RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT FY2000 WORK PLAN

DIVISION OF FISH AND WILDLIFE

I. PROGRAM DESCRIPTION

The Division of Fish and Wildlife protects, restores, and manages the fish and wildlife resources of the state. The division has a staff of 57 employees, including biologists, technicians, fish culturists, heavy equipment operators, and skilled workers. Division facilities include: the main office, three biological field offices, two development stations equipped with workshops and heavy machinery, and four freshwater hatcheries. The division is responsible for operating and managing twenty-four wildlife management areas totaling over 46,000 acres. The division also operates over 100 boat launching ramps and shore fishing areas located throughout the state. The division is responsible for setting seasons, size limits, methods of taking, and daily limits for the harvest of all wildlife as well as all recreational and commercial fisheries in the state. The division is divided into three separate sections: Marine Fisheries, Freshwater Fisheries, and Wildlife. Each section is responsible for specific program activities. These activities include fisheries and wildlife research, fish hatchery and fish stocking programs, habitat restoration, public access, land acquisition, education and information, public angling and hunting programs, and commercial fisheries management. In FY 1998 (FY1999 figures are not available but will be similar to FY1998) the total division program costs were \$5.45 million. These costs were distributed among 35 separate accounts corresponding to individual projects. Approximately 90% of these costs were covered by dedicated resources including USFWS Sportfish Restoration Program (special federal excise taxes on fishing, hunting, and boating equipment), NMFS, and Rhode Island hunting and fishing license receipts. These funding sources provide the foundation for a user-pay user-benefit relationship with the hunting, fishing, and boating public of Rhode Island. The division works closely with this constituency, attending meetings and holding workshops to seek information on usergroup needs and concerns.

II. MISSION OF THE DIVISION

Ensuring that the Freshwater, Marine, and Wildlife Resources of the State of Rhode Island will be Conserved and Managed for Equitable and Sustainable Use.

Key Division Objectives:

- 1. Maintain Healthy and Sustainable Populations of Fish and Wildlife
- 2. Protect and Restore Habitat & Promote Biodiversity.
- 3. Improve Recreational Fishing and Hunting.
- 4. Promote the Fisheries and Wildlife Resources as a Key Element in Rhode Islands Economy.
- 5. Asset Protection Improve Division Facilities to Increase Program Effectiveness.

Division of Fish and Wildlife DRAFT last revised 10/7/99 9:32:39 AM

III. PROGRAM HIGHLIGHTS

Objective 1 - Maintain Healthy and Sustainable Populations of Fish and Wildlife Trends

- Fisheries surveys, which are currently being conducted in the Pawcatuck River Watershed, indicate healthy distributions of species including important gamefish. This information has been used by local watershed groups (Pawcatuck River Watershed Partnership) as well as other state and federal agencies. Samples of fish were supplied to the DOH and EPA.
- Anadromous populations of alewives have recently increased in small Rhode Island coastal streams. This may be correlated to the division's of broodstock enhancement work in the early 1990's
- Research and survey projects continue to provide data, which has been used to increase hunting opportunities for wild turkey, white tailed deer, and Canada goose. New and/or longer seasons have been set.
- The fisheries resource of Narragansett Bay and Rhode Island Sound is in transition. Demersel fish populations are in decline while pelagic species populations are increasing. Crab and lobster survey results have shown population increases while quahaugs have declined. This community restructuring is coincident to overfishing of demersal finfish, a long-term increase in water temperature, and predator-prey interactions.
- The commercial fishery has responded by shifting effort to underutilized species and exploring new market opportunities. Recreational anglers have also shifted emphasis to species under recovery such as striped bass and summer flounder. They have become more engaged in the management process, demanding rebuilding of the depressed stock and an equitable share in the harvest.
- Research, assessment, and management of the marine resources have grown exponentially in the past decade. Passage of the Atlantic Coastal Fisheries Cooperative Management Act and the Sustainable Fisheries Act have required state and federal agencies to channel substantial resources into rebuilding depleted stocks.
- Fisheries management has experienced a shift from resource orientation to client orientation.

