

**CHARLESTOWN WORK PLAN
YEAR 5 & 6
APRIL 1, 2004 TO MARCH 31, 2006**

**Block Island and Green Hill Pond Watershed, Rhode Island EPA National Community
Decentralized Wastewater Treatment Demonstration Project
Town of Charlestown Annual Work Plan
April 1, 2004 to March 31, 2006**

PROJECT OVERVIEW (From Project Scope)

The purpose of this project is to establish sustainable wastewater management programs in two project locations (Block Island and Green Hill Pond watershed) using site specific performance standards and a range of technologies to reduce pollution to local water resources while accommodating environmentally sound development. This project is designed to build local capacity for managing community wastewater management programs by strengthening local expertise and creating management structures for the town management of onsite systems beyond the life of this Demonstration Project. The primary purpose is to fully implement wastewater management programs in the Green Hill Pond watershed communities of Charlestown and South Kingstown by adapting risk-based methods similar to those of New Shoreham, that suit local needs.

MILESTONES

- ❖ Continue to implement educational strategy
- ❖ Develop penalty procedures to residents who have not had their septic system inspections; accelerate in Green Hill Pond Watershed.
- ❖ Complete inspections in the Green Hill/Ninigret area.
- ❖ Participate in updated wastewater needs assessment of the Green Hill /Ninigret Pond watersheds and drinking water supplies by URI and RI Department of Health.
- ❖ Implement wastewater treatment standards for Green Hill/Ninigret.
- ❖ Adopt wastewater treatment standards for new systems, repairs, and retrofits in Green Hill (including basic tank improvements, tank retrofit, cesspool phase-out, and advanced treatment in critical areas).

CHARLESTOWN ANNUAL WORK PLAN: PROJECT YEARS 5 & 6

OBJECTIVES, ACTION ITEMS AND TASKS	CHARLESTOWN ANNUAL TASKS AND RESPONSIBILITIES	YEARS 5&6 4-01-04 to 3-31-06
OBJECTIVE 1.	Develop and maintain a process to coordinate and manage the project with community involvement.	
Action 1.1	Establish and maintain a coordinated project management structure.	
Task 1.1a	<i>Organized local project steering committee Continue monthly or as needed local Wastewater mgt. Commission meetings to ensure implementation of workplan Select representatives for Project Team Finalize representatives to Overall Project Steering Committee Participate in monthly Project Team Meetings(includes representatives from the towns, URI, EPA and RIDEM) Participate in annual or biannual Steering Committee Meetings</i>	Complete Ongoing Complete Complete Ongoing Ongoing
Action 1.3	Administer project, document impacts, and report progress	
Task 1.3b	<i>Identify progress indicators and measure success. Submit monthly progress reports to accompany invoices</i>	Ongoing
Task 1.3 c	Develop annual workplan by March 1 of each project year as per contract.	
Task 1.3e	<i>Quarterly progress reports. Prepare quarterly reports that summarize monthly progress reports and in addition contain narrative reports of such things as monitoring data, inspection reports, retrofit program, education initiatives, computer tracking with database, etc. These reports are due 1 month following the close of each quarter.</i>	Due first week of April, July, October and, January for preceding 3 months.
OBJECTIVE 2.	Identify wastewater treatment needs using Geographic Information System-based	

