, and beach use and swimming are always near the top of Rhode Islanders' lists, for understandable

reasons, and these account for over 40 percent of the estimated total 2002 annual recreational participation in Rhode Island. However, despite the significant addition and renovation of recreational facilities through the past two decades, local system managers continue to report user conflicts and overcrowding, particularly in urban areas on the weekends and at active recreation and team sports facilities.

Most state and local sources report a need for additional recreational opportunities and, in most cases, such expansion will require more land. There is a need to expand the quantity of land and water within the public domain available for recreation at both the state and local level. In light of current development pressures, it is advisable to secure public land and water areas for present and future recreation needs

Rhode Island municipalities all prepared and adopted Community Comprehensive Plans in the early 90's and, at that time, the plans reported a collective need to expand local recreation system by approximately 2,000 acres statewide to meet nationally-accepted service standards. This estimate addressed only the formal component of community recreation systems such as playfields and parks and not land protected for natural or cultural resources as in the greenspace system. While a recalculation of acreage needs was not performed for this Plan update, it is safe to say that it is probably still significant.

Municipal recreation facilities are under considerable and growing pressures and coordination and creativity are needed to maximize use of local facilities by school programs, league sports and the general public. Multiple-use facilities and sharing of facilities are trends well-underway and they must continue. We must provide more open space, recreation facilities and linkages to the state open space and recreation system for urban residents. We must encourage recreation projects that integrate a variety of opportunities and a mixture of age groups and degree of physical abilities.

**Policy RCOS - 12** Provide a diverse, balanced system offering quality recreational opportunities that meet users needs.

### Action Agenda 2009-2014

- Implement the DEM Asset Management Plans for facility maintenance and repairs.
- Rehabilitate the facilities at East Matunuck State Beach.
- Acquire and develop new coastal sites for campgrounds.
- Maintain a limited parking area at Rome Point.
- Maintain the Narragansett Bay Islands as wildlife management and low impact recreation areas.
- Give priority to recreational projects that meet documented needs and foster a diverse and balanced recreation system.
- Renovate the Salty Brine State Beach Facility and reconfigure the parking lot.

- Construct 3 large pavilions at Lincoln Woods, Goddard and Colt State Parks for rent to the public for weddings and family outings.
- Continue the Smoke-Free Beach Campaign at state beaches and explore ways that healthy habits can be extended to other recreational areas.

#### 4-3-2 Public Access to the Shoreline

The R.I. Coastal Resources Management Council (CRMC) is charged with protecting the public's right to access to the shore. One CRMC program designates public rights of way and installs permanent markers to identify them, however, limited funding has slowed progress under this effort. In order to achieve more and better-designed public access to the water, State agencies and local planning and conservation officials should coordinate in several ways. Coastal communities can adopt guidelines and regulations furthering shoreline access to complement state efforts. Local Comprehensive Plans should proactively identify general shoreline areas where more public access is desirable. At the earliest stages of planning for new projects along the waterfront, the best opportunities must be investigated for inclusion of public access so that it will be integral to the development plan. This is appropriate whenever commercial, residential and public spaces are planned. It is imperative to advance this initiative now since the coming years will only bring increasing pressure to develop shoreline areas.

The State can also expand and enhance shoreline access by acquiring and developing key access points and coordinating the improvement and expansion of facilities where the state or quasi-state or not-for-profit groups own waterfront properties. Aggressive advocacy and defense of the public's rights to the shore under the Public Trust Doctrine and the State Constitution is a state responsibility necessary to maintain the legal foundation of coastal public access.

**Policy RCOS- 13:** Preserve and expand public access to the shoreline.

# Action Agenda 2009-2014

- Revitalize the CRMC's Shoreline Access Program and continue support for the Council's Urban Coastal Greenways Policy.
- Update and republish the guide Public Access to the Rhode Island Coast.
- Utilize indestructible markers to identify public access points.
- Encourage local acquisition of coastal lands to stem the loss of traditional water dependent uses along the coast.
- Encourage municipalities and state agencies to protect and expand public access to the water.
- Enhance waterfronts with appropriately designed new and redevelopment projects.

- Investigate the feasibility of a water trail to the Narragansett Bay Islands with linkage to water transportation.
- Identify coastal sites for acquisition based on recreation potential, ecological function and public access.
- Require municipalities to address coastal public access in the recreation and open space elements of community comprehensive plans.
- Assist municipalities in developing guidelines for the development of public access to the water to be used in local planning and land use regulations.
- Require coastal land-owning public and quasi-public agencies, to assess the public access potential of lands under their control.

#### 4-3-3 Saltwater Beaches

Rhode Island's saltwater beaches are the state's most popular and heavily used recreational resources. While most of the people using the beaches are Rhode Island residents, the beaches are a regional attraction. The intense demand for beach use and the popularity of the state beaches have supported significant improvements to DEM's coastal facilities over the past 15 years.

The State Beaches have intensively developed infrastructures designed to handle large numbers of people for relatively short periods of time during the summer months. These facilities are located in exposed coastal areas that require significant annual maintenance. With the complete acquisition of major additions to Scarborough Beach and the numerous other state and local beaches that extend along the Atlantic Coast from Westerly to Little Compton, there should be no further need for the DEM to acquire southern coastal beach areas for public bathing facilities. Major renovations have been completed to state beach facilities at Misquamicut, Scarborough and Block Island.

Municipalities, sometimes assisted by not-for-profit partners, have also made significant acquisitions of saltwater beachfront property for public recreation purposes during the past two decades. These community-based efforts should continue, when and if important waterfront properties become available. These acquisitions are funded primarily through the state's recreation grant programs.

Communities should allow shoreline development that increases public recreational access to the coast. In the Providence metropolitan area, water quality improvements in upper Narragansett Bay related to the ongoing efforts to mitigate the combined sewer over flows and other contamination sources, will hopefully lead to conditions allowing re-opening of bathing beaches.

**Policy RCOS – 14:** Improve and expand opportunities for recreational use of saltwater beaches.

### **Action Items 2009-2014**

Renovate the facilities at East Matunuck State Beach.

- Consider allowing contained campers for overnight stays at Scarborough South and Misquamicut State Beaches.
- Continue and promote public transit service to the State Beaches.
- Support all community-based efforts which would acquire saltwater beachfront, develop public recreation facilities, extend hours of operations, serve specialized populations, and encourage alternative modes of transportation.
- Continue ongoing efforts to eliminate pollution sources that are the primary cause of beach closures.
- Encourage appropriate signage to alert the public of beach closures.

### 4-3-4 Recreational Boating

Recreational boating is among the most popular uses of the state's fresh and salt waters. Combining figures from the 2002 Public Survey for motorboating, sailboating, and canoeing/kayaking; the total participation in recreational boating placed tenth highest (out of 26) activities in terms of total demand.

Long an international center of boat building and yacht racing, recreational boating is an industry in Rhode Island. Boat-related activities and services continue to play a major role in the state's recreational, tourist, and manufacturing economy.

Sailboats, motorized craft, canoes, kayaks, and windsurfers use coastal waters even through the coldest months. More than 100 boating-related events ranging from weekly club regattas to major ocean races starts are held in our coastal waters.

Increased boat traffic has heightened safety concerns, particularly with regard to operating while under the influence of alcohol and lack of knowledge of boating safety practices. The State enacted two laws in 2001 to address both issues. The first sets alcohol limits and penalties similar to the driving while intoxicated standards and requires the same levels of testing. The second requires those born after 1985 who operate a boat with a motor greater than 10 horsepower to complete a boating safety course. DEM and the Coast Guard Auxiliary provide boating safety courses in English and Spanish. DEM also promotes the use of life jackets through education and outreach.

The popularity of boating stresses the resources, services, and facilities which support this activity, especially in salt water areas. As with other recreational activities, there is an unequal distribution of boating opportunities for Rhode Islanders to enjoy, resulting in the overcrowding of popular areas while others are rarely used.

Recreational boating will remain one of the state's most popular and profitable recreational pastimes. Relatively minor actions can result in greatly enhanced opportunities for boaters and we must continue the commitment to maintain and enhance this very special aspect of recreation.

**Policy RCOS - 15:** Preserve and expand recreational boating opportunities.

## Action Agenda 2009-2014

- Encourage municipalities to implement recommendations of their harbor management plans to increase mooring and dock space consistent with the Coastal Resources Management Program.
- Continue boating safety education and enforcement programs.
- Work with boating and fishing user groups in assessing needs and priorities in acquiring and developing boat launch sites.
- Make development of new boat ramps a priority in areas where few or no boat ramps exist. Assign priority to land acquisitions and facility development for new ramps.
- Protect and maintain existing public and private boat access points and facilities and take measures to discourage the conversion of private marinas to non-water dependent uses.
- Where feasible, construct new boat ramps in local and state parks, especially in the Narragansett Bay area, where additional ramps will improve access to the state park system.

## 4-3-5 Inland Lakes, Ponds, Rivers and Streams

River systems offer great opportunities to create greenways connecting urban, suburban, and rural areas. In addition to providing opportunities for water-related recreation, they can control and channel growth and help define the form and character of the developed landscape.

The potential to provide water-based recreation opportunities close-to-home is being demonstrated as a system of state and local parks is taking form along the Blackstone River. This recognition of the river as a community resource has stimulated local investments in parks along the river in Central Falls, Cumberland, Woonsocket, North Smithfield, and Pawtucket. The Blackstone can serve as a model showing how a heavily urbanized river system can be brought back as both a recreational resource and a historic landscape.

The involvement of the Rivers Council, established in 1991, watershed associations, private conservation groups, and user groups in river and stream land protection efforts and as advocates and watchdogs has been an essential ingredient of the successes to date, and will continue to grow in importance as public funding becomes tighter. Land protection along rivers should remain a high priority of state and local conservation efforts.

Recreational use of our rivers is high, and access is improving due to the efforts of state agencies, municipalities and Watershed Councils. Additional access points of various kinds should be developed. These points should be well-designed and include effective signage, and adequate parking.

Rhode Island's streams, lakes, and ponds attract many users as well. Providing opportunities for freshwater swimming, especially in the metropolitan region, is vitally important. Swimming areas are often very busy during peak periods and these areas often experience user conflicts. Reducing crowding at the more popular freshwater beaches might be accomplished by carefully promoting underused freshwater facilities, and ensuring that the smaller lakes and ponds throughout the state continue to provide local swimming opportunities. The development of Snake Den Park will provide a major freshwater recreation area proximate to the urban area.

**Policy RCOS - 16:** Preserve and expand access to the state's, rivers, lakes, ponds, streams and other inland waters for recreational use, while maintaining water quality.

## **Action Agenda 2009-2014:**

- Promote the establishment of linear parks and riverway land protection in accordance with the State Greenways Plan, Watershed Council Action Plans, and initiatives of the Rivers Council and regional watershed associations and other conservation efforts.
- Give priority to areas threatened by development, especially in urban areas.
- Focus inland acquisition efforts within identified greenspace areas and greenways providing recreational access to rivers.
- Continue working with the Blackstone River Valley National Heritage Corridor Commission to complete the Blackstone River State Park.
- Continue development of the Woonasquatucket River Greenway.
- Continue DEM program of developing portage points and campgrounds along river systems.
- Continue to support watershed associations in their efforts to create waterfront access and portage trails, protect inland waterways including easement acquisition, monitoring, public education programs, and preparation of programs promoting river preservation among landowners, local officials and conservation groups.
- Assist in watershed-wide approaches to protection of the rivers and inland waters through consistent municipal land use controls and practices.
- Encourage the protection, expansion, and development of new freshwater swimming opportunities, especially in the greater Providence-Woonsocket metropolitan region. Development of new swimming facilities at existing parks, such as Roger Williams and India Point Parks should be explored in addition to the water park planned for Snake Den.

## 4-3-6 Multi-purpose Management Areas

Rhode Island's 40,000+ acre management area system provides forests, fields and streams close-to-homes of Rhode Islanders, enabling them to enjoy dispersed, resource-based outdoor recreation such as hunting, fishing, hiking, camping, and trail use.

While not as intensively used as the state's beaches or metropolitan parks, use of the natural resource areas is growing. Population migration from the Providence metropolitan area to regions closer to the rural recreation areas has simply put more people closer to them. Tight household budgets may compel many recreationists to seek their hunting, fishing, hiking, and camping trips closer to home. Also, as larger forest tracts change hands, lands once open for informal public use are closed off, further concentrating recreational use on public forest lands.

With projected rural population increases over the next 20 years, the once relatively remote forest recreation areas are becoming set in more suburbanized regions, adding to the demands on resources and the managers of these areas. In the midst of these changes, management goals should seek to accommodate legitimate usage, while ensuring policies are in place to protect the resources and retain the unique character of these settings. The wilderness-like recreation potential, and their wildlife, rare species habitat, trails, ponds, and scenic values should be protected and maintained through continued multiple-use management approaches.

As development swallows up more open land, access to areas for hunting becomes more limited and the people who move to the more rural areas of the state are largely opposed to hunting near their homes. Yet the federal taxes on hunting and fishing equipment is returned to the state to purchase land for habitat protection and for program operating expenses.

Over the past several decades, DEM acquired one and expanded two fish hatcheries. The programs for stocking hatchery-raised trout are enormously popular and provide not only recreation, but a source of fish that is not contaminated with mercury as are all naturally occurring freshwater fish.