.Problems

- The demands of accelerated resource management have exceeded division resources. Modern management is largely a people issue demanding many interactions with stakeholders. Division scientists are not trained in this area, resulting in ineffective facilitation that does not meet current resource management needs.
- Maintenance and operation of existing fishways continues, however due to limited financial resources new fishway construction is on hold. Anadromous fish restoration in the Pawcatuck River cannot improve until the dam gates at the Potter Hill Dam have been repaired. This dam is in private ownership. Efforts to work with the owner of this dam have failed.
- In the past the division obtained alewife and blueback broodstock from coastal streams in Massachusetts. A recent decrease in the returns at these runs has limited our ability to perform broodstock enhancement work.
- Volunteer information from recreational anglers (logbooks, records, surveys etc) is an untapped source of information. Additional staff is needed to coordinate this work so that it may be used as part of the stock assessment process.

Initiatives

Protect and Restore Critical Resources

• The division will work with the DEM Land Acquisition Committee to purchase two parcels of land along the Ponaganset River to protect and preserve habitat as well as improve angler access.

Ecosystem/Watershed Management

- The division will integrate current stream and pond fisheries survey data into the RIGIS database maintained by DEM and URI. This information will be organized by watersheds and will be available to watershed partnerships.
- The division is working with local watershed groups on the Ten Mile River, as well as local communities to investigate the feasibility of restoring anadromous fish to the river.
- The division will work with the South County Watershed Partnership to attempt to resolve the Potter Hill Dam issues.
- The division will assist the Woonasquatucket Watershed Partnership with fish sampling for bioassay work
- The division will revise and improve the Cooperative (USFWS) Anadromous Fish Restoration Plan for the Pawcatuck River Watershed.
- Winter flounder research in the coastal ponds will be expanded to include tagging studies of the spawning stock.
- The division will begin a survey of the Block Island fisheries resource using a monthly, multi-gear sampling format.
- The division has recognized the importance of essential fish habitat and has delegated the responsibility for this issue to one staff scientist.
- The division will work with watershed partnerships on shellfish management issues in salt ponds and estuaries.

Promote Partnerships

- The federal sportfish program will be expanded to include a research partnership with the URI Graduate School of Oceanography. They will study the decline of winter flounder in Narragansett Bay.
- The division will strengthen and restructure the citizens advisory panels which advise the RI Marine Fisheries Council
- With assistance from Senator Chafee's office, a partnership will be formed between the division and NMFS to study fisheries problems in Narragansett Bay. This will provide enhanced port & sea sampling and water quality studies.

Streamline Processes

• A grant request to streamline and modernize fishery data collection will be submitted to the Atlantic States Cooperative Statistics Program for consideration.

Improve Communication

• The potential of expanding aquatic educational opportunities at various DEM facilities will be explored.

Training

• Staff training in fisheries stock assessment methods, GIS, and general computer skills will be initiated.

Objective 2 - Protect and Restore Habitat. Promote Biodiversity.

Trends

- Wildlife habitat in the state of Rhode Island has decreased at a steady rate. The increased development in rural communities has provided situations where wildlife populations and human populations are attempting to coexist.
- The Galilee Salt Marsh restoration work has been completed with the expectation of 80 acres of new salt marsh being created for wintering black ducks. Partners on this project included URI, Ducks Unlimited, USFWS, EPA, and Army Corps.
- Approximately 100 acres of even-age forest habitat have been reverted to primary successional stage, dramatically increasing biodiversity on 2 wildlife management areas. Narragansett Electric provided in-kind services for this work.
- Recent DEM/Fish and Wildlife land acquisitions, as well as pending acquisitions will add over 300 acres to existing wildlife management areas. This will increase division-managed lands to over 47,000 acres.
- Over the past 3 years, four waterfowl marshes have been renovated by installing new water control structures. This was under a cooperative program with the USFWS and Ducks Unlimited.

Problems

- Private lands are being developed or are being posted at an increasing rate. Therefore, habitat, public fishing and hunting and decreasing.
- Funding to purchase additional lands for habitat protection has become limited.
- Limited resources have been a major setback when dealing with wildlife damage and/or disease issues.
- The Aquatic Education Program provides excellent opportunities for youth programs, workshops, and other forms of informational outreach on habitat restoration, however these activities are limited because of inadequate personnel and lack of appropriate class room facilities.

