Creating a Consistent Statewide Wastewater Management Program

RIWIS July 26, 2007
University of Rhode Island, Kingston RI

Lorraine Joubert, URI NEMO
Topics

- RIWIS – A new Statewide Database for Local Wastewater Management
- Resources for Wastewater Managers at the URI Onsite Wastewater Resource Center website
- Next Steps
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RIWIS Background

- There is a recognized need for a state-wide computerized wastewater information management system.
- There is an urgent need for state-wide tracking of performance, operation and maintenance of large flow and I&A systems.
- Several RI communities are using Carmody™, 2 towns having switched after considerable investment in other tracking programs.
RIWIS Inception

- In December of 2005, URI Cooperative Extension applied for a grant to develop a standardized state-wide information system for onsite systems.

- Several communities and non-government organizations wrote strong letters of support.

- We did not get the grant but interest was still strong to find other ways to fund the project.
Moving Forward: Sponsorship Program

- Scott Carmody presented concept of RIWIS Sponsorship program to URI
- RIWIS would be funded by industry sponsors and provided essentially free of charge to URI, RIDEM, other state agencies, and Rhode Island Communities
- Representing a substantial cost savings to communities
RIWIS – Now up and running with private sponsors at www.riwis.org

The Rhode Island Wastewater Information System (RIWIS) provides a paperless state-of-the-art software solution to effectively monitor the operation and maintenance of Rhode Island’s septic systems. The RIWIS Green Ads program will save each participating Town thousands of dollars in software, clerical duties, data entry, training, and support costs every year that would otherwise be paid for by tax dollars.

The sponsors that purchase our green ads below are active participants investing in a healthy environment for Rhode Island citizens.

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Common Questions

1. What are the benefits of web-based tracking program?
2. How does a “sponsorship program” work?
3. How is RIWIS a State program?
4. How can my community benefit from RIWIS?
Benefits of a Web-Based Tracking Program

- Access from any internet connection
- Password protected
- Secure with daily back-up
- Easy to link with other databases and GIS
- Enhances coordination among service providers, communities, and the state
- Facilitates inter-agency communication
Capable of Tracking:

- Inspection and compliance information
- Pump-out records
- Permit information
- NOV’s and correspondence
- Cesspool phase out
- Maintenance of enhanced treatment systems
- Commercial, large and high flow systems
- Alternative and innovative systems with multiple components in treatment train
- Sampling / monitoring results and analyses
Other Capabilities:

- User can upload documents, letters, CAD drawings, etc.
- Point-n-click mailing feature
- Access to real-time information
- GIS compatibility

Other municipal capabilities

- Online permitting
- Pavement Management Program
- Harbor / Mooring Permit Database, etc…
Automatic Inventory and Notification Services

- Systems needing inspections
- Overdue inspections
- Systems that failed inspection
- Systems needing repair or maintenance
Sponsorship Program

- Disclaimer: A Sponsorship does not constitute an endorsement from Carmody Data Systems, The University of Rhode Island, or Rhode Island Department of Environmental Management.

- If a sponsor is in violation with RIDEM, they agree to forfeit their sponsorship, as specified in the sponsor agreement.
Advertisements will be kept on the “login” page only and will not interfere with users or function of the system. There will be no pop-ups or flash banners.

The sponsors will not have access to the database, unless they are also a local service provider, in which case they would have access to only their client’s information.
Sponsorship Program

- Sponsor logos included on URI course schedules, workshop flyers and agendas when RIWIS workshops offered.

- Sponsor logos on URI RIWIS webpage.

- Sponsor application in today’s handout packet.
How is RIWIS A State Program?