**Policy RCOS – 17:** Provide hunting, fishing, and other extensive recreational opportunities while protecting the resources and natural character of the state's management areas.

**Policy RCOS – 18:** Provide opportunities for hunting and fishing, where feasible, throughout the state.

### **Action Agenda 2009 – 2014**

- Expand the youth archery hunt.
- Complete capital improvements at fish hatcheries to continue and expand trout stocking.
- Continue to maintain and improve boat launching ramps and shore fishing areas.

- Manage woodland parks and open space areas to provide recreational opportunities while protecting natural resources and wilderness character.
- Land acquisitions should continue to concentrate on expanding large tracts of protected land, protecting trails, and eliminating incompatible development on in-holdings and adjacent lands.
- DEM should continue upgrading camping areas, restrooms, and related user facilities of the woodland system, as resources allow.
- DEM should continue to cooperate with trail and other user groups to undertake facility improvement activities such as trail clearing and maintenance.
- DEM's Management Area Councils and special use permit system should continue as a means to provide coordination, minimize user conflicts, and establish the responsibility of user groups to maintain order and respect the facilities they are permitted to enjoy.

#### 4-3-7 Trail Based Recreation

Walking, hiking, jogging, and cycling are enormously popular in the state and are the most readily accessible form of outdoor recreation. Sixty-six percent of the respondents in the Outdoor Recreation Demand Survey said they participated in walking over the past year and on average went walking 140 days of the year. Over one-third bicycled, on average using their bikes fifty-eight days per year. Mountain biking is also becoming increasingly popular on unpaved trails. Trails are also used by horseback riders, bird-watchers, cross-country skiers, and motorized off-road vehicle (ORV) users, including motorcycle and snowmobile riders.

Trails and paths should be understood in terms of a continuum that ranges from primitive dirt trails though remote backcountry to paved trails in more developed areas to urban trails that might consist only of sidewalks. More remote areas provide critical habitat for wildlife and opportunities for many low impact activities such as hiking, walking, camping, and bird and nature watching. Paved trails, notably the growing system of state bike paths, offer convenient access for residents to recreate and exercise, and in more urban areas, paved trails and sidewalks are connectors to many other recreational and cultural resources.

Given the diverse nature of trail-based activities, it is important that management policies minimize potential user conflicts and ensure sustainability of the resource base. Although user conflicts and resource sustainability issues are raised by many forms of trail usage, the use of off-road vehicles on trails has created the most concern by managers and other trail users. While the number of ORV users is relatively small (4%), the number of days these users engage in the activity is relatively high (63 days per year). There are a number of types of ORVs that include two-wheeled, three-wheeled, four-wheeled, and snowmobiles. Vehicles might be street legal or for off-road use only. The types of user conflicts and environmental impacts will vary according to the type of ORVs, and how they are used.

The DEM is responsible for setting the rules and regulations for trail use in State parks and management areas and is faced with the difficult task of balancing requests for more access from responsible ORV users with concerns over the impacts upon the resource base and conflicts with other system users. DEM allows limited use of snowmobiles on designated trails in several management areas, and of properly registered motorcycles operated by licensed drivers on specified dirt roads and for specially permitted events for motorcycle groups in the Arcadia Management Area. However, ORV interests have continually advocated for the need for expanded off-road access. DEM's Trail Advisory Committee, comprised of DEM staff and representatives of various trail user groups, has been, and should continue to be the primary venue for considering requests for expanded ORV use. A subcommittee of the Trails Advisory Committee, having balanced representation, should examine the many issues and recommend ways to address legitimate needs within resource management constraints.

In order to meet the current and growing demand, establishing new trails, extending those that are partially constructed and making connections between existing trails and greenways is a priority. The development of state and local, paved and unpaved, trails that connect existing parks, management areas, beaches, open spaces, and urban centers is key component of this plan. In addition to trails developed by state and local government, land trusts and watershed associations are expanding the state's trail network by developing trails for public access on their protected properties.

The concept of trails and paths in natural areas must be expanded to connect with the pedestrian connections in the built environment, primarily sidewalks. It is likely that the vast majority of the Rhode Islanders who walk frequently, if not daily, walk on sidewalks close to home. New shared interests of planners, environmentalists, and public health advocates are seeking community designs which include opportunities for physical activity. The basic skeleton of this design is a good pedestrian network, one that is well-designed, landscaped, extensive and inter-connective.

**Policy RCOS - 19:** Maintain and expand the state's network of trails and pedestrian paths, in natural and built areas.

## Action Agenda 2009 - 2014:

- Continue to develop state and local, paved and unpaved trails that connect existing parks, management areas, beaches, open spaces and urban centers.
- Continue to develop, print and distribute trail guides and encourage municipalities to do the same.
- Complete the construction of the Blackstone River Bikeway.
- Continue to develop the Trestle Trail, Ten Mile River Bikeway and South County Bikeways/Trails.
- Implement plans for the Woonasquatucket River and Warwick Bicycle Network Bikeways.

- Encourage the completion of improved pedestrian connections from the East Side of Providence to the East Bay Bike Path.
- Initiate a study to monitor how the increased use of the Blackstone Bikeway affects the surrounding ecosystem (e.g. wildlife, waterfowl and water quality).
- Improve the trail maintenance program by ensuring all trails are evaluated and repaired at least once every five years in addition to maintaining them on an as needed basis.
- Continue to address trail use-restrictions, planning, construction, maintenance, and enforcement issues at management areas through the Trail Advisory Committee and the Northwest and Arcadia Management Councils.
- Maximize the trail looping system at Arcadia Management Area.
- Develop a strategy to increase the number of official and volunteer patrols.
- Develop and implement a public education program to minimize conflicts among hikers, bikers, hunters and other user groups.
- Convene a subcommittee of the Trails Advisory Committee with balanced representation to recommend ways to address legitimate needs for off-road vehicle recreation within resource management constraints.
- Continue to promote attention to pedestrian safety issues by providing technical assistance on walkable communities.
- Promote pedestrian safety and walkability by ensuring that proposals for growth centers emphasize pedestrian access and sidewalk connections.
- Support land trusts and watershed associations in their role in creating and maintaining public trails throughout the state.

## 4-3-8 Urban and Community Recreation

The parks and recreation facilities of Rhode Island's 39 cities and towns meet a significant amount of our residents' outdoor recreation needs. Traditionally, facilities for active outdoor recreation, like court and field sports, neighborhood parks, and playgrounds, are provided by local park and recreation entities.

Over 50 percent of Rhode Island's residents live in the Providence metropolitan area at the upper end of Narragansett Bay. As urban residents continue to migrate out to the state's suburban and rural areas, they are replaced in the cities by new immigrant groups. Many of these new arrivals are at lower income levels, and lacking the ability to travel beyond the cities to enjoy ocean beaches or remote forest trails. As the immigrant and ethnic population of our cities shift, emerging cultural preferences place new demands on our urban recreational resources. Soccer and volleyball have increased dramatically in popularity in the past two decades in response to growing numbers of

Hispanic, Asian, Southeast Asian, and Caribbean urban residents. Community gardening on vacant parcels in Providence has also increased in recent years as new immigrants from agrarian regions of the country seek to grown their own native produce.

Despite the number of parks in and near the metropolitan region, many developed urban parks overflow on summer weekends, sometimes forcing park managers to turn people away. Crowding creates management problems, user conflicts, traffic congestion, illegal parking, vandalism, accelerated deterioration of buildings and facilities and the potential for degradation of the resource base. The crowding is unlikely to abate, and actually might increase as more people seek to recreate closer to home.

Meeting the recreational needs of our inner-city residents must be addressed on many fronts. We need, among other things, to get well beyond the traditional concept of transporting urban residents to outlying parks. We need to embrace the imperative of providing open space and recreational opportunities for people close to home, seizing the scarce opportunities to reclaim open land as it exists in urban neighborhoods. We must provide recreation in communities where it is most sorely needed, re-connect urban residents with the natural environment on both land and water, and give them a greater stake in revitalizing their neighborhoods.

The State provides assistance in close to home recreation through the recreational grants to the municipalities and in linking urban neighborhoods to state management areas and statewide recreational opportunities through bus service and construction of paved bike paths and trails. The development of Snake Den State Park will provide an easily accessible park for urban residents on the west side of Providence's metropolitan area.

In the past ten years many bikepaths, greenways, and trails have been planned, initiated, and some completed. The East Bay Bike Path connects Providence and East Providence to Barrington, Bristol, and Warren, and provides a direct link to Colt State Park in Bristol. The Cranston Bike Path, Washington Secondary Bike Path, Coventry Greenways, and Trestle Trail (all segments of the same route) connect urbanized areas in Providence, Cranston, and West Warwick to rural landscapes of Coventry, including DEM's Nicholas Farm Management Area near the state's western border. The Blackstone River Bikeway connects urban residents of Providence, Pawtucket, Central Falls, and Woonsocket with the more rural sections of the Blackstone River Valley in Cumberland and Lincoln, and provides access to features of the Blackstone Valley National Heritage Corridor, and Blackstone River, and Lincoln Woods State Parks. Work is continuing on linkages to create a unified statewide system, as outlined in the Greenspace and Greenways Plan. A linkage of the several routes converging the City of Providence remains a gap, although on-road routes have been designated. Opportunities for permanent connections linking Waterplace Park and the Providence Riverwalk to India Point Park, and to connect to Blackstone River Bikeway in Pawtucket, the Cranston Bikepath, and the Woonasquatucket River Greenway must be realized in order to create a unified system with Providence as a hub.

**Policy RCOS – 20:** Strengthen and expand opportunities for open space and outdoor recreation for urban residents.

**Policy RCOS – 21:** Strengthen and expand community-based recreation facilities and open spaces to meet close-to-home needs.

**Policy RCOS – 22:** Maintain and expand active and passive Greenspace facilities in densely-developed neighborhoods and districts throughout the State.

**Policy RCOS – 23:** Coordinate regional initiatives in conservation and recreation and promote sharing of facilities to meet needs on a regional, multi-town basis.

## Action Agenda 2009 - 2014:

- Develop Snake Den State Park, as a multi-use park with water features, trails, picnic areas, and other user amenities appropriate to the hydrology of the site.
- DEM and the City of Providence should work to identify and develop a connection linking the Blackstone River Bikeway (from Pawtucket) to India Point Park in Providence.
- DEM, DOT, and the City of Providence should work to identify and develop a connection linking the Cranston Bikepath from the Cranston/Providence city line to the Woonasquatucket River Greenway/Northwest Bikepath, in order to provide a direct linkage to Waterplace Park and the Providence Riverwalk connecting to India Point Park. Off road bike paths may not be possible in this area and working with existing roads provides a different experience for the public.
- DEM, DOT, and the City of Providence should work with neighborhood groups to identify and develop a continuous greenway providing pedestrian and bicycle linkages between India Point Park and the Providence Riverwalk.
- DOT will develop a bikepath and walkways separated from vehicle lanes as part of the Washington Bridge south span replacement project, in order to provide a unique urban park, and improve the connection of the East Bay Bike Path to Providence.
- DEM should work with DOT and the City of Providence to encourage development of connections from the Woonasquatucket River Greenway and Buttonhole Golf Course.
- Develop programs to provide signage and/or publications for non-English speaking park users, and encourage the hiring of bi-lingual park personnel.
- Cooperate with municipalities to transfer small state-owned recreational areas that serve primarily local recreation needs. Consider retaining a conservation easement that ensures the continued recreational use of such property.
- Encourage municipalities to annually assess and correct maintenance issues regarding their Path to Health.

- Community park and recreation administrators should form partnerships with user groups and leagues which use ball fields and courts, encouraging them to participate in their maintenance and upkeep.
- Encourage communities to use local planning and land use controls to obtain land that is well-configured and useful as additions to the locally greenspace system for open space and recreation. Communities should actively use subdivision open space dedication requirements to protect identified natural or recreational features, such as river corridors and trails, rather than isolated pieces.
- Coordinate with city and state officials who are studying vacant land within the urban areas. Investigate the feasibility of use of some of the vacant properties for recreation and open space in the urban areas.
- Ensure that redevelopment designs within urban neighborhoods and growth center initiatives maximize opportunities for recreation and open space and connection to the greenspace system.
- Continue to support the Rhode Island Public Transit Authority (RIPTA) in their efforts to offer programs linking Rhode Island residents to recreational amenities including public transit routes to saltwater and freshwater beaches and the Rack N' Ride program.
- Continue to support the availability of the State's University and College recreation system for limited public usage where appropriate.

#### 4-3-9 Recreation and Tourism

Tourism is the second largest industry in Rhode Island in terms of revenue. State beaches in the southwestern portion of the state derive 56 percent of their parking receipts from out-of-state visitors. Much of the tourism is linked to activities such as recreational boating and fishing in Narragansett Bay and offshore. Visitors are also drawn to management areas that offer hunting, golfing, skiing, biking, hiking, and bird watching, among other activities. Birding groups of between 20 and 200 visit regularly to observe the fall migration. The tourist industry depends on the same features that are important to Rhode Island residents: a clean, healthy, and accessible bay and beaches, our natural, cultural, scenic, and historic resources, and attractive, safe and accessible parks, management areas, and other open spaces.