Initiatives

Protect and Restore Critical Resources

- The division will participate in the purchase of 150 acres of open space habitat, insuring that biodiversity is a key component of acquisition criteria.
- The division will provide technical assistance to communities to insure that land use decisions are sensitive to fish and wildlife habitat requirements.
- Expand Narragansett Bay survey work to cooperate with EPA and the Coastal Resources Management Council to identify eelgrass and aquatic vegetation.

Ecosystem/Watershed Management

- The division will cooperate with watershed partnerships to evaluate instream flow regulations and the potential impact of drought conditions on the fisheries resources
- Watershed issues will be incorporated into the aquatic education program.
- The division will represent fish and wildlife resource issues in watershed based decision-making.
- The division will cooperate with USDA, EPA, TNC, Army Corps, Narragansett Indian Tribe, and other organizations on the NRCS "State Team" to promote wildlife programs under the Farm Bill.

Promote Partnerships

- The division will join with other states in USFWS Region 5 to fund a Wildlife Damage Cooperative Unit.
- The division will train wildlife rehabilitation volunteers in methods of taking care of wildlife impacted by oil spills.

• The division will work with watershed groups, local communities, and special interest groups to provide technical assistance to support creative and sound land use decisions to protect sensitive habitat and maintain biodiversity at the highest level possible.

Streamline Processes

• The division will work with the Division of Agriculture to streamline regulations to allow for easy access to special use permits, including deer damage permits.

Objective 3 - Improve Recreational Fishing and Hunting Trends

- Recreational fishing and hunting are essential components of natural resources management in Rhode Island. The posting of private land and development have decreased available habitat for angling and hunting. A large parcel (Pratt Property) providing important frontage along the upper Wood River was acquired by DEM in 1999. The Division of Fish and Wildlife worked with the Division of Planning and Development and The Nature Conservancy to acquire this property. Protecting important fisheries and wildlife habitat in addition to the provision of public access will continue.
- Acquisition of a new hatchery (1993), and recent capital improvements has brought hatchery production to an all time high. Two new additional locations were selected for trout stocking in 1999. Trout stamp sales in FY 1999 indicate an increase in trout anglers.
- New areas are being developed to increase angler access. Four saltwater (handicap accessible) and two freshwater (one handicap accessible) access areas were constructed in 1999. Funding for these areas involved partnerships with local communities, Governor's Commission on Disabilities, and SCAT. Repairs, maintenance, and operations of existing public access continue.
- Marine Recreational Fisheries Statistics show recent increases in marine recreational fishing in Rhode Island. Much of this increase is due to the successful coast wide cooperative (state/federal) restoration of Striped Bass.

Problems

- Increasing the number of public access areas for angling and boating has also increased the maintenance and operation responsibilities (cost) of the division.
- Increasing public access to management areas has caused an increase in vandalism and public dumping.
- Multiple use of management areas causes conflicts and has increased costs of maintenance.

Initiatives

Promote Partnerships

- The division will improve largemouth bass populations (and angling) in selected ponds. A pilot program to culture and stock largemouth bass is in operation. Surveys will evaluate results of stocking. Local bass fishing clubs will cooperate with stocking and survey work.
- Planned public access improvements include, new boat ramps at Colt Park, Westerly, and Portsmouth. These maps will be handicap accessible. The division will cooperate with the Town of Westerly, the Division of Parks and Recreation, and the Governors Commission on Disabilities.

- The division will attempt to work with landowners such as the RI Audubon Society and the Providence Water Supply Board, to offer special permission hunting. The Northwest Cooperative and the South Shore Management Area are examples of this type of arrangement.
- Using the program's volunteer network of instructors, hunter education classes will be scheduled more frequently to increase the number of trained students

Set an Example

- A program to develop handicap shorefishing access sites has started. This program will call on partnerships with the Governors Commission on Disabilities and local communities. For example, the Division is working with the Wood/Pawcatuck Watershed Association to develop a site at their headquarters in Westerly and with SCAT to install a handicap accessible trail at Black Point.
- Hunting opportunities for disabled people will increase because of handicap accessible waterfowl hunting blinds and by the opening of a new area at Fort Greene in Narragansett. This work will include a cooperative effort with Ducks Unlimited and the Town of Narragansett.

