

Creating & Sustaining Successful Water Quality Programs



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Program History

- Need identified in the early 1970s for proper onsite wastewater treatment to protect MN lakes.
- The education program and corresponding certification started as voluntary in 1974 with 1 part time University trainer and limited regulatory assistance
- Over the next 15 years, 2/3 of MN 87 counties required the certification to obtain septic permits.
- This led to the adoption of a statewide law with mandatory licensing and education in 1994.
- This effort spearheaded by state contractors association with support of regulatory agency and University
- Currently provide education for 2,000 industry, government and academic professionals.
 - Training to get license: design, install, maintenance and inspection
 - Continuing education: 20 varying topical training
 - 3 full time University trainers, limited regulatory assistance

Overall Program Goal

Protecting public health and Minnesota's environment through proper wastewater treatment

- Serving as partner and leader in the industry when appropriate
- Partnerships within University – Water Resources Center, Extension, College of Food, Agriculture and Natural Resource Science, Soil Water and Climate, Civil Engineering, Public Health, etc
- Partnerships outside – State regulatory agency, Local Units of Government, Consortium, Contractors Associations, Industry, EPA Region 5 group, Rural Development, Public Facilities Authority, Midwest Assistance Program, Minnesota Rural Water Association, Minnesota Association of Small Cities, etc

Three Primary Components of the OSTP

1. Education for Professionals ~2000 companies
2. Education for Homeowners & Small Communities ~ 1/2 million
3. Research and demonstration supporting educational efforts



Three Successful Attributes

1. Collaborative

- Strong relationship with regulatory and professional base
- Grew from the bottom up with the help and support of the contractors.

2. Visible

- In the field providing technical assistance
- Written materials: Detailed technical manual, fact sheets, web site,
- Local, state and national speaking engagements
- Recognized as one of the largest and strongest septic system program across the US

3. Sustainable

- 3 technical program staff are sustainably funded through workshop fees and supplemented with grant funding to develop materials and conduct research.
- 2 administrative positions are funded
- 3 Extension position are funded to do homeowner and small community

OSTP Website: <http://septic.umn.edu>

Onsite Sewage Treatment Program (OSTP) | Water Resources Center | University of Minnesota - Mo

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Water Resources Center

What's Inside

About the WRC
Staff
Research
Outreach & Public Engagement
Animal Waste Management
Drinking Water and Human Health
Environmental Restoration
Nutrients and Water Quality
Water Policy and Economics
Watershed Management
Youth and Water Resources

Education
News and Events
Publications
Water Links
Expertise Directory

Onsite Sewage Treatment Program

The Onsite Sewage Treatment Program at the University of Minnesota is dedicated to protecting public health and the Minnesota environment through proper onsite wastewater treatment. Our staff includes engineers, soil scientists, extension educators and University faculty.

Information for Wastewater Professionals	Information for Homeowners
Information for Realtors	Information for Small Communities
Research	Workshops and Events

Specific objectives of our program are to:

- Teach proper system operation and maintenance,
- Teach proper design, installation and inspection,
- Provide research-based information about new and existing technology, and
- Assist residents and local governmental units with regulations and planning.
- To help small communities develop and implement wastewater treatment systems with an emphasis on management

Contact Us
septic@umn.edu

Onsite Sewage Treatment Program

Main
Communities
Homeowners
Links
Professionals
Publications
Realtors
Research
Staff
Workshops

Hot Topics
Minnesota Rule Changes
Manual Revision Process

In Partnership:
Water Resources Center
University of Minnesota
Extension Service
College of Food,

Evaluation Strategy

- Over the last 30 years the number of “failing” septic systems has dramatically reduced
- Post evaluations of all work shops
 - Professional
 - Homeowner & small community
- Strong industry feedback on continual basis
- When professionals and counties have a problem they call us
- Materials and courses are developed based on work shops feedback, questions and technical assistance:
 - Anoka sand plain
 - New technology training
- New evaluation processes are in the works
 - Post evaluation of newly licensed professionals 1 – 2 years after working in the field
 - Follow up with communities on impacts to projects of training

Conveying Success

- Delicate balance
- Growth of our program from 1 part time position to 8
- Availability to assist when needs develop
- Growing base of collaborators who see the value in our program
- Reporting, newsletters, web site, etc
- Broader program goals discussed with all audiences
- Participate in national training programs and associations