	assessment methods and select management alternatives considering a range of land use planning techniques and wastewater treatment technologies capable of meeting resource-specific water-quality goals.	
Action 2.1	Expand and maintain local GIS database	Ongoing
Task 2.1a	Develop procedures to incorporate locations of new/repared systems in GIS database and link to related system information in septic system database.	July 01- ongoing
Task 2.1b	<i>Update Town GIS database using field data on site conditions and system conditions collected under Objective 3</i>	July 01-ongoing
Task 2.2	<i>Town representatives will participate in the updated needs assessment for Green Hill Pond, provide local GIS coverages, and inspection data from the septic system tracking program, as it becomes available. The first assessment meeting is scheduled for February 6, 2001.</i>	Ongoing
Task 2.3b	<i>Cooperate with project planning consultant to develop land development standards to limit more intensive use of the Green Hill area possible with improved wastewater treatment.</i>	Early spring 05
OBJECTIVE 3.	Through field investigations, determine suitability for on-site wastewater treatment and identify parcel-specific wastewater management options in selected high-risk septic system failure areas. (NOTE: This field investigation is designed to identify on-site system suitability in problem neighborhoods specifically to develop repair options for the neighborhood. This is in addition to the Town's regular inspection program. This fieldwork will follow the updated map analysis of Green Hill Pond under Objective 2, which is scheduled to begin February 6, 2001.	
Action 3.1a	Inspect septic systems in priority high-risk areas	Ongoing
Task 3.1b	<i>Identify inspection responsibilities and develop schedule. Initial inspections will be conducted in the Green Hill Pond Watershed Area.</i>	Complete
Task 3.1c	<i>Conduct inspections and update town septic system tracking database.</i>	Ongoing
Action 3.2	Determine site suitability for on-site wastewater treatment in targeted problem areas.	Ongoing
Action 3.3	Analyze and select parcel-level septic system remediation alternatives.	
OBJECTIVE 4.	Retrofit, repair or replace septic system in high risk 'high spots' using a range of innovative and alternative technologies through demonstration system installation.	
Action 4.1	Repair failing systems and provide enhanced wastewater treatment in critical areas.	
Task 4.1a	<i>Develop criteria for selection of demonstration systems.</i>	Complete

<i>Task 4.1d</i>	<i>Explore enforcement options and Town oversight needed to monitor and enforce system maintenance agreements.</i>	Ongoing
Action 4.2	Retrofit existing systems with tank improvements.	
<i>Task 4.2c</i>	<i>Explore the feasibility of developing a tank retrofit assistance program for the Green Hill Pond Watershed. This may include development of an ordinance to require retrofitting functioning tanks.</i>	
OBJECTIVE 5.	Establish inspection based septic-system maintenance and repair ordinances with support administrative procedures, technical guidance, inspection tracking database, and long term financing mechanisms.	
<i>Task 5.1a</i>	<i>Hire a Wastewater Management Specialist</i>	Complete
<i>Task 5.1b</i>	<i>Develop procedures to implement required inspection program with enforcement methods for Green Hill (Year 2), followed by full town (Year 3).</i>	Complete
<i>Task 5.1c</i>	<i>Research and identify long term funding mechanism to maintain municipal inspection programs operated by either town staff or by private contract at the close of the demonstration project. Procedures should be established by end of Year 3.</i>	Ongoing
Action 5.2	Maintain septic system inspection database; ensure compatibility with RIDEM inspection procedure.	Ongoing
<i>Task 5.2a</i>	<i>Maintain and update town septic system inspection / repair databases.</i>	Ongoing
<i>Task 5.2b</i>	<i>Share data between Charlestown /South Kingstown and ensure databases are compatible.</i>	September 01-ongoing
OBJECTIVE 6.	Establish wastewater treatment standards in the Green Hill Pond Watershed for new systems and repairs.	
Action 6.2	Green Hill Pond: Develop and adopt risk-based wastewater treatment standards using the Block Island approach as a model (6.1 applies only to Block Island; 6.2 applies to Charlestown).	Waiting for URI to come out with treatment standards
<i>Task 6.2a</i>	Cooperate with URI to recommend treatment standards for upgrade of existing systems, repairs, and new construction in the Green Hill/Ninigret watershed area.	Winter 2004-Spring 2005
<i>Task 6.2b, d</i>	<i>Incorporate wastewater treatment standards into town plans, ordinances, and regulations.</i>	Summer 2005
Action 6.3	Revise zoning and land development regulations to minimize nonpoint source pollution	Fall 2005
<i>Task 6.3 c</i>	<i>Incorporate neighborhood-specific land development standards (developed under 2.3b)</i>	Fall 2005
OBJECTIVE 7.	Encourage the participation, and expansion of existing financial assistance programs to create additional homeowner incentives to retrofit, repair on-site wastewater systems in	