Objective 4 - Promote the Fisheries and Wildlife Resources as a Key Element in Rhode Islands Economy. Trends

• Fish and wildlife resources and the business they support make up a significant sector of Rhode Island's economy. Surveys in 1996 estimated that 163,095 resident and non-resident anglers participated in recreational fishing in Rhode Island, spending over \$136,000,000. This total includes both fresh and saltwater angling. These anglers supported over 3000 full time jobs and generated over \$11,000,000 in state sales and income tax revenue. This same survey estimated that there were over 16,000 Rhode Island hunters who spent an estimated \$20,785,000. In 1996 over 4,000 commercial fishing licenses were issued and the value of the total commercial landings of fish and shellfish greater than \$230,000,000.

Problems

• Fisheries and wildlife resources must be considered and managed as a segment of Rhode Island's economy.

Initiatives

Promote Partnerships

• Develop a partnership with the Rhode Island Economic Development Corporation to promote the economic importance of Rhode Island's natural resources.

Improve Communications

• Prepare and publish public access guides to assist the local and state tourist industry.

Objective 5 - Asset Protection - Improve Division Facilities to Increase Program Effectiveness Trends

• Most of the division's facilities are old and in poor condition. Decrepit facilities limit the capabilities and production of the division. For example, there is no wet lab to support validation and tag retention work. A Plan to consolidate the offices and labs of the marine

- section began several years ago. The division is cooperating with the Division of Planning and Development to build a new marine center at Fort Wetherill Jamestown. Designs are completed. Construction is planned for February of 2000.
- The existing marine research vessel (42' T. J. Wright) is too small and inadequate to properly sample Rhode Island Sound and Narragansett Bay. A contract to replace the existing marine research vessel with a larger vessel (60') capable of multiple sampling techniques has been awarded. Construction will begin in FY 2000.

Problems

- The division does not have a central facility providing the public with access to information on fish and wildlife resources or outdoor recreational opportunities. There is also a lack of classroom, lab, and storage space for the aquatic education and hunter safety programs.
- The division has a substantial investment in heavy equipment, tractors, trucks, and boats. Storage and workshop capabilities are inadequate.

Initiatives

Streamline Processes/Improve Communications

• The division will begin planning a new field headquarters in FY2000 to replace the Great Swamp facility. This new facility will be a center for the Freshwater Fisheries Section, the Wildlife Section, the Aquatic Education Program, and the Hunter Safety Program. This new facility will be equipped with adequate classrooms, meeting areas, and demonstration spaces to accommodate the dissemination of public information and education. The purpose of this facility is to streamline public access to DEM programs and information. These public meeting facilities will be ideal for public hearings, workshops, and community partnerships.

OBJECTIVE: 1 Maintain Healthy and Sustainable Populations of Fish and Wildlife	 ENVIRONMENTAL INDICATORS: Species abundance and distribution Returning Adults Wildlife Population Statistics Abundance – Nesting Colony Birds Landing Statistics Spawning Stock Biomass 	
STRATEGIES	ACTIVITIES	PERFORMANCE MEASURES
A) continue Freshwater Fisheries Surveys	 Continue fisheries surveys in the Pawcatuck River Watershed. Integrate current stream and pond fisheries data into RIGIS database. 	 Sample 8 ponds with the boat electroshocker. Sample 30 stream locations with the backpack electroshocker.
B) Continue Anadromous Fish Restoration monitoring program	Revise the Cooperative Plan for the Restoration of Anadromous Fish to the Pawcatuck River Watershed. (This is a Partnership with the USFWS).	 In fall of 1999 and spring of 2000. Install one additional electronic fish counter on the Hunts River. Stock 500,000 Atlantic salmon parr.
	Complete the Anadromous Fish Restoration Strategic Plan.	• Spring of 2000.