We must maintain the balance between high quality recreational experiences, meeting local recreational demands, and tapping the tourist market to ensure that tourists' use of recreation and open space facilities does not overtax them and displace resident users. Better coordination and mutual understanding between recreation managers and the tourism industry can help protect Rhode Island's natural resource base while continuing to generate tourism revenue.

**Policy RCOS - 24:** Promote Rhode Island's open space and recreational resources to tourists, while protecting the quality and stability of the resource base.

### Action Agenda 2009 – 2014

- Communication among recreation, tourism, and economic development agencies and private tourism interests should be made more formal and regular.
- Use state/local greenways plans to guide tourist promotion and the development of natural-and cultural resource-based tourist attractions.
- Develop and publish "Watchable Wildlife" guides.

# 4-4 Stewardship and Partnership...Improving Accessibility, Operations and Resource Management

Goal 3: Rhode Island's public and private partners will join as strong stewards of the state's outdoor recreation and open space system and will protect, maintain, and improve its essential features.

This part of the plan returns to a more enduring concern: taking proper care of the outdoor recreation system. The key concepts presented in this section are the issues of *stewardship and partnership*. Proper stewardship of the recreation system requires continuity of mission and a long range perspective. It views short-term problems and needs through the lenses of the transcendent principles that lie at the core of the system: our responsibility to the resource base; and to the needs of future users of the system. To be proper stewards we must understand and cherish the value of what has been handed down to us, to protect and better it to the extent of our abilities, to pass it on, unimpaired, to those who follow.

Partnership is not a new concept for recreation system managers and planners. It is, however, a principle they increasingly rely upon in order to fulfill their mission in these resource scarce times. At base, it implies recognition that no individual, agency, group, or sector of the recreation system can do the job alone in today's world; but that by looking for common interests and working together we can accomplish great things.

The Rhode Island Conservation Stewardship Collaborative (CSC) was formed to work to advance long-term protection and stewardship of terrestrial, aquatic, coastal, estuarine, and marine areas in Rhode Island that have been conserved by fee. easement, or other means. It is a coalition of conservation organizations who strive to ensure that their work complements each other, there is clear communication among them, and maximum efficiency through collaboration and teamwork is achieved. The CSC is comprised of the organizations that own conservation areas or make significant contributions to the stewardship of conservation areas in Rhode Island including: Audubon Society of Rhode Island, DEM, Rhode Island Chapter of The Nature Conservancy, Rhode Island Land Trust Council, Rhode Island Natural History Survey, United States Fish and Wildlife Service, and the University of Rhode Island Department of Natural Resources Science. Since the CSC is especially interested in supporting the implementation of approaches to stewardship and monitoring that have potential for replication and expansion by other organizations, it serves as a model for the protection, maintenance, and improvement of the essential features of the state's open space and recreation network.

## 4-4-1 Accessibility for All Users

Providers of outdoor recreation must serve all segments of Rhode Island's population, including those with special needs, such as the elderly and people with disabilities. Construction standards providing handicapped accessibility guide new public recreation facility development and rehabilitation projects. Such standards have opened new opportunities for those formerly unable to access some areas. The Americans with Disabilities Act reinforces the mandate of making the outdoor recreation system accessible.

Concepts of accessibility must exceed minimum architectural standards. Improvements to basic facilities at recreation areas - restrooms and parking, for instance - need continued attention, but attention must be given to finding creative solutions which open the entire recreational experience to those whose mobility, vision, hearing, or other physical disability currently restricts their full use and enjoyment of Rhode Island's recreation resources. Similarly, interpretive and educational programs should strive to accommodate visitors with impaired hearing and vision, and signage can also be improved in this regard.

Since the adoption of the Americans with Disabilities Act in 1990, the state and municipalities have expanded access to recreation facilities for all segments of Rhode Island's population, including those with special needs. About fifty percent of state facilities are now handicap accessible and some facilities have handicap accessible equipment such as surf chairs and hand cycles. DEM and the municipalities work with the Governor's Office on Disabilities to provide full access at new and rehabilitated facilities. DEM received the First Annual Department of Interior Civil Rights Award for outstanding accomplishments in providing equitable services to constituents.

Policy ROCS - 25: Insure a system that is accessible to all potential users.

#### **Action Agenda 2009-2014:**

- DEM will continue to make all its facilities meet Universal Design standards to allow access by physically limited individuals.
- Continue to expand offerings of equipment such as surf chairs and hand cycles that facilitate access to outdoor recreation to physically-limited individuals.
- Work with the Governor's Commission on the Handicapped to develop and distribute a directory of handicapped-accessible facilities at state and local parks.
- Continue working with RIPTA to maintain/expand bus service to major recreation facilities as resources permit.
- Develop interpretive and educational programs to accommodate visitors with impaired hearing and vision, and improve signage in this regard.
- Provide rest stops on trails for use by elderly and handicapped persons.

# 4-4-2 Ensuring Funding Support for the System

Rhode Island has made a significant investment in outdoor recreation facilities. The value of the 123 State outdoor recreation facilities alone is estimated at \$701 million. The 934 municipal facilities are worth hundreds of millions more. However, the high level of use and chronically shortages of staffing and funding to maintain facilities are beginning to take a toll. Park and beach visitors are beginning to mention overcrowding and maintenance problems at facilities as shown in the responses to the Outdoor Recreation Demand Survey and the Park and Beach User Survey. Moreover, only 21 percent of respondents rated state recreation facilities as excellent in contrast with respondents elsewhere in the country who rate 30 percent of recreation facilities as excellent. The DEM's Asset Management Plans described a backlog of 206 priority repairs and replacements at an estimated cost of \$10.6 million in 2001. Municipal recreation programs are facing the same pressures that the state recreation system is facing.

Capital projects have fared better than operations and maintenance during the last ten years. The citizens of Rhode Island overwhelmingly approve referenda proving bond funds for open space and recreation development. The state capital budget underwrote major renovations at state and local facilities such as Misquamicut and Roger Wheeler Beaches, World War II Memorial Park, and Roger Williams Park. The DOT and Federal Highway Administration (FHWA) provide funding for design and construction of state and local bike paths, but not for maintenance.

The experience at DEM's Division of Fish and Wildlife management areas shows what can happen when dedicated public resources are available. The F & W management areas are well maintained and the division is expanding handicapped access to its facilities. The division receives dedicated funding for acquisition, development and maintenance of wildlife management areas and public access areas from anglers and hunters taxes and as well as state hunting and fishing license fees.

Partnerships with the non-profits and the private sector have become increasingly important to maintaining and developing outdoor recreation facilities as budgets have declined. Legislation proposed to create a group to support parks, such as the Friends of Rhode Island's Parks, was not heard before the 2002 General Assembly. Groups that are formed for a specific site, such as the Beavertail Lighthouse Museum Association and the Fort Adams Trust, draw from local residents who have a special fondness for the site and are more likely to succeed.

For the next few years as state and local government cut back on services and expenses, creative ways of funding and providing facilities and services and partnerships will become even more critical to maintaining our recreation system. It is likely that during the five year time horizon of this plan, park, recreation, and open space managers will continually be forced to stretch their resources to the maximum. As state and municipal budgets tighten, they will need to fight to insure that recreation continues to be seen as a legitimate and important social investment and that it is treated fairly in government budget decisions. We will also need to ensure that all avenues are explored and exploited to minimize operation and maintenance expenses, to make every capital dollar go as far as possible, and to seek creative funding solutions and alternative sources of capital and labor.

The continued funding of the Land and Water Conservation Fund Act is a bright spot. The federal government continues to live up to the promises of partnership it made to the American people in the 1964 Land and Water Conservation Fund Act. The Act's findings of need for federal participation in state and local outdoor recreation are as true and compelling today as they were a generation ago. Restored federal participation in state and local recreation capital investments provides a leadership example, and the leveraging of funds provided by the 50/50 matching ratio of the LWCF stimulates state and local investments in recreation.

Recreation and open space capital needs must be treated as continuing needs which should be systematically programmed and continually addressed. Periodic budget uncertainties underscore the need for the state to consider creating sustainable revenue sources, in place of unpredictable annual appropriations and sporadic large-scale borrowing via bond acts. The establishment of a self-perpetuating trust fund for land acquisition and recreation facility development should be seriously examined. The objectives of such a fund would be to guarantee inflation-adjusted level funding to meet the needs for recreation/open space, and to avoid or minimize the need for bonded indebtedness. Revenue sources which could be examined include fees for extraction or permanent commitment of the state's nonrenewable resources, fees for private use or commitment of lands or waters held by in trust for the public by the state, CECLP, and an increased real estate transfer tax.

**Policy RCOS – 26:** Cooperatively support appropriate levels of funding for the acquisition, development and renovation of the state's open spaces and recreation facilities.

**Policy RCOS – 27:** Provide sufficient resources for effective operation and maintenance of state and local parks, recreation facilities and conservation areas.

# **Action Agenda for 2009 - 2014:**

- Integrate the Parks and Recreation and Forestry Asset Management Plans into the Capital Budget.
- Determine the cost of a base level of service for state recreation to be funded from the State's General Fund and develop a plan to allow restricted receipts for costs above that level for capital improvements.
- Encourage the creation of organizations, such as friends of the park groups, to support specific facilities or parks.
- Explore the increased application of user fees and concession rentals to offset the expenses of providing, operating and maintaining recreation areas and facilities.
- Resubmit legislation to establish state parks and forest foundations.
- Investigate the possibility of selling special license plates to help fund land acquisition and recreation facility development and improvement.

- DEM and municipal parks and conservation agencies should take advantage of opportunities to use volunteers by providing user groups, watershed associations, and others with information and direction as to what kinds of assistance is needed.
- Encourage the option of working in state or local parks for lawbreakers sentenced to perform community service.
- Design capital projects to minimize long-term maintenance and operating expenses.
- Design and maintain all facilities and areas with accessibility, attractiveness, cleanliness and safety as key criteria.
- Support a variety of methods to curb vandalism at recreational facilities including preventative programs, heightened security, and increased enforcement.
- Encourage collaboration with community groups to promote the stewardship of public parks.

### 4-4-3 Sustainable Facilities

The incorporation of energy-saving, recycled, and vandal resistant materials and design elements such as siting for passive solar gain will reduce pollution, can save energy and other resources and reduce the cost of long-term operation and maintenance of public buildings and other facilities. The use of native vegetation and xeriscaping will similarly save water, reduce pollution and save on maintenance costs.

Requests to convert system land to other uses, while infrequent, arise often enough to be worrisome, and given the diminishing quantity of "raw" land in the State, are likely to grow in the future. Such requests, whether of the state or local government, should be resisted, and should face the highest burden of proof of net public recreational benefit. In any case, where conversion of recreation system land is considered, approval should not come until after full administrative review and public scrutiny, and should be conditioned upon a full replacement of the acreage and/or resource value. (Such a test is applied to any proposed conversion of recreation land which was purchased or improved with federal funds, or with state bonds. Significant portions of the recreation system do not fall under this standard, however.)

Only slightly less deference should be accorded to "unused" government lands, which while not part of the formal recreation system, are providing recreational or open space values in their current state. Small irregular parcels, often the residuals of property taken to assemble highway corridors are the most frequent example of this. Particular in urban areas, the open space functions of such lands may have unrecognized, but real, importance. Tree on the parcel, even if of common or undesirable species, nay offer shade to neighboring homes, and buffer the noise and pollution form an adjoining highway. Although unsanctioned for such use, the site may serve as a "de facto" play lots for children having no other opportunities close at hand. Government decisions to part with such parcels should accord some public significance to these intangible benefits in their calculations of management efficiency or added revenues.

**Policy RCOS – 28:** Demonstrate and promote sustainable design and building concepts in recreation projects.

**Policy RCOS – 29:** Avoid the loss of recreation and open space system land through conversion to alternative uses, and enhance open space recreation values, where possible, through the management of public lands.

#### **Action Agenda 2009 – 2014**

- State Energy Office and DEM should promote green design to architects, contractors, and the public.
- Continue to incorporate green design into plans for all new and major renovations to minimize operation and maintenance costs, and the use of non-renewable resources.
- The Recreation Resource Review Committee should continue to give additional weight to applications that consider operating and maintenance budgetary needs.
- Continue to use vandal-resistant materials and construction in facility designs.
- Continue to design facilities to maximize visual access for ease of monitoring and enforcement.
- Install more composting toilets at major locations in the State management areas such as Browning Mill Pond Recreation Area and the Arcadia Management Area Check Station.
- DEM will design and build Snake Den Park and the Great Swamp Wildlife Center to meet Leadership in Energy and Environmental Design sustainable design standards.
- Design capital projects to minimize long-term maintenance and operating expenses.

#### 4-4-4 Outreach, Education and Interpretation

Funding for recreation outreach and information continued to be constrained over the last ten years and is likely to remain so for the near future. However, widespread availability of electronic media, particularly computer generated maps and websites, has provided brand new services such as online boat registration and new channels for outreach. DEM information is generated by separate divisions, as funding becomes available. There has been no central entity within the Department to coordinate information and education materials since the Division of Information and Education was disbanded in the early 1990's.

Recent increases in non-English speaking populations in the state have increased the need for outreach materials for these groups as documented in Multi-Lingual/Cultural Services and Outreach for the Rhode Island DEM, August 2001. The Department has made some progress in reaching non-English speaking constituents, but a great deal remains to be done. DEM publishes brochures in languages other than English and offers a boating safety course in Spanish. DEM is researching translation services to provide wider access to information on its website.