	accordance with risk-based performance standards.	
Action 7.1	Promote the use of low interest loans for system improvements through the Rhode Island Community Septic System Loan Program (CSSLP)	Ongoing
Task 7.1b	<i>Explore options for limited grants for system repairs and retrofits in critical resource areas where advanced treatment systems are needed / required. Goal for program in place at end of Year 2. In addition to existing program develop protocol for using project retrofit repair funds</i>	January 03-ongoing
Task 7.1c	<i>Establish protocols for use of loans / or limited grants with low / moderate income guidelines.</i>	Protocols complete; program ongoing
Action 7.2	Explore financial programs and other incentives to encourage system improvements.	Ongoing
Task 7.2a	<i>Investigate incentives to assist Charlestown residents to comply with repair, retrofit and upgrading requirements of town ordinances.</i>	Ongoing
OBJECTIVE 8.	Through training and technology transfer, build capacity of town staff / consultants to effectively administer septic system management programs, and of local wastewater professionals to design, construct and maintain alternative on-site wastewater technologies.	
Action 8.1	Train town staff and others to conduct soil-based site evaluation.	
Task 8.1b	<i>Work with URI to review initial applications for advanced wastewater treatment systems, conduct site evaluations and select appropriate systems for each.</i>	Complete
Action 8.2	Work with URI to design and conduct training in system inspection, design, installation, repair and maintenance. Help promote and advertise workshops. Participate in training offered.	Ongoing
OBJECTIVE 10.	Design and implement a monitoring program to track water quality trends in surface and ground waters, and provide results of this monitoring and related local research in an accessible format to local decision makers and the general public.	
Task 10.1a	Appoint representative to the Project Water Quality Monitoring Subcommittee.	Complete
Task 10.1b	<i>Design a water quality monitoring plan with URI assistance; update for Spring 2001.</i>	Complete
Task 10.1c	<i>Oversee the monitoring program and organize the volunteers.</i>	Ongoing
Task 10.1f	<i>Provide monitoring results in a user-friendly format for residents and visitors.</i>	Ongoing
OBJECTIVE 11.	Design and carry out an outreach program to promote adoption of wastewater management practices and report project accomplishments to local, state and national audiences.	

Action 11.1	Build local awareness of, support for, and compliance with local wastewater management programs.	Ongoing
<i>Task 11.1a</i>	<i>Charlestown Wastewater Management Commission has established an Education Sub-Committee.</i>	Ongoing
<i>Task 11.1b</i>	<i>Design and implement an outreach strategy targeted to specific audiences within Charlestown, such as homeowners, renters, tourists, and business owners. Meetings with Rhode Island Home*A*Syst program and URI are taking place to define the target audiences and to discuss the implementation of the project. Education efforts hope to relay pertinent information to Charlestown residents concerning the use of innovative / alternative systems and mandatory inspection procedures.</i>	Ongoing
<i>Task 11.1d</i>	<i>Develop and distribute educational materials for targeted groups, exploring a variety of methods for delivering information, from newspapers to workshops.</i>	April 00 - ongoing

CPAD student responsibilities

Select Green Hill Pond neighborhood study area(s). Consult SK village mapping project for areas residents have noted as having desirable features and protection priorities.

Map impervious cover (using orthophoto maps probably) and correlate to average lot size. Develop neighborhood-scale impervious cover estimates that include roads and other paved areas outside of individual lots.

Compare with published impervious values (USDA, NEMO and Randhir) and with town lot coverage regulations.

Compare present building dimensions and setbacks (in neighborhoods with desirable character) with town zoning standards. Evaluate whether recent new construction and expansions are allowable under present standards or require special use permit or other approval (include wetland setbacks). Also consider whether standards are not restrictive enough.

Identify the type of zoning board actions taken in the area and map.

Evaluate and recommend site-specific zoning and land development standards for new construction and redevelopment. Consider for example: building height, setbacks and frontage; lot coverage and maximum impervious area; and maximum wastewater design flow (regulated by building size and /or number of bedrooms) to limit total wastewater loading. Cooperative Extension will develop recommendations for stormwater control and wetland buffer protection /restoration.