C) Continue wildlife population Management	 Continue research and surveys on all hunted and non-game species Start a new wildlife research project on ruffed grouse. 	Radio tag 40 birds to determine movement and mortality.
	 Collect and analyze information to set proper limits and seasons for the 2000-hunting season. Monitor the 1999 harvest of small game, waterfowl, deer, and turkey. Conduct surveys on population abundance. 	1999-2000spring and summer (2000)
D) Survey Species of Concern – Data Base Management	Continue to monitor all known nesting	• FY 2000
D) Survey Species of Concern – Data Base Management	 sites of piping plover. Attempt to restore, by brush cutting, 10 acres of American Beetle habitat on Block Island. Survey 65 colony nesting bird nesting 	 By 6/30/01 By 6/30/01
	sites.	By 0/30/01
E) Conduct Marine Fisheries Surveys	 Trawl surveys, shellfish surveys, and lobster fishery monitoring will continue. Sampling of juvenile populations in coastal ponds and Narragansett Bay will continue and expand to identifying eel grass and aquatic vegetation in cooperation with EPA and Coastal Resources Management Council. 	 Sample 12 trawl stations monthly Sample 26 Trawl stations biannually Sample 4 Coastal ponds monthly. Sample 18 shore seine stations in Narr. Bay monthly(May-Oct.) Collect shellfish samples from 60 sites in Narr. Bay 40 trips aboard commecricial lobster boats to obtain data on lobster pop.

F) Monitor Commercial Landings	 Increase weekly RI commercial landings data to 10 species. Develop a grant proposal to participate in a cooperative coast wide monitoring program for commercial and recreational species. 	 Initiate collection of daily landings for 2 species. Continue collecting and analyzing 5-day landings for 10 RI trap companies.
G) Complete Management Plans	 Complete inter-jurisdictional management plans for three additional species: horseshoe crab, blue crab, and eel. Add tautog and winter flounder to the list of regional management plans. Cooperate with URI to investigate possible causes for decline of local winter flounder stocks. 	By June 30, 2000By June 30, 2001
H) Support to Rhode Island Marine Fisheries Council	Continue providing technical support for Rhode Island Marine Fisheries Council.	Conduct 12 to 14 regular meetings and 4 to 5 public hearings and workshops.
I) Support to Atlantic States Marine Fisheries Commission	Division staff will complete a regional plan for weakfish.	By June 30, 2001

OBJECTIVE 2: Protect and Restore Habitat. Promote Biodiversity STRATEGIES	Environmental Indicators: • Wildlife Populations Statistics • Waterfowl Population Statistics • Amount of Protected Land ACTIVITIES PERFORMANCE MEASURES	
STRATEGIES	ACTIVITIES	TERI ORIVII II VEE MEN SORES
A) Continue Management Area Operations B) Maintain Waterfowl Impoundment's	 Update operational plans for wildlife management areas. Seed 375 acres with wildlife food and cover crops Harvest 25 acres of timber Plant 500 trees Cut 100 acres of warm season grasses. Mark 10 miles of boundaries. Continue with annual maintenance to waterfowl impoundments. Replace water control structures at Buck Hill and Durfee Hill Marsh. Repair or replace 500 wood duck nesting 	 By June 30, 2001 Spring 2000. Fall 1999. Spring 2000. Spring 2000. By June 30, 2001 Ongoing By June 30, 2001. By June 30, 2001.
C) Secure Land Acquisition	 Acquire two parcels of land totaling 139 acres on the upper Ponaganset River Watershed to protect habit and provide public access. Acquire 300' of frontage on the lower Wood River (Tefft) to protect habitat and provide access. 	By June 30, 2001.By June 30, 2001.
	 Participate in the acquisition of 4 parcels of land totaling 165 acres to be incorporated into the wildlife management areas. 	• By June 30, 2001.