DEM education programs include training to teachers in wetlands, water and wildlife topics; classroom ecology sessions and field sampling, fishing programs for schools, clubs, special needs and youths at risk, several boating and hunter safety courses and a Park Naturalist Program. However, there are not enough resources to meet demand. More education and interpretation programs are needed to foster greater awareness and appreciation of Rhode Island's environmental resources, including the threat of climate change and sea level rise. Programs for those with impaired vision and hearing are needed, as are interpretive devices and signs.

Some programs draw on cooperative arrangements. Programs related to the Blackstone Heritage Corridor, for example, involve the National Park Service, and the Parks Association of Rhode Island. State and federal agencies work in partnership with non-profits and municipalities such as the Audubon Society of Rhode Island, Save the Bay and Roger Williams Park Zoo.

**Policy RCOS – 30:** Provide strong public outreach and effective information about public recreation opportunities.

**Policy RCOS – 31:** Develop and maximize opportunities for education within the greenspace system about the system and its specific resources.

### **Action Agenda 2009 – 2014**

- Maintain the DEM website with links to other information such as the Economic Development Corporation 's Tourism web page and the RI DOT's Bike RI web page.
- Ensure stable funding for and expand the summer naturalist program in the State parks.
- Compile and publish information on private facilities that are open to the public.
- Seek funding to develop informational materials in languages other than English.
- Provide translated materials on website with recreation information.
- Update and republish the guidebook --Public Access to the Rhode Island Coast.

- Continue to support the environmental education efforts of organizations such as the Audubon Society of Rhode Island, the Watershed Councils and the National Wildlife Federation.
- Update and publish a State Trails and Greenways Map.
- Publish detailed map/guides to marine areas including boating, shore fishing and shellfishing.
- Work to install signage identifying rivers and river access points through a coordinated signage system.

### 4-4-5 Fostering Partnerships

Rhode Island's greenspace system is complex and has many components. Planning, developing, operating, maintaining the system requires excellent information, strong management and creative strategies. State-local and public-private cooperation is necessary to achieve the goals we have set. Our alliances and relationships must continue to develop and to support each other.

Historically there has been a strong connection between the DEM and the 39 municipalities, formed primarily through the administration of local grant programs. Over the past two decades these programs have distributed more than \$70 million to cities and towns, in most cases the state funds being equally matched by local government contributions. As successful as the local grant programs have been, however, there can be even greater opportunities ahead to focus on regional efforts between municipalities and the State. Such coordination of efforts is likely to take on greater significance as budgets tighten.

State and local programs for conservation and recreation need not be identical, but to be most effective they need to be complementary and to approach their missions within a regional context. State Planning Council and legislative actions of the past decade are positive steps in this direction. Provisions of the Comprehensive Planning and Land Use Regulation Act of 1988 allow for the coordination of municipal planning activities, and for possible joint planning activities by two or more municipalities. The Statewide Planning Program coordinates state level review of municipal plans by all state agencies, and DEM has a lead position reviewing the elements for recreation, open space and natural resources.

Partnerships with non-profit organizations, particularly The Nature Conservancy, the Audubon Society and the dozens of local land trusts, have played a pivotal role in protecting open space throughout the state. Private businesses have also contributed to support recreation facilities and programs. Some local sports leagues help maintain ball fields. Businesses, individual volunteers, and environmental groups help organize and provide workers for cleanups and special events.

The level of expertise and experience among local park and recreation staff varies. Some communities have experienced full-time staff while others have part-time staff. Four communities have no recreation staff. Communities could benefit from assistance such as seminars for recreation planning, sustainable and cost-effective design and maintenance, and grantwriting.

Partnerships can also play a role in reducing vandalism, littering, break-ins, and illegal dumping which continues at some recreation facilities. Higher visibility law enforcement and increased patrols, possibly even citizen watch groups, of remote areas are part of the answer. Law enforcement personnel need the authority, training, and resources to deter abuse of our open space and recreation areas. Restricting vehicular access to remote areas, especially at night and off-season, can cut down on vandalism. The development of hard-to-patrol sites should be discouraged. In addition, experience in state parks, notably at Scarborough State Beach, has shown that if facilities are upgraded and then well maintained, the level of vandalism drops off markedly.

State recreation officials have also expressed concern about public safety when some facilities fill to capacity on weekends and evenings in very hot weather. Training park personnel in handling conflict, developing flexible enforcement strategies to respond as attendance demands and partnerships with state and local law enforcement agencies will ensure that facilities remain safe.

**Policy RCOS – 32:** Strengthen the professional capacity for recreation, conservation and open space planning at all levels.

**Policy RCOS – 33:** Maintain a coordinated planning and implementation program for the statewide system that includes State, municipal and private agencies.

**Policy RCOS- 34:** Encourage information-sharing and cooperative initiatives among the State's public and private greenspace partners.

### Action Agenda 2009 - 2014

- Continue to update and maintain Rhode Island Geographic Information System (RIGIS) inventories and mapped data about natural resources, protected open space and recreational facilities throughout the state.
- Continue to work to connect the state and local planning and implementation efforts through the State Guide Plan – Comprehensive Community Plan Process. The Division of Planning, the State Planning Council, and the Rhode Island Chapter of the American Planning Association will lead this coordination.
- Support the development of non-profit conservation and recreation organizations, and encourage their continuing participation in state and local recreation and open space preservation, operation, management, and planning.
- Request that the National Park Service sponsor training and technical assistance workshops for local park officials.
- Provide technical assistance to municipal planners in recreational and open space planning including updated guidelines for comprehensive plans, zoning, subdivision and land development regulations and municipal implementation techniques.

- Encourage the Rhode Island Parks and Recreation Association to establish an information clearinghouse and/or to hold workshops on park system management for local recreation staff.
- Encourage private sector operators to provide in-park concessions, including sailing, canoe and boat rentals, refreshments, concerts, and horseback riding.
- Working with local tourism councils, determine the need for additional facilities (such as campgrounds or picnic areas). Encourage private sector involvement to satisfy such needs.
- Investigate Adopt-A-Park programs in other states and encourage the formation of such groups in Rhode Island. Establish a model program, possibly in the Blackstone River State Park.
- Train lifeguards and other recreation facility staff in handling conflicts.
- Develop a flexible enforcement strategy that allows DEM's Environmental Police or other enforcing authorities to respond to crowded areas as attendance demands.
- Maintain a coordinated planning and implementation program for the Statewide system that includes State, municipal and private agencies.
- Encourage information-sharing and cooperative initiatives among the State's public and private greenspace partners.

# APPENDIX A OCEAN STATE OUTDOORS: RHODE ISLAND'S COMPREHENSIVE OUTDOOR RECREATION PLAN RECREATION GRANT SELECTION PROCESS

### Introduction

This part of the Rhode Island State Comprehensive Outdoor Recreation Plan (SCORP) establishes and describes the Recreation Grant Selection Process (RGSP) and serves as the rules and procedures governing the RI Recreation Resources Review Committee (RRRC). The RGSP is the procedure the State of Rhode Island utilizes to solicit, evaluate, and select outdoor recreational land acquisition and facility development projects eligible for grant assistance under the federal Land and Water Conservation Fund (LWCF) and the State-Local Recreation System Development Program provided for under various State bonds. The RGSP is developed in response to a requirement of the National Park Service that such a process be utilized by the states in the allocation of available LWCF resources. The procedures must be designed to insure that projects are selected for funding in a rational and systematic manner open to public scrutiny, that the Fund is accessible to all citizens consistent with the purposes of the Land and Water Conservation Fund Act, and that projects selected meet priority recreational needs.

The Governor has designated the Department of Environmental Management (DEM) as Rhode Island's state liaison agency for administering the federal LCWF monies. DEM also administers the State bonds supporting the State-Local Recreation System Development Program. The Recreation Resources Review Committee is instituted by the SCORP as a broad-based adjunct body to DEM for the purpose of administering the RGSP and advising the DEM director in funding project applications.

The State Planning Council, through the adoption of this document as an element of the State Guide Plan, establishes the RGSP and authorizes the RRRC to implement the allocation of funds, funding categories, criteria for applicant eligibility, the level of public participation required in project formulation, and criteria for scoring project proposals based on how well they meet the goals, objectives, and action items identified in the SCORP and community comprehensive plans. Scoring criteria also consider other documented needs, including accessibility of proposed projects to all segments of the population including handicapped and minority populations and other LWCF requirements (found in Parts 640 and 660 of the LWCF Grants Manual).

### The Recreation Resources Review Committee

The Recreation Resources Review Committee (RRRC) is established for the purposes of soliciting, evaluating, establishing the relative priority of recreation grant projects, and submitting to the Director of the Department of Environmental Management recommendations for funding recreation grant proposals. In order to effectively carry out these responsibilities and to guarantee a representative and balanced evaluation, the membership of the RRRC is structured to provide both the professional expertise and the diversity of interests needed to accurately and fairly evaluate and rank the variety of project proposals which can be foreseen.

The RRRC consists of at least six but not more than twelve experts in outdoor recreation, natural resource management, and conservation of open space, selected with the objective of providing balanced representation of state, municipal, public, and private constituencies. Permanently represented on the RRRC are the Governor's Office, DEM (serves

as the State Liaison Office to the National Park Service), and the Statewide Planning Program. The State Planning Council shall appoint additional committee members for terms of up to three years. The following list identifies organizations that are typically asked to designate a representative(s) to the RRRC, however, the State Planning Council is not limited to this list and may appoint representatives of other organizations as deemed appropriate. Existing members may be reappointed. Vacancies are filled in the same manner as regular appointments.

RRRC Membership: Agencies or groups typically asked to designate representatives:

AGENCY	MEMBERS
American Planning Association, RI Chapter	1
American Society of Landscape Architects, RI Chapter	1
Audubon Society of Rhode Island	1
RI League of Cities and Towns	1
RI Resource Conservation and Development Area Council	1
RI Parks and Recreation Association, at least one from a distressed community as defined by RIGL 4-13-12	2
Urban League of Rhode Island	1

The RRRC shall elect a chair and a vice-chair for three-year terms.

If a Committee member misses three consecutive meetings the RRRC will report the absence to the Chair of the State Planning Council with a recommendation to remove the individual from the Committee.

### Allocation of Federal and State Funds

Allocation of Federal Land and Water Conservation Funds - Under the LWCF, states are given the prerogative of determining the most equitable allocation of available funds among the various categories of applicants (generally state and municipal). The State may use up to 10 percent of the total LWCF apportionment for planning projects and for maintaining an updated SCORP. The remaining funds (not less than 90 percent) shall be split equally between state and municipal projects.

Allocation of State Acquisition and Development Bonds, Appropriations, and other Sources of Funds - State funds are allocated as provided in the authorizing legislation, or regulations issued pursuant thereto, of the specific funding program. DEM, with the advice of the RRRC, establishes the amount of state funding to be made available within a particular grant round, consistent with applicable laws and regulations governing the source of the state funding.

### The Recreation Grant Selection Process

### Funding Cycle

Funding cycles are determined by the availability of funds and coordination with other state funding processes. During the term of this SCORP, it is anticipated that the RRRC will schedule grant rounds every two years beginning in 2003. Each funding cycle takes

approximately 180 days commencing with the solicitation of project proposals. Applicants have 90 days to respond to a solicitation notice with submission of completed grant application. Following the proposal submission closing date, a 90 day period is provided for staff review and RRRC evaluation and ranking of the proposals. Funding cycles conclude with notification to all applicants of the rating assigned to their project(s) by the Committee and transmittal of funding commitment letters to those applicants selected for funding.

### Setting Funding Categories and Limits

Certain funding categories may be established by law or regulation. The DEM is responsible for informing the RRRC of LWCF and State funds available and any restrictions on those funds. For funds not designated by law or regulation, RRRC shall set funding categories that promote equity and efficiency. The RRRC may also set a minimum required rating score for each proposal in order to promote selection of the highest quality projects. If a proposal does not attain the minimum score, it will not be recommended for funding. Recreation grants generally require a financial match by the recipient.

Accordingly, at the outset of each grant round, the RRRC may:

- Set a maximum per project funding limit for each category.
- Establish a maximum number of submissions per municipality for project proposals.
- Establish funding categories and allocation for each category.
- Set a financial match requirement for grant recipients.

Note: If a surplus occurs as a result of: 1) total funding requests are less than the available monies for a category, or, 2) state or local projects do not score high enough to qualify for funding, the RRRC may reallocate the surplus to another category or may reserve the surplus for a future grant round.

### Funding categories:

- 1. Renovation of Existing or Construction of New Outdoor Recreational Facilities:
  - Small project assistance grants (\$25,000 or less)
  - Large project assistance grants (over \$25,000)
- 2. Acquisition of Land for Outdoor Recreation
- 3. Distressed Communities Grants (as defined by RIGL 45-13-12, see page A-11)

Financial match requirement: Grant recipients under categories 1. or 2. will be required to match 50 percent of the total project cost; grant recipients under category 3. (Distressed Communities) will be required to provide a 25 percent match for development projects, no match will be required for parkland acquisition.

The RRRC may alter funding categories and raise or lower the match requirement for any grant round or category, as circumstances require.