- Often confused w/ DEM Program.
- RIWIS is available statewide for local wastewater managers and service providers.
- RIWIS towns, with URI and Carmody, have developed a simple, standardized format that can be compatible for all RI Communities.
- Each sector / user essentially has their own database.
- It has the potential to unite all sectors of RI wastewater management.
RIDEM’S ROLE

- Has made ISDS Permit & Application data available to participating communities.
- This data provides a barebones “state” database.
- Provide periodic updates to RIWIS.
- Access to this information allows communities start building a WWM program even before adopting ordinances.
- May use RIWIS to track performance of large systems subject to DEM permit requirements.
URI’S ROLE

- Worked with Carmody on RIWIS concept
- With towns, developed “management blocks” to ease community WWM
- Worked with RIDEM to acquire permit database.
- May use monitoring data to research and evaluate system performance in future.
- Provide regular training and technical support to RIWIS users.
Service Provider Benefits

- Potential for Consistent Reporting for All Towns
- One Username & Password
- Free Management Program
  - Can Track When Clients are due for service
  - Notify Communities when client doesn’t renew contract
  - Instant access to client information
  - Secure & Password Protected
  - Different levels of access keep private information safe, while automatically reporting required information to state and communities
Community Benefits

- Consistent with other towns
- Easy access to state information
- Flexibility!
- Pre-set inspection reports, fact sheets, and letters that communities can use & edit with specific town requirements
- Essentially FREE ($100 a year membership)
- Setup support available in 2007 through work sessions & technical assistance to towns with drinking water supplies.
Topics

- RIWIS – A new Statewide Database for Local Wastewater Management

- Resources for Wastewater Managers at the URI Onsite Wastewater Resource Center website

- Next Steps
Onsite Wastewater Resource Center website

www.uri.edu/ce/wq/RESOURCES/wastewater

Designed for wastewater managers as a guide to the entire process of establishing a Wastewater Management Program.

Provides baseline program materials freely available to download and use directly or adapt.

A work in progress - to be completed summer 2007
Main Components of website

- Local Wastewater Management in RI
- Onsite System basics – conventional and advanced treatment systems.
- Wastewater Manager’s ToolKit
- Research, assessment and monitoring
- Resources – Workshop, publications.
“Management Blocks”

- Sequence of steps for implementing inspection program.
- Downloadable letters for communication with system owners and inspectors.
- Each letter accompanied by suggested attachments such as:
  - Inspection procedures,
  - List of town-registered service providers,
  - Financial aid information.
### Sample Sequence of Town Mailings to Property Owners

Click on the links below to see suggested mailings for each event, including links to sample letters and fact sheets.

To see the flowchart version, click here.

<table>
<thead>
<tr>
<th>Event</th>
<th>Description</th>
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| 1. Ordinance Passes | Residents need to be made aware of new ordinance  
  a. Early Education to all residents  
    1. Letter detailing ordinance and regulations  
    2. What’s In Your Backyard? |
| 2. Maintenance Schedule Created | Residents need to schedule inspection  
  a. First Maintenance Inspection Letter to selected residents  
    1. Town Program Info  
    2. Town Approved Service Providers  
    3. First Maintenance Fact Sheet  
    4. Tank Upgrades Fact Sheet |
| 3. System Passes Inspection and Needs Pumping |
| 4. System Passes Inspection and Does Not Need Pumping |
| 5. System Fails Inspection |
| 6. Inspection Not Done |

Expand with assistance from Town of Charlestown

Sample letters to system owners with factsheets and other information organized for input into RIWIS.

[www.uri.edu/ce/wq/RESOURCES/wastewater](http://www.uri.edu/ce/wq/RESOURCES/wastewater)
Sample factsheets on inspection procedures, pumpouts, access risers and filters, system care, and others readily accessible.
Topics

- RIWIS – A new Statewide Database for Local Wastewater Management
- Resources for Wastewater Managers at the URI Onsite Wastewater Resource Center website
- Next Steps
RIWIS is a powerful database that can be customized to suit town needs.

Charlestown, Jamestown, New Shoreham, have invested considerable time and resources to create efficient and consistent procedures.

These procedures and “management blocks” for coordinating with homeowners and service providers create a baseline wwm program to ease town start up.
Summary and Next Steps

To fully implement a consistent statewide program, compatible baseline reports are needed to include:

- Consistent terminology in RIWIS
- Service provider applications with consistent requirements for training, insurance, etc.
- 1\textsuperscript{st} maintenance report
- Routine maintenance report
Summary and Next Steps

Consistent procedures are needed for alternative systems to ensure equal & fair standards, with good quality control:

- Statewide reporting for alternative systems.
- Manufacturer’s inspection and maintenance reports for alternative systems.
- Notification in RIWIS of maintenance contract cancellation for alternative systems, others with pumps and large flow.
- Field observations and low-cost sampling to verify performance (odors, pH, DO, turbidity, clarity, etc.).
- Lab monitoring data reported for large flow systems.
For municipalities, establishing *consistent* procedures statewide is voluntary.