D) Continue Aquatic Education Program	Conduct 5 teacher workshops, 25 ecology	By June 30, 2001.
	programs, 40 recreational training programs, and 6 family presentations.	
E) Review Development Proposals	Continue to conduct environmental reviews as required.	Ongoing
F) Continue Fish and Wildlife Population Assessment	 Continue making information available to the public. Increase data base to include ruffed grouse. 	OngoingBy June 30, 2001.
G) Expedite Wildlife Damage Assessment and Technical Assistance to the Public	The division will work with the Division of Agriculture to address deer damage complaints.	Ongoing

OBJECTIVE 3:	Environmental Indicators	
Improve Recreational Fishing and Hunting	Numbers of Stocked Fish	
STRATEGIES	ACTIVITIES	PERFORMANCE MEASURES
A) Hatchery Operations and Fish Stocking	 Continue with routine operations Repair and maintenance of the hatchery facilities will continue. Capitol improvements planned are: upgrade the electrical system at the Perryville Hatchery rebuild 150 feet of raceway at the Perryville Hatchery and drill test wells on the groundwater aquifer at Arcadia and Lafayette Hatcheries 	 By June 30, 2001. 135,000 trout to be distributed to 82 different locations. 10,000 fingerling bass will be stocked into 5 ponds. 2,000 northern pike yearlings will be stocked into 5 selected locations. Fall 1999 Spring 2000 Fall 1999

B) Public Access Maintenance and Operations	 Continue with the annual maintenance schedules in FY 2000. Replace baffles at the Nonquit Fish Ladder in. Replace guardrail at approximatly 8 public access locations Replace boat ramp surface at Slatersville and Smith and Sayles Reservoirs. Spring of 2000 To be determined in fall of 1999
	 Continue with schedule for annual maintenance of the access areas. Maintain 15 miles of road and 3 miles of trails.
	 Continue operating 4 hunter information centers. Ongoing
	Work with Ducks Unlimited to build a handicap accessible waterfowl blind By June 30, 2001.
	 Work with the Town of Narragansett to develop a handicap hunting area at Fort Greene. Issue 600 waterfowl permits and 150 By June 30, 2001. By June 30, 2001.
C) Public Access Development	deer hunting permits.
C) Public Access Development	 Construct parking areas for Colt Park Boat Ramp and Westerly Boat Ramp
	 Rebuild the Stone Bridge ramp, Tiverton Spring 2000
	 Develop a new shore fishing access area at Barberville Dam, Wood River and Black Point, Narragansett
	 Construct handicap accessible docks for shore fishing at Little Round Top Pond and Carolina Trout Pond Fall 1999

E) Hunter Education	Schedule hunter education, hunter ethics,	• 40 hunter education courses
	& certification.	Certify 1100 individuals
		• 3 special workshops on
		Hunter Ethics

OBJECTIVE 4:	Environmental Indicators	
Promote Fisheries and Wildlife Resources as a Key Element of	More robust natural resources based industries.	
Rhode Island's Economy		
STRATEGIES	ACTIVITIES	PERFORMANCE MEASURES
A) Continue Partnership With EDS	Work with RI Economic Dev. Corp.	Integrate economic importance of
		natural resources into resource
		management decisions
B) Conduct Public Outreach	Prepare RI public access guides to fishing,	Guides published in 2000
	boating, hunting, and other forms of	
	outdoor recreation for the general public	

OBJECTIVE 5: Asset Protection - Improve Division Facilities to Increase Program Effectiveness	 Environmental Indicators Renovated facilities Improved facilities and access. 	
STRATEGIES	ACTIVITIES	PERFORMANCE MEASURES
A) Maintain Division Buildings and Facilities	Continue with maintenance of division facilities- weekly cleaning, painting, carpentry, exterior work, etc.	Ongoing

B) Fort Wetherill Marine Resource Management Center	 Complete design of wet lab, including saltwater system Obtain all permits. Issue purchase order to contractor Begin construction 	By September 1999.By December of 1999.By February of 2000.By April of 2000.
C) Great Swamp Field Headquarters	 Provide the Division of Planning and Development with a conceptual needs document. Obtain archetectural consultant for design of new field headquarters 	By December of 1999By May 2000
D) Marine Research Vessel	 Obtain contract for design of new 60' research vessel to replace RV Thomas J. Wright. Complete vessel construction 	• By June 2000.