### Eligibility Determination

Only state agencies and municipalities may apply for funding under these RGSP procedures. DEM capital and non-capital asset management programs shall be the basis for

determining DEM sponsored projects to receive LWCF and State recreation funds. Other state agencies must demonstrate how their proposals meet the goals, objectives, and action items identified in the SCORP and community comprehensive plans. Municipally sponsored projects will compete for funding under the guidelines that follow. Non-municipal entities must partner in grant proposals with a municipality who must be the official applicant.

### Municipal Eligibility

The RRRC is responsible for determining the eligibility of municipal applicants to participate in the RGSP. Eligibility is determined at the commencement of each grant round, and is based on the State approval status of an applicant's community comprehensive plans. The Statewide Planning Program provides standards and guidance to municipalities for the development of community comprehensive plans (*Handbook 16: Handbook on the Local Comprehensive Plan*) and coordinates the State review and approval of local comprehensive plans.

There are three categories of municipal eligibility:

Fully Eligible: A community will be considered fully eligible if it has a State-approved comprehensive plan.

Conditionally Eligible: A community will be considered conditionally eligible if its comprehensive plan has not received State approval or if State approval has expired. Under such circumstances, conditional status will be granted for a period of twelve months from the opening of the grant round. Applications made by municipalities with conditional eligibility will be rated by the RRRC, and if selected, a project agreement may be executed contingent upon the following condition: if State approval of the community's comprehensive plan is not achieved within the twelve month period of conditional eligibility, no more than 75% of the grant funds due the project sponsor will be disbursed. If State approval of the community's comprehensive plan is not received within 12 months following the end of the conditional eligibility period, the RRRC may revoke its commitment to disburse the remaining 25% of grant funds due to the project sponsor.

Ineligible: A community will be considered ineligible to apply for funding in subsequent grant rounds if after having been placed in conditional eligibility status it fails to achieve State approval for its comprehensive plan within the prescribed twelve month period. The community will be considered fully eligible for future grant rounds upon providing the RRRC with a copy of the State certification of approval for its comprehensive plan.

### Solicitation of Proposals

The DEM, in conjunction with the RRRC, authorizes the solicitation of grant proposals. The State Liaison Officer is responsible for sending a notice to the Chief Elected Official and the manager/administrator of all cities and towns. The notice shall include the municipalities' current eligibility status, the procedures to be followed for submitting a grant application, project eligibility requirements, the deadline for submission of project proposals, and other materials deemed appropriate by the RRRC such as available funding, legislative citations, examples of fundable projects, and cost sharing formulas of grant programs. Municipalities must submit proposals to the State Liaison Officer within 90 days of the notice. A press release is also sent to local media by DEM, and information posted on the DEM website regarding application procedures for the grant round.

### Public Participation Requirements

The RGSP requires public involvement to ensure that projects selected have widespread public acceptance and support, best reflect current needs and desires of the citizenry, and are to the maximum extent possible, free from potential problems such as environmental conflicts. The required minimum public participation for a grant application to qualify for review is as follows:

- Renovation of existing or construction of new facilities utilizing Small Project Assistance Grants (\$25,000 or less) shall require the consent of the local governing body.
- All other projects including renovations or construction projects utilizing Large Project Assistance Grants (over \$25,000) or the acquisition of land for recreation shall require public notice and at least one public hearing or meeting held not more than 120 days prior to the grant submission.

The RRRC encourages all project sponsors to exceed these minimum public participation requirements (particularly for larger-scale, projects) by means of public informational meetings, a project advisory committee, neighborhood surveys, or similar measures.

### Preliminary Evaluation of Applications

After the close of the 90 day application period, DEM staff have 30 days to conduct a preliminary evaluation to determine the completeness of the application. Completeness is determined by:

- Submission by an eligible applicant
- Documentation demonstrating the public participation requirements have been met, and;
- The application has been completed in accordance with directions and contains sufficient information to allow the proposal to be rated.

Proposals that meet these criteria will be forwarded to the RRRC for evaluation and ranking. Deficient proposals will be returned to applicants with recommendations for addressing the inadequacies. Every effort will be made to return deficient applications to their sponsors in time to allow re-submittal prior to the RRRC rating process.

As part of the preliminary evaluation, DEM and Statewide Planning staffs prepare a brief report for each application to be reviewed by RRRC members. The report may contain:

- Background information on supply and demand for recreational activities in the applicant's jurisdiction.
- The current status of the applicant's community comprehensive plan and, if applicable, the local Recreation, Conservation, and Open Space Plan;
- An assessment of the project's consistency with the goals, policies, and recommendations of the SCORP, the Greenspace and Greenways Plan, and other relevant State Guide Plan elements as may be determined by the RRRC.
- An evaluation of the applicant's operation and maintenance capacity and history for outdoor recreation facilities based upon field investigations.

The staff reports and copies of the grant applications will be provided to the members of the RRRC prior to the RRRC meeting(s) convened to score and rank the applications.

### Final Evaluation of Applications

Upon the close of the 30 day preliminary evaluation period, the RRRC will hold priority-rating sessions at which all complete applications will be evaluated by the Committee and a point value assigned to each utilizing the priority-rating system established in this Appendix (described in the following section). These sessions are conducted as open public meetings consistent with the State Administrative Procedures Act and the State Open Meetings Law. The Committee will notify applicants of the date, time, and place of the meetings.

Utilizing the information contained in the application, the staff reports, plus their individual expertise Committee members will assign points to each application under the criteria contained in the rating system. Committee members will have access to community comprehensive plans and the SCORP for reference. Scoring of proposals shall be on score sheets provided by the DEM staff, and shall include the signature of each member scoring a proposal. The score for each proposal will be tabulated by adding the total scores assigned to the application by each committee member and dividing the points by the number of members who participated in the scoring.

Proposal scores are subject to a statistical evaluation. If staff finds a variation of greater than 10 from the standard deviation within the scoring of any application, the Committee will be notified and members be allowed to review their scoring prior to submitting their signed score sheets.

### Project Selection/Funding Commitment

When Committee evaluation and scoring of all eligible projects within the grant round has been completed, the RRRC will hold a meeting to review the list(s) of proposals ranked by final score. Proposals will be recommended for funding in rank order of final score within the limit of available funding within each category, with the following exceptions:

- If the RRRC has established a minimum point score threshold, funding will not recommended for projects whose final score is below the threshold score regardless of their ranking within a grant category.
- The Committee also reserves the right to recommend a limit to the number of grants awarded to a single applicant in one grant round.

The Committee will, by vote, adopt a recommendation for proposals to be funded based upon the ranked list(s) of projects and funding available within each category and will forward this recommendation to the Director of DEM.

DEM will notify project sponsors in writing of the Director's decision to fund a project and the grant amount offered. The State Liaison Officer reserves the indicated amount of funding for the project for a specific commitment period one-year for all LWCF assisted projects and State-assisted acquisition projects or two-years for State-assisted development projects.

Once notified, grant award applicants must obtain the National Park Service's and DEM's approval of the final project plan, secure all necessary permits and additional approvals such as state wetlands or CRMC permits, local zoning or building approvals, and activate the project. Any project that is not activated within the commitment period will be subject to

termination of its funding, in which case funds earmarked for the project become available for reallocation during the next scheduled funding round.

Funding commitments offered to project sponsors are subject to the availability of funds. The RRRC and the DEM are not responsible for subsequent cutbacks or reductions in fund allocations. All project applicants to whom funding commitments have been offered will share funding cutbacks in proportion to the grant amount.

### V. Priority Rating System Overview

The RRRC uses a rating system to identify which project proposals will best serve communities and Rhode Islanders. The Priority-Rating System form used by the RRRC for scoring all applications follows this section. The numerical ranking system scores projects based on consistency with the community comprehensive plan, the SCORP and other applicable State plans, application quality, the applicant's commitment to operation and maintenance, special features, and recreation development/land acquisition.

**Section A – Planning Consistency** emphasizes project consistency and conformance with applicable planning documents (SCORP, community comprehensive plans, Recreation, Conservation, and Open Space Plans, and State Guide Plan elements) ensuring that funding goes towards priority needs identified and documented through a formal planning process and for proposals that are well documented.

**Section B – Sponsor Operation and Maintenance** is intended to evaluate the applicant's operation and maintenance record of existing recreation resources under its control, including facilities funded under previous federal or state grants, as well as the community's commitment to maintaining the proposed facility. These criteria recognize that it may be counterproductive to award grants for additional capital development and facility expansion to applicants who cannot demonstrate an adequate commitment to operation and maintenance of their facilities.

**Section C – Bonus Features** offer points to projects that incorporate special features or address major state and community goals beyond recreation and natural resource protection.

**Section D – Project Merit -** Recreational development projects or land acquisition provides a means for comparing the relative merits of projects for land acquisition or recreational development. Land acquisition and recreational development projects are scored separately.

### **State Regulatory Definition of Distressed Community**

CHAPTER 45-13, State Aid, § 45-13-12 Distressed communities' relief fund.

- (a) There is established a fund to provide state assistance to those Rhode Island cities and towns which have the highest property tax burdens relative to the wealth of taxpayers.
- (b) Establishment of indices: Four (4) indices of distress shall be established to determine eligibility for the program. Each community shall be ranked by each distress index and any community that falls into the lowest fifteen percent (15%) of at least three (3) of the four (4) indices shall be eligible to receive assistance. The four (4) indices are established as follows:

- (1) Percent of tax levy to full value of property. This shall be computed by dividing the tax levy of each municipality by the full value of property for each municipality. For the 1990-91 fiscal year, tax levy and full value shall be as of the assessment date December 31, 1986.
- (2) Per capita income. This shall be the most recent estimate reported by the U.S. department of commerce, bureau of the census.
- (3) Percent of personal income to full value of property. This shall be computed by multiplying the per capita income above by the most recent population estimate as reported by the U.S. department of commerce, bureau of the census, and dividing the result by the full value of property.
- (4) Per capita full value of property. This shall be the full value of property divided by the most recent estimate of population by the U.S. department of commerce, bureau of the census.

As of 2009, the following municipalities met this definition:

Central Falls West Warwick
Pawtucket Woonsocket
Providence No. Providence

# Table 152-A (1) RI Recreation Resources Review Committee Recreation Grant Selection Process Priority Rating System

Section A – Planning 25 Total Points Availal		Total Poi	nts Awarded					
Criteria Name	Criteria Description	Maximum Points	Points Awarded					
Local Planning Consistency	The proposal satisfies priority needs documented in the Community Comprehensive Plan and conforms to the plan's acquisition and development schedule for project priority, timeline, and cost.	10						
State Planning Consistency								
Applicant Priority	The applicant's highest priority application will receive 5 points. Additional applications will receive progressively fewer points.	5						
Section B - Applicant 10 Total Points Availal	t's Commitment to Operation and Maintenance	Total Poi	nts Awarded					
Criteria Name	Criteria Description	Maximum Points	Points Awarded					
Operation and Maintenance Requirements	The applicant must document the operation and maintenance needs including budget, equipment, and labor for the proposed project and explain how the municipality will meet them.	5						
Maintenance Record	Evaluation of the applicant's maintenance of other outdoor recreation facilities under their jurisdiction.	5						
Section C - Bonus Fe 22 Total Points Availal		Total Poi	nts Awarded					
Criteria Name	Criteria Description	Maximum Points	Points Awarded					
Multi-community Regional Needs	The project addresses multi-community or regional needs.	3						
Master Plan	The project is part of a multi-phase project with a master plan. (The Master Plan must be submitted to the RRRC.)	3						
Economic Revitalization	The project will improve the economy of an area. For example, spurs job creation, town center redevelopment, or development of a facility in an area identified for revitalization in State or community programs.	5						
Brownfield Redevelopment	The redevelopment of a brownfield as defined by DEM Remediation Regulations.	5						
Special or Innovative Design Features	Examples include: "green design" features (e.g. recycled materials, water or energy conservation), preservation of an historical feature, landscaping, or habitat restoration.	3						
Exceptional Features	The project has special features not noted elsewhere in the application. For example, promotes arts, tourism, or special programming.	3						

## APPENDIX B RHODE ISLAND WETLANDS PRIORITY PLAN

Coastal and freshwater wetlands perform critical functions including purifying and maintaining groundwater supplies, flood and stormwater control, erosion and sedimentation control, fish and wildlife habitat, nutrient production and cycling, open space, educational and scientific research opportunities, and under appropriate circumstances, substantial recreational opportunities. These valuable functions have been recognized in Rhode Island and federal law through regulatory programs and other measures designed to provide protection for wetlands. In Rhode Island freshwater wetlands are defined by statute in Chapter 2-1-20 of RI General Laws. Avoiding the loss and degradation of wetlands, and restoring previously degraded wetlands, remains an environmental issue of national and state significance. Floodplains are wetlands that absorb runoff and wave impacts, and buffer inland areas from storm and flood damage.

Rhode Island's freshwater swamps, marshes, bogs, ponds, lakes, reservoirs, and almost 1,500 miles of rivers and streams attract an assortment of recreational enthusiasts including kayakers, canoeists, swimmers, and fishers as well as motor boaters and jet skiers, bird watchers, hikers, and photographers.

The federal Emergency Wetlands Resources Act of 1986 authorizes federal funds, including the Land and Water Conservation Fund, for wetlands acquisition. This statute also, directs the U.S. Fish & Wildlife Service and each state to prepare a Wetlands Priority Plan to guide protection efforts. State plans are to be included as part of their SCORP and are to identify wetland types or areas to be given priority for protection through acquisition programs. Rhode Island's Wetlands Priority Plan was approved in 1988 by the National Park Service, and is updated and summarized in the remainder of this section.

