Wastewater Management Made Easy!
Shape Up Your Program in 3 Practical Sessions

Fall 2007 Workshop Series

**Workshop #1**
Select a Management Approach & Build Your Database
October 26, 2007

**Workshop #2**
Create Consistent Forms, Reports & Procedures
November 30, 2007

**Workshop #3**
Send Notices, Track Progress and Generate Reports
January 18, 2008
Community Management Options

October 26, 2007

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Topics

• Management options – from education, maintenance of alternative systems to mandatory inspections.

• Sample education and outreach methods, ordinances in initial program efforts.

• Open discussion - best-fit options for communities, successes and progress to date, planned activities.
Management Options

1. Voluntary – education and financial incentives
2. Track maintenance of alternative systems.
3. Mandatory inspection and maintenance of all system types.
4. Cesspool phaseout
5. System standards- siting, treatment, site assessment and monitoring
Choosing a Management Approach

Let the Wastewater Management plan be your guide to:

• Level of management
• Critical areas to focus effort,
• Funding, staff and oversight

Ensure consistency with the Comprehensive Plan - Has the wastewater plan been adopted as an element of the Comp Plan?
Approaching It In Phases

There are many options to ease into a management program:

• Target only critical areas with sensitive water resources or areas of dense, substandard development.

• Adopt an ordinance requiring mandatory inspection and maintenance, but allow a period of voluntary compliance.

• Establish standards for the use of alternative systems beginning in wetland buffers.

• Begin a tracking program to monitor inspection results, but focus initially just on alternative systems, large flow systems, and commercial systems.
Voluntary - Education and Financial Incentives

What's your message? What will motivate action?
- Keep system maintained to avoid costly failure;
- Protect your private well and family’s health,
- Do your part to protect local water resources.
- Address related issues – water conservation.

What you want residents to do? Education should be designed to promote specific action.
- Use and maintain system properly.
- Hire town-approved inspectors to inspect/maintain system.
- Retrofit tank with access risers and filters.
- Plan to replace cesspools
- Keep alternative system maintenance contract active
- Apply for low interest loans/ grants to repair/upgrade a system.
- Be aware of local watersheds/ aquifers and take other pollution prevention measures.
...Voluntary - Education and Financial Incentives

**Pros**
Easy to implement
Low risk area may be sufficient to protect water quality and meet plan requirements.
Begin to generate awareness, build support for mandatory inspections.

**Cons**
Limited effectiveness – Charlestown found voluntary inspections resulted in only cream of the crop being inspected.

Need inspection results to learn about system type and condition – Charlestown used low response to argue for mandatory approach.
Voluntary - Education and Financial Incentives

Outreach Materials and Methods

• Direct mail to residents in on findings of wastewater management plan and need for septic system maintenance.

• Include fact sheet on system types, routine care, inspections, pumpouts – URI factsheet series

• Press release on educational initiative – link to current hot topic – growth, contamination, etc.

• Pair with newspaper notices and articles and town newsletters on need for maintenance, basic O&M. Example town newsletters – NK water bill insert “the Puddle”, Charlestown newsletter, Glocester adds for low interest loans in local free newspaper, BI Times notices, and Hopkinton newspaper insert.

• In private well areas, schedule URI well protection workshops and sample collection.
• A variety of educational materials and methods are available.
Sample factsheets inspection procedures, pumpout, access risers and filters, system care, and local program summary to be included with scheduled notices.
Phasing in Mandatory Inspection and Maintenance for Alternative and Large Flow Systems

- Select critical areas only or townwide.
- Begin with new construction and require maintenance contract, recorded on property deed.
- Track maintenance reports, review service providers’ notice of cancellation.
- Expand tracking to include existing systems.
- As resources permit, review O&M of system components.
- Require performance monitoring for large systems, other alternative systems in critical areas.
Outreach
Initial notice to system owners of need for I/A maintenance and requirement (DEM and/or Town) for contract.
Similar notice to system owners at property transfer.
Reminder sent if notice received of system cancellation, with copy to DEM.

Example ordinances
- South Kingstown Wetland Buffer Zoning provision requires use of advanced treatment system as condition of approval for special use permit, with use of I/A system noted on property deed.
- Maintenance contract required for I/A systems in Cumberland (proposed Cumberland Water Resources Overlay district) and recorded on property deed.
- Charlestown requires continuous maintenance contract.
- Jamestown beginning to track operation and maintenance.
- Barnstable County, MA tracks effluent monitoring data for all I/A systems.
Mandatory Inspection and Maintenance of all system types

Mandatory Inspection, pumpout and repair as needed.
• Establish in critical areas and maintain voluntary program in low-risk areas of community
• Or phase in town-wide as needed.

Issues:
• Some towns have required regular pumping intervals such as once /3 years to start. Difficult to later switch to pump as needed. Raises awareness but does not address failing systems.
• Ensure adequate septage capacity and inspectors/pumpers to handle demand.

Outreach – communication sequence on the URI web.
Technical support – is there someone at the town hall to answer questions? Need for communication with mandatory program increases staff needs, especially with large number of systems.
Wastewater Districts

1 - All properties served by a private well and ISDS or cesspool;

2 - All properties located in Zone 1 Groundwater Protection Areas and all properties located adjacent to poorly flushed coastal areas;

3 - All properties located in Zone 2 Groundwater Protection Areas and properties located in densely settles coastal areas;

4 - all other properties in North Kingstown served by ISDS or cesspools.

Consider Phasing out cesspools in critical areas or townwide
• Annual pumpouts for all cesspools.
• Immediate removal for failing system that is health threat
• Removal within 1 year of property transfer.
• Removal within xx years following first inspection.

Examples:
Block Island, Charlestown, South Kingstown; Tiverton water supply overlay zone.

Issues: More difficult to implement without a mandatory inspection program.
System standards – siting, treatment, site assessment, monitoring

A variety of local ordinances regulate location of onsite systems within wetland buffers, density within aquifers, and need for advanced treatment within critical areas, most commonly within wetland buffers.

Examples:
• North Kingstown – use of advanced treatment systems within wetland buffers on substandard lots within aquifer overlay zone;
• Tiverton – advanced treatment within wetland buffers in drinking water overlay districts.
• South Kingstown – advanced treatment and site specific soil survey within wetland buffers as condition of special use permit.
• Jamestown – high water table district requires use of advanced treatment in high water tables in designated areas of dense development.
• Block Island – full treatment standards

Issues:
Need for technical support and assistance to homeowners greater with advanced treatment requirements.
RI HEALTH supports RI NEMO outreach to municipalities to protect drinking water sources.

The Town of Jamestown is working with URI to provide training and technical support to RI municipalities in use of RIWIS.

RIWIS was developed under the EPA Block Island and Green Hill Pond Watershed Community Wastewater Demonstration Project in partnership with the towns of South Kingstown, New Shoreham and Charlestown.

Thank you to our funding agencies and partners:
Topics

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Open discussion - best-fit options for communities, successes and progress to date, planned activities. Your need for ordinance examples and educational materials.
www.uri.edu/ce/wq/RESOURCES/wastewater