- Requires cooperation among towns and service providers.

- What are service providers’ issues?

- What are municipal wwm’s issues?

- How can each RIWIS user group promote development of a consistent statewide program?
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.

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

Thank you to our funding agencies and partners:
Resources

Onsite Wastewater Resource Center:
www.uri.edu/ce/wq/RESOURCES/wastewater

To learn more about RIWIS contact Scott Carmody:
Carmody™ Tel: 608-846-0234
Carmody Website: www.carmody.biz
RIWIS web: www.RIWIS.org

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New England Onsite Wastewater Training Center
George Loomis and David Kalen
Tel: 401-874-4558, gloomis@uri.edu
www.uri.edu/ce/wq/
Questions?

"It's strange. We just had the septic tank pumped out twelve years ago!"
Summary

- The URI online resource center provides resources to communities looking to establish, implement, or expand a wastewater management program.
- Practical easy to use materials based on proven municipal experience.
- Management blocks with procedures and supporting materials to be further developed and incorporated into RIWIS with local input.

www.uri.edu/ce/wq/RESOURCES/wastewater
What URI is doing to support local use of statewide database.

- Work with town partners and Carmody Inc. to set-up consistent baseline program for RI Communities to adopt.

- Work with DEM to collect data on I/A systems statewide, and submit to Carmody to populate the database.

- Work with Carmody Inc. to create and demonstrate how sampling reports can be imported into the program. (using existing URI data for Charlestown)
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Rhode Island Wastewater Information System

The Wastewater Information System (RIWIS) provides a paperless state-of-the-art software solution to effectively monitor the operation and maintain wastewater systems. The RIWIS Green Ads program will save each participating Town thousands of dollars in software, clerical duties, data entry, training and could otherwise be paid for by tax dollars.

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You can learn more about our services at: www.carmody.biz
Investigate opportunities for making Rhode Island -customized septic system tracking software readily accessible to other Rhode Island communities at low cost.
Topics

- RIWIS – A new Statewide Database for Local Wastewater Management
- Resources for Wastewater Managers at the URI Onsite Wastewater Resource Center website
- Next steps - Enhancing consistency, implementing statewide - you input
Topics

- What is RIWIS – A new Statewide Database for Local Wastewater Management
- What it is and / How we got here- rumor control
- RIWIS features – What it can do - Pros and cons for all, Service providers, towns, DEM, URI.
- What it might do - Future directions — all systems statewide, monitoring data, cesspool phaseout? Crystal ball -
- Making it happen -Resources at the URI Onsite Wastewater Resource Center website
- What we hope to accomplish today – start conversation - explore possibility of developing consistent methods and procedures among communities. What’s needed to voluntarily reaching agreement on consistent town programs. What are service provider issues and how can a statewide program help them, how can municipalities and service providers work together?

- This workshop for service providers and intro for towns –real mgt issues and program development to be addressed in 3 follow up work sessions for towns. Sept, oct., nov.
Topics

- Service provider pros and cons
- Consistency statewide vs. 39 different application requirements, reports, computer programs, terms.
Topics

- Municipal wwmgr pros and cons
- Wave of the future – all systems statewide, monitoring data, cesspool phaseout?
Summary

- RIWIS is an inexpensive but powerful management program that provides service providers and communities with their own database, that has access to RIDEM data, and is compatible with proven “management blocks” developed by URI with towns.
- 6 RI towns have joined and many others have expressed interest.
- Together, Wastewater Resource Center and RIWIS provide major support for local wastewater management.
RIWIS is a powerful database that can be customized to suit town needs.

Charlestown, Jamestown, New Shoreham, have invested considerable time and resources to create efficient and consistent procedures.

These procedures and “management blocks” for coordinating with homeowners and service providers create a simplified “plug and play” program for towns starting up now.

www.uri.edu/ce/wq/RESOURCES/wastewater