A shift in focus in wetlands protection has led from protection of a single wetland to a more holistic focus on ecosystems such as open waters and associated wetlands. Revisions to the RI Water Quality Regulations in 1997 included a new category for Special Resource Protection Waters, (SRPW) which are wetlands and waters, many with associated wetlands, that are afforded special protection. See Table 152-B(3) for a list of SPRWs. A statewide wetlands monitoring plan has been completed (2006) and the Department of Environmental Management (DEM) continues to improve wetland protection through regulatory as well as non-regulatory strategies and projects such as acquisition and restoration and other EPA core elements of a comprehensive state program. This plan is a summary of existing DEM programs and the work that is in progress.

### Status of Wetlands in Rhode Island

Although a variety of wetland surveys have been conducted in Rhode Island since 1950, differing methods, objectives, and definitions limit the comparability of survey results. For example, the National Wetlands Inventory conducted in the early 1980's calculated approximately 65,000 acres of wetlands, the (1995) RIGIS land use / land cover dataset reports approximately 90,000 acres classified as wetlands, and the 2002 State of the State's Waters Rhode Island Section (305b) Report lists over 127,000 acres of wetlands and deepwater habitats.

Urbanization, particularly along major river systems, has caused considerable modification to and loss of the state's wetlands. The continuing movement of population away from the urban centers towards coastal and inland rural communities poses a significant threat to the state's wetland resources. Developments in floodplains are exposed to flood risks, and reduce the natural ability of floodplains to store water, increasing the severity of flooding downstream, even in area where floodplains are intact. Historically, floodplain zones have been prime commercial, industrial, and residential development areas. No definitive data exists to establish the total quantity of wetlands that have been lost in Rhode Island through the effects of human activities. However, based upon a Connecticut study, studies conducted in other states, and for the nation as a whole, it is possible that Rhode Island has lost up to one-half of its original salt marshes through filling, drainage, and other development procedures. The wetlands of Providence, Kent, and Washington Counties face the greatest potential impacts from continued population shifts and associated development. In addition to forested and other freshwater wetlands, the estuarine habitats of Washington County remain under constant pressure from increasing development of surrounding uplands and tributary watersheds.

According the 2001 study (Miller and Golet), about 16 percent of the state's fresh and saltwater wetlands are protected through government or non-profit land protection programs. Over 18,000 acres of Rhode Island's wetlands are protected via public or conservation organization ownership: the federal government owns approximately 240 acres of wetland, the state owns approximately 10,900 acres, municipalities own approximately 4,500 acres, and non-governmental organizations own approximately 2,400 acres. A breakdown of ownership is illustrated in Table 152-B(1). A review of the 2005 land use and land cover dataset (Jordan 2007) reveals that 28 percent of the area of palustrine and estuarine wetlands is located on protected lands.

Table 152-B(1)
Acreage of Rhode Island's Freshwater Wetlands by Watershed and Class of Ownership<sup>1</sup>

Watershed			Ownership			Total	Total	Percent
	Federal	State	Municipal	NGO*	Private	wetlands	protected	protected
Blackstone River Basin	0	810	506	94	11,515	12,925	1,411	10.9
Blackstone and Millers Rivers Sub-basins	0	253	409	46	5,353	6,062	708	11.7
Branch River Sub-basin	0	169	0	38	1,722	1,929	207	10.7
Chepachet River Sub-basin	0	20	86	10	1,782	1,899	117	6.1
Clear River Sub-basin	0	368	11	0	2,658	3,037	379	12.5
Block Island Basin	0	10	7	4	508	529	21	4.0
Moshassuck River Basin	0	126	30	16	1,421	1,593	172	10.8
Narragansett Bay Basin	0	620	1,404	335	13,820	16,179	2,359	13.9
Annaquatucket River Sub-basin	0	35	118	13	916	1,082	166	15.3
Greenwich Bay Sub-basin	0	16	24	3	540	582	43	7.3
Hunt River Sub-basin	0	24	76	51	2,522	2,672	150	5.6
Kickemuit River Sub-basin	0	0	39	12	276	328	52	15.7
Maskerchugg River Sub-basin	0	8	0	0	516	524	8	1.5
Mount Hope Bay Sub-basin	0	0	8	9	391	408	17	4.1
Narragansett Bay Sub-basin	0	507	518	179	3,809	5,013	1,204	24.0
Providence River Sub-basin	0	13	127	19	781	939	158	16.8
Sakonnet River Sub-basin	0	18	491	49	4,054	4,612	558	12.1
Seekonk River Sub-basin	0	0	4	0	16	20	4	21.7
Pawcatuck River Basin	0	4,144	39	1,138	18,327	23,648	5,320	22.5
Chickasheen River Sub-basin	0	357	0	1	792	1,150	358	31.1
Chipuxet River Sub-basin	0	1,525	22	126	3,341	5,014	1,673	33.4
Pawcatuck River Sub-basin	0	2,169	16	177	11,267	13,629	2,362	17.3
Queen River Sub-basin	0	92	1	834	2,927	3,855	928	24.1
Pawtuxet River Basin	0	1,597	1,688	170	21,442	24,897	3,455	13.9
Barden Reservoir Sub-basin	0	16	47	16	2,502	2,581	79	3.1
Big River Sub-basin	0	1,293	34	0	1,477	2,804	1,327	47.3
Flat River Reservoir Sub-basin	0	31	5	74	2,879	2,988	110	3.7
Moswansicut Reservoir Sub-basin	0	0	46	0	46	558	604	7.6

<sup>&</sup>lt;sup>1</sup> This table was adapted from <u>Development of a Freshwater Wetland Restoration Strategy</u>, <u>Phase 1: Site Identification and Prioritization Methods</u> (2001) by Nicholas A. Miller and Francis Golet, Department of Natural Resources Sciences, University of Rhode Island.

Watershed	Federal	State	<i>Ownership</i> Municipal	NGO*	Private	Total wetlands	Total protected	Percent protected
North Branch Pawtuxet River Sub-basin	0	54	172	42	268	1,268	1,536	17.4
Pawtuxet River Sub-basin	0	57	93	12	162	2,178	2,340	6.9
Pocassett River Sub-basin	0	136	191	0	327	1,497	1,823	17.9
Ponaganset Reservoir Subbasin	0	0	0	0	0	323	323	0.0
Regulating Reservoir Sub-basin	0	0	156	10	166	1,641	1,807	9.2
Scituate Reservoir Sub-basin	0	0	897	5	903	4,727	5,630	16.0
South Branch Pawtuxet River Sub-basin	0	11	17	10	37	2,057	2,094	1.8
Westconnaug Reservoir Sub-basin	0	0	31	0	31	336	367	8.5
Pettaquamscutt River and Narragansett Shore	92	7	147	6	1997	2250	253	12.7
Point Judith Pond Basin	76	13	57	58	698	902	204	22.6
<b>Quinebaug Basin</b> (includes the Moosup River Sub-basin, Five Mile River Sub-basin, and the Pachaug River Sub-basin)	0	1,068	35	71	5,151	6,325	1,174	18.6
Saugatucket River Basin	0	14	97	52	2,233	2,396	162	6.8
Southeast Coastal Basin	0	4	61	110	3,774	3,949	175	4.4
Coastal Aquidneck Sub-basin	0	4	28	1	350	383	33	8.5
Little Compton Sub-basin	0	0	1	107	2,408	2,516	108	4.3
Westport River Sub-basin	0	0	32	2	1,016	1,050	34	3.2
Southwest Coastal Basin	72	52	3	157	1,473	1,756	283	16.1
Taunton River Basin	0	0	21	0	1,213	1,234	21	1.7
Ten Mile River Basin	0	36	284	38	210	568	358	63.0
Warren River Basin	0	4	80	17	757	859	101	11.8
Barrington River Sub-basin	0	0	74	2	142	219	76	34.8
Palmer River Sub-basin	0	0	0	9	215	224	9	3.9
Runnins River Sub-basin	0	0	6	0	242	249	7	2.6
Warren River Sub-basin	0	4	0	6	158	168	10	6.0
Wood River Basin	0	2,323	1	101	4,576	7,001	2,425	34.6
Woonasquatucket River Basin	0	61	68	56	4,632	4,817	185	3.8
Statewide	240	10,890	4,528	2,423	93,747	111,828	18,081	16.2

<sup>\*</sup>Non-Governmental Organizations e.g. Audubon Society of Rhode Island, The Nature Conservancy, etc.

(Data are based on interpretation of 1988 1:24,000-scale panchromatic aerial photographs and stored in the Rhode Island Geographic Information System (RIGIS); minimum map unit = 1/4 acre. Values include wetlands and deepwater habitats as defined by Cowardin et al. (1979).)

### **Wetlands Protection Measures**

Federal, state and local governments and private sector organizations all also play a role in protecting wetlands. Protection measures utilized in Rhode Island include federal and state regulation of alterations to wetlands, acquisition of land (and interests in land) connected to wetlands, programs to restore degraded wetlands, and efforts to educate and involve the public in the protection of wetlands.

### Regulatory Programs

State wetlands protection regulations administered by the DEM and the Coastal Resources Management Council (CRMC) play the most important regulatory role in protecting Rhode Island's freshwater and coastal wetlands.

Despite the broad authority granted under section 404 of the Clean Water Act, wetlands protection through federal regulation has been constrained by Court challenges and varying administrative interpretations over time. Nationally, there has been a substantial loss of wetlands under the regulatory jurisdiction of the federal government although Rhode Island benefits by a close working partnership with its federal agencies that in turn benefits wetland protection. A Federal Supreme Court decision in 2001 limited the scope of the Clean Water Act's jurisdiction over isolated wetlands however, Rhode Island's Freshwater Wetlands Act and the Coastal Act gives the State agencies continued jurisdiction over isolated wetlands.

Rhode Island's Freshwater Wetlands Act, Chapter 2-1 of the General Laws, is one of the oldest and strongest state wetlands protection measures in the nation. DEM's Office of Water Resources operates the freshwater wetlands permitting program, which seeks to protect and restore wetlands to provide wildlife habitat, reduce floods, improve water quality, and provide recreational opportunities. The technical and public reviews of development proposals provided for under this regulatory program have been largely responsible for Rhode Island's avoidance of the substantial wetlands losses which other states have experienced in recent years. Freshwater wetlands losses in the state as a result of permitted alterations have been kept to a minimum, for example 6.8 acres of alteration were permitted by the DEM and the CRMC in 2001 through 2005, inclusive. Unauthorized alterations are still a problem however, with the DEM reporting 26.2 acres of unauthorized wetland, river, and stream alterations and 40.7 acres of unauthorized perimeter, riverbank, and floodplain alterations occurring in 2001 through 2005, inclusive. DEM's Office of Compliance and Inspection is responsible for restoring many freshwater wetlands that have been altered without authorization from the Office of Water Resources, thereby ensuring wetland conservation after an alteration.

Saltwater wetlands in Rhode Island are regulated by CRMC. Established by Chapter 46-23 of the Rhode Island General Laws, it is a seventeen-member body given a broad legislative mandate for coastal resource planning, management, and regulation. The CRMC has jurisdiction over all construction, filling, removal, and grading within 200 feet of the coast and of coastal features, over freshwater wetlands in the vicinity of the coast, as well as over moorings, docks, dredging, and other activities through its permitting program. Under the Coastal Resources Management Program, the Council's regulatory document, uses of shoreline areas are regulated according to the characteristics of the resource involved and the intensity use designation of the adjacent coastal waters.

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<sup>&</sup>lt;sup>2</sup> Wetland Regulation and Protection Status and Trends Report, 2007, RIDEM Office of Water Resources, Groundwater and Wetlands Protection Program.

Since about 90 percent of the state's salt marshes are adjacent to waters having the two lowest intensity usage categories, or have been designated as areas for preservation and restoration, only minor alterations to most of the state's saltwater wetlands are permissible. Only about 37 acres of saltmarsh statewide are located adjacent to higher intensity water classes where significant alterations could be allowed. CRMC has adopted a saltwater wetland mitigation policy.<sup>3</sup>

Amendments made in the early 1990s to the state's local zoning and subdivision and land development review enabling statutes gave municipalities authority to use modern land use techniques to control the use of wetlands and of land surrounding and affecting wetlands. While 37 of the state's 39 municipalities had included provisions for protecting wetlands, watercourses, or floodplain areas within their local land use regulations as of 2000<sup>4</sup>, no systematic evaluation of the effectiveness of these measures has been undertaken. While municipal land use regulation can be an important complement, state wetlands regulatory authority remains the primary defense of important wetland values.

### Acquisition Programs

Acquisition of wetlands is also a significant protection measure in Rhode Island. DEM's Fiscal Year 2002-2003 Performance Partnership Agreement with EPA contains as a joint target to permanently protect 200 acres per year of wetlands through purchase or conservation easements. DEM's Planning and Development Section operates the State Land Acquisition Program, in cooperation with the Divisions of Fish & Wildlife, and Forest Environment. The Program coordinates state land protection projects, which may include both purchase of land and purchase of development rights. DEM's land acquisition efforts are guided by *Protecting Our Land Resources* (1996), DEM's strategic plan for implementing the State's *Greenspace and Greenways Plan*, State Guide Plan Element 155<sup>5</sup>. The Land Acquisition Program uses criteria set by the Natural Heritage Program, whose goals of protecting representative areas of all native ecosystem types and maintaining viable populations of all native species do ensure that wetlands are an important part of the program.