Education for Professionals

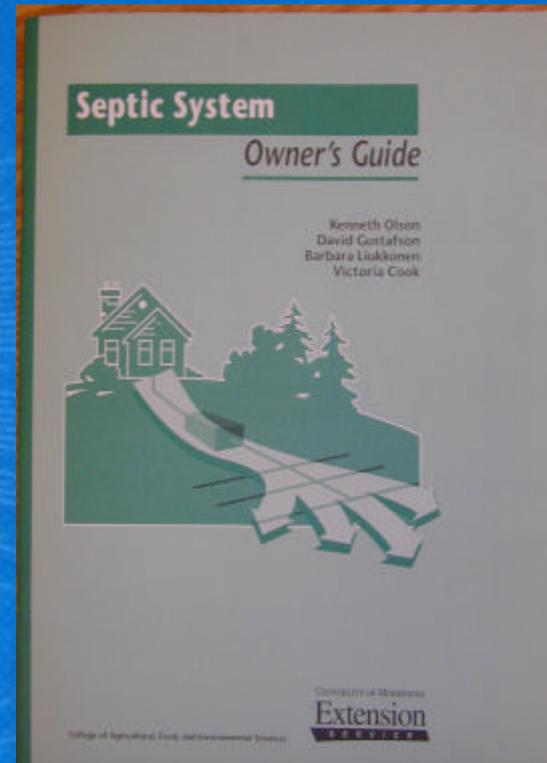


Goal: To assist professionals including designers, inspectors, installers, service providers, pumpers, inspectors and regulators in understanding rules, science and application of onsite wastewater treatment.

Professional Activities

- Annual extensive schedule across MN
- Specialty workshops upon educational needs at the request of industry regulators (local units of government and state) and suppliers
- Submit papers and speak at numerous national events
- Manual is undergoing large update to match the new rules
- Management plan development
- New workshops next year to meet new license requirements:
 - Service provider
 - Advanced unit designer
 - Cluster system designer
- Provide leadership to state advisory council on septic systems
- Consortium of Institutes for Decentralized Wastewater Treatment (CIDWT)
 - University and professional training materials
 - O&M Service Provider Training Material
 - Upcoming Installer Training Materials
- Serve on board and chair education committee/conference for local wastewater association – MN Onsite Wastewater Association (MOWA) and National Onsite Wastewater Recycling Association (NOWRA)

Education for Homeowners

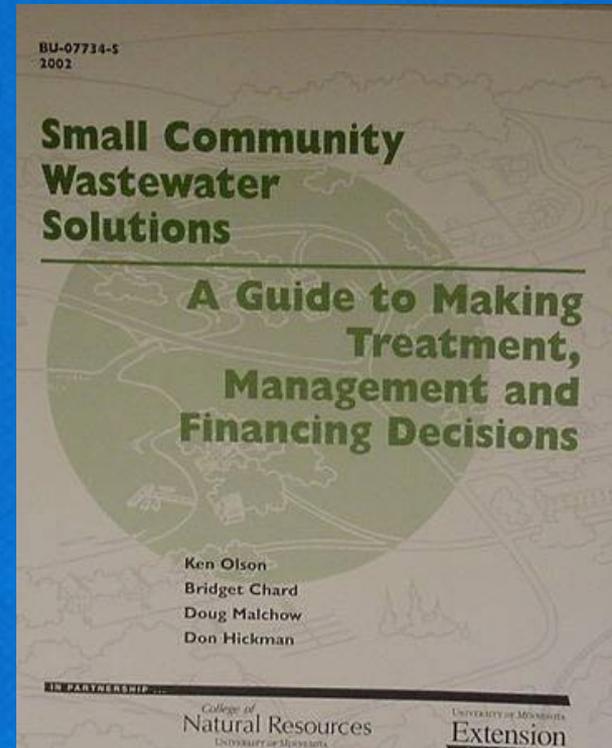


Goal: Provide information and educate homeowners about how onsite systems work and proper operation and maintenance

Homeowner Activities

- Septic system owners guide is provided by many local units of government, designers and service providers
- Website with over 100,000 hits per month (many from homeowners)
- Technical assistance to homeowners
- Homeowner education workshops by sponsoring local units of government

Education for Small Communities



***Goal: Helping Communities
Find Viable Solutions to
Wastewater Issues***

Small Community Activities

- OSTP is working with over 50 Minnesota small communities
- Education provided on:
 - Care of ISTS systems, why we treat wastewater.
 - Community process: leadership, task force formation, how to organize, steps in the process, facilitation skills.
 - Management of systems: review plans for O&M, assist with development of community organization or legal structure.

Small Community Activities

- Education provided continued:
 - Working with Professionals: how to hire and request RFPs
 - Treatment Options: technical and educational assistance to help communities select an option, complete assessments, evaluate soils, oversight of technical process, system design review
 - Increasing work on community assessment as a combination of the strengths of both the small community and professional staff

Research



Goal: To provide research information about new and existing technologies

See <http://septic.umn.edu/research> for related reports

Overview of Research Activities

- Recently completed
 - Large system septic tank evaluation
 - Chamber versus rock drainfield comparison
 - Technical evaluation committee for soils disputes
- Ongoing
 - Milk house wastewater treatment
 - Water table monitoring of seasonal saturation
- Upcoming
 - Membrane system evaluation (pharmaceuticals, endocrine disrupters, nitrogen, etc)
 - Community technical assistance

Questions

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