In addition to State acquisition, municipalities, local land trusts, and major non-profit land conservation organizations such as The Nature Conservancy, the Audubon Society of Rhode Island, and the Trust for Public Land have taken on much greater importance in land protection efforts in recent years. The State, through its land acquisition grant programs, has partnered with local governments and private conservation group in many projects that provide protection to wetlands.

Funding sources utilized by Rhode Island for wetlands acquisition include federal funding from the Sport Fish and Wildlife Restoration Program, Department of Agriculture Farmland Acquisition Program, the Land and Water Conservation Fund, and the North American Wetlands Conservation Act. While the North American Wetlands Conservation Act is the one source of funding that is specifically targeted to wetland acquisition, other sources also contribute to wetland conservation. For example, because forested wetlands are by far the most common wetland type in Rhode Island, projects funded under the Forest Legacy Program typically include extensive wetland areas. State funding for land protection is provided via the

<sup>3</sup> CRMC saltwater wetland mitigation policy is found in the CRMP, Section 300.12.

<sup>4</sup> RI Statewide Planning Program. <u>Inventory of Local Zoning and Land Development Provisions</u>. 2001.

<sup>&</sup>lt;sup>5</sup> R.I. Division of Planning. <u>A Greener Path: Greenspace and Greenways for Rhode Island's Future</u>. State Guide Plan Element 155. 1994

State Capital Development Program, which includes proceeds from a number of bond issues including the 2000 Open Space and 1998 Greenways Bonds. Supplementing federal and state funding for land acquisition have been substantial charitable (private foundation) contributions.

#### Wetlands Restoration

In addition to conserving high quality wetlands, the restoration of the values and functions of degraded wetland systems has become an important goal for Rhode Island in recent years. The State's Greenspace and Greenways Plan<sup>6</sup> called for restoring 100 acres of degraded wetlands per year. In 2002 the RI General Assembly established the Coastal Habitat Restoration and Trust Fund to fund restoration of three types of marine habitat: salt marshes, eelgrass, and fish runs with funds from the Oil Spill Response Fund. Other efforts include:

- Identification by URI and DEM of 77 potential freshwater restoration sites in the Woonasquatucket watershed and outreach to landowners to discuss restoration opportunities.
- The Rhode Island Corporate Wetlands Restoration Project, initiated in 2001 as part of the national organization, is led by Narragansett Electric Company and Environmental Science Services. It committed \$30,000 to the restoration of Lonsdale Marsh and \$25,000 to the Pawtuxet River Fish Restoration project. It is actively seeking to raise funds from various Rhode Island businesses.
- The Narragansett Bay Estuary Program, works with the CRMC, municipalities, and non-profit groups to identify coastal wetland restoration opportunities, prioritizes those wetlands, and obtains funding for restoration.
- Local watershed organizations -- while a number of watershed groups have been in existence for many years they primarily focused on a particular waterbody. Beginning in the mid-1990's watershed associations began taking a more formal and active role in planning and advocating for resource protection. As of 2007, ten local watershed associations have been formally recognized by the Rhode Island Rivers Council, and with support from DEM's Watershed Program, a number of these groups have begun developing watershed-wide action plans that include wetlands protection and restoration.

#### **Wetland Conservation Priorities**

While Rhode Island is committed to the protection of all its wetland resources, realistically, priorities must be established to direct conservation investments. In addition to those documents RI's Living Legacy, guides the Land Acquisition Program. The Rhode Island Natural Heritage Program provides valuable information used to identify priority wetland types and areas in Rhode Island<sup>7</sup>. The Natural Heritage Program has identified more than 50 natural community types in the state, eight of which are considered to be unique in the state and region and are therefore important conservation priorities. The eight community types may be found within the seven bioregions of Rhode Island that contain biological features of critical importance to maintaining the state's biodiversity. Among the eight community types unique to Rhode Island, the following six types are wetland communities, and are therefore important conservation priorities:

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<sup>&</sup>lt;sup>6</sup> Ibid. p. 8.6

<sup>&</sup>lt;sup>7</sup> Natural Communities of Rhode Island (2006) by Richard W. Enser, DEM Natural Heritage Program and Julie A. Lundgren, The Nature Conservancy of Rhode Island.

- 1. Open peatlands (bogs and fens) includes wetlands with less than 50% canopy cover of trees, the dominant vegetation being shrubs, herbs, and mosses.
- 2. Atlantic White Cedar swamps an evergreen or mixed swamp occurring on organic soils in poorly drained depressions, occasionally along streams.
- 3. Freshwater pond shores that support coastal plain species the gently sloping sandy-gravelly shores of ponds in morainal kettle holes and depressions in glacial outwash plains within the coastal region.
- 4. Floodplain forests hardwood forests in mineral soils on low terraces of river floodplains characterized by a flooding regime in which low areas are flooded annually, usually in the spring; higher areas are flooded irregularly.
- 5. Sea level fens rare community type that develops in the upper border of tidal marshes receiving fresh groundwater seepage. The best RI example is found on the inland side of a coastal pond that receives freshwater percolating from the adjacent moraine.
- 6. Freshwater tidal marshes very rare marsh communities occurring at the upper limits of tidal flow along streams and rivers.

Several state efforts underway will further inform and refine wetlands conservation priorities in the future. DEM's Office of Water Resources has developed a statewide freshwater wetlands monitoring plan which has identified long and short-term objectives for freshwater wetlands. The companion coastal wetlands protection and restoration plan developed by the Habitat Restoration Team, is being implemented. These plans are being developed with other state agencies, municipalities, and nonprofit organizations such as Save the Bay. When completed, these plans will provide comprehensive, coordinated wetlands strategies and priorities for Rhode Island.

The following excerpts are from the Natural Communities of Rhode Island<sup>8</sup>. The seven Biodiversity Focus Areas and strategies for protection through acquisition, easements, and management include various types of wetlands.

### 1. Western Forest

The western interior contains the largest tracts of forest habitat in the state. Included are several large State-owned Management Areas (Buck Hill, George Washington, Durfee Hill, Nicholas Farm, Arcadia, and Rockville), and most of the land in the Scituate Reservoir Watershed. The continuity of the primarily forested landscape in this focus area provides the spatial requirements of a number of species that rely on large habitat tracts. Species of particular interest in this focus area include birds, especially neotropical migrants which are also forest-interior specialists, some found nowhere else in the state. Additional fauna includes such forest dependent and/or wide-ranging animals as bobcat and fisher, for which population and status information is very limited but evidence suggests the presence of both within larger habitat tracts.

<u>Strategy</u>: All potential land acquisitions in excess of 150 acres in the Western Forest focus area should be actively pursued. Acquisition of parcels less than 150 acres should be considered on the basis of identification of specific habitat value, or the potential for physically adding to and/or connecting existing large protected forest tracts.

<sup>&</sup>lt;sup>8</sup> <u>Natural Communities of Rhode Island</u> (2006) by Richard W. Enser, DEM Natural Heritage Program and Julie A. Lundgren, The Nature Conservancy of Rhode Island.

### 2. Pawcatuck River

The high diversity and quality of wetland habitats, including coastal plain ponds, bogs fens, floodplain forests, white cedar swamps, and rivers in the Pawcatuck River watershed supports more than 60 percent of the state's populations of rare plants and animals, including those listed under the regulatory authority of Federal and State Endangered Species laws. In addition, large managed areas (Great Swamp, Burlingame, Carolina, and Audubon's Eppley Sanctuary) provide a basis for expanding the size of, and increasing buffers for, large protected habitats. The pristine riverine systems in the Pawcatuck watershed provide the best opportunities in the state for preserving aquatic communities and the species they support in a presently healthy system. Many of the state's other waterways have been heavily impacted by damming, pollution, and other forms of degradation with a consequent decline in aquatic species composition and vigor.

<u>Strategy</u>: All potential land acquisitions in this focus area, regardless of size, should be actively considered based on their contribution to the unique biodiversity values of the Pawcatuck River Watershed. Decisions regarding acquisitions and use of available funding sources should focus on these unique values of the Pawcatuck rather than public active recreational potential.

### 3. South Coastal

Included within this area are the many unique ecosystems associated with the coast including beaches, dunes, salt marshes, salt ponds and shores, and upland maritime shrub lands. Several large protected areas exist here (including federal Fish and Wildlife refuges, Charlestown Beach, Napatree Point, etc.) and most sites receive some regulatory protection.

<u>Strategy</u>: Concentration on land acquisitions in the South Coastal area should be based on protection of coastal habitats, low-impact recreational objectives, and elimination of sources of pollution to the coastal ponds. Land parcels may be of any size, but should provide additional buffer for already protected areas, or unique opportunities to protect species and communities not already receiving sufficient protection.

### 4. Narragansett Bay

The principal interest in this region is the array of unique natural communities and other important biological features (most notably, colonial waterbird nesting sites). In general, there is a low occurrence of species considered rare on a regional scale, but there are several populations of state endangered species, most notably the Northern Diamondback Terrapin. Unique habitats include large tidal marshes (Hundred Acre Cove, Prudence Island, Jamestown Marsh Meadows, etc.) which are used as feeding areas by egrets and other wading birds nesting in Narragansett Bay, as well as large numbers of migrant shorebirds. Moreover, these estuaries are recognized as some of the most productive nurseries for aquatic fauna in the region. In addition, the Barrington/Runnins Rivers support the state's best examples of fresh/brackish tidal wetlands, a community type lost from most the state's other rivers.

<u>Strategy</u>: All land acquisitions on Prudence, Patience, and Dyer Islands should be actively considered with the goal being to permanently protect <u>all</u> remaining privately held open land on these islands. Land protection strategies, including acquisition, conservation easement, and regulatory methods, should also be directed to the Barrington/Runnins River estuary where exemplary tidal wetland communities still exist.

### 5. Blackstone Valley

Several wetland communities along the Blackstone River are significant examples of these types for Rhode Island, and also support diverse faunas. These areas include the Valley Marshes (shared by the municipalities of Central Falls, Cumberland, and Lincoln) and portions of remnant floodplain forest found between the Valley Marshes and Woonsocket.

<u>Strategy</u>: Acquisition should be considered for any lands contiguous to existing protected areas.

### 6. East Coastal

The biological values associated with the East Coastal region are similar to those of the South Coastal focus area. Significant natural communities are centered at the coastal salt pond complex in Little Compton (most notably at Briggs Marsh and Quicksand Pond) and include beaches, tidal marshes, and other estuarine types. The focus area boundary is extended north to include the watersheds for these coastal ponds.

<u>Strategy</u>: All potential land acquisitions (in excess of 10 acres) in the watersheds of the coastal ponds along the south shore of Little Compton should be considered.

### 7. Block Island

Block Island has traditionally received the benefits of a great deal of conservation work. What has been termed a "Last Great Place" by the Nature Conservancy supports a comparatively high number of regionally significant species, most notably the Federally listed American Burying Beetle, and also serves as a refuge for several species no longer extant on the mainland of Rhode Island. Among these are several nesting birds including the Northern Harrier and American Bittern.

<u>Strategy</u>: The State will continue to support The Nature Conservancy, Block Island Conservancy, Block Island Land Trust, and other regional and local conservation organizations that have taken an active participatory role in the protection of Block Island's unique habitats.

Table 152-B(2) displays ten wetland types found in Rhode Island. The wetland types are arranged by watershed areas. In addition to the ten wetland categories in the table, one additional wetland type, riverine tidal open water, is found in the Woonasquatucket River basin. Seven acres of riverine tidal open water have been identified in the Woonasquatucket watershed.

Table 152-B(2)
Acreage of Rhode Island's Freshwater Wetland Types by Watershed<sup>9</sup>

Watershed	EMA	EMB	SSA	SSB	FOA	FOB	FOD	LOW	POW	ROW	Total
Blackstone River Basin	590	55	806	301	1,241	6,179	2	2,661	629	463	12,925
Blackstone and Millers Rivers Sub-basins	402	32	404	117	385	2,919	1	1,163	286	352	6,062
Branch River Sub-basin	90	0	126	12	132	1,092	0	252	141	84	1,929
Chepachet River Sub-basin	30	5	95	71	312	859	0	440	76	11	1,899
Clear River Sub-basin	68	19	181	102	412	1,308	1	806	126	16	3,037
Block Island Basin	147	0	189	0	0	0	0	26	167	0	529
Moshassuck River Basin	100	0	112	2	25	971	0	248	122	13	1,593
Narragansett Bay Basin	1,144	5	2,120	46	521	10,342	17	1,383	573	28	16,179
Annaquatucket River Sub-basin	65	1	126	0	17	648	7	174	43	0	1,082
Greenwich Bay Sub-basin	14	0	50	0	1	422	0	52	42	1	582
Hunt River Sub-basin	58	3	160	15	177	2,126	5	0	110	18	2,672
Kickemuit River Sub-basin	45	0	41	0	0	205	0	31	6	0	328
Maskerchugg River Sub-basin	16	0	20	0	1	455	1	0	31	0	524
Mount Hope Bay Sub-basin	32	0	68	0	31	254	0	1	19	4	408
Narragansett Bay Sub-basin	335	2	744	32	97	3,234	3	399	169	1	5,013
Providence River Sub-basin	36	0	87	0	5	601	0	128	78	3	938
Sakonnet River Sub-basin	541	0	824	0	193	2,386	1	598	70	0	4,612
Seekonk River Sub-basin	3	0	1	0	0	12	0	0	5	1	20
Pawcatuck River Basin	460	48	1,696	528	3,326	14,091	52	2,460	585	402	23,648
Chickasheen River Sub-basin	21	0	76	8	91	777	0	163	13	1	1,150
Chipuxet River Sub-basin	36	5	271	77	577	2,596	18	1,315	106	14	5,014
Pawcatuck River Sub-basin	340	41	1,192	385	2,036	7,984	32	931	327	362	13,629
Queen River Sub-basin	64	1	158	59	622	2,735	3	52	139	24	3,855

<sup>9</sup> Ibid.

Table 152-B(2) con't

Watershed	EMA	EMB	SSA	SSB	FOA	FOB	FOD	LOW	POW	ROW	Total
Pawtuxet River Basin	672	53	1,389	457	2,309	12,036	25	6,566	911	479	24,897
Barden Reservoir Sub-basin	46	5	254	48	332	1,499	17	275	96	10	2,581
Big River Sub-basin	57	41	121	207	637	1,468	2	144	102	24	2,804
Flat River Reservoir Sub-basin	54	0	149	46	326	1,274	1	1,045	93	2	2,988
Moswansicut Reservoir Sub-basin	18	0	26	0	8	249	0	298	5	0	604
North Branch Pawtuxet River Sub-basin	45	0	86	25	48	1,073	4	52	105	99	1,536
Pawtuxet River Sub-basin	161	0	243	0	7	1,388	0	196	195	151	2,340
Pocassett River Sub-basin	119	0	139	3	18	1,137	0	303	84	20	1,823
Ponaganset Reservoir Sub-basin	2	1	3	3	13	60	0	240	2	0	323
Regulating Reservoir Sub-basin	40	0	106	21	56	1,246	0	257	80	2	1,807
Scituate Reservoir Sub-basin	68	4	146	31	178	1,850	0	3,307	47	0	5,630
South Branch Pawtuxet River Sub-basin	61	1	111	72	649	655	1	281	92	172	2,095
Westconnaug Reservoir Sub-basin	3	1	6	1	38	138	0	168	11	0	367
Pettaquamscutt River and Narragansett Shore	58	4	198	38	48	1,752	0	58	90	6	2,250
Point Judith Pond Basin	20	0	113	5	12	572	0	68	113	0	902
Quinebaug Basin (includes the Moosup River Sub- basin, Five Mile River Sub-basin, and the Pachaug River Sub-basin)	245	39	736	306	1,268	2,352	60	926	325	69	6,325
Saugatucket River Basin	27	0	74	8	32	1,809	4	365	65	12	2,395
Southeast Coastal Basin	364	0	682	1	67	2,690	32	23	88	1	3,949
Coastal Aquidneck Sub-basin	132	0	184	0	0	59	0	0	8	0	383
Little Compton Sub-basin	195	0	452	1	52	1,726	8	23	59	1	2,516
Westport River Sub-Basin	38	0	46	0	16	905	24	0	21	1	1,050
Southwest Coastal Basin	57	0	313	58	106	931	0	129	162	0	1,757

**Table 152-B(2)** con't

Watershed	EMA	EMB	SSA	SSB	FOA	FOB	FOD	LOW	POW	ROW	Total
Taunton River Basin	26	0	59	1	117	538	1	489	4	0	1,234
Ten Mile River Basin	26	0	41	0	0	165	0	273	21	43	568
Warren River Basin	89	0	146	0	0	598	0	0	23	3	859
Barrington River Sub-basin	8	0	19	0	0	180	0	0	12	0	219
Palmer River Sub-basin	23	0	41	0	0	157	0	0	3	0	224
Runnins River Sub-basin	39	0	39	0	0	164	0	0	5	3	249
Warren River Sub-basin	20	0	48	0	0	97	0	0	3	0	168
Wood River Basin	113	24	680	238	1,535	2,894	33	988	302	197	7,002
Woonasquatucket River Basin	203	2	249	73	294	2,765	0	856	282	89	4,810
Statewide	4,340	229	9,602	2,060	10,900	60,684	225	17,518	4,460	1,803	111,828
Wetland Types EMA Emergent Wetland: Marsh/Wet Meadow EMB Emergent Wetland: Emergent Fen or Fog SSA Scrub-shrub Wetland: Shrub Swamp SSB Scrub-shrub Wetland: Shrub Fen or Bog FOA Forested wetland: Coniferous							Fore Lacu Palu	sted wetla sted wetla strine Ope strine Ope rine Nonti	and: Dea en Water en Water	d r (Lake) · (Pond)	

(Data are based on interpretation of 1988 1:24,000-scale panchromatic aerial photographs and stored in the Rhode Island Geographic Information System (RIGIS); minimum map unit = 1/4 acre.)

Special Resource Protection Waters are high quality surface waters identified by the Director of DEM as having significant ecological or recreational uses, which may include but are not limited to: wildlife refuge or management areas; public drinking water supplies; state and federal parks; state and federal designated Estuarine Sanctuary Areas; waterbodies containing critical habitats, which may include but are not limited to waterbodies identified by the RIDEM Natural Heritage Program as critical habitat for rare or endangered species; wetland types or specific wetlands listed as rare, threatened, endangered, of special interest or of special concern by the RI Natural Heritage Program; waterbodies identified by the U.S. Department of the Interior on the Final List of Rivers for potential inclusion in the National Wild and Scenic Rivers System.

### **Table 152-B(3)**

### **RIDEM Special Resource Protection Waters**

WATERBODY	LOCATION
Abbott Run Brook	Cumberland
Ash Swamp	Cumberland
Ash Swamp Brook	Cumberland
Asheville Pond	Hopkinton
Bailey Brook	Middletown
Barden Reservoir	Scituate
Barrington River Estuary	Barrington, East Providence
Beach Pond	Exeter
Belleville Pond	North Kingstown
Big River	West Greenwich
Blue Pond	Hopkinton
Bowdish Reservoir	Glocester
Briggs Marsh	Little Compton
Brown Point Marsh	Little Compton
Cards Pond	South Kingstown
Cedar Swamp Pond	Burrillville
Chapman Pond / Crandall Swamp	Westerly
Cold Brook	Little Compton
Cole Spring Brook	Little Compton
Croff Farm Brook	Burrillville
Crookfall Brook	North Smithfield, Cumberland
Deep Pond	Charlestown
Diamond Hill Reservoir	Cumberland
Diamond Pond/Bog Complex	Richmond
Donovan Marsh	Little Compton
East Sneech Brook	Cumberland
Ell Pond	Hopkinton
Factory Pond	South Kingstown
Fogland Point Marsh	Tiverton
Fresh Pond	Charlestown
Fresh Pond	New Shoreham
Galilee Bird Sanctuary	Narragansett, South Kingstown
Gardiner Pond	Middletown
Gennesee Swamp	South Kingstown
Gorton Pond	Warwick
Grass Pond	Richmond
Great Salt Pond & Marshes	New Shoreham
Great Swamp	South Kingstown
Green Hill Pond	South Kingstown
Happy Hollow Pond	Cumberland
Hunt River	North Kingstown
Hunting House Brook	Scituate
Jamestown Brook	Jamestown
Kickemuit Reservoir	Warren

Lawton Valley Pond	Portsmouth
Little Maschaug Pond	Westerly
Little Narragansett Bay	Westerly
Long Brook	Cumberland
Long Pond	Hopkinton
Long Pond	Little Compton
	Lincoln, Central Falls,
Lonsdale Marshes	Cumberland
(Blackstone Complex)	
Maidford River	Middletown
Maschaug Pond	Westerly
Matunuck Hills Complex –	South Kingstown
Tucker, Long, & White Ponds	-
McGowan Swamp	Westerly
Meadowbrook Pond	Richmond
Mishnock Swamp	Coventry
Moswansicut Pond	Scituate
Nelson Pond	Middletown
Ninigret Pond	Charlestown
Nonquit Pond	Tiverton
North Easton Pond	Middletown
North Pond	Jamestown
Palmer River	Barrington, Warren
Paradise Brook	Middletown
Pawcatuck River	Westerly, Richmond, Hopkinton,
	Charlestown, South Kingstown
Pawtucket (Arnold Mills) Reservoir	Cumberland
Pettaquamscutt (Narrow) River	North Kingstown, South
. , , ,	Kingstown, Narragansett
Phantom Bog	Hopkinton
Point Judith Pond	South Kingstown, Narragansett
Ponaganset Reservoir	Glocester
Ponaganset River	Foster, Glocester
Potter Pond	South Kingstown
Queen River	Exeter, South Kingstown
Quicksand Pond	Little Compton
Quonochontaug Pond	Charlestown, Westerly
Regulating Reservoir	Scituate
Robin Hollow Pond	Cumberland
Runnins River	Barrington, East Providence
Sachem Pond	New Shoreham
Sands Pond	New Shoreham
Sapowet Marsh	Tiverton
Schoolhouse Pond	Charlestown
Scituate Reservoir	Scituate
Screech Hole Bog	Burrillville
Scwindels Swamp Preserve	Glocester
Shippee Saw Mill Pond Sisson Pond	Foster
	Portsmouth

Smith & Sayles Reservoir	Glocester
Sneech Pond	Cumberland
South Easton Pond	Newport
South Pond	Jamestown
St. Marys Pond	Portsmouth
Stafford Pond	Tiverton
Succotash Marsh	South Kingstown
Tippencast Pond	West Greenwich, Exeter
Trustom Pond	South Kingstown
Tunipus Pond	Little Compton
Twin Pond	Narragansett
Valley Falls Pond	Cumberland
Wallum Lake	Burrillville
Watchaug Pond	Charlestown
Watson Reservoir	Little Compton
Wesquage Pond	Narragansett
Westconnaug Reservoir	Scituate, Foster
Wickaboxet Pond	West Greenwich
Winnapaug Pond & Salt Marsh	Westerly
Wood River	Richmond, Westerly, Hopkinton
Woonsocket Reservoir #1	North Smithfield
Woonsocket Reservoir #3	North Smithfield
Worden Pond	South Kingstown
Wyoming Pond	Hope Valley
Yawgoog Pond	Hopkinton

In addition to those listed, all other waters that are of at least a first (1st) order stream size, excluding their wetlands, and are tributary to public drinking water supplies, are SRPWs.

Protection of vulnerable isolated wetlands, including vernal pools, has become a priority conservation objective nationally, regionally, and in Rhode Island. Vernal pools are small ponds that generally dry seasonally and that provide important habitat for amphibians and invertebrates that are adapted to the flooding and drying. Traditional wetland regulations do not adequately conserve the pools or upland adjacent areas that are critical for the amphibian life needs. The DEM engaged researchers at the Department of Natural Resources Science, University of Rhode Island to develop a vernal pool protection plan in the Queen's River Watershed to supplement the existing regulatory approach (Mitchell et al. 2007) largely based on the application of models which predict a vernal pool's hydroperiod (Mitchell 2005; Skidds et al 2005). Additional vernal pool prioritization and mapping work is ongoing by DEM with the assistance of the New England Interstate Water Pollution Control Commission and the Wood-Pawcatuck River Watershed.

### 2009-2014 Action Agenda

 DEM coordinates with and reports on the wetland protection efforts of the DEM Fish and Wildlife Division, the Natural Heritage Program, the Land Acquisition Program, the Wetlands Regulatory Program, municipalities, and nonprofits through the periodic wetland status and trends report.

- Continue to support wetland and habitat restoration by coordinating with DEM Wetland and Water Quality Restoration Team to provide enhanced preapplication guidance for proactive projects.
- Continue to implement the RI Freshwater Wetland Monitoring and Assessment Plan (2006).
- Verify and map vernal pool wetlands in the Wood-Pawcatuck River watershed and explore initiating similar mapping efforts in other areas of the State.
- CRMC, the Narragansett Bay Estuary Program, and partners are coordinating coastal wetlands conservation through development of a comprehensive coastal wetland protection and restoration plan.
- RI will continue to provide both the freshwater and coastal wetland regulatory processes with resources and professional staff sufficient to execute their protection mandates in a thorough and efficient fashion.
- DEM will continue to provide the technical assistance and educational outreach efforts to the
  development community and other interested parties on wetland avoidance methods and
  development impact minimization for wetlands-associated development acceptable under
  the Freshwater Wetlands Program's regulations. The publication What's the Scoop on
  Wetlands, recommending procedures for minimizing adverse effects of development
  activities upon wetlands, will continue to be made available through DEM's Office of Water
  Resources.
- State agencies should encourage communities to adopt land management regulations for their floodplains which exceed the minimum requirements of the National Flood Insurance Program.
- State and local agencies should acquire necessary data through coordinated efforts to develop accurate coastal elevation maps to assess the impacts associated with sea level rise, and address these impacts in permitting and project design decisions.
- The State should develop contingency plans for the acquisition of floodplain properties damaged or destroyed by severe floods.
- The State should consider legislative efforts to establish a hurricane trust fund for the acquisition of storm damaged properties.
- The State should continue to protect floodplains through acquisitions related to linear parks and greenways.